28th International ICFMH Conference

Organized by:

ICFMH

IUMS

International Committee on Food Microbiology and Hygiene

Under the auspices:

UNIVERSIDAD DE BURGOS

FOOD micro 2024

TECHNOLOGICAL EVOLUTION AND REVOLUTION IN FOOD MICROBIOLOGY

foodmicro2024.com

July, 8-11, 2024

Fórum Evolución Conference Centre and Auditorium

Burgos (Spain)

FINAL PROGRAM


FOOD
micro
2024

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Welcome address

Dear colleagues,

It is a great pleasure to welcome you all to our city of Burgos in Spain to attend the 28th ICFMH International Conference, FoodMicro 2024. Since the International Conferences began in the last century, this is the first time it has been held in Spain. We want to express our gratitude to the executive committee of the ICFMH for choosing the city Burgos for this occasion.

Burgos is a nice city located 220 km north of Madrid, in the midway to the Atlantic seashore in Santander in northern Spain. An area that traditionally has been inhabited from more than 1 million years. Here, in the surroundings of the city, in the archeological site of Atapuerca, the remains of the so called the first European have been discovered, dating back more than 1.2 million years. The climate of this area has done the rest and in Atapuerca human fossils from most of the human phylogeny of Europe have been found, bones that you can see in the Museum of Human Evolution, which is located in the center of the city, next to the Congress Venue Fórum Evolución. Hence, Burgos is the European city of Human Evolution.

Here, in Burgos is where we developed our scientific career and research in food microbiology over the last 30 years in the Department of Biotechnology and Food Science of the University of Burgos, which was also born 30 years ago. Therefore, we think it will be a nice celebration for our university to welcome everyone to Burgos to attend FoodMicro 2024. During that time, there has also been a great evolution in food microbiology research in preparation of the big revolution that is now being produced involving new and powerful methodologies based on omics and other techniques. All this gives us a new insight of classical topics as food fermentations, probiotics or protective cultures, new technological interventions to extend the shelf-life and to improve food safety, new topics related to food environments such as primary production, food producing plants and its interaction with food products, the microbiome, etc.

For this reason, Burgos is the right place to talk and debate about this technological evolution and revolution in Food Microbiology. It is the place where everything begins with our ancient parents fighting to survive in a hard environment to evolve to the

present day. A city in the middle of Saint James' Way, where the knowledge exchange 800 years ago, brought through this way made possible the construction of the magnificent Gothic cathedral that stands in the middle of the city, which you will observe while discussing food microbiology in the Congress Venue.

Dear colleague, don't miss this opportunity to exchange ideas and do networking with other colleagues in the 28th International Conference of ICFMH. We have prepared an excellent program to facilitate this purpose including for the first time in FoodMicro Conference: Flash Communications to give more opportunities to young researchers to explain their research to the audience; Round Tables to give the audience a different way to discuss the research ideas behind the topics proposed and a congress party in the gardens of the university where you could enjoy, meet each other better and explore synergies for future research collaborations.

Welcome all of you to Spain and Burgos, enjoy our city, our culture and gastronomy and the good wines elaborated in this area.

Ah and don't forget your sunglasses!

Jordi Rovira (President), Beatriz Melero, Isabel Jaime
University of Burgos
Local Organizing Committee

Organized by:

International Committee on Food Microbiology and Hygiene

Under the auspices:

UNIVERSIDAD DE BURGOS

Dear Colleagues and Friends,

It is my great pleasure to welcome you to the upcoming International Committee on Food Microbiology and Hygiene (ICFMH) congress in Burgos, Spain. This year, our focus is on the latest advances in new technologies in food production and microbiological analysis, and we are thrilled to bring together experts, researchers, regulators, and industry professionals from around the world to share knowledge and exchange ideas.

Revolutionary advancements in technology are transforming the field of food microbiology and hygiene, leading to unprecedented opportunities for scientific evolution. The congress will offer an exciting opportunity to delve into cutting-edge research and technological breakthroughs, exploring the ways in which innovation is driving improvements in food safety and quality. This will surely cover all aspects from the wet lab studies to in silico work as well as global changes that influence food web.

Keynote speakers and scientific sessions will cover a range of topics, including new trends in food processing, innovative approaches to food safety and quality, and novel methods for microbial analysis. We will also for the first time tackle some emerging fields such as microplastics and microbiome interactions. By sharing insights and exploring new ideas together, we hope to spark new collaborations and inspire future innovation in the field.

Beyond the scientific program, we have organized social events that will give you the opportunity to immerse yourself in the rich history and culture of Burgos, Spain. We are confident that this congress will offer an unforgettable experience for all attendees, fostering new collaborations, sharing insights, and providing opportunities to expand your knowledge.

We look forward to welcoming you to the ICFMH congress in Burgos, Spain, where we will explore the ways in which the revolution in technology is driving scientific evolution in the field of food microbiology and hygiene.

Sincerely,

Prof. Dr. Andreja Rajkovic

President, International Committee on Food Microbiology and Hygiene (ICFMH)

About "ICFMH"

The International Committee on Food Microbiology and Hygiene was founded in 1953.

The major scope of ICFMH is to contribute to food safety and controlling food spoilage internationally, by means of organizing conferences (e.g. FOODMICRO), symposia and workshops, supporting of international bodies in food microbiology issues, publications (e.g. the International Journal of Food Microbiology), and initiation of education and training in food microbiology.

The ICFMH particularly focuses on the food safety situation in developing countries, with a special mission towards the African situation.

www.foodmicro2024.com

Under the auspices

UNIVERSIDAD DE BURGOS

Technical Secretariat

Amex GBT Meetings & Events

AMEX GBT Meetings & Events

General Information:

foodmicro2024@amexgbt.com

Registrations:

registrationfoodmicro2024@amexgbt.com

Abstracts:

abstractsfoodmicro2024@amexgbt.com

Let's get social

@FoodMicroconference

instagram.com/foodmicro2024

@foodmicro2024

Official hashtags: #foodmicro2024

Committees

Honor Committee

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Excma. Sra. D.ª Rocío Lucas Nava. Consejera de Educación de la Junta de Castilla y León
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Wilhem Holzapfel. Handong Global University, Korea

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University of Burgos, Spain

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Beatriz Melero
Isabel Jaime

Social media manager

David Sáez

International Committee on Food Microbiology and Hygiene

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Jesca Nakavuma. Makerere University, Uganda
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Tom Ross. University of Tasmania, Australia

