# Gathering Insights Through Interviews with Key Informants and Researchers 

## Gender Imbalances at the Meso-Level

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## MINDtheGEPs

 gender equality in researchMINDtheGEPs (Modifying Institutions by Developing Gender Equality Plans) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 101006543.

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## Foreword

Gender equality is incredibly important for both research excellence and the well-being of researchers. Feminist epistemologies remind us that the economic and political context in which Western science has developed has led to scientific paradigms and organisational cultures that perpetuate inequalities. This means we need to not only welcome more women into the field but also rethink how we do science and how it fits into our lives. It's not just about the numbers; we also need to change institutions and the knowledge system. The pressure to "publish or perish" and to be an "unconditional worker" are particularly challenging for women. They have to balance undervalued work in research organisations (often referred to as 'academic housework') with caregiving and family responsibilities. However, in today's uncertain and competitive academic environments, this pressure affects everyone. Encouraging more diverse research teams and leadership offers a wider range of perspectives, not only in research contents but also in ways of doing science and of defining excellence and recruitment and promotion processes. The results are more innovative solutions and discoveries, benefiting everyone involved.

The MINDtheGEPs project is a significant effort to address gender disparities in research and education across five countries: Italy, Spain, Serbia, Ireland, and Poland. These are countries relatively 'inactive' in developing gender equality policies in science and research and that are characterized by resistances, antigenderism and traditional gender roles (especially in Poland and Italy). Our project joins together different research performing organisations (RPOs), including public universities, publishers, and public and private research centres, taking a multidisciplinary approach to tackle persistent gender imbalances in our domain(s). By fostering collaboration and shared initiatives, we aim to pave the way for a more inclusive, equitable, and academically vibrant future within European research.

Led by the University of Turin's Research Center for Women's and Gender Studies (CIRSDe), MINDtheGEPs recognizes the importance of gender equality, first of all as a matter of social justice, but also as a crucial element for enhancing research excellence and individual wellbeing. Because gender is a social structure that is characterized by multiple intersected barriers, several types of data are needed to be able to capture the various push and pull factors that (de)construct gender inequalities during different phases of a research career (early, middle, late) and at different levels (individual, organizational, national).

By drawing from 4 types of data collected ad hoc within each MINDtheGEPs' implementing partners this report assumes a pivotal role in enriching our comprehension of gender equality within diverse contexts. It was first shared as a deliverable from the project titled D2.2 Report on gender imbalances at meso-level. After anonymization of results, in order to facilitate reading, this report has been divided into three subreports: Gender Imbalances at the Meso-Level: A Multi-Indicator Approach to Organisational Gender Data, Gender Imbalances at the Meso-Level: Gathering Insights from Researchers Through a Web Survey, and Gender Imbalances at the Meso-Level: Gathering Insights Through Interviews with Key Informants and Researchers.

In this report, Gender Imbalances at the Meso-Level: Gathering Insights Through Interviews with Key Informants and Researchers, we share the results from our qualitative interviews with key informants (such as rectors and vice rectors, departmental directors; members of competition commissions; the president of Equal Opportunities bodies). They reveal much about the way excellence and merit are defined in partner organisations and how gender biases are viewed. Qualitative interviews with researchers (both early and advanced careers, male and female, representing both STEMM and SSH fields) reveal the causes that men and women see behind their more or less "successful" career, the fatigue they face in getting a stable or higher position, postponing or giving up to private life projects, and the changes they would wish to see towards a more inclusive, innovative and less stressfull science production and environment.

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## 1. Interviews with key informants

### 1.1 Aims and methodology

The aim our interviews with key informants was to collect qualitative insights in the MINDtheGEPs implementing organisations on the basis of key informants' point of view. A total of 63 qualitative semi-structured interviews with key-informants have been conducted in 7 public and private RPOs in 5 countries: Fundación para la Promoción de la Investigación, Innovación y Desarrollo Tecnológico en la Industria de Automoción de Galicia in Spain, Italian National Research Council and University of Turin in Italy, Jagiellonian University and University of Gdańsk in Poland, University of Belgrade in Serbia, Munster Technological University in Ireland.

A participatory and horizontal process that regularly involved all implementing partner in dedicated meetings managed by the Italian team, led to the adoption of a comparative qualitative research approach. Partners used shared tools and a common methodology for the conduction, monitoring and analysis of the qualitative interviews in the involved RPOs, in particular:

- Tools for the preparatory work before the fieldwork
- Sampling plan
- Interview outlines
- Tools and instructions for implementing the entire process; among this:
o "invitation letters" to recruit the interviewees
- the MINDtheGEPs D9.1 H-REQUIREMENT No. 2, containing all the instructions for the anonymization and storage of the interviewees and template of informed consent ${ }^{1}$
- flyers and power point presentation to introduce the research participants to the MINDtheGEPs project
- Synopsis template and notes for formatting and naming the synopses files
- Short report template and guidelines
- Introductive table for each implementing partner (reporting a brief description of their own organization, and the main information on organization's experience/expertise in the project domain and role in the project, Decision Making Bodies, Equal opportunity bodies and Gender Research Center, Evaluation system and career progression, Sexual harassment and gender violence).

The tools for the preparatory work before the fieldwork, the sampling plan, the interview outlines and the synopsis template, were designed starting from the materials used for the national research project Gea-Gendering Academia (funded by the Italian Ministry of University and Research and coordinated by Professor Manuela Naldini) from which derives the interviews analyzed for the University of Turin.

[^0]According to MINDtheGEPs sampling plan, a total of 8 to 16 key-informants had to be interviewed. Given the internal level of differences of MINDtheGEPs consortium and the aim of deliverable 2.2 at providing each organization with a clear picture of the status quo in order to plan effective GEPs, particular attention was paid to encourage the partners to amend, adapt and adjust these tools and research design - and in particular sampling plan, interview outlines and synopsis template - to their language, the specific characteristics and needs of each different organization and basing on its context. In this sense, the phases and tools of the research and analysis have been designed, developed and implemented, to some extent, as flexible through a participatory and circular process that constantly involved all the teams who shared their progress, comments and insights and was lead and coordinated by the Italian team. The implementation was supported by a careful and constant monitoring of the advancements made and assistance has been guaranteed by the UNITO team with almost monthly online meetings with all the partners and in some cases also bilateral meetings, in order to assure that the interview implementation and then the analysis of the rich empirical material collected by each RPO teams were made according to common criteria, shared by all the teams.

The comparative qualitative analysis was developed by using the empirical material collected in each RPO and organized in synopses along with short reports compiled and written by each RPO's team. The synopses - that is a short summery of each interview - comprehended a thematic summary of the interview and selected quotations in the common English language while the interviews were conducted and informed contents signed in the own country language of each team. The research activities were carried on by sociologists, psychologists and/or other social scientists' expert in qualitative research.

The first meetings (started in April 2021) and activities of the partners were devoted to undertake the desk and preparatory work ${ }^{2}$ before the fieldwork - individuating in May 2021 (M4) the month for the preparatory work and in June (M5) the starting month for the interviews - and to define the sampling strategy - trying, on the one hand, to preserve the homogeneity of the logics behind the choice of the departments and of the recruitment among all the RPOs but, on the other, at the same time taking into account the different characteristic and needs of each organization - starting from the discussion of the following issues (among others):

- Selection of the department(s) (and equivalent Research Unit in non-academic RPOs): in how many and in which departments/research units conduct the fieldwork (one or more STEM department(s) and one or more SSH department(s), only STEM or SSH?)
- Reasons behind the choice
- How to involve the departments/research units
- Selection of people to be interviewed: which levels and profile of key informants to be interviewed
- Selection of the more appropriate level of governance for the interviews with key-informants (only departmental level or central level too?)

At the end, partners agreed about the following five targets of key informants:
A. Department(s) governance/management (examples: present Department Director and Deputy/vice Director, or former directors if they witness interesting (and recent) cases; Dean, vice Dean).
B. Members of competition commissions in the hiring procedures of early and advanced career researchers in the same departments choosen for the interviews with the early and advanced researchers (examples: professors who have participated as members and/or internal

[^1]presidents of Commission / Council in the selection processes of researchers and/or full professors and equivalent in non academic RPO (Grade A) who are involved in governance).
C. Members of University/RPO governance (i.e., rector, pro-rectors, Delegates and / or Vice Rectors, Board members, Members of the Senate, Members of the evaluation team and equivalent in non academic RPO, Top Management, HR director).
D. Key-actors and key-players on sexual harassment/gender violence and gender issues (i.e., President of the Guarantee Committee for Equal Opportunities, Employee Wellbeing and NonDiscrimination at Work, confidential advisor, diversity managers).
E. Members of Not managerial Administrative stuff (i.e: Faculty Secretary; Head of Grant and EU funded project CNR).

Some RPO conducted the interviews in one STEM department/unit and in one SSH, other only in STEM department for reasons illustrated more in depth in the dedicated 2.5 short reports (see page XX and following).

UNITO team provided and discussed with all the partners a total of four interview outlines in English, one for each target of multi-level key-informant (see Annex 6.2 and 6.3 ). The outlines A and B were meant for key informants at department/research unit level inside the RPO, the outline C and D for the key informants at RPO "central" level. The four outlines were adapted to each RPO's characteristics and dynamics. The partners did not necessarily need to interview all of the mentioned targets. They could choose them accordingly to their most relevant level of governance and actors in their institution/organization in order to allow/facilitate the identification of factors and mechanisms behind the gender imbalance in recruitment, career advancement and decision-making processes. The participants were chosen with the overall goal of T2.5 in mind that is to: «focus on the cultural assumptions and everyday practices of recruitment and promotion processes, of decision-making boards, of research contents and programmes, and of allocations of research funds. The aim is to determine how, consciously or unconsciously, notions of scientific "excellence" and "good" leadership are gendered so that they influence recruitment procedures, career promotion, research funding. The interview outlines were tested. Before starting the interview, the interviewers introduced the research project to the participant and asked him/her to fill in and sign the Informed Consent (ethics). The interview outline included a devoted section ("Interviewer's notes and comments") meant to allow the interviewers to take note of their comments and notes during the interview, and a "General Information form" to keep notes of the main interviewees' socio-demographic characteristics.

The synopses were delivered in two tranches at a distance of one month from each other. UNITO team gave feedback to each partners on the reading of the synopses of the first tranche, suggesting -when opportune - amendments and consistency. Each RPO team wrote a short report according a template and guidelines shared and discussed by UNITO team with all the partners. The short reports were delivered between December 2021 and January 2022. UNITO team commented and revised each report. After that each team amended and sent the final version back to UNITO team. On the basis of both RPOs' synopses and short reports UNITO team wrote the comparative final section " 5.3 Task 2.5 Comparing interviews with key informants".

In the next sections per each MINDtheGEPs implementing partners readers will find a dedicated short report of the interviews realized for T2.5. The comparative analysis of the qualitative results for $\mathbf{t 2 . 5}$ will be provided in the final chapter, specifically in the section " 5.3 Task 2.5 Comparing interviews with key informants".

### 1.2 University of Turin, Italy (UNITO)

### 1.2.1 Desk work, fieldwork and sample's characteristics

The preliminary desk work was based on institutional documents, norms and data published on the website of the involved university and departments, as well as provided by the administrative offices of the Italian research ministry. We collected information on procedures, formal criteria and funding distribution for recruitment and career advancement, governance bodies and staff composition.

As all the Italian Public universities, the current allocative mechanism of resources for staff recruitment is the introduction of a metric - the so-called Punto Organico (PO) - which is equivalent to the average cost of a full professor. As documented by Fadda et al. (2021) "In 2018, one PO equaled $€ 113,774$ and was used to parametrize the average cost of all the other academic or administrative positions, i.e. one associate professor equals 0.7 PO ; one fixed-term research fellow varies from 0.4 to 0.5 PO ; one executive equals 0.65 PO , etc." The university of Turin system focused on research quality - until 2018 - to distribute funding for staff resources across departments. It determined the accumulation of competitive advantages of some departments. The new Rector of the university and his team introduced subsequent changes from 2019 responded to the need for a rebalancing, between those departments that were rewarded for their ability to do research, and those departments that increased the number of students enrolled (and that were not necessarily rewarded from the previous criteria). The latter accumulated a lower ratio between the number of professors and the number of students than the others. The decrease in the glass ceiling phenomenon appears among the strategic aims 2021-2027 of the university (the indicator chosen is to increase the proportion of women among full professors. Furthermore, guidelines have been provided on the language to be used in university documents so that it does not contain gender discrimination. Only some facilities are equipped with childcare services. In 2019 the university has inaugurated a help desk anti-violence against women.

As for the interviews, the sample was based on the complete list of the population in required governance positions, available in the university's official documents. We also tried to involve women as interviewees. However, it was possible to have around half women interviewed, only in the case of the SSH department, due to the fact that in top positions in STEMM men are more representatives. Overall, there was good collaboration and participation in the research, although some participants, due to busy schedules, moved their interview appointments several times. In some cases, they were running out of time so it was necessary to shorten the questions. The interviewees managed to summarize the main information they wanted to share.

In collaboration with GEA-Gendering Academia UNITO research project, which has been responsible for designing and conducting all the interviews, the UNITO team has analyzed 14 interviews to Key informants. The interviews with key informants at UNITO have been realized online due to the COVID19 pandemic, from March to November 2021.

All the participants have Italian citizenship and work at university as academic staff, 13 as Full professors and one as Assistant professor, mostly aged 48-60. The sample was constituted by:

- 6 key informants of Department(s) governance/management, two are SSH and STEM male Directors, the others are 4 Vice-Directors, 2 are STEMM and men, 2 are SSH, a man and a woman. For them it was used the Outline A.
- 6 key informants, members of competition commissions in the hiring procedure for early and advanced career researchers, 2 women in SSH fields of study and 3 men, one in SSH and 2 in STEMM. For them it was used the Outline B;
- 1 key informant of University/RPO governance, a woman in STEMM fields of study. In this case it was used Outline C.
- 1 key-actor on sexual harassment/gender violence, a woman, advanced researcher in STEMM fields of study. In this case it was used Outline D (table 1).

Table 1.1 UNITO: Profile of Key Informants

| N. | Alias | Sex | Role | Outline |
| :---: | :---: | :---: | :---: | :---: |
| 1 | KISSH1 | F | Member of Department recruitment \& promotion committee SSH | B |
| 2 | KISSH2 | F | Member of Department recruitment \& promotion committee SSH | B |
| 3 | KISTEMM <br> 1 | M | Member of Department recruitment \& promotion committee STEM | B |
| 4 | KISTEMM <br> 2 | M | Member of Department recruitment \& promotion committee STEM | B |
| 5 | KISTEMM $3$ | M | Member of Department recruitment \& promotion committee STEM | B |
| 6 | KISSH3 | M | Member of Department recruitment committee - SSH | B |
| 7 | KISSH4 | M | Department Director - SSH | A |
| 8 | KISSH5 | M | Department Vice-Director - SSH | A |
| 9 | KIUNITO $1$ | F | Member of the University Guarantee Act Commitee (Comitato unico di garanzia - CUG) | D |
| 10 | KIUNITO $2$ | F | Member of the University's Senate | C |
| 11 | KISSH6 | F | Department Vice-Director - SSH | A |
| 12 | KISTEMM <br> 4 | M | Department Vice-Director - STEM | A |
| 13 | KISTEMM <br> 5 | M | Department Vice-Director - STEM | A |
| 14 | KISTEMM $6$ | M | Department Director - STEM | A |

### 1.2.2 Departmental management

## Strategic choices, organizational and gender cultures

According to the interviewees the most valued features in the organization are: the internationalization of research and teaching, meaning the ability to teach in international contexts and carry-on projects and research in transnational teams; the scientific productivity, meaning both the qualitative and quantitative aspects of publications and projects. One of the interviewees reported the quantitative aspect is prevailing.

Since the criteria for funding allocation in the departments are based on quantitative indicators both interviewees think there are no gender inequalities issues. Moreover, interviewees added that in their department there are enough women in leadership positions working as example of scientific excellence as well as in research evaluation commissions.

## Recruitment and career progression processes

The prevailing criteria regarding the process of recruiting Grade A (Full Professor) and early career researchers (Grade $D$ and $C$ ) reflects the most valued features in the organization: the department decided to support early career researchers increasing the number of long-term contracts (from Grade D to C) applying as evaluation criteria for career advancement the ability to teach in international contexts and carry on projects and research in transnational teams and the qualitative and quantitative
aspects of publications and projects. One of the interviewees states these criteria can guarantee promotions based on merit in order to "award productivity".

Interviewees reported that national policies for supporting maternity and illnesses exist but they are insufficient in such a competitive environment as the academic one. They are also aware that family responsibilities are more often a women's burden and that this affects negatively career advancement. They reported there is an official procedure for not penalizing women for maternity leave in the evaluation of scientific productivity, but this may not be enough against gender biases.

One of the interviewees reported he initially did not acknowledge that certain working habits can obstacle women, he learnt thanks to other colleagues that scheduling a meeting at 6 pm can prevent women from participating, but he also specified that this particular need regards mothers more than "women".

Interviewees think that Competition Commissions are equally composed by gender "whenever possible", as suggested by the University rules, even if there is no regulation in place at University level, practices depend on the Departments and in some of them this need has never emerged. They know Full Professor are usually senior and male and thus they are more involved in evaluation and hiring commissions but in the department they try to avoid a male-centered composition recurring to the "draw" procedure: in the draw there are men and women is equal, however it may happen that only men can be drawn.

The interviewees' reported they acknowledge gender inequalities not so much in the early stages of careers but more in step towards the advanced ones; when talking of the leaky pipeline phenomenon an interviewee reported that in his department only women have abandoned their careers.

## Departmental policies

Interviewees seem to have a great esteem of the female professors and researchers in their departments thus they reported a "gender friendly" context. However, interviewees are aware of the weight on career advancement of care duties and more generally of private life. They know that women can easily "drop out" since the academic system requires a full-life availability, in particular when coming at top-positions. One of the interviewees admitted the workload is unsustainable and that the prevailing of the quantitative criteria is worsening a situation already aggravated by "cumbersome bureaucracy".

Interviewees know that women can have less visibility than men and reported that even if there is not an ad-hoc departmental policy on that, in the event's organization the issue of gender equality is often considered. Moreover, they know the University of Turin is going to introduce guidelines for gender equality in scientific events and they agree on respect them. Also, the action on gender sensitive language was known and generally supported by the interviewees. However, some participants report that the issue of language is not considered important by all colleagues and the adhesion of the departments took place on the initiative of some female professors and indications from the University.
-Interviewees did not know the data on the composition by sex relating to the various positions. Some of them added that having the data may change their opinion on the status of gender equality they now have. When looking at the data shared by the interviewer (the figure contained the gender composition by academic levels of the whole Department), interviewees stated some inequalities persist at the level of Full Professors due both to the "historical presence" of more male professors and to a low recruitment at the level of Full Professors (in one interviewee's words: "for a long-time full professor were not appointed at all").

Interviewees reported departments showed great ability to meet personal needs during the pandemic solving problems case by case, however there is not an ad-hoc policy to ensure equal opportunities for those with care responsibilities during the pandemic.

### 1.2.3 Members of competition commissions in hiring procedures

## Personal recruitment and promotion experiences

KISSH1 has great experience in selection and promotion procedures, from Grade A to C. He reported that for Grade C positions he never experienced a proper "selection procedure" because in his field of study usually only one application comes to the commission, thus if some gender inequality exists it regards the previous career and life paths, not the recruitment itself. Moreover, he stated the University of Turin has approved guidelines to ensure a gender balanced composition of the competition commissions and that his department respects them. When coming to competition commissions for grade B and A it can happen to have at least 2 candidates and in this case the criteria for evaluation are not limited to quantitative productivity, more important are the publications' quality and consistency with the field of study.

When talking about funding allocation for recruitment and promotion the interviewees explained the decisions are taken in a formally dedicated commission, the Staffing Points Commission ("Commissione punti organico") and all the decisions have to be discussed and approved in the Department Council. One interviewee emblematically stated: "I have never seen the Department Council deny the decision of the Staffing Points Commission, because these things are decided collectively". However, informal discussions among Full Professors remain important for agreements and decision making. In the SSH department, respondents say that female Associate or Full professors are involved in decisions, while in the STEM department they are numerically less present.

KISSH2 share the same great experience in selection and promotion procedures, from Grade A to C. She noticed a gender difference in evaluation commission: when they are composed also by female professors, they tend to hire more female researchers. She noticed also that quantitative criteria are insufficient for evaluating "excellence" since they do not take into consideration relational skills, which should also taken into account in the opinion of this interviewee.

KISSH3 was very aware of the gender asymmetries in competition commissions, evaluation procedures and even in the work of the Staffing Points Commission. In her experience the weight of senior male professors is still predominant and women are still less prone to express their opinions during official meetings. As for excellence, she reckons teaching skills are important as well as research attitudes.

KISTEMM1 reported for grade B and C more than 2/3 (up to 6) applications come to the Commission, not only from internal staff but also from external scholars. In his experience the gender inequalities are evident already in the initial phase of the competition: all the applicants and of course all the shorted listed candidates are usually men. As for the funding allocation for recruitment and promotion the interviewees explained the decisions are taken in a Staffing Points Commission. Nevertheless, these decisions are not easy and require time and mediation to be taken, the Department uses to respect them. As for the understanding of excellence the interview declared not only scientific productivity but also the international mobility in research are taken in high consideration, more than teaching ability. External candidates with high-skills can be even more likely to win than internal candidates, because excellence is considered more important than the need to ensure continuity to a precarious fellow researcher, but this can be difficult from the point of view of the evaluators.

KISTEMM2 highlighted that apart from scientific productivity and international mobility in the evaluation process and in the final decision for hiring or not a candidate a great role is played by
departmental needs, thus the candidate that meets the departmental needs in terms of research would be the favorite one and that this is not a matter of sex or gender. He also reported the Department used to respect the decisions taken by the Staffing Points Commission.

In his opinion "an excellent researcher" can become "excellent" thanks to the work of "normal scientists" maybe less genial but part of the environment in which a "genius" can mature an advancement in research, thus reflecting a concept of excellent science based on collective production of knowledge.

## Selection processes and links with the gender culture of the organization

KISSH1 reported the most valued features in his organization with regards to scientific excellence are constituted by a mix of quantitative indicators (number of publications) and qualitative evaluation (peer-to-peer review), however he knows that the success in the National Scientific Qualification (Abiliatazione Scientifica Nazionale) plays a great role in career advancement. Regarding National Scientific Evaluation he expressed a great concern of its negative effects on scientific productivity with these emblematic words:
> we are multiplying the deforestation of the Amazon because of these crazy rules that force us all to publish more and more, where of course quantity ends up overcoming quality. And this does not only concern young people, but it also concerns us, because to become commissioners we must have the medians, to have the medians we must have published, our publications expire like cans of tuna or yogurt. So I must have five, I don't know, three items in range A in the last five-five years. If I wrote the fundamental work of my life ten years ago, that no longer counts for anything. That is, Einstein's theory of relativity of 1909, in 1917 would no longer work according to the criteria.

This interviewee specified that even the most awarded Associate Professors could not advance, because in his department since 2006 to 2018 there was no competition for appointing Full Professors and this has penalized for a waterfall effect the careers of both female advanced researcher and male and female early-stage researchers.

For the interviewee maternity leave is already taken into account in scientific evaluation, so a woman cannot be penalized for having children, however he underlined that gender biases still affect the opinion that evaluators can have of women, more likely to be supposed less prone to full availability due to family charges.

KISSH2 reckons that there are many national and institutional policies to guarantee equal opportunities in case of maternity but she thinks these measures are often not applied. Her idea is that to improve gender equality in evaluation procedure the University should award the departments that hire the under-represented gender.

KISSH3 reckons that national provisions for maternity leave are not enough because they are applied only at top-positions, thus younger female researcher can be penalized before reaching Grade C applications. Moreover, she remembered that also older female researcher can have other care duties, such as eldercare, to be taken into account.

KISTEMM1 reported that women visibility is very low in his field of study, he mentioned an international conference where on 95 speakers only 3 were women. He is aware of the historical absence of women in his field of study but he believes in our century there should be enough women worth of scientific acknowledgment. If women invisibility persists, according to this interviewee, is because of the evaluation system itself that "was created by all men for men" and that reflects an
"aggressive" approach to science, too much based on competition, while women tend to prefer a "relational" approach more based on cooperation. The criteria of international mobility is also perceived as excluding young female researchers. The few women that became Full Professor in his field of study are not considered able to spread a different kind of leadership, since they adopted the male model to succeed in their careers.

KISTEMM2 stated that "an algorithm able to evaluate the best candidate does not exist" and this is due to the fact that is impossible to apply only quantitative criteria, a number of different aspects must be taken into account, from the will of the candidate to keep working in the university and not leaving it after few years to the departmental needs in research and teaching. Another crucial aspect difficult to be taken into account in the official procedure for hiring is the team-working skill, often sacrificed in the name of individual scientific productivity.

The interviewee reported in his department there is enough sensitiveness to not exclude a candidate for maternity leaves and/or illness periods. However, he underlined how family loads affects negatively the careers of female young researchers in his field of study, mainly because of the predominant "fullavailability culture" (here he specified that older female researchers and professors, having sacrificed their private lives to succeed in academia, use to not understand the personal choices and needs of the younger colleagues).

## Departmental policies

KISSH1 trusts in his department there are no gender inequalities issue and he states data reflect an equal distribution of women among all grades. He was very aware of gender policy in the recruitment and career progression process and he explains gender inequalities are not a problem of legislation, since there are already good policies in place. In his words: "regulations themselves do not ensure gender equality, a cultural change in people's way of thinking can do it". He mentioned as example the case of a selection procedure where a man won because he finished the PhD in time, while the other candidate that was a woman finished one year later due to maternity and thus lost the competition. Similar cases should not happen, according to national provisions that force us all to not penalize women for maternity, and if they happen is because the cultural and behavioral change is far from being achieved.

KISSH2 looking at departmental data acknowledges that less women than men succeed in becoming Full Professor and she explained this reflects a national change in legislation occurred in 2010 and known as Gelmini Law, a law that had the effect of preventing career advancement reinforcing the pyramidal structure of Italian academy. She is also aware of the fact that more women than man renounce to academic career preferring a satisfying private life, even do she continues to hire women whenever possible since she believes "equality must be done not told". If there was an increase in the number of female researchers it was not due to departmental policies but to the personal decisions of female associate professors, a sort of implicit gender sensitive evaluation procedure.

KISSH3 being one of the few female full professors in her department knew there was a gender inequality issues at stake and looking at the data she stated "our field of research is highly influenced by traditional gender norms". Not only she was concerned by the fact the men were doubling women as FP, but she was also worried by the fact that there were more women in precarious positions than men. She also mentioned the gender biases experienced by highly visible women in academia, always perceived as "flexible" and "at male disposal".

KISSH4 says that in the department where she works there has been attention to gender equality for years, also due to the influential role that female professors have had in governance and because the international positioning strategy pursued. However, she noted that the gender equality situation in
her scientific sector is different and in Italy the number of young female full professors is small. She also reported that "following the indications of the universities we have been called to review all our study programs and all our communications on the web in order to respect gender equality and this is an aspect on which the Department has done a lot attention".

KISTEMM1 when looking at the data of his department confirmed the negative trend and explained the absence of women in almost all grades with the huge workload foreseen for succeed in academia. In his words:
> we must stop placing excessive emphasis on the factory, on the product, on workaholic approach: it is scientifically demonstrable that it harms women more than men. If the prospect is that of having to hang around for six years killing oneself with work day and night, seven days a week, to produce twenty-four jobs
> before passing the threshold, women give up. There will always be enough fanatical me $n$ ready to accept, but I don't think there will be the same number of women.

KISTEMM2 confirmed that in his field of study there are almost all men in grade A positions and this is due to the "quantitative threshold" almost impossible to cross if not involved in some international project. He did not know the reasons but he confirmed in his department female early career researchers usually do not cross that threshold.

KISTEMM4 explained that in proposing research projects and in governance, women are "unfortunately few from the start". Awareness that evaluation criteria for recruitment and advancement academic career can be gender-biased is very low. He explained that he "hopes" that the evaluation criteria are not creating gender asymmetries. From his words emerges an apparently neutral gender-blind discourse about evaluation:
> in the departmental field, in the research field, in the research groups, I don't look at the gender of the person making the proposal. What is evaluated is the quality of the proposal and the way in which it is carried out is not ... an important factor who brings it forward linked to gender above all. It is not a parameter that I have ever looked at, here is ... I personally do not ... I did not notice

KISTEMM5 reported that departmental commissions and governance bodies are set up to express the different "souls" and "interests" of the department and research areas. Moreover, the different research areas have internal discussions. He says that "at least as regards the macro area in which I am, there are active discussions whether by male colleagues or by female colleagues", and however there are field of activities where female professors are clearly a minority. He also says he does not know exactly data on the gender composition of the staff. Also, this participant explicitly re-proposed the "gender neutral" approach and explained he believes that the influence or presence of women in governance depends on individual preference, time availability and interest.

As regards how the pandemic is affecting some parts of the academic population some interviewees reckon the time was not enough to measure and analyze the phenomena thus it has not emerged any particular need of policies for equal opportunities. One of the STEMM interviewees experienced as father the increase of care duties and how it affected his work in the absence of any policy or support, however he knows how the pandemic had a worst effect on women's lives.

The majority of the interviewees was not aware of the fact that universities without GEP from 2022 will no longer be able to participate in the Horizon Europe. KISSH3, believing that the award's strategy can be effective to reach gender equality, asked to the interviewer to share with her this news via mail.

### 1.2.4 Governance "central" level

## The rector/president/head's team

According to the interviewee, merit, experiences in management and leadership's skills were the requirement prevailed in the formation of the rector's work team and they weight was more than the weight of the equal gender representation criteria. Women appear to be less confident with topmanagement position and they are less numerically if compared with men when coming to Full Professors positions: these factors may explain the fact that there was no female candidate to the last campaign to become Rector.

## The collegial bodies

According to the interviewee the influence degree exercised by the members of the Board of Directors is equally distributed by gender, there is no one member more influential than another. Different positions in the governance of the University and specifically in the team chosen by the Rector, did not have different weights, but were all placed at the same level, as well as equally distributed from a gender point of view.

## The policies for the recruitment and scheduling of staff

According to the interviewee there are thousand criteria in order to meet the different departments' needs. Teaching and research are both valorized in the same way and this means that both SSH and STEMM fields of study are valorized, since teaching is a huge component of the effort in SSH departments as research is in STEMM departments. Both SSH and STEMM departments start from the same funding levels. Hiring commissions are equally composed by gender.

## Gender policies

The interviewee is aware of some institutional action for gender equality, such as the gender sensitive language action, however she did not know about the fact that universities without GEP from 2022 will no longer be able to participate in the Horizon Europe funds. The interviewee stated she never reflected on gender inequalities in academia an she never experienced them in her career.

### 1.2.5 Key-actors on sexual harassment/gender violence

## Sexual harassment and gender violence

The interviewee explained she is a member of the Guarantee Committee for Equal Opportunities, Employee Wellbeing and Non-Discrimination at Work - CUG, that has many responsibilities, not only the prevention and sanction of sexual harassment and gender violence. She is not aware of the data on sexual harassment and gender violence since she declares this is her first time as member of the Committee and she has only an experience of few years, but she suggested to contact the CUG's President for these data.

## Organizational culture

Within CUG the organizational climate is perfect according to the interviewee, since there is full transparency regarding procedures and decisions, all the documents are shared within the team, all the meetings are scheduled in time to let the employees organize at their best, democratic principles are valued as core-issues by the President. However, the interviewee stressed the difficulties in making effective CUG's action for promoting gender equality at institutional level: many actions, such as the "Alias career" for trans students and the data gathering for the gender budget, were not easy to carry on due to the slow in the institutional approval. When talking about the organizational culture of the whole university and its effects on gender inequality the interviewee states women are for attitude
more prone to renounce to leadership and top-positions without noticing any relations to the difficulties of balancing care/family duties with work.

The interviewee was not aware of the fact that universities without GEP from 2022 will no longer be able to participate in the Horizon Europe funds.

### 1.3 National Research Council of Italy (CNR)

### 1.3.1 Desk work, fieldwork and sample's characteristics

The qualitative interviews to key informants at CNR were planned for April 2021 and they occurred in a time of a reorganization of the CNR top management encompassing the appointment of a new Board of Directors and of a new President (April 2021). The profiles to be interviewed were selected just after the change of the top management. The 8 interviews were originally planned to occur in person but, due to the Covid-19 pandemic, most of them took place online. The sample included managers with key responsibilities at CNR, as outlined in the table below.

Table 1.1 CNR: Profile of Key Informants

| Gender | Role | Age | Citizenshi <br> p | PhD <br> year | Interview in person/remote | $\begin{aligned} & \text { SSH/STE } \\ & \text { M } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | Member of RPO governance | 56 | Italian | $\begin{aligned} & 199 \\ & 4 \end{aligned}$ | In person | STEM |
| M | Former member of governance | 43 | Italian | n/a | Remote | SSH |
| M | Member of board of directors | 53 | Italian | n/a | Remote | SSH |
| M | Head of Department | - | Italian | $\begin{aligned} & 199 \\ & 2 \end{aligned}$ | Remote | SSH |
| F | Head of Department | 67 | Italian | $\begin{aligned} & 198 \\ & 4 \end{aligned}$ | Remote | STEM |
| M | Head of Department | 61 | Italian | $\begin{aligned} & 198 \\ & 1 \end{aligned}$ | Remote | STEM |
| F | Key-actor on gender issues | 66 | Italian | n/a | In person | SSH |
| F | Member of not managerial administrative staff | 50 | Italian | $201$ | In person | STEM |

Contacting the interviewees and arranging the timing for the interviews proved challenging but it was made possible by the establishment of the "GEP Working group" at the Central Direction (GEPIB in the MINDtheGEPs project) that emphasized and gave visibility to the GEP designing, including the need for data collection and engagement of the top management. Below, we report the outcomes of the interviews divided by type of role/organizational unit of the interviewee(s).

### 1.3.2 Departmental management

## Strategic choices, organizational and gender cultures

Head of STEM Department (F) Speaking about formal and informal decision-making processes: "I don't think a hierarchical approach alone can work. I think sharing projects and discussion are key, even if ultimately one person has to take responsibility for the decisions. But it is always better to work for a consensus on all decisions". Even during COVID, meetings have been organized with the institutes directors' under the Dept at least once a month, with the DSB-scientific board (Consiglio scientifico) and also a departmental conference has taken place."When I was director of a CNR Institute in Naples I used the same approach, I had meetings with all researchers and personnel once a month to share with them the managing and scientific life of the Institute. I think this is the duty of a director that also facilitates the interaction and the progress of the whole scientific community."

Regarding scientific excellence, "it is defined by the scientific history of a researcher and can be in part deduced from the CV of a candidate: the university degree (laurea or master) has to be followed by a competitive PHD program for 3 (better 4) years in a good, international laboratory. Then, during the post-doctoral period the researcher has to build his/her scientific independence demonstrating to concentrate on good ideas, innovative projects, to know how to lead a group. In this way we can define scientific excellence: knowledge, curiosity, capacity of interacting with colleagues, motivate them and lead them." Excellence is the capacity of exploiting to the maximum level the intellectual and managerial skills researchers might have. These are individual skills and ambitions that do not depend on gender." In her experience family and school play a crucial role in the proposition of gender role and are fundamental to overcome gender stereotypes.

Head of STEM Department (M) The approach of CNR departments to define policies that might mitigate the gender gap are mainly determined at the public administration level that can be further specified by the CNR at the statute level. In this sense, the head of a CNR department is partially free to identify room for improvement. "On my side, as a head of department, when possible, I implicitly promote gender equality". As I already mentioned "this has been done with two main actions: a balance composition of the scientific Internal Advisory Board and giving a shared male-female leadership of the four virtual laboratories established within the department I led". "These are two little steps, but still not sufficient."

From a procedural perspective decision making processes are discussed by the head of department with institutes and researchers during two main formal interactions. The first one is with the board of institute directors who interface with the relevant institute's Internal Advisory Board (i.e., Consiglio di Istituto in Italian) to be informed as well as to propose ideas on different topics, from policy to strategic issues also including the internal selections. The second formal interaction involves the department's scientific Internal Advisory Board (i.e., Consiglio Scientifico di dipartimento in Italian) with the main aim of discussing the strategic lines that the director of the department intends to implement. These lines might take into account the importance of the scientific experiences of the different research groups of the department. "However, in my opinion the role of the department and its director and boards would not be to coordinate and manage the institutes' activities but to provide support to the researchers in their inter-disciplinary collaboration, trying to identify impact research themes and organize and plan for inter-institutional collaborations within them". For these reasons the Department have identified four macro areas where different skills can work together in an interdisciplinary perspective. In this process and model the department becomes the glue between the various institutes and supports them in planning activities that the individual institutes are unable to carry out and manage. The four laboratories are focused on: urban intelligence, cyber-security,
artificial intelligence and aerospace. From a gender balance, the activities carried out in each of these four laboratories are coordinated by one male and one female.

Head of SSH Department (M), The structure of the Department is presented in the light of the organizational culture established by the Statute and the Regulations of the Research performing organization, which valid for all departmental structures and present specific features for nondiscrimination in the Statute of the research performing organization ("promoting anti-discrimination measures and promoting equal opportunities policies"). The legal basis of the research performing organization statute is considered as a fundamental value not only for its declaratory function but also for a more substantive one, delegated to specific committees and bodies within the research performing organizations. In light of the thematic specificity of the Department (social sciences and humanities) led by the interviewee, the greater presence of women in the staff is highlighted. The latter is identified in terms of capacity of transmitting a greater number of women with humanisticsocial degrees and doctorates to the research system in these areas. The definition of scientific excellence, in this specific context, arises from the need to portray a synthesis from the research activity and from the need to establish a dialogue with society on research topics. In this perspective, the interviewee specified: " In this multidisciplinary context and with a strong dialogue with society, the disciplines most endowed with human capital, and with the resilience to research that the people in the department show, emerge. Excellence in research, ability to research and the capacity of accepting challenges with flexibility are the key components that keep research moving forward in our research areas". In terms of gender cultures, the differences between men and women existing in the professional paths of research in the Department are traced back to a societal dimension, in which the differences between men and women have not yet been fully overcome. On this issue the interviewee affirmed: "There are gender differences in the paths of excellence and scientific and organizational leadership. In theory there should not be, but in my opinion, these are not specific differences, linked to the world of research and science, but general differences, imported from the gender differences that exist in society... These gender difficulties for women working in research have emerged decisively also in the pandemic scenario. Absolutely and in this specific period, women active in research certainly have greater difficulties in carrying on their life as researchers, trying to reconcile their commitment to research with the conduct of family and domestic life. Denying this evidence would imply sweeping the problem under the carpet."

## Recruitment and career progression processes

Head of STEM Department (M) "The CNR is a public research organization which undergoes under the laws and policies of the public administration". In this perspective, the CNR as well as its departments and institutes are not autonomous in the recruitment process, for instance, considering the composition of the selection commission and the balanced representation of its members from a gender perspective. "However, as a head of department, when possible, I try to give more space even if sometimes it can be complicated in particular in specific disciplines studied in our sector, such as informatics". For instance, the scientific Internal Advisory Board of the ICT department leading is composed of five members, two of them are elected by researchers and no rules for gender balance are expected, while the remaining three are nominated by the head of the department. "Among them I have nominated one female. But this is not a precise indicator or a formal rule, but a personal initiative for balancing the gender within the board". Another example concerns the four virtual laboratories (i.e., urban intelligence, cyber-security, artificial intelligence and aerospace) established within the department he led. They are equally coordinated by one male and one female researcher.

Head SSH Department (M) In terms of recruitment and career development, the interviewee does not assess that there are significant gender organizational or scientific differences, in the face of a series of structural obstacles (initial precariousness, reduced opportunities for professional development),
with a generalized impact for men and women. On this perspective the respondent affirmed: "I don't see career differences of a scientific or organizational nature, but I have the general perception that women in this career, show a greater ability to "withstand the elements". A career in the CNR presents elements of difficulty for everyone, because we all, men and women, go through long periods of precariousness and long periods of dependence on a person who is the team leader of the research group. This is not easy, for anyone. And in this process it is necessary to recognize that women, when they are highly motivated to do this job, they are very talented, they always do their work to the best of their ability because they are tough, and in the absence of career reforms, being tough and highly motivated is a very important feature, especially in here". In particular, with reference to the achievement of a good gender balance in the career access positions in the considered Department, the respondent considers that there is an open question for gender equal opportunities in the paths for career development, in which there is a male prevalence. On the subject, the respondent considers the question in broader terms, referring to the under-dimensioning of career paths in this research performing organizations and of research funding within the Italian research system. "The circumstance of this gap in the access of women in top positions lies, in my opinion, not so much in the departmental dimension but in the general complexity that the research organization encounters in developing career paths for everyone, women and men. We can see a non-development strategy that emerges also in the context of drafting the budgets of European projects, for example, in which the research staff of the CNR is valued at significantly lower costs than the research staff of the majority of partners in European research performing organizations. There is a need for decisive structural interventions at institution level, guaranteeing, for example, more consistently, a greater inflow of funds for research activities." The question of gender imbalance in the career progression is reported to a general societal asset and to an institutional organization of public research in Italy (under financing of the sector and lack of career opportunities for researchers) and not to specific organizational profiles of the research performing organization in which the respondent operates.

Head of STEM department (F) "I'm against female quotas, in all those job applications that evaluate the person performance (University professorships, manager positions etc.), instead I think it is very important that boards and committees have a gender balanced composition. This can apply to members of the board of directors, evaluation commissions, as an equal number of men and women would contribute their different sensibility to the decision process. This i salso to avoid the so-called "Old boy networks" that facilitate male applicants over females maybe unconsciously, only because they are more similar in posture and way of presenting themselves. This gender balanced composition should be applied in every type of committees and commissions, not only for recruitments and career progressions. The female way of thinking would for example promote the institution of kindergarten in any structure/firm to help women at work: this thought comes easily to the mind of a woman, while maybe it is not a priority for a man. This is a too simplistic example but it is to give an idea".

## Departmental policies

Head of SSH Department (M) The department's approach to gender equality policies is determined by the context of the research performing organization's statute and rules and adheres to these measures. The approach appears to be oriented towards the mere executive dimension of the system of legal rules in force within the research performing organization. On the subject, the respondent states: "From the discipline of the Statute and Regulations, the Department follows all the procedures for gender representation for the formation of the Competition Commissions and within the Scientific Council of the Department. In particular, in the Scientific Council of the Department, the two elective components on the part of the staff are both women". In terms of present perspectives, the approach expressed by the respondent does not advance from the legal dimension of the issue within the RPO, whose measures and policies are known by the interviewee. In this perspective, gender policies must be centrally managed by the CNR and its structures such as Departments and Research Institutes are
limited to implementing the general legal framework. At the same time, outside this legal and organizational framework, the respondent hopes for a further advancement of policies for equal gender opportunities, stating: "It seems to me that the scientific world has shown greater openness towards the female gender, the issue is often the subject of public debate, also due to the emergence of broader social issues related to women (gender violence, gender medicine). The times seem to me right for gender equal opportunities in the world of scientific research and I believe that the future may be even more aimed at affirming equal opportunities, if we are able to overcome those overall discriminatory dimensions linked to precarious work and the lack of career progressions". In this sense, the respondent hopes for the prospect of deepening, in terms of scientific research, the organizational dimension of gender policies in RPOs. On this issue he proposes: "In my opinion, it would be useful to investigate this dimension with more targeted statistical research, or even with research aimed at understanding how the operating logic of research groups, also in psychological terms, can bring young researchers closer to or further away from our research environment."

Head of STEM department (F) Analyzing the 2019 data on career progression of CNR research staff and those reporting career progression in the Department of biomedical sciences the interviewee states that : "CNR is in line with other European countries. Only in Eastern Europe countries there are more women than men working at universities who also reach high levels of career not only because they are good and competitive but also because men often do not apply for these positions since universities have lower salaries than the private sector. Considering the DSB, I'm pleased to notice that there are more women than men and this reflects what is happening at the university level. The number of women with PhDs as well as the PhD students are more numerous, so the higher number of women in third level researchers (c level) reflects this trend. The women research directors are much less, following the European trend of the "scissor", with high number at the entry level of the scientific career and low percent in high positions (director, president). So, there is room for improvements and we have to work on it." It is necessary to work providing opportunities, this means providing more flexible work time and providing institutes with kindergartens. This can help families, meaning "young female but also male researchers, both of them", in balancing private life and work. When the interviewee was president at the CNR Naples research area, she supported the creation of a playroom, a sort of Kindergarten, in collaboration with CUG (Guarantee Committee for Equal Opportunities, Employee Wellbeing and Non-discrimination at Work - CUG). She considers it one of her most satisfying experiences outside her scientific career. "Having a woman in this position has helped a lot to put this initiative in place".

### 1.3.3 Governance "central" level

## The Rector/president/head's team

Member of the board of directors $(M)$ In the first part of the talk the interviewee presents the organizational structure of the board of Directors he is involved in, in particular regarding equal opportunities. In fact, with the change of the CNR President, the board became more gender balanced if compared with the former one that was entirely composed by males. As confirmed by the interviewee, who is directly elected by the CNR personnel, besides the president the members of the board are nominated by the Conference of Italian University Rectors (CRUI), the Italian Union of Chambers of Commerce and Confindustria and the State Regions Conference. At the moment, one female and two males are nominated. From the perspective of the interviewee: "it was a right time to pursue this gender rebalancing not only in our institution. In fact, suffice is to know that also the first university in Rome as well as others universities in Italy now have a female dean". Not forgetting that "also the minister of scientific research is led by a female physician and academic scientist". "Considering the CNR in particular, in these months, the board has also nominated directors of
institutes and departments who are females". "This change of course, however, was not supported by formal policies but, as I said, is mainly due to the maturation of time within the scientific community."

Member of RPO governance (F), said that:" When I have to set up a working group the first and most important selection criteria is of course the competence of people, but I am always considering the gender balance".

## The collegial bodies

Member of the board of directors (M) As a member of the board of directors the interviewee is not directly involved in the selection and evaluation of research directors as well as on career progressions. As reported in the previous question the board of directors is in charge of the appointment of institute and department directors starting from a short list of three candidates preliminary selected by a scientific commission. Based on these preliminary considerations, the interviewee drew attention on the recruitment and career progression processes from an organizational perspective. In his opinion "even if the director of an institute or a department cannot directly influence the criteria in a competition for full professor, he/she has the responsibility of identifying the main strategic areas where to invest in the coming years". "This strategic vision may influence the recruitment process identifying the research groups to be financed and where to select researchers eligible for career progressions". Substantially, "even if the head of each department may not directly influence the criteria for the career progression, their programmatic choices indirectly pose specific research topics and groups in the foreground compared to others". This aspect may be the starting point to reduce the gender imbalance between men and women. Considering the last series of career progression selections carried out between 2020 and 2021, the interviewee confirmed that evaluation did not take into account any measure for reducing the gender balance also considering, for instance, that a high percentage of entry-level researchers are women, in comparison with the other grades. The interviewee highlighted the necessity of reducing the base of the pyramid in the CNR balancing the number of colleagues placed within the three executive levels.

Member of RPO governance (F) The choice of the Departments heads (the highest level after the Governing board) is done by the Governing board out of a number of applicants and the President, as CEO of the Board, plays an important role and has an important influence that can be exerted. Out of seven Departments, for the first time in the CNR history, 3 women have been appointed, two of them during the present Presidency term. This is a strong 'revolution' in the governing chain of the Organization. So, the relative weight of the positions occupied by women within CNR governance system is pretty high considering both the number of women present in the highest governing board and those appointed as head of Departments. I believe that this situation of female presence among the highest level of CNR decision chain has not yet been fully recognized by the general public and maybe even by CNR itself. It is, I think, a quite remarkable result awarded".

## The policies for the recruitment and scheduling of staff

Member of RPO governance (F) The decision-making role for a research worker, in the allocation of resources is done in relation to the research programs and the people who have an important decisionmaking role are the heads of the departments which take into account the opinions and the proposals of the directors of the institutes. She answered: "There are no gender considerations in allocating resources, but usually evaluated in a favorable light when there is a strong female candidate" so there is a positive attitude in looking for a gender balance, but gender is never the first consideration, the first pre-requisite and this also applies to career progressions. We must consider that being a public research body both for recruitment, which is based on competitions and for career advancement, it is not possible to include gender as a selection criterion by law, it would be consider a discrimination. For the choice of delegates, members of the boards of directors or scientific councils delegated by the

CNR, there is a choice. The mechanism takes place starting with a proposal of possible members that comes from the directors of the department, who in turn hear the directors of the institute. And afterwards there is an approval by the CDA that considers an: "overall calculation, never on the individual case, but in general in this way we try to respect the gender balance".

## Gender policies

Member of the board of directors (M), The interviewee pointed out that in the last years different managerial positions have been covered by females. "This is particularly evident in diverse administrative departments and offices as well as in bodies and committees that strictly operate to reduce disparities (not only from a gender perspective) and ensure the protection of rights and are coordinated by women", such as the Unique Guarantee Committee and the labour unions. He asserted that "in these last years he assisted to a sort of gender innovation in the managerial offices with a less unbalanced distribution of responsibilities between men and women". "However, even if these examples are an important starting point for reducing the gender gap, they are not systematic in our institution". This model is mainly applied to the administrative part of the CNR, while in the scientific side there is a need of changing some procedures adopted during the recruitment and career progression processes. He provides an example related to the evaluation of the scientific literature of the candidates that is limited to the number of papers published, the impact factor, the role of the researcher within the team, etc. but "does not take into account the quality of the content of the paper that may be examined during the oral interview". "Even if this does not directly contribute to reduce the gender gap, it can enhance the skills of researchers also from a gender perspective".

Member of RPO governance (F) She stated that. "There is not yet consideration of maternity leave in the calculation, for example, of publications as it was introduced by ERC or other institutions but we should also put in place this rule. It is one of the issues on my Presidency and Administrative Council agenda". We are studying a series of measures to be developed that favor both maternity and not allow discrimination with respect to the time spent in maternity, but also the possibility of having time for paternity leave "we will do everything to include these measures".

She appeared well aware of the necessity of introducing the GEP in CNR as stated in advance.
Former member of governance (M) "The European Community is right in not financing us millions if we do not adopt this document. And this is, if you think about it, a strong measure." With respect to the policies implemented by the CNR to promote policies aimed at gender equality the DG admitted that the Institution does not have such policies. The DG is aware that measures such as company kindergarten, or such an economic incentive for parents to pay for a babysitter could be formidable policies to help women in developing their career, however, he claimed that the CNR does not have the financial ability to implement such policies. In his words: "The other (policies), much more important, (as) subsidies for child maintenance, nurseries within the same structure where the mother works, however, are measures that require financial coverage that this Institution, which hardly pays the bills, just does not have."

### 1.3.4 Key-actors on sexual harassment/gender violence

## Sexual harassment and gender violence

Key actor on gender issues (F), The CUG is a joint body representing the trade unions and the employer, in our case the CNR. "The CNR CUG was born very weakly, took office quietly and had difficulty in being recognized by the central administration of the CNR". The Code of Conduct against sexual harassment was recently adopted at CNR. A dedicated working group was created to develop the code that was adopted in July 2020. But not all its requirements and provisions are in place: the counseling desk and
a trusted adviser are not yet established. The code envisaged the institutions of both provision but the Director General did not make the necessary act to establish it.

## Organizational culture

Key actor on gender issues (F), The organizational climate of the CNR is compartmentalized, much depends on the institutes and research groups and also on the profiles of the employees. "I often see an uncooperative atmosphere and CNR and bureaucracy are often a burden especially from the late '90 when our organization was controlled by the ministry of education and by the mystery of public administration. Before, when we were an autonomous public body, there was a different climate. The institution has become bureaucratized and often the head office has its own mentality that does not dialogue with territorial needs, which are almost considered to be second-class." Careers at CNR are a serious problem, often the people who are worthy do not have adequate outlets. The elements to make a career should be linked to merit but instead other things always count. "The logic is to "fix" people and therefore the merit takes a back seat: there is often the son of, the grandson of who must be accommodated". People of value must often be supported and motivated, because the organizational climate of the CNR does not support them. Very often the CNR works with a public welfare logic, commitment is not rewarded but other logics prevail.

### 1.4 University of Gdańsk, Poland (UG)

### 1.4.1 Desk work, fieldwork and sample's characteristics

The interviews with the Key Informants (KI) at the University of Gdańsk (UG) were conducted between 6 September - 1 October 2021. In total, we conducted 8 interviews with 6 women -3 from STEM and 3 from SSH faculties and 2 men - both from STEM faculties. Among the participants, 1 woman was exclusively a senior administrative employee in a director position, while the remaining 7 were active researchers in current or past management positions, 3 of them full professors age 58-67, 4 associate professors age 41-55.

The timing of the interviews was during the summer holiday break and therefore we were concerned about the availability of our interviewees and decided to conduct the interviews in September, which increased the likelihood of getting an appointment. Only in one case - that of the Rector - we did not receive a reply to an e-mail invitation and directed the invitation to the Vice Rector - a woman with whom the interview turned out to be extremely positive and meaningful.

The procedure of inviting interviewees was the same as the one applied with the early and advanced career researchers (T2.6). Invitations were sent by e-mail, explaining in detail the conditions of participation, and attaching the necessary consents forms to be signed. Some interviewees were informed directly by the head of the project that they would receive such an invitation and what the study consisted of, and at this stage they already gave their preliminary consent.

Table 1.1 UG: Profile of key informants

|  | F | M | STEM | SSH | Total KI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| KI A | 1 | 1 | 2 | 0 | 2 |
| KI B | 1 | 0 | 1 | 0 | 1 |
| KI C | 3 | 1 | 2 | 2 | 4 |
| KI D | 1 | 0 | 0 | 1 | 1 |


| Total | 6 | 2 | 5 | 3 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total KI | 8 |  |  |  |  |

Breakdown by positions held:

|  | former position ( n ) | present position ( n ) |
| :---: | :---: | :---: |
| KI A | Faculty Dean (1) | Faculty Dean (1), |
|  | Senate Member (1) | Senate Member (1) |
| KI B |  | Management position in central |
| KI C | Senate Member (2) | Senate Member (1) |
|  | Faculty Dean (2) |  |
|  | University Council member (2) |  |
| KI D |  | Key actor in discrimination and gender issues/ |

The coding of the interviewees is based on the rule that all first names start with the letter "K" (Kamil, Karolina etc.). 6 interviews were carried online via MS TEAMS or ZOOM.US platforms and 2 were conducted face- to face. In the next stages, an external company was contracted to transcribe the interviews in Polish and on this basis synopsises were produced. The synopsises were then sent for professional translation into English. The interviews, synopsises and report were processed by a team consisting of Dr. Magdalena Żadkowska, MA Marta Dziedzic and PhD Student MA Magdalena Herzberg - Kurasz form UG.

### 1.4.2 Departmental management

## Strategic choices, organizational and gender cultures

Both interviews (Kinga and Kamil) with different managerial experience, working at the same faculty, pay attention to slightly different aspects, however both show openness and care for the scientific quality of the faculty as a priority. Kinga, as a young administrator (age 41), also emphasises her care for the administrative staff, indicating their very important role for the faculty which could be seen as a generation change.

Observations:

- when selecting the Dean's Council (Kinga), she wanted to maintain the gender balance in the management body of the Faculty (there are 2 women and 2 men), however, when selecting academics, the main criterion is their professional excellence and their gender becomes secondary (both Kinga and Kamil admits that)
- Accademia is seen as a highly competitive environment (Kamil). Competition is observed internally on individual level between staff and with the colleagues on national and international level. Scientists compete for grants, publication and success which on the other hand enhances professional ethos.
- Mentoring used to be based on informal relationships and this was sufficient support (Kamil older generation perspective), however today mentoring should be more systemically developed so that young researchers are aware that they can expect it.
- Feminised education system in Poland (Kamil), men do not want to take up scientific or teaching careers because they think they are not for them - boys need support and encouragement in order to choose science or teaching - as a whole, no matter SSH or STEM.
- Competition among scientists provokes overuse of doctoral students' work, often at the level of mobbing or abuse (Kamil) - there is a need of institutional system of training on how to distinguish inappropriate or mobbing behaviour


## Recruitment and career progression processes

Criteria for recruiting for Professors positions:

- accumulating sufficient scientific output
- promoting doctoral students
- obtaining own scientific grants as PI

According to Kinga, those criteria, however clear and widely accepted, are still harder to be met by women due to their family roles as mothers. Yet, she wants to keep those criteria unchanged as women would not want to be verified according to other rules than men and they will reach those positions, however maybe in a longer time frame and with double effort, performing house duties simultaneously.

For PostDoc positions:

- criteria based on the given research project's requirements

For technical, teaching or administrative positions:

- criteria based according to the needs of certain position

According to Kinga in her faculty (STEM) the number of women and men achieving doctoral and postdoctoral degrees has been similar in recent years. The criterion of family situation is not taken into account when recruiting employees. The composition of selection committees is also not differentiated by gender balance, only competency criteria are considered. According to Kinga, in the recruitment process, even if the committee consists of men, they should be guided only by merit criteria.

In recruitment both Kamil and Kinga indicate that merit criteria, scientific excellence are the most important and gender is secondary. And this is how it is commonly done at the University of Gdansk during recruitment. However, Kamil stresses the issue of feminisation of science, which manifests itself in the fact that some teams are dominated by women and although he would like to balance them out, he still stresses that during the recruitment process, the merit argument will prevail and the employee will be selected on that basis. Conclusion: with equal applications, the gender factor should be taken into account to try to maintain balance and ensure a diverse team.

## Departmental policies

Kamil sees a steady increase in the number of women in boardrooms and does not see a necessity of speeding up this process. Kinga also sees small increase in the number of women as heads of faculties

For many years of his managerial career Kamil did not observe women fleeing from science because of motherhood on this faculty (Kamil) however he thinks that break in the career due to child-bringing is natural and happens and should hence be institutionally supported - there is a need to provide women with institutional facilities (infrastructure of nurseries, kindergartens, feeding rooms and breaks for nursing mothers). In a contrary, Kinga indicates that women often leave research career in the moment when they want to establish a family as their employment situation is unstable, financial conditions uncertain and most importantly, the workload is too high.

Kinga sees the unequal division of labour that occurred in the pandemic and that women with children were overburdened with caring responsibilities. She therefore promotes solutions that enable women to work flexible hours and believes that there is general acceptance within her faculty and team leaders for such solutions.

### 1.4.3 Members of competition commissions in hiring procedures

Experiences presented in this section relate to one 43 -year-old female individual employed at an administrative position at the University. She has a management position in central administration. She tied her career to the academic track at first. Eventually, she took up a career in the administrative track, rising to a high, independent position.

## Personal recruitment and promotion experiences

Karolina (43) already knew when she was a student that she wanted to stay at the University. She found her future PhD supervisor already as a student. At first, she tied her career to the University solely as a researcher. In 2007, she faced a barrier because admissions to research positions were put on hold. Karolina did not want to wait for a full-time research position to be opened (there was a risk of waiting up to several years), so she decided to stay at the University in an administrative position. She continues to work in this capacity to date (although her position has changed greatly over the years), and she is constantly involved in additional research projects (participating in several in parallel). She mentions another barrier she encountered later in her work and the lack of a fixed career path for administrative staff within the University - having been highly competent, with a doctoral degree since 2007, and having been involved in various projects, she remained in the position of "secretary to the deputy rector" for far too long.

Recognised problems:

- the lack of a clear career path;
- the lack of proper designation for one's functions in the administrative path of development, where at the same time, the paths for research employees have been clearly defined, presented, and implemented;
- lack of tools to help managers support and reward active and ambitious employees;
- dilemmas regarding employee bonuses.

Karolina (43) shared her dilemmas regarding employee bonuses. As a manager, her hands are tied in a situation where bonuses are put on hold at any given time and the finance resources run out. She is not surprised that young employees leave to work for corporations. She believes that there is no rat race within the university administration because there is nothing to race for. There is also a lack of tools to help managers support and reward active and ambitious employees.

## Selection processes and links with the gender culture of the organization

Karolina (43) recalls that while defending her doctorate ("not so long ago, in 2007") she stood in front of a committee consisting only of men. She points out that in administration, the situation is reversed because the financial barrier means that even if men participate in the hiring process - when financial issues are discussed - they withdraw.

Karolina (43) listed and described the pillars of scientific excellence that she believes are implemented sufficiently within the University of Gdańsk. They are also, in her opinion, diverse within the various faculties. Karolina coordinates the HR Excellence in Research process at UG.

At first, she points to a researcher who knows what kind of research they want to do, and no one limits them in doing it. They have access to research infrastructure and the ability to raise funds through various grants. The role of the university in this case is to provide application opportunities. And the European Commission strongly emphasises the importance of equal access - for example, for researchers at different stages of their careers.

Karolina strongly emphasises the importance of the third pillar within scientific excellence, which she considers to be disseminating science and reaching the right audience, in the right, thoughtful way, communicating appropriately:
> "More and more, there's this new approach, which is this social responsibility of science and the scientist. That is, talking about research findings in a way that is appropriate to who the audience is, who is receiving this response of ours. That is, getting into the so-called ... sustainability goals. That is, we study, we do research in terms of what is important to the world. Whether it's poverty, water, green growth and so on. And the so-called public engagement, which is interacting with the broader public."

According to Karolina, some of the elements that define scientific excellence are implemented better, others less so. Much depends on the scientific discipline. She says that more time is needed for a generational change, a change of attitude, if only in the context of sharing knowledge and projects. A change is needed with respect to the willingness to disseminate what the scientist is researching.

Karolina does not notice risks to potential parents of young, underage children working within the University. She believes that leave schedules (maternity, paternity) are very closely complied with. She compares this situation to the corporate reality, which she feels provides much less security in this area. On the other hand, she notes that too much emphasis is placed on caring for young children, while in many cases the problem is the need for employees to care for the elderly and the low level of understanding that goes with it:
> "What I find is that more and more people are burdened with elderly parents and it's also like we keep thinking in terms of children, that you have to take care of the children, I actually had - because now this group is shrinking - but I had quite a large group of elderly employees with even older parents who needed care. And here we have a little less understanding, or it's not talked about, it's forgotten. But that, I say, we're such a hierarchical organisation, but still with a "human face" to it, so there's no problem here."

## Departmental policies

Karolina says that a few years ago the European Committee started to pay attention to gender balance in every funded project. According to her, the report (which was a grassroots initiative) prepared by
the Professor (name) on Women at the University had a very strong impact on gender politics within the University of Gdańsk. The report was produced as part of the Social Responsibility Committee. Karolina also points to other university bodies where great care is taken to have both genders represented.

> "A lot of forward momentum was made by Professor [name] coming out with the proposal for this committee. The committee first addressed this report of women in science. And it showed clearly and distinctly in numbers... because some people if they don't see in numbers, they don't see in charts, in percentages - they don't
> see it at all. Even such a slide was presented yesterday by the rector at the meeting: no data - no policy, because if there is no data, there is no need to implement anything. So that's where it started. And in my opinion, that policy is being implemented. Because in all the committees that I personally... because I can only speak for myself here, but in all the committees, and they're at a high level, like the Senate, and we have, for example, a committee on science support programmes - the ones that originate from the university, excellence, research university. We set them up so that they have representatives of both genders."

Karolina strongly emphasised the situation of digital exclusion of administrative employees faced during the COVID-19 pandemic. Using her office as an example, she pointed out the total lack of preparation for such a situation. None of the employees had a laptop, yet initially everyone was forced to work remotely. In addition, internet access was also a challenge in situations where all household members (including children studying remotely) were using the same connection, or the employee was using a plan with limited data transfer. The situation did not change when the administrative staff returned to the office to work, as online meetings continued with severely limited participation because "most desktops do not have microphones and cameras".

Karolina was unable to identify specific examples of discriminatory behaviour among employees. It is more crucial, she feels, to talk about there being a pathway for an employee to report certain incidents, behaviours or situations.

She believes that discriminatory behaviour focuses on two aspects: age and position (in relation to type of employment). In the case of the latter, this occurs in a two-fold manner, as it relates both to behaviour within the research and teaching workforce, as well as to the hurtful and unjust division between research and "non-research" employees - that is, administrative employees:
> "I think sometimes we have age-based discrimination here at the University. And again, it's more of the type that someone is too young for something. And I myself witnessed at a habilitation exam that someone said that this candidate was too young, because he was only 40 years old, and he already wants to have a postdoctoral degree. And it comes from this long-standing tradition that these degrees are earned one by one, and it goes on and on."

"We also have some discrimination due to position or employment type, whether it's research position or research and teaching position, compared to administrative positions. And you can see that in the language: the lady over there will do it, Basia, Kasia will bring it. And also, in general, there's that "some lady's going to do it" - kind of disrespectful. Especially from senior professors, from tenured professors. I'm the one who notices how my female employees are treated, while I, as I'm the director, still have a degree that just happens to be good for the job. I'm treated differently, but the employees... It's not an insult, but it shows a lack of respect. And we should probably pay more attention to the fact
that these are the staff who support and are necessary for the researchers to do their work."

### 1.4.4 Governance "central" level

The summary for Section $C$ is based on the experiences presented by interviewees, two women (Krystyna and Klara) and one man (Kuba). Two STEMM and one SSH representatives and their role in shaping University policies and structure as present/former: v-ce Rectors, Deans and Members of University Board.

## The rector/president/head's team

The recent Law on Higher Education and Science known as Act 2.0 (2018) has strengthened the rector's position tremendously. The rector is virtually responsible for the entire operation of the university, with Senate approval of changes. The appointment of deans or the appointment of department heads formally depends solely on the rector, so the rector has gained a great deal of empowerment and the ability to make independent decisions. As a result, the internal structure does not have as important a role outside the university, of course it has an important role in internal life and organization, while the role of the dean has potentially diminished. The current chancellors want to strengthen back the role of deans, but gone, importantly, are the faculty councils. The Rector is currently elected by the academic community. The election is fully democratic and, according to interviewees, not particularly different from other universities. However, when it comes to the election of deputy rectors, it is different:
> "Because the rector proposes the deputy rectors, and one votes for specific people proposed by the rector (...) first of all, however, one looks at the merits, that is, for a given position, who is the most competent, who seems the most competent of the candidates at the university, that's one thing. And, of course, two - with whom you would like to work, so usually you propose people you trust, who are valued not only in terms of content, but also in terms of the fact that you can count on such a person at work. Well, specifically, whether it is the deputy rector for scientific affairs, or for teaching affairs, or for other matters, well, this team must be harmonious, trusted, and therefore, if we consider candidates, for example, that in terms of the merits several people would be suitable for a given position, as the rector thinks, well, it is also important with whom it will be better to work, on more personal terms. This also has to be taken into account, because it is a piece of intense work, and the team has to be in sync. By the way, the same thing happens at the stage of not only rector, but also dean elections - I would say, the mechanisms are very similar" (Kuba).