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Juana Frías. Institute of Food Science, Technology and Nutrition (ICTAN, CSIC)
Antonio Gálvez. University of Jaén
Rosa M. García. University of Córdoba
Rafael Pagán. University of Zaragoza
Miguel Prieto. University of León
David Rodríguez. University of Burgos
Susana Sanz. University of La Rioja
Carole Tonello. Hiperbaric
Antonio Valero. University of Córdoba

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Johanna Björkroth. University of Helsinki, Finland
Luca Cocolin. University of Turin, Italy
Franchesca de Filippis. University of Naples Federico II, Italy
Heidy den Besten. Food Microbiology Wageningen University, The Netherlands
Frank Devlieghere. Ghent University, Belgium
Danilo Ercolini. University of Naples Federico II, Italy
Pieter Gouws. Stellenbosch University, South Africa
Sophia Johler. University of Zurich, Switzerland
Anja Klancnik. University of Ljubljana, Slovenia
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Marta Laranjo. University of Évora, Portugal
Julius Maina Mathara. Jomo Kenyatta University of Agriculture and Technology, Kenia
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Andreja Rajkovic. Ghent University, Belgium
Kalliopi Rantsiou. University of Turin, Italy
Panagiotis Skandamis. Agricultural University of Athens, Greece
Paula Teixeira. Catholic University of Portugal (UCP)
Olakunle David Teniola. Olusegun Agagu University of Science and Technology (OAUSTECH), Nigeria
Martin Wagner. University of Veterinary Medicine Vienna, Austria
Marcel Zwietering. Food Microbiology Wageningen University, The Netherlands

General Information A-Z

A

ACCOMMODATION

ABBA BURGOS 4*
C. Fernán González, 72 [1 km]

CORONA DE CASTILLA 4*
C. Madrid, 15 [550 m]

RICE PALACIO DE LOS BLASONES 4*
C. Fernán González, 72 [650 m]

SILKEN GRAN TEATRO 4*
Av. del Arlanzón, 8 [240 m]

HOTEL NORTE Y LONDRES 2*
Pl. de Alonso-Martínez, 10 [550 m]

Residencia Univ. "CAMINO DE SANTIAGO"
C. José Mª Villacián Rebolledo, s/n [2,5 km]

B

BURGOS

Burgos is a modern city, which is immersed in a profound process of urban, tourism and cultural transformation. The recent creation of large infrastructures, including the Human Evolution Complex, represents a decisive change in the appearance of the city. Burgos, which

has made a firm commitment to tourism and culture over the last decade, aspires to become a benchmark for conference and incentive tourism.

Burgos has some tourist attractions that are unique in the national panorama. It has an artistic heritage with three declared World Heritage Cultural Sites: The Cathedral, the Camino de Santiago and the Archaeological Site of Atapuerca.

Tourism information office
Calle Nuño Rasura, 7, Burgos
+34 947 288 874

Link: turismo.aytoburgos.es/en | turismoburgos.org | spain.info/en/destination/burgos

Bus Station: C/ Miranda 4-6, 09002 Burgos | +34 947 288 855

Rosa Manzano Train Station: Avenida Príncipe de Asturias s/n, 09006 Burgos | +34 902 320 320

Taxi Services Abu taxis / Radio taxi
+34 947 277 777

C

COFFEE

- Located on the 1st floor of the Fórum Evolución.
- It has direct access from the street, through its terrace, and has incredible views of the Burgos cathedral and the city center.

CERTIFICATES OF ATTENDANCE

Certificates of Attendance will be delivered by email to delegates that have attended the scientific program, after completion of the Foodmicro 2024.

CLOAKROOM

A cloakroom will be available during the congress. It will be located next to the main entrance.

- Monday July 8th from 16:00 to 21:30
- Tuesday July 9th and Wednesday July 10th from 08:30 to 19:00
- Thursday July 11th from 08:30 to 14:30

E

EMERGENCY CONTACT

Emergency contact number: 112

EXHIBITION OPERATING

All exhibitors are listed in the Program (see Exhibition floor plan).

The exhibition will run during the Conference dates at ground floor lobby as follows:

- Tuesday July 9th and Wednesday July 10th from 08:30 to 19:00
- Thursday July 11th from 08:30 to 14:00

F

FOOD & BEVERAGES

Coffee and Lunch during official breaks are included in the delegate registration fee and will be served in designated catering stations in all Conference areas.

- Coffee. Exhibition and Poster Area. Ground floor lobby and 3rd floor hall
- Lunch. 3rd floor hall

I

INSURANCE & LIABILITY

- The registration fees do not include insurance of participants against accidents, sickness, cancellation, theft, property loss or damage. Participants are advised to take out adequate personal insurance.
- Registration implies acceptance of the congress rules and its conditions of participation and cancellation.
- The Organizers of the 28th International ICFMH Conference reserve the right to limit the capacity of the in-person Conference due to the need to ensure the health and safety of attendees, in accordance with the recommendations of the World Health Organization, Health (WHO) and local Health Authorities, at the time of the Conference.

INTERNET

- **WiFi network:** foodmicro2024
- **Password:** burgos2024

L

LOST & FOUND

A lost and found service is available at the Cloakroom.

P

PARKING

- The **Human Evolution Parking** is a municipal facility, which has more than **1,400 spaces** and it is located under the conference venue.
- It is a **modern space**, with excellent facilities and **affordable rates**.
- The entrance to the Parking is located on C/ Burgense. Price: 12.60 € /24 h.

Telephone: + 34 947 25 51 24

R

REGISTRATION DESK

The Registration Desk and Onsite Secretariat is in the ground floor lobby level (0) of the Conference Venue and will be operating throughout Conference dates according to the following schedule:

- Monday, July 8th: 16:00 to 20:00
- Tuesday, July 9th: 08:30 to 19:00
- Wednesday, July 10th: 08:30 to 19:00
- Thursday, July 11th: 08:30 to 14:00

Important note: Your badge is your personal identification to enter the Conference. Due to attendance limitations and protocols, entry to Conference areas will be monitored, so please be mindful of your badge for the Conference. **In case of loss,** an administrative fee of 20 € will be charged for reprinting.

New accreditations can be processed starting at 16:00 on Monday, July 8th at the Registration Desk.

S

SOCIAL PROGRAM

Get together

Monday, July 8th | 19:30 to 21:30 | Ground floor lobby Fórum Evolución

Party

Wednesday, July 10th | 20:30 to 23:00

Gardens of University of Burgos (Hospital del Rey) "Facultad de Derecho y Rectorado de la Universidad de Burgos", Hospital del Rey, s/n; Burgos.

Distance from the conference site: 38 min. within walking distance | By car: 6 min | Bus Lines: 3, 5.

Dresscode: Casual

Ticket: Free, the dinner is included in your registration fee. Advance confirmation of attendance is required.

The Foodmicro Organizers will be throwing an afterwork party (cocktail type) where you will be able to taste some typical Spanish tapas, enjoy music and get together with colleagues from all over the world.

V

VENUE

Universidad de Burgos: Preconference Workshops. Facultad de Derecho
Hospital del Rey, s/n. 09001 Burgos
+34 947 258 701

Fórum Evolución Burgos.
Palacio de Congresos y Auditorio
Paseo Sierra de Atapuerca s/n. Burgos
+34 947 25 95 75

W

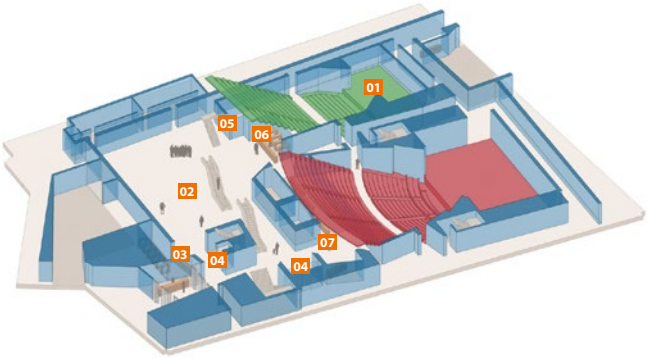
WEATHER

The weather in the province of Burgos has a marked continental character, with long and cold winters, short and not excessively hot summers. Usual July temperature:

Maximum temperatures range from 25 to 27 °C and rarely drop below 19 °C or exceed 33°C.

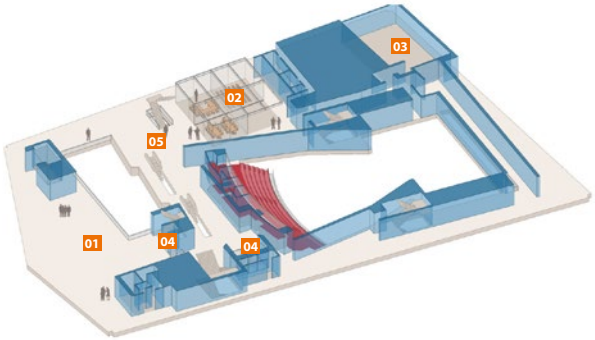
Daily minimum temperatures range from 11 to 12 °C and rarely fall below 7 °C or exceed 15 °C.

Halls and Levels



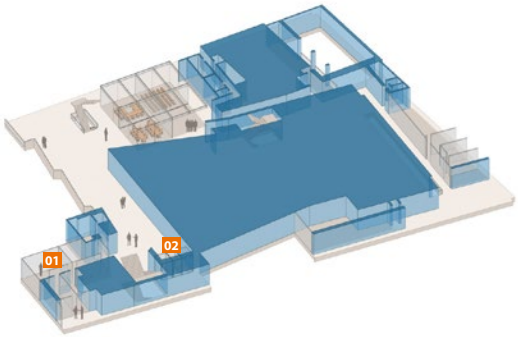
GROUND FLOOR

01 Auditorium
02 Exhibition + Poster Area + Coffee
03 Cloakroom
04 Lifts
05 Loading presentation area + Speaker room
06 Registration desk + Technical secretariat
07 Rest area



3ST. FLOOR

01 Lunch
02 Meeting Room B
03 Meeting Room A
04 Lifts
05 Poster Area + Coffee



4st. FLOOR

01 Executive Committee Room
02 Lifts

Acknowledgments

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International Association for Food Protection

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Organized by:

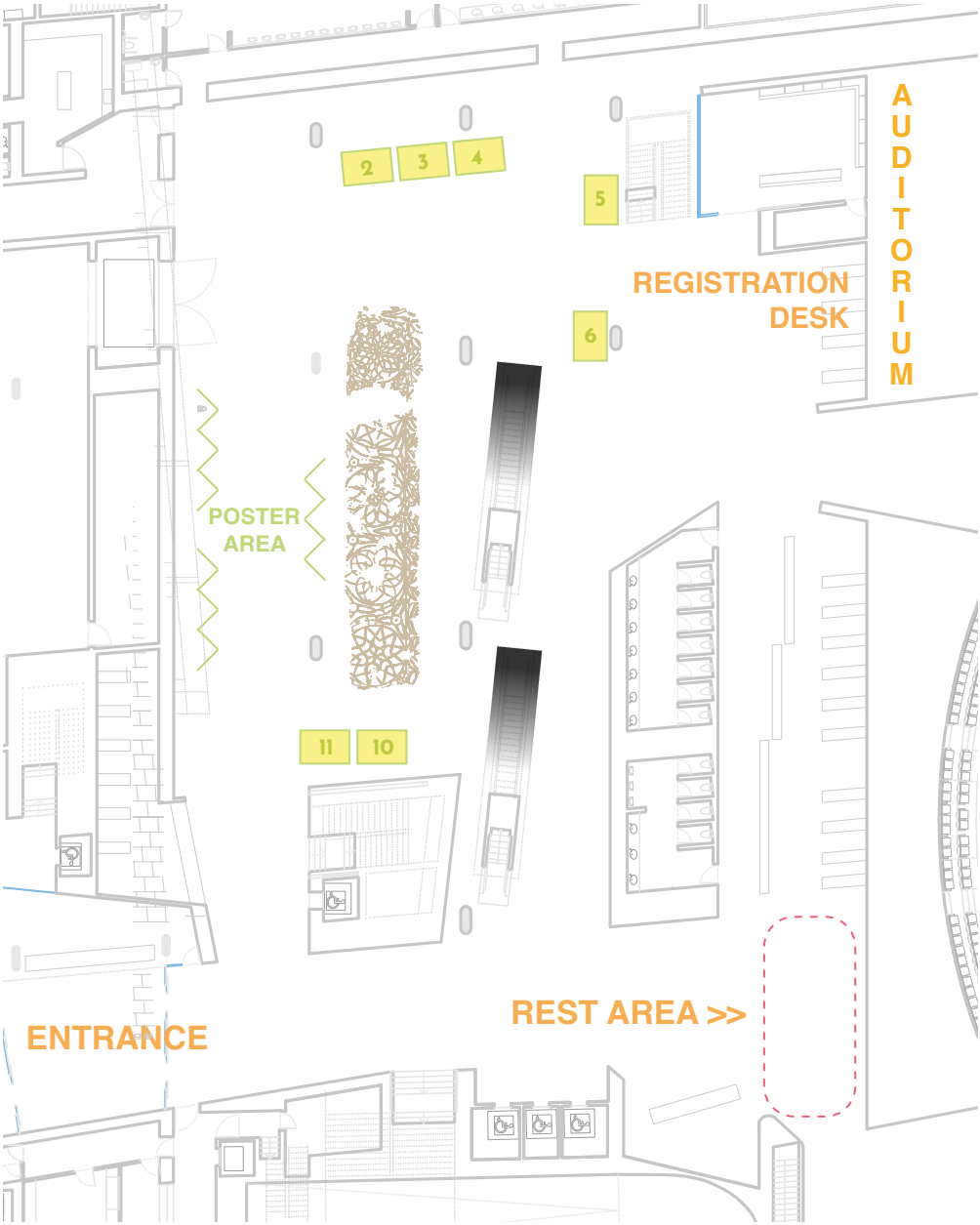
International Committee on Food Microbiology and Hygiene