Kuba underlines that creating the managerial team is gender neutral. Anyway, the chosen team for 2020-2024 consists of 4 men and only 1 woman. The team is "young" compering to previous teams: rectors are 44, 49, 52, 57 and 61 years old. Three of them were in rectoral team in 2016-2020, two are new members.

Team spirit is also confirmed by Klara (Vice-Rector) from her one year-long collaborative perspective in planning and implementing change at the institution. Rector has recruited the team with the goal to work closely together and make decisions collectively.

A very significant, decisive role in the university has always been held by the Senate, where the most important strategic and less important matters are discussed, and resolutions are adopted.

Respondents also note that decisions about rotations or changes at the department or institute head/chair level should be subject to consideration. The changes to the university's structure are described as moving toward flattening the organizational structure. Nevertheless, rotation does not always seem to be the best solution according to Kuba.

## The collegial bodies

Gender representativeness in the university structure is a complex matter - respondents say. Kuba underlines that the change is happening, and it is irreversible. Kuba sees a new era of gender ratios in both science and academic governance but he is nevertheless highly sceptical of "artificial" regulations and quotas.

For a long time the only female functions were those related to care - care for students - the Deputy Rector for Student Affairs and to Education. These functions were assigned to a woman because of the nature of the positions. Nowadays the Vice Rector position held by a woman is Deputy for Foreign Affairs (term 2020-2024).

The University Council, elected from 2019, consists of 7 members, of which 2, indicated by the Rector, are women. The interviewee (Krystyna) believes that this fails to meet balance criteria. There is also a definite change in the proportion of deans, with 4 female deans out of 11 faculties and far more female deputy deans. Compared to when she served as dean 16 years ago in her first term, she was the only woman in that capacity at the university, and there were just 2 female deans in her second term.

In the central administration, most of the managerial positions are held by women, currently women are in charge of the departments of human resources, science, finance, project service, bursar and these are significant administrative functions. However, this is again related to the nature of administrative work, there are more women in those positions.

## The policies for the recruitment and scheduling of staff

Respondents trust the system that gives autonomy and at the same time responsibility to the manager(s) hiring for scientific teams with transparent functioning of competition procedures.

The very new 'University of Gdańsk HR Development Policy' should be the primary recommendation and basis for all hiring decisions made by hiring committees and decision-makers in deference to applicable law, including the UG Statute and Work Regulations. At the same time, it is intended to indicate possible academic career paths to those seeking employment at UG at various levels of their careers.

There is still a certain paradox at UG: on the one hand, the University's strategy is aimed at the initiative of excellence, on the other hand there is no constructive feedback after evaluation procedures.

With the new Human Resources Development Policy the University clearly communicates the requirements for each of the paths, for the teaching, research and combined teaching-research path. It claims it will give tools - multiple teaching initiatives, from tutoring to courses in modern teaching methods and will sponsor initiatives of support, of research activity: the system of small and large grants to secure the balance for the scientific and research path.

Thinking about quotas, one informant says that it would be useful to introduce a regulation on hiring the minority gender in the faculty, of course, according to the need for staff and with the main criterion of scientific excellence in mind.

## Gender policies

There is no consistent gender policy at the University but elements of it appears in various projects and programmes. The changes are demonstrated by the fact that there are already more women deans and in the central administration, in the newly established centres, i.e. the Centre for Sustainable Development and the Office of the Ombudsman for Equal Treatment and Counteracting Mobbing are both headed by women. The University has a Committee for Social Responsibility of Science, which was established as an aftermath of the STARBIOS2 project, which drew attention to the social responsibility of research in the biological sciences, including gender equality issues.

The Committee for Social Responsibility of Science initiated the creation of a tab on the University of Gdańsk website dedicated to the activities of the committee and more broadly to the responsibility of science at UG, the role and activities of women at the university, historically and currently. The equality in question does not refer only to gender but also to equal treatment on the grounds of ethnicity, sexual orientation, religion, disability or other factors that may be used to discriminate. One of the committee's initiatives was to have the Rector appoint an Ombudsman for Equal Treatment and Counteracting Mobbing at UG.

The interviewees, who are involved in the establishment of the GEP emphasise that the University authorities are enthusiastic about it and are aware that this requirement is essential for the development of the University and that the understanding of social processes related to changes in the public sphere associated with the emancipation of women have to be visible in University policies.

Nevertheless, the employee evaluation could add a question about the burden of family responsibilities, which plays an important role in why the advancement in women's careers (managerial, scientific and administrative) is delayed compared to men - the achievement of women in preparing a doctoral dissertation or habilitation was emphasised as made despite having a family and children.

## Organizational culture

After the recent change that is related to the election of a new rector [term 2020-2024] there are new values to be seen as crucial and guiding: "equality and freedom", with a focus on quality of learning and education. The prevalence of a democratic culture at UG is underlined. According to KI's the Rector and deputy Rectors make sure that they are in touch with the faculties and that they are up to date on faculty-related issues. The authorities are available and open to talk, there is no problem to make an appointment or contact by mail. It is also specified that collaboration, engagement, decision-making, and competency building are new dominant organizational values.

> "But it's also that decision-making that I talked about at the beginning. Exactly a little bit I think we're already at a place where we really know what we want to achieve. This is a great deal. I mean, the Rector knows exactly and makes decisions very quickly, directional decisions. They help everyone because they make these things just happen. We're not talking about something that's written somewhere - these teams can meet as long as the document is completed. It's also nice to work then, because there's really such a good atmosphere" (Klara).

### 1.4.5 Key-actors on sexual harassment/gender violence

Based on an interview with a key actor in discrimination and gender issues (Central Administration). Klaudia (55) is also a Head of the Department, and University Professor (SSH). Thanks to her role as part of the Organisation and Development Committee, then as a senator - she was also invited to become part of the University's Social Responsibility Committee.

## Sexual harassment and gender violence

Klaudia (55) was offered the position in 2021. The interviewee points out that the issues of discrimination, harassment, and taking institutional action in this regard - is only symptomatic of the last 2-3 years. Recent years have opened up discussions about them in general, and some concrete actions are being taken. Klaudia wants to put emphasis primarily on the educational function - that is, pointing out anti-discriminatory and anti-bullying behaviours (she emphasises the very clear lack of knowledge in this area, even among people reporting incidents). She is preparing training in this area, and work is taking place on an information manual for academic, teaching and administrative staff. She is mainly of the opinion that at the moment (and in the general state of knowledge) the development, preparation of various types of data and reports based on them, and their subsequent dissemination is the basic task - a kind of popularisation activity.

The role of second deputy is to be filled by a male. He will be tasked with dealing with antidiscrimination issues regarding students and doctoral students. The Deputy Ombudsman for Students and Doctoral Students will be appointed due to emerging reports of cases that bear the hallmarks of discrimination among students and doctoral students. Due to the lack of an employment relationship - they could not be considered under the classic intervention pathway (according to antidiscrimination or anti-mobbing policies). That is why there was such an initiative and proposal to appoint a responsible person (ombudsman) for these specific applications.

Klaudia's idea is to make the Office of the Ombudsman a place where an employee can always come and get initial advice. The initiation of an anti-mobbing or anti-discrimination procedure is associated with a certain formalism, due to the fact that these are matters that may later be brought, for example, to a labour court. The office is meant to be a place for preventing conflicts from arising and resolving them, not necessarily through the formal path.

Klaudia has no knowledge of sexual harassment cases. However, Klaudia mentions that in an anonymous questionnaire, during the implementation of the GEAM survey in 2020 - harassment was noted (a negligible percentage, but it was noted nonetheless). As part of her planned activities, she would like to investigate this further, although anonymous complaints raise some concerns and doubts in her mind (regarding their credibility).

Each potential complaint goes to a staff member in the Office of the Ombudsman. The official procedure, including a detailed scheme ${ }^{3}$ constitutes a formal path of proceeding in case of reporting an incident: At the moment, the University does not have a system for reporting possible discriminatory or bullying situations in an anonymous form. Labour Code regulations state that taking any action against another employee must follow this formal path.

Klaudia also draws attention to a very clear lack of knowledge regarding discrimination, or at least the behaviours that are perceived as such. Klaudia points out the huge generation gap and the misunderstanding and miscommunication that occurs between students (the younger generation) and professors (who have no intention of acting in a questionable manner). Klaudia also believes that, just a few years ago, there was not as much attention paid to the issue of discrimination or bullying.
"...I put emphasis here mainly on this educational, preventive function, and at faculty councils, at dean's councils, when I reported on the performance of this

[^2]function, of course not pointing the finger at anyone, I simply pointed out the reprehensible phenomenon, which was assessed as reprehensible by the students - well, as some kind of a warning simply for the employees that they should take into account at this moment a different sensitivity and different standards, as I say, moral, or other ethical norms that have been formed."

As one of the possible solutions, she pointed out the creation of positions for intermediaries - "trusted representatives" - within each department:
"I think that appointing such intermediaries, or, as we discussed there, these trusted representatives, at specific departments, that is people to whom you can go to report certain things, not necessarily making a specific complaint against a specific person - just a whistleblowing action... Well, I think that this is such a good step to start with, don't you? Because I'm of the opinion that sometimes just starting a discussion, or just saying, expressing certain issues, or emotions, on the one hand gives the employee who reports such a situation the feeling that he or she can go somewhere and just be heard, and on the other hand, sometimes drawing attention to certain issues in such a general way causes, or can cause other employees, especially superiors, to realise that actions which, as I say, would seem to be some kind of normal, acceptable actions, because that's how it's been so far, that they simply are no longer acceptable."

## Organizational culture

Klaudia mentions that the beginning of her career involved joining a "feudal institution". The university in Poland functions quite differently than in the Anglo-Saxon system. Academics do not work in teams, but in permanent departments. Development occurred through a student-master relationship.

A type of an automatic process takes place within Klaudia's faculty. When academic advancement occurs and the candidate becomes an independent faculty member, they may apply for the position of department head. This is the only way to assume such a position. Due to the increase in the number of independent employees - the principle of "seniority" was adopted when it comes to taking over management. In addition, the position is ultimately offered to the head by the Dean of the Faculty. Klaudia highlights the complete lack of preparation of potential and current heads to adequately perform a management function:

> "...In my opinion, to date, no one is considering managerial competence when it comes to assigning management functions in the university. This applies to all positions, I'll be brutal. It's just not considered to be a factor in awarding such positions at all. And this does not apply only to the University of Gdańsk, it applies to all higher education institutions in Poland. This I say with complete conviction."
"I believe that if someone is already taking this leadership position, they should acquire managerial competencies. And it's doable. Training is accessible -for example, it was offered under the POWER programme. Not everyone... Obviously this is still an inadequate offering."

Klaudia is more than aware of the need to implement GEP and strongly supports this effort within the University.

### 1.5 Jagiellonian University in Kraków, Poland (UJ)

### 1.5.1 Desk work, fieldwork and sample's characteristics

As agreed by the MINDtheGEPs consortium, two university units were selected for the qualitative study, including interviews with researchers and interviews with key informants A (departmental management) and key informants B (members of recruitment and advancement departmental commissions). One of the units operates within the Faculty of Management and Social Communication representing SSH sciences and the other lies within the structure of the Faculty of Biology and represents STEM sciences. The rationale for choosing these units has been provided in the T 2.6 report.

The management of the chosen units - including the unit directors and faculty deans - was contacted in advance via e-mail with information about the MINDtheGEPs project and the aims of the qualitative study. On this occasion they were firstly invited to take part in the interviews.

The interview outlines and guidelines for each group of key informants were translated into Polish and adapted to the context of a Polish university. To this end we identified the collegial bodies within JU and their competences, verified the processes of recruitment and advancement, specific for each Faculty. It was quite a challenge to identify the members of recruitment and advancement committees as their compositions vary from faculty to faculty as well as the accessibility of the information on their operation. Within the JU project team, we have verified whether the questions were sound and understandable.

According to the guidelines for sample design and based on 1. the analysis of university-level and faculty-level management composition available at the JU webpages and 2 . insider knowledge on the recruitment and advancement procedures shared by the project team members and interviewees from the chosen units, 12 potential respondents were identified: 4 for the interviews with key informants $A, 4$ for the interviews with key informants $B, 2$ for interviews with key informants $C$ and 2 for interviews with key informants D.

Depending on the type of key informants, the interview candidates were contacted via e-mail with information on the MINDtheGEPs project and invitations to participate in the qualitative study in Summer 2021 (key informants A) and in Autumn 2021 (key informants B, C, and D).

After a few rounds of contacting the selected candidates and thanks to a few informal interventions of the MINDtheGEPs team members working at the selected units, 8 interviews were conducted between November 2021 and February 2022, both online (5) and in presence (3). Four candidates either did not respond to any of the invitations or initially declared participation, but then stopped answering the emails. This group includes departmental key informants ( $A$ and $B$ ) from both STEM and SSH units.

The fieldwork - including contact with potential interviewees, setting the dates of interviews, conducting the interviews and writing interview synopses - has been done by three social researchers (two sociologists and one psychologist) experienced in qualitative research. The interviews were conducted with:

- a male vice-dean of the faculty within which the chosen STEM unit operates and a male director of the chosen SSH unit (key informants A);
- a male member of the STEM faculty recruitment committee and the faculty professor commission (responsible for professorial promotions), who is employed in the chosen STEM unit and a male member of the SSH faculty recruitment and promotion committee, who is employed in a unit that sits within the same faculty as the chosen SSH unit (key informants B);
- a female representative of the central university management who manages administrative units and a male representative of the central university management responsible for employment policy (key informants C);
- a female and a male whose competencies include counteracting discrimination and sex-based violence (key informants D) (for a detailed description of interviewees' characteristics see Table 1).

Table 1.1 UJ: Profile of key informants

| No. | Alias | Age | Sex | PhD year | Academic position | Administrative function ${ }^{*}$ | Unit | Position type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01 | Aleksander | 61 | M | 1996 | University professor | Department governance/manag ement | STEM | Key informant A |
| 02 | Cezary | 50 | M | 2002 | University professor | Department governance/manag ement | SSH | Key <br> informant <br> A |
| 03 | Dominik | 64 | M | 1992 | Full <br> Professor | member of the STEM faculty recruitment committee and the faculty professor commission | STEM | Key <br> informant <br> B |
| 04 | Jacek | 56 | M | 2000 | University professor | member of the Faculty recruitment and promoting committee | SSH | Key informant B |
| 05 | Julia | 42 | F | - | - | central university management | central | Key <br> informant <br> C |
| 06 | Roman | 50 | M | 1998 | Full professor | representative of the central university management responsible for employment policy | central | Key <br> informant <br> C |
| 07 | Olimpia | 57 | F | 1996 | University professor | Key actor in counteracting discrimination and sex-based violence | central | Key <br> informant <br> D |
| 08 | Tadeusz | 28 | M | (PhD <br> student) | - | Key actor in counteracting discrimination and sex-based violence | central | Key <br> informant <br> D |

All interviewees but two have been developing academic career and they combine management functions with academic positions in their respective units. All interviewees are Poles.

### 1.5.2 Departmental management

## Strategic choices, organizational and gender cultures

When discussing the strategic aims of own departments respondents from both STEM and SSH point to reaching high quality of science and teaching. They also stress the aim of internationalization of their departments in terms of being internationally recognized research and education centres. While the STEM key informant seems to be satisfied with the degree of fulfilling these aims so far, the SSH
respondent signals that, while his unit has recently reached a recognizable position in the national science, there is still some effort to be made to be a significant European research centre. However, he is convinced that the level of internationalization of teaching is already high, which is evidenced by the considerable proportion of Erasmus students. Among the most important strategic goals, the key informant from the STEM unit also identifies cooperation with external stakeholders, acquiring external funds and internationalisation of the faculty ${ }^{4}$.

In both units the strategic goals were formulated within small teams, whose members were appointed for the purpose of writing a faculty strategy. The teams were composed of the representatives of faculty and unit management and - in the case of the SSH faculty - "the people who specialise in scientific work or have a significant position in the community" The working documents were then consulted with faculty members. In this context one of the respondents admits that the process of implementing the faculty strategy was not very democratic, which was however necessary due to considerable diversity of the staff:
"It is difficult here to work out the first proposal in such a democratic group, because we would diverge. We are rather used to the fact that there is a proposal, it is discussed, debated, criticised and we have a plan here."
(Cezary_M_50_A_SSH_JU)
According to the University Statute, the faculty strategies are then reviewed by Faculty Councils and approved by the Rector.

Among the expected qualities of a good scientist the SSH interviewee points to the ability to write scientific texts, teaching skills and teamwork. A person in a leadership position should both meet some formal criteria (such as having publications, grants, projects, the ability to plan, anticipate and manage) and have a good command of informal, unwritten rules, traditions and customs of the public institution.

## Recruitment and career progression processes

While talking about the criteria considered when recruiting or promoting for the positions of full professors or university professors (Grade A and Grade B) both the STEM and SSH interviewees point to academic achievements understood as publication output that exceeds considerably the requirements for a doctorate and includes articles in high-scoring international journals. The STEM key informant also stresses the necessity of having a long-term internship abroad. He admits that the requirements for grade A and grade B positions in his faculty used to be higher than in formal requirements present in the university work regulation or in the national legislation, where no obligations for having long-term experience abroad were included. While the SSH key informant does not mention this criterion explicitly, he mentions that applicants for the position of professor are also expected to conduct grants and cooperate internationally. He also admits that in addition to formal criteria collected in an internal document (which is not made public, but staff members can receive it upon request) there are also certain customary, unwritten rules to be conformed to, e.g., it is not accepted that one becomes a university professor immediately after receiving habilitation. The rationale for this rule has not been given by the respondent.

[^3]Both respondents admit that in the case of promotion procedures - especially to the position of full professor - the applicants are consulted with directors or academics with outstanding research achievements whether they have already met the eligibility criteria:
> "Most often these are some indications of what else the person should do and in six months to a year these requirements are met. Of course, this coincides with the rules of the committee and then it is decided, so this is how these informal arrangements meet the formal ones." (Cezary_M_50_A_SSH_JU)

While talking about the criteria considered when recruiting or promoting for the early career positions (grade D, and grade C) both respondents firstly point to the number and the quality of candidates' publications (measured by the rank of journals). The STEM informant admits that only when candidates have comparable publication scores, other aspects are taken into account such as teaching experience and evaluation, the quality of PhD thesis, and organisational experience. It becomes clear from his narrative that own candidates (e.g., faculty PhD students) have the advantage as the committee members have a more detailed and personalised knowledge of their academic performance. The SSH respondent also signals importance of research projects participation, involvement in administrative work (such as coordination of Erasmus studies and internships or managing webpage of an Institute) and soft skills, such as ability to work in a team. In his faculty it is also required from a candidate to obtain a recommendation from "an independent employee" [i. e. with habilitation or full professorship]. The SSH respondent also shares an opinion that since salaries in academia are not competitive, the recruitment requirements cannot be too demanding and therefore he supports
> "the strategy to take a person who may still need to be developed in terms of merit, but who corresponds in a soft sense, namely the ability to cooperate, because in 2-3 years he or she will already be a pretty cool person. [...] you have to be aware of the market and if you tighten the criteria, you will not find a person with such competences who will want to come for such a pay. [...]"
(Cezary_M_50_A_SSH_JU)

The STEM key informant confirms that at the last 4-year evaluation of employees, the time spent on maternity leave has been considered. However, in his opinion female researchers with caring obligations often have better publication output that men:
> "And I remember that we said that it should be appreciated all the more, because usually it was also the case, it is a phenomenon that those people who also have some other tasks to do after work are often much better than those who have nothing. That is, these people are very actively working. I would like to say that these young people who, for example, have just been on maternity leave often have a publication output comparable to men who at that time had no such problems and did not have this leave. So, we really valued that in this evaluation, and I think that's important." (Aleksander_M_61_A_STEM_JU)

In both analyzed faculties the rules for the composition of recruitment and advancement commissions are set by Deans and in none of the units there are any regulations concerning gender quotas. In one of the unit this body consists of "best researchers and teachers, so to speak, from different institutes, from different fields". In the other unit the committee is composed from a representative of the dean's authority and the directors of the faculty units. In both cases they are currently gender-differentiated.

While the STEM interviewee notes that female employees are more determined and the fact that they are able to effectively reconcile caring duties with academic work requires admiration, according to the SSH informant there are no gender differences in the performance of duties or the organisation of
work. However, he recognises in his unit two styles of communication at work, which he describes after Deborah Tannen as masculine and feminine. These are not due to biological differences, but to cultural differences. People who communicate with a masculine style (they can be both men and women) are competitive and need to establish a hierarchy. In contrast, people using a feminine style (both women and men) prefer understanding and cooperation. Both respondents paid however attention to generational differences: younger researchers seem to be less committed to academic work. As especially experimental science requires long working hours and "constant presence", younger researchers - committed to the idea of well-paid job allowing for work-life balance - become disappointed and sometimes resign from work in academia.

The SSH respondent explains that all employees have organizational, however different, obligations. Early career academics are loaded with the duties of students' recruitment, however it is always informally taken into consideration, in which career phase the person is, whether he/she can have these additional duties. A few people are also engaged, on a voluntary basis and for extra financial rewarding, in long-term tasks such as coordination of Erasmus studies, maintaining the institute webpage or coordinating student traineeship.

## Departmental policies

None of the respondents reports observing lesser visibility of women in their departments or in the whole university. Women are, in their opinion, on equal basis with men present among authors, grantees, conference speakers or committee members.

For one of the respondents, good visibility of women is ensured by their presence in the faculty authorities, which include three women and one man. The other respondent notices that any limitation to the access to resources does not take place, also because it would have negative impact not only on individual careers but also on the discipline and the organisational unit:
> "By refusing publication money to anyone for any reason, I'd be undermining the entire discipline, and ultimately my own workplace too. Here, too, because of the care for the individual career, but also, above all, for the discipline, anyone who has an idea comes, gets the money here. As I say, I haven't noticed any refusals when it comes to translations, editing, conference fees, fees for publications in journals, so it's as if the male-female criterion doesn't matter a bit, because everyone gets it." (Cezary_M_50_A_SSH_JU)

In response to the question on the possible reasons for declining proportions of women on consecutive career stages, both interviewees highlight the role of motherhood. Pregnancy, childbirth, postpartum and care obligations mean less time to fulfil professional requirements. The SSH respondent also highlights cultural issues related to having children. Greater professional involvement of a man who is a father is understandable, as it is related to meeting the needs of the family. In contrast, a woman who becomes a mother is expected to stay at home, take care of the children, abandon her own plans and be subservient. This situation breeds differences in the professional position of men and women. The official statistics (namely She Figures 2021) only partially support this assumption, as the level of mobility is slightly higher for women among pre-PhD researchers and lower for women among postPhD researchers.

Referring to motherhood as a factor that slows down academic careers of women, both respondents however deny that female candidates or employees are treated less favourably because of their (potential) caring responsibilities. Being on parental or sick leave is declared by one of them to be understood by managers and treated as a normal course of events. The other respondent declares that at his unit women are accepted no matter at what point in the family life cycle they are, both those
who already have settled down and reared children and young women who are just entering into relationships and making their decisions to become mothers.

As far as departmental policies to promote equal opportunities are concerned the SSH respondent points to several rules and solutions. Firstly, when the employees return to work after leave, they teach the same subjects that they taught before. Secondly, the departmental meetings are set at regular working hours, when nurseries, kindergartens and schools are open. Thirdly, the university provides infrastructural solutions for women with children, such as a mother and child room and a room for creative, collaborative work where older children can stay. The STEM interviewee only mentions a university initiative called "Creative Spaces", which is a place for the free exchange of ideas. It provides a centre for discussion on various topics also with external stakeholders. It is an initiative that - in the interviewee's opinion - somehow can support the idea of equality.

Asked whether their departments introduced any measures to ensure equal opportunities for those with care responsibilities during the pandemic both respondents read switching to remote teaching (which in one of the faculties took place before the official lockdown at the whole university) as a method of helping people with children when kindergartens and schools were closed.

### 1.5.3 Members of competition commissions in hiring procedures

## Personal recruitment and promotion experiences

Interviewees' experiences in selection and promotion procedures differ mainly in terms of length of service and types of structures they serve in. The STEM informant has participated for several years in the work of two faculty committees: the competition committee, which selects candidates for various academic positions and the so-called professorial committee, which deals with promotions to the position of "full professor with the title of honorary professor". Besides, as the head of a research team (and, previously, the head of a unit) he has taken part for years in many recruitments for research projects. Therefore, he does not recall the exact number of competition processes he took part in, he only indicates that there might have been 9-10 competition cases per year. The SSH interviewee's experience is much shorter (a year and a half) and refers to participation in a faculty commission dealing with both recruitment and promotions. So far, he participated in a dozen or so meetings of this committee (on average, one a month). In both cases the committees deal with selection for various positions (e.g., assistant, assistant professor, assistant professor with habilitation), both for the group of teaching and research staff and for teaching staff.

The competition procedure for hiring a position financed from the university's budget in both faculties follows a similar pattern: job applications are reviewed by the director of the institute to which the person is being recruited or by the dean of the faculty. At the committee meeting the director or the dean presents the candidacies to other members, presents his or her opinion on them ("emphasizing what, from his perspective, is important in their CVs"), then a discussion takes place, followed by a secret ballot. None of the respondents recall a situation when a committee had a difficulty in choosing a candidate, as always, the strongest candidates clearly emerge. Then the chairperson of the committee presents the recommendations of the competition committee during the Faculty Council, and then the dean puts the matter to a vote, which for both respondents seems to be a pure formality.

In both faculties candidates for academic positions are assessed based on the criteria indicated in the competition notice. Each call for candidates is tailored to the needs of a specific institute. Therefore, in the case of teaching or research and teaching posts, the criterion is usually the educational profile necessary to teach specific classes ("If we expect this person to teach, say, ecology, we will not employ a cytologist"). For the research and teaching posts the record of publications in a specific area is also taken into consideration. More specifically, the STEM interviewee explains that as far as the criteria
for applicants for the post of assistant professor are concerned, the applicant is expected to make a habilitation within a few years (3-5 years) or (due to the fact that habilitation is no longer formally obligatory) to reach a position that would entitle him/her to a habilitation. Therefore, a candidate should have around 20 very good publications in international journals, teaching and organisational experience as well as at least 1-2 research grants in their output. For the professorship a person should "double the output, in relation to what is expected of a postdoctoral fellow (...), of someone who is appointed as an associate professor" (Domik_64_B_STEM_JU), which in practice means another 20 publications in good international journals, teaching at a high level, activities for the university, organising conferences and participation in non-university scientific bodies.

While the STEM respondent seems to be satisfied with the above-described procedure, the SSH interviewee signals that sometimes it is insufficient. Talking from the perspective of the head of the unit where a new person is to be employed, he notes that the procedure makes it difficult to make a reliable choice in a situation where there are several people with similar experience. It does not provide for interviews with candidates for the position as well as for a longer discussion in the committee:

> "These were two good candidates. I had no conviction who was better, so this procedure was shortened for me. Of course, when I think about the fact that several dozen people were to be screened annually, I understand that some more time-consuming would be difficult, but I also have experience from American universities, this process, which lasts several months and has several stages, I feel was fuller. Here, the fact that we do not talk to each other and that we do not talk to candidates is such a deficit for me. ." (Jacek_M_56_B_SSH_JU)

Both STEM and SSH committees are comprised of comparable numbers of men and women, however this is not an outcome of any deliberate design. None of the respondents confirms gender differences in the committee members' style of communication or having power. While the SSH interviewee attributes perceived differences to personality traits, he at the same signals that it is rather men, who have more to say, and he relates this to gender differences in socialisation ("I guess it is related to the fact that we have become so socialised that the boys are not afraid to speak, and the girls are waiting for the boys to say something, but is it reproduced at this level? I do not know", Jacek_M_56_B_SSH_JU).

## Selection processes and links with the gender culture of the organization

None of the respondents sees that gender - or any other factor - is the basis for discrimination in the recruitment or promotion process or that the requirements set for candidates alone can differentiate the chances of women and men. At the same time, however, they both admit that maternal obligations make the fulfilment of these requirements harder for women. While the STEM interviewee reduces these difficulties to biological factors only and treats them as insurmountable ("No matter how hard I try, I will not give birth to a child. I can help with the upbringing, but even here there are certain limitations of a biological nature at the beginning, so it is always a bit more difficult for women", Domik_64_B_STEM_JU), the SSH informant points to the norms of the patriarchal society, which include expectations that it is mothers who should devote more for the upbringing of children. At the same time, he adds that the promotion or employment procedures in his department do not consider the impact of these difficulties. In contrast, the STEM respondent confirms that in his department the fact of giving birth to a child/children is taken into account by excluding the period of maternity leave from the evaluation process.

When discussing the criteria of excellence, the STEM respondent points to open-mindedness, being well read, having a willingness to do science seriously and publications that count in international
rankings. The SSH interviewee admits that in his discipline an impressive list of publications is as well considered to be an indicator of excellence, however he rather leans towards "peregrination and searching in areas that are quite unobvious, asking questions that are inconvenient and conducting research that are intriguing (...)" (Jacek_M_56_B_SSH_JU).

The respondents differ in relation to the problem of lesser visibility of female scientists. While the STEM interviewee refers to biological (hormonal) gender differences that are the reason why women "try less" and men have a greater "drive" to succeed, the SSH informant at first does not notice that the achievements of women are less visible in his unit. He wonders, however, whether the presence of several strong, visible female figures (who headed the unit previously or took the position of dean) does not cover the problem of the worse visibility of women.

## Departmental policies

The differences between the opinions of SSH and STEM informants emerge also when the issue of declining women's participation at successive stages of academic career is discussed. While the interviewee from the STEM unit points to hormonal gender differences that make men more willing to engage in competition, the SSH respondent discusses the impact of earlier retirement age for women and admits that it is part of a broader process of strengthening the patriarchal culture promoted by the current government. Surprised by the scale of the gender gap in professorships across the university ("I mean those $26 \%$ of female professors and $74 \%$ of male professors ... I wasn't aware of it. I'm shocked. I'm shocked indeed, even though it is a subject of my interest, I deal with education, but that in our university there is such a colossal difference", Jacek_M_56_B_SSH_JU) he concludes that must be some immediate mechanisms located in academia, however he admits he does not perceive them.

Both respondents have ambivalent attitudes towards gender policies in the recruitment and career progression processes, however on different grounds. The STEM informant indicates that some solutions are already in place (as excluding from evaluation the time on maternity leave) and repeats several times that the role of the university is to create equal opportunities for women and men. However, he emphasises the objectivity, the naturalness of the obstacles to gender equality in science resulting from biological differences between men and women and fails to see the possibility and legitimacy of combating them. The respondent formulates an opinion that actions going further than creating equal opportunities would be acting "by force". The SSH interview sees spaces for necessary interventions (as e.g. including information on maternity and parental leave in a CV or introducing quotas). However, the respondent declares a cautious attitude towards these interventions and analyzing their possible unintended consequences. Referring to the idea of introducing information about maternity and childcare leaves into the application forms, the respondent discusses its potential countereffect: "I can already imagine that some committees will take it into account, and some committees will say: 'why do we need a mother of three children who will probably be more interested in caring than working for us', so it could be disastrous again" (Jacek_M_56_B_SSH_JU).

While discussing the effects of the covid-19 pandemic on the academic community only the SSH informant declares that it is women with caring responsibilities who have been impacted more severely. Both interviewees point however to students - both male and female - who are disadvantaged by the fact of remote teaching and limited social contacts. As for the existing solutions to mitigate the negative effects of lockdown, one of the respondents discusses departmental support for students: "We ask, we try to stay in touch, [[...]. I do not know if we have the tools to react efficiently and effectively, but we try, but I am talking about such wellbeing, about such mental condition that we
try to monitor at our institute, and the departmental authorities encourage us to do so" (Jacek_M_56_B_SSH_JU).

The issue of a GEP as an eligibility criterion for applying for Horizon Europe grants has not been directly tackled in the interview with the STEM respondent. However, he declares awareness that many universities in Europe implement gender equality measures and comments it - half jokingly, half seriously - with a conviction that in his unit it is men who need support, because they are a (numerical) minority. The SSH informant admits that he did not know about this requirement, but once again confirmed that he is a supporter of all equality regulations. He only stipulated that they should be developed in a participatory process involving all interested parties and based on dialogue:

> "These equality plans, or any such provisions are necessary, but they must always be created in the process of such consultations, debates, and participation by all. It is excruciatingly troublesome, stressful, people don't come, and when they come, they don't agree, but you just can't do anything from the top. One can propose, but it must be consulted, so I am a great supporter of such things, but it must be introduced in a meaningful way." (Jacek_M_56_B_SSH_JU)

### 1.5.4 Governance "central" level

## The rector/president/head's team

The Rector's College is composed of the rector and vice-rectors, the chancellor and the bursar (+ the representatives of the student government and PhD students are invited). This body deals with "the most important issues that we face on a daily basis (...) related to major investments, development directions, issues related to remuneration policy; these are the basic issues that each vice-chancellor, chancellor, bursar deals with in their departments, works on them, and then they are analyzed and reviewed by the college". (Julia_F_42_C_JU)

The perspective of both informants on the main criteria related to the selection of individuals to the rector's team is convergent - both attribute the greatest importance to previous positive experiences of working with individuals and the associated trust in their competence. The history of positions held in both cases confirms that both respondents had previously cooperated with the rector in various managerial positions at JU, where they had "proved themselves" to such an extent that they were offered their current positions at the College.

In addition, one informant points out that other relevant criteria also include representation from different disciplines, personal skills such as the ability to maintain good relations with others, willingness to cooperate, management, conflict avoidance and full commitment.

Regarding the decision-making processes within the Rector's College, both informants also emphasize that although the final decision always rests with the Rector, the general rule regarding decisionmaking processes is democratic and most decisions are made by voting. However, before a vote is taken, there are discussions and consultations with those who have substantive competence or experience in the areas concerned:
> "Of course, there is also a natural tendency of the rector to consult certain things with selected people, because, for example, it is natural that if my specialty is real estate matters, but I have also been dealing with labor law and employee rights for almost 20 years, then, of course, it happens that if there is this kind of issue, the rector consults with me, Even if there are some consultations here, which are targeted at one particular person, or the voice of this person prevails, it is only for substantive and competence-related reasons". (Julia_F_42_C_JU)

Nonetheless, the position and strength of arguments of individuals in the Rector's team is seen to vary. One informant distinguishes two influencing factors. The first relates to the term for which the person was elected and the associated baggage of experience or greater confidence in dealing with certain responsibilities. The second criterion relates to the area of responsibility: there is a greater number and stature of responsibilities associated with some pro-rector positions, where impact and influence in decision-making processes is stronger.

Interestingly, the criterion of equal gender representation in this collegial body was brought only in the form of a joke, explaining why, after taking office, the new rector left in office two women who were part of the previous Rector's College:
> "Sometimes we laugh that because we as women were needed for him to maintain the parity, but in fact we stayed, (Julia_F_42_C_JU).

## The collegial bodies

The collegiate bodies at JU include the Rector's College, the Rector-Dean's College, the Senate and the University Council. The Rector-Dean's College is extended from the Rector's College by persons holding the position of dean of faculty and performs mainly a consultative function for this narrower body. It also takes decisions on the sale/acquisition of real estate. With the recent higher education reform carried out in 2018, the senate lost its previous decision-making powers (for example, adopting the university budget) and now performs mainly consultative and representative functions. The University Council - a new body introduced by the 2018 Act - is intended to be "an element that connects the university i.e., units of the public finance sector with the business world i.e., it was supposed to be something borderline like a supervisory board" (Julia_F_42_C_JU). The University Council supervises the rector and grants approvals for investment activities.

As far as the collegial bodies at JU are concerned, the respondents admit that so far there are no formal solutions in force, which would regulate the gender composition of collegiate bodies. However, one of the informants notes that this issue is increasingly receiving attention and there is a noticeable effort to make decision-making bodies gender-diverse:
> "(...) many times in the discussions of precisely the rector's college and so on, there is more and more often such an element, when we formulate a body (...)at some point everyone mitigates and: "No, no, no, then we have to think a little differently, because either we have only men and suddenly it turns out that it's only women, then we have to somehow mix this company and try to..." of course, not like with a ruler, it's never the case that we make sure it's 50-50, but really that there's at least some kind of representation and that the community is such, such a mixed community". (Julia_F_42_C_JU)

## The policies for the recruitment and scheduling of staff

There are two paths of distribution of financial resources for the recruitment and advancement of administrative staff. For staff working at university central units the resources are managed centrally by the office of one of the respondents. The operating rule is here - according to one of the respondent - a policy of equal pay for new recruits.

For recruiting and advancing staff employed at faculties and other university subdivisions the financial decisions are made directly at these levels by unit managers, including deans. In case of academic staff financial resources are universally distributed from organisational central budget to faculties (or nonfaculty units), faculty deans can then decide whether to keep all of them at their disposal or further
distribute to interfaculty units (institutes or chairs). This method is recognized as effective, allowing to better recognise and answer the needs of employees.

According to one of the respondents the university has very limited possibilities in terms of personnel policy, employment structure and renumeration, as they are designed and regulated by the national legislation. It can only pursue a policy regarding quality requirements for candidates for certain positions. However, agreeing the criteria on a university-wide scale is not easy.

While the respondents are aware that the level of remuneration (for both academic and administrative staff) at the university is not very competitive in relation to private sector, they both point to existing incentives that make working in their organisation attractive. These include various social benefits, availability of flexible working time (for academics), internal trainings and co-financing of external courses, as well as additional financial resources for participating in various programs and projects, which one of the respondents calls 'university entrepreneurship':
> "It is a certain specificity of working in universities, that the employment and wages in the employment contract are not impressive for the most part, but nevertheless opportunities for generating other income for the benefit of oneself and the university do exist and the various projects that we observe are proof of this. " (Roman_M_50_C_JU)

As was signalled in other parts of the report, there are two basic types of recruitment at universities. The first concerns hiring employees on the basis on working contracts financed from the university's budget, the second - hiring for projects financed by external sources. In the case of projects, the key person is the project manager and he or she makes employment decisions. The decisions about hiring personnel for positions financed from the budget are made by recruitment committees. These commissions include a representative of the unit that recruits a new employee, but that is only one of many members. Voting of the committee is secret. One of the respondents notices that in this way more people are able to coldly assess the candidate's predispositions.

## Gender policies

Gender equality measures, understood as a dedicated unit or body focused solely on gender issues, do not exist so far at the university in a formal or systemic way. For example, there is no position - at the level of the rectoral authorities - that would be responsible for ensuring gender equality, nor are any of the positions or departments in the university administration directly and solely responsible for gender equality. An interviewee (who is a woman) believes that such a position, high up in the power structure, should be created:
> "To be honest, there is not really such a single place, because we have a little bit of it in a department called Safe UJ, (...) but again, this is a department that has a whole bunch of other tasks besides that, and it gets blurred for us. Just like with the Ombudsperson for Rights and Values. I have an impression that creating such a separate position, be it at the rank of, I don't know, vice-rector, or plenipotentiary (...) I think it doesn't matter, but certainly a person who would be strongly empowered and highly authorised directly by the rector, who would deal strictly with questions related to equality, equalisation of opportunities on the grounds of gender, is not something exaggerated in my opinion. Absolutely not, because I also have the impression that even the lack of such direct naming (...). I think that the very fact of articulating it would draw attention to the problem, raise its importance and really emphasise the direction of the university".
(Julia_F_42_C_JU)

On the other hand, the other respondent refers to the problem of discrimination as a managerial problem and says he was surprised, when discovered a gender pay gap "there was an impulse for me, because I had not thought before that it might be a problem" (Roman_M_50_C_JU). So, he also responded in a managerial way: In the quarterly remuneration reports, an obligation has been introduced to pay attention to whether, for various reasons, there is an imbalance in remuneration, e.g., whether the person who was on maternity leave was not avoided by any wage regulation. The respondent notices that: "ladies are on these leaves more often, so systematically it is later intertwined into differences in remuneration - to the disadvantage of the ladies, unfortunately" (Roman_M_50_C_JU).

In a consequence the respondent sees the procedural solutions in case of discrimination as appropriate at the university [there are no procedures dedicated to discrimination, just procedures related to disciplinary issues], but the problem he sees, is very long time to resolve a given case. In his opinion, in many cases the problem could be solved much faster through managerial interference.

Female representative of university's central level management is supporting the idea of Gender Equality Plans as a demand in case of financing projects under Horizon program. She estimates that, if not for this requirement, little would still be happening in this area. In this context, she mentions that for the first time the issue of the gender pay gap was taken into focus and it was with great surprise that it was discovered to be significant among academic staff.

## Organizational culture

The respondents do not have the gender awareness in this regard, so their perspective of organizational culture is gender- blind. A respondent notices that when talking about the style of management at the university, there are two opposing models. On the one hand, it is a leadershipautocratic model related to independent decision-making, regardless of the opinion of advisory bodies. The opposite style, on the other hand, is to shift responsibility for making decisions to advisory bodies, e.g., committees. The respondent, and in his opinion also the majority of people working at the university, support an attitude that lies between the two styles. A person in managerial positions should consult others but should not shy away from making decisions when appropriate.

The respondents admit that they had encountered cases of harassment, gender discrimination and mobbing during their career due to the positions they hold and had held before. Dealing with those issues does not seem a problem for them:
> "I mean I'd be lying if I said I didn't [encounter cases of discrimination], because as I say I've always dealt with labour matters, so there everything was like a lens. (...) Fortunately, we have mechanisms in place so that if someone decides to disclose such a matter, there are certain mechanisms in place to ensure that the matter is dealt with fairly at the university. I can say with a clear conscience that since I've been working at the Jagiellonian University, in fact since 2012, when I came here with the rector and I've always been directly involved with subsequent rectors, not a single thing, not a single thing, not a single complaint, even an anonymous one, which would indicate that criminal or morally unacceptable activities are taking place, has proverbially been swept under the carpet". (Julia_F_42_C_JU)

Referring to the gender disparity in science, the chancellor sees the main reason in motherhood, which causes careers to slow down and take longer than men to reach the next level. As a result of lack of gender perspective, she sees this as something natural, something that cannot be changed:
> "A woman scientist has it harder due to the fact that as a rule, of course, it is impossible to standardise, everyone's path of development is different, but if I were to generalise between two groups: women and men, a woman, of course, the average amount of time it takes to get a doctorate, a habilitation, then a professorship is certainly longer than for a man if only because of, and in fact primarily because of, motherhood. This cannot be avoided, because it cannot be reconciled. There is no situation in which men give birth, so we will not change anything in this matter, while a woman who decides to combine her professional path with the role of mother and motherhood, in a natural way has a few years to spend on motherhood, because it cannot be changed, and she inevitably has to spend this time". (Julia_F_42_C_JU)

The problem of gender stereotypical view on the influence of motherhood on professional career is also visible, while describing another mechanism which can be described as self-discrimination, selflimitation, resulting from a sense of failure to meet social expectations, or which is a strategy for coping with tension resulting from the contradiction of expectations towards women-leaders and womenmothers. This is illustrated by the case of an employee who, when she became a mother, decided to resign from her managerial position since her level of commitment to her job would decrease and that would be perceived badly by her employees. Gender stereotypes and expectations of women and men also lead to the fact that in the administration [which, by the way, is highly feminised] managerial functions are quite often held by men:

> "I observe that in many units, however, we have a large number of male managers, and this is because somewhere there is a habit that if a man, he is more available, and if a man, he will, and if a man, he will not give birth, and it is not even so that it is taken...It is just so strange, because these are usually decisions that come from below from the teams themselves". (Julia_F_42_C_JU)

### 1.5.5 Key-actors on sexual harassment/gender violence

There is no body or unit dedicated directly to combating sexual harassment and gender violence at the JU, however the duties of such a body are covered by the Academic Ombudsperson and Security, Safety and Equal Treatment Department - Safe JU.

The position of Academic Ombudsperson was created at JU in November 2020. This position is foreseen as a kind of umbrella position for various equality-related activities. It also holds a serious autonomy and authority due to the fact it was an open election procedure and was chosen in voting by the University Senate. The position also requires holding a university professor degree.

The Department of Safety, Security and Equal Treatment is fairly new, it was established in January 2020, but before that since 2011 the head of the department held the position of Rector's Plenipotentiary for Students' Safety. What is outstanding in Safe JU - comparing to other universities in Poland - is that this is a university unit with a budget covered by authorities (not project-related) and administrative position to help operate. It hires 8 people (most of them on full-time positions or $4 / 5$ of full-time). The unit was created after long lobbying from the Plenipotentiary.

The relations with authorities, in the perspective of Safe JU's current head is, that in general JU has wide and vertical structure, however the Safe JU department is located in the chancellor's division and reports directly to the chief chancellor, not to one of the deputies, which means that the chancellor is the immediate superior of the head of department and all formal communication and mechanisms go this way. However, most of department's cooperation is with units located elsewhere (not in chancellor's division), so cooperation is demanding communication with many units and knowledge of
hierarchy and connections in-between different units, departments or positions. The quality of this cooperation depends on peoples' engagement and openness to deal with equality issues, but very often people come to the department with issues which are not directly related to the subject of the unit. So, it requires communication and negotiations with many different people and units, with no clear vision, who is responsible for what and who is entitled to make some decisions or even take a voice on a particular case.

Such situations are even more complicated, when it comes to legal issues, then the Safe JU department has no authority to present their knowledge, as legal cases are reserved only to university's legal advisors' team, even if they lack particular expertise:
> "The same applies to some legal issues, where we think, for example, in some way, you can proceed with certain things or deal with some matters that are reported to us. And there are some legal issues, we also most often have our own opinion, our own position, well, after all, I am a lawyer by profession, so I also know some things. On the other hand, I am not a lawyer at the university, I do not deal with it and a team of legal advisers is responsible for being responsible in matters of law, which I know that they lack, for example, knowledge in the field of equal treatment or personal safety". (Tadeusz_M_28_D_JU)

Regarding relationship with the university authorities the respondent replies that there is only a small amount of contacts at the highest level in the course of her tasks. This only happens when all other possibilities of "soft" actions have been used and there is a need to make a resolving decision or apply sanctions, which the interviewee does not have in her competences.
> "Because the idea is that cases that come to me...and I don't have any tools, it has to be said. I mean, I can refer a case to a committee, I can ask for an explanation, but I don't have the ability to punish someone or even praise specifically, so I really deal with the authorities in those cases where there is no other way, that is, when the authorities intervene and the decision has to be or fall at the highest level. So, to put it briefly, what I've learnt during these months is that the vast majority of issues can be resolved at the level of discussion, mediation, normalization of differences of opinion, and at the moment my activities consist mainly of such interventions, whereas I usually deal with the authorities in those matters which are already very heated and cooperation must take place at the highest
> level". (Olimpia_F_57_D_JU)

When asked whether the way she performs her function is discussed with the university authorities, the interviewee emphasizes the independence of her position, but also her efforts to make her methods of action transparent and to regularly inform the university authorities about the issues she deals with. However, there is no mention of any feedback that she receives directly, although she admits that perhaps her actions are not supported by everyone:
"My position is independent. On the other hand, I also put from the beginning on very open communication with the authorities, whether once a quarter the Senate obliges me to one report a year. Once a quarter I send information about the number of meetings (...) so I give a short information of a few pages, how many meetings there were, what were the main issues raised, and of course I realize that some people may not like this, but the essence of this position is independence, and they will simply verify me over time, after further reports or, well, that's it." (Olimpia_F_57_D_JU)

Abovementioned are examples of two different operational strategies of two bodies responsible for combating sexual harassment and gender violence. Both very new to the University (none of them operates longer than two years) and both seem to be isolated or not included in systemic procedures but rather have a role of additional support, which can be used by university authorities. They seem to play an advisory role, not an executive one as none of them have tools nor procedures to use in case of addressing a sexual harassment or gender violence. Moreover, such procedures do not exist at JU, each case is dealt with individually, but we don't know on which basis are particular steps taken. That is also why the support that is offered by these bodies is limited in terms of official procedures but has rather psychological effect, that people are not alone with their situation and there are people who care about them. The role of the respondent is autonomous, so she can decide what to do, whom to talk to and so on, but still she has no official tools to be used in such cases. In case of Safe JU - they have a direct supervisor in a position of a head chancellor of university, so they may end up in a situation which may look like a conflict of interest, but it will not happen if everyone: authorities and employees understand and define the interest of university as eradication of sexual harassment and gender violence.

JU does not have collection of data of discriminatory incidents (including sexual harassment).

## Organizational culture

The picture drawn from the interviews is that the organisational climate is based on lack of transparency, there are little procedures available to the representatives of the university's community, which enable not only being part of the decision-making process but also to be informed about what is going on. According to respondents, important decisions are made by closest co-workers of rector or vice-rectors/chancellors, regardless of the topic. In case of equality and combating violence, the top management is engaged only in case of serious intervention, meaning the case was not solved on a lower level (eg., of the department or other university's unit). But they do not have any agenda or procedures in this regard. Each case they treat individually and make decisions on the basis of their convictions (there are no antidiscrimination procedures at the JU). There is an antimobbing procedure, but respondents were not talking about it, as it is not necessarily used while dealing with the case of mobbing. What is common in diverse perspectives of respondents is that the lack of those procedures remains them toolless and makes it more difficult to be engaged in a case, if a person does not turn directly to them asking for help. They are not situated on - communicational rather than organisational - map of solving sexual harassment and violence related issues, even though they are officially established to deal with these cases. So, what is needed are transparency and procedures as tools for more effective dealing with challenges related to sexual harassment and gender violence as well as providing solutions regarding work-life balance and equal opportunities.

Considering the importance of gender equality in the organizational culture of the university, the basic condition for a positive change in this direction is to move away from episodic and incidental treatment of cases of discrimination, as well as marginalization of women's role in governance and decisionmaking.

As far as the requirement to implement Gender Equality Plans in order to benefit from Horizon Europe funds is concerned, the position of the interviewees is very pragmatic, they think such push was necessary not only to advance already taken actions aiming at gender equality, but also in terms of declaration of certain values:

> "(...) this is a requirement that is the result of a grassroots push by European universities, so if we want to feel part of this community, we just adopt this plan.
> If we want to fall out of it, we don't." (Olimpia_F_57_D_JU)

However, they don't believe it will immediately solve the problem, of course.

### 1.6 University of Belgrade, Serbia (ETF)

### 1.6.1 Desk work, fieldwork and sample's characteristics

All interview outlines were translated into Serbian. Outline A was used without any changes. For outline $B$, we adapted the agenda to fit both synopsis requirements and employing policies at Belgrade University, of which the ETF is a part: as the composition of the Commission at the faculty level remains the same for all hiring/promotions, we asked them about the process in general and focused on the differences in decision making regarding candidates' gender. For outline $C$, we adapted the agenda to fit both synopsis requirements and the structure of the central level governance.

We recruited an equal number of women and men across all the categories. Since there are only a few women in governing bodies and commissions, we decided to recruit eight key informants in order to achieve gender balance. Thus, there were four women and four men in our sample. There were no major problems during the recruitment process. The only subgroup that was difficult to reach were female faculty management / governing council members since there are hardly any women in these positions.

Seven (out of eight) interviewed key informants are advanced career researchers in the field of electrical engineering who earned their PhD titles between 1999 and 2015. Four of them are men, while three are women. The remaining interviewee is a lawyer employed as a faculty secretary. Interviewees' age ranged from 35 to 64. All the interviewees are employed in STEM fields, i.e. in the Faculty of Electrical Engineering, University of Belgrade (ETF UB).

The informants' positions were as follows:

- two heads of the department (outline A)
- two members of the Hiring Commission (outline B)
- four members of the faculty management / governing council (outline C).

There was an equal number of men and women in each category. We did not apply outline D.

Table 1.1 ETF: Profile of key informants

| N. | Alias | Sex | Role | Outline |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Jelena | F | Department governance/management | A |
| 2 | Jovan | M | Member of University governance | C |
| 3 | Milorad | M | Member of University governance | C |
| 4 | Zorana | F | Member of not managerial administrative stuff | A |
| 5 | Goran | M | Member of Hiring Commission | B |
| 6 | Ana | F | Member of Governing Council | C |
| 7 | Nevena | F | Member of Hiring Commission | B |
| 8 | Tomislav | M | Department governance/management | A |

### 1.6.2 Departmental management

## Strategic choices, organizational and gender cultures

The interviewees come from two different departments in the ETF UB but have similar views of their departments' gender culture. They share the attitude that the crucial strategic objective of all departments is to recruit and keep the most talented students, regardless of gender. Electrical engineering is one of the most competitive professions in the labor market, with salaries multiple times higher than in academia. Thus, the best students usually do not have ambition to continue their career as teaching or research assistants at the Faculty. Therefore, the departments develop strategies to attract talented graduates to stay at the Faculty. Since they struggle with employing young teachers, they opt for a fully gender-blind recruitment strategy - our respondents argue that it is difficult to find exceptional students who are motivated to take a job at the Faculty, so any strategy that could narrow the pool of eligible people is considered "a luxury". At the moment, there is a gender disproportion in the pre-PhD teaching positions (teaching associates and assistants) in both interviewees' departments: the proportion of females in these positions is less than $20 \%$, although there is around $30 \%$ of women among teachers and researchers in the whole Faculty. On the other hand, gender disproportion among undergraduate and graduate students, as well as among young teachers, is decreasing. Our interviewees underlined that this is a good sign. They attributed the current disproportion to the gender stereotypes that are still strong and to the patriarchal society as a whole.

The interviewees stressed two major disadvantages of the current organizational culture. First, student evaluations of teachers' work are typically used only in the promotion process of the teaching staff (it is obligatory to report students' assessments), but not as an input to improve the teaching. Evaluations are available to the teachers only in a summarized form, and they never see the actual students' answers that might be useful. Second, they agree that conformity is highly valued, however they refer to it as cooperativeness, agreeableness, or kindness. Our respondents stated that those who do not re-examine institutional issues and stay quiet when controversial issues are raised are the ones who usually receive the best treatment. A combination of conformity and solid scientific results ensures smooth career advancement, primarily for the early career (EC) teachers and researchers. On the contrary, according to our respondents, those who decide to stand up for something that might disturb the status quo are labeled as troublemakers and can face obstacles in career advancement:

> "What usually happens is that the promotions of these so called 'rebels' barely pass in the first vote or the department doesn't open a call at, but then the dean opens it. Or, the candidate does not pass in the first vote, but then passes in the second or a third vote, because in the meantime he or she 'calms down' and stops talking" (Tomislav, 60).

## Recruitment and career progression processes ${ }^{5}$

## Criteria regarding the process of recruiting Grade A (Full Professor) and early career researchers (Grade D and C)

Formal criteria for each academic title are prescribed by law and apply to all universities in Serbia. However, universities and the particular faculties within them have the autonomy to propose additional criteria. Formal criteria for employment and promotion are primarily defined through the number of publications in various categories (e.g. number of articles in the journals on the SCI/SSCI list, number of conference proceedings etc.). The ETF has stricter formal criteria than proposed by the University of Belgrade.

As in all public universities in Serbia, the staff recruitment policies are determined mainly by the Government policies regarding employment in the public sector. Thus, the Faculty cannot deliberately distribute financial resources for the recruitment across the departments. Furthermore, as a part of austerity measures, since 2014 there has been a ban on employment in public institutions, which means that the number of employees within an institution is to be kept constant. In other words, new vacancies can open only when someone retires or quits. In the university context, this means that new teaching/research assistants (TAs/RAs) are not employed on a regular basis, but only when there is a vacant position. However, except for this general rule, recruitment policies differ depending on whether it is a teaching (including research) or just a research position.

TAs are recruited from the best graduate students and PhD candidates pool. When there is a vacancy, they are informed about it and can informally apply for the job. The first round of the interviews then happens on a departmental level - professors from the department interview all the interested candidates. This round is unofficial, and it differs between the departments. However, when an ideal candidate is chosen, only he or she officially applies to the call. Thus, the decision is usually made before the official beginning of the selection procedure. The first step of the official part is forming a commission that writes a report about the candidate. Then the Teaching-Scientific Council evaluates the report, and the Hiring Commission checks whether the candidate meets all formal criteria. Finally, the Teaching-Scientific Council votes, taking into account the report about the candidate and the Hiring Commission report.

Career advancement for teachers is almost automatic - i.e. teachers usually get promoted as soon as they meet the promotion criteria. All the positions except for the full professorship are fixed-term. Thus, a teacher has to initiate the promotion procedure at least six months before this period expires. In fact, teachers usually initiate the procedure at the moment when they meet all the formal criteria for the higher position. Formally, the Faculty opens a vacancy, but the requirements for the position are created following the particular candidate's competencies, taking into account all the formal requirements. This is the Faculty's mechanism to keep their professors and prevent candidates "from the outside" (i.e. from any other university) from taking over their position. As a member of departments governance/management told us, they value the diploma from the ETF UB more than the diplomas from any other university in the country, and they do not even consider the possibility of international candidates applying. Thus, once teachers are employed, they rarely lose their job if they meet all the formal criteria for career advancement.

The recruitment of the RAs somewhat differs from that of the TAs. More precisely, RAs are recruited when there are vacancies in research projects, or when a new research project starts. Their contracts

[^4]are tightly related to the duration of a particular project - so they receive so-called "project funding". Good students also can be engaged in research positions at the beginning of their PhD at the ETF, regardless of concrete projects - and then they receive so-called "institutional funding". Researcher positions are less attractive than the teaching ones - not only are they less certain in terms of future funding, but they also provide less probability to lead to a tenure track. RAs are recruited from the pool of graduate students and PhD candidates. Project coordinators have the freedom to pick the candidates they find the most appropriate for a particular position in their project, whereas research staff who engage at the ETF regardless of any specific project just need to be confirmed by the dean, which is a straightforward process. Formally, the selection procedure is similar to the one for the TAs. As for the promotion procedures, they are also not much different for RAs from those for teaching positions. However, RAs apply for the promotion to the Hiring Committee directly, without a decision at the departmental level.

The most influential people in the decision-making process differ depending on the regarding open positions. For teachers, the greatest influence comes from the department. The head of the department is the most influential one, but the other teachers from the department give their votes as well. Conversely, research positions are strictly related to particular projects, so all the influence comes from the PI.

## Maternity and child-care leave policies

Serbian labor law provides the right to leave from work due to pregnancy and childbirth (maternity leave), as well as leave from work due to child care (childcare leave), for a total duration of 365 days.

Maternity leave starts at the earliest 45 days, and obligatorily 28 days before the time set for childbirth (also in the case the child is stillborn or dies before the end of maternity leave). The father of the child can use the right to maternity leave only in the case when the mother is not employed, leaves the child, dies or is prevented from using that right for other justified reasons (serving a prison sentence, serious illness, etc.).

After the expiration of maternity leave, starts the childcare leave that lasts until the expiration of 365 days from the day the maternity leave begins. An employed woman has the right to maternity leave and the right to leave from work to care for a child for the third and each subsequent newborn child for a total of two years. The father of the child may (in agreement with the mother of the child), use the childcare leave instead of the mother, however, this rarely happens.

Pausing of tenure track (extension of elective period and employment) is prescribed by law if a person is on a maternity leave, child-care leave ( 12 months at most), leave from work for special care of a child, or any sick leave longer than six months. It is intended to allow young parents (in practice mostly mothers) to come back to their academic activities after a year's pause with no consequences. However, our respondents claim that such a long pause does not suit the nature of jobs in academia. Thus, it happens that women take shorter maternity leaves to get on track earlier. Our respondents also observed that those who shorten their leaves or even refuse to take maternity leave are perceived as "soldiers" and hard workers who are truly committed to their academic careers.

Any other support to parents (but in practice almost always women) who have children (e.g. flexibility in working hours, short sick leaves for children's illnesses) is informal and depends on the climate in the department. Our respondents noted that the colleagues are usually willing to temporarily take over the tasks of working parents (typically referring to mothers). However, such support is not formalized nor something that women can fully rely on; it is perceived as an act of cooperation and goodwill to help colleagues in need.

## Interviewees' opinions on the Competition Commissions in the selection procedures

Please see the section Monitoring related to the distribution of the more strictly service and administrative tasks.

## Interviewees' experiences on the differences between men and women

All the procedures, as well as formal criteria for promotion, are entirely gender blind. The interviewees did not observe any gender differences in institutional expectations; however, they stressed that societal expectations are different for men and women. While men are free to dedicate themselves to their careers, women who want to become excellent in their field and have children need to juggle between professional and private life, making it harder for them to achieve excellence:
> "What we have noticed is, but it is a consequence of the norms in the whole society, that women, when they get a family, find it a little harder to fit into university requirements. Male members simply have more time for these commitments. But, again, it reflects our society as a whole. Early careers of females in academia suffer more, because in that stage of life they have to dedicate themselves to their families. But I have no formal proof of this, it is more a feeling I have. As the head of the department, I will rarely receive an email from a male member saying 'I had to stay at home because my children are sick', but I will receive it from a female member of the department. But that is due to our society, not our department. These are the expectations of our society. It's just the way it is. Unfortunately, that is the situation, it is expected. Our society is, unfortunately, still patriarchal." (Tomislav, 60, head of department).

Due to such expectations, women burn out more often. However, this is attributed to societal gender climate, and the interviewees did not offer any solution to this issue. Furthermore, any aspect of formalized gender equality policy is perceived more as a burden than a benefit, which we discuss in detail in section 3. Departmental policies.

## Monitoring relating to the distribution of the more strictly service and administrative tasks ${ }^{6}$

Although there are a lot of service administrative tasks necessary to perform to keep the Faculty running, there are no formal regulations nor record-keeping of their distribution. Most of our respondents noted that, typically, women take on most of the unrecognized administrative burden (i.e. administrative work regarding exams and grading). Women are perceived as more organized and responsible, so it seems "natural" to dedicate themselves to such tasks and to be delegated with such tasks.

Membership in commissions/boards (such as Governing Council, Hiring Commission, or department management) is one of the promotion requirements, but it seems that people generally avoid it and find it banal and underwhelming. However, men are overrepresented in the most influential Faculty commissions and boards. The proportion of women in these bodies is much lower than the proportion of female professors, indicating that underrepresentation is systemic and partially unrelated to the basic gender distribution of employees. For example, only 20 percent of the Governing Council are women, and there are no women in the Faculty management, although around $30 \%$ of professors are women. Moreover, there has never been a female dean, whilst only three women have ever been elected as vice-deans.

[^5]The interviewees attributed this asymmetry to various factors, and their explanations differed depending on their gender. Our female interviewees mostly believed that gender disproportion in commissions and boards is a consequence of sexist stereotypes and prejudice: women are afraid that their voices would not be valued equally as men's, so they do not even apply for the commission membership. Some of them believe that men perceive them as more emotional and therefore less competent for problem-solving and leadership:
> "It was even funny when they decided to have a woman as a president of the HR commission, and that idea was constantly somewhere in the background. We have never had a female dean, although currently, 47 out of 150 professors and assistants are women. The situation is changing, but somehow men always represent their departments. I don't know what to say, I don't like that. [...] It seems to me, I even heard some such opinions, that many of them think that a woman could never be a dean. Like, 'how can a woman solve the problems that men cannot. And I am sure that we could solve such problems much easier in some situations." (Nataša, 52, president of the Hiring Commission)

On the contrary, while some male interviewees addressed gender disproportion to traditional stereotypes, some of them even resorted to "essentialist arguments" to explain underrepresentation of women: women cannot be leading authorities in the scientific community, which means that they are unable to be leaders in academia and therefore their votes are undervalued:
> "Well, yes, I mean men and women differ. Women can often be, I mean we, men, we are more pragmatic I think, and when women stick with something, then that's it, they are I think more emotional. We (men) are more willing to, like OK, that's fine, but let's see and agree, like, to make something like, and among women it is, I mean in that manner, maybe they are more tolerated. I mean, women are more willing to get into some incidents, and then, I mean I think that it is more tolerated." (Goran, 58, member of the Hiring Commission)

Another obstacle the interviewees observed to prevent women from participating in commissions is the expectations regarding private life. Participation in such bodies requires additional administrative work without any financial compensation. Since women are generally expected to take care of children and the household, our respondents claimed they are less likely to accept additional workload that is not compensated adequately. The respondents, however, failed to notice that while women do take unpaid, but also less valued administrative tasks, they are at the same time somehow reluctant to take unpaid, but socially valued and influential positions in governing bodies. "
"No one is forcing women to take administrative tasks... I do not know why they end up with those...Is it in their nature to gather, you know - men are hunters, women are gatherers? I cannot disentangle that... whether they are more often offered these tasks or they accept them more readily..." (Jelena, 50, head of department)

In addition, the respondents did not see the biased expectations from women when it comes to their work-life balance as an example of gender inequality in academia but attributed those to broader social norms which are thus "out of reach and unchangeable".

## Departmental policies

The interviewees reported that women are now more represented and visible in the ETF than ever before. Currently, 25 percent of full professors are women, and they viewed it as a positive trend. They
noted that 20 years ago, there were hardly any women in the highest positions. They expect that this trend of decreasing gender gap will continue as now more and more girls enroll in undergraduate studies, so the pool of talented female students will certainly get larger. However, they doubted that the increasing number of women in the highest position would lead to a higher chance of having a female dean in the near future. They argued that the teaching staff is not yet ready for this, assuming that most teachers still stick to traditional gender stereotypes. As one (female) interviewee said, men are afraid that a woman in the dean position would be too soft and indecisive, which would have negative consequences for the Faculty as a whole.