Under the auspices:

UNIVERSIDAD DE BURGOS

Exhibition Floor Plan

	BOOTHS
avantor™	2
BRUKER	5
ELSEVIER	6
foods an Open Access Journal by MDPI pathogens an Open Access Journal by MDPI	11
GSC	3
International Association for Food Protection	4
ThermoFisher SCIENTIFIC	10


2
3
4
5
6
AUDITORIUM
REGISTRATION DESK
POSTER AREA
11
10
ENTRANCE
REST AREA >>

SCIENTIFIC PROGRAM

Monday, July 8th

University of Burgos
PRE-CONFERENCE WORKSHOPS

	AULA ROMEROS	AULA ALFONSO VIII
09:00-11:00	WORKSHOP 1 **Microplastics and microbiome Interactions: Sharing insights and exploring new pathways**	WORKSHOP 2 **Nonthermal technologies for food preservation: Current applications and future trends**
11:00-11:30	Coffee break	
10:00-13:00	AULA RUTA JACOBEA WORKSHOP 3 **FoodSafeR: A joined-up approach to protect european food from biological and chemical hazards**	
11:30-13:30	AULA ROMEROS WORKSHOP 4 **Microbial food safety workshop for developing countries: Opportunities for mitigation of foodborne pathogens by natural preservatives**	

Fórum Evolución Burgos, Conference Center and Auditorium
AUDITORIUM

18:00-18:30	**Opening Ceremony**
18:30-19:30	Inaugural Plenary Conference: **Food microbiology in retrospect and prospect**
19:30-20:00	**Musical Opening: Concert by Fetén Fetén**
	GROUND FLOOR LOBBY
20:00-21:30	**Get together**

Tuesday, July 9th

Fórum Evolución Burgos, Conference Center and Auditorium
AUDITORIUM

09:00-10:00	Plenary Session. **Towards more sustainable packaging of food: impact on microbial safety and shelf life of packaged foods**		
	AUDITORIUM	MEETING ROOM A	
10:00-11:00	Parallel Session 1 **Microbial food ecology: from processing plants to food**	Parallel Session 2 **Technologies for food preservation and sustainability I**	
11:00-11:30	Coffee break + Posters + Exhibition		
	AUDITORIUM	MEETING ROOM A	
11:30-13:00	Parallel session 1 (continuation) **Food microbiota and impact on human microbiom** **Microbial food ecology: from processing plants to food**	Parallel session 2 (continuation) **Impact of climate on food safety and spoilage** **Technologies for food preservation and sustainability I**	
13:00-15:00	Posters - Lunch	EXECUTIVE COMMITTEE ROOM 13:30-14:30 ICFMH National Delegate Meeting	MEETING ROOM B 14:00-14:45 Author work: What to consider when publishing your work. Elsevier
	AUDITORIUM	MEETING ROOM A	
15:00-16:40	Parallel session 3 **Fermented foods I**	Parallel session 4 **New methods in food microbiology**	
16:40-17:00	Coffee break + Posters + Exhibition		
	AUDITORIUM	MEETING ROOM A	
17:00-17:45	Parallel session 3 (continuation)	Parallel session 4 (continuation)	
	PARALLEL ROUND TABLES		
	AUDITORIUM	MEETING ROOM A	MEETING ROOM B
17:45-19:00	Role of lactic acid bacteria bacteriocins in the improving food safety: from simple additives to powerful multi-tasking metabolites	Pushing the boundaries of knowledge in Food Microbiology through the cataloging and detailed exploration of food metagenomes	Software Fair Tools for predictive modelling and quantitative microbial risk assessment
19:30	Visit to Hiperbaric headquarters		

Organized by: International Committee on Food Microbiology and Hygiene

Under the auspices: UNIVERSIDAD DE BURGOS

Wednesday, July 10th

Fórum Evolución Burgos, Conference Center and Auditorium

	AUDITORIUM	MEETING ROOM A	MEETING ROOM B	EXECUTIVE COMMITTEE ROOM
09:00-10:00	Plenary session. **Type III secretion systems: bacterial nanomachines for protein delivery**			
10:00-11:00	Parallel session 5 **Fermented foods II/Food mycology**	Parallel session 6 **Foodborne pathogens I**		
11:00-11:30	Coffee break + Posters + Exhibition		Detailed demonstrations of tools presented at Round Table 3	
11:30-13:00	Parallel session 5 (continuation)	Parallel session 6 (continuation)		
13:00-14:30	Posters - Lunch			13:30-14:30 International Journal of Food Microbiology Editorial Board meeting
14:30-16:10	Parallel session 7 **Technologies for food preservation and sustainability II**	Parallel session 8 **Foodborne pathogens II**		
16:10-16:30	Coffee break + Posters + Exhibition		Detailed demonstrations of tools presented at Round Table 3	
16:30-17:15	Parallel session 7 (continuation)	Parallel session 8 (continuation)		
17:15-19:00	**Persistent bacteria in food and feed processing environments: which, how, where and why** Round table sponsored by EFSA			

Thursday, July 11th

Forum Evolución Burgos, Conference Center and Auditorium

	AUDITORIUM	MEETING ROOM A
09:00-10:00	Plenary session. **Food, antimicrobial resistance and one health**	
10:00-11:00	Parallel session 9 **Predictive microbiology and microbial risk assessment**	Parallel session 10 **Microbial resistance/One health**
11:00-11:30	Coffee break + Posters + Exhibition	
11:30-13:00	Parallel session 9 (continuation)	Parallel session 10 (continuation)
13:00-14:00	**Closure session**	

Topics

- Fermented foods
- Food microbiota and impact on human microbiome
- Food mycology
- Foodborne pathogens
- Impact of climate change on food safety and spoilage
- Microbial food ecology: from processing plants to food
- Microbial resistance
- New methods in food microbiology
- One health
- Predictive microbiology and microbial risk assessment
- Technologies for food preservation and sustainabilit
- Food microbes in plastisphere: microbial ecosystem on microplastics

MONDAY, JULY 8th

Pre-Conference Workshops

Venue: Hospital del Rey, University of Burgos

09:00-22:00

WORKSHOP 1
Microplastics and microbiome interactions: sharing insights and exploring new pathways

Aula Romeros

Chair: Andreja Rajkovic. Ghent University, Belgium

Workshop in organization of ICFMH and Horizon2020 project ImpTox

ImpTox in the army of five: CUSP squad collects and analyzes data to decipher role of microplastics and nanoplastics in food safety and public health
Andreja Rajkovic. Ghent University, Belgium

Can microplastics modulate the virulence of *Listeria monocytogenes*?
Irene Ortega Sanz. Ghent University, Belgium

To swim or not to swim: Probing the influence of micro- and nanoparticles on male reproductive cell viability and how plastics react with *Bacillus cereus cereulide*
Bram Jacobs. Ghent University /Sciensano, Belgium

Monday, July 8th

Campylobacter jejuni and *Pseudomonas* spp: microplastic assisted spread, virulence, and persistence in poultry chain
Ziva Kolenc. University of Ljubljana, Slovenia

09:00-11:00

WORKSHOP 2
Nonthermal technologies for food preservation: current applications and future trends

Aula Alfonso VIII

Principles and innovative applications of high-pressure processing
Mario González. Hiperbaric, Spain

Microbial inactivation by Pulsed Electric Fields
Javier Raso. University of Zaragoza, Spain

UV-C light, a technology to inactivate microorganisms in liquid and solid food products
Ignacio Álvarez-Lanzarote. University of Zaragoza, Spain

10:00-13:00

WORKSHOP 3
FoodSafeR: A joined-up approach to protect european food from biological and chemical hazards

Aula Ruta Jacobea

Organised by: Martin Wagner and **Rudolf Krska**. Austrian Competence Centre for Feed and Food Quality, Safety and Innovation (FFOQSI), Austria

The European Project Holifood
Ine van der Fels-Klerx. Wageningen University and Wageningen Research, The Netherlands

The European Project FOODSAFER: What, Why and How
Martin Wagner and **Rudolf Krska**, University of Veterinary Medicine Vienna and Austrian Competence Centre for Feed and Food Quality, Safety and Innovation (FFOQSI), Tulln, Austria; University for Natural Resources and Life Science, Vienna

Analysis of drivers and indicators of food safety hazards and associated risks in the food chain
Liesbeth Jacxsens, Nina Hommels, Mathias Vermeesch. Ghent University, Ghent, Belgium

Monday, July 8th

Case studies of microbial emerging hazards/risks
Mieke Uyttendaele. Ghent University, Ghent, Belgium

Case studies of chemical emerging hazards/risks
Michele Suman. Barilla G. E R. Fratelli SPA, Parma, Italy

Bringing together the Food Safety community: how we can get it!
Oonagh McNerny. IRIS Technology Solutions, Barcelona, Spain

Food Safety: a global perspective
Samuel Godefroy. Food Risk Analysis and Regulatory Policies, Food Risk Analysis and Regulatory Excellence Platform (PARERA), Laval University, Quebec, Canada

11:00-11:30

Coffee break

Hospital del Rey

11:30 – 13:30

WORKSHOP 4
Microbial food safety workshop for developing countries: opportunities for mitigation of foodborne pathogens by natural preservatives

Aula Romeros

Chair: Weihuan Fang. Zhejiang University, China

Probiotic bacteria for food safety applications
Ivan Muzira Mukisa. Department of Food Technology and Nutrition Makerere University Uganda

Bacteriophages: A sustainable tool to promote food safety from farm to fork
Kitiya Vongkamjan. Aurand Faculty of Agro-Industry, Thailand

Bacteriophage: a novel biocontrol approach-advancements and prospects in Africa
Christiana Cudjoe Dapuliga. University of KwaZulu-Natal, South Africa

Nature's Bioactive Arsenal: exploring plant-derived solutions for a safer food supply
Hanen Falleh. Laboratory of Aromatic and Medicinal Plants Biotechnology Center of Borj-Cédria, Tunisia

Organized by: International Committee on Food Microbiology and Hygiene

Under the auspices: Universidad de Burgos

Monday, July 8th

FoodMicro 2024 Conference

Fórum Evolución Burgos

18:00-18:30

Opening Ceremony

Auditorium

18:30-19:30

Inaugural Plenary conference

Auditorium

Juan Luis Arsuaga. Fundación Atapuerca, Spain

19:30-20:00

Musical Opening

Auditorium

Concert by Fetén Fetén

20:00-21:30

Get Together

Ground floor lobby

Tuesday, July 9th

09:00-10:00

Plenary Session

Auditorium

Towards more sustainable packaging of food: impact on microbial safety and shelf life of packaged foods

Frank Devlieghere. Ghent University, Belgium

10:00-11:00

Parallel Session 1

Microbial food ecology: from processing plants to food

Auditorium

Chairs: Mieke Uyttendaele. Ghent University, Belgium
Paola Mattarelli. University of Bologna, Italy

10:00-10:20

Keynote 1.1 Microbial food ecology: from processing plants to food
Mieke Uyttendaele. Ghent University, Belgium

10:20-10:30

Oral 1.1 Synergistic interactions in multispecies biofilm combinations of bacterial isolates recovered from diverse food processing industries
Koen De Reu. ILVO (Flanders Research Institute for Agriculture, Fisheries and Food), Belgium

10:30-10:40

Oral 1.2 Bacterial community dynamics and their fructophilic properties during fermentation of Traminette grape
Folarin Oguntoyinbo. Appalachian State University, USA

10:40-10:50

Oral 1.3 Disinfection in the salmon industry: impact on bacterial communities and efficacy towards foodborne bacteria and biofilms
Thorben Reiche. Norwegian University of Science and Technology, Norway

10:50-11:00 Questions

Tuesday, July 9th

10:00-11:00

Parallel Session 2

Technologies for food preservation and sustainability I

Meeting Room A

Chairs: Rafael Pagán. University of Zaragoza, Spain
Ana Allende. CEBAS-CSIC (Spanish National Research Council), Spain

10:00-10:20 **Keynote 2.1** Addressing food safety and agri-food chain sustainability challenges through food microbiology research
Rafael Pagán. University of Zaragoza, Spain