Notwithstanding an observation that gender stereotypes in the Faculty are still strong, almost all the interviewees (not only heads of departments) were generally reluctant to endorse any formalization the Gender Equality Plan (GEP) would bring. They all found the gender-blind nature of Faculty policies and procedures the principal indicator of gender equality at the ETF. Although they supported the GEP requirement in general, they tended to see it as a requirement that needed to be fulfilled, but they were afraid that it would not bring true equality and instead would put the focus on somewhat trivial issues. They unanimously stressed out that there are no formal obstacles for women to get to the highest positions, which, in their opinion, indicates that there is no need for the formalization of GEP. More importantly, their general first impression on the GEP formalization was directed to imposing quotas regarding gender distribution in selection and enrollment procedures, which they considered unfair. They argued that this could jeopardize competence-based hiring and student enrollment. Women even argued that such a quota-based policy might have negative consequences for women: it would mean that an equal number of female and male researchers should be recruited for each project, even when the competent women outnumber competent men.
> "I think that it is sometimes too much. It seems to me that the attention is not paid to what is essential. If you believe me, I find it strange when my students call me 'profesorica' (the feminine form of generic masculine term for professor). [...] Or 'mentorka' (the feminine form of generic masculine term for mentor/advisor), I mean, a mentor is mentor, I understand that there is a feminine and masculine form for every title, it is emphasized, especially recently. We now have feminine and masculine forms of some documents. I have signed the feminine version of the work contract." (Ana, 35, member of the Governing Council)
> "I am not sure if there is anything that could be written in the form of some rules that is not yet obeyed. You can always restrict someone and tell them they have to employ one man and one woman as assistants. But if I have two excellent women and none men in that generation, or vice versa, that kind of rules would not be beneficial for us." (Ana, 35, member of the Governing Council)
> "I would always choose to work with someone who can best contribute to the project. That is my point of view. I would not like to be instructed to choose someone only because of their gender. What if I wanted to have more women in my project team, because of their expertise? Would that mean that I should invite the same number of men, or exclude some of those women?" (Nataša, 52, member of the Hiring Commission)

Here we once again observed differences in the argumentation between women and men. Women we interviewed expressed concern that GEP formalization might move the focus from essential to formal

[^6]issues or even backfire. They explained that any change imposed from the outside can be counterproductive and found the resistance to it inevitable. We also observed that they themselves are resistant to some recent linguistic changes in the public discourse regarding gender equality, such as using feminine forms of titles instead of the generic masculine ones. Although such change seems superficial, there is empirical evidence indicating that it might increase the visibility of women, especially in stereotypically male professions. Even such small changes were perceived as nonessential and thus redundant by our respondents. They both, however, highlighted the fact that women are considerably less represented in the Faculty bodies such as Faculty management, Governing Council, or Hiring Commission. They attributed this to the general tendency of men to stand up for themselves and communicate more aggressively than women, but did not offer any systemic solution for this issue.

Conversely, men described that women in the ETF are generally treated "gentlemanly" by men. They pointed out that they personally treated women and men equally. Combined with the gender-blind faculty policies that they stress out, they perceive this gentlemanly treatment as a proof of not only gender equality but also a somewhat preferential treatment that women enjoy. According to psychological studies, such paternalistic treatment of women typically reinforces the gender-related status quo and would in the current context prevent any systemic changes that would lead to a higher representation of women in the STEM fields.

Regarding gender equality policies during the Covid-19 pandemic, the interviewees reported that none exists, neither formal nor informal.

### 1.6.3 Members of competition commissions in hiring procedures

## Personal recruitment and promotion experiences

Both interviewees are members of the Hiring Commission. As mentioned, recruitment and promotion procedures are centralized, so the Commission decides on all of them. Thus, our respondents have participated in numerous cases of selection and promotion at both the early career (EC) and the advanced career ( AC ) levels. However, it is worth noting that the Hiring Commission is an advisory body that only confirms that a candidate is eligible for a given position, while the final decision is brought by the Teaching-Scientific Council (consisting of the full-time teaching staff). Selection and promotion procedures are detailed under Outline A: 2. Recruitment and career progression processes. Therefore, we will not describe them again here.

## Selection processes and links with the gender culture of the organization

Excellence is mainly defined through scientific production - those who publish more are considered more excellent. Our interviewees agreed that such a definition of excellence is far from ideal. They both noted that excellence is more than just the number of publications, and that it should also imply that one is nationally and internationally acknowledged as an expert in their field. Here they both noticed that women are less likely to achieve such defined excellence and attribute that mostly to the fact that STEM fields are perceived as typically masculine. However, their arguments and points differ considerably. President of the Hiring Commission (female) highlights that women must adapt to such a "man's world" in order to be acknowledged. She also notes that women are perceived as easy targets so that they often bear the burden of the conflicts within a department. On the contrary, the other member of the Hiring Commission (male) gives an essentialist explanation of the gender gap: for him, it is a logical consequence of the "masculine" nature of electrical engineering. He perceived the dilemma between scientific excellence and motherhood as a zero-sum situation where women have to decide between the two; thus, those who decide to become mothers are unlikely to achieve excellence.

The two opinions illustrate how men and women in the ETF perceive differential sources of the gender gap: men see it as something natural and offer essentialist explanations; conversely, women observe a gap and attribute it mainly to the traditional perception that STEM fields are stereotypically masculine. However, gender-blind formal criteria for promotion are described as egalitarian, contributing to the status quo, as the interviewees did not perceive any formal obstacles for women to achieve excellence.

Regarding organizational culture, our interviewees stated that conformism is highly valued. Here we observed another difference between women and men: whilst women usually talked about it in a negative manner, men perceived it as a sign of cooperativeness and friendly behavior.

Policies regarding maternity leave, as well as the interviewees' views on them are detailed under Outline A: 2. Recruitment and career progression processes.

## Departmental policies

The gender disproportion is lowest in junior positions; and it increases in higher positions: only 25 percent of full professors are women. Our respondents attributed such a trend to the fact that electrical engineering used to be a typically male profession. With more girls deciding to enroll into the bachelor studies at the ETF, they expect this to be reflected in higher positions as well.

The gender gap is even more apparent when it comes to the representation of women in commissions: e.g. only one (out of eight) members of the Hiring Commission is a woman. The interviewees' attitudes and views on gender distribution in commissions and boards are detailed in Outline A: 3. Departmental policies.

The interviewees perceived GEP formalization through quotas, which they found unpopular and harmful. Participants' views on GEP are detailed under Outline A: 3. Departmental Policies.

### 1.6.4 Governance "central" level

## The rector/president/head's team

The election process of dean and vice-deans (faculty management) starts at the departmental level: dean candidates are chosen from the pool of full professors. Then, each candidate proposes a team of potential vice deans (from the pool of assistant, associate, and full professors) based on their expertise and previous cooperation. Further, members of the Teaching-scientific Council vote for a dean and his team. Finally, the Governing Council verifies the new faculty management.

The interviewees agree that the most important criteria for the dean candidates are programs and teams they propose. There are no quotas or any requirements regarding the gender composition of the dean's team, which was reflected in the exclusively male faculty management at the time of the interviewing process ${ }^{8}$. Moreover, women are rarely elected to the position of vice-dean, so some interviewees mentioned that they doubted that there is any chance for the ETF to have a female dean in the next 20 years. However, the only permanent member of the Faculty management - Faculty Secretary - is a woman; she has been in that position for more than 30 years. Having a woman in such a position, among almost exclusively men, could be due to the stereotypical perception of women as generally inclined to administrative jobs, which was brought up several times by our respondents.

[^7]Within the Faculty management, the influence of individual vice-deans comes from their positions. Whilst the dean is the most influential figure, our interviewees do not observe significant differences in power distribution among the vice-deans. Instead, each vice-dean has their own area of influence. However, the interviewees note that the position of vice-dean for academic affairs is the most demanding one, as it includes constant communication with the teaching staff and the students.

## The collegial bodies

Governing council is a body that makes a final decision on almost all critical issues and formally has considerable power. The Council consists of three groups of members: the Faculty representatives, the Government of Serbia representatives, and the students' representatives. Decisions are reached by voting, each member counting for one voice.

Similar to the other powerful governing bodies in the ETF, most of the members of the Governing Council are men: women make three out of 15 faculty representatives; there are no women among Government representatives; at the time of interviews conduction, 50 percent of student representatives were women. The Faculty representatives are elected from the pool of professors; each department has one or two representatives. There are no gender quotas in place, which is reflected in the high gender disproportion. However, some interviewees noted that women often refuse candidacy for the members of the Council. Although the Council member position is influential, people generally avoid it because they are afraid of its high administrative load. Some of them note that women avoid them more often because they also suspect that their votes would not have the same weight as the men's.

The interviewees agreed that the Faculty representatives have the most influence among the three groups. However, the influence of individual members within this group is described as primarily egalitarian. Some interviewees perceived minor differences regarding members' academic titles, i.e. full professors are more influential than the others.

The other two groups of representatives have considerably less influence. Government representatives respect the university autonomy and avoid getting involved in the internal issues of the Faculty. On the other hand, student representatives are, according to our interviewees, welcome to discuss the issues concerning them.

## The policies for the recruitment and scheduling of staff

The selection and promotion policies and procedures are detailed under Outline A: 2. Recruitment and career progression processes. Therefore, we will not describe them here again.

## Gender policies

At the period of the research conduction, the ETF did not have any formalized gender policy. As one interviewee who is a part of the MINDtheGEPs project explained: the fact that the Faculty participates in the project should facilitate the formalization of the gender policy. Some of the interviewees were aware of the novel regulation regarding GEP as a requirement for participation in the Horizon Europe projects.

The interviewees' views on GEP formalization are detailed under Outline A: Monitoring relating to the distribution of the more strictly service and administrative tasks.

## Organizational culture

The interviewees agreed that excellence and cooperativeness are the central organizational values at the ETF. They define excellence not only through the number of publications but also through recognizability in the field. However, they all note that recognizability is not easy to operationalize;
thus, it is valued only informally. Conversely, the number of publications and students' evaluations of teachers' work are the key criteria for promotion into higher titles. Apart from these mandatory formal criteria for promotion, there is also a set of facultative criteria that, if met, support teachers' career advancement. Whilst men and women have formally equal opportunities to meet the mandatory criteria, the facultative ones are implicitly not gender-blind. A prominent example is underrepresentation of women in faculty commissions and boards (see Outline A): Monitoring relating to the distribution of the more strictly service and administrative tasks.

Cooperativeness, that the interviewees listed as a main organizational value, is once again defined as conformity, as we have discussed in detail in the Outline A. "Good employee" is one who does not question well-established practices. This attitude was stronger with senior professors, but it was also observed among the junior ones of whom one would expect to be more open for change. This again reflects conservative organizational culture that could be a barrier to a systemic change and a barrier to processes that lead to more equal gender representation that have been initiated.

### 1.7. Munster Technological University, Ireland (MTU)

### 1.7.1 Desk work, fieldwork and sample's characteristics

Desk analysis began with a brief overview of previous research findings to gain a broader understanding of career-development within academia and the barriers in which could heed women's progression in research. Research carried out within the organisation pertaining to this topic was also explored; to determine if research like this was carried out prior. The researcher did not find any comparable research and no shared repository of knowledge on this topic exists within MTU. Prior to conducting the fieldwork, conversations around the avenues and means to reach the target sample were determined with the leading project managers within the organisation. Two of the individuals involved in the project who have a senior role within the organisation connected with the head of departments and those regarded as key informants via email informing them of the MINDtheGEPs project and encouraging them to participate in the interviews. Research outlines for $A, B, C$ and $D$ were reviewed and altered to suit the organisation and the key informants being interviewed. Following this, a pilot interview with the amendments was conducted online via Microsoft Teams with a key informant from outline A. The pilot interview resulted in further amendments being made to the interview outlines, such as the number of questions being shortened, as interviewees did not have the time to conduct a two-hour long interview. Key informants were selected through purposive sampling. There was no difficulty in accessing male or female key informants, however, there was some difficulty in accessing individuals from outline $C$ and $D$.

Eight interviews were conducted with key informants. Ten interviews were originally scheduled, however, a male and a female key informant from outline $A$ and $B$ failed to respond to the research invites. Of the eight, five were female and three were male. There were four key informants from outline A (3 female, 1 male), two from outline B (2 males), one from outline C (female) and one from outline $\mathbf{D}$ (female). Key informants included five heads of departments and a vice-president. The key informants were between 36 and 54 years of age. All key informants were married with children. All the key informants were Irish. All apart from two, had completed a PhD. For further information regarding the socio-demographic characteristics of the sample, please see Table 1.1.

Table 1.1 MTU: Profile of key informants

| Pseudonyms | Gender | Outline | Marital <br> Status | Children | Current <br> Job and Position | Scientific <br> field | PhD <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |


| Mary | Female | A | Married | Yes | Head Department | of | STEM | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carmel | Female | A | Married | Yes | Head Department | of | STEM | 2007 |
| Barbara | Female | A | Married | Yes | Head Department | of | STEM | 2012 |
| Michael | Male | A | Married | No | Head Department | of | STEM | 2012 |
| Jack | Male | B | Married | Yes | Manager Research Unit | of | STEM | 2000 |
| Kevin | Male | B | Married | Yes | Manager Research Unit | of | STEM | 2000 |
| Jane | Female | C | Married | Yes | Vice-President |  | STEM | N/S |
| Karen | Female | D | Married | Yes | Head Department |  | STEM | N/S |

### 1.7.2 Departmental management

## Strategic choices, organizational and gender cultures

As the university is currently in a merger it was difficult for key informants (Michael, Barbara, Mary and Carmel) to discuss the organizational culture at present, as strategies and policies are still within the infancy stages and have not filtered down to those in mid-leadership roles. In relation to gender culture, both men and women are expected to behave in the same way and key informants did not distinguish between genders when discussing the valued features of their department and that of the organization:
> "...in the last few years a lot of people in engineering would be of the same mindset of myself eh gender, race, sexual orientation and all that stuff it's not that I don't like one and not the other I just don't care. I actually don't care. I don't want to know if you're a man or a woman do you know what I mean it's not something... I don't think it's on an engineer's radar anymore, its more can you the job for me or not and are you going to do it cheaper for me than the next fella. You know can I get more work out of you and that's where you know that's what a company wants to know they don't particularly want to know if you're a man or a woman" (Michael)
"Gender just doesn't come into it, if you can take initiative and work in a collaborative fashion well then that's all I care[...] I don't notice these things, it comes down to whether they can do a job not so much whether they're male and female"(Carmel)
"Gender doesn't come into it. I always think it's the best candidate and the best candidate should always win regardless of what the gender is" (Mary)

The recent appointment of a female president has been welcomed within the organization and key informants suggested this highlighted the importance of having women in senior roles. While the departments of the key informants from this outline differ, there was a consensus that collaboration and teamwork is imperative to the organization; this being attributable to the nature of the research they carry out, which namely engages with industry and enterprise partners. Features such as good communication and engagement were highly regarded, in addition to striving for excellence. The key informants also discussed the importance of being competent and showing initiative in your role.

## Recruitment and career progression processes

The three prevailing criteria regarding the process of recruiting a Grade A (Full Professor) is the following: Relevant qualifications, a PhD is preferred; Several years of lecturing experience or key industry experience which demonstrates the candidate's expertise in the field and good communication skills. While all the key informants agreed that the criteria above are imperative, they also suggested the need to be a team player and demonstrate their ability to work well in a collaborative manner: For early career researchers (Grade C and D) the criteria was similar to that of Grade A, however, less years of industry and teaching experience were required. Key informants stated that the relevant qualifications and technical expertise is required, in addition to being adaptable and working as a team. For those within this grade, there was an acceptance that although qualified, they still have much to learn.

When discussing factors such as maternity leave or disabilities, each of the key informants stated that these have no bearing in the evaluation, and it would be ethically incorrect to discuss such things with the candidate. The key informants did not refer to candidates with disabilities, however, in relation to maternity leave they stated if a pregnant candidate was the preferred option, they would wait for that person to fulfill their maternity leave, providing the timeframe would allow for it. Maternity leave is externally funded by government, therefore has no financial implications to the organization. This was a point in which all key informants stressed during the interview:
> "We don't ask questions like that, asking about someone's personal life would be
> frowned a upon and we'd get into a lot of trouble with HR. I guess for me, maternity wouldn't be an issue as its externally funded and I've been through the whole maternity side of things myself so I would be conscious of it. Having said that amm I couldn't keep a position open if I won funding for a project, industry partners would not accept a 6 month delay like that" (Carmel)

"It [maternity leave] factors in but it doesn't factor in a negative way, it factors in how we can facilitate and how we can support because amm there is ways and means to support people and it's a matter of figuring out what that is. For example, if it was a maternity leave and you knew someone was coming in and interviewing well if they were the candidate for the job well you're going to be developing a panel anyway so you know you would have the facility there to plan in advance so you'd have someone on the panel to come in and fill the maternity leave" (Barbara)
"... Were in the public sector so if there's maternity leave cover is funded predominantly you know cover is funded. I would say [pause] I'd say it's a bigger thing in the private sector where you know somebody has to hire someone else and maybe that's not funded you know... The only thing is they're only going for 6 months you know. l'd rather be missing someone for 6 months and have that person with great expertise return than lose that person with great expertise"
(Michael)
Key informants were satisfied with the process surrounding the competition commission. The process is formal, open and follows strict guidelines through the use of scorecards. Under HR regulations, each interview panel must assess each candidate under themes pertaining to the specific job being advertised. Following the interviews, formal discussions occur with each member of the interview panel and the position is awarded to the higher scoring candidate. As key informants noted, the use of scorecards and a point system reduced the possibility of any bias occurring during selection procedures. For the interview panel, at least one female and one male must be present. There is no gender composition in terms of who and what gender they must hire and although key informants noted that there are few female researchers in their department they're not in the position to target women specifically for research positions. Key informants agreed that there is no requirement to introduce such a procedure as candidates are selected on their capabilities and qualifications rather than their gender. Michael for example suggested it would be inappropriate to introduce such a measure as it would encourage further discrimination. While the other three female key informants did not believe it would cause discrimination, they felt it was unwarranted at this stage:
> " $h m m$ it's a difficult one right because if you have a quota to fill which is fundamentally what that means, it means the potential for a better quality male candidate to be rejected in place of a eh female candidate because there is a quota to fill. Right so I think that's ridiculous right you know again I think we should strive and not see gender and I know that's not the case right and I'm coming from a position where I suppose I see a tiny proportion of the things that go on that some women have to put up with right so I don't know the whole story at all at all" (Michael)

"Gender doesn't come into it. I always think it's the best candidate and the best candidate should always win regardless of what the gender is" (Mary)
"I see it, it's always been there that gap between men and women in research. It's the nature of our field. At secondary level, girls just aren't pursuing science and its coming through here at university level... I don't think introducing quotas at this stage would change that" (Carmel)

It's a wider question 'how do we get more women into engineering anyway - who is the exemplar of that? is it the way in which we advertise? Is there more information we could put into the job spec? I don't know, but we probably don't do enough there, no" (Barbara)

Key informants did not believe there are any differences between men and women in either the early stage or advanced stage of their career. Each key informant pointed to the fact that three of the four heads of departments in STEM are women, which demonstrates the advancement of women in MTU.

There is no form of monitoring relating to the distribution of administrative tasks of Grade D and C. Line managers and supervisors have weekly meetings to ensure tasks are divided equally.

## Departmental policies

Each interviewee was aware of the lower visibility of women. Michael and Mary though concerned about women's invisibility believed it is not a university or departmental problem as it is occurring due to the smaller pool of female graduates coming through to STEM. Michael and Mary stated that STEM is dominated by men and therefore we must accept that:

> "In certain areas and in certain fields they're dominated by men if you look back at women in STEM for example, look at engineering departments look there are facts which cannot be ignored but that's the way it is" (Mary)
> "Sure look if the graduate pool becomes more equal than our staff hire would you know. Again, like I said very few ladies apply because there just aren't a lot of graduates in the area" (Michael)

Within Michael and Mary's departments there is very little conversations occurring around this topic as they try to adopt a gender-blind perspective. Carmel and Barbara on the other hand, are both aware and conscious of the lower visibility of women and try to ensure that women are targeted and championed at conferences and seminars. Both Carmel and Barbara have organized events directed specifically at female researchers. The topic is continuously being discussed and championed within their department.

Apart from Barbara, the interviewees did not discuss the gender composition of the department but did comment on the gender composition of the school of STEM. Interviewees consciously highlighted that of the four head of departments within the school, three of them are women. Michael who is the only male head of department within the school, believed women are exceeding at a managerial level in MTU. Barbara stated her department is male dominated as there are 11 men and three women in her department. She hopes to target women in the department's next recruitment drive.

Each of the interviewees stated that no departmental policy exists to promote equal opportunities. There is a HR policy which states that women and men cannot be targeted specifically for recruitment as they're an equal opportunity employer. Key informants must follow this. There has been no discussion around measures or policies being implemented for those with care responsibilities. Interviewees stated that they are flexible and understanding of staff with caring duties.

### 1.7.3 Members of competition commissions in hiring procedures

## Personal recruitment and promotion experiences

Both interviewees, particularly Jack has extensive experience in both the selection and promotion procedures of Grade A and C researchers. Kevin has sat and chaired 10-12 interviews for research positions and internships in the past 18 months. Kevin discussed his most recent interview for the position of a Grade C researcher. In the past 18 months, interviews have been conducted online using Zoom, this has been fraught with difficulties as there are often technical issues during these calls. Regarding the selection procedure, it is a requirement within MTU that at least one man and one woman are on the interview panel. Within the male dominated sectors, it can be difficult to source a female for an interview panel both which Kevin and Jack highlighted. During the selection process, each candidate is scored by each member of the interview panel based on criteria specifically tailored to the research position advertised. Following strict HR procedure, each member of the interview panel is given equal weighting and each person must offer their thoughts on their preferred candidate. A formal conversation occurs following the interviews with the prospective candidates. Although each panel member is given equal weight, the project manager or the individual who will be working closely with the candidate is usually consulted the most. Kevin stated that the decisive criteria centered upon
expertise and communication skills, however, the candidates did not demonstrate these skills and therefore the position had to be re-advertised. Kevin stated that gender is not a factor in which he or his department take into consideration:
"gender is never a consideration for us even in terms of the discrimination of either genders...its about hiring the right candidate whether they're male or female is irrelevant"(Kevin)

Jack's experience of the selection procedures is akin to that of Kevin's. Jack has sat and chaired over 33 recruitment processes for researchers over the past ten years. Jack discussed his most recent interview for the position of a Grade C researcher. Jack also highlighted the requirement by MTU to have at least one male and one female on the interview panel. Jack explained the selection process where each member of the selection board is provided with a scoring card based on criteria specifically tailored to the research position advertised. All candidates are assessed using the scoring system and the position is typically awarded to the highest scorer. Discussions take place in a formal matter after each interview to assess each candidate. Jack stated that the decisive criteria centered upon expertise. The position was awarded to the only female candidate who was regarded as the most qualified, as she recently completed her PhD. Jack stated that while gender didn't have a role in this instance as the female candidate was the most qualified, he did state that if there were two candidates with similar scores, and one of them were female; the female would always be selected as women are underrepresented in STEM:
> "If there had been two candidates, if they'd been a male and her at the same level she would have probably been awarded the position because of her gender but not for any gender balance reason. I do think there is potential there for somebody to have a preference there for a woman doing that [cosmetic testing] and it's important we retain that testing panel so in that circumstance she might have sneaked it if they were bang on equal"(Jack)

## Selection processes and links with the gender culture of the organization

Both Jack and Kevin agreed that the most valued features in their organization centered upon being co-operative, adaptable, competitive and being a team player. As the nature of the positions particularly for early-career researchers evolve around funding calls, these features are imperative according to both interviewees. Both Jack and Kevin stated that the selection criteria are similar to that of the valued features and as they're not gender specific. Both interviewees believed since the criteria is not gender specific, they cannot produce any imbalances. Maternity periods, family loads and working hours are not considered during the selection processes, however, Kevin did state, in an industry setting such factors would be taken into consideration, but not in academia:
> no one would dare bring up anything about those topics and even if people don't mention the topic or put it on the table, I have never sensed that people are considering them either. You know in industry that certain individuals maybe thinking along those lines, but in academia I've never had any sense of those being a consideration"(Kevin)

> As both interviewees are parents themselves, they did state that being flexible with their staff is imperative and allows those with caring duties to work flexible hours if required. Interviewees didn't discuss in detail on how women's productivity and visibility are perceived in the recruitment and evaluation processes, however, Jack commented on the fact that women must work harder as the STEM environment is male dominated:

> "its so unbalanced at the top that women have to work harder. You need to bring in measures to rebalance it and then it starts to feed its way down. There's enough opportunities for men that if 15 or 20 positions re designated specifically for women they [men] need to stop giving out and get over themselves" (Jack)

## Departmental policies

Both interviewees have different experience of women within their department. Jack is pleased with the gender composition of his staff, as despite being in STEM his department is female dominated with over $70 \%$ being women. Jack discussed how women within MTU are progressing with three of the head of departments within STEM being women, he also discussed how his own line manager is female and in a Vice-President position. Kevin, on the other hand was concerned about the lack of women in his department, which has gotten progressively worse with the loss of two female researchers. At present, there are 30 men and four women working in his department and this makes him quite sensitive to gender equality issues. Both Kevin and Jack stated there is no gender policy in the recruitment and career progression process. This is attributable to the fact that anyone regardless of race or gender can apply for a position and each applicant must be called for an interview under HR regulations. For this reason, both interviewees did not believe in introducing quotas for female applicants as each applicant is offered an equal opportunity to apply for the position advertised. Kevin and Jack agreed that the pandemic has highlighted the need for line managers to be flexible with their staff regarding working hours. Both interviewees stated that flexible hours should be introduced for those with caring duties. Kevin highlighted that people should not be restricted by their work which is often the case:
> "For research and our clients, it's all about the outputs and once you're there for the key meetings I mean I don't think we should be restricting people in terms of when they work(...)we try and do that you know and we're flexible in terms of meetings and we know some people have childcare"(Kevin)
> "Ultimately the person has to deliver their job so it depends if that time for caring impacts their work [...]but if they cant start work until 10am and they finish at $6 p m$, that's grand with me I don't mind that at all. I told my team they can be flexible"(Jack)

Both interviewees were aware of a GEP, however, Jack was not aware of the requirement under Horizon Europe funds. Kevin was aware of this and while he was in favor of the condition, he was concerned of the impact it could have on his department as it is so male dominated.

### 1.7.4 Governance "central" level

## The rector/president/head's team

As the institution has only recently merged with another organization to create MTU, the process around the development of the organizational structure is currently ongoing. At present, the two executives from both organizations have merged to create an executive of 15 people, many of whom share the same role. However, amendments will be made to the president's team in due course. Jane stated that the future team of the president will be selected based on the priority areas of the University for example research and finance. At a senior management level, there are 15 individuals, four of which are women. The president of the university is female and carries a lot of weight regarding the decision making within the university. According to Jane, the three most influential individuals are the chairperson of the governing body, the President of the university and at this stage considering the merger, the Vice President for corporate affairs and finance.

## The collegial bodies

According to Jane, the change within society regarding women has ensured that women in MTU are open to leadership roles. The recent appointment of a female president represents this change that is occurring among academia. Jane stated that women are dominant at middle level management, however, at a senior role there is less women evident. At present, there is a 15 people executive, however, only four of which are women. The most powerful position is held by a woman. Jane did not discuss detail factors which hindered the selection of women, nor did she discuss the weight of positions occupied by women, apart from that of the President. It is in Jane's opinion that the chairperson of academic council can be regarded as the most powerful individual as they dictate the agenda.

## The policies for the recruitment and scheduling of staff

The person responsible for deciding the criteria to adopt and distribute economic and financial resources various from one area to another. Typically, however, the criteria is established by governmental educational departments prior, HR communicates this information to department heads and staff who wish to apply for various financial resources particularly around career progression. As Vice President of research, Jane is the budget holder and responsible for financial resources regarding research development. For this reason, Jane is one of the most influential individuals in the decisionmaking process.

## Gender policies

Jane led the development of the Gender Equality Plan and is chair of the Athena Swan Group therefore she is aware of the gender policies within the MTU and understands the need for further policies. While Jane did not discuss in detail the gender policy measures which are in place, she did state that gender equality policies are legally required and are in place for that reason. When discussing the aspects in which gender equality progressed, Jane stated that the equality of women in terms of career progression and access to leadership roles has progressed within MTU:

> "The school of STEM, look at how many head of departments we have that are female in an actual area like STEM where normally there is an issue attracting women. When you look at our leadership roles, we have access to leadership roles and management team. We're more balanced at the middle management level as opposed to a senior management level" (Jane)

There are more opportunities for women to access leadership roles, this is partly attributable to the change of society regarding gender equality. Jane briefly discussed how at a middle management level, women have particularly progressed, where four out of the five head of departments within the school of STEM are women. When discussing policies, Jane stated that women have influence in creating policy this is attributable to the fact that three of the six vice-presidents are female. However, Jane is concerned that the progression of women within the university, merely occurred because it had to happen. While discussions around gender equality occur, there is little resources for Jane to implement any of targets from the Gender Action Plan she helped create. She feels there is ambition to promote women further, but resources are required:

> Women have as much influence as their male counterpart in terms of influencing and creating policies but sometimes I feel the whole agenda is appropriately, eh it has happened because it has to happen right...we have our gender action plan for
> the university but like I have no resources to implement that plan so we have ambition and we have want we want to do but for the university moving forward

> they need to prioritize [gender equality]...so there's a lot done but a lot more to do"(Jane)

Jane was aware of the future requirements associated with receiving funding from Horizon Europe.

## Organizational culture

Jane stated that as this is a new organization it is difficult to discuss the organizational culture. However, being co-operative and inclusive are key elements between the two organizations (IT Tralee and IT Cork) and this is outlined in their strategy which is due to be published. Jane did discuss her experience with IT Tralee prior to the merger. Jane stated the organization stressed the need to be collaborative and assist one another, particularly within the research departments. Jane did not wish to discuss the characteristics of the leadership figures as she stated the organization is too newly established. However, she did discuss the characteristics in which they should have such as leading for example, consult and listen. Regarding the factors and merits necessary for the achievement of promotions, Jane commented on the importance of being adaptable and co-operative. Jane did not discuss any experience of discrimination or harassment in the workplace. However she is concerned of the impact the merger with Cork may have on the work culture in MTU Kerry:

> "I am worried about the size and scale of the new university..amm I think there is a different culture in the Cork Campus to what there is in the Kerry campus. I'd be concerned that the culture in Cork would become the stronger culture"(Jane)

### 1.7.5 Key-actors on sexual harassment/gender violence

## Sexual harassment and gender violence

Karen is not involved in a governing body around sexual harassment, however, as Head of HR she is best placed to discuss the policy and incidents pertaining to this, as all cases of sexual harassment and gender violence are reviewed by her. Incidents around sexual harassment and gender violence within the organization are rare. Within her time in MTU, Karen could only recall two accounts or claims of sexual harassment, none of which were founded and happened seven years ago:
> "there were two claims of sexual harassment but they weren't founded but they were there and people felt them so it doesn't really matter if they were founded or unfounded...we've had little accounts of sexual harassment here"(Karen)

While Karen did not go into detail regarding these incidents of sexual harassment, she did state it was a male who had experienced sexual harassment from a female. Karen did state that issues around bullying within the organization would be more prominent than that of sexual harassment. All information regarding actions against sexual harassment and gender violence are outlined in the Dignity and Respect Policy which is distributed to all staff members. The document highlights the steps in which staff members can take if they're feeling intimated or uncomfortable in anyway. Karen outlined the process, suggesting that staff members can contact key contact points regarding harassment if they feel uncomfortable speaking to their manager:
> "the policy outlines the steps you can take if you're feeling that you're bullied or harassed both informally and formally. We have contact people, trained contact people in Tralee where lets say if somebody didn't want to talk to their manager which is normal they could talk to these people confidentially" (Karen)

There are formal and informal methods in which staff members can take regarding harassment of any kind. Staff members are encouraged to speak to managers or key contact staff, prior to making a formal complaint. Karen discussed another policy, Employer Assistance Service which staff tend to use for any issue they may have.

## Organizational culture

Karen stated as the organization is so newly established, it is difficult to comment on the organizational culture and values as well as the characteristics of the leadership figures as this has yet to be finalized by the governing body of the university. However, she did reflect on the organizational culture of IT Tralee. According to Karen, the organization was primarily focused on the development and well-being of its students. Staff members were very cooperative and assisted one another. Karen stated that owing to the changing nature of the organization it is difficult to discuss the relationships between various departments and government bodies, as discussions around organizational values are yet to be finalized. Karen has little relations with the government bodies at present. However, this will change in due course. Karen did not believe there were differences between men and women in leadership roles, although this could change due to the merger. Regarding the factors and merits necessary for the achievement of promotions, Karen commented on the importance of being adaptable and cooperative. Karen was unaware of the conditions regarding applications to Horizon Europe. However, Karen is aware of a GEP and understands this was also needed as part of their application under Athena Swan. Karen was concerned, however, how serious organisations take the GEP, and debated whether they're merely given lip-service to the topic:
"I think it's a good idea cause organisations like ourselves have to do them, would they be done if we didn't have to do them. I'm not sure, I would have to say no actually, and I think anyone pushing it would be giving it lip-service, but then on the other hand I think the focus then could potentially be with the GEP is actually now just get it over the line rather than are we doing it for the right reasons"
(Karen)

### 1.8 CTAG - Automotive Technology Centre of Galicia, Spain (CTAG)

### 1.8.1 Desk work, fieldwork and sample's characteristics

Being a Technology Centre focused on development, research, and investigation, CTAG does share characteristics with the rest of the partners in the MINDtheGEPs project. However, the way its organigram is structured, the nature of its activities and its client-orientated focus made it necessary to adapt, in certain cases, categories and nomenclature to its reality.

As far as categories are concerned, the following pattern was used:

| Key informants' classification |  |
| :--- | :--- |
| CTAG | MINDtheGEPs |
| Division director | Outline A |
| Head of department | Outline B |
| Area manager | Outline C |
| Member of HR | Outline D |
| Trade union representative \& equal opportunity <br> committee member |  |

Having this correspondence in mind, identifying key informants was easy and almost all proposed candidates accepted to participate in the project except two Heads of Department (outline B) whose working agendas were really overloaded at that time. In fact, one of them proposed that his Area Director (also outlined B) take his place, as they share the same principles regarding hiring and promotion.

Table 1.1 CTAG: Profile of Key Informants

| Classification | Gender | Age | Nickname | Field |
| :--- | :--- | :--- | :--- | :--- |
| C | Female | 47 | LAURA | SSH |
| A | Female | 51 | ELISA | STEM |
| A | Male | 61 | CESAR | STEM |
| A | Female | 47 | CORINA | SSH |
| B | Female | 46 | MARTINA | STEM |
| B | Male | 42 | BRUNO | STEM |
| B | Male | 46 | KIER20 | STEM |
| B | Female | 44 | MONICA | STEM |
| D | Female | 43 | LOLA | STEM |

As it can be inferred from the table above, three Division Directors were interviewed as outlines A. Two women and one man (all STEM profiles except one). As far as outline B is concerned, three Heads of Department (two men and one woman) and one Area manager (female) were selected. As for outline C, representing the company, a member of the Division "People and Occupational Health and Safety". Regarding outline D we interviewed one person of the Gender Equality Committee's Members who is also a Trade Union representative (Female and STEM).

### 1.8.2 Departmental management

## Strategic choices, organizational and gender cultures

The organizational and gender culture principles in CTAG are outlined by the Managing Board. Gender values started to shape CTAG's culture from the beginning although it was from 2007 onwards that the existing gender values started to be regulated. CTAG's participation in a local initiative under the framework of the ESF, "Conta con Elas" (Count on Them=women) fostering women visibility in managing positions helped to consolidate these principles. In addition to this, Laws regulating Gender Policies (Ley Orgánica 3/2007) came into force at national level (for details, please check D2.1).

In 2012, the first Equality Plan was approved at CTAG as our reference tool where principles were defined to establish a Gender Equality Policy at CTAG. In this document, lines of action were defined to work on internally in order to promote women visibility.

Gender diversity, equality and respect for the others are landmarks in the Managing Board vision. This culture was rooted and has become stronger thanks to people who work at CTAG.

In 2017, workshops were held among members of different teams (senior and junior) to identify the organizational values and make them more visible for every person. The results from these workshops served to reaffirm the existing values and published them.

A new step has recently been taken with the distribution of an Ethic Code embodied all principles shaping the organization philosophy.

All directors interviewed easily identified the organizational values and work for them to be accomplished. Innovation, commitment, excellence, teamwork and integrity are characteristics shared
by most people among the organization along with creativity, perseverance, specific technical knowledge, emotional intelligence, good command on languages, communication skills and, of course, initiative.

These parameters are also taken into account when recruiting without considering any gender distinction.

People is the organization major asset, and all efforts are concentrated on giving them the necessary training and knowledge to retain them and make them grow along with the Centre.

The choice of the final candidate, then will not be based on gender as people are different, because they are individuals, unique, with their own way of expressing themselves and behaving regardless of being a woman or a man.

Directors hardly participate in the interviews. They have delegated their managers who are currently in charge of the interviews and candidates' assessment. However, the Directors' role is crucial as they offer their strategic vision regarding the needs of the division

No pre-established steps are taken to guarantee women participation in the recruiting committee. But there is always at least one representing Human Resources.

Of course, gender distribution among candidates will be random and greatly depend on technical abilities and soft skills in line with the Centre's values.

As far as leadership is concerned, they see many of the organizational values reflected on a leader. A leader must be reliable, committed and know how to motivate the team. He should also show managerial skills, a holistic vision of the projects and be an inspiration for the others.

Excellence will imply proactivity and extra motivation, sound knowledge, creativity, communication skills, customer orientation and high degree of responsibility.

Excellence or leadership should not be influenced by the fact of being parents, or having caring responsibilities and if they were, at present, it is almost unnoticeable thanks to the flexibility of remote work and other reconciliation tools.

There is no difference in the expectations regarding excellence or leadership referring to women or men. However, one of the directors, ELISA pointed out that women -at the beginning of their career path- seemed to be less ambitious than men and prefer to demonstrate through facts rather than words.

## Recruitment and career progress

Bearing in mind that CTAG is a relatively young organization, with an internal structure that has not suffered great changes through years, its progress and evolution, according to the majority of the interviewees, has taken into account female representation in positions with a certain degree of responsibility, board of directors, head of departments and panel experts. Of course, the representation rate could be improved, and all efforts are concentrated to achieve a balance.

The criteria applied to Early Career Researchers, once again, regardless of gender discrimination, focuses on previous experience if there is any, knowledge of a particular field, good command of languages and attitude, emphasizing teamwork and communicative skills.
> "In the interviews, no personal questions are asked, but from there it can come out collaterally as a result of another question that the person tells something personal, but I am not aware that questions are asked in reference to their
personal life, what is valued are technical capabilities, appropriate to the position we are looking for, from there the decision is made, without stopping to think about their personal situation assuming. " (MONICA_44_AC)

Factors such as special family situations have never been considered as these are not directly asked in the interviews. Besides timetable flexibility helps to conciliate and since the outbreak of the pandemic situation, this flexibility has been enlarged and the possibility of working from home is also present, making conciliation a priority.

These conciliation measures are very welcome by all people integrating the teams and also by potential candidates. As mentioned before the average age rate is fairly young thus the number of maternity/paternity leaves have increased only recently. Teams have learned to be more effective and reschedule work. If there is any particular situation that makes a person to be absent, the rest of naturally reschedule their work without complaining and the Direction is always willing to even engage more people to cover vacancies emerging from these situations.

According to CESAR_AC_61 if a person has to be absent from work for a personal matter, it is regulated and can be absent, there are permits for it. The common attitude of the team is, for example, if a person has to reduce his/her working hours or be absent due to illness, they cover themselves sharing the workload or hiring a new person, in this sense the division is very flexible, there is no case that there is an attitude otherwise it is always in an attitude of supporting that person.

The organization through its Gender Equality Plan is working towards a more balanced composition in terms of not only gender, but diversity as it would add dynamism and creativity.

The presence of at least one female participant in the recruitment committee is therefore guaranteed and although an even proportion of male and female candidates would be ideal the reality is that there are still imbalances in certain careers, fewer than before but still there.

No differences are perceived in terms of performance or scientific production when referring to men or women in their early stages. It is the individual who makes the difference not the gender.
> "I have the impression that women are less ambitious, I don't know how to say it, I think that this is changing little by little. At the recruiting processes women do not speak openly about their abilities and capacities they prefer to prove it at work first. However, men have more confidence on themselves and place higher demands already at the interviews" (ELISA_AC_51)

One of the interviewees has also admitted that the number of women at technical careers have considerably increased compared to the time he studied, so that might mean a change in trend, small though.
"In our sector there are far more men studying technical degrees than women, this is why we get more male candidates and thus more male members in our staff" (BRUNO_AC_42)

## Departmental policies

All interviewees agreed that the distribution in terms of gender of the teams is imbalanced because it reflects the situation in the technical education field where men outnumbered women. This fact should be rechanneled at the early stages of the educational process, fostering women to choose a technical career.

This gender balance is present in all divisions' strategic policy. Paradoxically, ELISA's division, being a technical division, shows the opposite pattern as far as gender is concerned as women are more in number than men (70\%-30\%). In this case, technical expertise is important but R\&D managing skills are crucial. Junior male engineers feel more attracted to more technical positions than consultancy work. This fact together with the integration of non-STEM profiles favor women's presence.

As far as occupational training is concerned a change in trend is perceived, so women's representation has become more frequent.

The departmental policy will follow the principles established in the Gender Equality Plan of CTAG in which professionals will be assessed according to their abilities and not gender. Secondly, whenever possible efforts will be addressed to achieve balance, by including women in the recruitment process and having at least one female candidate, if possible, to be interviewed, always underling the fact that priority will be given to abilities.

CTAG has offered from the very beginning the possibility of working from home, widen the working time slot (from 6 am till 10 pm ) in order to perform the working timetable to make conciliation possible offering the chance to adapt the working week to 4 working days if necessary. And also providing everyone with the necessary legal tools with no obstacles in terms of working hours reduction for caring responsibilities.

### 1.8.3 Members of competition commissions in hiring procedures

## Personal recruitment and promotion experiences

Three of the four interviewees lead a role as Head of Department and just one as Area manager. All heads of department have attended an average of 50 interviews. Just MARTINA, the area manager, has less experience with around 10 interviews.

All of them have participated in the growth and development of CTAG which was translated into diversification of the Centre's capacities resulting in new technical areas thus the birth of the role of "area managers". This is the reason why, the heads of department participated more actively in the interviews at the early stages of their leading role, but they gradually transferred this responsibility to their area managers assessing them whenever needed and participating in the process when the profile is difficult to find or will be considered of strategic importance.

Regarding the type of profiles recruited nearly all of them are STEM except the case of BRUNO leading a management department for which he had to engage administrative profiles. Otherwise, all have recruited many junior researchers or engineers and less senior as to foster internal promotion whenever possible.

The recruitment process falls into different stages:

- the identification of a need prompting the search of a specific profile (agreed jointly by the manager, the head of department and the director9.
- the outlining of the abilities and requirements for the specific position as well as tasks description that will be published.
- Screening and selection of the best candidates (carried out jointly by the area manager (AM), the head of department (HD) -if the position belong to his/her immediate team or has a role of responsibility-, HR and sometimes a technical expert (TE) if the position requires it)
- Interviewing (AM, HD, HR, TE)
- Decision taking (AM, HD, HR, TE)

The screening stage is really important for only the candidates fulfilling the requirements are selected for an eventual interview. The average of people interviewed for a position will not exceed 5/6.

Interviews normally reveal the best candidate/s, a person who stands out. Thus, all members of the recruitment committee share the same opinion. When there are discrepancies among two final candidates the director and the head department based their decision on strategic policies and if possible, try to suggest other positions that might be of interest for both, the other candidate and the company as a way to retain talent.

The criteria followed for the final selection depended and still does on technical abilities, experience and the attitude shown during the interview. Gender is not considered a factor for discrimination.

For all interviewees an excellent candidate will be that who apart from covering all technical aspects required for the position, also shows Initiative, Teamwork abilities and a certain degree of Autonomy.

However, KIER2O pointed out that occasionally, specific technical abilities, very hard to find in candidates, or even the mastering of a language, may be considered more relevant than interpersonal abilities. This is something he is determined to escape from, but it is not always easy.

## Selection processes and links with the gender culture of the organization

When it comes to selection all interviewees have agreed that features sought in candidates are in line with the organization corporate values, that is, innovation, commitment, perseverance, adaptability, client goal orientation and with a special stress on teamwork and collaboration along with other more neutral parameters based on academic background, experience and good command of languages.

None of these criterions is biased by gender distinction.
The most valued features in the organization regarding scientific excellence will be based on the previous values adding others such as:

- Generosity, understood as the capacity of being always available for others ready to share knowledge,
- Initiative by anticipating needs
- A certain degree of autonomy and,
- Sound knowledge on a particular field.
- Emotional Intelligence.

In the search of researchers or scientific excellence, factors such as maternity periods, family loads are not taken into account. Part time positions are also proposed to those candidates who are about to end their studies but are interested in working at the same time.

All interviewees were aware of the gender imbalance that still exists and is also reflected on their teams, regarding technical careers. They agreed that there is a subtle change in trend but still a cultural reeducation should be done from the first stages to guarantee equal opportunities.

## Departmental policies

All interviewees agreed that there are imbalances as far as gender is concerned in their teams. BRUNO also pointed out that for management positions which imply team coordination, time assessment and communication, female candidates were better placed as they had better communication abilities and a good command of languages. This was a clear example of his own team. However, KIER2O and MONICA confirmed that where the technical specialization of the work is high, few female candidates applied the recruitment processes. Thus, the imbalance comes from the educational stage already. This is more obvious, according to KIER2O for the positions of technical assistants who are assigned
more manual and practical work. In this case, in non-university degrees, occupational training on mechanics, electronics, or any technical field men outnumbered women.

The interviewees do not apply a specific gender policy regarding recruitment favoring either men or women. Selection is based on the candidate's skills, abilities, and experience.

The pandemic has had a great impact on everyone's life, forcing everyone to adapt, to be more flexible and to work from home very quickly. All interviewees agreed that people with caring responsibilities have suffered more from this disturbing situation. CTAG from the beginning gave people the possibility to work from home, widened the working time slot from 6 am till 10 pm in order to best match everyone's timetable and helped them to conciliate work and personal life.

Interviewees also shared the opinion that these measures should somehow remain in the near future.

### 1.8.4 Governance "central" level

## The rector/president/head's team

CTAG was created in 2002 and was born as a result of a collective feeling of the automotive sector in the region. The need was seen to provide the sector with 3 main production hubs: a constructor, as was the case of the STELLANTIS-PSA plant, an Automotive cluster uniting all the component companies that worked for this OEM, and a R\&D center, which was CTAG.

Initially it was set up by a small team, most of them male engineers, who made possible the shaping of this project and who had a sound experience on the automotive sector. Technical experience and the contact with organizations and companies which would become our reference in training and introducing the business, weighed heavily. Then in 2005, the electronics division was incorporated. The base was built like this, there was no discriminatory criterion, the people who held functions of responsibility in the management committee did so because in their companies they already had a management position and paradoxically they were men. When she joined CTAG in 2006 there was a female deputy director of a technical division, and the management committee was shaped in 2006. Technical knowledge has prevailed as the criterion to be at the management committee which is a fairly small group that has remained stable through the years and has lately incorporated a woman. The 3 women integrating the management committee have been promoted from other positions to the committee.

There is no academic senate so no further information can be added at this point.

## The collegial bodies

There is an equality commission, made up of 10 people, 5 representing the company and 5 representing the works council, and from there come the axes of action in matters of equality, discussed and agreed upon at that table.

The most influential people in the politics of the center all have a role in the steering committee and it is not particularly perceived that one division or another is more influential than others. In the management committee there are three axes of action, the first is the management that is occupied by the general manager who covers all our activity and who organizes the actions of each direction, then there are the more transversal directions such as people and sst, the financial and the organization and quality, and the third axis has more discussions in the field of its activity, and there is a fourth axis the division of technological innovation, which is a fundamental reference because it combines a technical and transversal part about the technological innovations and helps the rest of the divisions. But there is not a division that prevails over others but each one is complementary to the others.

Regarding the degree of influence, the General Director is the most influential person, followed by the People and H\&S Director as well as the Financial Director, having a transversal influence, everything is very focused on the financial part and people management, working closely and validating decisions upon the approval of General Director. In third place, the Business Development and the Quality Directors. Then the 4 technical areas would form another axis of influence, but each one has its own influence, but in the end, everyone has an important role in the management committee and for that reason no one influences more than the other.

The influence will be based on their technical knowledge, curriculum, experience. The goal is to go along the center's strategy and growth.

The women of the management committee. One of them joined in mid-2005. She had an important experience in the Automotive industry in Europe and Spain, with languages and knew how the Automotive network regarding applied research, component companies, and R\&D, She arrived by the hand of a director of the Center as deputy director, and the interviewee suggested her as Division Director to make her contribution more visible to the other divisions and that was a complete success, being a clear example of overcoming

The other female director, was the last promotion to the Board of Directors, she entered the Business Development area, she participated in the selection of this person, and it is a very small management and she handles the part of first contacts, marketing, Assistance in fairs, and in addition to his experience, and his poise, and his language skills and earned the trust of all the divisions, being highly demanded in all commercial meetings, due to his personal characteristics, acquiring more skills and autonomy. There was the opportunity to occupy the position of commercial director and she held that position and also very meritorious, that she does not have technical training and it is necessary to know the technique very well to defend the Projects and has been able to lead technical meetings, understanding very well the business.

The interviewee is the third woman, she entered as deputy director without existing a director, and at a time where roles were more leveled in the organization and in the end as a part of CTAG own evolution she became director.

## The policies for the recruitment and scheduling of staff

CTAG is a Foundation and above it there is a governing body that is the Foundation, the general director also has the function of secretary in this governing council, and it is where the annual proposals of each division are approved in terms of strategy, need for people and business generation. Then, on a day-to-day basis, it is the CEO who governs the Board of Directors that reports quarterly to the governing council. There things are raised, budgets are adapted, and then everything has to converge at a single point to know what is prioritized and what is not and many elements that shape the budget. The indicators that weigh the most in the selection of economic resources to hire people, the sustainability of the organization, our priority is stability in employment and $\mathrm{R}+\mathrm{D}+\mathrm{I}$. The sustainability of this technical R\&D activity, being visionaries of the future, is sustained if there are people behind it, and also the center has some obligations to attend to, so the business has to support all of that, as well as the profitability to be able to financially manage the Foundation. In addition to project and financial management, first it is where you want to go, what your future is, and then everything else is built from there.

Within the strategic policies of the center, and the lines of activity, for a few years, the success we have been having is to have increased our level of clients, working directly with car manufacturers, in this way we have had an evolution in the technique, So there have been occasions when we have hired people for their knowledge of a technique, and our intention to position ourselves, that is to say that
some experts have already entered occupying some positions, but they have been few, CTAG bets more on internal development.

Each division has a budget and is quite autonomous in managing that budget, but to open a line of business or, for example, organizational changes, or because there are projects that are made up of various directorates, you usually see CVs between various directorates, and usually submit to consultation.

## Gender policies

The center's gender policies are known to her because the People and H\&S Division is an actor in the participation of these policies. The measures that have been taken mainly, in 2007 we had participated in a local project subsidized with European funds, on issues of equality policies, "Conta con elas" program, and from then on in 2011 the center was the first Once it takes a first position that was translated with the signature of the general director of its commitment to the policies of equal treatment, providing personal and human resources and from there the first commission was constituted and in May 2012 the first plan was constituted of equality, where everything that we fear today is structured. Various selection and hiring axes, professional classification, training, promotion in positions were discussed, everything that has to do with working conditions and salary audit, personal, professional and family reconciliation of people, female underrepresentation, in PRL was reviewed a special chapter related to possible sexual harassment for reasons of sex and violence in the workplace and accompaniment in the situation of gender violence. It was proposed by the general management for the equality policies that were established in 2007 at the national and regional levels, that is where the "Conta con Elas" Project was born, and it remained in its infancy, a diagnosis, and it was from Hence, the general management put this need on the stage and the social agents joined because the IP has to be negotiated and opinions exchanged with the representation of the workers. In recent years, what has progressed the most in equality for women, in Laura's opinion, is that the technical profile that we have in the center is accompanied by the way the students are trained, and it is the beginning of everything, and it is where the equality policies. We are participating in programs such as technical profiles for women to appear as mentors to spread the technical specialty in the academic field such as colleges, to attract the female group to the technical field. To ensure that girls sign up for scientific-technical careers (Inspira STEM Program). If we observe what is happening now, which is all the ratios that we have at the engineering level and analyze it with the University environment, CTAG is well above the university ratio, since in CTAG there are $28 \%$ of women, which seems little, but if we compare it with women who graduated from university, we are more than 8 points above the statistics, that is a great success being able to incorporate women in the technical field, over the years it has been reinforced, although we have not been able to increase this percentage a lot over the years, in part because we continue to perceive that the selection that students make in high school, in relation to what they want to study, there is not a great promotion of promoting the role of women in the field technical, and that should be worked from the base, promote women in the selection of technical careers, it should go hand in hand with reinforcing the role of women in the scientific field, and at the university level, there should be more and more women It is in technical races.

## Organizational culture

The environment in CTAG is balanced and healthy, in progression, the people who select CTAG is because of the type of organization that it is, they like the field of research and innovative and interesting projects in the technical field and also something that is highly valued is the equality policy focused on broad conciliation, we have been one of the few institutions that has initially offered flexible hours.

The most common cultural values, especially teamwork, that interest in the new, attention to internal or external customers, a vocation for service, working equally, all participating in the same terms when there is group diversity, and over time They have not changed but have been strengthened, having to adapt to being a small center to a large one, as a general feeling the bases continue to be maintained.

The leaders in CTAG are those who arbitrate a general line of work but who allow to do, who allows to evolve, create a favorable environment for people to produce, believe, feel comfortable, have their personal concerns addressed, guide them but also walk and stumble.

To promote you have to give two things, that there are projects, and that the person wants to do them. The degree of specialization that our technicians acquire sometimes makes it hard to move them because they specialize in something, there have to be projects and business growth and a good attitude of the person to do those things and also the CV, without affecting personal life, but it can There is the caveat that a position may require traveling or living in another country, it may be that there are people who are not available, but in the end this organization usually asks the person if they want to go, before indicating to the person that they should go. Many times, the person's personal situation is unknown, so it is the person who sets their own limits and wishes in a situation like that.

Characteristics of a researcher, what is most valued, in addition to basic knowledge, one of the things the interviewee values most is the motivation to learn and develop, the drive to do these things by oneself and then the flexibility of the person to change the theme, the project, to evolve little by little and to learn in his professional life in different technological fields.

In relation to excellent people, the characteristics in your case, in addition to the technical and work capacity that we talked about before, the emotional intelligence to deal with colleagues and clients, being able to adapt to circumstances and understand the other and how to transmit that capacity technique.

Discrimination at the center is not common and there are no known cases, but there may be in the field of engineering, she has not had any discriminatory situation, but she is aware of it in the field of engineering or close to it. She, being in a more influential direction, does not perceive discrimination, and if she did, she would do everything possible to redirect that situation.

### 1.8.5 Key-actors on sexual harassment/gender violence

Sexual harassment and gender violence are regulated in the Equality Plan established in 2012 and are part of 2 development axes. On the one hand, there is the chapter dedicated to the prevention of sexual and gender-based harassment and violence in the work environment and, on the other hand, the chapter on protecting and providing support in terms of their needs in relation to victims of violence. of genre.

Regarding sexual harassment, an action protocol has been established, a guide so that the alleged victim can have an Attention in this regard, as well as the other party defend themselves from the facts. A commission is formed made up of the RLT, PRL, related people who can provide a complementary vision (such as psychologists), and knows that it has been activated at some time, but since they are data protected by the data protection law, there is no more information regarding data

## Organizational culture

For LOLA, the climate you breathe is confidence and comfort, a lot of camaraderie. She has always noticed it, with the covid issue she notices it less because we are at home. With the company, inside and outside the company, she has always had a cordial and good treatment and beyond the cordiality
with her bosses and with the company when dealing with daily tasks of the CE during the meetings even when no agreement is reached.

She knows that the corporate values are in the dining room, on the web and in the ERP and he intuits what they may be: competitive, we are very friendly colleagues with each other, very responsible with the clients in terms of delivery and deadlines, and with confidentiality, and in this case the organization provides the resources for that, whether technical or human.

Currently it denotes that they have improved over time in terms of information security and confidentiality, now many more mechanisms are put in place. In relation to camaraderie, there is less because we see each other less, but it's still good. In relation to dealing with his colleagues and superiors, he has always been good and cordial, he has never had inaccessible managers, when he joined there were 200 and now more than 750 , that is why now they have evolved for the better.

Work relations are sometimes complicated if you have to work with different areas, it is usually complicated due to the structure, because you do not know what things are done in the different areas, even if a client tells us about other services, he does not know what to say because, although it is not his mission, he does not know if it is being done or not because he is in another division. If you would like to have a general idea of what is done in the areas, internal information about what is done in ctag is missing.

As for their role as part of the works council, they meet with the CEO every 6 months and present the general lines of the center and the most relevant projects, but the rest of the company does not know this.

Labor relations remain stagnant, and after the change in the organization chart, there is less communication between areas, although before there were fewer areas, there was more communication.

As for the people who have leadership Lola thinks they are people ready to listen, both upwards and downwards, on the other hand, there is a lot of technical part and sometimes decisions are made without taking into account the technical part, good leaders have to know how to listen and trust their team and trust who listen, because it takes time to make decisions and makes people uneasy, and thus loses leadership".

There are many people who do it very well, so it is not the most important thing not to have technical knowledge.

There is active listening, mutual trust. Lola does not perceive that there is a different expectation between men and women, she believes that it has evolved for the better in this sense of appointing more women as managers and directors since she has been in CTAG."

In her department there is a man and a woman who are responsible, and both generate the same expectations from their team, and they are both very good leaders. to her at best when they go to the side of their clients, it is no longer that they are in the technical sector and in addition to the automotive sector, she usually finds herself alone on many occasions as well as training.

In relation to the merits to promote, she does not know them, but she is happy with the choice that has been made of her bosses.

She does not believe that there is an imbalance between the personal and family life of the leaders, managers or people with those capacities who have been promoted, if she believes that they make some trip.

She indicates that when Ctag appointed those responsible for the area, she does not believe that there was discrimination because more women have been promoted, without taking into account any criteria other than their merits, such as their personal life.

She believes that these people have been appointed because they were the right people to fill that position. She believes that in the case of those responsible, the fact of being responsible has not affected them negatively, only traveling a little more in her case, but they already did. In relation to overtime, not many are usually done in general

Regarding what would be useful for new people to advance, she believes that good mentoring would be useful, she had it for several years and learned a lot. Two things are very important for this, a lot of follow-up and training to guide. She has mentors identified and depending on what she does, she is one person or another. In the rest of the areas and departments she misses him. She believes that what she has implanted, she knows is not implemented in others and that it is necessary

## 2. Interviews with researchers

### 2.1 Aims and methodology

The goal of our interviews with researchers (started in April 2021) was to gather work (and family) career experiences individual point of view of early and advanced researchers in the MINDtheGEPs implementing organisations.

A total of 118 qualitative semi-structured interviews with researchers have been conducted in 7 public and private RPOs in 5 countries: Fundación para la Promoción de la Investigación, Innovación y Desarrollo Tecnológico en la Industria de Automoción de Galicia in Spain, Italian National Research Council and University of Turin in Italy, Jagiellonian University and University of Gdańsk in Poland, University of Belgrade in Serbia, Munster Technological University in Ireland.

A comparative qualitative research approach was used, based on the same common and shared tools and methodology for the conduction, monitoring and analysis of the qualitative interviews in the involved RPOs:

- Tools for the preparatory work before the fieldwork
- Sampling plan
- Interview outlines
- Tools and instructions for implementing the entire process; among this:
- "invitation letters" to recruit the interviewees
- the MINDtheGEPs D9.1 H-REQUIREMENT No. 2, containing all the instructions for the anonymization and storage of the interviewees and template of informed consent ${ }^{9}$
- flyers and power point presentation to present the MINDtheGEPs project to the research participants
- Synopsis template and notes for formatting and naming the synopses files
- Short report template and guidelines
- Introductive table for each implementing partner (reporting a brief description of their own organization, and the main information on organization's experience/expertise in the project domain and role in the project, Decision Making Bodies, Equal opportunity bodies and Gender Research Center, Evaluation system and career progression, Sexual harassment and gender violence).

The tools for the preparatory work before the fieldwork, the sampling plan, the interview outlines and the synopsis template, were designed starting from the materials used for the national research project Gea-Gendering Academia (funded by the Italian Ministry of University and Research and coordinated by prof. Manuela Naldini) from which derives the interviews analyzed for the University of Turin.

[^8]According to MINDtheGEPs sampling plan, a total of 12 to 24 researchers had to be interviewed. Given the internal level of differences of MINDtheGEPs consortium and the aim of deliverable 2.2 at providing each organization with a clear picture of the status quo in order to plan effective GEPs, particular attention was paid to encourage the partners to amend, adapt and adjust these tools and research design - and in particular sampling plan, interview outlines and synopsis template - to their language, the specific characteristics and needs of each different organization and basing on its context. In this sense, the phases and tools of the research and analysis have been designed, developed and implemented, to some extent, as flexible through a participatory and circular process that constantly involved all the teams who shared their progress, comments and insights and was lead and coordinated by the Italian team. The implementation was supported by a careful and constant monitoring of the advancements made and assistance guaranteed by the UNITO team with almost monthly online meetings with all the partners and in some cases also bilateral meetings, in order to assure that the interview implementation and then the analysis of the rich empirical material collected by each RPO teams were made according to common criteria, shared by all the teams.

The comparative qualitative analysis was developed by using the empirical material collected in each RPO and organized in synopses along with short reports compiled and written by each RPO's team. The synopses - that is a short summery of each interview - comprehended a thematic summary of the interview and selected quotations in the common English language while the interviews were conducted and informed contents signed in the own country language of each team. The research activities were carried on by sociologists, psychologists and/or other social scientists expert in qualitative analysis.

The first meetings (started in April 2021) and activities of the partners were devoted to undertaking the desk and preparatory work ${ }^{10}$ before the fieldwork - individuating in May 2021 (M4) the month for the preparatory work and in June (M5) the starting month for the interviews - and to define the sampling strategy - trying, on the one hand, to preserve the homogeneity of the logics behind the choice of the departments and of the recruitment among all the RPOs but, on the other, at the same time taking into account the different characteristic and needs of each organization - starting from the discussion of the following issues (among others):

- Selection of the department(s) (and equivalent in non academic RPOs): in how many and in which departments/research units conduct the fieldwork (one or more STEM department(s) and one or more SSH department(s), only STEM or SSH?)
- Reasons behind the choice
- How to involve the departments/research units
- Which levels and profile of researchers to be interviewed.

At the end, partners agreed about the following two targets of researchers:

- EARLY CAREER RESEARCHERS, i.e., research fellows, post-docs with temporary contracts and researchers in grade C for no more than 10 years in that role,
- ADVANCED CAREER RESEARCHERS: grade B (corresponding to the "associate professor" and equivalent); in other words people not yet in the higher level of hierarchy (as example, grade A full professorship in the University) but in a permanent and responsibility position; this because one of the goal of the interviews with the "advance career researchers" was to

[^9]explore the so called "glass-ceiling" phenomenon (and the difficulties to reach the higher/top position in the hierarchy of each RPO). ${ }^{11}$

In accordance to the general aims of WP2 "Assessing gender imbalances", the objectives of collecting qualitative data on researchers' point of view in the implementing organisations were:

- to analyse gender asymmetries in scientific careers in STEM and SSH disciplines
- to understand whether and if so, in what ways gender differences and inequalities are reproduced at various stages of academic careers.

More specifically the issues explored in the interview outlines were:

- the identification of the "push" and "pull" factors behind the gender imbalance in recruitment, career advancement and decision-making processes
- gender differences in individuals' trajectories, constraints, motivations and strategies in entering, pursuing or quitting academic careers (micro level).

Some RPO conducted the interviews in one STEM department/unit and in one SSH, other only in STEM department for reasons reported more in depth in the dedicated T2.6 short reports (see page XX and following). Two different interview outlines were provided in English by UNITO team for each target of researchers in different stages of their career (see Annex 6.3). The outline A was meant for early career researcher, the outline B for advanced career researcher:

- The A. for early career: male and female PhD holders in the early stages of their career like for example research fellows, post-docs non-tenured assistant professors, adjunct professors with temporary contracts (usually considered in grade D according to the report of the European Commission "She figures 2018 " pp.194-200) and researchers in grade C for no more than 10 years in that role. The goal here is to explore the early stages of "junior" researchers' career paths and the existence of the "leaky pipeline" phenomenon;
- The B. for advanced career: male and female academics in grade B (for example in the Italian case this correspond to the "associate professor" and equivalent in the other RPOs - Researchperforming organizations); in other words people not yet in the higher level of hierarchy (as example, grade A full professorship in the University) but in a permanent and responsibility position; this because one of the goal of the interviews with the "advance career researchers" is to explore the career advancement into apical positions and the so called "glass ceiling" (and the difficulties to reach the higher/top position in the hierarchy of the RPOs).

Since different types of organizations were involved in the sample (public universities, public non academic organizations, private RPO) in different scientific fields (SSH and STEM) partners adapted and adjusted the questions to their working situation, position and scientific field when necessary.

The outlines for the interviews with researchers (outline A. for early career, B. for advanced career) were divided into 7 main thematic sections:
a) Past working path
b) Current job/everyday working life
c) Organizational cultures
d) Well-being and work-life balance
e) Career advancement and future prospects
f) Interviewer's notes and comments

[^10]g) General Information Form (socio-demographic information filled in by the interviewer).

In each section of the outline there were:

- a brief description of the thematic focus, aim and topics to be investigated in the section
- a list of suggested questions.

The two outlines were adapted to each RPO's language, population characteristics and dynamics and tested.