10:20-10:30 **Oral 2.1** Bioprotective effect of lactic acid bacteria on cold-smoked rainbow trout against *Listeria monocytogenes* biofilm cells at different refrigeration temperatures.
Javier Sánchez-Martín. University of Córdoba, Spain

10:30-10:40 **Oral 2.2** Deciphering the bacterial interaction network within seafood microbiome to develop a sustainable biopreservation strategy
Delphine Passerini. IFREMER, France

10:40-10:50 **Oral 2.3** Biological growth control of *Listeria monocytogenes* in salmon applying protective cultures of lactic acid bacteria
Anita Nordeng Jakobsen. Norwegian University of Science and Technology (NTNU), Norway

10:50-11:00 Questions

11:00-11:30

Coffee break + Posters + Exhibition

Ground floor lobby & Hall 3rd floor

Tuesday, July 9th

11:30-13:00

Parallel Session 1 (continuation)

Food microbiota and impact on human microbiome

Auditorium

Chairs: Mieke Uyttendaele. Ghent University, Belgium
Paola Mattarelli. University of Bologna, Italy

11:30-11:50

Keynote 1.2 Disentangling the complex relationship between food microbiota and gut microbiome: an update
Paola Mattarelli. University of Bologna, Italy

11:50-12:00

Oral 1.4 Bacteria-neurons interaction: a new interpretation of the gut-brain axis
Luca Cocolin. University of Torino-DISAFA, USA

12:00-12:10

Oral 1.5 A methyl esterase from *Bifidobacterium longum subsp. longum* reshapes the prebiotic properties of apple pectin by triggering differential fecal microbiome modulatory capacity
Lorena Ruiz. IPLA-CSIC, Spain

12:10-12:15 Questions

12:15-13:00 **FLASH COMMUNICATIONS**

Microbial food ecology: from processing plants to food

Food microbiota and impact on human microbiome

Microbiological safety in alternative non-conventional plant-based protein extract
Mónica Saverio. University of Parma, Italy

Insights into developing plant-based analogues: dairy vs soy curds
Caroline Kothe. DTU Biosustain, Denmark

The sweet-cold spot: a multi-omics study on the impact of temperature and sugars on Exopolysaccharides (EPS) production by sausage spoilage *Leuconostoc mesenteroides*
Miguel Fernández de Ullivarri. APC Microbiome, Ireland

Tuesday, July 9th

Antibiofilm efficacy of bacterial metabolites isolated from meat processing equipment.
Xianqin Yang. Agriculture and Agri-Food Canada, Canada

Functional Swiss-type cheeses promote beneficial effects on mice health and gut microbiome during inflammatory bowel disease
Gwénaël Jan. INRAE, France

Probiotic lactic acid bacteria associated with fermented millet-based milk beverage 'brukina' and their effects on the gut microbiome
Elmer Ametefe. University of Ghana, Ghana

Supplementation with beneficial Mediterranean diet ingredients enhances gut microbiome composition and metabolic potential
Vincenzo Valentino. University of Naples Federico II, Italy

11:30-13:00

Parallel Session 2 (continuation)

Impact of climate change on food safety and spoilage

Meeting Room A

Chairs: Rafael Pagán. University of Zaragoza, Spain
Ana Allende. CEBAS-CSIC (Spanish National Research Council), Spain

11:30-11:50
Keynote 2.2 Water scarcity: reclaiming and reusing in fresh produce production
Ana Allende. CEBAS-CSIC. (Spanish National Research Council), Spain

11:50-12:00
Oral 2.4 Potential health risk of Microcystin accumulation in green house grown crops
Andreja Rajkovic. Ghent University, Belgium

12:00-12:10
Oral 2.5 Assessing the microbiological quality of roof-harvested rainwater as an alternative water source for produce irrigation
Michael Arthur. Teagasc Food Research Center, Ireland

12:10-12:15 Questions

Tuesday, July 9th

12:15-13:00 **FLASH COMMUNICATIONS**

Technologies for food preservation and sustainability I

Impact of climate change on food safety and spoilage

Evaluation of climate-e and ecosystem-induced stresses on the dynamic of *Arcobacter* spp. present in Manila clams collected in the Venice Lagoon
Hooriyeh Mohammadpour. University of Padova, Italy

Revealing the impact of environmental dynamics under climate stress conditions on microbial responses
Vasilis Valdramidis. University of Malta, Malta

Role of coat layers in heat resistance and germination of *B. subtilis* spores produced at high salinity conditions
Víctor Freire. University of Zaragoza, Spain

Application of bacteriophages for the biocontrol of *Salmonella* Typhimurium in natural casings used for traditional fermented meat products
Jean Costa. University of Córdoba, Spain

Natural preservatives and food safety-challenges and opportunities
Lingli Jiang. Ningbo College of Health Science, China

The effect of maritime pine bark extract addition on the microbiological quality of dried horse mackerel fillets
Manuela Va-Velho. CISAS-Polytechnic Institute of Viana do Castelo, Portugal

Non-*Saccharomyces* killer yeasts for the sustainable bio-management of postharvest
Sebahat Öztekin. Bayburt University, Turkey

13:00-15:00

Poster

Ground floor lobby & Hall 3rd floor

13:00-14:30

Lunch

3rd floor

Organized by: International Committee on Food Microbiology and Hygiene

Under the auspices: UNIVERSIDAD DE BURGOS

Tuesday, July 9th

13:30–14:30

ICFMH National Delegate meeting

Executive Committee Room

14:00-14:45

Author workshop: What to consider when publishing your work. Elsevier

Meeting Room B

Luca Cocolin. Editor-in-Chief International Journal of Food Microbiology, Italy
Joanna Aldred. Publisher Elsevier, The Netherlands

ELSEVIER

15:00-16:40

Parallel Session 3

Fermented foods I

Auditorium

Chairs: Juana Frías. Institute of Food Science, Technology and Nutrition (ICTAN, CSIC), Spain
Marta Laranjo. Mediterranean Institute for Agriculture, Environment and Development & CHANGE Global Change and Sustainability Institute, Portugal

15:00-15:20

Keynote 3.1 Nutritional and health-promoting potential of a novel gluten-free fermented beverage obtained from germinated oat

Juana Frías. Institute of Food Science, Technology and Nutrition (ICTAN, CSIC), Spain

15:20-15:40

Keynote 3.2 Promoting Innovation of ferMENTed fOods (PIMENTO). COST ACTION CA20128

Marta Laranjo. Mediterranean Institute for Agriculture, Environment and Development & CHANGE Institute for Global Change and Sustainability, Portugal