Before starting the interview, the interviewers introduced the research project to the participant and asked him/her to fill in and sign the Informed Consent (ethics). The interview outline included a dedicated section ("Interviewer's notes and comments") meant to allow the interviewers to take note of their comments and notes during the interview on interviewee's nonverbal communication, mood, physical reactions to certain questions, interruptions, etc. and other relevant aspects, and a "General Information form" to keep notes of the main interviewees' socio-demographic characteristics at the end of the interview.

The synopses of the interviews were delivered in two tranches at a distance of one month from each other. UNITO team gave feedback to each partners on the reading of the synopses of the first tranche, suggesting -when opportune - amendments and consistency. Each RPO team wrote a short report according a template and guidelines shared and discussed by UNITO team with all the partners. The short reports were delivered between December and January. UNITO team commented and revised each report. After that each team amended and sent the final version back to UNITO team. On the basis of both RPOs' synopses and short reports UNITO team wrote the comparative final section.

In the next sections per each MINDtheGEPs implementing partners readers will find a dedicated short report of the interviews realized for T2.6. The comparative analysis of the qualitative results for t2.6 will be provided in the final chapter, specifically in the section "5.4 Task 2.6 Comparing interviews with researchers".

### 2.2 University of Turin, Italy (UNITO)

### 2.2.1 Desk work, fieldwork and sample's characteristics

Within the Gendering Academia project from which this qualitative analysis originated, the UnitoTeam selected two Department of University, one STEM and one SSH. The selection stemmed from a quantitative data on gender composition of student population and academic staff of the University. Before starting the fieldwork, the Unito-Team conducted a pre-test of the interview outline. At the same time it was necessary to map the characteristics of the two selected Departments. In order to keep under control the work-life balance issues it was considered appropriate to recruit researchers and professors with children and without. At the same time it was crucial to contact the selected Department Directors and a few key informants to gain access to the field. The contacts with the Directors and with the key informants facilitated communications with the selected researchers and professors and their recruitment was quite smooth.

The (semi-structured) qualitative interviews have been realised during 2020, during the pandemic crisis, and, as mentioned they are part of the wider research project of relevant national interest (PRIN) "GeA - Gendering Academia". The interview outline contained 6 sections: individual academic career, current daily working life, organizational cultures (current and past), wellbeing and work-life balance, perceptions and satisfaction of the current position and future prospects and policies. The interviews were all verbatim transcribed and synthesised in a synopsis. The interviews analysed for the current
report are a total of 25,16 to Early Career researchers, 9 to Advanced Career professors. They were conducted at the University of Turin in the period between march and november 2020.

The Early Career researchers interviewed are 16, they are aged between 28 and 42 years, 8 are men and 8 women. They all have a PhD and have temporary labour contracts in the departments involved in the study: 4 interviewees are junior assistant professors (so called "RTD-A" in the Italian academic system), 11 are research fellows ("assegnisti di ricerca"), 1 has a scholarship ("borsa di ricerca"), 8 work in the SSH and 8 in the STEM. Regarding marital status, family and housing condition, 1 (female) interviewee is on LAT (living apart together), 5 are in cohabiting couples, 6 are married, 4 are single. As for the partner's employment situation, in 3 cases he/she is an autonomous worker/freelance, in 3 cases temporary worker, in 5 permanent employee, in 1 case unemployed. Over the $2 / 3$ of the interviewees ( 11 out of 16 ) are childless, and 5 are parents (among them, 3 mothers and 2 fathers), or in transition to parenthood (as Denise, 31, STEM, who is at the $5^{\text {th }}$ month of pregnancy). The age of the children ranges from 6 months to 11 years old. 9 interviewees live in rented houses, 7 in houses of their property, or of their parents' property that the interviewees live in for free.

All the 9 Advanced Career interviewees are associate professors, 5 males and 4 females, 3 SSH and 5 STEM, their age ranges between 40-51 ( 5 with children, among them, 2 mothers and 3 fathers, children mostly underage, and 4 childless).

Table 2.1 UNITO: Socio-demographic characteristics of the EC and AC interviewees

| N. | ALIAS | AGE | SEX | EC/AC | SCIENTIFIC FIELD |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Mimmo | 33 | M | EC | SSH |
| 2 | Carmen | 35 | F | EC | SSH |
| 3 | Nina | 42 | F | EC | SSH |
| 4 | Anita | 34 | F | EC | SSH |
| 5 | Sara | 35 | F | EC | SSH |
| 6 | Luca | 32 | M | EC | SSH |
| 7 | Tito | 42 | M | EC | SSH |
| 8 | Flavio | 34 | M | EC | SSH |
| 9 | Giovanna | 32 | F | EC | STEM |
| 10 | Mario | 36 | M | EC | STEM |
| 11 | Salvatore | 28 | M | EC | STEM |
| 12 | Denise | 31 | F | EC | STEM |
| 13 | Mariella | 41 | F | EC | STEM |
| 14 | Nora | 37 | F | EC | STEM |
| 15 | Marco | 32 | M | EC | STEM |
| 16 | Ennio | 40 | M | AC | STEM |
| 17 | Yuri | 51 | F | AC | SSH |
| 18 | Lena | 41 | F | AC | SSH |
| 19 | Loris | 43 | M | AC | SSH |
| 20 | Mirko | 50 | M | AC | STEM |
| 21 | Fosco | 47 | M | AC | STEM |
| 22 | Emanuele | 50 | F | AC | STEM |
| 23 | Francesca | 48 | F | AC | STEM |
| 24 | Pia | 42 | M | AC | STEM |
| 25 | Dario |  |  |  |  |

### 2.2.2 Recruitment and career progress

## Early Career recruitment and career progress

Our results based on the interviews with the 16 Early Career researchers interviewed confirm previous studies which show that early career stages are significantly marked by the requirement of very high productivity levels and the ideal of individual entrepreneurial (Murgia, Poggio, 2019).

Regarding recruitment and promotion criterions, models of scientific excellence and evaluation processes, the interviewees recurrently focus on "productivity", usually meant as (a high number of) publications. This is seen by the interviewees as one of the most important facilitating factors in accessing (and in advancing in) the academic profession while in the interviewees' discourses less emphasis is posed on "quality", "innovation", and "originality" of publications, research results and activities. As Anita, 34, SSH, states: "productivity (short pause) (...) is a very present element so you know you have to produce, you have to produce, so you always try to produce". Several interviewees talk about the time pressure to publish that they perceive as an element to the detriment of quality of their research work and publications. To this respect, Nina, 42, SSH, declares: "disconnection between, on the one hand, the need for research to be done well [...] and the need to immediately produce results in terms of publications".

Another factor considered by many Early Career interviewees as crucial in facilitating the recruitment and career progress is the role of the supervisor/mentor ("maestro") who - when present and "active" in promoting their fellows and in providing opportunities for publications and collaborations - can represent an "anchor". An 'extreme' and emblematic case is that of Flavio, 34, SSH, who - regarding
his (female) supervisors - affirms: "my whole curriculum, thanks to which I managed to win the competition, also depended in large part on them. These professors do a lot for me so they definitely do more for me than I do for them. (...) they helped me (...) in my career to make the right choices (...) I constantly ask for advice and they give it to me." Consistently with this, Flavio believes that the respect for the hierarchy is important: "With the bosses you have to know how to talk (...) you have to know how to recognize and accept the hierarchies, something that not everyone is capable of doing".

When the supervisor/mentor is absent or not "active" this can be even a "disaster" in the words of Sara whose supervisor has retired. In other cases, this can also expose, leave unprotected, to mobbing as in the case of Mariella, 41, STEM, who says that she suffered forms of mobbing (already started before) and was left at home without a contract for a year when her supervisor retired. In general, she has a rather troubled history and little support from all the supervisors she had in their past career and at the moment of the interview she is worried because her current supervisor also is not very active neither on the research front nor on national and international networking, which does not favor her career even in terms of publications opportunities. A not very active supervisor may result in a lack of information - "asymmetry of information" in Carmen's, 35, SSH, words - that can be useful to build one's career effectively. Carmen affirms she has not been adequately informed / oriented with respect to the opportunity to spend periods abroad and with what time frame during their PhD program. Therefore, her PhD thesis work was slowed down because the period abroad coincided with the last period of the writing, in her opinion the period abroad should have been earlier. Despite the importance Carmen gives to the mentor's advices and indications, she thinks that autonomy and individual entrepreneurial attitude are likewise important; she declares: "relying on the advices of those who follow you - the mentor she means - is necessary; (...) but I have also learned that the teacher of yourself is you, that is, entrepreneurial activity is necessary in building a career, if you are waiting for the other to tell you which step to take ... (...) get a move on your own business too!" Asked about the characteristics that people considered excellent in her department have, she flatly affirms: "A great ruthlessness combined with a high-level scientific profile." And about career progress, leadership and gender, she thinks that: "Leadership positions (...) are very often given to men"; "what I seem to notice is that when women manage to be valued in these terms it is because they have worked a little more than men".

Internationalization is considered by most of the Early Career interviewees, regardless of their scientific fields, one of the criteria very much appreciated in their departments. To some extent this seems a 'sort of' rhetoric, especially among SSH researcher. As matter of the fact, this title of 'internationalization' may play against the career. As in the opinion of those who have been abroad for many year. Tito, 42, SSH, who worked in Germany and abroad for 7 years, affirms: "That is, in my opinion, a lot depends on how much you are inserted at the academic level in Italy ... (...) it is still essential to be in Italy and have relationships in Italy and in the Italian Academy. Because if you go abroad, no. [....] in other countries having been abroad is considered as an added value, not as a penalty; but here (in Italy) it is different". And Carmen, 35, SSH, declares outlying the role of "academic power": "To advance in the career, more than mobility, it is very important to put yourself 'under someone's wing': (...) mobility is an added value only in the form: 'Oh how nice, you have travelled a lot!' but then in substance... often it is the academic world that is constructed like Tizio who puts himself under the wing of Caius". Interdisciplinarity is another factor cited frequently in the interviewees' discourses - although less than productivity and internationalization - as a characteristic appreciated in the evaluation processes. The interviewees in the STEM department (for example, Mario, 36, STEM) more often than those in the SSH department involved in our study mention the capacity to attract funds through the winning of projects.

Several interviewees refer to "vocation" and dedication as important individual motivational resources to sustain the continuation of the career, coping with job insecurity on one hand and unconditional
worker model on the other. The capacity to perform the 'unconditional worker ideal' that characterises the academic organizational culture is believed as very important for being considered excellent scientist. Even if they think that this alone is not enough. In Mimmo's opinion, 33, SSH, the academic organizational culture is believed in a transitional phase where if on one hand "innovative" trends, "communication" and "internationalization" emerge and become stronger and stronger on the other hand "conservative" practices and attitudes based on "affiliations", "loyalty", and researchers' "positioning" persist.

Just as important is the informal support (material, economic, emotional and psychological) by the social networks (e.g. family and partner support) in sustaining the continuation of academic career during precariousness. Mario, 36, STEM, father of a six-years-old baby, affirms: "one of the reasons why I have always been very calm in facing the career as a researcher given all the uncertainties that this entails, is that my wife has a secure job, because she is a permanent employee of a pharmacy". Sara, 35, SSH, husband's support allowed her to participate in conferences and also to visit abroad, bringing him and children with her. Above all, her husband's support allowed her: "to be able to make commitments away from home, clearly not for months but for days, certain in the fact that he defended the commitment to look after the children, even in my absence". Carmen's, $35, \mathrm{SSH}$, comments on her experience to be dependent by her family of origin point out the implications in terms of social class of academic precarious work: "This is not a job for the poor (short break) (...) in some moments if my family hadn't been behind me I would not have been able to continue this activity".

From the interviews, directly and indirectly, emerge that women abandon (or they are believed to abandon) more frequently than men their jobs in academy; this is true especially in the STEM department. For example Nora, 38 , STEM mentions a couple of colleagues who have left their research career because it is not easily reconciled with family and Giovanna, 32 , STEM is going to abandon the academic career, despite the passion for research work, she seems resigned to abandoning her academic career for a more secure job in public school due to academic job insecurity and the sacrifices that would be required to continue, including the need to change research topics (since the actual is "marginal") and to go abroad.

Compared to the female interviewees the male Early Career researchers more frequently show a 'gender blindness', thinking there are no gender asymmetries and (direct and indirect) discrimination in recruitment and career progress in their own department; they consider the criteria of the "excellence" as rather neutral with respect to gender, as well as the impacts / consequences that these criteria have on work-life balance. And when recognize them, several tend to minimize. As example, Mario, 36, STEM, says: "if one does his job to achieve goals, regardless of whether he is male or female, that must be done. There are probably those who are more organized, less organized and therefore ... may or may not be more effective or less in completing what he has to do but ... I do not perceive particular differences." Flavio, 34, SSH, repeatedly stresses the process of feminization of the student population in the degree courses. To this respect, on gender composition in academic careers, he predicts for the future: "In twenty years, our sector will have the absolute prevalence of women". Although someone, as Luca, 32 , SSH, says to be aware of the existence of gender differentiated and stereotyped practices and expectations in the university: "I am aware of the fact that the university works as the worst of patriarchates (laughing) in the sense that I happened to see young female colleagues confined in roles also from the point of view of aesthetic representation (...) who replace the name tent cards during the conferences? by the young female post-graduate student or PhD student". On the gender implications of the criteria for a career in university Tito, 42 , SSH says: "perhaps for a woman it can be a little heavier if there are children". Only few male interviewees recognize gender imbalances in academia; for example Marco, 37 , STEM declares that it is more difficult for women to reach top positions and of leadership because there are unconscious biases (he speaks of "skepticism") and their work is discredited (there is always a tendency to "discredit women's work").

## Advanced Career recruitment and career progress

Most of our 9 Associate Professors interviewed had a career progress not too long, but characterized by significant periods of research and even work abroad. As for career progress is concerned most of the interviewees, regardless of their scientific fields, believe that the criteria very much appreciate in their Departments are two: internationalization and to get research projects, especially European ones. Though some of the interviewees refer is important also high level of productivity, evoking the importance to assume an 'unconditional worker model'. In the most part of cases, the interviewees describe the criteria of academic work evaluation as gender neutral, especially in STEM disciplines, and maintain that promotions take place regardless of gender, as long as the candidates are "excellent". According to some professors it is important not only "to be" excellent but to be "recognized" as excellent researchers, i.e. because one publishes a work considered very important. However, with regard to advancement career it is stressed that there are mechanisms that go beyond merits and the definition of 'excellence' but have to do with the academic policy logics (i.e. negotiation between scientific sectors within one discipline, or between scientific areas).

As for gender disparity, a difference emerges between those professors belonging to SSH who seems more aware of gender disparity within academia, and those belonging to STEM fields. The latter believe more strongly on the ideal of 'neutrality of science' and more frequently attribute to the issue of unbalance in 'number' and that of 'parenthood penalty' the reasons of gender inequalities or more properly the reasons why women (or better mothers) are more slow in their academic career. For instance, Mirko, 43, STEM, says: "research work does not foresee that you take a break (for parental leave, for instance) and nowadays the problem of science evaluation is that it's not based on quality but on quantitative criteria" [...] "we have reached a point where every shit you have to publish". According to Dario, 42, STEM, however, it is important to recognize that the gender inequalities (that he labels "discrimination") do not apply to career progression as researcher, but to leadership. It is within the processes around the selection of leaders or top managers that gender differences emerge more clearly. Lena, $51, \mathrm{SSH}$, mother of two children got before to start her PhD, says: "ideal academic worker is childless, this is why many academic women have to renounce to born a child". Pia, 48, STEM, telling why there is a gender gap in STEM field, concludes: "I think that in some respects we are still the barrier of ourselves". Summing up: most of the advanced career interviewees think that "mother penalty" is the pivotal mechanism which slows down women's career, representations of science and research as areas of human life regulated by objective and non-discriminatory/gender-neutral norms are largely prevalent in the participants' narratives (especially within STEM's interviewees). As for career progression and leadership the 'unconditional adult worker model' is considered the most appropriate.

### 2.2.3 Work-life balance

Identify and report what emerged in the interviews and in the synopses' section "well-being and workfamily/life balance"

Since the results can be very different for EC and AC, please organize this section in two sub-paragraphs as follows:

## Early Career work life balance

Speaking of work-life balance and well-being, many Early Career interviewees claim that they are unable to carve out enough time for themselves and for their private life due to the stressful work schedule and 'unconditional worker model' in academia. For example Flavio, 34, SSH declares: "I even attribute my being single to the need to work so hard" and Anita, 34, SSH: "my luck is to have a boyfriend who works as much as I do because if not (ironic sigh) there would be private life, that's it". Some interviews suffer heavily for the impact on their psychological well-being and criticize the widespread attitude in the academic organization of showing off to perform such a model in order to be considered an excellent scientist; Carmen, 35, SSH, affirms she feels "crushed", "paralyzed" and "slowed down" by the "anxiety instilled by this perverse system" associated with the precarity of its labour contracts and comments with disappointment: "for many it is also a habit to say: 'I spent the night working', 'I worked over the weekend', because if you don't say it, it's as if you didn't (...) a person who also has a life seems little devoted to scientific activity. (...) It's something you must have to show how much you produce". Mimmo, 33, SSH, talks with discomfort about the need (expectation) of being available to respond to work requests on holidays and / or sick days: "it is clear that no one physically forced me [to work on holidays, on vacation or when sick] but it is clear that if I hadn't answered that email, if I hadn't answered that phone call (pause) it would have been in short (...) (ironic sigh) not answering is not a good thing". Also, the career criteria can be cause of malaise; Marco, 37, STEM, describes as "inhumane" and "unsustainable" the career criteria that, "shifted higher and higher", imply a childnessless early career model and made him give up an extra-working life. In some cases, the exit strategy seems the only solution. For example Giovanna, 32, STEM, states: "The truth is that I think that in order to continue in the research, in the correct way, in my opinion, I should really give up everything, go abroad, change the subject and dedicate one hundred percent of my energy to that, and right now I don't want to do it".

The great part of the interviewees - especially female interviewees - underlines the parenthood penalty and especially 'motherhood penalty' associated to the unconditional worker model and the career criteria discussed before (productivity, mobility etc.). Anita, 34, SSH: "the timing of work transitions and parenting when they coincide in the course of life is penalizing (...) I think in a way you have to / be super women / (laughing). (...) If one has children it produces less (ironic sigh). And so since you are evaluated for your production, while you have children others produce then pass in front of you, and / therefore this is why no one has children / (...) one knows that when he/she has a child ... it will affect the working aspect." These factors, together with the job insecurity that characterize the early stages of academic career in the Italian academic system, discourage reproductive decisions as in the case of Carmen, 35 , SSH who says "I am a 35 year old woman (...) will I be able to have a child?" and Anita, 34, SSH, who actually is childless but in the future she would have some, is worried about the consequences on her scientific productivity (publications) of motherhood. And about mobility and travelling a female interviewee says: "they (her husband's employers) would leave my husband at home, they wouldn't tell him 'go and get a year's leave to follow your wife', it's unthinkable" (Nora, 38, STEM). Moreover Luca, 32, SSH declares: "today the conditions to encourage reconciliation between life times and working times do not exist, especially in the phase between the end of the doctorate and a hypothetical stabilization of your working position".

In general, the female interviewees seem more aware of the motherhood penalty and of the difficult work-family balance for a female scientist having childcare responsibilities. For example Mariella, 41, STEM (at the moment of the interview childless) believes that the research evaluation criteria prevent the reconciliation of private life (and above all motherhood) and academic work even though she believes that the problem is broader, at a socio-cultural level, and not just an academic one: "they are obstacles that in my opinion (...) I do not think they come from (pause) (...) the supervisor gets against you or something like that, they come because for how society is organized these years I don't know how to say, they are inevitable." Therefore often - as Nora, 38, STEM, mother of three children aged 3-11 years, highlight that the teaching and research staff have a predominantly male composition in her scientific field and comments: "the women who become university professors are very few here (...) and when they become university professors they usually have no family (...) a woman stops earlier (...) because it is often objectively tiring". Similarly to Mariella, Nora believes that the different obstacles for men and women in advancing in academic career derive to some extent to the Italian culture which considers the women the main responsible for (child)care and Giovanna, 32, STEM, who declares: "[The differences between mothers and fathers] I think they are linked above all to the fact that in terms of social vision it is still believed that it is the woman who takes care of the children more than the man". Similar also the point of view of Nina, 42, SSH (mother of two children): "The chronic difference between men and women in the daily organization, I think it has a weight [...] feeling the expectation that I as a woman do a series of things and it is natural that this is the case, there is a bit, yes. I am thinking of housekeeping, shopping, childcare, and so on. This obviously affects work". In some cases, the model of 'intensive mothering' requested to women by the socio-cultural expectations are perceived as exposing women to criticized and labelled as deviant; Sara, 35, SSH, underlines how sometimes she has received unpleasant opinions precisely in the face of her choice to keep family and academic career together: "from another woman (...) statements that I found unpleasant (...) in relation to of the fact that I did not dedicate myself enough to my family".

Also, some father tells about his difficult to reconcile fatherhood and academic work. Mimmo, 33, SSH: "on the first day with my son I have this distinct memory of me (laughter), while my wife was trying to recover from the caesarean section, tired and dead, and I with the baby in her arms asleep and on the other hand the mobile phone to answer e-mails".

Some male interviewees, although they underline the motherhood penalty, minimize it by confining it to pregnancy and the very early stages of maternity and breastfeeding. This is the case of Flavio, 34, SSH, who affirms: "in my opinion it is more or less the same thing. I know that there is greater weight on the woman in the care of the child; in fact, it is often said that women give up their career more than a man. But in my opinion the real obstacles are the physical ones, that is, first getting pregnant and then having to breastfeed. After that period there, theoretically the situation should be the same".

Some female interviewees says that the Covid-19 pandemic radically worsen the work-family balance for women. Nora, STEM, "Because a father who works from home stays locked in his room and works; mom who works from home is not like that. [...] So the gender difference exists objectively."

## Advanced Career work life balance

There is a general consensus that having children may produce "parenthood penalty" (or better motherhood penalty) phenomenon very well-known in the literature (Zippel 2017). As matter of the fact, in the narrative of the interviewees pregnancy and childbearing continue to be acknowledged as an obstacle in women's careers because it forces them to interrupt their work and to reduce their productivity. Indeed, women currently in advanced career positions either postponed maternity after the reach of a tenure track position. Some female interviewees postponed the decision of having a child until it was too late. As in the case of Pia, 48, STEM; she says she wanted and still wishes to have
a child but she recognizes that there are biological limits: "it is biology... I must be honest, from this point of view if tomorrow for a miracle I would remain pregnant, the work... [pregnancy] would become for sure the priority. So I did not do any sacrifice because of work. I was not lucky, let's put it this way".

Care work is seen as barrier to work career and with work also among those who have or have had care responsibilities towards their frail elderly parents or family members. Answers related to the impact of Covid19 pandemic on research and on 'productivity' might be classified in two divergent types according to the presence (or not) of young children and to family life course of respondent. Those childless have gained more time during the first pandemic period to research and to publish. Those who have children experienced a dramatic reduction of time to be devoted to research and to write.

### 2.2.4 Research

Identify and report what emerged about the issues related to research and teaching or other activities in the interviews and in the synopses' section "current job and everyday working life" and "organizational culture" but please pay attention to the fact that some considerations on research and teaching could be also reported in other sections).

Since the results can be very different for EC and AC , please organize this section in two sub-paragraphs as follows:

## Early Career research (and teaching)

Most of the interviewees are research fellows without teaching courses; therefore, the majority of them perceive to devote the great part of their working time to the research. Despite of this it is due to say that the near the totality of them is involved in informal teaching support activities (such as following undergraduates students' thesis, exams, lessons) carried out as part of the courses of their supervisors/mentors and in other academic activities as writing of projects and administrative tasks which are perceived in many cases as being part of academic work only improperly or in part and that take - especially for some interviewees - a important part of their working time. For example, Carmen, 35, SSH, states: "Well, I think that at least in the initial years of training, we should be less absorbed in teaching. Also because what then brings you forward is research, not didactics. And for some, everything you do in teaching is so taken for granted that ... it's your business if you can't carry out the research activity then ... probably (short pause) to be less absorbed in the teaching of others would be appropriate".

## Advanced Career research and teaching

Most of the interviewees perceive the time to be devoted to research as imbalanced compared to other academic activities, referring not only to teaching time, but also to other services activities which are often perceived as being part of academic work only improperly (Winslow, 2010). These results are consistent with previous studies (Garforth and Kerr 2009; Winslow 2010) showing that, since "excellence" and merits are measured in terms of publications (and citations as in the case of STEM disciplines), teaching activities are considered less important and undervalued compared to research ones. Since women are generally more involved in these tasks, they usually experience slower advancements of career, but this is also true for men who adopt similar paths. However, according to some interviewees to combine all diverse academic activities and to assume fully institutional responsibilities one needs to work over-time and overnight. Though it is worth to underline that several professors recognize that the number of hours and frequency they overwork has reduced since they have got a tenure position.

### 2.2.5 Emerged proposal from interviewees point of view

Identify and report only what emerged in the synopses' section "Desired policies and changes of the university/institution system", highlighting here personal expectations and considerations on gender equality issues. Please specify the interviewees' gender when reporting her/his considerations and expectations, since it can be pivotal in the understanding of unconscious biases.

Since the results can be very different for EC and AC, please organize this section in two sub-paragraphs as follows:

## Early Career personal emerged proposals

The great part of proposals that emerge from the interviews with Early Career researchers are about to increase income guarantees during period of unemployment and social protections for temporary workers in academia. This has to be framed with the recent changes in the Italian academic system. Indeed the last university reform, the so-called Gelmini reform (law 240/2010), has reshaped the academic career ladder and "precarised" the assistant professorship by replacing the former permanent contract of assistant professor (the so called "Ricercatore Unico" (RU)) with two new types of fixed-term contracts: the RTDa, a "junior" assistant professor, and the RTDb, a "senior" assistant professor, paid more and with tenure track to the associate professor position once obtained the National Scientific Qualification (ASN). Many interviewees point out the generational differences in terms of career requirements and timing and think that today for early career researchers is more difficult to enter the academy and above all reach a tenure track permanent position as professor. Other interviewees claim support for parenting by the University, and measures to support reconciliation (such as nursery).

## Advanced Career personal emerged proposals

Several professors underlined the need to introduce additional health insurance benefit for professors and not only for no-teaching staff in the University. Fosco, 50, STEM, childless, underlines to the need to rethink the distribution of academic work in order to obtain more time for 'research'.

### 2.3 National Research Council of Italy (CNR)

### 2.3.1 Desk work, fieldwork and sample's characteristics

CNR research staff are divided into researchers and technologists at three levels: researcher and technologist (level III, equivalent to grade C of She Figures classification), first researcher and first technologist (level II, grade B) and director of research or technologist director (level I, grade A). As a public research organisation, grade $D$ is similar to a research grant, which is currently not managed centrally but autonomously by each CNR Institute, and therefore lacks a register for the entire organisation. In addition, except for research staff serving as Director of an Institute, Department or Research Area (fixed-time appointment), both Level II and Level I staff mainly carry out research activities on an individual basis or as a research group leader.

Based on the project requests and the specificities of the organisation we, therefore, defined the two groups to be interviewed slightly differently from the general project approach:

- early-career researchers: permanent research staff at level III with a maximum of 2 years of experience as a permanent researcher/technologist, or temporary research staff at level III;
- advanced-career researchers: permanent research staff at II and I level (maintaining a fair balance between levels), and III level research staff with at least 15 years of experience.

The CNR is composed of 7 Departments, 6 STEMM and 1 SSH. The Department of Human and Social Sciences, Cultural Heritage is the only department showing gender parity within the research staff (across profiles and levels). In 2019, all STEMM departments show a female presence between 34.6\% in the Department of Engineering, ICT and Technologies for Energy and Transportation and 47.3\% in the Department of Chemical Sciences and Materials Technologies, except for the Department of Biomedical Sciences, where the gender ratio is reversed, recording $65.2 \%$ of research staff as female. Given these gender-related macro-characteristics, we identified research staff to be interviewed within 3 departments:

- Engineering, ICT and Technologies for Energy and Transportation (ICT), being the CNR department with the lowest presence of female research staff;
- Biomedical Sciences (BMS), as CNR department with the highest presence of female research staff;
- Human and Social Sciences, Cultural Heritage (HSS), as the only SSH department.

Since the brief considerations just made, the reference universe for the two subsamples (early- and advanced-career researchers) is composed as follows:

Table 2.1 CNR: Reference universe - research staff, by gender, level, profile and contract (2019)

| Departments | F |  | M |  | Tot. F | Tot. M | Tot. Researchers | Tot. Technologists | Tot. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Researcher s | Technologists | Researchers | Technologists |  |  |  |  |  |
| Early career: III level, permanent contracct, at most 2 years of experience |  |  |  |  |  |  |  |  |  |
| HSS | 7 | 0 | 9 | 0 | 7 | 9 | 16 | 0 | 16 |
| ICT | 17 | 1 | 18 | 0 | 18 | 18 | 35 | 1 | 36 |
| BMS | 35 | 1 | 12 | 1 | 36 | 13 | 47 | 2 | 49 |
| Tot. | 59 | 2 | 39 | 1 | 61 | 40 | 98 | 3 | 1 |
| Early career: III level, temporary contract |  |  |  |  |  |  |  |  |  |
| HSS | 4 | 5 | 11 | 4 | 9 | 15 | 15 | 9 | 24 |
| ICT | 13 | 2 | 22 | 7 | 15 | 29 | 35 | 9 | 44 |
| BMS | 23 | 3 | 8 | 4 | 26 | 12 | 31 | 7 | 38 |
| Tot. | 40 | 10 | 41 | 15 | 50 | 56 | 81 | 25 | 6 |
| Advanced career: II and I level, permanent contract |  |  |  |  |  |  |  |  |  |
| HSS | 46 | 2 | 56 | 4 | 48 | 50 | 102 | 6 | 108 |
| ICT | 59 | 3 | 152 | 17 | 62 | 171 | 211 | 22 | 233 |
| BMS | 95 | 7 | 80 | 6 | 102 | 86 | 175 | 13 | 188 |
| Tot. | 200 | 12 | 288 | 29 | 212 | 317 | 488 | 41 | 529 |
| Advanced career: III level, permanent contracts, at least 15 years of experience |  |  |  |  |  |  |  |  |  |
| HSS | 52 | 12 | 54 | 7 | 64 | 61 | 106 | 19 | 125 |
| ICT | 67 | 16 | 102 | 22 | 83 | 124 | 169 | 38 | 207 |
| BMS | 158 | 25 | 63 | 12 | 183 | 75 | 221 | 37 | 258 |
| Tot. | 277 | 53 | 219 | 41 | 330 | 260 | 496 | 94 | 590 |

Source: CNR (2019)
From this universe, we drew 24 persons to be interviewed, 12 early- and 12 advanced-career, aiming to meet the distribution by gender, profile, level, and department.

Table 3.2 CNR: Socio-demographic characteristics of the EC and AC interviewees (2019)

| Departments | F |  | M |  | Tot. F | Tot. M | Tot. Researchers | Tot. Technologists | Tot. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Researchers | Technologists | Researchers | Technologists |  |  |  |  |  |
| Early career: III level, permanent contracct, at most 2 years of experience |  |  |  |  |  |  |  |  |  |
| HSS | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 2 |
| ICT | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 1 | 3 |
| BMS | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 1 | 3 |
| Tot. | 3 | 2 | 3 | 0 | 5 | 3 | 6 | 2 | 8 |
| Early career: III level, temporary contract |  |  |  |  |  |  |  |  |  |
| HSS | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| ICT | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 3 |
| BMS | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Tot. | 2 | 0 | 2 | 1 | 2 | 3 | 4 | 1 | 5 |
| Advanced career: II and I level, permanent contract |  |  |  |  |  |  |  |  |  |
| HSS | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 2 |
| ICT | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 2 |
| BMS | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 |
| Tot. | 2 | 1 | 3 | 0 | 3 | 3 | 5 | 1 | 6 |
| Advanced career: III level, permanent contracts, at least 15 years of experience |  |  |  |  |  |  |  |  |  |
| HSS | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 2 |
| ICT | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 |
| BMS | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 |
| Tot. | 3 | 1 | 0 | 2 | 4 | 2 | 3 | 3 | 6 |

Source: authors' elaboration based on CNR (2019)

From this original plan the final list of interviews were the following: 11 Early stage careers researchers ( 8 with children and 3 without children) and 10 Advanced careers researchers ( 8 with children and 2 without children). The dropdown from the original plans was due difficulties in recruiting the AC researchers that did not answer the interview invitation. A reserve list was used to contact additional researchers but was not possible to get the planned sample.

### 2.3.2 Recruitment and career progress

## Early Career recruitment and career progress

For EC researchers the role model and mentor was one of the leading element in the intervieews. Such as Ambra_F_34_ERti_SSH_CNR: "While I was here at the CNR, the figure of my male head of the research group was fundamental. He was my supervisor of the fellowship and [...] he was also, just from a perhaps more scientific point of view actually..., [who taught me] how to carry out research even at CNR, and in general doing research, [he] has been absolutely important". There is a lot of collaboration between colleagues and groups, and groups are very committed to winning national and/or international projects. However, it seems that, at the Institute level, the commitment to daily activities or to writing/winning projects is more rewarded than the classic activity of researchers (i.e. publication of papers, monographs, chapters, etc.). The perception is that the aspect of collaboration "for the common good" is more rewarded than the individual career. "The feeling I have [...] is that it is more rewarding to commit yourself on a daily basis to activities and projects rather than to commit the researcher to publication as if committing yourself to publication [...] is seen as something a little more selfish than [...] spending yourself on one common cause."

Marta_F_38_STEM_CNR: Her first fixed-term contract was born from a regional project (Puglia region) which financed her research contract. "I have had several mentors and scientific figures of reference both men and women, of different roles and professional backgrounds. All my mentors have accompanied me on my professional career and I have certainly learned much more from my fifteenyear experience. In general, I consider myself quite independent even if my precarious condition, especially in the last period, weighs on me from the point of view of perspectives, desire to get involved and enthusiasm. Soon I should be hired with a permanent contract and perhaps a new period will open, for now I feel a bit in limbo".

Aurora_F_36_EC_STEM_CNR:Concerning the concept of excellence and the factors important for recruitment and career progressions, the interviewee claimed that within her field, as happens elsewhere, also at the CNR what is necessary is to publish and to be able to attract funds through national and/or international projects. According to the interviewee excellence today goes with the label of the H index, even if she noted that within CNR also the seniority matters.

Ambra_F_34_ERti_SSH_CNR: Excellence is defined as a person who is a guarantee of scientific accuracy, both towards their own products and in reviewing the work of the group. And she thinks that only an excellent person can also be a leader. In fact, she shows concerns in the evolution of her research group, because at present she does not identify such a person among the potential group leaders. However, she points out that, at the Institute level, excellence is best assessed with regard to project skills and competencies. The group in which she works is strongly male-dominated: only she and a female technologist, the others men (even among research fellows). However, this situation is not perceived as a sign of discrimination.

Carlo_M_37_EC_STEM_CNR: When asked which characteristics are more valued within the research institute, the interviewee responded that: "from a research standpoint, it is important to do research "in silence" but in particular to create collaborations within the Institute and with external colleagues (...) and then being proactive in terms of creating collaborations and being competitive, meaning to
push oneself to produce a better research products compared to those produced by other colleagues..." However, he did not believe that there was a significant difference in terms of expectations between men and women. This difference was evident until 30 or 20 years ago and indeed the senior research staff is composed of all men. However nowadays this gap has been filled and the majority of the colleagues that joined the research group from 2013 to 2015 consisted of women. He added though that:

ERTI_RUBINO_M_41_ STEM_CNR: In particular, in detecting the characteristics of the scientific excellence of the colleagues present in the research institute, the respondent identifies the following elements: "there are two scientific profiles that I consider outstanding in terms of excellence: two leading researchers, a man and a woman, who both manifest a deep knowledge of their research topics and a profound empirical ability in their labs. Both are researchers who, despite their leading scientific position, are personally and directly active in their labs. They work every day with young scholars, they know how to take care of the aspects of teaching and training, they follow the path of scientific development. these leadership profiles of excellence have the same characteristics scientific and professional, without gender differences".

Sonia_F_49_EC_STEM_IRPPS: According to the interviewee, what characterizes leadership is mainly the seniority level rather than any other characteristic. However, according to her also in this context, there is a gender gap and women are less likely to end in leadership roles

Torvalds_M_45_EC_STEM: Among the factor that influences the scientific excellence the interviewee underlines "the importance of networking". "With a strong network of colleagues, you can easily access European and national funding, publish the results of your work, etc.". When asked to talk about eventual personal (or of other) experiences of discrimination or harassment at his/her workplace the interviewee confirmed that he did not assist to any gender imbalances and that he did non assist to any form of discrimination or harassment. He has not evidence about the presence of a Code of Conduct in his research organization.

Anna_ ECti_F_35_STEM_CNR: She reported to have been very lucky to have the possibility to freely move around Europe and to follow her desires and expectations, especially the professional ones. This was possible due to the fact that she still has no children. (...) it was easy to move because I could also start to do things that I have never taken care of, if I had remained stationary in a place... (...) which is in the sense that I could still move myself. I didn't have anything to take care of, so I didn't have anything, so it was easy for me to take a train, go to a competition, go home or come back.

Lidia_F_42_ERtd_STEM_CNR: During her PhD, she did an 8-month internship abroad (France), and then two co.co.co. contracts and three annual research grants at the CNR institute for which she currently works. Over the years, within the CNR institute, she has specialised in cancer molecular biology, also collaborating with the hospital in the city where she lives and works. She is currently a researcher on a fixed-term contract of level III. Since having her son (2 years old), she has decided not to carry out long stays (visiting researcher or similar programmes) abroad.

Leonardo_M_47_EC_SSH_CNR: The interviewee stated that he is very happy of its current work climate, which he finds really collaborative and inter-disciplinary. According to his opinion, this is also due to the current Director of the Institute (a woman) who pushed for creating interdisciplinary teams with people coming from different backgrounds working on the same theme. He also highlighted that the institute is organized in a manner to have office leaders rather than team leaders. The office leader has coordination and management responsibilities but, from a scientific viewpoint, the relationship is peer to peer and based on the equality between researchers.

Leonardo_M_47_EC_SSH_CNR: He did not notice any imbalance or disparity in terms of gender within its institute, where the majority of the staff is composed by women, many senior researchers and research directors are female and the Institute Director and the Office Leader are women too. When asked if he noticed a more frequent drop-out of female researchers from research positions in the early stages of his career path outside CNR, he replied that he noticed it a lot. However, he was not aware of any case of gender-based discrimination at CNR. Based on his opionion, the current Head of the Institute pushes for an environment where they: characteristics more valued within the institute refer to the ability: "know each other, mix-up and exchange opinion and make things together in order to create new research streams that are as inter- and multi-disciplinary as possible"

Marta_F_38_STEM_CNR: The organizational climate is positive even if the pandemic period has frayed relations and made group collaboration more complex. The leadership of her institute is predominantly male, although in the last period there have been career advancements that have affected some female researchers. "I don't think, however, there are different expectations between men and women in our workplace. If anything, there is an obvious additional burden on women who, during maternity or maternity leave, stop physiologically for at least a year and a half, then the pace of work naturally slackens".

Lidia_F_42_ERtd_STEM_CNR: The respondent does not experience any obstacles at work as a woman, and finds the male-dominated environment natural both in the research group and in the institute, since chemistry and biology is predominantly male and women "have to take care of the family". If group meetings are held in the afternoon, the group knows that she has to leave at some point, and they update her the next day. When asked "have you ever proposed to change the time of the meetings in order to be able to participate fully?", she replied that no, she has never done that because everybody has always done that, and she does not see the problem.

Sonia_F_49_EC_STEM_IRPPS: The interviewee then missed a public competition in 2011, due to the fact that she recently had a baby: "Let's say that for me it has been a problem the fact that I skipped an internal competition in 2011 that belonged to my institute. I didn't do it, that is, I signed up but then I didn't do it because I had my daughter who was a few months old and therefore it was not the right time for me to be able to face competition in serenity [...] but in short, when you are breastfeeding, there is a baby of a few months, in short, it is not the right time to study."

## Advanced Career recruitment and career progress

Danilo_M_53_AC_STEM_CNR: He affirms that the promotion from Researcher to Senior Researcher occurred thanks to the number of publications whereas in the competition for Senior Research Manager the evaluation panel valued particularly the research projects that he managed to secure and coordinate. When asked which characteristics are more valued within the research institute, the interviewee responded that: "Being proactive, search for projects, connect with others, be available when the Director asks you to be involved in a project, considering that our Institute is quite young so it is obvuious that the readiness to respond to new inputs is a relevant element, also considering that these projects and internal and external initiatives come with tight deadlines[...]"

Anita_F_51_AC_SSH_CNR: Regarding the differences between men and women in leadership positions, the interviewee noted that his department has always had male leaders and his institute also had almost exclusively male leaders, apart from a period in which the same interviewee was director ad interim. The respondent also noted that: "Sometimes I think that the different way of thinking between man and woman is very constructive, that is, you ask yourself about a whole series of things and vice versa you give them an input ... what I regret is that you see situations where the man is missing, and the woman is perhaps more able to, but instead it is always the man who in the end reaches the finish line ".

Danilo_M_53_AC_STEM_CNR: Concerning the characteristics that a leader should possess, the interviewee mentioned that a research manager should have a clear vision of where the research trends are heading to. This is crucial both in terms of producing research publications of good quality and for securing funding in order to recruit new staff. When asked as to whether he noticed any difference between men and women in terms of expectations referred to a leader's characteristics, he replied that adhering to these characteristics is not related to the gender of the employee but rather to his/her ambition given that: "I mean, unfortunately given that the CNR is lacking from an organizational viewpoint, it is inevitable, in order to advance in the research career, that one has to do some sacrifices on the side of the private life, unless one is part of large research group when there is some sort of inertia...there is this trade-off between active career and private life which is a choice of the individual, of the individual and of the family situation"

Paolo_M_AC_SSH_IRPPS: Considering excellence under a gender perspective, the interviewee points out that in his setting there is a narrow-minded mentality as "leadership is always seen in male terms and this is one of the main obstacles that prevent the leadership of female researchers". Responsible researchers of this research unit were historically male, and when the last one retired, "it seemed natural that I would be appointed". He can think of a female colleague of him who could have this role. According to the interviewee leadership need authority and prestige, so to give the indications on how to move forward. "A leader should have a visionary attitude. This is independent from being male or female.. There are many women that have a visionary attitude".

Francesca_F_52_STEM_CNR: When asked which elements are more valued within the institute, the interviewee replied that the most important pertains to the number of publications. In her opinion, this criterion does not reflect the wide range of activities that a researcher can engage in. For example, in public competitions at CNR, activities such as participating in the Institute Managemenet Committee (she did this for a few years), working as a reviewer of national projects, project management activities (e.g. writing deliverables) are completely underrated. When asked about the characteristics that leaders possess, she noted that colleagues holding leadership positions are all very competent but she also argued that they had greater chances to emerge because the scientific sector was less competitive compared to others and they probably were lucky to be working on a thriving theme at the time of their recruitment.

Laura_F_57_ARti_SSH_CNR: After her graduation and the completion of the internship, her supervisor asked her if she was interested in continuing collaborating with the Institute. She accepted and continued the collaboration for seven years through fixed term scholarships. In the meantime, she also had two children, pausing and reactivating the scholarship also for long periods. Finally, in 2001 she had the possibility to participate to a public competition for a research position at CNR and she won it. "Between a scholarship and the other I also have two children, and then I stay at home for a slightly longer period, let's say, than the standard maternity one, also because they weren't paid maternity leave, I interrupt the scholarship and then take it back [...] let's say that in all this period, however, I was always carrying out research activities on the same theme that were digital resources for inclusion and therefore in any case it was never interrupted the common thread of this interest of mine, of this field of research of mine. I can say that I was lucky because I didn't have to completely change the research scope. Sometimes this, as you know, happens, no, because from one project to another you may also have to change completely, instead, I must say I was lucky, and I continued in this way."

Oro_F_61_ARti_SSH_CNR: The main element that seems to have interrupted, but not blocked, the ability to carry on scientific activities and career paths reported in the interview was the experience of motherhood, that has been managed without the reference of figures from the family network, but with the support of welfare resources (baby-sitting) acquired through the network of professional contacts. The circumstance of having benefited from a fragmented maternity leave, spending time
with her daughter even in the period up to eight years, and the flexibility of the working methods connected to her professional role allowed the researcher an adequate work-life balance, despite the workloads turned out to be very high.

Paolo_M_AC_SSH_IRPPS: "There is a systemic bias for women, the difficulties of conciliating work and family, it is not easy, a woman has to conquer this space, while for a man this is taken for granted".

Laura_F_57_ARti_SSH_CNR: The interviewee does not see much attention from CNR to individuals. She thinks that the CNR tends to valorise the only the number of publications, not considering other activities such as teaching or third mission activities. The interviewee thinks that in her Institute there is more collaboration than competition, even if there is some healthy competition among colleagues, and that overall, there is a positive climate. She is very happy about the new Institute Director and the fact that he is working on promoting the collaboration between colleagues and between the two locations of the institute.

### 2.3.3 Work-life balance

## Early Career work life balance

Ambra_F_34_ERti_SSH_CNR: For WLB in general there is a difference between men and women, but not in the Institute she works in. In her research group, it seems to be more difficult to manage the "age issue", as she is the youngest and very distant from the other colleagues (except for the research fellows): she thinks that for this reason she is assigned fewer responsibilities (projects, units, surveys) than her older colleagues. In this, she notices a change of attitude over time, but more due to having become a researcher rather than age-related. She relates this situation to more general cultural factors, whereby there is a tendency to give responsibility to the older person as a person of experience, not allowing young people to grow by experimenting. "I don't think it's an institute thing, it's something a bit... a culture in general, maybe a bit Italian [...] for which the elderly person is IN every point of view more credible, more reliable than the young person, even if in reality the young person is more up-to-date, has more will to do, or in any case learns more easily".

Anna_ECti_F_35_STEM_CNR: She was hired just before the pandemic, so she had mostly experienced working at home. However she says feeling ok about working from home, since she can have the right time to stay focused and the right time to lightning. "Maybe I don't work all the time, I don't know... I'm not hyper concentrated in the band that could be the time slot from 9 to 16 , but then I work instead all day, in the sense that maybe just an hour I take it to do... to take the dogs to the park. But then in the evening I stay an hour, an hour and a half to do the math. Because because I find myself better I work... In my opinion it is a way that, for those who do mathematics, so it does not apply to everyone, in which, however, one essentially counts alone and even better, in the sense that then one must have some spaces, let's say some holes in which he does not think the thing, but returns to his mind. So let's just say, try to figure it out regardless of sitting on your desk on your computer[...]


#### Abstract

Aurora_F_36_EC_STEM_CNR: The interviewee thinks that the impact that this state of affairs has on the work-life balance is a subjective choice and that is each researcher that must decide to what extent to invest one energy and how to balance work and life time. "I think it is a subjective choice, therefore, it is up to you to decide where you want to invest your energy and how it manages to balance family, work, personal life or what your interests are. From experience I have seen, perhaps I have had some great examples, I have seen that there are great Pls who can however afford the three weeks of summer vacation without any problem. So, I've never had the need to work who knows how many hours, on the contrary, I think that working too much is much less productive, especially in what we do which requires a certain freshness of mind and a certain predisposition on, how to say, a mindfulness more than a


long-term share of inertia. Sometimes there are deadlines that are a bit heavy, and you have to get a little under, but then you can recover in another way."

Carlo_M_37_EC_STEM_CNR: The interviewee clarified that, although working in the research sector implies that the researcher has often to work overtime, one can find a balance between work and private life if he/she is passionate about its work. Indeed, a researcher's job is a never-ending and continuous job. However, the interviewee contended that he had no problem to find a balance between working and private life: "My work does not affect my family life that much, I can put together the two, exactly because I have passion for what I do so when I come back home, I try to distract myself from work and to devote time to my daughter, to help out with housekeeping..."

Leonardo_M_47_EC_SSH_CNR: The interviewee is not married and he has no children. He dedicated his entire life to his job and that the precarity of contracts had an impact on his private life. Since he joined CNR in 2020, he believes he has a better work-life balance although he still works over 10 hours per day for his own decision, as he used to do before securing the permanent position.

Lidia_F_42_ERtd_STEM_CNR: The respondent lives with her husband and son in the same town where she works. The husband is not in the academy, and he works a lot and is the first family income. She works every day until $4 \mathrm{p} . \mathrm{m}$. and then she goes to pick up her son at the nursery. Before the birth of the child, she was planning to go abroad with her husband, but with the child's coming they decided to stay in their city to have the help of their parents.

Marta_F_38_STEM_CNR: The evaluation criteria in her institute are with work-life balance and certainly when you have a family the time you can devote to work must be forcibly optimized. It also depends on how you follow the children "I personally love to devote myself to my family, and therefore I cannot work too many hours more than those foreseen by the contract. Since I had my children, for example, I have greatly reduced travel for conferences and missions and this naturally also translates into the international relations that I am able to activate. I also believe that work-life balance is a problem that clearly concerns women in a particular way. I am very lucky because I have the support of grandparents who pick them up from school or follow them in their activities. Without their help I could not carry out my work the way I do today". She anyway would not say that there are different expectations for men and women in the Institute but that the working life of women in particular becomes much more difficult with the birth of children. This should be considered and taken into account in the evaluation and with targeted support actions.

ERTI_RUBINO_M_41_ STEM_CNR: He declares that he didn't take advantage of paternity leave and that he greatly benefits from the flexibility dimension in research activity, in terms of time, in order to carry out his family duties; in any case, the double scientific burden on the couple entailed the need to provide family support for the management of the child during the working day.This presence of family help has supported the scientific activity of the couple also during the period of Covid19, in which both have had the opportunity to carry out data analysis during the stay of the family help, and have alternated in work and family life in afternoons and evenings. On the subject of work-life balance, the researcher said: "Having flexibility both my partner and I, we found out that we can manage family times with consistent effort but without major problems". The flexibility of work organization, together with the presence of a family help is the solution identified by this family of researchers, to ensure the adequate balance between work and life.

Sonia_F_49_EC_STEM_IRPPS: The interviewee highlighted how compared with the academic work in universities, the work at CNR is harder concerning the reconciliation of family and work because it is less flexible. "In the university, it's a different story: you don't stamp. This doesn't mean that you do less, but you certainly have fewer obligations. I have many female friends who work in the university [...] and they do not have the obligation to clock out and it is [great]."

## Advanced Career work life balance

Anita_F_51_AC_SSH_CNR: According to the experience of the interviewee, being a woman in the work world is somehow penalizing especially, but not only, if one has children. However, she thinks that the problem is not limited to CNR but is widespread in all the country: "In Italy, in my opinion, women struggle twice, if not triple, in their careers compared to men, and it is not fair because, for heaven's sake, I have good male colleagues, but I also have female colleagues who are very good, and this must be recognized also taking into account that a woman makes a lot of efforts". The interviewee also noted how her career took a boost when her children become adult: "[...] you can also see in my career, which then I have an exploit starting from a certain year onwards, that is, when the children begin to be decidedly older". In addition, he noted how a woman with children must struggle to reconcile work and family time:"You have to give your kids your time too, to educate them [...]. Some people say you should give up your career, and this does not seem to me to be right and correct. And so, even more reasons to reward those women who manage to do both by going to bed at 2am, getting up at 5am, as I have done a billion times in my life, but sometimes that doesn't happen." Lastly, the interviewee highlights how a woman to go on with her career must rely on the help of his family: "My mom was a holy woman, my mom helped me a lot."

Danilo_M_53_AC_STEM_CNR: In the opinion of the interviewee, the CNR has some responsibility in the lack of work-life balance especially because much of the time of the researchers' work is taken up by administrative tasks that could be saved with a better organization of the work. When prompted about the difficulties that may lead a researcher to quit the research career in the early stages, the interviewee made reference to the fact that having short term contracts for a long period results in only the most privilege ones being able to continue on this career. "The choice to continue or not continue, is linked to family issues, meaning that in many cases continuing working on short term contracts is a luxury that not all the people can afford"....

In this respect, the interviewee recognized that, depending on the life stage, being a man or a woman makes it easier to accept or not to accept short term contracts. He cite that " for example, a married woman who has an husband that work full time or who has grown up children, has no problems in theory to accept short term contracts. On the contrary, a woman that needs money to live on or who has a young child or wants to have a child has many more problems from being on short term contracts" In this respect, the interviewee acknowledged that women are more disadvantaged than men for a "cultural" reason, because many family commitments in Italy are completely delegated to women. However, he contended that this has more to do with the culture of the country and the lack of services for families in Italy than to an internal flaw of the CNR.

ACti_Fabrizio_M_48_STEM_CNR: Thanks to telework he reported to have lots of time to dedicate to his family and to his three children. He showed enthusiasm for having the possibility to conciliate time to dedicate to work and time to dedicate to family. "I have three children.... So let's say, the possibility of staying in the house and that is, and welcoming them..., I don't know... when they come back from school, I make lunch..., that's a kind of priceless thing for me".

Francesca_F_52_STEM_CNR: The interviewee recognizes that the work at CNR offers the opportunity to balance work and private life in theory. However, she added that the working mode we are progressively embracing is a never-stopping job where you never really disconnect to your work activities.

Ines_F_48_AR_STEM_CNR: The interviewee states that the burden of family organisation has always been mainly on her shoulders. Her husband helped and helps her in the management of the house, but the care of the daughters has always been mainly the respondent's task. They got a lot of help
from their grandparents and babysitter, who were especially important for managing emergencies as both she and her husband often travel for conferences or events.

Laura_F_57_ARti_SSH_CNR: The interviewee through her experience highlighted how for a woman is sometimes difficult to balance work and family life. When her children where young, for instance, the help of her parents with the children was fundamental and allow her to somehow reconcile work and family tasks. Nevertheless, for several years, when her children were young, she renounced in doing working trips and she avoid taking part to those projects and research activities that required her to travel a lot. Then, when the children grow up the situation became more manageable but now, again, since her mother become elder, she started to limit again her working travels. Another issue that makes difficult reconcile work and family tasks, according to the interviewee, is the amount of bureaucratic incumbencies that the CNR requires to her employees. According to her, the CNR should simplify the bureaucracy in order to leave researcher more time for research avoiding them the need to waste time that they could employ for their family.

Oro_F_61_ARti_SSH_CNR: On the issue she says: "Research work endows you with the great ability to manage work times, including self-determination of research products delivery and very tight deadlines. Thanks to this work-related attitude, you learn to balance work activities and personal life, optimizing the always very large amount of time that is dedicated to working activities". The experience of motherhood, in which she had the opportunity to take two separate leaves (the second one within the 8th year of her daughter) over time, the researcher had the opportunity to operate and think about her ability to manage the balance between life and work. From the reflection on the ability to manage times and formats of working activities, a new WLB emerged, based on work in presence and on remote; this allowed and allows her to be very present and active both in the workload and in the commitments of family and personal life.

Paolo_M_AC_SSH_IRPPS: Considering the balance between work and private life, the interviewee says that "I was lucky. [...] I'm doing what I like, but I'm aware that if I could not have counted on the support of my family, I would not have had this condition". "Certainly, my wellbeing depends on the fact that I have my wife, I have chosen a person who supports me. I'm aware that my investments on work would have not succeeded, if I have not had her support": "This makes me think that women conditions, especially in South Italy, are worst. Their double, triple and quadruple presence is a very heavy job". The interviewee put the major emphasis on the well-functioning of social services available at territorial, public level, but he also considers that nursery and kindergarten experiences within the work organization can facilitate the balance between work and family, especially for women. He would be in favor of CNR organizing and supporting these services at the workplace.

### 2.3.4 Research

## Early Career research

Anna_ ECti_F_35_STEM_CNR: She says that our current job is completely devoted to scientific publications but she highlights that the collaborations remain at the stage that everyone just take care of the piece of paper that he/she is writing, it is not something that they build together. (...) that is in the sense I work with other people, I collaborate with other people, but the collaborations are always.... At most, I mean, let's say for groups where I work, we usually are about 5 names. Okay, so let's say, we work together, we advise each other, but each individual writes something and then we read it with the others, which is not me writing it, you can write another one, and then we read it together. Even if she works especially with publications, she recognises that at CNR it is very important to participate in research projects, however she has just arrived (considering the almost two years of pandemic) and she has not really experienced collaborations with colleagues.

Aurora_F_36_EC_STEM_CNR: Due to her research experience developed mainly outside Italy, the interviewee is mainly part of international research groups. However, since she thinks developing a good network is an important aspect of research, she is staring to develop also national and regional networks.

Carlo_M_37_EC_STEM_CNR: The interviewee stated that his supervisor is a man and had an excellent supervision and collaboration experience with him to the extent that the research groups managed to produce about 28 scientific publications in the last years. He outlined that, opposed to what often happened in the University, in his work at CNR he had a lot of autonomy in his daily work activities.

Lidia_F_42_ERtd_STEM_CNR: The main part of the interviewee's work takes place in biological laboratories, where she works with her colleagues (all male except the interviewee). The articles are signed together if they are deliverables or reports of the laboratory projects, but then each member of the group has the freedom to do their own articles (usually with someone else from the research group). The administrative part is relatively small, because it is carried out by the administrative staff of the Institute. She usually leaves work around 4 p.m. to pick up her son from the nursery.

Marta_F_38_STEM_CNR: She participated in several competitive projects with her group, both in Italy and in Europe, and I certainly feel part of the group. However, the precariousness sometimes weighs on me despite the fact that I put a lot of effort into teamwork. "I have learned a lot in competitive projects and I believe this will be useful to me in my future career. Indeed, my desire for the future of my career is to feel fully part of a group and to finally be able to contribute fully."

Sonia_F_49_EC_STEM_IRPPS: The interviewee's everyday working life is divided between research activities, at the office or at the laboratory, and the necessary bureaucratic activities, while she does not dedicate to teaching. According to the interviewee, the COVID19 pandemic changes a lot her time management, but overall she believes that the possibility to stay at home some days per week makes it easier to balance her private and work-life: "It has changed a lot. It's another thing. So, I must say that Covid has certainly brought one thing: that going to the office 5 days per week as far as I'm concerned is sterile, it's useless and I just waste time. Now I come from [city name], I have to go to [name of a different city], I waste a lot of time for that, so ... And this is one of the few things, at least as far as I'm concerned, very clear, that 5 days out of 5 in the office are useless.

Torvalds_M_45_EC_STEM: At the moment apart from research activities daily carried out, he teaches in a course in a telematic university and collaborates in several courses as an invited speaker expert in semantic technologies. He does not deal with any administrative activity. He stated that "the COVID19 emergency positively impacts on my working activities in particular considering the scientific production". This is mainly due to the smart working model that allowed him to manage daily time. Usually, "the time he spent for travelling was used to work or to carry on housework". However, "I have always been free to manage my working time independently from smart working in a pandemic period" as well as "I'm generally able to manage time and to reconcile work with personal and family life". When the interviewee is asked if his answers would have been different if he had been a woman he answers "no, the situation would be the same and I think that in my institute no gender difference are applied".

## Advanced Career research

## Anita_F_51_AC_SSH_CNR

Concerning the COVID-19 period, the interviewee declared to have worked more and better than usual: "With Covid I tell you that I have worked differently and much more, paradoxically, because, obviously, those downtime you have to move from your home to the office have disappeared. Dead times, which are fundamental for your relationship life because after two years you need it, or the chat
with your colleague as soon as you arrive that makes you lose that half hour anyway, or someone who asks you something while you are very concentrated. Nobody breaks you at home. With Covid I woke up, I got ready, I had breakfast, I turned on the computer ... and I also worked from 08:30/9 until 21:00 ".

Danilo_M_53_AC_STEM_CNR: The interviewee stated that he devotes most of his working time to projects (about $70-80 \%$ of the total time). In some of these projects, he is the Principal Investigators, in others he works as a partner managing a team of two researchers (in addition to himself) working full time and on permanent contracts. He dedicates also a little percentage of his time to organising post-doc schools (about 5\%) while the administrative work covers almost the $50 \%$ of the time devoted to projects. Given that he and his team mainly work in a laboratory environment, they managed to be granted the authorisation to access to the research institute after the easing of the lockdown measures. He thinks that this differential impact is not related to the gender of the employee though but rather to having/not having the support of family members to manage children when schools are closed.

ACti_Fabrizio_M_48_STEM_CNR: Several years ago he decided to telework and he is still enthusiastic and he also manifested to be worried about the future, in case teleworking contract will not be renewed. His contract will expire at the end of 2021 and he does not yet know what is going to happen in the next future. "(...) let's say perfect, I'm enthusiastic about the smart and time of telework, that is for me, in fact now the contract expires on December 31, I do not know what will happen to me". Even if his activities are necessary for the researchers activities, he reported to not have ever received a formal commitment for his work. This highlights the lack of a formal recognition that could generate negative effects also on the career progression.

Laura_F_57_ARti_SSH_CNR: At the moment of the interview, the interviewee works on several active national and regional projects focused on the development of technologies for inclusion. Also, she works on some non-funded projects. Within such projects, the interviewee supervises young researcher (research fellowship and scholarship). She also teaches at university courses and within the university she supervises Bachelor, Master and PhD theses. According to the interviewee, however, teaching and supervising activities are not always valorised within CNR. The interviewee also does administrative and bureaucratic work required by the CNR, even if she declared that most of the administrative work is carried out by the administrative staff within her Institute, which greatly help researcher in the administrative burdens linked to projects and so on.

Oro_F_61_ARti_SSH_CNR: The researcher interviewed, due to her professional position within the Institute and the conduction of a plurality of research projects and training activities, carries out an intense daily activity of research planning, publication of the relative results, realization of projects research, communication and third mission. In a recent phase of her professional career, she declares to have benefited from the possibility of delegating some aspects and functions of your research activity to colleagues trained over the course of a collaboration of a few years. On the subject, the researcher declares: "I spend a lot of time in coordinating and managing groups for European projects; now I feel supported by the two young colleagues, with whom I share coordination on some occasions, and that support me in all the financial management activities and in communication management. For me it has always been a value to share the coordination activities with the group of people working on the projects, (for example while I am doing this interview, the colleagues are involved in a relevant meeting of a European project), but the real difficulty is linked to the great effort that goes into manage several projects in parallel and to apply productivity to the part of the publications."

Paolo_M_AC_SSH_IRPPS: During the COVID lockdown, he was super-productive. He was involved in the public debate on the school closure and was invited by prestigious organizations as well as by radio
programs to express his ideas (INVALSI =Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione, Fondazione Feltrinelli, the Naples municipality, Radio3). He managed to finish a book he had started before the pandemics, being able to revise the draft and respond to the editor requests and comments "in the silence of late-night hours".

### 2.3.5 Emerged proposal from interviewees point of view

## Early Career personal emerged proposals

Ambra_F_34_ERti_SSH_CNR: For the respondent, the problem of gender equality concern the culture in the country and the policies at the national level (e.g. lack of childcare services), but not the organisation she is working for.

Anna_ ECti_F_35_STEM_CNR: Considering the job placement policy in Germany, reserving places for women, she reported to disagree with the fact that women could have reserved places because it can be something that men can use against women.

Aurora_F_36_EC_STEM_CNR: The interview is not totally satisfied about her position and would like to have an upgrade. She is quite critical about the career progression at CNR and she thinks that her curriculum would allow her to be a first researcher. The problem here is that CNR cyclically publish a few positions for career advancement and therefore there are many people who, like the interviewee, despite having the requisites for career advancement in the end do not get it.

Carlo_M_37_EC_STEM_CNR: In terms of policies for families, the interviewee believed that the CNR should continue on the path of the smart working because this made easier for the researchers to dedicate some time to the children and then go back to the work activity.

Leonardo_M_47_EC_SSH_CNR: Immediately after starting the position of researcher, he applied for the position of senior researcher (Primo ricercatore) at CNR but this was not successful. He attributed it to the fact that he was considered as a newcomer and thus someone who did not contribute to the growth of the organisation. However, it outlined that many colleagues who had been working at CNR for many years, were not successful in this application as well. Thus, he suggested that CNR should have more frequent competitions for career advancement. Indeed remaining many years at the same career level is de-motivating.

## Sonia_F_49_EC_STEM_IRPPS

According to the interviewee, a change the CNR should do is about the criterion employed for the competitions, internal and external:"[The CNR] should define criteria that are always the same. I would be happy to have fixed criteria instead of having different ones each time depending on the Commission, sometimes the criteria are defined after a competition, that is, first you have to present your titles and then they define the criteria. But it's also in the choice of titles... So in my opinion having fixed and always those criteria would not be bad."

Advanced Career personal emerged proposals

## Anita_F_51_AC_SSH_CNR

The interviewee thinks that the issues of gender equality cannot be addressed only through policies and that they are not just a problem of the CNR, but rather that there is a national cultural problem:"Eh, what actions? That is, a greater understanding certainly towards women in those phases in which they are mothers, but sometimes there is no such understanding on the part of managers. But let's say that this is a very difficult problem to overcome, I don't know how much Italy itself is a country
ready for a type of assistance within the workplace, as happens for example in the countries of Northern Europe. It is not a problem of the CNR, I think it is still a problem of mentality, even this "

Danilo_M_53_AC_STEM_CNR: The interviewee would like to see changes especially in relation to better coordination between institutes and between institutes/departments/managing centres of the CNR so that to free up much of the time that researchers devote to administrative tasks and that they could otherwise devote to their personal life. He thinks that it would be difficult for CNR to arrange childcare services in support of employees who are parents, especially considering the fact that CNR offices are scattered throughout Italy. In his opinion, childcare services such as nursery is more a responsibility of the Government than of the employer.

### 2.4 University of Gdańsk, Poland (UG)

### 2.4.1 Desk work, fieldwork and sample's characteristics

The interviews with Advanced and Early Career Researchers were conducted at Intercollegiate Faculty of Biotechnology of University of Gdańsk and Medical University of Gdańsk (IFB) and Faculty of Law and Administration (FLA) between 28.06.2021 and 01.10.2021 (14 interviews in total -9 at IFB and 5 at FLA).

IFB was chosen since the faculty has already participated in pilot activities dedicated to gender issues in another HH2O20 project (STARBIOS2 2016-2020) and it was assumed that we might encounter more awareness on this topic here. The FLA was chosen because it is a large SSH faculty with representants in the Main Management of the University.

There were established criteria used to classify the respondents invited to participate in the interviews:

- gender (male, female),
- academic seniority (early and advanced career researchers according to the number of years after obtaining a doctorate) and
- factor of being or not being a parent.

Invitations were sent by e-mail, explaining in detail the conditions of participation, and attaching the necessary consents forms to be signed. In addition, in the STEM faculty all persons selected were first informed by the project PI either by e-mail or in person and all of them declared their willingness to participate. The feedback and acceptance rate were therefore 100 percent. The participant had to send back the signed consent form and set up individually an appointment with the interviewer for a specific interview date.

Table 2.1 UG: Socio-demographic characteristics of the EC and AC interviewees
a) In the STEM faculty for the interviews the following were recruited: 2 female early career researchers, both PhD, 1 parent, 1 non parent,

| STEM, Female, EC | Age | PhD year |
| :--- | :--- | :--- |
| parent | 45 | 2006 |
| non-parent | 44 | 2008 |

b) 2 female advanced career researchers, both Assoc. Prof., 1 parent, 1 non parent,

| STEM,Female, AC | Age | PhD year | Hab. Year |
| :--- | :--- | :--- | :--- |
| parent | 45 | 2007 | 2019 |
| non-parent | 49 | 2000 | 2016 |

c) 2 male early career researchers, both PhD, 1 on technical research position, 1 parent, 1 non parent,

| STEM, Male, EC | Age | PhD year |  |
| :--- | :--- | :--- | :--- |
| parent | 42 | 2009 |  |
| non-parent | 50 | 2006 | Technical research position |

d) 2 male advanced career researchers, both Assoc. Prof., 2 parents

| STEM, Male, AC | Age | PhD year | Hab. Year |
| :--- | :--- | :--- | :--- |
| parent | 51 | 1999 | 2011 |
| parent | 48 | 2006 | 2015 |

e) As we reached all the criteria for selecting respondents among AC and EC researchers, we decided to additionally interview a representative of doctoral students, we managed to interview 1 female PhD student.

| Female, PhD student | Age | PhD planned |
| :--- | :--- | :--- |
| non parent | 27 | 2023 |

f) All 9 individuals gave consent and interviews were conducted between August and September 2021.

In the SSH faculty, 10 participants were selected for the study according to the same criteria as in STEM. Out of 10 invitations sent 5 persons responded positively, 2 refused to participate, 3 did not respond to the email despite repeating the invitation. 5 interviews were conducted with:

2 female, PhD, early research career, 2 parents;

| SSH, Female, EC | Age | PhD year |
| :--- | :--- | :--- |
| parent | 44 | 2012 |
| parent | 33 | 2017 |

g) 1 female, advanced research career, Assoc Prof, parent

| SSH, Female, AC | Age | PhD year | Hab. Year |
| :--- | :--- | :--- | :--- |
| parent | 44 | 2007 | 2016 |

h) 2 male advanced career researchers, Assoc. Prof, both parents.

| SSH, Male, AC | Age | PhD year | Hab. Year |
| :--- | :--- | :--- | :--- |
| parent | 39 | 2011 | 2019 |
| parent | 44 | 2009 | 2020 |

In SSH we did not manage to find PhD student for the interview during summer time. The difficulty in finding a sufficient number of respondents was due to the holiday period and the need of the interviewers to meet the deadlines for completing the interviews by the end of September 2021. The period of conducting interviews according to the project schedule included the summer break and holiday period of university employees, which was associated with difficulties in determining the availability of respondents (fewer interviews at SSH). Despite this fact, it was possible to conduct 14 interviews with researchers at the two faculties.

Interview outlines were only slightly modified mainly to adjust the wording to the Polish conditions of work in the Academia. The important and facilitating factor was that we have also closely cooperated with UJ partner in terms of outline adjustments and translation into Polish. Our team also proposed to add one question regarding overtime work based on showing an additional slide during the interview which we thought might add variety to the conversation and focus respondents' attention (sample of the slide attached to the Report). All interviews were carried online via MS TEAMS or ZOOM.US platforms and lasted between 64 to 143 minutes.

In the next stages, an external company was contracted to transcribe the interviews in Polish and on this basis synopsises of the interviews were produced. The synopsises were then sent for professional translation into English.

The interviews, synopsises and report were processed by a team consisting of Dr. Magdalena Żadkowska, MA Marta Dziedzic and PhD Student MA Magdalena Herzberg - Kurasz form UG.

The coding of the interviewees is based on the following rule: for respondents coming from SSH (humanities) faculty, all first names start with the letter "H" (Helena, Henryk etc.) whereas for STEM respondents all names start with the letter "S" (e.g., Sara, Stefan etc.).

| UG Faculty | Outline type | Gender |  |
| :--- | :--- | :--- | :--- |
|  |  | Female | Male |
|  | Early Career Researcher | 2 | 2 |
|  | Advanced Career Researcher | 2 | 2 |
|  | PhD Student | 1 | 0 |
| SSH Faculty | Early Career Researcher | 2 | 0 |
|  | Advanced Career Researcher | 1 | $\mathbf{2}$ |
|  |  | $\mathbf{8}$ | $\mathbf{6}$ |
| Total number of interviews |  | $\mathbf{1 4}$ |  |

### 2.4.2 Recruitment and career progress

What all respondents have in common is that they started their scientific career at the University of Gdansk. In many cases they were offered a job position just after their master's degree graduation. Within all interviews, the role of the supervisor, considered by the majority as a mentor role, resonated strongly. In certain cases, it was also the person who led to employment in academia in the first place. Some of the interviewees have prior experience in business environment while others gained their work experience mainly at the university.

## Early Career recruitment and career progress

It is important to emphasize that people classified in this group - young scientists - are those with relatively high seniority (all except one person hold a doctoral degree). The average age of respondents in the Early Career group does not differ significantly from the age of respondents in the Advanced Career group - respectively 41 average for Early Career and 46 average for Advanced Career. Most of them are either very close to their habilitation procedure or they are not interested in proceeding (one male respondent, who might not be interested due to his technician position for which the development path is different; he is satisfied with his personal growth). In many cases, getting another scientific degree is related to the image issue.

Sylwia (27), the only PhD student in our study group who truly represents an early career candidate, thinks that the problem of the livelihood of doctoral students does not interest anyone, and the generation of professors thinks that since they lived modestly during their doctorate, the younger generation will also manage. On top of that, there are various delays in the payment of scholarships and/or in the reimbursement of costs incurred by researchers out of their own pockets, for example for conferences.

The ability to obtain funding for research projects, as well as publication efficiency (as highly regarded and indicative of scientific excellence) are considered the most desirable qualities of an academic. Sandra (44, no kids) sees no differences in the context of expectations placed on men and women. She sees teamwork and mutual support within the team of employees, support from the head as vastly more important. Sylwia (27) assesses her workplace, i.e. the laboratory, very well. Unfortunately, she does not hold the same high opinion about the faculty as a whole: "I think that's where [in our lab] we fit in. Everyone has some different skills and it's somehow like a cogwheel. But across the floor, let's say our floor, I think the atmosphere is not ideal."

Sara (45) views the workplace atmosphere as supportive and positive. She admits that there are conflicts between employees, such as competing for a position. What she values most in her academic work is scientific independence, resilience in winning grants and publishing. There are a lot of women in leadership positions in her department, these proportions have changed over the years in favour of women, although she points out that some leadership positions have always been filled by women in the department and according to her this was due to their competence. She believes that among the faculty leadership, they always made sure that there were women employed in dean's positions and maintained the proportions.

> "I think that when it comes to the selection of people in supervisory positions, it is personal qualities and merit, not gender, that are decisive after all." "I think the authorities take care of it on their own. Also, image-wise so that, let's say, an informal gender parity is maintained."

Career turning points:

- wining own grants increasing academic confidence and independence in decision-making in pursuing own research and scientific ideas (important: Sara (45) mentioned grant from a program for parents who want to return to active research; Sandra (44) describes working on research projects as the basis for scientific development. She strongly emphasizes their financial value, without which there is no way to fund research, which is expensive. The financing helped to 'go forward' - "It seems to me that this is crucial - key, really. Pursuing projects is the basis of a scientific career, at least in my field, without this there is no chance of an academic path, without research funding".
- autonomy and collaboration with a supervisor.
- becoming one of the grant contractors thus beginning publication.
- development closely connected with inspiring, creative and charismatic professors
- postdoctoral fellowships as a way to see "what doing science abroad looks like" Sara (45)
- being close to a supervisor during master's degree
- supervisor as mentors, not only in terms of professional knowledge

Recognised problems:

- lack of administrative support for organizing trips or lab purchases by researchers
- lack of grants and academic output, which are closely related: grants depend on academic output and academic output depends on grants
- career slows down due to maternity leave; research activities during the period of maternity leave are hampered
- legally unclear regulations regarding whether it is possible to apply for grants and publications during the maternity leave and whether this period will be taken into account during parameterization
- lack of team management skills of the head of department


## Advanced Career recruitment and career progress

The group is diverse in terms of having children, job seniority, time in which they defended their doctoral degree, and went through the habilitation process. All these elements have shaped their careers. They agree in their statements that working at the university must be about passion and vocation. Some of them noted that they do not feel appreciated. Halina (44) mentioned she never received any scientific award. She also believes that there is a lot of competition at the University. From her perspective, the role of the supervisors is to provide information and motivation - in terms of awards.

The majority of those who commented on the collaboration within small units - referring to their teams or departments - were positive about the atmosphere and cooperation. Sonia (45) claims that working relationships in her team are cooperative and mutual, they hold joint seminars, discuss their research results together, and teach this cooperative attitude to new hires. However, within the department as a whole "one doesn't feel that cooperative atmosphere between teams"; there are teams that are easier to work with, but there are also groups that are more hermetic and competitive. For Stella (49) the dominant value in her workplace is "collaboration with lots of freedom".

Sonia (45) indicates that there are formal guidelines for promotion, but they are not clearly defined, e.g., number of publications, projects: "(...) it's just very fluid, there are not really clear criteria that show what you have to do to get promoted." She points out that men are more likely to successfully pursue habilitation in her department than women. The criteria for gender are the same, but men meet them faster: "Fulfilling these criteria comes later for women, because they have less time (...) a woman, simply, spends more time on taking care on the so-called 'homemaking'". According to her, the promotion criteria do not consider the need to balance private and professional life. At the same
time Stella (49) thinks that the criteria for scientific promotion are quite exorbitant and she doubts that if she had a family and children, she would be able to meet such requirements: "I really admire people who are actually able to balance both academic work, research, teaching and having a family". What it interesting, from the male researcher perspective Stefan (48, one child) believes that existing criteria for promotion are not too demanding and they can be reconciled with family life and are equally achievable for men and women. However, for Stefan, obtaining external funding for research remains the biggest problem.

Career turning points:

- support of the supervisor
- collaboration with a professor (called "master") who showed respect to the students
- collaboration with researchers from another department
- research grants
- scientific scholarships (e.g., to an EU country; ministerial programs)
- leading research projects
- becoming a parent
- giving up study trips for family reasons which is common both for male and female researchers (as a consequence of the previous point) "(...) I had the opportunity to do scientific work abroad, but I decided to come to Poland simply because we had a son. And that's what I think was a turning point and made us want to work in Poland after all. (Stefan 48)
- continuity of employment also during fellowships (abroad)
- innovative and practical dissertation topic supports development process

Recognised problems:

- Maternity leave as time of being unnoticed; for some female academics, it is a period of time that gives them space to prepare their work, e.g., for a postdoctoral dissertation, while for others it is a period of time that prolongs the acquisition of another academic degree or grants
- Too little emphasis (on the organisational side) on collaboration among researchers across departments/institutes; teamwork in academic projects and collaboration on scientific publications are rare
- burden of administrative duties (steadily increasing); these activities do not count as working time and are very time-consuming at the same time.
- resignation from scientific fellowships abroad due to family reasons (young children, unwillingness to change so much and the need to provide care during the fellowship) or partner's work (both men and women)


### 2.4.3 Work-life balance

Work-Life-Balance has "gender", men and women have different amount of free time, different duties and differences are influenced by gender stereotypes. Two words strongly depict the issue FLEXIBILITY \& BLURRING.

Early Career Respondents differ in age, having children and profession of partner - these differences influence their Work-Life-Balance strategies and possibilities. Those we have recruited are only women, which reinforces the gendered image of WLB. For Sara (45) and Hanna (44) remote work and flexible hours' arrangements let them (and used to let them) raise children. Looking at the world of Academia from Work-Life-Balance perspectives gives us ambiguous picture. On the one hand, as Hanna said: "A university job is the best option for women who do not have to support a family on their own" and for Sara: "I can't imagine... I mean I don't know what would happen to my professional career if I didn't have flexible hours". On the other hand as Sandra underlines: "Women, as persons who spend
(especially at the beginning of parenthood), more time with their children, have a harder time and necessarily move away from their academic activities".

While a male partner (of a female scientist) works in Academia, it influences the understanding of the time overload and integrates a couple: "So, necessarily, at our home, we talk about work a lot. It's just that our work brings us together and integrates us, and there's not some competitive factor, just mutual motivation" - Helena. As Helena and her husband, dual academic career couples create space for common motivation and mutual understanding of overwork and passion for science, that might be not a case for other types of couples.

Recognised problems:

- household members, who do not understand when a scholar is actually working, is troublesome: If I work from home, in their opinion, I am not working - Hanna, 44
- feeling of blurring boundaries between professional time and personal, lack of free time was influenced by COVID-19 remote work
- return to work, after child/children are born causes crucial delay in career development: "Career has lagged behind the career progress of my husband and men in general" - Helena, 34
- for young researchers, as Sylwia (27) describes it, there is a big risk of workaholism and threat if one can slow down and find balance while children are born
- there is lack of promoters/supervisors with knowledge and understanding of gender biases related to household and parental burden.

Advanced Career Researchers underline the importance of the possibility of flexible work' arrangements and autonomy in their work. Henryk (44) says: "I think working at the university is such a great job... I also wanted to work here for that reason, to spend time with my kids, I mean - during that [about his career] conversation with the professor, I said that I wanted to be a father". They are sharing more practices and strategies of balancing work and private life compared to Early Career Researchers. Stefan (48) explains that the balance is due to the fact that he likes his job, he cares about it but he also cares about his family and that is why he tries to reconcile these spheres: "I just try as much as possible to keep that kind of work-life balance." Szymon (51) says: "I separate my work life from my private life. There's a sharp line for me absolutely, I don't tie those worlds together".

While a female partner (of a male scientist) works in Academia, it might influence partnership division of duties at home: "We share parental responsibilities related to our son equally". For Halina (44), having a husband in Academia strongly influences that: "We mix our professional and family life practically all the time. And that's both good and bad".

Combining parenting and academic career is seen (by both men and women) as a main factor of slow downing the career, a barrier for mobility, requiring extra competences and strong personality. But if one has a strong personality, he/she "can catch-up" while children are older. Men, though, do not take parental leave and as Hubert (38) reveals: "Taking paternity leave would involve work perturbations and it would be problematic to give my classes to someone else", they have explanation related to professionalism.

The issue, that was noticed in AC stories was the risk of burnout: "I'm saying I had to really set myself up properly emotionally for many years of scientific and teaching work, so that just the minor or major successes and the minor or major failures in (...) didn't cause me to either burn out or have bipolar disease - from euphoria to depression. You can, unfortunately, fall down that hole, if you don't work out certain mechanisms, our research and teaching work can certainly mess with your emotions a lot, but I was able to work it out" - Stella (49)

Recognised problems:

- the risk of workaholism, working during holidays is the most used and suitable option
- the risk of possible burnout and psychological crisis
- feeling of blurring boundaries between professional time and personal, free time, extremely reinforced by COVID-19 remote work
- mobility should be the matter of choice - it can strongly influence relationship with intimate partner and with children
- male respondents, although declaring big engagement in parental practices and duties have never used parental leave.


### 2.4.4 Research

All Respondents, in addition to their scientific activities, perform teaching and administrative functions. Some of them are members of various university committees, faculty councils or/and discipline councils. Everyone agrees that the activities listed above take up a great deal of time. Primarily, they teach classes related to their research interests. They also point out that they have freedom in matters of content, choice of research topics and their implementation.

There is also a quite clear division into teaching and research assignments throughout the academic year. There are periods when they are devoted to didactics (fall and winter semesters), as well as periods when the focus is on research (the summer vacation period, when classes are not taught).

Some of them are additionally active outside the university in their community and political activities. Helena (EC, 34), for example, values these activities outside of the university, appreciates their interdisciplinary nature, and believes they fill gaps that are within the university: "And here, well, again there is this connection with the university, that on the one hand I am a university employee, and this university is my primary place of work, but those deficiencies, those shortcomings that the university does not provide for, well, I have to pursue in the NGO. And that's how it ties together." Helena (34).

Covid-19 resulted in increased workload in the context of teaching responsibilities due to the need to prepare for remote, intermediate delivery of lectures. They all agree that it takes a lot of time to properly take care of the attractiveness of the classes. For Stella (49) the organisation of her work has changed, she has less time for scientific work and more time for teaching. Currently, during the pandemic period, she is experiencing a tremendous additional time burden in organising her teaching. It takes much more time to check tests, record lectures, and operate the system. The amount of extra work to prepare for online classes has reduced her free time.

On the other hand, the pandemic has also created opportunities to test new forms of teaching or to bring the delivery of some content up to date. The time while commuting to the university is saved too.

## Early Career research and teaching

In this group, one person has experience teaching only in remote form, and the other person is not currently in an academic teaching role, working exclusively in a technical position - Sławomir (50). Sylwia (27), as a doctoral student, is required to teach students. She has little experience in this and in addition it is mainly gained during the pandemic, by teaching online classes. She is very critical of this form of teaching and cannot imagine continuing in the next academic year. Others hold regular, fulltime classes. Sara (45), a mother of two children, admits: "We perform more duties than our teaching load officially indicates". She claims she has a flexible work schedule but there are also times when she spends 10 hours plus an additional 2 hours working from home. Sandra (44) feels more compelled by research work than teaching. Helena (34) organises her collaboration with experts outside the
university, in institutions dedicated to the topic she is working on, since she has not found collaboration partners in academia.

Recognised problems:

- inability to distribute didactic hours equally among all faculty members
- overload of didactic duties
- injustice due to the lack of possibility to measure additional time-consuming activities within the university (administration tasks)
- once engaged in the particular activity/task (in terms of administration) it is hard to leave
- administrative tasks resulting from ongoing projects as one of the main obstacles to academic work
- (unevenly distributed)
- lack of collaborative substantive teamwork and interdisciplinary work


## Advanced Career research and teaching

Some consider themselves to be experienced academics, and as a result, they do not feel overburdened by the need to combine academic work, teaching work, and administrative work (whether related to teaching or ongoing projects). They point out the differences when they were still assistants and putting all the pieces together was more difficult. It seems that in the Advanced Career group, there are increased responsibilities for membership in various university committees. The flexibility typical for the work organisation within university is quite strongly emphasized (and with a positive implication) within the interviews.

Nonetheless, there are some who are overwhelmed by the didactic part of their work. Teaching, despite being a source of "fun" in recent years, has lately become overwhelming for Hubert (38) and distracts him from his academic work. The teaching load led to a situation where academic activities were not pursued by Hubert to his satisfaction. Hubert believes that the burden of administrative duties has been steadily increasing over the past 10 years.

Recognised problems:

- disappointment due to underestimation of teaching work
- in parents' perspective: impact of the pandemic on work and family time organisation: increase in the need for more equipment and a good internet connection while working and learning from home
- taking hours for colleagues which leads to overwork
- administrative part of teaching which does not count towards teaching load


### 2.4.5 Emerged proposal from interviewees point of view

## Early Career personal emerged proposals

Most of respondents indicated family factor as crucial in slowing down the pace of women's researchers' career in various sense e.g.:

- later accomplishment of scientific degrees (delays in career development due to maternity leave/ sick leave during pregnancy)
- difficult return to one's job after maternity leave (women have consistently had larger gaps in their academic resumes and if they do not come back after 2-3 years the position might be taken)
- women not publishing scientific papers when being on maternity leave which restrains them from being successful in obtaining grants as they had 1,5 or 3 years break from publishing
- the necessity to start from scratch or to regress after a long absence from work
- difficulties in applying for grants due to being on maternity leave for several months/years.

One voice (Sara) even refers to this factor as discrimination on the basis of having a family, which is still visible in Accademia and individuals without family commitments are more likely to be employed due to the fact that the academia is focused on the production of results and achievements.

Interestingly, although on the one hand the respondents admit that gender does not influence promotions because the criteria are objective, most of them however underline the difficulties for women-mothers because of having a family. This can also be seen in the male voices - Sławomir, although he indicates that gender does not matter in the promotion process, he admits that the factor of having a family slows down or even hinders the development of a scientific career.

Moreover, still respondents mostly do not accept the idea of gender quotas/ parity - Sławomir: promotion does not depend on gender; even women: Sara is not in favour of imposing quotas based on gender or age because she believes they will not work.

Solutions suggested:

- to allow women on maternity leave/ leave during pregnancy due to health reasons to apply for grants if they wish to and, once obtained, to be able to start it once a woman returns to work (suggestion of Helena, young mother) - this would allow women who come back to work to carry on right away with their research work and not just starting from scratch
- all kinds of employees training to make them aware of the mechanisms of discrimination or to raise their self-awareness - Sara considers it very useful and educational "So all kinds of training, lectures that we attend, where you talk about these problems and increase this awareness, it starts to work. (...) If everyone would go through such training or awareness somewhere, it will definitely change us."
- the very appointment of an anti-discrimination ombudsman at the university, Sara finds crucial as it already makes people wonder whether they are discriminating against others
- to differentiate salaries based on performance and different activities
- changing the ways in which employees are evaluated -suggestion to consider the percentage of time commitment in various tasks rather than looking solely at the end stage in terms of a finished book or funding received. Here, she emphasises the role of the supervisor, who would evaluate in a holistic manner.

Other problems observed:

- including information about family status in resume might be in favour of individuals without family obligations
- large disparities between employees' salaries - suggested solution was to differentiate salaries based on performance and different activities (Sandra)
- the health situation of immediate family members could also become a discriminatory factor when selecting a job applicant
- the social security concerning childbirth very important at workplace (this remark came from the youngest interviewee- PhD Srudent)

Solutions and forms of social support existing that were much appreciated:

- kindergarten for university employees / students/ PhD students - this idea has been indicated by most of the interviewees. Those respondents who have ever experienced having children at kindergarten clearly stated that a location close to the workplace is essential for a
researcher, especially with irregular working hours or when both parents working in science/ teaching. That is why a kindergarten located within university campus has been considered of particular importance.
- social benefits for employees such as loan - Sara used one herself when renovating her apartment


## Advanced Career personal emerged proposals

The same point is repeated as with EC, that men are quicker to get habilitations, professorships, and are more likely to become group leaders. It is even strongly underlined by Sonia who believes that men and women are treated differently at all stages of life and mostly it is because women lack confidence.

Sonia does not see systemic solutions at the university to help young mothers. Most distressing for her is the lack of help in caring for a young child and solutions such as the reduced work hours for breastfeeding considers an illusory solution. She represents the same view as EC Sara or Helena when saying that after leaves, mothers have to make up time because they may perform worse in parameterisation. In general, she sees it as a delay in the whole process.

However, a person with no family obligations such as AC Stella (no husband/partner, no children) does not see any problem of gender discrimination in her environment and experience. On the contrary, in her experience, women were able to hold leadership positions and be valued academically and she did not experience different treatment because of her gender at all "even maternity leave does not block anything at this point if the person has sufficient substantive skills". However, still these stays in contradiction to her opinion when she doubts that if she had a family and children, she would be able to meet such high requirements as there are at her workplace for scientific promotion.

Interesting differences can be spotted in seeing science word reality were described by female or male respondents:

Situation identified by women respondents:

- Women obtaining habitation and professorships later than men
- Delays in getting PhD after coming from maternity leave comparing to men of similar age
- Men more likely to obtain leadership positions
- Not sufficient or illusory institutional solutions such as shorter working hours because of breastfeeding

In a contrary man do not see gender discrimination here (Stefan: pursuing scientific careers equally affect both men and women) or proof their openness eg. Szymon supports his female subordinates when taking childcare leaves and presents himself as a person who sees scientists as "a person of science" and not as women or men. Also an interesting viewpoint come from AC men eg. the proposal for a specific solution concerning care leaves comes from Hubert - the implementation of joint mother and father leave - 6/9 months of time together with the child

However, it is also a man (Szymon) who makes a very important remark on strong differences in societal expectations about the roles of men and women that affect women's situations in science. Szymon believes that motherhood is not an obstacle in science, but "the University does not help here" financial-wise. Here, too, Szymon argues the low salary of an assistant professor position which, according to him, is insufficient to support a family and says directly" only "crazy people" remain.

# 2.5 Jagiellonian University in Kraków, Poland (UJ) 

### 2.5.1 Desk work, fieldwork and sample's characteristics

## Desk work, fieldwork and sample's characteristics

As agreed by the MINDtheGEPs consortium, two university units were selected for the qualitative study. One of the units operates within the Faculty of Management and Social Communication representing social sciences and the other lies within the structure of the Faculty of Biology and represents STEM sciences. These two units were chosen on the basis of three criteria: size, gender disproportions and the accessibility. Firstly, both Institutes are the biggest units (in terms of the number of academic teachers employed) within the chosen Faculties. Secondly, considerable gender disproportions can be observed within their student and academic teacher populations: while undergraduate and graduate studies are heavily female-dominated (women represent 75-80\% of all students), the proportions of women shrink with every stage of academic career to reach 33-37\% of full professors. Thirdly, the representatives of these two units are the members of the JU MINDtheGEPs team, which has been recognised as a factor facilitating the access to potential respondents.

The management of the chosen units - including the institute directors and/or faculty deans - was contacted in advance via e-mail with information about the MINDtheGEPs project and the aims of the qualitative study.

The interview outlines and guidelines for early career and advanced career researchers were translated into Polish and adapted to the context of a Polish university. Within the JU project team, we have verified whether the questions were sound and understandable. One major modification has been made: when asked for the description of a usual working day (in the work-life balance section), the respondents were confronted with the results of the GEAM survey (conducted at JU in June and July 2020) showing how often the JU employees work overtime (more than 10 hours a day, in the night and on weekends) and asked about their experience with overtime work.

According to the guidelines for sample design and based on 1. the analysis of academic staff composition available at the webpages of the chosen Institutes and 2. insider knowledge on various socio-demographic characteristics and accessibility of the selected academics shared by the project team members from the chosen Institutes, 24 potential respondents were identified. The aim was to reach a balanced number of SSH and STEM, female and male, as well as early and advanced career scientists. Researchers doing their PhD or already holding PhD were classified as early career (consecutively D and C positions according to the She Figures classification) and researchers either having habilitation or full professorship were classified as advanced career (consecutively B and A positions according to the She Figures classification). The sample was also meant to be diversified according to child care duties (by including both academics with and without children), academic position types (including academics holding both research \& didactic positions and research positions) and career paths (including academics with both linear career and predictable advancement and with non-traditional career paths such as moving from private sector or holding a scientific-technical position).

In Summer 2021 the interview candidates were contacted via e-mail with information on the MINDtheGEPs project and invitations to participate in the qualitative study. More specifically, the invitations were sent to:

- 12 STEM institute members ( 6 early career scientists, including 3 women and 3 men and 6 advanced career researchers, including 4 women and 2 men),
- 12 SSH institute members ( 6 early career scientists, including 4 women and 2 men and 6 advanced career researchers, including 3 women and 3 men).

The response to the invitations was at first moderate, mainly since some of the candidates were already on holidays. After the second (and sometimes third) round of contacting the selected candidates and thanks to a few informal interventions of the MINDtheGEPs team members working at the selected institutes, 17 interviews were conducted until mid- October 2021. While only two candidates explicitly refused to take part in the study (a female early career researcher from the STEM institute and a male advanced career researcher from the SSH institute), five candidates either did not respond to any of the invitations or initially declared participation, but then stopped answering the emails. This group includes four academics from a STEM institute (two advanced-career male academics, one early career male academic and one advanced career female academics) and one advanced-career male academic from the SSH institute.

In the second stage of the recruitment process seven new candidates were selected and invited to an interview. They included 5 advanced career male researchers and 1 advanced career female researcher from the STEM institute and 1 advanced career male academic from the SSH institute. Three invitations - all for male researchers from the STEM unit - remained unanswered.

The fieldwork - including contact with potential interviewees, setting the dates of interviews, conducting the interviews and writing interview synopses - has been done by four social researchers (three sociologists and one psychologist) experienced in qualitative research, working outside of two units under study. From July to December 2021 they conducted 21 interviews with 13 female and 8 male respondents. The gender imbalance of the sample is due to the fact that less male academics agreed to be interviewed ${ }^{12}$. More specifically, 21 interviews were conducted with:

- 10 early career researchers and 11 advanced career researchers;
- 6 female early career researchers (including 4 from the SSH unit and 2 from STEM unit) and 4 male early career researchers (including 2 from the SSH unit and 2 from the STEM unit), out of whom 9 hold PhD degree and 1 - MA degree;
- 7 female advanced career researchers (including 3 from the SSH unit and 4 from the STEM unit) and 4 male advanced career researchers (including 2 from the SSH unit and 2 from the STEM unit), out of whom all have habilitation and none - full professorship.

[^11]Table 2.1 UJ: Socio-demographic characteristics of the EC and AC interviewees

| No. | Alias | Age | Sex | EC/AC | Field | Position type | Child-care |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 01 | Alicja | 46 | F | AC | SSH | research-didactic | 2 children |
| 02 | Amelia | 44 | F | EC | SSH | research-didactic | 2 children |
| 03 | Andrzej | 56 | M | AC | SSH | research-didactic | no children |
| 04 | Anita | 43 | F | EC | STEM | research | no children |
| 05 | Anna | 39 | F | EC | STEM | research-didactic | 2 children |
| 06 | Carol | 36 | F | EC | SSH | research-didactic | no children |
| 07 | Daria | 47 | F | AC | STEM | research-didactic | 2 children |
| 08 | Ewa | 39 | F | AC | STEM | research (project) | 3 children |
| 09 | Irena | 51 | F | AC | SSH | research-didactic | 2 children |
| 10 | Jan | 43 | M | AC | SSH | research-didactic | no children |
| 11 | Karolina | 33 | F | EC | SSH | research-didactic | 1 child |
| 12 | Klaudia | 52 | F | AC | SSH | research-didactic | 1 child |
| 13 | Marcin | 37 | M | EC | SSH | research-didactic | 1 child |
| 14 | Marco | 35 | M | EC | SSH | research-didactic | no children |
| 15 | Mariann | 30 | F |  |  |  |  |
|  | a |  |  | EC | SSH | research-didactic | no children |
| 16 | Paula | 53 | F | AC | STEM | research-didactic | no children |
| 17 | Paweł | 34 | M | EC | STEM | research (project) | 2 children |
| 18 | Rafał | 49 | M | AC | STEM | research-didactic | no children |
| 19 | Tomasz | 46 | M | AC | STEM | research (project) | no children |
| 20 | Urszula | 54 | F | AC | STEM | research-technical | 2 children |
| 21 | Wojtek | 44 | M | EC | STEM | research-didactic | 1 child |

While the age of early career academics varies from 30 to 44 years, the age of advanced career academics is between 39 and 56 years. Most of the interviewees (16) are employed in the group research \& teaching staff (this means that they have both research and teaching obligations), 4 respondents (all from a STEM unit) are (project based) research staff (without teaching obligations) and one female respondent is not formally an academic, but a member of research-technical staff, despite pursuing an academic career and having habilitation (see table 1). 10 respondents are assistant professors (including 2 with habilitation), 7 are in the position of university professor, 3 are assistants and 1 - senior specialist.

Most of the interviewees are married with children (10), 5 of them are single with no children, 3 are in a partnership with no children, 2 are divorced with children and 1 is married without children. While 12 respondents ( 6 early career and 6 advanced career) have children (including 7 with 2 children, 4 with 1 child and 1 with 3 children), 9 have no children. While out of 13 women, 9 have children, out of 8 men only 3 have children (see table 1).

14 interviewees live with their spouses or partners, most of whom have full time employment outside academia (10, including 2 running own business). 2 spouses/partners are academics and 1 is unemployed. Additionally one respondent refused to inform about her spouse's employment status. Almost all interviewees live in their own apartments/houses (19) ${ }^{13}$, one rents a flat but will soon move to privately-owned one. One respondent refused to inform about the status of her residence.

[^12]
### 2.5.2 Recruitment and career progress

## Early Career recruitment and career progress

As for the factors impacting recruitment and career progression, the role of mentors have been recognised as an important facilitator. The interviewees recall support they received while being at the very beginning of their career, while transfering from a previous workplace, and while writing their PhD dissertations. Mentors (or supervisors) can also help in getting a permanent employment contract at the university, which is normally quite difficult to obtain, especially at the beginning of academic career, before receiving PhD or shortly after it. Another facilitating factor, albeit less frequently mentioned, is participation in European projects, which allows to gain extensive experience in international cooperation and mobility abroad.

In the context of hindering factors, the respondents from the SSH unit (both men and women, both early and advanced career academics) indicate the heavy overload with teaching, which nobody seems to be able to avoid ${ }^{14}$. While it is appreciated that teaching overtime allows to increase the salary (which is rather unsatisfactory at the university), it adversely affects the quality of scientific work and makes it difficult to concentrate on writing PhD dissertations and scientific publications. One of the interviewees suggests, that instead of being protected from this "huge burden", early career researchers are expected to teach extra courses. Sporadically, early career researchers also mention administrative work and additional informal activities (such as helping a friend / colleague, in the preparation to the defense of PhD thesis, conducting examinations, as well as consultations and meetings with students) as time consuming and distracting from research and teaching activities.

Some respondents, especially those from the STEM unit, see applying for research grants as a normal, taken for granted activity, which in the case of research staff is practically the only method for prolonging university employment. However, a SSH interviewee sees it differently and points that the need for raising funds for research becomes a considerable burden. While preparation of a grant application to an external research funding agency is very time consuming so that it is practically impossible to do research at the same time, the chances of receiving money for research remain small:

> "Recently, I even decided that I would quit applying because it misses the point.
> I've had several failures in a row. This grant would help me, but it's not that without it I can't do my things in my discipline " (Marco_M_35_EC_SSH).

In this context another interviewee criticizes unavailability of a small university fund for PhD students and young researchers, which he recalls as being a significant facilitation and support for him at earlier stages of his scientific path. What is also mentioned often as a hardship, is unavailability of permanent positions for early career researchers:
> "(...) it's quite frustrating for young workers. I don't know anyone who is employed at my age and a bit older, there is practically no one. After the PhD, when you finish, you either have your own projects [as a principal investigator P.S.] or you are employed as a post-doc, although it is very difficult because NCN [National Science Centre - the biggest research funding organization in Poland P.S.] does not allow it. Here, the projects are mainly from NCN, you cannot be a postdoc in the institute or unit where you did your PhD. I am here exceptionally,

[^13]because my colleague, the head of the department got the project when this restriction did not exist yet. (Pawel ${ }^{3}$ M_34_EC_STEM) ${ }^{15}$

While asked about most valued qualities of a scientist (or what it means to be an excellent scientist) quite a few respondents - both from STEM and SSH units - point to the publication rate as single most important factor. Excellence is being measured mathematically with Impact Factors or H -index ${ }^{16}$ of the publication, which is criticized and sometimes called "punctosis":

> "High Hirsch index. I think that is enough. You can be nice, not nice, you can do popularisation, not do it. A high Hirsh index takes care of most of the work of being a recognised scientist." (Anna_F_39_EC_STEM).
> „Honestly speaking, I have a feeling that what matters most is the points. Hence, whether you are good is defined by how many points you get. So you can do bad things, but if there are points for it then that's OK. If I do something interesting, but there are no points from it, nobody will be interested in it."

(Marcin_M_37_EC_SSH)
Interviewees also discuss other valued qualities, including participation in conferences, adequate representation of the unit at scientific events, but also unwavering curiosity for research, diligence, patience, regularity, willingness to learn, resourcefulness and creativity, as well as the ability to work in a team and readiness to share knowledge with others. Few respondents also underline that teaching is a very important part of academic work, as it systematizes knowledge and helps to develop. However, it is not appreciated enough in the scientific evaluation, similarly as popularizing activities. One of the interviewees defines scientific excellence as: "as trying to ask important questions and get answers to them in an original way" (Pawel ${ }^{3}$ _M_34_EC_STEM)

While talking about the desirable qualities associated with leadership, the respondents mention the ability to work in a group, openness to people, diligence, charisma, as well as organisational skills enabling the acquisition of financial resources. In the interviews with STEM scientists, it also came out that the position of the institute director is perceived as a significant break in an academic career and that is why there were no candidates to take it up.

Most interviewees do not notice gender discrimination in science, and two of them relate it to formalised and clearly defined criteria for promotion, which ensure that if someone meets these criteria, he/she is not likely to be held back due to some other issues, e.g., gender. However, few interlocutors admit it is more difficult for women to pursue an academic career when they have childcare constraints, and the demands placed on them are the same as on everyone else. One interviewee also reports that quite a few women - after doing their PhD - left scientific careers and work in administration or at technical positions.

As the working conditions under the Covid19 pandemic and lockdown are concerned, most of the interviewees - both men and women - point to difficulties, including a lot of effort and work necessary to prepare didactic materials for a remote mode in a short time, intermingling of family and work life, and the lack of personal contacts with colleagues or superiors, which strongly affects the quality of research work when working in teams. However, one respondent finds the period of remote teaching during the pandemic as "a blessing". It was a time when she was beginning her teaching career and

[^14]teaching online made her less stressed. She also saved time and money by not having to commute to the university.

## Advanced Career recruitment and career progress

Among the factors impacting recruitment and career progression interviewees underline (to a higher degree than early career researchers) the facilitating role of their supervisors. Having (formally or informally) strong position at the department they were able to push their ideas and win positions for their mentees, even when the pool of vacancies was limited. Supervisors have been also recognized for involving interviewees - when they were at early career stage - in valuable international cooperation. As for the factors that hinder research and career development, the respondents often point to the burden of administrative work, including organization of studies and exams as well as project management. Some researchers admit that they have developed a strategy of dealing with these duties:

> "It's not hard work in any way. However, it takes time. I must say that from a certain moment I started to consciously avoid [the administrative tasks - P.S.], and I don't feel remorse about it" (Daria_F_47_AC_STEM)

In this context, the lack of candidates for the post of director of one of the institutes came up again. The number of administrative tasks combined with low level of prestige and gratification are being perceived as heavily discouraging from running for this position.

Among the interviewees from the SSH department the heavy load of teaching is mentioned again, as "burdensome" and leaving less time for research. Both STEM and SSH advanced researchers point to the problem of unavailability of permanent positions both at early and later stages of academic career as well as low earnings as factors negatively impacting the stability of employment and discouriging young scientists from continuing their university careers.

While asked about most valued qualities of a scientist (or what it means to be an excellent scientist) the researchers from both STEM and SSH institutes emphasize the growing role of productivity understood as publishing in high-scoring journals and obtaining grants. There is much criticism about this development, understood in terms of marketization/liberalisation of science, in which citations and publications in highly scored journals, that charge high fees for publications, count. At the same time, these publishing agencies are private corporations that are not geared towards popularizing science, but profit. Additionally, one of the interviewees signals that gathering points for publication is difficult and frustrating because the ratings of individual scientific journals are constantly changing ${ }^{17}$, which makes it much more difficult to plan and build up a recognisable scientific output.

The focus on publishing in highly ranked journals distracts from other important aspects of scientific activity:

> "If someone conducts important research that brings us closer to understanding reality, but which is not published for 140 points or is not the result of obtaining a grant, I think this is completely overlooked. All research activity is not noticed until it is associated with obtaining an appropriate number of points. Critical reflection towards this system is also pushed to the sidelines. (...)
> We also have no other criteria than the statutory ones, that is, what is in the statute is prescribed in our own evaluation, and it focuses so much attention that everything that is outside, some additional work with students, for example, that

[^15]> is running study circles, running discussion clubs. If someone is doing that, they are doing it solely at the expense of their time and their own effort. It was never raised as a valuable thing, it was never connected with additional privileges, benefits, anything". (Alicja_F_46_AC_SSH)

Among other components of excellence in science, the respondents point to the importance of passion, curiosity, creativity, teamwork and cooperation as well as organisational and interpersonal skills.

While talking about the desirable qualities associated with leadership, the interviewees empha size the role of dedication to work and strong identification with the workplace, openness, organisational skills, the ability to cohere a team, which requires interpersonal skills and emotional intelligence, as well as "the ability to raise funds, also to see what is happening, not only in science, but also in society" (Urszula_F_54_AC_STEM).

Advanced career interviewees more often than their younger colleagues see the manifestations of gender inequalities in academia. Some of them manifest in division of tasks stemming from gender stereotypes, according to which women are better at meticulous gathering of data and men are more creative and better at analysing them. When it comes to evaluation of individual effort, analysis counts more than data collection. Other inequalities derive from the very model of scientific inquiry, which produces a kind of a vicious circle: to be able to conduct research, academics have to apply for grants; to receive grants they have to have valuable publications; if someone has a break in publishing, for example due to maternity leave and care obligations, it is difficult for them to get money for a new project and this in turn means that they will not have possibility to publish and the circle is closed. What has been as well mentioned is the lack of systemic solutions in the case of experiencing undesirable behaviour, including mobbing and sexual harassment. According to one of the interviewees such matters are "swept under the rug" and the knowledge where and to whom to report a case of abuse is missing.

Interestingly, one of the interviewees suggests that it is not gender or age that influences the requirements for people working as researchers, but seniority (understood as longer experience of working at the university). The academics with more seniority can expect receiving more attractive tasks.

As the working conditions under the Covid19 pandemic and lockdown are concerned, the interviewees raise their negative impact on individuals, including health problems stemming from sitting in front of a computer for hours and the effects of combining work with childcare, which poses "a huge burden to do paid and unpaid work at the same time. (...) In the same place. Without any possibility to leave, escape, rest" (Alicja_F_46_AC_SSH). The pandemic regime is also seen to have negative impact on the functioning of the university, as the quality of teaching has deteriorated, due to the lack of real contact with students and among students and the increased difficulty in activating students. As teamwork based on personal meetings and exchange of ideas is perceived by some of the interviewees as the core of scientific endeavor - the pandemic is also reported to negatively influenced the processes of cooperation on various tasks decreased the possibilities to share and discuss research results at conferences. One of the interviewees however admits that within his team the work - both research and teaching - has intensified as the pandemic and online mode "freed some time", which would normally be necessary for commuting.

### 2.5.3 Work-life balance

## Early Career work life balance

Regarding keeping the work life balance few factors seem to influence this topic.
Unstructured, meaning not fixed, working hours, which on one hand give the flexibility and freedom but on the other hand in many cases seem to end up in a perception, that people are working all the time. That feeling was compounded by the pandemic, when during lock-down all working activities were conducted at home, on-line and then many of them stayed this way. However, when asked to estimate the working hours most of the respondents indicated 5 to 7 days a week 8 or more hours a day. Very rarely people indicated that they deliberately keep focus on not working overtime. It is worth to mention, that due to academic contract you cannot be paid for additional time you spent working (task-oriented contracts) - the only paid hours are the contracted overtime teaching. So if we mention overtime, we mean more than 40-hours a week, that is assigned in a contract. Usually, it is due to additional teaching obligations (and those rely on number of students in the Institute). Some people do not mind working overtime (as long as it is paid), but others indicated that young researchers, especially right after they get PhD, usually get a lot of classes and it is time consuming (more of that topic is presented in next point of this report). In general people seem to work more than an average 40-hours a week scheme and this overload of work brings into light a situation, when many academics indicated the need of support from their life partners. This need seems to be most visible in case of childcare duties, when flexibility is even more valued. So, on one hand this flexibility gives chance to manage situations like doctor appointment but also opens a topic of unpaid domestic/childcare obligations.

Another challenge for the interviewees in the context of reconciling family life with career are the issues of mobility, especially internationally, and as one of them admits, he consciously chooses the family instead of international experiences, although from the perspective of the evaluation of scientific activity, he loses:
> "There is a lot of emphasis in our system on international mobility and experiences and international exchanges. I was able to do this for my PhD, just after the birth of my son, when my wife was on maternity leave. It was also difficult, but still doable. Now, when the children are older, I do not see myself suddenly going somewhere to work for a year or two in another research center. Someone might ask if you can't take your kids and wife. I probably could, but the question is whether I want to do it, because it's totally changing a few people's lives just to get more points in some table that I don't know if it's crucial for employment. I haven't been on any long-term internship, mainly because of that. Even the funding is not an issue, these are available in our faculty. I wouldn't feel bad because I didn't feel bad in Sweden, but the separation from my family bothered me the most". (Pawet_M_34_EC_STEM)

When asked about the possibility of obtaining support in the context of individual needs related to, for example, health or parental responsibilities, respondents clearly indicate, that they know of support available to parents. Mainly women refer to maternity leave, but also young researchers indicate that they want to be present in their children's' life, so are willing to use them. However, in case of other circumstances they would expect more openness and support from the university in case of health problems, the sick leave is not always a good or possible solution and there are no other means of support. Also, in case of the need for care not of children, but elderly parents or siblings, the system does not allow for same solutions as in childcare. In general, the perception of support for
parents is that interviewees are satisfied with the way the maternity leave is conducted, but they see means for improvement (e.g. academic nursery).

## Advanced Career work life balance

Regarding flexibility and unpaid households and childcare duties, experienced researchers shared the same reflections as the early ones: "it gives such freedom, or the illusion of freedom, it is also a trap, because when there is no imposed working time, we find ourselves working all the time" (Daria_F_47_AC_STEM). Some gave examples of how to be aware of that and not to abuse others: "For some time I had been trying, probably longer, not to work on the weekends, but it was difficult. Sometimes it's hard when you have a big project. At least I tried to prevent the people I employ from working on weekends, I had such an unwritten contract that I just, well, tried not to contact them in the afternoon". (Paula_F_53_AC_STEM). One person summed up, that, especially during pandemic, she is working all the time (apart from time when she sleeps), the difference is only between paid and unpaid labor, depending on if it is academic work or household and childcare one. This brought also a case of problems with private life in terms of social meetings. Part of interviewees complained that they are too tired after work to go out and socialize, they also feel overstimulated:
> "Sometimes I'm so tired after work, after lecturing for so many hours, that sometimes I don't even want to meet anyone because I can't speak anymore. I have such a heavy throat and some people don't understand that (...) the best thing for me was peace and quiet, that I came home from work so that no one would ask me anything and no one would want anything from me, because I simply didn't want to talk anymore". (Klaudia_F_52_AC_SSH)

The division is visible regarding experiences with work life balance due to parenting. Those with children (both mothers and fathers) gave many examples of how challenging it was and clearly articulated the need for support from others and from the system. Those who don't have kids shared second-hand experiences in this regard, or sometimes claimed, they didn't want to talk about that topic as it was not relevant for them.

### 2.5.4 Research

## Early Career research (and teaching)

As to division of time between different tasks related to academic work it differs according to types of positions they work at (e.g. research-only position, researcher and teacher position or research-project related position). However, early career researchers indicate, that teaching may not be the most important in the eyes of some interviewees, but it is time-consuming and may be stressful. Especially when you are new to the subject, so at the beginning of your career, but also every time you get a new subject. What seems to be important is the predictability of workload and autonomy in work planning, but since early career researchers are at the bottom of university hierarchy, they have little to say in this regard. However sometimes they fight for themselves:
> "R: In our institute, there is a compulsory overtime. People don't know it. The norm is that we will have a lot of overtime, and this is how this institute has always operated. Now there is a problem with people like me or my generation who do not want to have overtime because they want to have free time or time for research, this is something that causes problems.

R: Yes, they are paid, of course, but not necessarily a priority. In the last year, I had almost double the workload, now I managed to cut half of it, that overtime, so it will be a big relief. " (Marco_M_35_EC_SSH)

What is connected to this is that academic achievements are not related to teaching, so this huge part of engagement and time is not rewarding in academic evaluation. In fact, in the eyes of respondents, the only things that matters are points (which you gain mainly through publications in highly scored journals).

Administrative tasks are seen as a bigger or smaller burden, but never a huge obstacle, at the early career path. No one would like to limit their research obligations, what is seen as problematic are research-related tasks like: grant applications and publishing research results in highly scored journals as the only thing that pays off. Some young researchers would like to be involved more in popularization of science or other activities related to "third mission".

## Advanced Career research and teaching

In case of experienced researchers some of them tried to share their duties equally between research and teaching (if they are hired on a researcher and teacher position) and only little time they want to spend on administrative tasks. The situation seems to differ due to the fact, that they have higher position and bigger experience, yet they may have taken additional administrative positions and have more administrative tasks, which are usually not welcomed: "I always try to avoid administrative tasks, whenever it's possible" (Andrzej_M_56_AC_SSH)
"I agreed to run [for and administrative position - ES] because there was a competition for the position, because it was a vision that you can build a new thing and it will be satisfying. I already know that in bureaucratic structures it is everything but satisfying, you can write many things about it, but satisfaction does not exist at all." (Alicja_F_46_AC_SSH)

The common issue that appeared in interviews was the case of finding money for the research, which seems to be connected with their discipline: in case of SSH, it is possible to do research without external funding, while in STEM it seems to be way harder to do so. Another difference in disciplines that was found in the research area is that in SSH you are usually personally involved in the whole process, while in STEM it may happen that along your academic development you face a situation described by one of the respondents:
"Then, when all this changes [when you gain a higher position at university - ES] and you create some teams and so on, or you just get hired, then you have to devote a part to teaching and theoretically $60 \%$ at the moment it should be didactics and sometimes it looks a bit like that, we just we have too much teaching at the university. This is the main problem. You spend less and less time on the research itself, you don't do it physically, which was a problem for me, because I liked doing it a lot. You start to hire people, or you have graduate students and doctoral students who start doing this research [...] All you do is meet with the team, you correct certain things" (Paula_F_53_STEM).

### 2.5.5 Emerged proposal from interviewees point of view

Both early and advanced career researchers are much less likely to propose specific practices or solutions, rather they indicate directions for improvements and desirable changes in the general functioning of the university or demand responses from the university to the problems and impediments signaled in the earlier parts of the report.

Both groups rarely link these difficulties or obstacles to gender equality issues. What is important in the context of analysing expectations and postulated proposals, a significant number of interviewees, even if they notice gender inequalities or (more often) gender differences between the situation of women and men at the university, question the role of the university in eliminating these differences or introducing pro-equality solutions. Part of the respondents from both SSH and STEM declare that they do not see a place for such policies at the university, even though answering other questions they support solutions such as paid maternity or paternity leaves, provision of crèches, kindergartens or other forms of support in caring duties in the university space. Among women and men representing both disciplines, in the topic of solutions supporting reconciliation of family and professional life, there are voices claiming that it should be rather a private matter and a consequence of individual choices: "if we take on any such challenge we cannot hold the whole world responsible for it, that is, if I take on any activity I have to establish what my situation is and how I will just deal with it". (Klaudia_F_52_AC_SSH) or "some people want to have children, others don't, nobody told anybody to do so and so on". (Pawel_M_34_EC_STEM)

For this reason, the answers in the section "Desired policies and changes of the university/institution system" tend to be quite sparse in relation to gender issues, but these issues come up during the interviews "by the way" of other questions. Nevertheless, regarding to "desirable policies or changes at the university", a large proportion of the interviews indicate various more general needs. Thus, a wide range of postulates and expectations is presented below, ranging from general ones concerning the functioning of the university without explicit reference to gender issues to those that directly address the situation of women and men (most often in the roles of mothers, fathers or those without children). Very few respondents were willing to develop themes of gender inequalities other than those related to reproductive issues.

## Early Career personal emerged proposals

Among early career researchers, both in the SSH and STEM disciplines, the issues of stability of employment and prolonged waiting for research and teaching positions to "free up" come to the fore. According to the interviewees, the number of such positions should be definitely increased. One of the respondents advocates the separation of scientific and didactic positions, which, in her opinion, would allow a greater use of individual competences and predispositions:
"Not every person is predisposed to teaching, but could be a great scientist and vice versa, so it seems to me that it would be good to use such individual and personality predispositions to invest more in teaching or, for example, in science in specific cases. Each person is simply better in some aspect."
(Anita_F_43_EC_STEM)
According to the same interviewee, for this purpose it would be sufficient to implement the regulations that are already in place, but for financial reasons, universities are reluctant to make such decisions:
> "The law on higher education guarantees being such an academic teacher, teaching assistant or researcher, so it would be nice to put these regulations into practice. I know second hand that rectors in Poland are reluctant to create such research positions, because from what I've heard, no money goes behind them. It's only about teaching. Then it could be changed, the funds would go from the ministry, so that such positions could be created." (Anita_F_43_EC_STEM)

Regarding to the stability and predictability of employment, one of the STEM early researchers working in a research project points to the need for greater transparency of employment plans at the faculty:
"(...) this employment is not defined in any way, what one has to do, how one should behave in order to have a chance of being employed, nor is it known at all when and if any recruitment will take place or is planned. You don't know how to plan ahead and you have to count on yourself, not on the fact that suddenly you will get a job offer for this position. I miss such predictability ".
(Pawel_M_34_EC_STEM)
Young scientists representing STEM also point to the problem of discontinuity of employment in projects, calling for the university to provide "bridging solutions" to maintain continuity of employment between projects. Especially as the university financially benefits from the funds brought in by young researchers using indirect costs:
"If there is a person who finishes such a project, wants to get another one, and doesn't get it, or is still finishing the research, and doesn't have funds left for his own employment, which often happens... one may even still have funds for research. Providing such a person with employment, even for half-time work, but still for at least a year after the completion of such a project, would also ensure greater stability. On the one hand, it does not have to be full-time, it can be halftime. This shows: 'listen, you've finished your job, now your financial conditions will change'. It is a motivation to fight for something else, but at the same time it provides "a cushion", in case that suddenly on 31 December you finish work and on 1 January you have nothing. There would be room for the margin of error that someone wrote a project and didn't submit it or that someone was expecting some employment and it's not there yet. For people who are on some project contracts, and I think there are a lot of such people, it would not be too bad for the image of the university, because if someone maintains a project and can come to our university or to another university with it, there is always something in favor of it, that "look, in case you don't finish your research, we will extend it for another year". The cost of this is less than the indirect costs"
(Pawel_M_34_EC_STEM)
In the context of funding, another interlocutor postulates availability of institute funds for research expenses for those who are not currently disposing of resources from externally funded projects but still need some small amounts of money to continue their research activities (e.g. for reagents or access to an article or database etc.) Those could even be small amounts of money but in disposal of the researchers and access to which would be easy and uncomplicated.

In the area of solutions to facilitate career development, one of the EC interviewees also proposed putting more emphasis on soft, interpersonal ways of support, such as mentoring or tutoring, whereby more experienced researchers who "have already made their names" share their experience, show paths, help in networking, with researchers at the beginning of their careers.

A considerable number of EC researchers also raised the issue of the so-called "third mission" of the university, indicating the need to value activities related to the popularization of science. One of the interviewees suggested setting up the interdepartmental, interdisciplinary unit aimed at conducting such activities:
> "I have such a dream, it is also learned from other universities (...) That is, the coordination of a project in which we draw people from many different departments who do it. Because they do it, only these are independent satellites and they circulate, and they are not coordinated, and they are all frustrated because they say: "the university does not help me by no means" (...) It could have
a huge profit for the university in my opinion. I think this group could do cool projects, they could make a podcast, they could create a joint publication for children. Maybe some atlas of common concepts for kids, maybe a fairy tale that really educates them These are wonderful things" (Carol_F_36_EC_SSH)

At the same time, it is worth mentioning that the area of various educational, but not directly scientific or academic commitments is mentioned as one that most often has to be abandoned, although with regret. If educational (popularization) or activist engagements were more appreciated and, to some extent, taken into account when assessing scientific achievements, some respondents would be more willing to devote more time to them.

Another area of postulated changes is related to the already mentioned requirement of mobility, which translates into the assessment of scientific output, and even constitutes a condition for the continuation of the academic career at a certain stage. Therefore, several respondents indicate that the necessity to carry out post-doc projects at a university other than one's own should be abolished. For some people, especially those with families with children, such a trip is impossible or very difficult. Some respondents also point to the lack of programs supporting such relocation with the family (both at the domestic and international level, related to the admission of foreign scientists by the Jagiellonian University). The respondents with broader experience of international mobility refer to their observations of such solutions successfully implemented at foreign universities and see it as very helpful.

In the area of developing a system of support in caring responsibilities at the university, the interviewees, both women and men who are parents of young children, as well as those who are just planning to start a family, most often emphasized to the need for the university to provide access to care facilities such as nurseries and kindergartens. This would allow a faster return to work after maternity leave, and then easier reconciliation of professional and caring responsibilities. Both surveyed institutes are located on the Jagiellonian University Campus - a large complex of university buildings, where there are no such institutions, and certainly according to the respondents, both STEM and SSH, would be of great interest. One of the young fathers from STEM points out that the proximity of the workplace to the childcare facility would definitely facilitate the organization of work for young parents and save the time they have to spend on transporting their children to facilities located in remote locations:
> "(...) and parents would really feel more comfortable that they are closer to their child, that they have their child close at hand, possibly that they can stay until some hour and not have to worry that "gee, there might be a traffic jam, so I have to go earlier, because if not, I won't be able to pick him up before the kindergarten closes. It would be a mental comfort that the child is here and I can fly over there. It's close, and there's no problem getting stuck in traffic somewhere on the way home or on the way to preschool. I think that would be a big mental comfort for me at this stage. " (Pawel_M_34_EC_STEM)

In addition, the interviewees also speak with approval about the already existing childcare solutions at the university such as installation of baby changing facilities or breast feeding rooms and emphasize that there should be many more of them.

## Advanced Career personal emerged proposals

Among advanced career researchers, both from the perspective of their own career path and referring to the observation of the current situation of younger colleagues, the issue of employment stability and the need for greater support for early career researchers was also raised. Firstly, respondents
postulate that full-time permanent positions should be proposed, especially in the case of those young researchers who have successfully collaborated with the university on research projects:

> In my opinion, this is the basic minimum, that full-time positions should not disappear after the retirement of older workers, [there should be opened] competitions to give a chance to those who have just finished working on the project, they have proven themselves great, it is known that they are good and that they could simply apply for these permanent positions. The procedures are such that the first three months are a trial period anyway. Then another year and the permanent [contract] (Urszula_F_54_AC_STEM)

As the second area of possible relief for young employees, their more experienced colleagues see a reduction in their involvement in the administrative tasks.

> I am aware of the fact that people are charged with research work and they are accountable for the number of publication points, so the system should function in such a way that this person is capable of doing it, right? (...) So if we have a very extensive administration, because we do have(...) well then I would be in favour of administrative staff taking over many organisational duties and not burdening a man (Jan_M_43_AC_SSH)

When asked about the changes related to the further career stages, the respondents point on the need for greater transparency of promotion procedures, eg. applying for full professorship (the so-called Belvedere professorship), as well as greater institutional support from the home institution in achieving this title:

> "It's not just my individual issue. The whole committee decides in general to start this procedure, such support would be very useful. If someone said: "Listen, well let's see, let's look at your output now, let's see" so that the faculty would also care about that, so that I could see that I have that support, possibly also so that we could discuss the directions of what I still lack and so that I could put emphasis on that." (Klaudia_F_52_AC_SSH)

The issue of habilitation requirements and, more broadly, the assessment of academic output is also addressed by a recommendation of one of the SSH interviewees to introduce more flexibility and possibility of extensions or exemptions in the system of assessing academic output (currently calculated in four-year time slots) due to reasons related to caring responsibilities (e.g. maternity leave). Similarly with regard to the habilitation process, where "you don't have to do habilitation in 6 years anymore, but 6 plus a period of maternity leave, it's still a matter of maternity leave only, and not taking care of a year-old child. Thus, I think there is still a long way to go. In this context" (Alicja_F_46_AC_SSH), some AC researchers also pointed out that caring responsibilities, especially at later stages of careers, concern not only children, but also other family members (e.g. parents, partner etc.).

Referring to solutions supporting employees with children, especially women, one of the SSH respondents indicated the practice of shifting the hours of important faculty meetings (such as the faculty council, etc.) from the afternoon to earlier times, enabling the staff who are parents to attend. Such a rule has been recommended by the interviewee as one that should be introduced across the university in general:
> "All kinds of meetings cannot take place at times when care institutions are not functioning: schools, kindergartens. It cannot take place in the afternoons. This largely excludes women from participating in university life." (Alicja_F46_AC_SSH)

Additionally, the same respondent postulates that childcare as a standard at any large university events should also be offered, especially during those taking place outside working hours. As an example, she points the annual summer picnic of the Jagiellonian University, where "the children of employees are absolutely cared for (by the babysitters hired by the university) while their parents are socializing" (Alicja_F_46_AC_SSH))

Another supportive signal that according to one of the AC STEM researchers could be sent by the university to the employees with children, would be the installation of facilities in the institutes enabling taking children to work: "(...) something like a play corner at the faculty or institute, something small, where the mother could work with a laptop and the child would play at that time. It would be a signal that it is allowed. I think it is not obvious to many that it can work that way." (Urszula_F_54_AC_STEM)

As an additional context of the university solutions supporting childcare, one of the SSH researchers draws attention to the problem of privatization of such care. She reclaimed the situation in which the university relinquished a nursery run by the local government, which had been used free of charge by university employees for several dozen years, and at the same time opened a private, paid facility, which is partly subsidized by the university: "Employees who are income tested can give their children there for an additional fee" (Alicja_F_46_AC_SSH)

In several cases suggestions of good practices that should be adapted in general are associated with the solutions introduced as a result of the pandemic. Some respondents positively assess some of the solutions, suggesting that remote working should be available on request in situations where it facilitates the organization of work and reconciliation with other obligations, such as family commitments, health problems, but also simply saving time for commuting, so that working time is better organized. Especially in the case of AC researchers, who are more likely to be members of various councils or university boards, the possibility of participating in such meetings on-line makes a big difference in time organizing.

Among advanced career researchers, the need for a more extensive support base related to mental health, professional burnout or other life difficulties affecting the quality of life and readiness to work was also indicated. As one of the respondents noticed, it might had been highlighted due to the pandemic crisis, but the problem had existed much earlier and should be addressed, not only by reacting to individual situations, but more systematically. Additionally, as an area requiring support, one of the respondents also indicates the sphere of interpersonal relations between people at work, which, in her opinion, is in crisis at the university and solutions that strengthen communication skills, conflict resolution, etc. should be implemented.

Similarly to the EC researchers, an issue of the need for bigger appreciation and creating more space and possibilities for the activities dealing with the popularization of science and practicing the aforementioned "third mission" of the university was also addressed by the AC researchers. These claims however arise to much a greater extent among STEM related researchers than the SSH.

### 2.6 University of Belgrade, Serbia (ETF)

### 2.6.1 Desk work, fieldwork and sample's characteristics

The results of desk analysis of gender distribution across positions are detailed in Table 1.

The interviews were adapted to fit the context and the procedures at Belgrade University. The changes were not substantial, and they were aimed at getting key information as outlined in synopses. Most of the interviewees needed further clarification of what is considered an organizational climate and to be given examples of organizational values.

The initial contact with the potential interviewees was made by project coordinator, who is an advanced career researcher at the ETF BU and their colleague. The goal of the research was clearly stated and they were informed that participation was fully voluntary and that they were free to opt out at any given point of time. In the first wave of recruitment, a total of 12 potential interviewees were contacted. Three of them did not respond, whilst one respondent refused to participate. The project coordinator proceeded to contact the alternative respondents according to quotas; all four respondents contacted in the second wave accepted the invitation. The rest of the fieldwork was carried out by three psychologists, experts in gender studies and experienced in qualitative research, working at the same university, but at different faculties. They arranged the dates of the interviews with the respondents, conducted interviews and wrote synopses. A total of 12 interviews were conducted between early October and late December 2021.

The sample was balanced according to career stage and gender and it included:

- 6 early career researchers and 6 advanced career researchers:
- The group of early career researchers included 3 women and 3 men. Four are teaching assistants ( 2 women and 2 men), while two are researchers ( 1 woman and 1 man). From this group, one male TA and one female researcher recently got PhD degree, while the others hold MA degree.
- There were also 3 women and 3 men in the group of advanced career researchers. All the AC researchers were associate professors.

While the age of early career academics varies from 28 to 32 years, the age of advanced career academics is between 36 and 54 years. All 12 interviewees are working in the STEM filed, more precisely, in the field of electrical engineering, software engineering and mathematics. Most of the interviewees (10) are members of teaching staff, but their job also includes research work. Only 2 early career respondents are (project based) research staff and have none or minimal teaching obligations.

The sample is diverse in terms of marital and parental status. There were 4 interviewees who are married with children ( 3 AC and 1 EC ), also 4 are single with no children ( 3 EC and 1 AC ), 2 are married and expecting their first child ( 2 EC ), 1 is in a civil partnership with children ( AC ) and 1 is married with no children (AC). Out of 5 interviewees who have children, 1 has 3 children, 3 have 2 children, while 1 has 1 child. The most of the interviewees live with their spouses or partners (8), half of whom also work in the academia ( 3 at the same faculty). Other partners have full time employment outside the academia. While all advances career researchers live in their own apartments/houses (6), younger researchers are more likely to rent apartments. Among EC interviewees, 2 live in their own apartments ( 1 alone, 1 with mother), while 4 are renting ( 1 alone, 3 with their partners/spouses).