15:40-15:50

Oral 3.1 Development of innovative fermented beverages and "yogurt"-type gels with immunomodulatory properties from almond and/or chickpea milk analogues

Valérie Gagnaire. INRAE UMR STLO, France

Tuesday, July 9th

15:50-16:00

Oral 3.2 HealthFerm: Innovative pulse and cereal-based food fermentations for human health and sustainable diets

Yamina De Bondt. KU Leuven, Belgium

16:00-16:10

Oral 3.3 Characterization of non-dairy kefir-like beverages by metagenome and volatilome analysis

Paula Fernández-Gómez. Teagasc Food Research Centre, Ireland

16:10-16:20

Oral 3.4 Understanding the contribution of oat-associated enzymes to fermentation-induced changes in oat constituents

Eline Lambrechts. KU Leuven, Belgium

16:20-16:30

Oral 3.5 Yellow carotenoid production of lactobacilli in the *Lactobacillaceae* family is associated with insect-adapted lifestyle

Vi Pham. University of Alberta, Canada

16:30-16:40 Questions

15:00-16:40

Parallel Session 4

New methods in food microbiology

Meeting Room A

Chairs: **Panagoitis Skandamis.** Agricultural University of Athens, Greece
Guerrino Macori. University College Dublin School of Biology and Environmental Science UCD-Centre for Food Safety, Ireland

15:00-15:20

Keynote 4.1 Exploring the continuum from 'a few' cells to composite microbial communities for safer food supply chain

Panagoitis Skandamis. Agricultural University of Athens, Greece

Tuesday, July 9th

15:20-15:40
Keynote 4.2 Revolutionising food safety: harnessing sequencing technologies and bioinformatics for advanced microbiology in the realm of microbial dark matter
Guerrino Macori. University College Dublin School of Biology and Environmental Science UCD-Centre for Food Safety, Ireland

15:40-15:50
Oral 4.1 Development of a rapid and reliable method for the identification of *Bacillus* spp. species in plant-based products by tuf gene sequencing with MinION
Vania Patrone. University Cattolica del Sacro Cuore, Italy

15:50-16:00
Oral 4.2 Tracing the origin and authenticity of Spanish PDO honey using metagenomics and machine learning
Carlos Sabater. Dairy Research Institute of Asturias (IPLA-CSIC), Spain

16:00-16:10
Oral 4.3 Application of the IR biotyper for rapid identification and discrimination of *Listeria monocytogenes* strains in persistence and outbreak investigations
Francis Muchaamba. University of Zurich, Switzerland

16:10-16:20
Oral 4.4 How can DNA-based omics effectively improve microbiological quality control? An explorative study applied to infant food production
Cristian Botta. University of Turin, Italy

16:20-16:30
Oral 4.5 Microplastic mediated transfer of Tetracycline resistance: unveiling role of mussels in marine ecosystem
Giovanni Milani. University Cattolica del Sacro Cuore Piacenza, Italy

16:30-16:40 Questions

Tuesday, July 9th

16:40-17:00

Coffee break + Posters + Exhibition

Ground floor lobby & Hall 3rd floor

17:00-17:45

Parallel Session 3 (continuation)

Fermented foods I

Auditorium

FLASH COMMUNICATIONS

From waste to value: unlocking the potential of red wine pomace and microalgae through tailored fermentation
Elisabetta Trossolo. Free University of Bozen-Bolzanol, Italy

Selection of lactic acid bacteria and yeasts to increase water extractable arabinoxylan content in wheat bran, and their effect in pasta application
Lucy Laila Tulinski-Withers. ZHAW, Switzerland

Microbial dynamics and physico-chemical changes during 6-month storage of fermented sea fennel pickles stabilized by mild pasteurization
Maryem Kraouia. Polytechnic University of Ancona, Italy

Nutritionally relevant transformations of pea flours related to lactic acid fermentation
Tina Šaula. University of Ljubljana, Slovenia

Reducing biogenic amines in fermented foods: identifying helpers and empowering them for enhanced efficiency
Chaofan Ji. Dalian Polytechnic University, China

Functional yam-based ice cream fermented by an indigenous phytase-producing lactic acid bacteria strain
Silvia Martínez. Federal University of Lavras, Brazil

Fermentation of Calendula, Echinacea and Malva officinal plant extracts as a means of increasing their sensory, antioxidant, antimicrobial and nutraceutical properties
Sofía Massaro. University of Padua, Italy

Tuesday, July 9th

17:00-17:45

Parallel Session 4 (continuation)

New methods in food microbiology

Meeting Room A

FLASH COMMUNICATIONS

A novel multivariate approach to identity optimal starter cultures for the production of fermented beverages
Lorenzo Palombi. IFAC-CNR, Italy

Establishment of novel routine-methods for selective differentiation and quantification of multi-strained probiotic milk powder for infant formula
Lisa Purk. Institut für Produktqualität, Germany

Fourier-transform infrared spectroscopy to investigate an outbreak of cereulide-producing *Bacillus cereus* sensu lato
Koenraad Van Hoorde. Sciensano, Belgium

Plastics as a potential vector for spread of antimicrobial resistance and pathogens from wastewater discharge to the marine environment
Anita Solem. NTNU-Norwegian University of Science and Technology, Norway

Inter-Laboratory Validation Trial on a multiplex real time PCR method allowing the identification of 30 major multi locus sequence typing clonal complexes of *Listeria monocytogenes* circulating in food in Europe
Fabrizia Guidi. National Reference Laboratory for Listeria monocytogenes, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise G. Caporale, Italy

17:45-19:00

Round Table 1

Auditorium

Role of lactic acid bacteria bacteriocins in the improving food safety: from simple additives to powerful multi-tasking metabolites

Coordinator: Svetoslav Todorov. Sao Paulo University, Brazil

Biotechnological potential of bacteriocinogenic lactic acid bacteria is objective, but safety is the priority
Svetoslav Todorov. Sao Paulo University, Brazil

Tuesday, July 9th

Bacteriocins and microbial communities in foods
Antonio Galvez. University of Jaén, Spain

Industrial application of LABs-Effects of its application in four types of cured meat traditional Portuguese products
Manuela Vaz-Velho. CISAS-Polytechnic Institute of Viana do Castelo, Portugal

Bacteriocins in food safety and human health
Wilhelm Holzapfel. Handong Global University, Korea

17:45-19:00

Round Table 2

Meeting Room A

Pushing the boundaries of knowledge in Food Microbiology through the cataloging and detailed exploration of food metagenomes

Moderator: Luca Cocolin. University of Torino, Italy

Linking food and human microbiomes with large-scale strain-level metagenomics
Nicola Segata. University of Trento, Italy