Table 2.1 ETF: Socio-demographic characteristics of the EC and AC interviewees

| Teachers |  |  | Researchers |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Title | M | F | Title | M | F |
| Teaching Associate | $10(83 \%)$ | $2(17 \%)$ | Junior Research Assistant | 3 | 3 |
| Teaching Assistant | $28(65 \%)$ | $15(35 \%)$ | Research Assistant | 4 | 1 |


| Assistant Professor | $23(72 \%)$ | $9(28 \%)$ | Research Associate | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Associate Professor | $30(73 \%)$ | $11(27 \%)$ | Senior Research Associate | 0 | 0 |
| Full Professor | $30(75 \%)$ | $10(25 \%)$ | Principal Research Fellow | 0 | 1 |
| Total | $\mathbf{1 2 1 ( 7 2 \% )}$ | $\mathbf{4 7 ( 2 8 \% )}$ | Total | $\mathbf{8}$ | $\mathbf{6}$ |

## Overall gender distribution: 129 (71\%) M; 53 (29\%) F

### 2.6.2 Recruitment and career progress

Real recruitment and competition at the ETF BU happens only at the entry level positions. The process of the recruitment of the EC researchers typically starts in the final year of the undergraduate studies. This process is automated so that all final-year students with a GPA above 9 ( 10 is the maximum) are invited to an interview for a Teaching Associate position. Those who are elected are expected to help professors with administrative demands of the teaching and practical classes. This fully formalized procedure was criticized by one of the EC interviewees, who argued that by favoring only grades, genuine academic motivation and talent can be overlooked. When talking about talent, respondents refer to creativity in terms of producing research ideas. Candidates who, after completing their master's studies, decide to pursue a career in the academia and enroll in PhD studies at the ETF BU, may be offered positions of Teaching Assistants within teaching departments or the positions of researchers within research labs of ETF BU. TA positions are offered only if there are vacancies, while researcher positions are opened only if there are research grants to provide funding for them.

At all public Serbian universities, after finishing PhDs, almost all TAs start tenure track careers. ETF BU offers even more secure prospects. Even if some TAs fail to finish their PhDs within the six year period, the ETF BU grants them transitional one-year contracts to finish their PhDs. In most cases, the calls for AC promotions at the ETF BU are opened as soon as the candidates meet all the required formal criteria. In accordance with this, even though these calls are formally open for all interested candidates, in reality they are intended for a specific candidate. Outside candidates rarely apply, and even if they do, the choice of in-house candidate is usually justified by his/hers experience in teaching at the ETF BU. Some interviewees comment on the almost guaranteed continuity of the contracts at the ETF BU. They are aware that such recruiting policy might not always promote fairness and excellence, but that it is protective of the people who devoted their early careers to the institution when they easily could have opted for more lucrative careers in the private sector.

The formal promotion criteria are strictly quantitative - to advance to a higher academic title, one needs a required number of academic publications. Most of the interviewees asserted that criteria are low and insufficiently comprehensive. According to them, one doesn't need a prolific scientific production to meet the requirement regarding the number of publications. Therefore, as even a mediocre researcher can fulfill them, these criteria do not reflect the level of academic quality that most respondents consider necessary for advancement. In addition to this, even though students' evaluations of teachers and mentoring activities are formally recognized, requirements regarding these aspects of the jobs are minimal and some interviewees wish they were given more weight. However, despite low criteria, the advancement is not quite automatic. Since all promotions must pass with a majority vote, the interviewees testify that interpersonal disagreements sometimes reflect on promotions of certain candidates. They were, nevertheless, all promoted once they fulfilled the formal criteria. Gender of the candidates isn't perceived, nor is reported as a differentiating factor in the recruitment and career progression at the ETF BU.

## Early Career Researchers' recruitment and career progress

All early stage career interviewees completed graduate and postgraduate studies at the Faculty of Electrical Engineering at the University of Belgrade (ETF BU). Almost all interviewees, particularly females, showed exceptional talent for mathematics and physics during previous levels of schooling, which was testified by winning awards in national competitions in these areas. Therefore, all of them were strongly intrinsically motivated to study electrical or software engineering, but most were also drawn by the good career prospects and financial stability associated with the degree in these fields. Despite impressive academic achievements at the high school level, two out of three female interviewees faced doubts of their fathers regarding their choice of studies. Both of these women had exceptional STEM teachers (both male and female) who encouraged them to pursue their academic aspirations.

Almost all of the EC interviewees went through the described recruitment procedures, even though some were tracked as talents and invited to apply for Teaching Associates even before the final year of their undergraduate studies. All of the interviewees were among the most successful students in their generations, and in addition to grades, some stood out for their success in student competitions, for receiving prestigious scholarships, participating in student exchanges and doing internships at prestigious international companies. Some of the candidates showed more assertiveness in the process of their recruitment, initiated talks with their professors and openly expressed wishes to stay at the University, but no gender differences were observed in this regard.

After graduating from master's studies, none of the interviewees were in a dilemma whether to choose an academic career or a job in the private sector, even though around half of them had attractive offers from respective international companies. In addition to strong inclination towards university level teaching and/or research, some of them felt that academic career prospects come with a small window of opportunity and that career options in the private sector can be revisited later in life. They mostly refer to the fact that the number of academic positions in Serbian universities is very limited and if there are no vacancies, sometimes even very good candidates can not be offered positions. Some of the interviewed EC researchers were hesitant whether to start PhD studies in Serbia or abroad. They were weighing many factors, such as the quality of studies, career prospects, the quality of life, availability of social support, etc. The availability of social support (especially for those who plan on becoming parents) and the relative socio-economic status of the degree holders in the field of engineering in Serbia were the factors which favored staying. No gender differences regarding motivation to start an academic career at the ETF BU and emigration dilemmas were observed.

Out of six EC interviewees, two are researchers at the ETF BU, while the rest are Teaching Assistants. The researchers at Serbian universities are funded through specific projects and their contracts are prolonged according to project duration. However, most researchers are tied to national projects that are prolonged annually. To secure funding for their studies, some researchers get involved in additional projects, sometimes unrelated to their PhDs. At ETF BU they are involved in teaching and administrative tasks on a very small scale. Teaching Assistants are in a somewhat better position regarding job certainty. They are funded the same way as university teachers and can be given two consecutive three year contracts. On average, TAs are involved in around 5 courses, working with roughly 600 students. They report that they dedicate $30-50 \%$ of work-hours to teaching. None of the interviewed TAs is currently involved in significant research projects within which they could develop research skills in their area of interest. Two of the interviewed TAs (one male, one female) have additional full- or part-time research oriented jobs at private companies and are able to publish some of the results obtained through their commercial work.

Two of the EC interviewees already completed their PhDs, two are near the submission of their theses, while two are in the earlier stages of that process. On average, the PhD studies at ETF BU last around 5 years. None of the interviewees report any discontinuities in their careers at ETF BU. One of the interviewees, a female TA, complained that the submission of her thesis proposal was postponed in a very direct manner in order to allow the other, in the interviewee's views privileged, female colleague to submit first. Two male EC, who are still in the earlier stages of their PhD studies, noted that they reached out for added supervision from academics abroad, as their local supervisors were not motivated enough or did not have enough expertise in a particular field.

Apart from formal criteria, the interviewees state that there is no universal model of excellence among ETF BU employees, since some emphasize the dedication to teaching and institution, others value research and academic projects, while some are oriented more towards commercial projects. Some of the interviewees argued that teaching should be given more weight in formal assessment. None of the interviewees spontaneously mentioned gendered expectations regarding scientific excellence nor were aware of it when explicitly asked. All decisions regarding promotions must be approved by majority vote on departmental and institutional level. Even though most of the promotions pass these instances automatically, our respondents stated that occasionally some candidates faced obstructions despite meeting formal criteria. These include receiving negative comments before vote takes place, opposing colleagues not showing up for vote or withholding vote. Some of the interviewees report this usually happens to noncompliant and vocal colleagues and one male interviewee experienced it personally. Also, they claimed the conflicts of senior members are sometimes transferred to younger colleagues. However, there were no reports of someone actually being withheld promotion despite meeting formal criteria. Even the highly unlikely prospect of losing their academic position was not particularly worrying for our respondents, because the degree guarantees employment outside academia at any moment.

All EC interviewees agreed that gender is not an obstacle for the recruitment and advancement at the ETF BU. Most claim that they did not notice any differences in career paths of male and female colleagues, nor have experienced it. Kristina (28), a TA, said: 'My professors have never shown any difference between male and female students.', while Zoran (32), who is EC researcher claims: "I don't believe that there are any rules or prejudice; it simply did not happen that any woman applied for the job in our lab. I don't believe that there is any objective reason why anyone would question someone only because she is a woman. I have never seen such an attitude or such behaviour."

They were not aware of any forms of subtle discrimination at this institution. A number of both male and female respondents, tended to view some female colleagues who point out to some forms of subtle discrimination as annoying and concerned about trivialities. One example of gender discrimination was reported by one female EC interviewee: she claimed she was asked about her plans regarding motherhood before being invited to join a research project team. Her quote follows: "My mentor told me that the project manager had asked him to ask me what my plans were for the next two years. In the sense of... with those words, my plans for a year or two. I said then - I already knew then I wanted to get pregnant, and I said, if I just... that (motherhood) matters to me and I will be pregnant at some point. When, I don't know that, that is not something that can be ordered. And it was the only moment in my entire career that I felt kind of bad, I think... it mattered to me to be included regardless of my plans on getting pregnant. Male colleagues are never asked such questions."

## Advanced Career Researchers' recruitment and career progress

All of the interviewed AC researchers are Associate Professors at the ETF BU. All interviewees are teaching courses both at undergraduate and postgraduate level. Range of the courses taught per interviewee is $5-10$, while the number of students taught varies from 500 to 1000 . Most of the AC
interviewees are involved in a number of national and international research projects. They operate within small research groups and most of them advise a number of postgraduate students. The AC interviewees were unanimous in their complaint regarding high administrative workload. Most are members of various institutional committees or perform managerial roles.

With the exception of one mathematics professor, all of the $A C$ interviewees were recruited in the same way as EC interviewees, right after graduating at ETF UB. They attended PhD studies at the ETF BU while holding positions of Teaching Assistants, after which they started tenure tracks. As we already discussed, true competition at the ETF BU happens almost exclusively at the entry level positions. Consequently, AC and EC interviewees share many similarities regarding their background, recruitment process and professional motivation. Just like EC interviewees, some AC interviewees were more drawn to the research, while others were oriented towards teaching. However, in this group motives relating to work-life balance are also brought up. One female AC interviewee expressed the opinion that teaching positions in academia might be more appealing to women who plan on having children, compared to jobs in the private sector, because of the stability of the job and more favorable climate regarding maternity and other forms of parental leaves. EC and AC interviewees both mentioned emigration dilemmas, but national identification and patriotism were more prominent in AC interviewees' narratives (both males' and females'). The number of interviews and the content of narratives we collected do not allow us to further explore the causes of this difference.

The career progression of all AC interviewees went without major complications and at the expected pace. One male AC interviewee's career progressed somewhat slower compared to most of his colleagues, due to his personal decision to devote his time to political activism. One female AC interviewee reported that she faced opposition from some colleagues before she was promoted to Associate Professor, but she was nonetheless promoted by the majority vote. This interviewee believes that opposing colleagues did not approve of her being vocal and firm with her opinions and deviating from some teaching traditions.

Just like EC interviewees, some AC interviewees recognized that ETF BU employees do not share a universal model of scientific excellence. Depending on the area of their personal successes, some value teaching more, some research, and some are more oriented towards cooperation with companies. All interviewees agreed there are no different gender-based expectations regarding scientific excellence at ETF BU. Some added that fully formalized quantitative criteria do not allow for any gender bias, and they are competence-based. When asked to explain the gender disproportion in STEM, some of the interviewees resorted to essentialist beliefs. Ranko (36) said: 'Jordan Peterson has some interesting talks on this issue. Perhaps electrical engineering is an area that attracts more men. Maybe it's more natural, boys like to screw something, to solder ...'.

Most of the interviewees were not aware of any cases of gender-based discrimination at ETF BU. They did report on some colleagues facing difficulties in career advancement, but they attributed it to their personalities, rather than gender. One female interviewee explicitly reported that most of the ETF BU employees were gender-blind and this could be inferred from the answers of most of the other AC interviewees as well. They did not recognize subtle forms of gender discrimination, nor were aware of the processes shaping gender geps in STEM and academia. However, one female interviewee pointed out the pronounced gender disproportion which favors males in managerial roles and females in administrative roles at ETF BU.

According to the interviewees answers, parenthood is not an obstacle for career advancement at the ETF BU. On the contrary, one female interviewee directly claimed that the institution fully supported colleagues who get pregnant, that there were no barriers for maternity leave, and colleagues put an effort to support young mothers. However, another female AC interviewee revealed that she ended
her child care leave after mandatory three months (fully paid child care leave in Serbia lasts 12 months) because she was afraid that her courses would be taken away from her indefinitely while she was away. Other interviewees believe that balancing motherhood and academia puts additional pressure on women compared to men and in some cases slows down their career progress, but they attributed this problem to the traditional gender roles in the society and did not see the room for improvement within their institution.

### 2.6.3 Work-life balance

Full commitment to work and complete availability seem to be the norm at the ETF BU. Therefore, the majority of the interviewees aren't able to achieve work-life balance. This is especially challenging for parents, and mothers in particular. Working Sundays have been identified as an unjustified institutional requirement that negatively affects work-life balance by some EC and AC interviewees. Work-life balance got worse during the pandemic as there were no clear boundaries, no opportunity for accidental socializing, lecturing got more demanding and motivating students was getting harder.

## Early Career Researchers' work life balance

All of the EC interviewees are very devoted to their jobs at the ETF BU and typically work at least 50 hours a week. Due to the flexible and dynamic nature of their jobs, it's not easy for them to keep track of how much time they allocate to all work-related tasks and commitments in total. Even though high commitment demands tend to be somewhat compensated with the flexibility of the working-hours, a number of interviewees noticed that flexible working-hours can be a double-edged sword and that young people in academia rarely get to use all of its benefits.

Based on their answers, the interviewed young women seem to invest more in a balance between private and professional commitments compared to their male colleagues. Although it is not always easy for them to prioritize private life in relation to work, they still manage to lead an active social life, to enjoy hobbies and lead a healthy lifestyle. They report that their (male) supervisors encourage or model how to prioritize family responsibilities. Their male colleagues who got interviewed seem to be more consumed by work, and two out of three reported that they had no or very poor work-life balance. Both believe that such a situation can be attributed only to their personal choices, and not to demands of the institution.

Several interviewees, both male and female, reported that they experienced negative emotional states and psychosomatic symptoms during their early years at ETF BU (imposter syndrome, negative emotions, anxiety, panic attacks and high blood pressure). Most of them struggled to keep workrelated stress from overspilling into their private time and lack knowledge of stress coping strategies. Some seek professional help and/or receive support from their supervisors and colleagues. All of these interviewees (both male and female) reported that over time, they become better at balancing and coping with work-related stress and making the most out of the flexible nature of their job. Some consider it an inevitable part of professional maturation in academia.

Even though both male and female EC interviewees who plan on becoming parents expressed some anxiety regarding balancing parental and professional roles in the future, this was a bigger issue for the interviewed women. Irina (28), a post-doc researcher, said: "If one has to take care of someone, there is simply not enough time and flexibility to travel and that automatically hinders academic development. It stuck with me, the CV of one of the most successful female scientists in my field. Even if she was a man, she would be considered wildly successful. I remember thinking - look, she is a woman and has achieved so much among all these sharks. I always wondered what her private life was like. And I found out she has no children. Another successful woman in my field also has no children. It's not some classic life, and honestly, I wonder. There is a huge question mark above my head at the moment,
what will happen to me when I become a mother. I anticipate that I won't be able to do research for a year and that a significant drop in productivity will draw away my international colleagues and signal to them that I won't be able to put in the extra hours and work. I am very enthusiastic at the moment, believing that I'll be able to write papers when children come (smiles). But still, it is questionable how I am going to make it all happen". Petar (30), who is soon starting tenure track and also expecting first child, said: "I'm a little worried about what will happen when the baby arrives. Will I be able to achieve all the obligations? I worry about being a good parent because I have such long working hours. Probably something will change when the baby comes." One of the interviewed EC researchers (Zoran, 32) is already a father and he is the least satisfied with his current work-life balance. He already attempted and failed at setting better boundaries between work and family life.

Strongest complaints regarding the impact of the pandemic on the work-life balance came from the same person, the only parent in the group. He noted that it was difficult during the lockdown (first three months of the pandemic), as both he and his wife worked from home, and childcare facilities were closed. The Covid-19 pandemic did not affect the workload or daily organization of most of the interviewees, but remote teaching and the absence of informal gatherings has reduced their work satisfaction.

## Advanced Career Researchers' work life balance

As expected, there are more parents among AC interviewees, compared to their younger colleagues. This group tends to use the flexible nature of the job more to their advantage, but still reports stress due to high workload and struggles to balance private and professional life. This stands in particular for the interviewed AC mothers, who took a greater share of child care and housework, even when they perceived that they were equal with their partners in every regard. Biljana (41), said: "I certainly cannot dedicate the same amount of time to this work as men do. I must pick up the children, I must give them lunch, when they are sick, I must stay at home. And that means I won't be able to stay longer for lunches where everyone else stays, and I won't be able to go to business dinners if there's no one to look after my children." . The interviewed mothers reported that they coped by multitasking and shifting priorities between work and family, depending on the current demands and thanks to the flexibility of the job. Some admitted that, despite all the flexibility, their family and personal lives suffered most of the time due to high demands of the job. Some reported the workload negatively affected their physical health, which manifested the most in sleeping less than needed. The female AC interviewee who was quoted before, Biljana (41), even renounced work-life balance policies to not affect her career: "I did not even use maternity leave (which lasts 12 months in Serbia). I closed the leave after the obligatory third month with both my children. I was afraid that my courses will be assigned to someone else and that I won't be able to take them back after I return from my maternity leave."

Conversely, the interviewed fathers report fewer struggles regarding work-life balance. Miloš (43) said: "There are those periods when I am overloaded, so I am at work from morning up until 9 p.m., but it is not something usual, it is not a whole year; it is one part of the semester when I simply have a higher teaching load." Although all of them are devoted parents, they pointed out that their spouses supported their academic work by taking a larger share of childcare when it was needed. All interviewed parents emphasize that balancing is particularly hard during early parenthood. However, even some AC interviewees who are not parents struggle with achieving balance, especially during a pandemic because the lines between working hours and leisure time get blurred. Some choose to devote all of their time to their job, without any regrets. They consider it a calling and prefer it that way. Some women and men from this group believe that lack of balance is a consequence of their incapability to balance everything, rather than high demands of professional and private roles.

### 2.6.4 Research

It stands for both early and advanced career employees that research is more valued than teaching at the ETF BU. Formal advancement criteria almost exclusively pertain to published research. However, in the perceptions of the professional role of the teacher at the ETF BU quality of teaching takes a significant place. A large portion of interviewees from both groups and genders mentioned their devotion to teaching, the efforts they invested in updating the teaching process and keeping the materials and didactical techniques relevant, especially during the pandemic. Many are dissatisfied with the fact that teaching is not given more weight among the formal advancement criteria, and different views regarding teaching approaches and importance of teaching sometimes stir bigger disagreements in the departments.

Some EC interviewees remarked that there were not enough opportunities for them to take part in large research projects; that they could not find an expert supervisor for their narrow area of interests; that they lacked some resources and equipment for research. In comparison to the AC researchers, ECs were more critical to the hierarchical institutional structure and sometimes claimed they lacked a more devoted supervision. AC interviewees were more devoted to research and more acceptive of the given structure. Majority of the respondents claimed that excellence is recognized within the institution (the best researchers are likely to get advanced, respected and chosen in the governing bodies).

As the ETF consists of a large number of departments, according to our respondents, in some departments organizational climate is marked by cooperation and collegial support, while in others, employees formed cliques and decision making is blocked by internal conflicts. Researchers from departments with rigid hierarchical organization and authoritarian leadership cite "cooperativeness" as a valued feature - it seems that agreeableness and conformity are expected, especially in the junior positions. Conflicts within departments negatively affect younger members by making them afraid to express their opinions or forcing them to take sides.

Based on the interviewees' personal narratives, and their reports concerning their male and female colleagues, minor gender differences can be observed in terms of teaching and research at the ETF BU: women are somewhat more often assigned administrative and lecturing duties; they collaborate with the industry less often and are somewhat less included in the research projects.

## Early Career research (and teaching)

As it was briefly mentioned in the first section of the report, the interviewed TAs are all heavily involved in teaching. With time they all became more efficient in preparation of classes and currently none of them complains about high teaching load. However, most miss being involved in larger and more significant research projects within which they would develop as researchers and engineers. Some try to overcome this obstacle by working for companies which allow them to publish commercially obtained data, while some are trying to start their own research groups with peers and younger colleagues. Male EC interviewees seem to be somewhat more proactive in this regard. All of them agree that they have a lot of autonomy in their work, but they would prefer more guidance both in terms of teaching and research.

Researchers at ETF BU are overburdened with research and mostly applicative projects, which sometimes diverts them from their PhDs. They would also like to see more cooperation within their laboratories. The obstacles to this are not bad interpersonal relationships, but different research interests and career stages of the researchers. Some researchers are frustrated that they are not more involved in teaching.

Researchers and TAs report that they are not overburdened with administrative work. This is a deliberate institutional decision made to allow young colleagues to focus on their PhDs. In most of the ETF BU departments, administrative workload starts to build up and gradually progresses along the tenure track.

## Advanced Career research and teaching

Unlike their younger colleagues, AC interviewees are less satisfied with teaching load than research opportunities. Most of them do research within 4-6 members research groups, work on multiple national and international research projects and have no difficulty finding new projects. It is their high teaching load that prevents them from dedicating more time and energy to research, which most of them wish to do. Biljana (41), said: "During the semester, when teaching takes place, I find time for research only in the evening and at night and other impossible hours. There is significantly less (research) work done than it should be. It is done when there are deadlines or when something should be published. Research is definitely in a subordinate position in relation to teaching. I would like to have more time both for teaching and for science." The AC interviewees who are accomplished as researchers are also strong advocates for the inclusion of younger colleagues in the research teams. Some interviewees were particularly dissatisfied with the fact that advising and developing younger researchers is not better recognized within the formal criteria for advancement. All interviewees dedicate a considerable amount of time to administrative tasks, in particular those who are members of various committees or are performing managerial roles.

Although the narratives of the AC interviewees almost correspond to the narratives of their younger colleagues when it comes to the organizational climate within their departments, their personal attitudes towards it are less critical. Most of them approve more of the hierarchy, strong leadership and respect for authorities. Some dismiss the criticism and fears of young colleagues as unfounded. Some even criticize young people for not being committed enough to the institution, for lacking personal integrity or enthusiasm for the "common cause".

### 2.6.5 Emerged proposal from interviewees point of view

Gender equality is not a topic that is much discussed at the ETF BU. Current gender gap in the STEM field is explained by societal gender roles or essentialism. The steady increase of the number of the female students and teachers at this institution diverts employees even further from the issue of gender equality, by making them believe this problem is already being solved on its own. Women who point to discrimination and seek change, insist on gender sensitive language, etc. are sometimes portrayed as annoying social justice warriors consumed with trivial issues, instead of dealing with more pressing matters. According to some interviewees, feminism is perceived negatively and sometimes even considered to be a fight against men.

Both men and women describe stereotypical gender roles when it comes to work-life balance and career goals. Women are unanimously expected to take child care leave. Women rarely complain about the fact that it is difficult to come back to work after a year of complete absence. They seem to be grateful for the informal support they are given upon their return, and only one respondent suggests that there might be more institutional support for child-rearing (e.g. opportunity for longer part-time instead of full-time leave; child-care facilities offered at the university campus). Some of the EC and AC interviewees try to challenge norms regarding absolute devotion and availability to the institution by requesting that certain work assignments should not be scheduled on Sundays.

Gender affirmative measures, gender quotas in particular, are often perceived as a discriminatory by men, but also some women. Some fear abuse or backlash if such policies were to be introduced. The respondents typically mentioned favoring women and/or lowering or lengthening the criteria for their
advancement and see it as a threat to meritocracy. Systemic solutions that would empower women, make their work life balance more acceptable etc. were almost never mentioned.

## Early Career personal emerged proposals

Although some of the EC interviewees complained about the rigid hierarchy and cliques, they seem to accept the situation and adapt to it rather than initiate any changes. Apart from general suggestions referring to better leadership, better recruitment policies, better guidance for younger colleagues, no specific organizational reforms were proposed. Most of the interviewees, males in particular, rely on personal competences, their inherent fairness, etc.

Female EC interviewees expressed concerns regarding balancing motherhood and career in the academia in the future. For researchers, the uncertainty of their position at the ETF BU and high expectations in terms of research production further complicate this issue. One of them proposed a concrete measure: a kindergarten within the institution for the children of the employees. Another female EC interviewee advocated for herself and some of her colleagues who are mothers by calling for the reduction of working weekends. One female interviewee believes that no gender policies are necessary, since in her opinion women already achieved critical visibility within the STEM field. She fears that gender equality policies directed towards improving visibility, such as gender quotas and gender fair language, might backfire, stand in the way of the natural progress of women and even go against their empowerment. She believes that leadership positions are not unreachable to women at ETF BU, but they are not interested in them, are not ready for the sacrifices leadership requires or lack self-confidence to reach those positions.

One male EC interviewee believes that gender discrimination at his department takes form of inappropriate reactions and comments. In his opinion, most of the colleagues are aware of which behaviors are socially undesirable, but some are more or less willing to control impulsive reactions. The interviewee acknowledges that some female colleagues progress more slowly due to family obligations and cooperate with companies less often. He resorts to an essentialist explanation of the stated gender asymmetry and finds it difficult to articulate specific policies and measures. All three male EC interviewees believe that additional policies directed to supporting parents in academia and especially mothers aren't needed at ETF BU. Some even believe they could be abused. In their opinion, such policies should be implemented at higher societal levels.

## Advanced Career personal emerged proposals

There are large individual differences among AC interviewees in terms of their views on the issue of institutional policies for ensuring gender equality. Two out of three male interviewees believe that mothers and fathers do not face different barriers during their careers and that maternity leave does not significantly affect women's careers. They believe that all organizational problems can be traced back to individual traits of different employees. Accordingly, they do not see how any institutional policies could improve the current position of employees. Others oppose their view on gender differential career barriers, but differ in their optimism regarding possible measures. Two interviewees, one man and one woman, proposed a gender affirmative measure that would facilitate advancement to higher titles for younger women and women with children. One female interviewee claimed she does not believe any institutional practice could solve this problem and fears that such practices could even provoke backlash. In her opinion, women in academia should be patient, endurant and fight misperceptions and discrimination with hard work and excellence.

### 2.7 Munster Technological University, Ireland (MTU)

### 2.7.1 Desk work, fieldwork and sample's characteristics

Desk analysis began with a brief overview of previous research findings to gain a broader understanding of early-career (EC) and advanced-career (AC) researchers and their development within the academic milieu. Research carried out within the organisation pertaining to this topic was also explored; to determine if research like this was carried out prior. The researcher did not find any comparable research and no shared repository of knowledge on this topic exists within MTU. Prior to conducting the fieldwork, conversations around the avenues and means to reach the target sample were determined with heads of departments within the organisation. Three key informants involved in the interviews agreed to contact researchers within their own departments via email and encourage them to participate in the interviews. Interview outlines for early and advanced-career researchers were reviewed and altered to suit the organisation and the researchers being interviewed. Following this, a pilot interview with the amendments was conducted online via Microsoft Teams with a female early-career researcher within the research group of the interviewer. The pilot interview resulted in further amendments being made to the interview outlines, such as the number of questions being shortened, as interviewees did not have the time to undertake an interview averaging an hour and a half to two hours.

Researchers were contacted by the interviewer with the assistance from the three key informants. All three key informants had direct access to researchers from various research fields and ethical backgrounds. While researchers of both genders were encouraged, it was difficult to access male researchers from both early and advanced career bracket. Most males did not respond to the various research invites. Those that did respond stated their schedules were too demanding at the time. Nine interviews with researchers were conducted. Of the nine, six were female EC researchers all of which were research fellows within STEM and one male EC who was also a research fellow within STEM. Most of the EC researchers were between 27 and 35 years of age, their positions were mainly managerial and oversee the development of various research projects. Most of the EC researchers were married or in a relationship, however, only two researchers have dependent children. Two researchers of the nine were AC and within STEM. Both AC researchers engaged with research but did not have any teaching responsibilities. One of the AC researchers, was divorced with three dependent children, whilst the other AC researcher was single and had recently moved back home to Ireland. For further information regarding the socio-demographic characteristics of the sample, please see Table 2.1.

Table 2.1 MTU: Socio-demographic characteristics of the EC and AC interviewees

| Pseudonyms | Gender | Ag <br> e | Marital <br> status | Children | Current Job <br> and Position | Partner <br> Employment <br> Status | Housing <br> situation |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ciara (EC) | Female | 27 | Single | 0 | Principal <br> Investigator | N/S | Renting |
| Laura (EC) | Female | 29 | Single | 0 | Education <br> and Outreach <br> manager | N/S | Living <br> with <br> parents |
| Orla (EC) | Female | 33 | Married | 1 | Research <br> Project <br> Manager | Employed | Renting |
| Saoirse (EC) | Female | 29 | Cohabitin <br> g | 0 | Researcher | Employed | Renting |
| Róisín (EC) | Female | 32 | Cohabitin <br> g | 0 | Innovation <br> Support | Employed | Renting |


$\left.$| Meabh (EC) | Female | 30 | Cohabitin <br> g | 0 | Officer <br> Bioeconomy <br> Project | N/S | Renting |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Gary (EC) | Male | 36 | Married | 1 | Manager | Principal <br> investigator | Employed | | Own |
| :--- |
| property | \right\rvert\,

Table 1.1 Socio Demographic Characteristics - EC and AC Researchers

### 2.7.2 Recruitment and career progress

## Early Career recruitment and career progress

Most of the EC researchers had research experience of some form prior to their current employment. While many of the researchers entered this organization directly after acquiring their academic qualifications, namely their PhD, the researchers had experience with national and international research projects while they carried out their postgraduate degree. Owing to this, many of the researchers felt they had the necessary skills required for their current position and believed this was a compelling factor in their hiring. All the researchers, apart from one, Laura, 29, believed they were suitably qualified for the position and that they could progress their career further with the skills they're currently acquiring. The researchers did not have a previous relationship or contact within the organization when they applied for the position. Each researcher applied for the job online after seeing it advertised on various employment websites.

The researchers' workload varies from week to week; however, it is for the most part time-consuming and intense with various short-term deadlines attached to various projects. The researchers interviewed, were managing many research projects at the one time, with few carrying out fieldwork themselves. As stated, many of these research projects are short-term, lasting between six months to a year. This can be difficult for researchers as they must continuously source other research projects to keep them in employment. This job insecurity was voiced by most of the researchers as they felt the uncertainty affected their every-day life and the quality of the work, particularly towards the end of a research contract:
> "Our research contracts are all short-term contracts amm so it's hard to balance both [current research project and applying for new research funding]. It's so hard because you want to deliver the project the best you can, the one you're working on now but then if you're spending too much time on trying to get your next contract sorted if you're applying for research funding that won't work out very well either so it's hard" (Roisin, EC)

"I didn't understand just how difficult it is for researchers to attain a permanent position. I didn't realise that most research contracts are only a year, and you have to go and find something else to keep you in a job. People keep telling me I'm lucky that I have a three-year contract, so like ya I am a bit worried about what the future could hold (Saoirse, EC)

[^16]When discussing the factors and merits for promotion, all researchers stated that promotions do not exist in MTU as it is in the public sector. Research positions are open to the public and candidates regardless of whether they're internal or external must go through an open and objective process. While researchers did not comment on the evaluation processes, Ciara did express some dismay regarding the absence of promotions as despite winning many research contracts she will never be offered a promotion and must apply for a position like everyone else if one were to come available in her department:

> I've won a lot more than people I know apart from [name of leaders in research group] within the group but there's definitely not going to be any promotion for myself" (Ciara, EC)
> "There is no promotion in our line of work, everything is like I say is public sector managed so if any role or position becomes available its open to the public so you have to go through the system so lets say there was a position open above my current role and I was keen to go for that I'd have to compete with an open application[...] of course on paper I'd have some advantage in that specific but that gets weighted against the criteria which is objective as possible" (Gary, EC)

Researchers did discuss certain factors and skills which are required for future recruitment. There was a consensus among the researchers that certain factors are required if you wish to progress and develop your career in research; namely having experience in winning research funding/contracts. Researchers suggested that within their departments there is great emphasis on winning calls and creating employment for yourself and others. This is highly valued by those in leadership roles. Additionally, researchers commented on the need to have strong leadership and communication skills as researchers are expected to work independently. EC researchers also suggested that co-operation is an imperative factor within the organization, one which is valued and evaluated during job performance. Researchers were of the opinion that these factors applied to both men and women, they did not segregate men from women when discussing these factors:
> "it's always about publications [laughs] but amm I certainly think bringing in funding is certainly a top priority alright for the research group but also for your own progression. Creating a job for yourself then so certainly bringing in your own funding for a research project. There is also the need to go above and beyond and showing your capabilities" (Meabh, EC)

"The more funding you attract the better. All university's want to see you winning calls and brining money into the place. I presume it's the same here. [...] Publishing is another desirable factor, the more papers you have the more you advance in our career" (Saoirse, EC)
"Getting more projects and having publications I think they get you noticed irrespective of whether you're a man or a woman. Our area isn't male dominated its quite equal" (Orla, EC)
> "Its that concept of winning funding and starting your own area and research group and it's a lot of work for sure and I don't think. Like for myself like I know unless I want to become extremely busy I'm just going to slowly move up the salary scale like even with the small amounts of funding that I've won" (Ciara, EC)
> "You need to keep pushing and need to try and move from where you're amm because in your previous role it can always be considered more comfortable that
you could stay there for longer whereas if you move your future is more uncertain but you need that for your CV and you want that yourself as well but ya there is no promotion, it's not really a thing (Roisin, EC)

## Advanced Career recruitment and career progression

Both AC researchers had vast experience prior to the attainment of their current role. Both AC researchers, Niamh and Emer had previous experience in the private sector, working with Multinational Corporations for some time before commencing their role at MTU. Both researchers' highest level of qualification is a master's degree. Both Niamh, 46, and Emer, 34, discussed how their experience in various fields and skills gained from aspects from their previous roles was undoubtedly a motivating factor behind their hiring. Both researchers are in their current position for less than a year and therefore were unable to comment on progressing to the next level in their career. However, both women did discuss the opportunity of adding teaching/lecturing activities to their current role, something which they feel is possible due to their private sector experience.

Emer and Niamh applied for the position after seeing it advertised online and went through an objective recruitment process. While Niamh was working in the organization prior to this, she believed that it did not have a bearing on her being awarded the position as she did not have a prior working relationship with the head of the department at the time.

While Emer and Niamh are regarded as experienced researchers, both expressed their concern regarding the uncertainty of short-term contracts for researchers. Both researchers do not have a permanent contract and therefore do not have any job security at present. For them to progress, they must ensure that research projects are available for them to manage:

> "short-contracts are a worry like if you're involved in a particular project for a short contract, I mean these are not full-time jobs you know they're 18 months or whatever you're not going to use your parental leave during that time because you need to be seen to be 100\% fully committed so you know you'll have a shot at the positions that will be coming up after" (Niamh, AC)
"Short-contracts are definitely an issue because you're always wondering where will I go to next, if hard for any researcher at the end of the day we are all looking for something stable (Emer, AC)"

When discussing the factors required for promotion, both Emer and Niamh stated that promotions for researchers do not exist in MTU. However, akin to the EC researchers, both women highlighted the importance of winning both national and international funding, being adaptable and publishing papers for anyone wishing to progress their career in research:
"There is definitely a pressure for continuous personal development so continuous upskilling etc. which is just part of the course also it's a lot about the relationships you build as well because its fine to be in one department but it's important to be working in different things, different departments and I think promotion is there for people who can demonstrate that" (Niamh, AC)
"Securing your own funding is so important, it shows initiative, it demonstrates to an employer that you're capable of sourcing your own employment and you can write in projects which is what theyre looking for in a researcher" (Emer, AC)

### 2.7.3 Work-life balance

## Early Career work life balance

EC researchers are currently adopting a hybrid approach, where half of their working week is spent in the office, and the other is spent working from home. This is a relatively new approach, which emerged during the Covid-19 pandemic. There was a disparity among the researchers. While the researchers enjoyed the comfort and flexibility of working from home, they also stressed the difficulty in communicating with others and being incapable of segregating work from home life. Researchers discussed the flexibility associated with working from home and how this has had a positive effect on their personal life; allowing them to spend more time with their children or doing outdoor activities as less time is spent commuting:
"one thing I've noticed is that sometimes you feel like you have to come in just to not support people but to be here incase they need something so it would be good to have a structure in place so that I could have 3 days in the office and 2 at home and people would know when I'd be around[...] I have a 2 hour commute so having the ability to work from home some of the days has been really beneficial its two hours I can keep working and get things done" (Roisin, EC)
"The pandemic has been mostly good and a little bit bad but mostly good because I could stay with my son at home and work at the same time(...) my job is desktop based, it wasn't lab based so as much the lockdown did not affect it and I could continue with work without any disruptions" (Orla, EC)
"working from home since March or whatever, its been good. We got wild animals, we got little ducks and now a cat and a dog as well. Its gotten a lot busier but its good and its helped because of covid I'm home and I can stay with them. I probably wouldn't, no I definitely wouldn't have done it if I wasn't home because I need to let the animals outside so it's nice" (Ciara, EC)
"I'm 2 or 3 days in the office or 2 or 3 days at home depending on the week so it's more a less half and half [...]it's great to have the option of working from home, it definitely beneficial especially for all my other responsibilities like just for an example my son's childminder is much closer to where I live at home versus the campus in Tralee I can pick me up and drop him off much easier I don't have to be rushing from Tralee to try and work through traffic to get to him on time" (Gary, EC)

On the other hand, the boundary between work and home life has blurred and therefore researchers also find it difficult to switch off and make time for their personal life. Having said that, the majority of the EC researchers try to prioritize their personal life and ensure they finish by 5.30pm. The researchers understand the concept of wellbeing and having a good work life balance and they're undoubtedly conscious of that. However, ensuring researchers have a good work life balance is not always possible due to the large workloads emerging from the various research projects which the researchers must engage with. Researchers did state, however, that their line managers were adaptable and cooperative and allowed them to work hours which suited them, providing that deliverables of the research project are met:

[^17]whenever we need something from each other so it's different and everything is by email and I speak to him a lot less which isn't great" (Ciara, EC)
"Covid has greatly reduced my interaction with my colleagues so like on zoom even if you know the person there is always that certain level of formality on screen that you wouldn't have in person and I've only been in the role a year so I haven't had that much contact time as I would have fully in the office so that has been slower to develop then" (Meabh EC)
"I'm at home and most people would probably agree to this that it's just blurred lines between your home life and your work life because you're in the same place.

Some days my son is actually here and my wife is here and its obviously a distraction and its difficult for them as well because they're limited in where they can go in the house. That blurred line between home life and work life is challenging as well" (Gary, EC)

## Advanced Career work life balance

The workloads of both Niamh and Emer are intense. Due to their senior roles, there is more responsibility, therefore, more work involved. This requires them to work most evenings and weekends to ensure the various projects are running smoothly. Niamh discussed her poor work-life balance, despite being a mother of three children she stated that most of her days and weekends are spent working. Due to remote working she is unable to switch off and works until 11 pm most evenings:

> "I would find myself thinking about work all the time amm I would often find myself putting hours in the evenings and weekends for sure so definitely it preoccupies my mind on a continual basis I do find it difficult to switch off and that
> is something that happened during Covid-19 and I'm not sure if its ever going to go away" (Niamh, AC)

While Niamh hopes for a better work life balance, she feels she is required to work these longer hours to ensure she progresses in her career and is provided with a more permanent contract:
"as a female who is trying to build up your career and being involved in the all the things that you feel you should be involved in and trying to build relationships and trying to put yourself out there and do a really good job but it is a little tricky when you've got family responsibilities[...] I want to get a permanent contract so I know I have to keep working hard at the minute" (Niamh, AC)

Emer (childless) on the other hand, ensures her personal life is prioritized despite the large workloads she may have, she makes time for her personal interests such as yoga and meditation:
"I try to make time for me. I do my yoga and meditation and try to be mindful of separating work from home. I'm never in work past 6pm" (Emer, AC)

### 2.7.4 Research

## Early Career research (and teaching)

EC researchers interviewed are predominantly involved in managing various research projects with very few carrying out physical fieldwork themselves. A lot of the researchers' time is spent on administrative tasks and ensuring the various projects are progressing. Researchers commented on the importance of dissemination and communication activities, particular with industry partners who wish to be informed quite regularly on the development of each project. While many of the researchers
enjoy this, it is time consuming and activities pertaining to public events consume their day, which leaves very little time for other research and administrative tasks:
"I do some research but a lot of it these days is spent on administrative tasks, project managing and speaking to companies. Compared to my last role, I am doing less research and I guess im more managing others which is good but I do miss the research side of it at times, being in the lab and stuff" (Roisin, EC)
"when you're in project management and not research sometimes what happens is you just end up networking and then you're managing projects and sometimes
you may not get enough time to read up so sometimes it really oscillates and sometimes you have shut down everything and read so you'll be able to like write papers, especially peer-reviewed papers. It comes like that but I think that's the thing with desktop work[..]when you're working on an EU project, dissemination is a working package on its own actually so must of the time or any event that we make we're always on LinkedIn and Eventbrite registration and advertising it with
the local enterprise offices and a few of the events were advertised on the radio[...\}we had an event in July for women in entrepreneurship and planning for it pretty much started in March" (OrIa, EC)
"European projects always have a lot of project dissemination and now there is [name of a specific science week] so I'm organizing an event for that, there is science week after it so I'm giving a talk to kids for that and there's a food waste forum then so yes there is a lot...they're very time-consuming" (Ciara, EC)
"I am fully on two EU projects but a lot of time is spent on organizational work but one project was I doing was nearly 100\% pure research but now the current project it's a lot of organizing and knowledge transfer and doing events" (Meabh, EC)

When discussing challenges pertaining to research, many of them commented on not being taken serious by national and international partners. As the researchers are in their late twenties to early thirties those more senior fail to take their work and role serious, leaving them with tedious and administrative activities which they consider to be below their paygrade:
"Because you're young in a research project like this, a lot of work gets thrown at you cause people think there is somebody else doing the project management and not me. Amm not from within our group, like [name of Ciara's line manager] knows what I'm doing but externally they [internal partners] think I can take a load on because all I'm doing is the research which is not the case so that can be a bit tricky because I'm foreign as well and young and my network is very small so it can be a bit difficult" (Ciara, EC)
" I look younger than what I am as well so perhaps sometimes I wouldn't be taken seriously then as some of my senior colleagues or when you're requesting things from people amm they would still go to someone else for a follow-up so like those little types of subtle things" (Meabh, EC)

Each of the researchers stated that they wished to remain in research, however, the uncertainty attached to research, and the short-term contracts is of great concern to them. Owing to this, researchers do not feel secure with their current research careers in MTU. Many of the researchers commented on an inequality between research and lecturing staff, stating that they do not receive
equal treatment to that received by those lecturing in the university. Researchers feel that lecturing staff are awarded with many benefits and advantages such as longer contracts, pensions, and greater flexibility in their roles, despite many of them not having a PhD in their subject:

> "I feel academics are not looked after more, but they have more benefits than we do and I'm not sure why it should be that way, it should be equal for researchers and lecturers" (Roisin, EC)
> "Lecturers seem to have a lot more advantages in terms of flexibility and pay and I think its only right that that filters down to researchers. We have PhDs, we work hard and I can't seem to understand how someone without one can be in a better position within academia" (Gary, EC)

In relation to teaching, it can be difficult for researchers to attain teaching hours as research and lecturing are traditionally not intertwined in IOTs. This was a key point raised by many of the EC researchers who would like to enter academia, however, stated it was almost impossible to do so. In other universities in Ireland, lecturing and research go hand in hand, however, in MTU these are currently kept separate due to the structure of the IOT sector, however this is changing and researchers are engaging in teaching activities:

> One of the things that and not to go into too much detail but there seems to be a separation between the academic side of the department and the research side whereas classically in an University they'd go hand in hand and they're interlinked so you'd have researchers and PIs amm lecturing cause obviously they're lecturing in what they're researching in. Here they seem to be kept separate for a long time" (Gary, EC)
> "I'd like to teach. I'd like to get the opportunity to show and teach others what I know but from speaking to other researchers this is something which isn't advocated within MTU" (Saoirse, EC)

Researchers would like to have the opportunity to teach in their specialized subjects, whilst also carrying out research. A few of the EC researchers have paid teaching and mentoring opportunities during the summer months, which is separate to their current role. This is something in which they enjoy and something which they wish was encouraged.

## Advanced Career research and teaching

Both AC researchers are involved in the management of various national and international research projects. Niamh and Emer do not carry out fieldwork, however, they're in charge of ensuring that the deliverables of each project are met. There is a lot of responsibilities attached to their roles, ensuring that partners and companies are satisfied with the work that is being carried out, whilst being in constant communication with partners and the public in the dissemination of the project. These roles require both Niamh and Emer to work longer hours and at the weekend, if necessary, to fulfil project goals. Both AC researchers do not teach or supervise at present, however, they plan to do so in the future as they're currently designing modules for both undergraduate and postgraduate students:
"were bringing out a new programme and its being created at the moment so I'm going to be involved in that and certainly I will be delivering at that point. Now I have done teaching prior to this in my previous role because we were running enterprises programmes for students [...]I have teaching experience so I know it's hard but right now I'm not teaching or supervising" (Niamh, AC)
"I'm working on something at the moment so I hope to bring that to fruition in the next few months. I lecture during the summer months but I would like to make it more of a regular thing" (Emer, AC)

AC researchers did not discuss any difficulties in accessing lecturing roles or teaching hours. However, a similar issue to the EC researchers around short-term contracts and job insecurity were raised by Niamh. Niamh also voiced her concern about her future in research when contracts are so short:
"short-contracts are a worry like if you're involved in a particular project for a short contract, I mean these are not full-time jobs you know they're 18 months or whatever you're not going to use your parental leave during that time because you need to be seen to be 100\% fully committed so you know you'll have a shot at the positions that will be coming up after" (Niamh, AC)

### 2.7.5 Emerged proposal from interviewees point of view

## Early Career personal emerged proposals

EC researchers wish to see the introduction of dedicated supports particularly around funding applications. Having a dedicated contact point or online area where researchers wishing to apply for national and international funding calls can access key information, particularly in relation to financial matters. EC researchers on that note, suggested the introduction of a mentor programme for those starting in the organization or beginning a new role who may need support and guidance in settling in. The mentor could potentially assist with advising researchers of research calls and being a key contact point if they were experiencing difficulties in their role and felt they were unable to reach out to their line manager.

As EC researchers dedicate much of their time to dissemination activities, the introduction of policies or measures around communication supports would be a welcomed initiative within MTU. Having someone to assist with dissemination activities and poster design would ease the workload for researchers who feel this can be sometimes beyond their remit.

Researchers stressed that MTU needs to rethink the prominence of short-term research contracts and introduce realistic research contracts that will provide researchers with job security. Researchers suggested the need to detain from advocating one-year research contracts which includes a 11-month probation period. Researchers are unable to obtain mortgages from banks due to the uncertainty attached to their contracts. Researchers also called revision of the pay scale. Researchers feel undervalued and suggested that more supports around pay is required. Several researchers called for researchers to be on MTU's pension scheme as at present they're not given this option:

> "My contract is just for a year and in the contract it's a 11 month's probation and then your contract is pretty much over by your probation time being finished. So I think those things are off-putting and its very unstable and that's not really a male/female divide I think it's the same thing for everyone in science. Trying to start out that the roles are either so short or the roles aren't as well-paid as you'd expect for people's experience" (Laura, EC)
"I would like to continue in the area where my role is now. I think a balance between working remotely and working in the office just to have that structure in place and just to be in a position where I can apply for a mortgage and just have some stability and with the short contracts that is quite difficult and change the pay that would be great" (Roisin, EC)

The Introduction of a policy around research staff acquiring teaching hours is something in which researchers wish to be introduced to allow for lecturing and research staff to be regarded as equal. While the proposals were not specific gender equality issues, researchers did state this was not a gender issue, but rather issues in which all researchers experience, regardless of gender or their family situation

## Advanced Career personal emerged proposals

Emer and Niamh did not discuss their desired policies and supports in detail. Niamh and Emer, however, did suggest that short-term research contracts need to be re-evaluated as they leave researchers with a lot of uncertainty and doubt. On this note, Niamh also suggested for measures around parental leave for those on short-term research contracts to be specifically addressed as Niamh would be concerned of the negative impact that taking such leave would have on her future career prospects in MTU.

## 6 Suggested policies for gender equality plan

The suggestion of measures and policies put forward by both the EC and AC researchers would be regarded as sustainable policies, however, very few have a gender-specific focus. It became apparent that female researchers do not feel at a disadvantage due to their gender, but rather as a result of their career choice as a researcher. Researchers are experiencing issues with job security, and which is unrelated to their gender. The proposals that emerged throughout the interviews are ones which can be included in the GEP going forward. Creating an inclusive and secure environment for researchers should be a key priority within the GEP. The introduction of a mentoring programme could be one measure to ensure researchers are supported and provided with the necessary tools to develop their career further. Undoubtedly measures around parental leave will be required to be more specific and encouraged by research staff to utilize. The introduction of a website with this information could be put forward as a measure. Providing researchers and teaching staff with similar benefits and conditions is an element which requires further attention and one which will need to be prioritized. Policy on flexibility for parents and those with caring duties should be developed further as very little information is currently available on this. Policy around research contracts and pensions is required. These are all facets which will require further investigation before we can determine what can and should be included in the GEP.

### 2.8 CTAG - Automotive Technology Centre of Galicia, Spain (CTAG)

### 2.8.1 Desk work, fieldwork and sample's characteristics

CTAG is a private non-profit research center with nearly 900 proffesionals, most of them Engineers and PhDs (STEM profiles). CTAG's workforce is mainly made up of personnel between the ages of 25 and 34. CTAG is divided into 8 divisions. Each division is headed by a director. Below the director are the heads of departments as intermediate commanders and below them are the area managers.

Some of the existing university figures such as "early career" or "advance career" do not exist in CTAG, so we have considered "junior technicians" (with less than 4 years of experience) and "senior technicians" (with more than 4 years of experience).

Question 7 of the survey concerning the supervision of doctoral theses and teaching activities has been asked without further explanation, since these activities are not related to CTAG's own activities.

Bearing in mind this diversity of profiles that shape CTAG, the sample was meant to be as representative as possible following the criteria shown on the table below ( 2 people from each profile were interviewed, 16 in total)

| 1 | Senior Technician (AC) | With Children | Female | 2 people were interviewed |
| :---: | :---: | :---: | :---: | :--- |
| 2 | Senior Technician (AC) | With Children | Male | 2 people were interviewed |
| 3 | Junior Technician (EC) | With Children | Female | 2 people were interviewed |
| 4 | Junior Technician (EC) | With Children | Male | 2 people were interviewed |
| 5 | Senior Technician (AC) | No Children | Female | 2 people were interviewed |
| 6 | Senior Technician (AC) | No Children | Male | 2 people were interviewed |
| 7 | Junior Technician (EC) | No Children | Female | 2 people were interviewed |
| 8 | Junior Technician (EC) | No Children | Male | 2 people were interviewed |

Initially, we identified a total of 24 potential participants for the interviews who best matched the sampling criteria. Although only 16 interviews were to be conducted, we decided to select a list of 24 suggested candidates, in case any of the researchers invited to interview did not wish to do so, as the interviews were voluntary. Finding EC Researchers with children was the hardest part as there are not many.

Of all 16 selected candidates just one junior technician (female, no children) refused to accept the participation because she considered too short the time she has been working for CTAG to have an overall vision. The rest were duly informed about the Mindthegep's main goals, personal data protection and interviews structure and length.

Once availability was agreed, an invitation via email was sent to the potential interviewee including a MINDtheGEPs flyer and the data protection document. All interviews were held virtually through TEAMS so as to avoid physical contact given the Covid19 pandemic, assure more time flexibility and having the possibility to save an audio record of the conversation which will be lately used to reproduce the interviews in written. The recording of this audio has the consent of the interviewee and is stored in a folder to which only the interviewers have access.

All interviews followed the same pattern, starting with a brief presentation (in PPT format conducted always by the same person) of the MINDtheGEPs project: framework (duration, call), coordinator and partners, general and specific goals of the project and of the interwiew. Interviewees were encouraged to ask any questions or curiosities and then the interviewers went ahead with the interviews

The interviewers involved were two, handling 8 interviews each.
At the end of the interview we invited the participants to share their feelings or any comment regarding the interview outline.

The interviews were intense and with a time duration average of approximately one hour.
The main socio-demografic characteristics of the sample are reported in the tables below:
Table 2.1 CTAG: Socio-demographic characteristics of the EC and AC interviewees
a) Early Career Researchers (junior technicians)

| RESEARCHER |  |  | NICKNAME | AGE | STATUS | CHILDREN | HOUSING | CONTRACT | JOB | EDUCATION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | With children | Female | FERNANDA | 32 | married | 1 | owner | temporary | full time | Engineer |
|  |  | Male | ANTONIO | 36 | couple | 1 | rented | permanent | full time | Engineer |
|  |  | Female | FRIDA | 29 | married | 3 | owner | permanent | full time | Engineer |
|  |  | Male | PLATON | 34 | married | 1 | owner | permanent | part time* | Engineer |
|  | No children | Female | HIPATIA | 25 | couple | 0 | rented | temporary | full time | Engineer |
|  |  | Male | HOMERO | 27 | single | 0 | with family | temporary | full time | Engineer |
|  |  | Female | ANTONIA | 35 | single | 0 | with family | temporary | full time | Engineer |
|  |  | Male | KANT | 28 | couple | 0 | rented | temporary | full time | Engineer |

* reduction for caring responsabilities

As far as gender is concerned, the number of female and male interviewees are the same.
No Phds have been found either male or female concerning Early Career Researchers. All the profiles are STEM as they represent $70 \%$ of the employees in CTAG.
b) Advanced Career Researchers (senior technicians)

| RESEARCHER |  |  | NICKNAME | AGE | STATUS | CHILD | HOUSING | CONTRACT | JOB | EDUCATION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AC | With children | Female | OLIVIA | 41 | married | 2 | rented | permanent | full time | PhD |
|  |  | Male | MANUEL | 39 | married | 2 | owner | permanent | full time | PhD |
|  |  | Female | OLIMPIA | 43 | married | 2 | owner | permanent | part time* | PhD |
|  |  | Male | JOSE | 40 | married | 2 | owner | permanent | full time | PhD |
|  | No children | Female | MANUELA | 41 | married | 0 | owner | permanent | full time | PhD |
|  |  | Male | FERNANDO | 40 | single | 0 | rented | permanent | full time | PhD |
|  |  | Female | AZUCENA | 35 | couple | 0 | rented | permanent | full time | Engineer |
|  |  | Male | MARTIN | 32 | married | 0 | owner | permanent | full time | Engineer |

*reduction for caring responsabilities
As far as gender is concerned, the number of female and male interviewees are the same.
75\% of the Advanced Career Researchers interviewed were PhD's sharing STEM roots.

### 3.8.2 Recruitment and career progress

## Early Career recruitment and career progress

## Past career and Current Job

Most of the EC researchers interviewed had a previous working experience before joining CTAG by means of an internship or a contract. They did not have problems to identify the turning points in their careers which in many cases they summed up as three: graduation, first job experience and their start at CTAG. They also happened to share a similiarity in the way their careers evolved with regard to the previous job experience which was normally away from their mother town, region or even country.

## Manager's role

The importance of the manager's role is a constant in almost all answers especially concerning the first stages in the interviewee's adaptation and integration to the team. They all pointed out the importance of this role but the way in which it has been played has its own nuances depending on the case.

For some of the interviewees, the mentor was also the manager and guided them from the very beginning helping them to understand the goals and structure of the organisation.
> "If I did not have the support from my coach my professional progress and integration within the company would have taken twice as much [...]"

(Hipatia_EC_25)
"What I do appreciate in my managers is their flexibility, that is, to be able to put in my shoes whenever I had a problem giving me the time I need [...]"
(Frida_EC_29)
For others, the mentor was a colleague or perhaps several team members who assumed this guiding role.

On the other hand there are other cases in which a certain degree of autonomy is granted from the very first day, which could be considered as a way of testing the interviewee's initiative but when there is too much scope people may feel lost, specially in a context such as the current one with a new working format.

## Organisational values. Excellence, Leadership and Promotion

Most of the corporate values (teamwork, innovation, commitment) are somehow identified by the interviewees not as something that they have learned because they have seen them published but as something they have inferred from daily activities and life at CTAG.

In this sense, teamwork represents CTAG's landmark. Collaboration and communication are key factors for all teams and this is reflected in the interviewees' opinions. All team members are available and ready to help. Of course, the recently new virtual format of work has slightly weakened social abilities and communication has suffered. There are no "virtual spaces for socialising". Meetings are held to go straight to the point with no time for a social interaction. Newcomers who have embraced remote work from the beginning might have suffered this "isolation".
> "When you are holding a virtual meeting it's like you are there only for the purpose of the meeting and there is no time for chatting with your colleagues [...]"
> (Kant_EC_28)
> "Before the outbreak of the Covid, whenever we had a break, it was the opportunity to talk to each other, share opinions and experiences, getting to know everyone better. The pandemic situation brought along work from home and although, at the beginning, we dedicated some time to talk about things off work, this time was gradually shortening till the point we no longer know anything about each other [...]"(Frida_EC_29)

Other values, not identified as, such have also emerged from the interviews. Learnability, holistic vision, perseverance.

Many of the interviewees agree that excellence implies experience, profound knowledge on a particular field and generosity understood as the capacity of being available and ready to share knowledge.

Leadership, on the other hand and according to the majority will have implicit, empathy, understanding and good managerial and communication skills.

In the case of promotion, not all EC researchers have clear what the main factors will be to achieve it. They have expressed their opinions but without complete certainty. For them, promotion will be achieved on the basis of sound experience in a field but also polyvalence and good communication skills.

None of the above mentioned criteria seemed to be influenced by gender. Nevertheless, there are some testimonies which believe that conciliation between family and professional life may influence promotion.
"I think that in CTAG I don't have the data, a different expectation for men or women, but I did. For example, a woman who is assertive or more energetic, sometimes generates a rejection, if it were a male profile it is more accepted. I have friends who present things in their work and they do not consider it, and if a man does it, it is considered. " (Antonia_EC_35))
"There is still this principle among some couples I know that if somebody has to put before conciliation it will be the woman [...]" (Kant_EC_28)
"At CTAG the expectations concerning these requirements are not based on gender as a dividing feature. This is more a cultural issue that has somehow been installed in our lives, for instance, when meetings are scheduled at an impossible time for parents to meet and it is usually the woman who assumes this burden."
(Frida_EC_29)

## Advanced Career recruitment and career progress

## Past career and Current Job

Almost all profiles interviewed had at least one or two previous work experience before entering CTAG and, in some cases, abroad. Regarding PhDS, there are certain that had previous experience but others just joined CTAG after a time of research at the University and looking for a certain stability.

## Organisational values. Excellence, Leadership and Promotion

Teamwork is again the most representative value among all interviewees along with innovation, excellence and commitment. Collaboration, communication and availability are key factors and directly related to teamwork.

AC Researchers do not feel that values have changed a great deal through the years. However, they do agree that the organisation has witnessed a considerable increase in terms of staff so the familiarity and closeness perceived at the beginning has been relegated to a team level, whereas communication among the organisation remains friendly.

The pandemic situation has also affected communication, since most of the work is carried out remotely and meetings do not offer the possibility to exchange points of view or feelings.

> "[...] (talking about working from home) you miss people a lot, to have personal contact with your colleagues ... and it looks like when you are holding a virtual meeting you are not entitled to start a conversation other than work [...]" (Olivia_AC_41)

Excellence is based on knowledge in a specific field, high capacities and analytic thinking.
Leadership will also include good communication skills, empathy and solution-oriented thinking.
Promotion will be achieved after years of experience in a particular field, becoming a real expert but the type of project the person will be involved its visibility and scope will also contribute to promotion.

Once again, promotion will be related to the impact and visibility of the project you are working in regardless of gender. However, she senses that conciliation in some cases, especially in very demanding projects may hinder promotion. Having a reduction in one's working timetable may be considered by other colleagues as lack of interest. This does not imply gender, but women are usually the ones who
assume the caring responsibilities and modify their working timetables.
(Olivia_AC_41)
Gender is not considered as a factor to influence any of the above-mentioned parameters but most interviewees have the impression that conciliation might represent an obstacle for promotion.

> "Woman leadership in a company such as CTAG were there are far more men than $$
\text { women is, at its essence, difficult" (Olimpia_AC_43) }
$$

### 2.8.3 Work-life balance

## Early Career work life balance

All interviewees agreed that flexibility as far as the working timetable is concerned is something they appreciate. During the pandemic situation this flexibility has been widened allowing them to conciliate both professional and private life. Having the chance of adapting their working timetable to a time lapse between six in the morning and ten in the evening and combining it with the possibility of working from home have provided them with the necessary tools for conciliation. In addition to this, timetable reduction may also be considered as another tool for concialiation specially in the case of care responsibilities.
> "Flexibility makes it easier not to have to resort to a reduction in working hours that influences the reduction of salary and I would not like to have to reduce working hours at the level of personal development, and being forced to reduce my work dedication would be something that I would not like and flexible hours is the solution to avoid having to do it. " (Fernanda_EC_32)

"(Talking about measures towards conciliation) the Centre offers already a flexible timetable and this flexibility is also visible when asking for days off or holidays
[...]" (Homero_EC_27)

Remote work represents an advantage that should prevail and be adapted to different tasks and circumstances. Most of EC Researchers favour a hybrid model combining working from home and on site according to project needs.

All EC Researchers also hope these measures that have been implemented during the pandemic situation and which have proved to be effective and welcomed will somehow be preserved in the long term.

## Advanced Career work life balance

Answers from AC researchers are similar to EC researchers. Preservation of the current time flexibility and also a hybrid working format which will combine work from home and on site.

However, there are cases in which more human resources are needed in order to make all conciliation measuares really efective as Jose_AC_40 reported.
> "My day is normally long, at least 45-50h a week on average, it is very long. The compensation is the increase in available human resources, I value time a lot since I have children and it is not my desire to work more hours than necessary and that
> for him is a symptom that the resources are not adequate ". (Jose_AC_40)

In some cases $A C$ researchers who were on a time reduction basis could come back to full time thanks to this flexibility.

In terms of conciliation obstacles are the same either for men or women. Although caring responsibilities tend to weight more on the women side probably due to cultural interferences in education. The situation has improved but efforts on education from early stages should be placed.

According to Olimpia_AC_43 there are more obstacles to overcome, as far as work is concerned, for a mother than a father. This is a cultural feature that was somehow settled in our lives. Women are inclined to assume all caring responsibilities related to family and the house.

### 2.8.4 Research

## Early Career research

Research becomes an intrinsic feature in almost EC researchers' daily activities. The proportion of time dedicated to research will vary depending on the type of project. Also, the project's development stage will determine the amount of time assigned to research. Early stages required more time and dedication to investigation activities whereas the final part will be concentrating on development.

Research projects may be limited to the private sector-most of the time- or have a public repercusion at regional, national and European level. There are also other research projects that are developed for internal use and to broaden capacities.

Time dedicated to administrative tasks in general is very brief and will consist of internal procedures and reports on projects' development. In any case, it is not considered a burden.

None of the people interviewed have done any teaching.

## Advanced Career research

The pattern shown for EC Researchers is also followed by AC Researchers with the peculiarity that in most cases assessing, reporting and in some way managing are part of their duties.

### 2.8.5 Emerged proposal from interviewees point of view

## Early Career personal emerged proposals

All interviewees, either women or men, have agreed on the fact of keeping the possibility of working from home but at the same time deploying tools to monitor time availability to guarantee digital detox. Parallely, communication and social connection must be looked after by promoting team building activities or any other which will foster team communication.

To this point, Frida_EC_29 suggested to improve welfare at the Centre by adding more lactation rooms as just only one for the all the Centre is not enough.

## Advanced Career personal emerged proposals

Proposals from AC researcherls follow the line shown with EC researchers. Main goal, to maintain flexibility and a hybrid work format, concentrating efforts on communication among teams.

The already existing conciliation tools should be kept and guaranteed as they are, paying attention to particular cases.

Olimpia_AC_41 insists on the importance of listening to each particular case and try to understand that diversity needs to adapt patterns to specific circumstances, for example, when there is a child with specific health needs.

## 3. A comparative portrait: Insights for designing self-tailored GEP

### 3.1 Comparing interviews with key informants

The aim of T2.5 "Qualitative analysis: interviews with key informants" was to collect qualitative insights in the MINDtheGEPs implementing organisations based on key informants' point of view. A total of 63 qualitative semi-structured interviews with key informants have been conducted in 7 public and private RPOs in 5 countries: Fundación para la Promoción de la Investigación, Innovación y Desarrollo Tecnológico en la Industria de Automoción de Galicia in Spain, Italian National Research Council and University of Turin in Italy, Jagiellonian University and University of Gdańsk in Poland, University of Belgrade in Serbia, Munster Technological University in Ireland.

A participatory and horizontal process that regularly involved all implementing partner in dedicated meetings managed by UNITO, led to the adoption of a comparative qualitative research approach. As well explained in section 2.1, partners used shared tools and a common methodology for the conduction, monitoring and the analysis of the interviews, thus allowing a comparative analysis to which is devoted this section, that reflects the structure of the T2.5 report of each implementing partner in order to allow readers to easily find more detailed information per each RPO under chapter 3 "T2.5 Qualitative analysis: interview with key informants". The results, in terms of similiarities and differences, will be compared among the same target, following this order: key informants at departmental management, members of competition commissions in hiring procedures, and in the RPOs governance at central level, key-actors on sexual harassment/gender violence.

## Departmental management ${ }^{18}$

From the key informants qualitative analysis of the Italian partners, UNITO and CNR, it emerges that gender inequalities in scientific environments stem from the structure of gender in society: several interviewees stated that they are not so much the research centers or the universities themselves, but societies as a whole to be gender biased and the main responsibles for gender gap in research and Academia. Prevailing social norms related to gender roles and family formation, together with welfare regime and social policies (or the lack of) which support a gendered division of care within the family create different opportunities and constrains for male and female researchers. This is true also for the Serbian and the Irish interviewees (ETF, MTU), since they attributed the current disproportion to the gender stereotypes in STEM field's of study to the patriarchal society as a whole.

For the Italian partners UNITO and CNR, excellence emerged as the only criterion used for recruitment and career advancement, meaning for excellence the internationalization level of research and teaching (i.e. the ability to teach in international contexts and carry-on projects and research in transnational teams), the scientific productivity (meaning both the qualitative and quantitative aspects of publications and projects). STEM interviewees emphasized more the role of internationalization, while SSH more scientific productivity, both underlined that quantitative aspects of scientific productivity are prevailing. Neverthless, Italian interviewees acknowledged the existence of phenomenon as the leaky pipeline and the glass ceiling and they stated that the university and research center reform carried out by Law n. 240 (see "Gelmini Law" in table Introduction to the

[^18]implementing partner UNITO, 4), together with the national evaluation system too much based on quantitative criteria, did not contribute to contrast them. Also from both the Polish partners' (UG, UJ) key informants qualitative analysis and for the Serbian one (ETF) it is evident that even when interviewees acknowledge that gender unbalances at recruitment and career advancement levels persist, they stress the need to not change the selection criteria based on merit and excellence. Excellence for the Polish interviewees means not only scientific productivity and (to a less extent) international mobility, but also adherence to unwritten customs and norms of the institution, such silent but continuously inherited habits can also regard evaluation and recruitment processes, as instance it is a "social norm" that no one can become a professor immediately after receiving habilitation. Interesting, for the Spanish partner (CTAG) and the Irish one (MTU) excellence is not linked to internalization of research but only to proactivity, extra motivation and good communication skills.

According to Italian, Polish and Serbian interviewees, the burden of care and family's responsabilities plays a crucial role in penalizing women. While men are usually free from these duties and can dedicate themselves to their careers, women who want to pursue their career and have children need to juggle between professional and private life, making it harder for them to achieve excellence.

The criteria of scientific excellence themselves, in particular the quantitative ones, have been criticized as well as the dominant male-centred culture and the gender neutral organization of work environment, nevertheless not all interviewees linked the prevalance of quantitative criteria to the male-centred culture. The lack of effective gender friendly and work-life balance policies has been identified by all partners as one of the main obstacle for women's career advancement and one of the main reason of female drop-out in scientific environment.

## Members of competition commissions in hiring procedures ${ }^{19}$

All parterns (with the exception of CNR), have interviewed members of competition commissions in hiring and promotion procedures. Many interviewees, in particular in UNITO, are aware of the gender asymmetries in competition commissions and gender bias evaluation procedures, however a certain emphasis on the role of "excellence" as first criterion is still present in all RPOs. For UNITO interviewees in SSH field of study scientific producitity is considered the first criterion for excellence (the publication of a monagraphy being a basic step), while in STEM area excellence means international mobility, criterion that has been identified as an obstacle for women that often can not spend long period abroad for their family responsibilities. UNITO respondents proposed to consider teaching ability and relational skills as more important criteria to individuate the best candidate. For UG (Polish partner) interviewees for excellence also mean the ability to share and disseminate scientific results, because a research without an impact can not be considered an effective one.

Moreover, from UNITO and UJ reports, it emerges a shared critique to the importance reached by productivity, that is, quantitative indicators (number of publications, citations, number of patents and licences, the amount of funding) in evaluating researchers' performance and in the construction and evaluation of excellence. For almost all interviewees quantity ends up overcoming quality (in particular for those of SSH fields of study). Both in Italy and in Poland in fact, the research national evaluations systems put an (unjustified) enmphasis on the number of publications, on citations, on indexes, forcing researchers to "publish or perish". The same critique can be find in Serbian interviewees (ETF), however they interestingly gave two different explanations of the obstacles women face trying to meet excellence quantitative criteria. The Serbian female interviewee reckon that is difficult for female

[^19]researchers to fully accomplish to a male system being highly productive both on work and private lives, while the Serbian male interviewee believes that the dilemma between achieving scientific excellence and motherhood is a "zero-sum situation", where women have to decide between the two, because women who decide to become mothers are unlikely to achieve excellence. On the difficulty to join and perform at the best in a not gender neutral system the female Serbian key informant (STEM) agrees with a UNITO key informant (male, STEM) that criticized the current productivistic evaluation system since it reflects an "aggressive" approach to science, too much based on competition, having been created "by all men for men", while women tend to prefer a "relational" approach more based on cooperation. CTAG, the Spanish partner that is a private non-profit entity, is characterized by a more pro-active approach: instead of focusing on the critique of the scientic research evaluation systems, CTAG elaborates a different idea of excellence. Of course also in CTAG criteria as innovation, commitment, perseverance, adaptability are very well valued, however others interesting criteria play a pivotal role in hiring procedure, in particular: generosity, initiative by anticipating needs, autonomy and emotional intelligence.

When coming to gender as a factor of discrimination in hiring and in career advancement, in all RPOs, apart from ETF, interviewees reported that there are regulations in place already ensuring that gender will not work as a reason for not being selected. As instance, both UNITO and UJ interviewees reported that there are policies in place to sustain female careers avoinding the "zero-sum situation" mentioned by the Serbian male key informant where women have to decide between maternity and work. Being in place policy like the exclusion of the period of maternity leaves from the evaluation process, Italian and Polish key-informants stressed that the obstacles towards gender equality in science do not rely in the absence of regulations, but in the male-biased evaluation system. However, in all countries almost all interviewees stated gender can work as an indirect factor of negative discrimination, in particular in STEMM fields of study. MTU is an happy exception. From its report it is evident that neither gender or maternity are considered as factors of negative discrimination, rather gender is perceived as a positive one: in selection with one female and one male candidates with similar scores the female would always be selected since women are underrepresented in STEM (in Ireland it is possible to recruit staff favoring one gender or another).

## Governance central level ${ }^{20}$

For all partners, women appear to be less confident with top-management position and they are less numerically if compared with men when coming to Full Professors positions, as it emerges from the section of the T2.5 report devoted to the governance central level. Neverthless in some RPOs, such as CNR and MTU, top-management positions are now opening also to women.

In MTU, according to the interviewees, the change within society regarding women has ensured the recent appointment of a female president and this represents the change that is occurring also among academia. However, when coming at collegial bodies even in MTU becomes evident that women are underrepresented. Also for the CNR key informants the increasing in the number of women at governance level is not due to a formal policies, neither national or institutional, rather it is due to the broader and slow-pace process towards gender equality taking place in the scientific communities. It is also true that in the Italian national legal framework it is not possible to include gender as a selection criterion since it would be consider a discrimination, thus both UNITO and CNR can not recruit staff favoring one gender or another, while this is possibile in Ireland, where in fact the presence and the visibility of women in leadership positions is higher. From the report of the Polish partners UG and UJ it is also evident that there are no formal regulation in force which would balance the gender

[^20]composition of collegiate bodies. In Poland women are less numerically if compared with men both as members of the rector team that as deans, however interviewees have no the same opionions on how to tackle this issue: one declared to be sceptic towards positive actions such us favoring the underrepresentend gender in recruitment procedures or recurring to "gender quota" for the composition of the collegial bodies, another that it would be useful to introduce a regulation on hiring the minority gender in the faculty. As for the Polish RPOs, also in the Serbian one there are no quotas or any requirements regarding the gender composition of the dean's team, which was reflected in the exclusively male faculty management at the time of the interviewing process. Moreover, women are rarely elected to the position of vice-dean, thus some Serbian interviewees mentioned that they doubted that there is any chance for the ETF to have a female dean in the next 20 years. It is worthy to be noted that in ETF there is only a woman in a leadership position, appointed as Faculty Secretary for more than 30 years. Having a woman in such a position, among almost exclusively men, could be due to the stereotypical perception of women as generally inclined to administrative jobs, which was brought up several times by Serbian respondents.

## Key-actors on sexual harassment/gender violence ${ }^{21}$

The Code of conduct (646/2016) of the University of Turin at articles from 3 to 10 defines and condemns sexual harassment in agreements with the national legal framework, specifying that in the university the Confidential Counsellor appointed by CUG, is a super partes expert called on to prevent, manage and intervene in cases of harassment, mobbing and other forms of discrimination. UNITO has also in place an Anti-Violence Desk, created and carried out thanks to the funding from CRT/Piedmont Region/Ministry of Equal Opportunities granted following the presentation of a four-year project that will end in June 2022. However it is interesting to highlight that the key informant identified by UNITO on this issues was not aware of the regulation in place neither of the anti-violence desk, neverthless as a member of CUG she was supposed to know both. In fact the Guarantee Committee for Equal Opportunities, Employee Wellbeing and Non-discrimination at Work (CUG Comitato Unico di Garanzia), established in 2010 (Law 183/2010, article 21), is the body that in Italian RPOs is in charge of Positive Action Plans, among whose policies there are also measures against gender violence. As instance, in July 2020, the other Italian RPO, CNR approved the Code of Conduct against Harassment (Resolution No. 191/2020) upon proposal of the CUG. The CNR Code condemns harassment of a sexual nature in accordance with national laws, and sets out the route for reporting and the measures to be taken if an employee becomes a victim of such harassment. Specifically, the Trusted Adviser (Consigliera di Fiducia), a super-partes figure with expertise in gender harassment, is in charge of the procedure, while counselling points have been planned at local level. But not all its requirements and provisions are in place: the counseling desk and a trusted adviser are not yet established. The CNR Code envisaged the institutions of both provisions but the Director General did not make the necessary act to establish them.

Polish partners do not have dedicated bodies to gender violence or services devoted to prevent sexual harassment. In UG since February 1, 2021, on the basis of the Rector's Ordinance, the Ombudsman for Equal Treatment and Counteracting Mobbing has been established. In UJ since 2020 there are also in place the Academic Ombudsperson and the Security, Safety and Equal Treatment Department. The position of Academic Ombudsperson is foreseen as a kind of umbrella position for various equalityrelated activities. As Polish interviewees well explained, both these bodies are very new to the Universities (none of them operates longer than two years) and both seem to be isolated or not included in systemic procedures but rather have a role of additional support, which can be used by

[^21]university authorities. They seem to play an advisory role, not an executive one as none of them have tools nor procedures to use in case of addressing a sexual harassment or gender violence.

### 3.2 Comparing interviews with researchers

The aim of T2.6 "Qualitative analysis: interviews with $M$ and $F$ researchers" was to gather qualitative insights in the MINDtheGEPs implementing organisations based on male and female researchers' point of view. A total of 118 qualitative semi-structured interviews with male and female researchers have been conducted in 7 public and private RPOs in five countries: Fundación para la Promoción de la Investigación, Innovación y Desarrollo Tecnológico en la Industria de Automoción de Galicia in Spain (CTAG), Italian National Research Council (CNR) and University of Turin (UNITO) in Italy, Jagiellonian University (UJ) and University of Gdańsk (UG) in Poland, University of Belgrade in Serbia (ETF), Munster Technological University in Ireland (MTU). Two main targets of researchers have been addressed both in STEM and SSH fields: 1) early career researchers (i.e., research fellows, post-docs with temporary contracts and researchers in grade C for no more than 10 years in that role) and 2) advanced career researchers (corresponding to the grade B "associate professor" and equivalent). As explained in section 4.1 of D2.2, the comparative qualitative analysis was developed by using the empirical material collected in each RPO according same common and shared tools and methodology, and organized in synopses - that is a short summery of each qualitative interview realized for T 2.6 , comprehending a thematic summary of it and selected quotations in the common English language - along with 7 short reports (one per each RPO) enclosed in chapter 4 of D2.2 "T2.6 Qualitative analysis: interviews with researchers". The results of this comparative qualitative analysis are provided in the present section of chapter "5. A comparative portrait: Insights for designing self-tailored GEP" whose aim is to highlight convergences and divergences among the RPOs and that is structured as follows. The first subsection is about issues related to career criterions, models of scientific excellence and evaluation processes, factors and merits considered - from the interviewees' subjective point of view -necessary/important for recruitment and promotion in the early stages of the career; the second subsection reflects on the same issues with regard to advanced stages of the career; the third and the fourth subsections refer both to early and advanced researchers and are about, the third, the work-life balance and well-being, the fourth, research and teaching activities. This structure reflects the template of the T2.6 report according to each implementing partner wrote its report, in order to allow readers to easily find more detailed information per each RPO under the abovementioned chapter 4.

## Recruitment and career progress in early career

The process of recruitment of the early career researchers differs widely among the MINDtheGEPs implementing organizations in respect to rules, practices and "timing". In some RPOs this process starts "early", typically in the final year of the undergraduate studies - like for example in the Serbian ETF with a kind of "formal top-down" procedure inviting final-year students with high scores to interviews for a Teaching Associate position and almost all Teaching Associates (at all public Serbian universities), after finishing a PhDs lasting around 5 years, start tenure track careers with secure prospects. In the great part of RPOs the process of recruitment of early career researchers is not based on such kind of "automized" practices, and research positions - as for example declared for the Irish MTU's case - are open to the candidates regardless of whether they are internal or external ("must go through an open and objective process"), but this does not exclude "informal top-down" mechanisms of recruitment where candidates are co-opted or invited to start an academic collaboration on the initiative of a senior mentor.

From the differences in the recruitment system and practices, derives different levels and timing of job insecurity in the early researchers' career and - definitively - life-course. In some RPOs - like in the Serbian ETF - as mentioned in the dedicated report, early career interviewees report any
discontinuities in their careers because benefit of a recruiting policy that it is protective of the people who devoted their early careers to the institution with the aim of avoiding the "flight" of workers to the more lucrative private non-academic sector, and/or job insecurity and discontinuities are limited to short phases of working career and of life-course. In other RPOs, especially those located in South and Eastern Europe - like for example the Italian UNITO, the Polish UJ and UG - reaching tenure track and permanent positions can be a long process for the early career researchers, taking many years of their adult life-course, spent in temporary and short-time contracts In these cases - and to some extent also in the Irish MTU - job insecurity and precarious employment conditions are crucial issues which respondents talk about: many of them often mentioned as a hardship the unavailability of permanent positions for early career researchers (see for example p. 435). Moreover, the interviewees in the polish universities ( UG and UJ ) frequently mentioned (low) salary as rather unsatisfactory at the university and that there are various delays in the payment of scholarships and/or in the reimbursement of costs incurred by researchers out of their own pockets, for example - for conferences. Similarly, a female SSH researcher in the Italian UNITO (as seen in the dedicated report) eloquently pointed out the implications in terms of social class of the academic precarious work (see p. 394).

Regarding models of scientific excellence and evaluation processes, criteria, factors and merits considered necessary/important for recruitment and promotion in the early stages of the career, the results - especially for the academic RPOs - confirm previous studies which show that early career stages are significantly marked by the requirement of very high productivity levels and the ideal of individual entrepreneurial (Murgia, Poggio, 2019). To this respect, the interviewees recurrently focus on "productivity", usually meant as (a high number of) publications together - especially in STEM sectors - the ability to attract funds. But there are differences among the RPOs, for example according to the public/private nature of the RPO. In fact, productivity and publications are seen as one of the most important facilitating factors in accessing (and in advancing in) the academic profession by most of the interviewees working in the public universities involved in the MINDtheGEPs qualitative analysis. Several early career interviewees working in them talked about the time pressure to publish that they perceive as an element to the detriment of quality of their research work and publications, moreover - as pointed out by some Polish interviewees working in the Polish UJ (see p. 437) - distracting from other important aspects of scientific activity and frustrating. On the side of the non-academic organizations, while there is no emphasis on pressure to publish in the interviews with researchers in the private Spanish CTAG, in the public non academic RPO (the Italian CNR) we found a similar focus on productivity and publications as the public academies. It is anyway important to point out that not in all the public - even academic - RPOs we found the same emphasis on the issue of publications; this is the case of the Serbian ETF where according to the early career researchers interviewed it isn't needed a prolific scientific production to meet the requirement regarding the number of publications.

Internationalization is another recurrent factor cited by the interviewees in many RPOs as very much appreciated in their departments and in general for being recruited and a successful career, but interesting divergences in opinions and attitudes emerged from the interviews with early career researchers. First, despite internationalization (and mobility) is considered important regardless of the scientific field where the interviewees work in, in some RPOs it seems to be cited as a 'sort of rhetoric', especially among by SSH researchers. This is for example the case of some SSH researchers in the Italian UNITO where we collected declarations about the importance of internationalization and mobility by interviewees that have been recently recruited as researchers (RTD-A) without having so many international experiences (participation in EU-funded projects for example and visiting) in their CVs, and in general working in scientific fields where internationalization, participation in EU-funded projects and mobility abroad is not so widespread and "crucial" (and therefore "conventionally" requested) in the "typical" career paths of scientists in that fields. Moreover, in the opinion of some
interviewees who have been abroad for many years in SSH sectors 'internationalization' may play against the career ad in the case of a male interviewee who is yet a precarious post-doctoral research fellow at the age of 42, in SSH sector at the University of Turin, after having worked in Germany and abroad for 7 years (see p. 394). Interesting convergences can be individuated between the Italian UNITO and the Polish UJ where some - male - interviews - in STEM sector - similarly to Tito (and Carmen) questioned the actual efficacy of mobility for recruitment and career advancement (see $p$. 439). Furthermore, not in all the RPOs mobility and internationalization are explicitly and recurrently cited as important factors -nor with the same intensity- in all the RPOs involved in the analysis. For example, the internationalization and mobility is not an issue deeply discussed by interviewees in the Irish MTU and in the Spanish CTAG.

Among the informal factors, transversally in many RPOs - public and private, academic and nonacademic, STEM and SSH - early career researchers considered as crucial in facilitating the recruitment and career progress the role of the supervisors/mentors, by promoting their fellows and providing them opportunities for publications and collaborations. This seems to reflect that - despite in different gradations and modalities - practices and attitudes based on "affiliations", "loyalty", and researchers' "positioning" are widespread and important (see p. 394). Linked to this, in some RPOs - like for example in the Serbian ETF - interviewees explicitly pointed out that interpersonal disagreements involving senior supervisors/mentors can obstacle recruitment and promotions since these must be approved with a majority vote in the departments. From a gender perspective, from some qualitative interviews emerged a lack of promoters/supervisors with knowledge and understanding of gender biases related to household and parental burden, this is for example the case of the Polish UG.

Interestingly some interviewees in UNITO, CNR, MTU, UG highlighted the "age and generational issue". In the Italian CNR is pointed out that the (young) age can obstacle the career because there is a tendency to give responsibility to the older person as a person of experience, not allowing young people to grow by experimenting while young people are assigned fewer responsibilities (projects, units, surveys) than the older colleagues. This reflects the (Italian) context and general culture particularly disadvantaged for young people in comparative perspective (Unt et al. 2021) and well expressed by a female interviewee in CNR (see p. 409). Related to this, another italian female interviewee in UNITO talked about a kind of "generational bulling" of the older generation of academics toward the younger one. In the Irish MTU, when discussing challenges pertaining to research, many early career researchers in their late twenties to early thirties commented on their work and role are not being taken serious by national and international partners, leaving them with tedious and administrative activities which they consider to be below their paygrade (see p. 467). In the Polish UG, in a female PhD student's opinion (see p. 421) the problem of the livelihood of (young) doctoral students does not interest anyone, and the older generation of professors thinks that since they lived modestly during their doctorate, the younger generation will also manage.

Regarding gender, the great part of the early career interviewees in the involved MINDtheGEPs implementing organizations, especially men, show a 'gender blindness', not perceiving nor reporting gender of the candidates as a differentiating and/or discriminating factor - at least formally and directly - in the recruitment and career progression. The criterion of the "excellence" is considered rather neutral with respect to gender, as well as the impacts / consequences that these criteria have on work-life balance. And when recognize them, several tend to minimize. Only few male interviewees recognized gender imbalances in academia and that it is more difficult for women to reach top positions and of leadership because there are unconscious biases and their work is discredited.

Gender is considered - to some extent and more frequently by women than men - a factor that can differentiate the working paths of men and women in the scientific labour market in relation to work-
life balance and childcare responsibility, as we will see in the next subsection (3) devoted to work-life balance and well-being.

## Recruitment and career progress - Advancement career paths

MINDtheGEPs reporting framework equipped universities and research centers with a comparative qualitative method to report the perception of gendered processes influencing recruitment and career progresses in advancement paths and the glass ceiling phenomenon across multiple dimensions at the micro level. Disclosures from institutions included in the 2022 data collection provide a wide-ranging and comprehensive look at how research work organizations in five countries around Europe are investing in women in the workplace leadership and apical positions and in reducing gender inequalities.

The MINDtheGEPs framework provided information on different dimensions and factors behind the gender imbalance in career advancement, based on questions related to career progress, female leadership and glass ceiling, work organization cultures and policies. The institutions reflected in the 2022 report differently committed to making strides towards equality in the workplace. The main criteria underlying career advancement at top levels tend to be considered as gender neutral, especially in the STEM sectors, in all institutions involved in this research. However, the most important career advancement criteria assume the "unconditional worker model" (passion trap, strong identification with the workplace), and especially some female interviewees are aware that they create gendered disadvantages. Moreover, interviews reported other personal characteristics to be an excellent researcher including communication skills, emotional intelligence, cooperative work styles, as well as creativity and organizational skills, less considered in formal promotion criteria.

## Publish or perish and "productivity"

In the context of public universities and research institutions (UNITO, UG, UJ, CNR, ETF), the main formal criterion for recruitments and promotions to apical position is productivity, defined by the number of publications (and/or by bibliometric parameters in STEM sectors). The flexibility with which this criterion is applied, however, varies between institutions. In Poland and Serbia, the quantitative criteria on publications and research projects are applied in a (more) discretionary manner and also in the other institutions the advancements are not automatic.

From interviews at UG, emerged recognition that men tend to meet the productivity criteria faster than women, because of unbalanced distribution of family duties and work-life conflicts. Another dimension of criticism towards the predominance of quantitative productivity criteria concerns the consequent erosion of the time that researchers can devote to other important scientific activities, such as critical reflection, identification of new research topics, teaching activities with students, participation in public life, public engagement activities (UJ). In the context of the marketization / liberalization of academia and research, the fact that scientific journals run by private corporations have ranking changing over time further questions the belief that bibliometric criteria are neutral and objective. However, this idea is reported by the majority of interviewees, especially in STEM disciplines.

Another important factors to define productivity is the leading of research projects and obtaining research funds (UNITO, CNR, UG, UJ, MTU). While this criterion of excellence is mainly presented as gender neutral, respondents in several institutions report that research leadership tends to be maledominated (CNR, UG, CTAG).

## Internationalization

Most of the interviewees spent a period of work in other countries and the internationalization of their research projects and network is considered relevant in order to reach top career levels (UNITO, CNR, UG, ETF).

The possibility of spending long periods in other countries may be more difficult for women with care responsibilities. This aspect is marginally recognized by the respondents, mainly women from the SSH disciplines.

## "Excellence" and resource distribution

The idea that promotions take place through transparent and clear mechanisms based on gender neutral competence-based criteria of scientific or professional excellence is widespread in universities and research institutions. Public national procedures of academic performance evaluation of individuals such as habilitations are presented as criteria influencing promotions in Italy and Poland. However, other relevant dimensions emerge from the interviews in public universities that concern the economic resources available in each institution in a specific moment, for recruitment and career advancement of the staff, and the negotiations between research sectors and groups to allocate funds (UNITO, UG). These resource distribution mechanisms can have gender repercussions on careers, when groups with different negotiating power have also a different gender composition. However, no awareness of this aspect emerged from the interviews. In the involved organizational cultures, the competition between groups for resources influences the working climate in the departments (UNITO) and in the faculties (UG) even where the climate is collaborative within the research groups. Yet, organizational climate may change across departments. Contexts matters also at the macro level: in some institutions (UJ) the respondents reported the scarcity of permanent positions both at the beginning of their careers and at the advanced levels as well as the low remuneration as factors that makes an academic career unappealing, compared to research in the private sector or in other countries.

## Motherhood penalty

Motherhood penalty is the most recognized dimension of women penalization in the top careers in all the institutions involved (albeit to a lesser extent at ETF). In the narratives, motherhood penalty is explained because of the persistent asymmetrical distribution of care and domestic work between women and men, and between mothers and fathers. It is significant to note that maternity leave (and to some extent parental leave) is not considered sufficient as a measure of equal opportunities to address this long-term disadvantage.

The academic work is considered by women in some STEM teaching-oriented contexts as more family friendly than research in private companies, because it ensures more stable contracts, more flexible working hours and greater acceptance of the use of leave and other conciliation measures. However, also in these contexts, female participants explained to have shortened their parental leaves because they feared it would have a negative impact on their career (ETF).

## Culture of inclusion, gender blindness, gender stereotypes

Private and public research institutions are committed to building a more inclusive work environment in which all employees can develop their career and have equal opportunity to achieve apical positions. However, differences emerged in how an inclusive work culture is defined. This issue emerged not only with regard to gender but also with regard to age (ETF). With respect to gender discrimination and disadvantages, gender-blindness is widespread, especially in the STEM disciplines. Furthermore, in
some contexts there is an awareness of persistent gender stereotypes that hinder the presence and recognition of women in leadership positions (UNITO, ETF).

## Work-life balance and well-being

Regarding work-life balance and well-being, the great part of interviewees (both those in their early and advanced stages of career) in all the RPOs involved in the research, claimed that they have not enough time for themselves and for their private and family life. In many cases the causes of this are perceived as attributable to the stressful work schedule, intense workload and to the so-called 'unconditional worker model' in academia implying to be available to respond to work requests also on evenings, holidays, weekends and/or sick days, high level of productivity, mobility and travelling. This is for example well exemplified by the Serbian ETF case where - emerged from the qualitative interviews - typically researchers work at least 50 hours a week and full commitment to work and complete availability seem to be the norm, making hard to the majority of the interviewees (especially parents, and mothers in particular) achieve work-life balance. Not infrequently, in many RPOs in the different countries, there are interviewees who declared to suffer heavily for the impact of workpressure on their psychological well-being. For example, in the Serbian ETF several interviewees, both male and female, reported the workload negatively affected their physical health and that they experienced negative emotions, psychosomatic symptoms, anxiety, panic attacks and high blood pressure, sleeping less than needed.

When discussing about the causes of the malaise and of the difficulties in reconciling work and life, even in a general situation where the great part of interviewees seems aware of the role played by the intrinsic characteristics of the high demanding scientific job and of the "unconditional worker model", from some interviews, especially in the Serbian, Polish and Irish cases, emerged a kind of tendency to the "individual blaming". This occurs at least in two ways. As in the ETF and MTU cases, some interviews - both women and men in the Serbian ETF, especially men in the Irish MTU - believed that the lack of balance is a consequence of their incapability to balance everything, rather than high demands of professional and private roles. In MTU male interviewees who seem to be more consumed by work, with two out of three reporting that they had no or very poor work-life balance, believe that such a situation can be attributed only to their personal choices, and not to demands from the workside. In other words, the individual is considered by these interviewees as responsible for his/her lack of balance, not questioning neither the institution/organization where they work in nor the prevailing work model in the scientific world. On another level, especially in the polish RPOs, the statements of some interviewees seem to reflect a (cultural) view of children and childcare as a private "affair" - and in a certain sense a "fault" of the individuals who "choose" to have children - instead of a collective "resource" and 'public' responsibility, not considering that at the end having children is a generous choice that allows to the society to reproduce over time. This is well exemplified for example by two interviewees, one female and the other male, the first working in SSH, the second in STEM field, in the polish UJ (see p. 442).

In the interviewees' narratives of all the RPOs - more frequently of the female ones who look more aware than of the males - having children, pregnancy and childbearing, are recognized as something exposing the researchers toward "parenthood penalty", in particular "motherhood penalty", posing obstacles and barrier in particular to women's careers because it forces them to interrupt their workcareer and to reduce their productivity. Therefore, often especially female researchers and in STEM fields postpone maternity after to reach a tenure track position; for this reason - in the great part of RPOs - there are more parents among the advanced career researchers than in the early career ones. In some cases, the decision of having a child was postponed until it was too late (see p. 398). Less frequently, and more among the advanced career researchers, interviewees said that also care responsibilities towards their frail elderly parents or family members can be a barrier for work and
career. Some interviewees recognized that the problem is broader, at a socio-cultural level, and not just an academic one, affirming that the different obstacles for men and women with care responsibilities in advancing in academic and research career derive to some extent to the Italian culture which considers the women the main responsible for (child)care. If women more frequently than men declared to have difficulties in balancing work, life and parenthood, and especially in some RPOs - like for example the Serbian ETF - the interviewed fathers report fewer struggles regarding work-life balance, also some father did. To this respect, in many RPOs a challenge for the interviewees in the context of reconciling family life with career is the issue of mobility, especially internationally; this is true especially for women but there are also men who admitted to consciously having chosen the family instead of international experiences (see for example p. 439). Moreover, for early career researchers experiencing job insecurity, they can play a crucial role in sustaining the continuation of academic career during precariousness as well explained by an interviewee, father of a six-years-old baby (see p. 394).

If, on one side, having children and care responsibilities can be a barrier to the recruitment and carrier advancement, on the other side, family and a supportive partner or family network can provide important informal support (material, economic, emotional and psychological) for reconciling care and work, in the everyday life, domestic tasks and care duties, as well as looking after the children in the interviewee's absence or/and bringing the partner and children with her/his to participate in conferences or to visit abroad.

In many RPOs, (UJ, CTAG, MTU, UNITO) interviewees underlined the importance of the possibility of flexible work' arrangements and autonomy in their work but some also (in UJ as example) have the perception that people are working all the time.

In many interviewees' opinion transversally among all RPOs Covid-19 pandemic radically worsen the work-family balance for researchers especially for women. But in some of them (as Serbian ETF) the Covid-19 pandemic did not affect the workload or daily organization of most of the interviewees, but remote teaching and the absence of informal gatherings reduced their work satisfaction. Moreover, many interviewees declared to appreciate remote working and a "hybrid" modality to work (half from home, half from the office) (like in the Spanish CTAG and Irish MTU), but are frustrated for the blurred boundaries between work and the rest of life when working from home. Pandemic - when during lockdown all working activities were conducted at home, on-line - has compounded the feeling that not having "structured", "fixed" working hours means work always.

## Research activities

## Early career researchers

In most of the universities and institutions (UNITO, UJ, CNR, ETF), early career staff researchers are mainly involved in research activities and have a lower load of administrative and teaching tasks (although in some contexts, such as in Italy, these tasks are part of the informal activities carried out by research fellows). A different situation emerged in private institutions, where also early career researchers perceive administrative workload but only under certain circumstances can teach (MTU), or none of the interviews teaches (CTAG). How much the research activities carried out by young researchers can lead to career development is very influenced by their supervisor, who can avoid them overload and allow or encourage, for example, their participation in international professional networks, autonomy, and the publication of articles (CNR, UNITO, UG, UJ). This aspect is not described by the interviewees as gender biased, and although unconscious gender stereotypes could influence the initiatives of the supervisors, this dimension is not reported by the interviewees.

## Advanced career researchers

As for senior researchers, in public universities (UNITO, UG, UJ) and research institutes (CNR, ETF, MTU, CTAG) the working time is divided between research activities, administrative-managerial activities, and (with the exception of CTAG) teaching, which are evaluated as less important for career progress. The inability to value administrative and management work - and partially also teaching efforts, for career advancements is represented as unfair in these institutions. Administrative work is perceived as overloading in some institutions (UNITO, ETF) more than others (UG, CNR).

Interestingly, the low level of recognition for administrative and management tasks seem to discourage to compete for governance positions (UJ).

In some fields and institutions (UG) also interdisciplinary research resulted as less valued for career purposes.

Moreover, in STEM sectors and ICTs institutions (ETF) women are involved in research projects and in collaborations with industries less than their men colleagues, and women tend to be more involved than men in administrative tasks.

Based on previous studies, the greater involvement of women in teaching and administrative activities could be one of the reasons they spend less time on research activities with negative career advancement outcomes.

Differently from the other involved institutions, at MTU also the advanced positions experience job insecurity and short contracts, and promotions are not implemented. This feature involves both women and men and the participants experienced workload and poor work-life balance.

Consequences of COVID-19 pandemic on research activities by gender and family characteristics
In all the institutions involved, except CNR, the effects of the pandemic on research activities are represented as disadvantageous for women with care responsibilities (UNITO, UG) and by women - or men more involved in teaching activities due to distance learning, instead the pandemic period is represented as a very profitable work moment for men's productivity (CNR).

## 4. Annex

## Annex 1. Introduction to each implementing partner

In this section a table containing useful info for each implementing partner will be listed to help readers in the understanding of the quantitative and qualitative data of MINDtheGEPs' institutions involved in the GEPs' elaboration, in particular info on the links between national and institutional policies.

## University of Turin, Italy (UNITO)

| Implementing <br> Organization | University of Torino (UNITO) |
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| Description of your <br> organisation | The University of Torino (UNITO) is one of the largest Italian Universities, <br> with about 70,000 students, 3,900 employees (academic, administrative <br> and technical staff), and 1,800 post-graduate and post-doctoral research <br> fellows. Research and training are performed in 26 Departments, <br> encompassing all scientific disciplines. According to GreenMetric <br> international ranking (December 2018), UNITO is ranked at 47 |
| in the world, and at 2 $2^{\text {nd }}$ in Italy (after University of Bologna). With |  |
| reference to the most recent national evaluation of the Italian university |  |

system (VQR 2015-2019), UNITO is ranked in the top three Italian universities in nine scientific areas out of 16 . In particular, UNITO is ranked in the top five in the following areas:

- first position in the area of historical, philosophical and pedagogical sciences; biological sciences; and chemical sciences;
- second position in the areas of medical sciences and physical sciences;
- third position in the area of political sciences; law; and agricultural and veterinary sciences;
- fifth position in the areas of psychological sciences; and economical and statistical sciences.
As for internationalization, UNITO is involved in about 500 international cooperation formal agreements with institutions from all around the world (in particular South America, Mediterranean countries, India and China, in addition to Europe and North America), including joint educational programs at undergraduate and doctoral level.

| Organization's <br> experience/expertise <br> in the project domain <br> and role in the project | UNITO is the Scientific Coordinator of MINDtheGEPs and the leader of <br> WP2. UNITO is deeply involved in scientific research and manages roughly <br> 500 projects per year, both at the national and international level. The <br> long record of participation of UNITO in the EU strategic research <br> agenda results from 115 FP7 funded research projects, among which 33 <br> coordinated projects and 4 Research Infrastructures projects. <br> UNITO manages roughly 500 projects per year, both at the national and <br> international level. The long record of participation of UNITO in the EU <br> strategic research agenda results from 115 FP7 and 186 H2020 funded <br> research projects. Under H2020 only, UNITO coordinated 41 projects and <br> 13 ERC, taking part in 42 Marie Skłodowska Curie Actions and 9 Research <br> Infrastructures grants overall. |
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| In Horizon Europe 8 projects have been funded so far, 5 of which under |  |
| the Research Infrastructures program. |  |


|  | departments at the University of Turin and many disciplinary fields, both in the humanities and in the sciences. https://www.cirsde.unito.it/it |
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| Evaluation system and career progression | According to "She figure" Report in Italy Full professor corresponds to grade A; Associate professor to grade B; Researcher to grade C; Postdocs to grade D. <br> The early academic career levels in Italy are ruled as short-term contracts: <br> - Research fellow (Grade D, Borsista di Ricerca, Assegnista di ricerca, only with research responsibilities, no teaching) <br> - Researcher (Grade C, Ricercatore/Ricercatrice) that in Italy are since 2010 temporary position by Law n. 240, art. 24, the so-called Gelmini reform that has reshaped the grade $C$ of the academic career by replacing the former permanent contract of assistant professor (the Ricercatore Unico (RU)) with two new types of short-term contracts, both foreseeing research and teaching duties: <br> an A type "Ricercatore a tempo determinato di tipo A" (RTDa), which can be considered a "junior" assistant professor; <br> a B type "Ricercatore a tempo determinato di tipo B" (RTDb), which can be considered a senior assistant professor with tenure track once the 3 -years contract is ended (if the candidate has obtained the Abilitazione Scientifica Nazionale - ASN; National Scientific Qualification) it automatically turns into an associate professor position). <br> In UNITO, as in all the other Italian Universities, to progress in their career, early stages researchers or external candidates have to overcome successfully the ASN (Abilitazione Scientifica Nazionale), that is, being considered 'abilitato' (employable, or fit for service) by a national committee within a specific field of study. Then, as a second step, the candidates have to apply and pass a local competition and be hired by a university as Associate Professor (Grade B, Professore associato, permanent position) before the title of habilitation expires. To became a Full Professor (Grade A, Professore ordinario, which is the highest academic qualification) the procedure is the same: the candidates need to pass a national competition to get the habilitation and then a local selection process (concorso) to get a promotion or to be hired. The evaluation in both national and local competitions is carried out on the basis of publications and scientific curriculum of the candidates: bibliometric methods and qualitative criteria are different for different scientific fields. <br> The ASN was introduced by the Gelmini reform and it represents a minimum standard quality requirement for the recruitment of associate and full professors; It is granted by a national committee on the basis of the candidate curriculum (law 240/2020, art. 16). The recruitment and the career advancement occur at departmental level. <br> The University Competition Code at art. 6, in line with the national law 240/2010, already specify the importance of ensuring, where possible, gender balance in the competition committees, however the Departments define the ways in which to respect this indication autonomously. |
| Sexual harassment and gender violence | The Code of conduct (646/2016) of the University of Turin at articles from 3 to 10 defines and condemns sexual harassment in agreements with the |


|  | national legal framework, specifying that in the university the Confidential <br> Counsellor appointed by CUG, is a super partes expert called on to <br> prevent, manage and intervene in cases of harassment, mobbing and <br> other forms of discrimination. <br> UNITO has also in place an Anti-Violence Desk, created and carried out <br> thanks to the funding from CRT/Piedmont Region/Ministry of Equal <br> Opportunities granted following the presentation of a four-year project <br> that will end in June 2022. <br> https://www.unito.it/servizi/pari-opportunita-benessere-e- <br> assistenza/sportello-antiviolenza <br> Moreover, there are a Listening service and Counseling space that provide <br> extensive services dedicated to the general well-being of the staff and the <br> student body. |
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National Research Council of Italy (CNR)
$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Implementing } \\ \text { Organization }\end{array} & \text { National Research Council of Italy (CNR) } \\ \hline \begin{array}{l}\text { Description of your } \\ \text { organisation }\end{array} & \begin{array}{l}\text { The National Research Council is the leading public organization in Italy } \\ \text { with the responsibility to carry out, promote, spread, transfer and improve } \\ \text { research in the main sectors of knowledge growth and of its applications } \\ \text { to scientific, technological, economic and social development of the } \\ \text { Country. To this end, the activities are divided into macro areas of } \\ \text { interdisciplinary scientific and technological research, ranging from life } \\ \text { sciences to ICT, Social Sciences and Humanities. CNR is distributed all over } \\ \text { Italy with its network of 88 institutes aiming at promoting a wide diffusion } \\ \text { knowledge throughout the national territory and at facilitating contacts } \\ \text { and cooperation with industry and academy. The human capital comprises } \\ \text { almost 9,000 employees, of whom more than half are researchers and } \\ \text { technologists. Additionally, 2,000 research fellows are engaged in } \\ \text { postgraduate studies and research training at CNR within the } \\ \text { organization's top priority areas of interest. A significant contribution also } \\ \text { comes from research associates: researchers, from universities or private } \\ \text { firms, who take part in CNR research activities. } \\ \text { The CNR Institute for Research on Population and Social Policies (CNR- }\end{array} \\ \text { IRPPS) is an interdisciplinary research institute that conducts studies on } \\ \text { demographic and migration issues, welfare systems and social policies, on } \\ \text { policies regarding science, technology and higher education, evaluation, } \\ \text { on the relations between science and society, as well as on the creation } \\ \text { of, access to and dissemination of knowledge and information technology. }\end{array}\right\}$

| Bodies | is composed of 5 members chosen from among highly qualified technical and scientific experts in the field of research, with proven management experience in public or private bodies and institutions: the CNR President, appointed by the Ministry for University and Research; one member elected among the CNR research personnel (researchers and technologists); one member appointed by the Conference of Italian University Rectors (Conferenza dei Rettori delle Università Italiane - CRUI); one member appointed jointly by the Italian Union of Commerce Chambers and Confindustria (the main association representing manufacturing and service companies in Italy); and one member appointed by the Permanent Conference for Relations between the State and the Regions. <br> The Board of Directors supervises the CNR financial, economic and administrative management, as well as is in charge to carry out the personnel recruitment plan regarding researcher, technologist, technician, and administrative (permanent) staff, while temporary staff or fellows recruitment is at department or institute level. |
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| Equal opportunity bodies and Gender Research Center | The CNR has a Guarantee Committee for Equal Opportunities, Employee Wellbeing and Non-discrimination at Work (Comitato Unico di Garanzia CUG). It was established in 2011 (Law 183/2010, article 21), and has the following purposes: <br> - addressing inequalities in access to employment, career advancement and the performance of work through the promotion of a culture of difference; <br> - encouraging the diversification of women's career choices, their access to employment and training; <br> - overcoming the distribution of work on the basis of gender and/or disability, which has negative effects on women; <br> - promoting the inclusion of women in activities where they are less present and at levels of responsibility; <br> - promoting the inclusion of women in activities where they are less present and at levels of responsibility; <br> - facilitating the overcoming of situations of personal and family hardship of employees; <br> - promoting a balance between family and professional responsibilities and a better gender balance; <br> - encouraging and encouraging female researchers to participate in research projects financed at national and international level. <br> These objectives are pursued through the definition of the Positive Action Plan (Piano di Azioni Positive - PAP), on a three-year basis. <br> https://www.cug.cnr.it <br> On the determination of the CNR Directorate General, the permanent Gender and Talent Observatory (Osservatorio Genere e Talenti - GeTa) has been established within the IRPPS since 2019. It studies gender inequalities within society with a special focus on the research and innovation sector. Each year, the GeTa Observatory presents a report, drafted by CNR-IRPPS staff and experts from other Italian institutes and universities. <br> https://www.irpps.cnr.it/en/geta-osservatorio-su-genere-e-talenti/ |
| Evaluation system and career progression | As RPO, the "She Figure" classification for Italy is shaped as follows: <br> - Grade A is Director of Research (Dirigente di ricerca) or Technologist Director (Dirigente tecnologo), as permanent or temporary position with research and management |

responsibilities;

- Grade B is Senior Researcher (Primo Ricercatore) or Senior Technologist (Primo Tecnologo), as permanent or temporary position with research and management responsibilities;
- Grade C is Researcher (Ricercatore) or Technologist (Tecnologo), as permanent or temporary position with (usually) research responsibilities only;
- Grade D is Research fellow (Borsista or Assegnista di ricerca), only temporary position and extendable for a maximum of 6 years, with research responsibilities.
Recruitment for grade $D$ and temporary positions is carried out by the individual institute or department through an open competition.
Recruitment for grades $\mathrm{A}, \mathrm{B}$ and C (permanent positions) is managed at central organisation level for all institutes and departments through open competitions.
The researcher grade D must win an open competition, open to non-CNR staff, to become a permanent employee of grade C (researcher or technologist).
Grade C or B staff must win an open competition (reserved for internal staff or open to non-CNR staff) to progress to the next grade.
Evaluation system follows national rules for public sector and CNR is evaluated on three year base by ANVUR, the agency for research evaluation
Sexual harassment $\quad$ In July 2020, the CNR approved the Code of Conduct against Harassment and gender violence (Resolution No. 191/2020) upon proposal of the CUG. The Code condemns harassment of a sexual nature in accordance with national laws, and sets out the route for reporting and the measures to be taken if an employee becomes a victim of such harassment. Specifically, the Trusted Adviser (Consigliera di Fiducia), a super-partes figure with expertise in gender harassment, is in charge of the procedure, while counselling points have been planned at local level. These figures, however, still have to be identified through a public call.
https://cug.cnr.it/sites/default/files/Codice\ per\ la\ prevenzion e\%20e\%20il\%20contrasto\%20delle\%20molestie\%20nel\%20CNR.pdf

University of Gdańsk, Poland (UG)

| Implementing <br> Organization | University of Gdańsk (UG) |
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| Description of your <br> organisation | The University of Gdańsk (UG) is a dynamically developing institution that <br> combines respect for tradition with a commitment to the new. UG has <br> been founded on 20 March 1970. Currently, it is the largest university in <br> the Pomorskie Region (Poland). Approx. 25,000 undergraduate, post- <br> graduate and PhD students are trained at 11 faculties. UG employs in total <br> approx. 3,200 staff members and the academic staff comprises approx. <br> 1,700 employees. |
| UG has experience in the implementation of national and international <br> projects focusing on research, teaching, networking, and development <br> from various funding sources, incl. national funding, EU Framework <br> Programmes, and EuropeanStructural Funds. UG cooperates with higher <br> education institutions and other 15 entities in most European countries as |  |


|  | well as outside Europe. Various institutes and departments of the <br> University of Gdańsk have obtained, or are in the process ofobtaining, the <br> prestigious status of Centres of Excellence, which is the European <br> certificate of quality. The top-modern facilities on the University's Baltic <br> Campus contribute to the high potential for providing innovative teaching <br> and conducting excellent research. <br> The mission of UG is to train highly-valued graduates who will possess <br> broad knowledge, abilities, and competences that are essential in a social- <br> economic life based on knowledge, as well as to continuously contribute <br> to the scientific knowledge in the world and to the solutions of its most <br> important contemporary problems. |
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| Organization's experience/expertise |  |
| in the project domain |  |
| and role in the project |  | | Social responsibility of universities is an important strategic path at UG. |
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| Several related projects project have been implemented eg: H2020: |
| STARBIOS2 (2016-2020), RESBIOS (2020-2022), ACTonGender (2018- |
| 2021), Towards Gender Harmony (2018-2022). In 2017 UG has initiated its |
| involvement in a national initiatives in this area and became signatory of |
| the national Declaration of Social Responsibility of Universities, collected |
| at the ministerial level, together with 23 other research \& higher |
| education institutions. UG is also one of 7 Polish universities starting an |
| initiative called Forum of Engaged Universities. UG has received the HR |
| Excellence in Research award and actively follows the European Charter |
| for Researchers and the Code of Conduct for the Recruitment of |
| Researchers. UG implements various research projects and initiatives |
| related to enhancing professional careers of women researchers, eg. |
| Involvement of staff in Polish Jury for the award L'Oreal UNESCOfor |
| Women in Science, and in the International Selection Committee for the |
| L'Oreal UNESCO for Women in Science - International rising Talents (ITR), |
| and promoting of successes of UG researchers in these contests (eg.award |
| for chemist dr Agnieszka Gajewicz in IRT 2018, virologist prof. Ewelina Król |
| in 2019). UG also introduces anti-discrimination policies and various |
| actions for a better work-life balance of employees. |


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representing the UG community. The Senate plays a legislative role, adopts, among others, the Statute, study regulations and regulations of doctoral schools, the mission and strategy of the University and approves the report on their implementation, appoints and dismisses members of the University Council. The tenure of the Senate is four years. The Councils of scientific disciplines confer degrees in the University.

The academic community participates in the governance of the University through elected collegiate and single-member bodies. The entire academic community of the University is represented in the collegiate bodies.

The following are in force at UG: Policy for Counteracting Mobbing and Discrimination at the University of Gdansk and Policy for Counteracting Discrimination against Students and Doctoral Students at the University of Gdansk, introduced by the Rector's Ordinances .
Since February 1, 2021, on the basis of the Rector's Ordinance, there has been an Ombudsman for Equal Treatment and Counteracting Mobbing at the UG, who replaced the Rector's Plenipotentiary for Counteracting Mobbing and Discrimination. The tasks of the Ombudsman include in particular:

1) initiating, implementing, coordinating or monitoring activities aimed at ensuring equal treatment, in particular protection against discrimination and counteracting mobbing;
2) taking action aimed at elimination or reduction of consequences resulting from infringement of the principle of equal treatment or reasonable suspicion of mobbing;
3) promoting, disseminating and propagating the principles of equal treatment
treatment;
4) development and implementation of a gender equality monitoring system
5) Undertaking activities to examine the legitimacy of complaints
6) taking action to investigate the merits of complaints in cases of violation of the principles of equal treatment or mobbing.
According to Gender Equality Plan introduced in January 2022 we plan realize Objective 4.
Objective 4: Integrating the gender perspective into research and teaching content
Action 4.1. Development and introduction of compulsory online training to raise awareness of the importance of a gender perspective
in the research content of scientific projects "Gender dimensions in research and in teaching".
Action 4.5. Enabling female editors and others involved in the publishing process of journals and publications published by UG to participate in training on gender mainstreaming in scientific content and guidelines for authors, as well as encouraging women to sit on evaluation panels for papers submitted for publication.
Action 4.7. Support for writing/applying for grants including experience in building diverse teams and applying for gender-inclusive research
Action 4.8 Development and implementation of a compulsory training course: Module "Gender roles in research and scientific careers"

| Evaluation system and career progression | University of Gdansk has just implemented Human Resources Development Policy that complies with the mission, vision and values laid down in the University of Gdańsk Development Strategy for 2020-2025 as well as with the principles of the European Charter for Researchers. <br> The principal objective of the policy is to define transparent procedures of employment and to ensure flexibility of the development paths of academic staff in line with the European Commission's Code of Conduct for the Recruitment of Researchers. The policy outlines the expectations of the University towards its employees, alongside the instruments of systemic support for academic career paths at the UG. The policy also refers to the periodic assessment of academic teachers, based on detailed criteria of academic achievement in a given scientific discipline and the criteria of didactic and organisational achievements. The rules for the employment of professors emeriti and their participation in University life have been specified. Moreover, the academic staff development policy refers to the principles of the equality of treatment and opportunities at each level of professional development. <br> Full text of the document can be found here: https://en.ug.edu.pl/sites/en.ug.edu.pl/files/ nodes/strona/52429/files/ hr development policy otm-r policy.pdf |
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| Sexual harassment and gender violence | See point: Equal opportunity bodies and Gender Research Center |

Jagiellonian University in Kraków, Poland (UJ)
$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Implementing } \\ \text { Organization }\end{array} & \text { Jagiellonian University in Krakow } \\ \hline \begin{array}{l}\text { Description of your } \\ \text { organisation }\end{array} & \begin{array}{l}\text { The Jagiellonian University in Kraków is a public higher education } \\ \text { institution in Poland, run under the Act on Higher Education and Science, } \\ \text { in accordance with its' Statute. The University is the oldest higher } \\ \text { education institution in Poland and one of the oldest in Europe } \\ \text { (established in 1364). Currently, the Jagiellonian University comprises 16 }\end{array} \\ \text { Faculties (including Medical College), where nearly 4 thousand academic } \\ \text { staff conduct research and provide education to over 40 thousand } \\ \text { students, within the framework of more than 90 different fields of study } \\ \text { in the humanities, social sciences, science and medicine. The eminent } \\ \text { researchers and state-of-the-art infrastructure make the JU one of the } \\ \text { leading Polish scientific institutions, collaborating with major academic } \\ \text { centres from all over the world and with a great record of both } \\ \text { internationally and nationally funded projects, financed among others } \\ \text { through the 6th and 7th Framework Projects and Horizon 2020 of the }\end{array}\right\}$
develop the innovative capacity of the university's educational potential.

|  | develop the innovative capacity of the university's educational potential. |
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| Organization's experience/expertise in the project domain and role in the project | Both Institute of Sociology and the Office for Safety, Security and Equal Treatment (university unnits that take part in the MINDtheGEPs project) have been engaged in international research projects aiming at gender equality in research and academia and beyond. <br> The Institute of Sociology has extensive research experience in the fields of gender and inequality studies. Recent projects concerning gender equality issues include 'Gender equality and quality of life - how gender equality can contribute to development in Europe' (Polish-Norwegian Research Programme, 2013-2016), 'GENERA - Gender Equality Network in the European Research Area (Horizon 2020, 2015-2018), ACT Promoting Communities of Practice to advance knowledge, collaborative learning and institutional change on gender equality in the European Research Area (2018-2021). <br> The Office for Safety, Security and Equal Treatment - Bezpieczni UJ was established on January 1st, 2020 as a result of a growing need of coordination of actions for personal safety and security, as well as equal treatment of all members of the university community. It is aimed at supporting victims of discriminatory behaviours, conducting surveys on perceived discrimination, co-creation of university-wide policies and procedures regarding equality \& diversity. The office continues previous activities in this filed conducted by the Rector's Proxy for Student Safety and Security, namely international cooperation within university networks such as: The Guild (Gender and Diversity Working Group), the AUCSO (Diversity Group) and previous projects ("Just and Safer Cities for All - Local Actions to Prevent and Combat Racism and All Forms of Intolerance", "GENERA" (advisory board). Recent projects concerning gender issues include international campaign " 16 days against genderbased violence" and students' satisfaction barometer - perceived discrimination, both conducted at the university annually since 2012. <br> The Jagiellonian University is a leader of WP4 on balancing recruitment, retention and career progression. It is also one of the implementing partners, who develop their GEPs within the framework of the project. |
| Decision Making Bodies | The main decision-making bodies of the Jagiellonian University are: the Rector, the University Council, the Senate, the Vice-Rector for the Collegium Medicum and the councils of disciplines. The Rector leads and represents the University (with the support of the rector-dean's college). The University Council gives its opinion on the university Statute and Strategy projects and monitors the governance of the University. The University Council consists of 6 members appointed by the Senate, including 3 members from the community of the university and 3 from outside the community of the university and the the President of the student self-government. The Senate adopts the university Statute the strategy and the study regulations. Its members are the Rector, 16 professors representing 16 faculties, 2 professors from extra-faculty and inter-faculty units, 8 students (including doctoral students), 6 academic teachers other than professors and 3 representatives of non-academic staff. |
| Equal opportunity bodies and Gender Research Center | Counteracting discrimination and ensuring equal treatment of all university community members is one of the priorities defined in the Jagiellonian University Statute. In 2017 Jagiellonian University has received the HR Excellence in Research award and follows the The European Charter for Researchers and the Code of Conduct for the |


|  | Recruitment of Researchers. <br> The Office for Safety, Security and Equal Treatment - Bezpieczni UJ selected tasks: <br> - diagnosing the level of equal treatment (monitoring, surveys, analysis) <br> - taking preventive actions consisting of conducting educational and promotional activities <br> - coordinating national and international cooperation in the field of equal treatment (including participation in projects) <br> - cooperation with other units on developing procedures and policies (responding to discriminatory incidents, implementing the principle of equal treatment in externally funded projects). <br> Academic Ombudsperson - selected tasks: <br> - monitoring violations of academic rights and values at the University; <br> - taking action in situations of violation; <br> - taking action to prevent behaviour that violates academic rights and values; <br> - cooperating with entities established at the University to protect academic rights and values. |
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| Evaluation system and career progression | According to "She Figures" Report in Poland Full professor (doctor habilis with the title of professor) corresponds to grade A; Habilitated PhD to grade B; Researcher with PhD to grade C; Researcher with Master degree to grade D. <br> For most researchers, both research and teaching are obligatory. However, beside research and teaching positions, there are also teaching positions and research positions. <br> In JU, to progress in their career, grade D researchers have to receive a PhD degree, through presenting and defending a doctoral dissertation prepared under the supervision of a senior researcher (a person holding a degree of doktor habilitowany or the title of professor). A person holding at least a PhD degree can be employed in the position of an assistant professor. The next step of academic career is the habilitated doctor ("doktor habilitowany"), which can be awarded only to PhD degree holders. Habilitation gives its holders scientific autonomy to conduct their own research and lead a team. It is the highest qualification level issued through the process of a university examination and is the key for access to a professorship. An application for the award of the degree of doctor habilitowany is evaluated by the habilitation commission on the basis of three reviews and the outcome of examination, which is obligatory in the case of achievements in the human, social and theological sciences. Full seniority in rank is however achieved with the scientific title of the professor ("profesor"), which is awarded by the President of the Republic of Poland upon a motion of a Commission appointed by the Council of the Scientific Excellence, a central body of government administration. The title of professor may be granted to a person who: 1. holds the habilitated doctor degree (in specific cases a PhD), 2. has outstanding scientific or artistic achievements, and 3. participated in scientific projects granted under open calls (national or international) or participated in international fellowships or research conducted in higher education institutions or research centres in Poland or abroad. Titular professorship is necessary to obtain the highest academic position of a professor. |


|  | The recruitment and the career advancement occur at faculty level. |
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| Sexual harassment and <br> gender violence | There is no policy/protocol for sexual harassment/gender-based violence <br> in the university. There is some data on the issue, gathered in e.g. GEAM <br> research. |

## University of Belgrade, Serbia (ETF)

$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Implementing } \\ \text { Organization }\end{array} & \begin{array}{l}\text { University of Belgrade - School of Electrical Engineering (ETF) } \\ \text { Description of your } \\ \text { organisation }\end{array} \\ \hline \begin{array}{l}\text { University of Belgrade - School of Electrical Engineering (ETF) is one of the } \\ \text { leading higher education and research institutions in the field of electrical } \\ \text { engineering and computer science in Southeast Europe (SEE). It is the } \\ \text { largest engineering faculty in the SEE region, and 3rd largest electrical } \\ \text { engineering faculty in Europe. } \\ \text { ETF is committed to meeting the highest standards in pedagogy, research } \\ \text { and applied science since its establishment in 1948. It has a staff of 300 } \\ \text { employees, and revenue for 2018 was about 8.5M EUR. It provides } \\ \text { exceptional engineers who contribute to productivity, innovation and } \\ \text { competitiveness, in Serbia, but also around the world. ETF participates in }\end{array} \\ \text { numerous international projects, and has joint research initiatives } \\ \text { supported by the European Commission (H2020, COST, EUREKA, } \\ \text { InteRReg, ERASMUS, TEMPUS, and other programs), as well as with the } \\ \text { US National Science Foundation and other prominent RFOs and RPOs. } \\ \text { One of the fundamental activities of ETF is to provide support for } \\ \text { innovation programs. Over the years, ETF have implemented } \\ \text { technological methods with original and systematic approach, providing }\end{array}\right\}$

|  | Group, a European Commission advisory body for Gender and Research. She started work with the high-level management of ETF aimed at support of equal career opportunities among our employees, and the opening of a new career and research opportunities. Also, three years ago, ETF established a new conference "Application of Free Software (FS) and Open Hardware ( OH ) - PSSOH" with a conference track (one of the three tracks) on the representation and role of women in FS and OH . |
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| Decision Making Bodies | The decision-making bodies at the School of Electrical Engineering comprise the Dean and four Vice Deans, the School Council, the Academic Council and the Election Council. The governing body of the School of Electrical Engineering is the School Council composed of teaching and non-teaching staff, student representatives and representatives of Serbia's Government, who founded the institution. The Academic Council of the School of Electrical Engineering consists of full-time teaching staff, the dean, vice-deans, and student representatives. The Election Council of the School of Electrical Engineering consists of full-time teaching staff and is chaired by the dean. |
| Equal opportunity bodies and Gender Research Center | Gender equality policies at ETF are at initial stage and with no systemic view both at strategic level and implementation level. Gender equality measures remains at very general and vague level in the official documents of the organizations, and no gender equality plan is in place yet. The only policies that are present are after law obligations and are in no way connected to a gender plan of action or strategy. No formal actions on career development are in place and no systematic support for work-life balance either. |
| Evaluation system and career progression | According to "She figure" Report in Serbia Full professor corresponds to grade A; Associate professor to grade B; Researcher to grade C; Postdocs to grade D. <br> Academic staff at ETF includes teachers, associates and researchers. There are several levels of titles within the teachers' profession: assistant professor; associate professor; and full professor. Assistant professors, associate professors and full professors may teach at all levels of higher education. There are two titles for education staff working as associates: teaching associates and teaching assistants. <br> Most commonly, teachers and associates are employed on a full time basis. However, the duration of their employment may vary in accordance with their respective titles: <br> - Teaching associates: fixed-term employment for 1 year, with a possible extension for another year; <br> - Teaching assistants: fixed-term employment for 3 years, with a possible extension for another 3 years; <br> - Assistant Professor: fixed-term employment for 5 years; <br> - Associate Professor: fixed-term employment for 5 years; <br> - Full Professor: permanent position. <br> Academic staff members are required to act in accordance with the professional code of ethics which is usually issued by each higher education institution. <br> Moving from a lower professional title to the next in the line (from teaching associate to full professor) is considered career advancement. Although academic staff members have to formally undergo a recruitment process in order to earn a higher title, it is an expected sequence of events for those who wish to continue their career at the same institution. |


|  | A higher-ranking title brings a salary increase, like in any other case of <br> teacher promotion (e.g. becoming the Head of Department, Dean, a <br> committee member etc.). Furthermore, each year of working experience <br> brings an increase in salary and number of annual leave days, as specified <br> by the Labour Law. <br> Honourable professor emeritus title may be assigned to a retired <br> professor for their distinguished scientific work and contribution to higher <br> education. Professor emeritus may be involved in all teaching activities <br> within the second and third-degree levels of study. |
| :--- | :--- |
| Sexual harassment and <br> gender violence | The rulebook on prevention and protection against sexual harassment has <br> been established in July 2021 at the level of the University of Belgrade. <br> Article 4 forbids sexual harassment, while article 5 prohibits the abuse of <br> the right to protection from the sexual harassment. Articles 7 and 8 <br> introduce the ongoing training and modification of the teaching material <br> to prevent sexual harassment. Finally, Article 9 appoints a Commissioner <br> of Equality at each institution at the University of Belgrade, who is in <br> charge of preventing sexual harassment, as well as suppressing any kind <br> of discrimination with respect to sex, gender, gender identity and sexual <br> orientation. Moreover the Commissioner is in charge to run the training <br> from Article 7 at his/her institution. The Commissioner of Equality at ETF <br> is listed on the website. |

## Munster Technological University, Ireland (MTU)

$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Implementing } \\ \text { Organization }\end{array} & \begin{array}{l}\text { Munster Technological University - MTU Kerry (ITT previously) } \\ \text { Description of your } \\ \text { organisation }\end{array} \\ \hline \begin{array}{l}\text { Munster Technological University (MTU) was formed on 1st January 2021 } \\ \text { when Cork Institute of Technology (CIT) \& Institute of Technology Tralee } \\ \text { (ITT) came together to form MTU. The MINDtheGEPs project is being } \\ \text { carried out within the Kerry campus, namely within the STEM department } \\ \text { as this department has the largest cohort of researchers in the university. } \\ \text { MTU Kerry is involved in education, research, regional, enterprise and } \\ \text { community development. It has a student community of 3500 students, } \\ \text { 355 staff distributed across 3 schools 1) Science, Technology, Engineering } \\ \text { and Maths (STEM), 2) Business, Computing and Humanities and 3) Health } \\ \text { and Social Sciences, which collectively deliver 60 undergraduate and post- } \\ \text { graduate programs. MTU Kerry has a vibrant and diverse and active } \\ \text { research community, with over 150 researchers (principle investigators, } \\ \text { post-doctoral researchers, post-graduates) in addition to research active } \\ \text { academic staff distributed across academic departments and research } \\ \text { centres. There are with 5 key research centres: Shannon Applied }\end{array} \\ \text { Biotechnology Centre (www.shannonabc.ie), Centre for Intelligent } \\ \text { Mechatronics and Robotics (IMAR, www.imar.ie), Lero Software research } \\ \text { centre (www.lero.ie) and the UNESCO Chair in Adapted Physical Activity } \\ \text { (http://unescoittralee.com/) and the Centre for Enterprise Development }\end{array}\right\}$
$\left.\begin{array}{|l|l|}\hline & \text { research at MTU Kerry. } \\ \hline \begin{array}{l}\text { Organization's } \\ \text { experience/expertise } \\ \text { in the project domain } \\ \text { and role in the project }\end{array} & \begin{array}{l}\text { MTU Kerry is actively extending this ethos of diversity and inclusion across } \\ \text { the staff and student communities. There is a particular focus on } \\ \text { addressing the gender dimension via Athena Swan, a charter for diversity } \\ \text { and inclusion. MTU has an Athena Swan Bronze award which requires, in } \\ \text { addition to establishing relevant governing bodies, to identify gaps and } \\ \text { improvement opportunities in the context of gender equality, diversity } \\ \text { and inclusion, and to develop and deploy actions to promote equal } \\ \text { opportunities, well-being in the workplace and non-discrimination. MTU } \\ \text { Kerry's MINDtheGEPs team has experience from working with the } \\ \text { UNESCO Chair in Physical Adapted Activity, in the STEM Passport project }\end{array} \\ \text { (Supporting and Enabling girls to progress to STEM program in University), } \\ \text { the InterReg project iEER, stimulating and developing innovation and } \\ \text { entrepreneurial ecosystems at regional level across the EU for the next } \\ \text { generation of innovators and exploring the gender dimension as a barrier, } \\ \text { enabler and differentiator as well as the InterReg FANBEST project. They } \\ \text { also acted as coordinator of the 4 million EUR EU-funded TRADEIT } \\ \text { project that had a special focus on female entrepreneurship. }\end{array}\right\}$

| career progression | ( $\mathrm{A}, \mathrm{B}$, and C ) which pertains to academic staff: <br> - Grade A - Full Professor on appropriate salary (€101,404 $€ 136,276)$. Grade A staff members are found in the universities. While there are some staff members who are in the loTs who are styled as professors, these are not returned as academic staff in the HEA returns, and therefore do not fit the definition of Grade A staff (the highest grade/post at which research is normally conducted). <br> - Grade B - Senior Lecturer and Associate Professor, (it would be expected that once the staff database is established Grade B staff will also include Lecturer 'above the bar', as these positions are held by those 'more senior than newly qualified PhD holders'). <br> - Grade C - Lecturer (and 'Assistant Lecturer' in the loTs) <br> - The Science Foundation Ireland has a designated framework outlined for researchers. This framework is typically utilized to calculate research budget salaries in Ireland: <br> - Level 1 Research Assistant - Minimum of primary Degree in relevant discipline with little or no research experience. <br> - Level 2A New Post-Doctoral Researcher - Newly qualified PhD <br> - Level 2B Experienced Post-Doctoral Researcher - The appointed candidate will have 2-3 years postdoctoral research experience <br> - Level 3 Research Fellow - The appointed candidate will generally have 4-6 years postdoctoral research experience. <br> - Level 4 Senior Research Fellow - The appointed candidate will generally have 4-6 years postdoctoral research experience. A researcher leading their research area or field. It would include the team leader of a research group ... In particular disciplines as an exception, leading researchers may include individuals who operate as lone researchers". <br> Progression of Assistant Lecturer to Lecturer Grade by staff with PhD Assistant lecturers with 3 years' service and qualified to PhD Level may apply to HR to progress to Lecturer grade. A minimum of one years' service in the is required at the institute in which the applicant is making the application. <br> There is no career progression framework for researchers due to it being in the public sector. All calls must be open-calls to ensure equal opportunity. |
| :---: | :---: |
| Sexual harassment and gender violence | MTU are currently designing a framework to tackle sexual violence and harassment. MTU is committed to ensuring that staff and students can work and learn in a positive and safe environment which is free from all forms of bullying, harassment, victimisation, and/or sexual harassment. Bullying, harassment, victimisation and/or sexual harassment in any form is not acceptable and will not be tolerated, whether it is carried out by a member of staff, student or member of the public interacting with staff and students of the MTU. MTU's has a Dignity and Respect Policy (2021). This policy and its associated procedure for preventing bullying, harassment, victimisation, and sexual harassment, in the workplace and for dealing with such complaints which arise between members of MTU |


|  | as defined in section 4. There are a number of processes under the <br> procedure to resolve dignity and respect issues. Complaints of <br> inappropriate behaviour, bullying, harassment, victimisation, and/or <br> sexual harassment will be treated seriously and with due regard for the <br> rights and sensitivities of the complainant and the respondent. This policy <br> is in compliance with the recommendations of the Government Task <br> Force Report on Bullying in the Workplace (2001) and is also underpinned <br> by the Equality Authority's Code of Practice on Sexual Harassment and <br> Harassment at Work. <br> MTU also engages the services of Spectrum. Life who are an Employee <br> Assistance Service provider. The Employee Assistance Service (EAS) is a <br> confidential counselling service. It provides support to employees, in <br> addition to their spouse, civil partner or dependant, where the family <br> member can be described as a person over the age of 18 and residing in <br> the family home. The EAP service is available 24/7, 365 days a year <br> covering numerous topics such as; counselling, infertility \& pregnancy |
| :--- | :--- |
| loss, elder care support, parent coaching, international employee |  |
| support, legal information, financial information and more. |  |

## CTAG - Automotive Technology Centre of Galicia, Spain (CTAG)

$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Implementing } \\ \text { Organization }\end{array} & \begin{array}{l}\text { Automotive Technology Centre of Galicia } \\ \text { Description of your } \\ \end{array} \\ \hline \begin{array}{l}\text { The Galician Automotive Technology Centre (CTAG) is a private non-profit } \\ \text { entity created in } 2002 \text { to carry out R\&D activities in the field of mobility. } \\ \text { CTAG's mission is to contribute to increasing competitiveness of } \\ \text { automotive companies, through the appropriation and transfer of related } \\ \text { technologies, as well as to guide and boost development, research and } \\ \text { technological innovation in the sector. } \\ \text { CTAG is present in all the stages from analysis, validation and verification, } \\ \text { to implementation at client sites and product improvement. The Centre } \\ \text { has a top-level human resources team, with great capacity for dedication } \\ \text { to the customer. CTAG's staff is around 900 people, most of them PhD, } \\ \text { engineers and university graduates. Moreover, it has modern facilities } \\ \text { equipped with the latest technology to provide the best customer service, } \\ \text { through its four technical divisions: Electronic \& ITS, Materials \& Process, } \\ \text { Testing \& Validation and Passive Safety. } \\ \text { CTAG has been declared as a Foundation of Industrial Interest by the } \\ \text { Xunta de Galicia (regional government), and it also has the approval of the } \\ \text { Ministry of Economy, Industry and Competitiveness, as a national level }\end{array} \\ \text { Technology Centre. Since 2009, CTAG has implemented an R\&D } \\ \text { management system accredited according to the UNE EN166.002 } \\ \text { standard, and furthermore follows the recommendations of the } \\ \text { international standard UNE-CEN/TS 16555-1:2013 "Innovation } \\ \text { Management". The Centre also has other certifications such as ISO9001 }\end{array}\right\}$

|  | authorities, user organisations, mobile network operators, and vehicle manufacturers, EPoSS- European Technology Platform on Smart Systems Integration and GET2EXCEL - a Global Exo Technology Research, Benchmarking, and Standardization Center of Excellence coordinating world-wide efforts, ATIGA- Intersectoral Technological Alliance of Galicia and member of the Vanguard Iniciative, and Supporting Organization of ADMA: European Advanced Manufacturing Support Center, I4MS |
| :---: | :---: |
| Organization's experience/expertise in the project domain and role in the project | CTAG is the leader of WP5. Empowering women in decision making processes. <br> CTAG has participated in more than 55 European R\&D projects, most of them co-founded by the European Commission through the FP7, CIP and H2020 Programmes and Connecting Europe Facility (CEF) as well as Interreg programme. <br> In Horizon Europe, CTAG is leading 1 project in Cluster 5. |
| Decision Making Bodies | CTAG has a decision-making body composed by the general manager and the 8 Directors of the 8 different divisions in which CTAG is structured. Moreover, CTAG counts with a Works Council, 21 people that represent the employees in the company (L.O 11/1985; L.O. 14/1994; R.D.L.G. 2/2015), |
| Equal opportunity bodies and Gender Research Center | Since 2013, CTAG has a Gender Equality Committe engaged with the elaboration of GEPs and since 2018 CTAG has stablisehed an action committe for cases of sexual, gender-based, workplace harassment and violence in working environment. <br> Furthermore, the Division "People, Safety and Health at Work" organize periodical trainings for the CTAG staff and an introductory training for new hires. |
| Evaluation system and career progression | CTAG, as private non-profit research organization has its internal classification. From a top to down approach: <br> - General Manager <br> - Director of Division <br> - Coordinator <br> - Head of department <br> - Team leader <br> - Technical staff <br> Career advancement is not subject, as in the university, to the achievement of any accreditation. It is motivated by the capabilities of the person and his or her work in the company. |
| Sexual harassment and gender violence | From 2018, CTAG counts with an action guide in case of sexual, genderbased, workplace harassment and violence in working environment, with the aim of guaranteeing the protection of the fundamental rights of CTAG employees and external persons linked to the Center, ensuring that all of them enjoy a respectful working environment, in which the right to equal treatment, freedom of expression, non-discrimination, dignity, privacy and integrity, are one of the fundamental pillars to be safeguarded. |

## Annex 2. Outline for the interview with key informants

This document includes four outlines for the interviews with four possible targets of multi-level key informants. Remember that the four outlines needed to be adapted to your RPO's characteristics and dynamics. For key informants at department/research unit level inside the RPO, follow the outline A and B. For the key informants at RPO "central" level, follow the outline C and D.

More specifically:
OUTLINE A. Department(s) governance/management (examples: present Department Director and Deputy/vice Director, or former directors if they witness interesting (and recent) cases).

OUTLINE B. Members of competition commissions in the hiring procedures of early and advanced career researchers in the same departments you choose for the interviews with the early and advanced researchers (examples: professors who have participated as members and/or internal presidents of Commission / Council in the selection processes of researchers and/or full professors and equivalent in non academic RPO (Grade A) who are involved in governance).

OUTLINE C. University/RPO governance (examples: rector, pro-rectors, Delegates and / or Vice Rectors, Board members, Members of the Senate, Members of the evaluation team and equivalent in non academic RPO, Top Management).

OUTLINE D. Key-actors and key-players on sexual harassment/gender violence (examples: President of the Guarantee Committee for Equal Opportunities, Employee Wellbeing and Non-Discrimination at Work) confidential advisor, diversity managers).

You do not necessarily need to interview all of the mentioned targets. You can choose them accordingly to your most relevant level of governance and actors in your institution/organization in order to allow/facilitate the identification of factors and mechanisms behind the gender imbalance in recruitment, career advancement and decision-making processes. Choose them with the overall goal of T2.5 in mind that is to: «focus on the cultural assumptions and everyday practices of recruitment and promotion processes, of decision-making boards, of research contents and programmes, and of allocations of research funds. The aim is to determine how, consciously or unconsciously, notions of "good" leadership and scientific "excellence" are gendered so that they influence recruitment procedures, career promotion, research funding».

All the topics have to be explored during the interview, but the order and the formulation of questions can be changed and adapted according to the interviewee's narrative flow and professional situation inside your RPO.

Ask the numbered and bold questions in the suggested form; instead, all the unnumbered and not bold questions are to be used if their topic has not emerged spontaneously. Objectives and notes in brackets are clarifications exclusively for the interviewer.

## PLEASE REMEMBER TO:

Before starting the interview: Introduce the research project to the participant. Ask the participant to fill in and sign the Informed Consent (ethics).

During the interview: Take note of your comments and notes using the dedicated section of the outline

After the interview: Fill in the "General information form"

## - OUTLINE A. GOVERNANCE - DEPARTMENTAL MANAGEMENT

Goal: to explore the strategic choices, decision-making processes and informal mechanisms of the governance of the Department, the organizational and gender culture of the Department in particular with regard to management, scientific excellence and leadership models. It investigates also the recruitment and career progression processes and their potential consequences in term of gender disparity.

Target: The interview is addressed to the Department management: Department Director and Deputy Director, or to former directors if they witness interesting (and recent) cases.

Interviewee: It is important that those conducting the interview know the organizational structure of the investigated Department (on-desk analysis of the website and available documents), the data on the composition by gender of the Department and the University regulations on recruitment. In order to reconstruct the procedures, it would also be useful to make a first informal exploration with the Department secretariat before carrying out the interviews.

Indications: In brackets some indications for the interviewer that do not fall within the formulation of the question.

The interview consists of three sections:

1. The first concerns the strategic choices of governance, the organizational and gender culture of the Department, in particular with regard to management models of scientific excellence and leadership models. 2. The second concerns the recruitment processes and performance evaluation for (grade C) researchers and for full professor (grade A and equivalent in non academic RPO) within the organizational culture of the Department. 3. The third includes questions about the department's policies, also in light of Covid-19.

## FIRST SECTION: STRATEGIC CHOICES, ORGANIZATIONAL AND GENDER CULTURES

1. What are the main strategic objectives that the Department has set in the last three years? [for the most recently appointed directors, refer to the current objectives and strategies to achieve them]. I would ask you if you can briefly outline the essential points, taking into account not only those included in the official documents, such as the Departmental Three-Year Plan, but also the most concretely pursued by the Department "policy". For example: increase the ranking nationally and internationally; investing in some areas of scientific research; implement a recruitment and stabilization plan; achieve an equal distribution of men and women in the various positions of the academic career; other.

Why these goals and from whom did these proposals emerge? From a small group of full professors, from some ad hoc Commissions or was the choice more participated and shared? [it is necessary to know the existing Commissions so as to then trace the composition in terms of sex]

Do you think that the colleagues - which we know are small in number [where it applies] - have actively contributed to the identification of strategic objectives?
2. It would be interesting to know how you work to reach a shared definition of the competition sectors in which to invest staff points for recruitment and career changes. In particular, I ask you: what are the spaces and moments, both institutional and informal, in which decisions are made? [investigate both the institutional and informal plan before arriving at the formal resolution by the Department Council: for example, the decisions are discussed in the Department Board, in ad hoc Commissions, in restricted meetings of some full professors, etc.]

Are all the members involved in these spaces/moments (Grade A, B, C and D)?
Which of these spaces or moments of confrontation do you find most useful?
In these spaces/moments of confrontation, have you observed a different way of being between men and women? If so, why? Did this translate into a different weight with respect to the decisions made?

If a Commission that informs the choices regarding recruitment and career advancement is in place, are there any criteria (formal and / or customary) that are followed for its composition? Which? Is there attention to the female presence?
3. Now we ask you to tell us which are the most valued features in your organization with regards to scientific excellence on the one hand and leadership on the other?

What are the main organisational values (for example: competitive-cooperative etc.)?
What do you think are the most valued features in a researcher/scholar within your department/institute/organization/discipline?

What are the characteristics of the leadership figures in your Department/institute/organization?
What characteristics do people considered excellent in your department/institute/organization/discipline have?

Are there different expectations in relation to leadership and excellence towards women and men in your department/institute/organization?

## SECOND SECTION: RECRUITMENT AND CAREER PROGRESSION PROCESSES

4. As regards the process of recruiting Grade A (Full Professor), I ask you, on the basis of your experience as Director, what are the three prevailing criteria, taking into account any differences between internal competitions [reserved only for University candidates], external competitions [reserved for all candidates] and calls for foreigners [who follow completely different procedures]. [try to understand what 'weighs more' in the STEM/SSH department in addition to the requirements of the National Scientific Evaluation and if there are additional thresholds]

As you are a privileged observer, how do you think these criteria are accepted by your colleagues? Is it believed that in some way they can produce imbalances between men and women?

Do you think it would be appropriate to introduce some alternative or additional criteria to these?
With specific reference to candidates within the Department, in addition to the criteria, there are also other considerations that are taken into account (i.e. being available for the Department/ University, willingness to cover managerial roles)? Do you find differences between men and women on these aspects? If so, how do you explain it?
5. As regards the selection and recruitment processes of early career researchers (Grade $\mathbf{D}$ and $C$ ), which are the three main criteria? [try to understand what 'weighs more' in the STEM/SSH department in addition to the requirements of the National Scientific Evaluation and if there are additional thresholds.

As you are a privileged observer, how do you think these criteria are accepted by your colleagues? Is it believed that in some way they can produce imbalances between men and women?

Do you think it would be appropriate to introduce some alternative or additional criteria to these?
With specific reference to candidates within the Department, in addition to the criteria, there are also other considerations that are taken into account (evaluation of the work of the research fellow/researcher, the willingness to 'invest' in the Department and to collaborate within the research groups of the Department)?

In this regard, is there a Department strategy to ensure greater contractual continuity? And what is your opinion about it? [investigate the orientation of the Department and of the interviewee regarding the internal/external channels and the direct passages from Grade D to Grade C and indirect from junior to senior researcher within Grade C]

Do you find differences between men and women on these aspects (and therefore on the assessment of early career performance within the Department)? If so, how do you explain them?
6. Thinking in an overall way on the selection process, I ask you - making the appropriate distinctions between career start/early career positions and advanced positions - what weight do factors such as maternity leave or any disabilities have in the evaluation? I also ask you if the evaluation generally takes into account additional aspects such as family charges, working hours (full / part time) or any illnesses?

How is this taken into account and in this regard what are the common attitudes in your Department?
Are there any corrections applied? If so, on which indicators are they used and to what extent? How are they received by colleagues, also in light of the European Research Council (ERC) model of 18 months per child?

In your opinion, further corrections / incentives should be introduced to ensure greater equity (which ones?) Or should they not be introduced to avoid reinforcing the differences between men and women?
7. With regard to the Competition Commissions in the selection procedures, we have seen that the University/Organization (not) provides for specific measures for their composition by gender [possibly remember what the regulation provides]. What is your opinion about it? In addition, is there attention in the Department to the composition by gender of the competition commissions? Would it be appropriate for it to exist in your opinion?
8. In your experience, have you found differences between men and women - in the early stages of their careers and/or in the more advanced ones - in terms of performance, and therefore in terms of scientific production, organizational activity and teaching? If so, in 'quantitative' and / or 'qualitative' terms? How do you explain them?
9. Is there any form of monitoring relating to the distribution of the more strictly service and administrative tasks of Grade D and C (which may differently affect performance, such as thesis, participation in commissions, assignments such as coordination of degree courses, service activities to students in general)? Do you understand that there is an imbalance between men and women (with the same role) in the distribution of these different activities? If so, why do you think? [if necessary, upon request for clarification, refer to the literature]

## THIRD SECTION: DEPARTMENTAL POLICIES

10. The literature shows how the visibility of women (participation in conferences, public events, managerial positions, etc.) is - all other things being equal - on average lower due to various factors, also linked to cultural dimensions (stereotypes, expectations, consolidated practices, etc.). Is there awareness of this and is it a topic that was discussed in the Department?

For example, do you remember debates in institutional or informal settings where the issue of gender emerged (ie. criticism of 'all male panel' seminars, debate on gender language, etc.)? Can you tell me how the debate raised? [investigate who raised the issue, if there was any resistance, etc.]

Has the Department taken action in this regard with initiatives/policies to promote gender equality? If so, which kind of policies or initiatives and what is your point of view on the matter? [If the interviewee considers the policies or initiatives insufficient, ask what could be (further) done?]

Is there attention in the Department to the participation of the female component in public events? What do you think of the rebalancing campaigns or initiatives? [i.e. the 'No women no panel' campaign]
11. Can you comment on the data on the composition by sex relating to the various positions (among all Grades, from research fellow to full professor)? [Show the data and highlight the imbalances: two graphs, a histogram with the gender composition between the different departments and a historical trend (if we can recover it) specific to the department]. What could be the reasons for such imbalances in your opinion?
12. Are there any Department policies to promote equal opportunities for men and women in accessing early career stages, tenure track positions and open-ended positions?

If so, what are the main policies?
If not, why and what could be done? Does the Department intend to adopt measures in the near future to ensure equal opportunities for women or to encourage the presence of women in study paths (in particular where they are under-represented, for example in the STEM area)?

Are you already aware of the fact that universities without GEP (Gender Equality Plan) from 2022 will no longer be able to participate in the Horizon Europe funds, a program that will replace H 2020 ? What do you think about this?
13. The pandemic, forcing people to work from home, is showing how having responsibility for caring, especially for small children but also for elderly people who are not self-sufficient, takes time
and - as recent studies show - affects the well-being and scientific productivity of researchers and especially female researchers. Has the Department thought or is it considering an ad hoc policy and measures to ensure equal opportunities for those with care responsibilities? If not, why? What is your opinion on this? / If so, which ones? Do you think they are sufficient?

Thank you very much for your time! Is there anything else you would like to tell me?

INTERVIEWER'S NOTES AND COMMENTS
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GENERAL INFORMATION FORM (FILLED IN BY THE INTERVIEWER).

Sex: Male I__| Female |__| other I__|
Year of birth: |__|I_II_|I_|
Country of birth $\qquad$
Where do you live?
Country: $\qquad$
City: $\qquad$

Citizenship: $\qquad$
Education $\qquad$
Year of the PhD (If it apply) $\qquad$
Academic/scientific fields $\qquad$
Current job/position
Type of contract

Start of job (month, year)

Full-time, part-time

## - OUTLINE B. MEMBERS OF COMPETITION COMMISSIONS IN THE HIRING PROCEDURE FOR EARLY AND ADVANCED CAREER RESEARCHERS

Goal: The interview aims to reconstruct the recruitment processes starting from the experiences and individual choices of the commissioners, with particular attention to the concepts of suitability, scientific excellence and skills expected within the organization's gender culture.

Target: The interview is thought for professors who have participated as members and/or internal presidents of Commission / Council in the selection processes of a researcher (Grade C) and/or full professors (Grade A) who are involved in governance.

Interviewee: It is crucial that who manages the interview knows the data about the gender-based composition of the investigated departments, the University regulations on recruitment (and has possibly read the documents relating to specific calls, approved by the Evaluation Commission and published on the University portal).

Indications: In brackets some indications for the interviewer that do not fall within the formulation of the question.
!Keep Attention! With two of the interviewees, the questions' topic is the selection of researchers (Grade C); while with the other 2 is the selection of full professors (Grade A).

The interview as a whole is articulated in three sections: 1 . The first concerns a specific personal recruitment procedure in which the interviewee participated as president or as a member of the Commission/Council. 2. The second concerns the recruitment processes and the organization's culture with regards to scientific excellence and gender culture. 3 . The third includes questions on the policies of the Department it belongs to, also in light of Covid-19.

1. First of all I ask you about your experience in selection and promotion procedures: how many recruitment processes and for which positions did you take part of?

For researcher position (within Grade C) as an internal member of this department's Commission?
For researcher position (within Grade C) as another department's Commission member?
[directed to full professors only] For full professor (Grade A) external recruitment competitions as a member of this Department's Commission member?
[directed to full professors only] For full professor (Grade A) external recruitment competitions as another Department's Commission member?
[directed to full professors only] How many internal procedures for Grade A did you take part of as a member of the department Council?
2. [DIRECTED TO THE COMMISSIONERS INVOLVED IN RECRUITMENT PROCESSES FOR researchers position (within Grade C)] I ask you, now, to tell me about your personal experience as commissioner in a specific case of selection for a researcher position (within Grade C) in which there was at least one male candidate and a female one. It can be the last selection you took part of or a selection that you remember particularly well.

2bis. [TO BE ASKED TO COMMISSION / COUNCIL MEMBERS IN SELECTION PROCESSES BY FULL PROFESSORS (GRADE A)] I now ask you to tell me about your personal experience as a member of the Commission / Council in a specific case of selection of Grade A in which at least one male and one female candidate were present. It can be the last selection you took part of or a selection that you remember particularly well.
[only if the interviewee has chosen a selection that he/she remembers well] Why did you choose to tell me about this specific case?

How was the Commission composed? And what was your role in the Commission?
Number and gender of the candidates?
Were the candidates external to the University?
Did you have a preference for a candidate? Why?
Who won? A man or a woman?
3. I ask you to think about the phase that preceded the creation of this researcher position (grade C) - or - Grade A position; and consequently to think about how you arrived at a shared definition of the competition sector in which to invest staff points for recruitment/career advancement. In particular, what I want to ask you is:

Which was the main reason that led the Department to ban this Grade A - or - C position, in addition to the current availability of resources? (For example: balances between disciplinary areas - in particular for multidisciplinary departments - and balances between scientific sectors; particular new needs in the teaching sector; strengthening a research area/group; power relationships; visibility of the group; replacing an exit; or even, in the case of Grade C, giving the possibility to a 'young' person known in the Department to proceed in the academic career through an open competition; other).

Before arriving at the formal resolution by the Department Council, which were the spaces or moments of meeting and discussion between colleagues, even in addition to those provided for by the
institutional way? [let's here investigate both the institutional and informal plan: for example, the decisions were discussed in the Department Board, in ad hoc commissions, in restricted meetings for Full Professors only, etc.?

In this regard, does this specific case differ from other decision-making processes that led to the ban of a Grade C - or - a Grade A position? How? Can you give me other examples?
4. Referring to the spaces and moments of confrontation that precede the choice of recruitment/career advancement, and thinking about this specific case but also about your experience more generally, I ask you:

Among the spaces and moments of confrontation in which decisions regarding recruitment/career advancement are taken and which you spoke to me about, which do you find most useful and why?

Are all members actively involved in the institutional spaces (structured and unstructured staff)?
In these spaces/moments of confrontation (institutional and informal), did you happen to observe a different weight among colleagues based on the position held with respect to the decisions taken?

In these spaces moments of confrontation, did you happen to observe a different way of being between men and women? If so, why? Did this translate into a different weight with respect to the decisions made?

Basing on your experience, what tensions and what loads of responsibility one has to face when making choices related to recruitment and career advancement within the Department? Being these choices that fall on people's paths (working but also private life), has it ever happened to you to find yourself in difficulty in choosing whether to recruit young people or career advancements? If so, can you tell me an example?
5. In order to go deeply into the core of this selection procedure, I ask you: how did the decisionmaking process take place within the Commission/Council that led to the selection of the best candidate? Could you describe it?

What has been the development of the decision-making process? For example: immediate consent, disagreements, mediations and main issues, the more or less influential role of the members of the Commission/Council, etc.

What was your 'role' / position within the discussion?
Were there any further spaces or moments for discussion beyond those provided for in an institutional way?

Thinking about this selection procedure but also referring to your personal experience more generally, I ask you what loads of responsibilities or tensions did you experience in the role of Commissioner? For example, have you ever felt the need to reduce the margins of discretion, to rely on networks of known people, to reduce the fear of appeals, etc.? Can you give me an example?
6. In this selection procedure, which ones were the decisive criteria for a selection/promotion?
[In case of recruitment-procedure for researcher position (Grade C)] Were these criteria mentioned in the formal description of the call?

More generally, what are the three prevailing criteria in the selection processes for Grade C or for Grade A in their specific disciplinary sector (considering both the first phase of evaluation of qualifications and the second of the interviews / seminars held by candidate people)? What 'counts the most', in addition to the requirements of the ASN?
7. Do you believe that the candidates' sex/gender played a role in this selection procedure?

How many candidates were called for the interview / seminar?
If there were unselected candidates, what were the reasons for excluding them?
Was being a man or a woman in some way a topic of discussion within the Commission (for example, has there been talk of any 'drops' in productivity or career interruptions?)? Why? What is your opinion on this?
8. Did the final decision taken by the Department take into account the indications that emerged from the Commission? What other elements weighed in the final decision?
9. Do you consider the person selected through the selection process an excellent candidate? Why? [try to understand what excellence is for the interviewee]
10. Thinking of your other experiences as a commission member in selection processes of the same grade, is this procedure similar to the others in which you have been involved or does it differ in some ways? Which?

## SECOND SECTION: SELECTION PROCESSES AND LINKS WITH THE GENDER CULTURE OF THE ORGANIZATION

11. Can you, please, tell me now which are in your opinion the most valued features in your organization with regards to scientific excellence?

First of all, what are the main organisational values (for example: competivive-cooperative etc.)?
What do you think are the most valued features in a researcher/scholar within your department/institute/organization?

What characteristics do people considered scientifically excellent in your department/institute/organization have?

Are there different expectations in relation to excellence towards women and men in your department/institute/organization?
12. We talked a little while ago about the selection criteria, I ask you now if you think that in some way these criteria you mentioned can contribute to producing imbalances between men and women or are they neutral?

Do you think it would be appropriate to introduce some alternative or additional criteria to these?
13. Based on your experience, in the selection processes - making the appropriate distinctions between early career and advanced positions - factors such as maternity periods, family loads,
working hours (full/part time) are generally taken into account, any illnesses or disabilities of the candidate?

If so, how and what is your opinion on the matter? Are there any corrections applied? On which indicators are they used and to what extent? Do you think they are adequate, also in light of the European Research Council (ERC) model of 18 months per child?

If not, what is your opinion on this? In your opinion, it would be appropriate to introduce corrective measures to ensure greater equity (which ones?) Or should it not be in order to avoid reinforcing the differences between men and women?

Basing on your experience and according to your point of view, the candidates' reasons for any interruptions in their career or "drops" in scientific productivity are sufficiently taken into consideration? Is it a topic that is dealt with during the interview for researcher or in the seminar held by the professors for the Grade A selection (in 'external' competitions)? What is your opinion about it, is it desirable to do so in your opinion?
14. The literature shows how women's productivity (i.e. in terms of publications) and visibility are other things being equal - on average lower due to various factors, also linked to cultural dimensions (stereotypes, expectations, consolidated practices). Is there awareness of this and is it a topic that is discussed in the recruitment and evaluation processes?

If so, how and what is your point of view on the matter?
[If not or to an insufficient extent for the interviewee]: In your opinion, what could be done to take it (more) into account?

Thinking about the Competition Commissions, are there any criteria (formal and/or customary) that are followed for its composition? Which?

Is their composition by sex sufficiently taken into consideration?

## THIRD SECTION: DEPARTMENTAL POLICIES

15. Can you comment on the data on the composition by sex relating to the various positions (among all Grades, from research fellow to full professor)? [Show the data and highlight the imbalances: two graphs, a histogram with the gender composition between the different departments and a historical trend (if we can recover it) specific to the department]. What could be the reasons for such imbalances in your opinion?
16. Do you know if your Department and/or University applies any gender policy in the recruitment and career progression process?

If they exist, how are they received by the members of the Department? Were there more or less explicit discussions or resistances?

If they exist, how are these policies applied in practice?
What is your opinion on these kinds of policies? If they are not present, do you think they should be introduced? What policies and why?
17. In this phase marked by Covid-19, do you believe that some sections of the academic population may be at a disadvantage? Why? (ie. candidates with care responsibilities; early careers versus advanced careers regarding housing conditions)
18. Do you believe that the University (or the Department) in this particular phase marked by the pandemic should think of policies to guarantee equal opportunities to those who have responsibility for care (children but also of non self-sufficient elderly), also with specific reference to the processes of recruiting and career progression? What is your opinion on this?

What do you think are the solutions measures that could be implemented?
19. Are you already aware of the fact that universities without GEP (Gender Equality Plan) from 2022 will no longer be able to participate in the Horizon Europe funds, a program that will replace $\mathbf{H 2 0 2 0}$ ? What do you think about this?

Thank you very much for your time! Is there anything else you would like to tell me?

INTERVIEWER'S NOTES AND COMMENTS
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GENERAL INFORMATION FORM (FILLED IN BY THE INTERVIEWER).

Sex: Male |__| Female |__| other |__|
Year of birth: $\quad\left|\quad \_||\ldots|| \ldots\right| \mid$
Country of birth $\qquad$
Where do you live?
Country: $\qquad$
City: $\qquad$

Citizenship: $\qquad$
Education $\qquad$
Year of the PhD $\qquad$
Academic/scientific fields $\qquad$
Current job/position

Type of contract

Start of job (month, year)

Full-time, part-time

## - OUTLINE C. UNIVERSITY/RPO GOVERNANCE ("CENTRAL" LEVEL)

Goal: investigate the following thematic areas: interviewee profile, career and how he/she reached their current role/position, the selection process of the RPO's rector/head/president and his team (delegates and vice), collegial bodies (Senate and Board of Directors), policy and resources/funds for recruiting and internal distribution, policies for the promotion of gender equality, the organizational culture.

## SECTION ONE: THE RECTOR/PRESIDENT/HEAD'S TEAM

Goal: to estimate the relative weight of the positions occupied by women within the university governance system

1. What requirement prevailed in the formation of the rector's work team, with reference to the number of vice rectors and delegates and the criteria followed for their appointment? Is equal gender representation one of the team formation criteria? Are there specific delegations for equal opportunities?
2. Thinking about the rector's team (pro-rectors and delegates), can you indicate the three most influential on the political line of the university?

Who are they?
Where does their position of influence come from?
[Identify the prevailing main sources of influence: personal charisma, close relationships with the rector, relevance of the delegation held, scientific area of origin ...]

What is the relationship between the rector/president and the delegates? [collaboration, competition, hierarchy?]

Are there any proxies considered 'heavier' than others?

## SECTION TWO: THE COLLEGIAL BODIES

Goal: to detect mechanisms of co-optation or selection that have favored or hindered the selection of women in the governing bodies; estimate the relative weight of the positions occupied by women within the university governance system; detect the unfolding of any multiplier effects
3. On a scale of one to ten, for each of the members of the Board of Directors [show complete list], can you indicate the influence degree exercised?
4. [For the first three components in the ranking of influence reconstructed by the interviewee]

From your perspective, what cause one position to be more influence from another? [identify the main sources of influence: personal charisma, close relationships with the rector, relevance of the delegation held, scientific area of origin ...]
5. For each women on the Directors Board, can you tell me who they are and why they were appointed? [refer to the members list]
6. Thinking about the members of the Academic Senate (and equivalent in the non academic RPO), can you indicate the three most influential and the reasons for their influence?

Who are they?
[identify the prevailing sources of influence: personal charisma, close relationships with the Rector, relevance of the delegation held, scientific area of origin ...]

## SECTION THREE: THE POLICIES FOR THE RECRUITMENT AND SCHEDULING OF STAFF

Goal: establish the prevailing criteria for resources allocation, to define and organize it, the automatic or strategic nature of these criteria, if they presuppose the objective of gender equality, the top-down or bottom-up form of the process and the most influential actors.
7. What criteria are adopted in this university/RPO to distribute economic and financial resources to the departments/research units aimed at planning the recruitment and career advancement of staff?

Do automatisms related to the application of indicators and algorithms prevail?
What are the indicators that weigh the most?
Is any maternity leave taken into account?
The indicators that have been adopted are they considered: innovative or strategic for this university? Is there room for non-automatic criteria linked to discretionary and political choices?

Which? What kind? [opening of a new degree course, coverage of the educational offer, launch of a research line, ability to attract funding, gender balance ...]

## 8. Who defines these criteria?

9. Does the rector/president/head or general manager consult the peripheral bodies on these issues?

Are the departments consulted? Do you consult all of them or the biggest ones?
Are disciplinary groups consulted? All or the majors?
10. In your opinion, who are the most influential people in this decision-making process?

## SECTION FOUR: GENDER POLICIES

Goal: to grasp the commitment, to promoting equal opportunities, the introduction of public discourse and the ritual / instrumental nature of the initiatives taken, the perceived role of the Gelmini reform.

## 11. Do you know the gender policy of your university?

12. On this issue, what has been done?

In particular, have measures been taken to support a wider participation of women in the governing bodies of the university? And if so, which ones?

Have any measures been taken in relation to equal opportunities in the access and / or career progression of the academic body? If so, which ones?

## 13. How, when and by whom was the topic raised?

[Is the theme present has been presented on the basis of external stimuli, for example indications from the European Union, or recognized and followed benchmarks, or was it placed on the initiative of groups or figures within the university/RPO?]
14. In your opinion, in recent years at your university/RPO in which of the following aspects has the equality of women progressed most, and why?
access to the academic/RPO profession and career progression
the management and control plan
the political plan with discretion
15. Are you already aware of the fact that universities without GEP (Gender Equality Plan) from 2022 will no longer be able to participate in the Horizon Europe funds, a program that will replace H2020? What do you think about this?

## SECTION FIVE: ORGANIZATIONAL CULTURE

Goal: investigate the organizational culture, the gender culture of the organization, models of leadership models.
16. How is the organisational climate in this RPO (for example: at the University of Turin)? What are the main organisational values (for example: competivive-cooperative etc.)? Has it changed and how over time?
17. In your opinion, what are the characteristics of the leadership figures in this RPO (for example: at the University of Turin)?
18. What types of activities, factors and merits do you think are considered necessary/important for achieving promotions?
19. Do you think these criteria are sensitive to work-life balance (for example for requests of productivity and extra work, international mobility; etc.)? Do you think they have different implications for men and women?
20. Have you experienced discrimination or harassment at your workplace due to age, sex, sexual orientation, national origin, social class, other (e.g. pregnancy, long illness, care charges, use of parental leave)? Do you know if it has happened to others?

Thank you very much for your time! Is there anything else you would like to tell me?

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GENERAL INFORMATION FORM (FILLED IN BY THE INTERVIEWER).

Sex: Male |__| Female |__| other |__|

Country of birth $\qquad$
Where do you live?
Country: $\qquad$
City: $\qquad$
Citizenship: $\qquad$
Education $\qquad$
Year of the PhD $\qquad$
Academic/scientific fields $\qquad$
Current job/position
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Type of contract
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Start of job (month, year)

Full-time, part-time

- OUTLINE D. KEY-ACTORS, KEY-PLAYERS ON SEXUAL HARASSMENT/GENDER VIOLENCE

Goal: investigating sexual harassment and gender violence phenomenon at your RPO, asking for data and information about the main characteristics and some emblematic history of people involved and for policies and instruments promoted and used by the interviewees and/or by his/her organization/committee

## PLEASE FORMULATE QUESTIONS IN YOUR NATIONAL LANGUAGE AIMED TO EXPLORE THE FOLLOWING TOPICS

INTERVIEWEE PROFILE, CAREER AND HOW HE/SHE REACHED THE CURRENT ROLE/POSITION
HISTORY AND EVOLUTION OF HIS/HER ROLE/INSTITUTION/COMMITTEE
CURRENT RELATIONS OF THE INTERVIEWEE AND ITS INSTITUTION/COMMITTEE WITH GOVERNMENT BODIES

RECONSTRUCTION OF HOW THE DECISION-MAKING PROCESS IS CARRIED OUT AND OF HOW THE AGENDA AND ACTIONS AGAINST SEXUAL HARASSMENT/GENDER VIOLENCE ARE IMPLEMENTED

## AND ASK THE FOLLOWING ONES:

## SEXUAL HARASSMENT AND GENDER VIOLENCE AT YOUR RPO

What about people who experienced discrimination or harassment in this RPO due to age, sex, sexual orientation, national origin, social class, other (e.g. pregnancy, long illness, care charges, use of parental leave)? How many are they? How were/are they supported by your committee/organization/you?

## ORGANIZATIONAL CULTURE

Goal: investigate the organizational culture, the gender culture of the organization, models of leadership models.

How is the organisational climate in this RPO (for example: at the University of Turin)? What are the main organisational values (for example: competivive-cooperative etc.)? Has it changed and how over time?

How would you describe the current working relationships in this RPO? Has it changed and how over time?

What are the characteristics of the leadership figures in this RPO (for example: at the University of Turin) in your opinion?

In your opinion, are there different expectations in relation to leadership towards women and men in this RPO (for example: at the University of Turin)?

What types of activities, factors and merits do you think are considered necessary/important for promotions?

Do you think these criteria are sensitive to work-life balance (for example for requests of productivity and extra work, international mobility; etc.)? Do you think they have different implications for men and women?

If you think at people at the beginning of their university career, what do you think is most useful for making them grow?

Are you already aware of the fact that universities without GEP (Gender Equality Plan) from 2022 will no longer be able to participate in the Horizon Europe funds, a program that will replace H2020? What do you think about this?

Thank you very much for your time! Is there anything else you would like to tell me?

## INTERVIEWER'S NOTES AND COMMENTS

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GENERAL INFORMATIONS FORM (FILLED IN BY THE INTERVIEWER).

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Sex: Male I__| Female |__| other |__|
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Year of birth: |__||_||
Country of birth $\qquad$
Where do you live?
Country: $\qquad$

City: $\qquad$
Citizenship: $\qquad$

Education $\qquad$
Year of the PhD $\qquad$
Academic/scientific fields $\qquad$

Current job/position

Type of contract

Start of job (month, year)

Full-time, part-time

## Annex 3. Outline for the interview with researchers

The questions have to be asked, but their order and formulation can be changed according and adapted to the interviewee's narrative flow and professional situation.

In accordance to the general aims of WP2 assessing gender imbalances, the objectives of collecting qualitative data in the implementing organisations are:

To analyse gender asymmetries in scientific careers in STEM and SSH disciplines
To understand whether and if so, in what ways gender differences and inequalities are re-produced at various stages of academic careers

More specifically the issues explored in the interview outlines are: -the identification of the "push" and "pull" factors behind the gender imbalance in recruitment, career advancement and decision-making processes; - gender differences in individuals' trajectories, constraints, motivations and strategies in entering, pursuing or quitting academic careers (micro level);

## Instructions for the interviewer

The following outlines for the interviews with researchers (outline A. for early career, B. for advanced career) are divided into 7 sections. In each section of the outline there are:
a brief description of the thematic focus, aim and topics to be investigated in the section a list of suggested questions

The target of the interviews with researchers includes:

- early career: male and female PhD holders in the early stages of their career like for example research fellows, post-docs non-tenured assistant professors, adjunct professors with temporary contracts (usually considered in grade D according to the report of the European Commission "She figures 2018" pp.194-200) and researchers in grade C for no more than 10 years in that role. The goal here is to explore the early stages of "junior" researchers' career paths and the existence of the "leaky pipeline" ${ }^{22}$ phenomenon;
- advanced career: male and female academics in grade B (for example in the Italian case this correspond to the "associate professor" and equivalent in the other RPOs -Research-performing organizations); in other words people not yet in the higher level of hierarchy (as example, grade A full professorship in the University) but in a permanent and responsibility position; this because one of the goal of the interviews with the "advance career researchers" is to explore the career advancement into apical positions and the so called "glass ceiling" (and the difficulties to reach the higher/top position in the hierarchy of the RPOs).


## PLEASE REMEMBER TO:

Before starting the interview: Introduce the research project to the participant (for this purpose please use the information leaflet and the MINDtheGEPs website). Describe the course of the meeting and rules of the interview (e.g. recording, confidentiality, information about further using of the collected empirical material and data storage). Ask the participant to fill in and sign the Informed Consent in your own language (the English version is in D9.1 in MINDtheGEPs Drive folder where you can also find information and instructions about ethics, participants' recruitment, storage, and anonymity).

During the interview: Take note of your comments and notes on interviewee's nonverbal communication, mood, physical reactions to certain questions, interruptions, etc. and other relevant aspects using the dedicated section of the outline

After the interview: Fill in the "General information form"
Keep notes as soon as possible of the main interviewees' socio-demographic characteristics in the Excel file "Overview of the sample" in MINDtheGEPs Drive folder that we prepared to record the list of interviewees for each country (each country has its own file). It is meant to be useful both for each country team to plan the interviews, and for the coordinator of these tasks (University of Turin) to have an easy overview and to keep the overall interviews implementation process under control. To this end it is useful to collect this information step by step, therefore please keep the file updated.

## - INTERVIEW OUTLINE FOR SEMI-STRUCTURED INTERVIEWS WITH EARLY CAREER AND ADVANCED CAREER RESEARCHERS

The aim of the interview with SSH and STEM early career and advanced career researchers in academic and non academic organizations is to reconstruct their individual careers.

For each issue try to explore:
interviewee's lived experiences, expectations, perceptions, meanings, definitions, motivations, strategies, agency and other elements and aspects useful to understand the interviewee's professional history and situation as well as his/her subjective point of view about it turning points reasons behind decisions and changes criticalities and/or opportunities gendered mechanisms and processes gender bias and stereotypes (self-)selection and (self-)evaluation processes networking

Main thematic sections of the interview outline: Past working path ; Present job/everyday working life; Organizational cultures; Wellbeing and work-life balance; Career advancement and future prospects ; Interviewer's notes and comments; General Information Form (filled in by the interviewer).

Please take into account that the interview outlines are two for researchers interviewed in different stages of their career:

- The A. for early career: male and female PhD holders in the early stages of their career like for example research fellows, post-docs non-tenured assistant professors, adjunct professors with temporary contracts (usually considered in grade D according to the report of the European Commission "She figures 2018" pp.194-200) and researchers in grade C for no more than 10 years in that role. The goal here is to explore the early stages of "junior" researchers' career paths and the existence of the "leaky pipeline" phenomenon;
- The B. for advanced career: male and female academics in grade B (for example in the Italian case this correspond to the "associate professor" and equivalent in the other RPOs - Researchperforming organizations); in other words people not yet in the higher level of hierarchy (as example, grade A full professorship in the University) but in a permanent and responsibility position; this because one of the goal of the interviews with the "advance career researchers" is to explore the career advancement into apical positions and the so called "glass ceiling" (and the difficulties to reach the higher/top position in the hierarchy of the RPOs).

But unique for the different types of organizations involved in the sample: Public universities; Public non academic organizations; Private RPO; and for different scientific fields. Therefore pay attention to adapt and adjust the questions to their working situation, position and scientific field if necessary.

## - A- INTERVIEW OUTLINE FOR EARLY CAREER

## a. PAST WORKING PATH

Goal: reconstruct the career path and the recruitment process, and understand how the major turning points (both in professional and personal/family life) influenced the career

Could you tell me about your research career? What are the salient moments and turning points of it to your current situation?

Topics to be investigated if the information does not come up spontaneously: motivations behind the choice of the scientific field, continuity/discontinuity in interviewee's career path and reasons for it,
intra and inter-national mobility, working experiences and biographical/family events that have marked turning points

When and how have you been recruited by your department/institute/organization?
Topics to be investigated if the information does not come up spontaneously: if the interviewee already had a relationship with his/her department/institute/organization, factors that in interviewee's opinion favoured his/her hiring

## b. PRESENT JOB/EVERYDAY WORKING LIFE

Goal: investigate the distribution of time between the various work activities (research, teaching, funding management, fund rising, "third mission", administrative work) and the spaces of autonomy and visibility.
(only for those who are no-tenure track) Do you have a supervisor or mentor?
Topics to be investigated if the information does not come up spontaneously: the supervisor/mentor is men or woman, how the organisation of the supervision is [was], how the interviewee would change [have changed] this organisation, what is the impact of this person on his/her thesis/research/publications/career and work opportunities, if s/he helps/helped the interviewee to understand next step requirements for pursuing a career.

How much time do you dedicate a week to research activities?
Have you ever been involved in research projects (Local? National? International?)? How (formal/informal involvement)? What impact do you think this experience has, or will have, on your career?

Do you think your research activity has visibility in your department/institute/organization?
Do you teach (for university: and/or supervise undergraduate/graduate research theses)?
If no:
Why not? Would you like it?
If yes:
How many courses and what kind of courses do you teach (compulsory, optional; undergraduate, postgraduate)? How many students do you have? National and/or international students? Do you teach overtime? (If yes) Does it happen often (i.e. every academic year) or sporadically?

Who decides on the courses and their content (are they decided autonomously, are they shared with the supervisor or by others)?

How are these activities (teaching / supervision) recognized by your department/institute/organization: are they formalized and paid or are they simply considered as part of your work? Are they considered when you are evaluated/when you apply for promotion? What's your opinion about it?

Do you find that the work you dedicate to teaching-research is balanced in terms of time? If not, why?

Do you spend time working on administrative tasks? How much and of what type? Could you make some example?

Topics to be investigated if the information does not come up spontaneously: perceveid/experienced problems with these tasks and of what kinds

How are you involved in Public Engagement activities? Which? How much time do you spend on these activities?

## c. ORGANIZATIONAL CULTURE

Goal: investigate the organizational culture, the gender culture of the organization, models of scientific excellence and leadership models.

How is the organisational climate? What are the main organisational values (for example: competivive-cooperative etc.)? Have they changed and how over time?

How would you describe your current working relationships in your department/institute/organization? Has it changed and if so, how over time?

What do you think are the most valued features in a researcher within your department/institute/organization?

What are the characteristics of the leadership figures in your workplace?
How is excellence defined in your department/institute/organization? What characteristics do people consider excellent in your department/institute/organization have?

Are there different expectations in relation to leadership and excellence towards women and men in your department/institute/organization?

What types of activities, factors and merits do you think are considered necessary/important for promotions?

Topics to be investigated if the information does not come up spontaneously: importance to build networks within the scientific community; how useful can be the role of the supervisor; criteria of evaluation as for example publications, internationalization, participation in research projects, teaching, participation to conferences, participation in editorial committees of journals; try also to explore if the interviewee thinks to adhere/resemble to this type of models.

Do you think these criteria are sensitive to work-life balance (for example for requests of productivity and extra work, international mobility; etc.)? Do you think they have different implications for men and women?

If you think at people at the beginning of their university career like you, what do you think is most useful for making them grow?

Topics to be investigated if the information does not come up spontaneously: if in the interviewee's opinion leaving a scientific career at the beginning of the career involves men and women differently and why

Have you experienced discrimination or harassment at your workplace due to age, sex, sexual orientation, national origin, social class, other (e.g. pregnancy, long illness, care charges, use of parental leave)? Do you know if it has happened to others?

Topics to be investigated if the information does not come up spontaneously; what she/he did to cope with this and who she/he could contact to ask for help

## d. WELLBEING AND WORK-LIFE BALANCE

Goal: understand from a gender perspective how work organization influences wellbeing and health, the reconciliation between professional, private life and child/elderly/disabled and sick care responsibilities, embodiment, the choice to become parents and investigate the support network (University, non academic organization and family networks).

## How is your day/week organized? Can you describe it?

Topics to be investigated if the information does not come up spontaneously; fixed/flexible working hours, how many hours a day/week on average the interviewee spend working, if the organisation of work is judged in/sensitive to work-life balance.

How has your working day/week changed with the Covid-19 pandemic? (investigate the experience of home-working)

Did your department/institute/organization adopted policies, services and measures to support you in relation to the Covid19 pandemic? If yes, what?

## Do you find your work spare time appropriately balanced?

Topics to be investigated if the information does not come up spontaneously; work-related stress, if the interviewee ever work at home after official working hours and/or at weekends/during holidays, and what kind of work (emails, articles, etc.) and changes over time, if she/he has enough time for leisure, sports, hobbies, associations, politics, friends, etc., what she/he would like [has liked] to do in free time.

Who do you live with and what is your family like?
If the interviewee has a partner or a spouse, ask about his/her job status as well as if he/she is as well working in academia

Does the way how work is organised enable you to balance your work with private/family life? Has this situation changed over time?

Topics to be investigated if the information does not come up spontaneously; if the interviewee is satisfied or she/he would a different organization of the work

Do you think that your work / career has influenced your well-being and life plans in the past or influences now? How? Why?

Topics to be investigated if the information does not come up spontaneously; perceived obstacles in private/family plans, life as a couple, marriage, personal or family illnesses, care responsibilities towards the elderly or other family members), in having (other) children working at university/in research; for who doesn't have children: if she/he would like to have some

Do you think there are differences between fathers and mothers in the obstacles to be faced in your profession? Which? Why?

Can you count on the support of your University/institute/organization to reconcile private life and work? How? [Only for parents]

Have you taken maternity / paternity / parental leave? If so, can you tell me your experience? How long was your career break(s). Did you experience any difficulties or penalties?

Which measure and or policy of work-life balance can you count on (in addition to university supports)

Do you have [had] (enough) support from your family (partner and/or parents/parents in law and other relatives) to pursue your career and to reconcile life/family and work?

Topics to be investigated if the information does not come up spontaneously; if family is perceived as hindering / delaying or accelerating / helping his/her career

What repercussions on your work-life balance had Covid19 pandemic? How about your mental and physical health?

## e. CAREER ADVANCEMENT AND FUTURE PROSPECTS

Goal: investigate the correspondence between the skills acquired so far and the position currently held, the barriers to career progression (role of the University/institute/organization and the role of the welfare state) and future prospects.

Do you think that your current position is congruent with your CV (with your records, experience, your skills)? and is your current position congruent with the responsibilities you have, or do you spend a lot of time on activities and tasks that you shouldn't be responsible for? Which?

Do you have enough support from your current department/institute/organization to pursue your career interests and ambitions?

Do you think that in your department/institute/organization - and more generally in your sector the difficulty in advancing in the scientific career affect men and women differently? How and why? Are there any other features that can affect it? Eg social class, nationality, sexual orientation, other? How and why? Can you give some examples?

## What measures / policies / benefits:

could ensure greater protection and safety at work? (for examples in relation to income, sickness, parenting, maternity, paternity, parental leave, access to credit, home loan, housing)
could improve the quality of professional and private life of workers in your position?
Do you personally feel safe and protected in the event that you remain without a labour contract? Has this already happened to you? Have you ever benefited from unemployment insurance?

Imagine you can move into the future and look at yourself in 5 years time. How do you expect to see yourself (explore realistic expectations)? And what would you like to see (explore desires and wishes)?

Thank you very much for your time! Is there anything else you would like to tell me?
f. INTERVIEWER'S NOTES AND COMMENTS
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g. GENERAL INFORMATION FORM (FILLED IN BY THE INTERVIEWER).

Academic/scientific fields
Sex: Male |__| Female |__| Other |__|
Year of birth: $\quad\left|\quad \|_{\|}\right|\left|\_\left|\left|\_\right|\right.\right.$
Country of birth $\qquad$
City of birth: $\qquad$
Where do you live?
Do you currently live in $X_{x x}$ (name of the city, where the university/research institute is located) or do you have to commute to work?

If yes, how far/how long?

Housing: rented $\left.\right|_{\ldots} \mid$ owned |__| other I__|
Citizenship: $\qquad$
Marital status:
Now you live (more than one option is possible)

101006543- MINDtheGEPs

Number of Children: | $\qquad$ I

Education $\qquad$
Year of the PhD $\qquad$
Current job/position

Type of contract

Start of job (month, year)

Full-time, part-time

Hours per week on average (in practice not formally)

Regular income or not

Monthly net earnings

## Partner

```
Education [tick the voice]
O Less than primary education
1 \text { Primary education}
2 Lower secondary education
3 Upper secondary education
4 \text { Post-secondary non-tertiary education}
5Short-cycle tertiary education
6 \text { Bachelor's or equivalent level}
7 \text { Master's or equivalent level}
8 \text { Doctoral or equivalent level}
9 Not elsewhere classified
Labour market position [tick the voice]
Employed/self-employed |__|
Unemployed:
    |__|
```

| How long? ____ |
| :--- |
| Retired/Inactive |
| Type of job [lf not employed ask the last <br> job]___ |

## - B-INTERVIEW OUTLINE FOR ADVANCED CAREER

## a. PAST WORKING PATH

Goal: reconstruct the career path and the recruitment process, and understand how the major turning points (both in professional and personal/family life) influenced the career

Could you tell me about your research career? What are the salient moments and turning points of it to your current situation, and why?

Topics to be investigated if the information does not come up spontaneously: motivations behind the choice of the scientific field, continuity/discontinuity in interviewee's career path and reasons for it, intra and inter-national mobility, working experiences and biographical/family events that have marked turning points

When and how have you been recruited by your department/institute/organization?
Topics to be investigated if the information does not come up spontaneously: if the interviewee already had a relationship with his/her department/institute/organization, factors that in interviewee's opinion favoured his/her hiring

## When and how you advance to your current position?

Topics to be investigated if the information does not come up spontaneously: how long the career advancement took, factors that in interviewee's opinion favoured/slowed down it

## b. PRESENT JOB/EVERYDAY WORKING LIFE

Goal: investigate the distribution of time between the various work activities (research, teaching, "third mission", administrative work) and the spaces of autonomy and visibility.

## How are your research activities organized?

Topics to be investigated if the information does not come up spontaneously: if the interviewee participates/ed in local, national, international research projects and its role (i.e. PI...), time devoted to research activities, interviewee's judgment about how his/her workplaces (i.e. office and laboratories) look like, the adequacy of equipment and materials and availability of funds, benefits, prizes/opportunities

## How are your teaching activities organized?

Topics to be investigated if the information does not come up spontaneously: time devoted to teaching activities, number of students, if he/she has freedom in choosing the kind of courses he/she teaches, if the interviewee considers him/herself overloaded with teaching (also compared to other colleagues)

How much of your working time do you spend on administrative tasks? Of what type? Could you make some example?

Do you feel that you are required to engage, formally or informally, in other tasks that are not valued? For example?

How are you involved in Public Engagement activities? Which? How much time do you spend on these activities?

How have your everyday working life, research and teaching activities changed after the Covid19 pandemic?

Did your department/institute/organization adopted policies, services and measures to support you in relation to the Covid19 pandemic? If yes, what?

## c. ORGANIZATIONAL CULTURE

Goal: investigate the (past and present) organizational culture, the gender culture of the organization, models of scientific excellence and leadership models.

What is the organisational climate? What are the main organisational values? Has it changed and how over time?

How would you describe your current working relationships in your department/institute/organization? Has it changed and how over time?

What do you think are the most valued features in a researcher/professor within your department/institute/organization?

What are the characteristics of the leadership figures in your workplace?
What characteristics do people consider excellent in your department/institute/organization have?
Are there different expectations in relation to leadership and excellence towards women and men in your department/institute/organization?

What types of scientific and institutional activities (and which merits) do you think are considered necessary / important for advance in the career? Did they change over time in your opinion? How and why?

Topics to be investigated if the information does not come up spontaneously: specifically to become a full professor for the academic organizations and equivalent roles for non academic Researchperforming organization (RPO). Try to explore also if the interviewee thinks to adhere/resemble to this type of models and in case of changes perceived explore the role plaid for example by universities reforms, laws and public policies.

In your opinion, which activities / merits should be more rewarded in the future than what happens today in your workplace?

Do you think these criteria are sensitive to work-life balance? Do you think they have different implications for men and women?

If you think at people at the beginning of their university career (for the academic organizations: such as research fellows or young researchers), what do you think is most useful for making them grow?

Topics to be investigated if the information does not come up spontaneously: if in the interviewee's opinion leaving a scientific career at the beginning of the career involves men and women differently and why

Have you experienced mobbing, discrimination or harassment at your workplace due to age, sex, sexual orientation, national origin, social class, other (e.g. pregnancy, long illness, care charges, use of parental leave)? Do you know if it has happened to others?

Topics to be investigated if the information does not come up spontaneously; what she/he did to cope with this and who she/he could contact to ask for help

## d. WELLBEING AND WORK-LIFE BALANCE

Goal: understand from a gender perspective how work organization influences wellbeing and health, the reconciliation between professional, private life and child/elderly/disabled and sick care responsibilities, embodiment, the choice to become parents and investigate the support network (University, non academic organization and family networks).

How is your day/week organized? Can you describe it?
Topics to be investigated if the information does not come up spontaneously; fixed/flexible working hours, how many hours a day/week on average the interviewee spend working, if the organisation of work is judged in/sensitive to work-life balance.

How many days do you usually work in your department/office/ and how many days at home and/or in other places? Why?

Does how work is organised enable you to balance your work with private/family life? Has this situation changed over time?

Topics to be investigated if the information does not come up spontaneously; if the interviewee is satisfied or she/he would a different organization of the work

## Do you find your work spare time appropriately balanced?

Topics to be investigated if the information does not come up spontaneously; if the interviewee ever work at home after official working hours and/or at weekends/during holidays, and what kind of work (emails, articles, etc.) and changes over time, if she/he has enough time for leisure, sports, hobbies, associations, politics, friends, etc., what she/he would like [has liked] to do in free time.

Who do you live with and what is your family like?
It seems to you that your work / career has influenced your well-being and life plans in the past or influence now? How? Why?

Topics to be investigated if the information does not come up spontaneously; perceived obstacles perceived obstacles in private/family plans, life as a couple, marriage, personal or family illnesses, care responsibilities towards the elderly or other family members), in having (other) children working at university/in research; for who doesn't have children: if she/he would like to have some

Do you think there are differences between fathers and mothers in the obstacles to be faced in your profession? Which? Why?

Can you count on the support of your University/institute/organization to reconcile private life and work? How? [Only for parents] Have you taken maternity / paternity / parental leave? If so, can you tell me your experience? Did you experience any difficulties or penalties?

Which interventions are available in your organization to support balancing work and family?
As a researcher in your position, what measures / policies / benefits could improve the quality of professional and private life of researchers?

Do you have [had] (enough) support from your family (partner and/or parents/parents in law and other relatives) to pursue your career and to reconcile life/family and work?

Topics to be investigated if the information does not come up spontaneously; if family is perceived as hindering / delaying or accelerating / helping his/her career

What repercussions on your work-life balance had Covid19?

## e. CAREER ADVANCEMENT AND FUTURE PROSPECTS

Goal: investigate the correspondence between the skills acquired so far and the position currently held, the barriers to career progression (role of the University and the role of the welfare state) and future prospects.

Do you think that your current position is congruent with your CV (with your experience, your skills and your scientific career)?

Do you have enough support from your current department/institute/organization to pursue your career interests?

Do you think that in your department/institute/organization - and more generally in your sector the difficulty in advancing in the scientific career affects men and women differently? How and why? Are there any other features that can affect it? Eg social class, nationality, sexual orientation, other? How and why? Can you give some examples?

What measures / policies / benefits could improve gender equality careers at your University/RPO? Imagine you can move into the future and look at yourself in 5 years time. How do you expect to see yourself (explore realistic expectations)? And what would you like to see (explore desires and wishes)?

Thank you very much for your time! Is there anything else you would like to tell me?
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## f. GENERAL INFORMATION FORM (FILLED IN BY THE INTERVIEWER).

Academic/scientific fields $\qquad$
Sex: Male |__| Female |__| Other |__|
Year of birth: $\qquad$ II_I $\qquad$ |I_|

Country of birth $\qquad$
City of birth: $\qquad$
Do you currently live in Xxx (name of the city, where the university/research institute is located) or do you have to commute to work?

If yes, how far/how long? Where do you live?
Housing: rented $Z_{\text {_ }}$ owned |__| other |__|

Citizenship: $\qquad$
Marital status:
Single


Now you live (more than one option is possible)
On your own |__|

With a spouse or a partner
With brothers and sisters
With one or both parents and/or their partners/spouses
With one or more children
With other relatives

With people who are not your relatives
Other $\qquad$
I_|
|_|
|__|

I_|
|__|
I_|

Number of Children: $\qquad$ |

Education $\qquad$
Year of the PhD $\qquad$
Current job/position
Type of contract
Start of job (month, year)
Full-time, part-time
Hours per week
Regular income or not
Monthly net earnings
Partner

| Education [tick the voice] |
| :--- |
| 0 Less than primary education |
| 1 Primary education |
| 2 Lower secondary education |
| 3 Upper secondary education |
| 4 Post-secondary non-tertiary education |
| 5 Short-cycle tertiary education |
| 6 Bachelor's or equivalent level |
| 7 Master's or equivalent level |
| 8 Doctoral or equivalent level |
| 9 Not elsewhere classified |
| Labour market position [tick the voice] |
| Employed/self-employed |
| Unemployed: |
| How long? ____l |


| Retired/Inactive |
| :--- |
| Type of <br> job] |


[^0]:    ${ }^{1}$ The results of the research have been reported in such a way that no individual is publicly identifiable. All the partners have been instructed by the UNITO lead team to follow the following ethical standards and rules according to d9.1: all external transcribers have to follow strict confidentiality and data security protocols. Store transcripts in a secure directory with access to these restricted to authorized personnel. Separate names and addresses of participants from video/audio and transcripts, analytical databases and outputs and limit to authorized personnel the ability to connect both. In particular, they were instructed to: remove any information that links the respondent as an individual physical entity to the data stored about him/her; replace this distinguishing information with a pseudonym and remove any material identifying third parties before deposit in the MINDtheGEPs project data archives; record and store separately from the data itself any sociodemographic data (including address, telephone and cellular number) relating to individuals.

[^1]:    ${ }^{2}$ To this end, partners agreed to fulfil a file excel "Short questionnaire on governance and selection system" aimed at collecting some basic information on each RPOs' governance, levels of careers and selection system.

[^2]:    ${ }^{3}$ Annex to the Anti-discrimination and Anti-mobbing Policy, which is a legal act, the Policy is an annex to the Rector's Ordinance published in the Public Information Bulletin; previously there was only an anti-mobbing policy, which resulted directly from the Labour Code, employment relationship; the actions taken were enforced by the Labour Code.

[^3]:    ${ }^{4}$ Since the SSH faculty financial situation is very good, acquiring external funds does not seem to be a necessity. As the respondent from this faculty puts: "It does not pay to apply for grants because we can pay for them with our own money. So it is a waste of time to apply for these grants, because it is better to spend this time on research and publishing."

[^4]:    ${ }^{5}$ This section is based on all the key informants' answers since their views on selection and promotion procedures were similar. In order to avoid redundancy, we will not report this under Outlines B and C.

[^5]:    ${ }^{6}$ In order to avoid repetition, we summed up the attitudes of all key informants here.

[^6]:    ${ }^{7}$ All the key informants had similar attitudes on GEP formalization. Therefore, here we report their summarized views. To avoid repetition, we will not report this content under Outlines B and $C$, but will refer to this section.

[^7]:    ${ }^{8}$ Meanwhile, new faculty management was elected; in the new team, one out of four vice-deans is a woman, which is the third time ever that there has been a woman in the dean's team.

[^8]:    ${ }^{9}$ The results of the research have been reported in such a way that no individual is publicly identifiable. All the partners have been instructed by the UNITO lead team to follow the following the ethical standards and rules according to d9.1: all external transcribers have to follow strict confidentiality and data security protocols. Store transcripts in a secure directory with access to these restricted to authorized personnel. Separate names and addresses of participants from video/audio and transcripts, analytical databases and outputs and limit to authorized personnel the ability to connect both. In particular, they were instructed to: remove any information that links the respondent as an individual physical entity to the data stored about him/her; replace this distinguishing information with a pseudonym and remove any material identifying third parties before deposit in the MINDtheGEPs project data archives; record and store separately from the data itself any sociodemographic data (including address, telephone and cellular number) relating to individuals.

[^9]:    ${ }^{10}$ To this end, partners agreed to fulfill a file excel "Short questionnaire on governance and selection system" aimed at collecting some basic information on each RPOs' governance, levels of careers and selection system.

[^10]:    ${ }^{11}$ As for naming the synopses files the provided example of code was: alias (that is nickname), sex, age, AC for Advanced Career and EC for Early Career, scientific field (STEM(M) or SSH), and the acronym of your institution). Example: Maria_F_30_EC_STEM_JU; Karolina_F_43_KI_B_STEM_UG

[^11]:    ${ }^{12}$ Due to difficulties in recruiting men in the chosen STEM unit, we have recruited one male advanced career academic from another Institute operating within the same Faculty as the initial institute.

[^12]:    ${ }^{13}$ At least a few of these apartments/houses are however on mortgage.

[^13]:    ${ }^{14}$ The SSH Institute under study operates within a faculty with one of the biggest numbers of undergraduate and graduate students in the university.

[^14]:    ${ }^{15}$ Since 09.2019 there has been the requirement that post-doc positions in the NCN projects can be held by individuals who received their PhDs in another research organisation that the one, where the employment is planned (https://www.ncn.gov.pl/finansowanie-nauki/faq/realizacja-projektow).
    ${ }^{16} \mathrm{H}$-index is an author-level metric that measures both the productivity and citation impact of the publications.

[^15]:    ${ }^{17}$ For a couple of years the Polish Ministry of Science has been updating several times the list of ranked journals, by not only adding new journal titles but also by considerably changing the number of points they are allocated.

[^16]:    "The contracts are too short, there is no pension and they're underpaid, and I would like to see some of that addressed" (Gary, EC)

[^17]:    "me and [name of Ciara's line manager] are still very close and stuff. I used to sit right next to him and in the office our desks were right next to each other so l'd talk to him all day everyday but I speak to him every fortnight or something,

[^18]:    ${ }^{18}$ Key informants at department/research unit level interviewed using the outline A. GOVERNANCE DEPARTMENTAL MANAGEMENT, see Annex 6.2

[^19]:    ${ }^{19}$ Key informants at department/research unit level interviewed using the outline B. MEMBERS OF COMPETITION COMMISSIONS IN THE HIRING PROCEDURE FOR EARLY AND ADVANCED CAREER RESEARCHERS, see Annex 6.2.

[^20]:    ${ }^{20}$ Key informants at University/RPO "central" level interviewed using the outline C. UNIVERSITY/RPO GOVERNANCE ("CENTRAL" LEVEL), see Annex 6.2.

[^21]:    ${ }^{21}$ Key informants at University/RPO "central" level interviewed using the outline D. KEY-ACTORS, KEY-PLAYERS ON SEXUAL HARASSMENT/GENDER VIOLENCE, see Annex 6.2. ETF, MTU and CTAG have not used the outline D.