Mapping the microbiome in food processing environments reveals a functional landscape with beneficial and safety-relevant genomic patterns
Francesca De Filippis. University of Naples Federico II, Italy

Metatranscriptomic studies of food spoilage microbiomes
Johanna Björkroth. University of Helsinki, Finland

17:45-19:00

Round Table 3

Meeting Room B

Tools for predictive modelling and quantitative microbial risk assessment

Coordinator: Panagiotis Skandamis. Agricultural University of Athens, Greece

Growth Predictor: Web-tool for growth simulation & QMRA based on gamma models, primary and secondary model fitting for estimation of cardinal values
Panagiotis Skandamis. Agricultural University of Athens, Greece

Tuesday, July 9th

Biogrowth, Bioinactivation and Biorisk: online tools for predictive microbiology and QRA
Alberto Garre. Polytechnic University of Cartagena, Spain

New WHO QRA models of *Listeria monocytogenes* in frozen vegetables, cantaloupe and RTE seafood: R package and shiny tools
Vasco Cadavez. Polytechnic Institute of Braganza, Portugal
Ursula Gonzales-Barron. Polytechnic Institute of Braganza, Portugal

MICROHIBRO: growth, inactivation, Risk assessment and sampling plans
Fernando Pérez-Rodríguez. University of Córdoba, Spain

Microrisk Lab: An Online Freeware for Predictive Microbiology
Yangtai Liu, Xiang Wang, Qingli Dong. University of Shanghai for Science and Technology, China

19:30

Visit to Hiperbaric headquarter (reservation required)

Hiperbaric
HIGH PRESSURE PROCESSING

Wednesday, July 10th

09:00-10:00

Plenary Session

Auditorium

Type III secretion systems: bacterial nanomachines for protein delivery

María Lara-Tejero. Yale University School of Medicine, USA

10:00-11:00

Parallel Session 5

Fermented foods II/ Food mycology

Auditorium

Chairs: Ilenys Pérez-Díaz. Research Microbiologist, USDA-ARS Food Science & Market Quality and Handling Research Unit, USA
Johanna Björkroth. University of Helsinki, Finland

Wednesday, July 10th

10:00-10:20

Keynote 5.1 Understanding the biodiversity and physiology of the indigenous microbiota in vegetable fermentations brined with low salt to enable innovative products from surplus volumes

Ilenys Pérez-Díaz, Research Microbiologist, USDA-ARS Food Science & Market Quality and Handling Research Unit, USA

10:20-10:30

Oral 5.1 Large scale metagenomic analysis of the fermented beverage kefir

Liam Walsh. Teagasc, Ireland

10:30-10:40

Oral 5.2 Microbial biomass as food ingredient: high nutritional quality and resource efficiency or high productivity?

Myrsini Sakarika. Ghent University, Belgium

10:40-10:50

Oral 5.3 To guide or not to guide? Comparison between guided and spontaneous fermentation of *Boletus edulis* in laboratory and culinary conditions: impact on microbial population and aromatic compounds

Francesco Martelli. University of Parma, Italy

10:50-11:00 Questions

10:00-11:00

Parallel Session 6

Foodborne pathogens I

Meeting Room A

Chairs: Beatrix Stessl. University of Veterinary Medicine Vienna, Austria
Akio Hasegawa. World Health Organization, Switzerland

10:00-10:20

Keynote 6.1 Source attribution of *Listeria monocytogenes* to diverse ecological niches in a One Health approach

Beatrix Stessl. University of Veterinary Medicine Vienna, Austria

10:20-10:30

Oral 6.1 Comparative genomics of *Arcobacteraceae* species and insight on *Arcobacter butzleri* transcriptome during infection of a gut mucus

Wednesday, July 10th

producer human cell line
Davide Buzzanca. University of Torino, Italy

10:30-10:40
Oral 6.2 Novel approach for the control of campylobacteriosis using *Campylobacter*-specific phages
Estíbaliz Ruiz Santamaria. Azti, Spain

10:40-10:50
Oral 6.3 Molecular mechanisms mediating the survival and growth of *Salmonella enterica* subsp. *enterica* on diced onions
Laura Führer. LMU Munich, Germany

10:50-11:00 Questions

11:00-11:30
Coffee break + Posters + Exhibition
Ground floor lobby & Hall 3rd floor

11:00-11:30
Detailed demonstrations of tools presented at Round Table 3
Meeting Room B

11:30-13:00
Parallel Session 5 (continuation)

Fermented foods II/ Food mycology
Auditorium

Chairs: Ilenys Pérez-Díaz. Research Microbiologist, USDA-ARS Food Science & Market Quality and Handling Research Unit, USA
Johanna Björkroth. University of Helsinki, Finland

11:30-11:50
Keynote 5.2 From spoilers -to cold fermentation applications?
Johanna Björkroth. University of Helsinki, Finland

11:50-12:00
Oral 5.4 Interspecies yeast interactions during winemaking process:

Wednesday, July 10th

Saccharomyces cerevisiae and *Starmerella bacillaris* performance during mixed fermentations in natural red grape must

Gabriele Serafino. UniTo, Italy

12:00-12:10

Oral 5.5

New and stable lactic acid bacterium-yeast consortium to be used as starter culture for sourdough production

Ines Pradal. Vrije Universiteit Brussel, Belgium

12:10-12:15 Questions

12:15-13:00 **FLASH COMMUNICATIONS**

Fermented foods II

Food mycology

Advantages of controlled fermentation vs spontaneous fermentation of a traditional Nigerian fermented beverage

Kunu-aya. Giverny Ganz. Zürich University of Applied Sciences, Switzerland

Evaluation of microbial dynamics of green and black kombucha consortia and in vitro bioactivities during one year of backslopping.

Gloria Ghion. University of Padova, Italy

Extracellular vesicles from *Lactococcus lactis* deliver vitamin K2 to human cells.

Yue Liu. Laboratory Food Microbiology, Wageningen University & Research, The Netherlands

Lactic acid bacteria fermentations, a sustainable tool to improve the technological and functional proprieties of non-conventional plant-based sources

Monica Saverio. University of Parma, Italy

Microbiological Consumer Safety Risk Assessment of 3 ferments using different protein sources in a margarine processing

Daniele Kobayashi. Upfield, The Netherlands

Selection, use, and the influence of lysine- and methionine-producing starter cultures in the nutrition and processing improvement of ogi

Olakunle David Teniola. Olusegun Agagu University of Science and Technology, Nigeria

Wednesday, July 10th

11:30-13:00

Parallel Session 6 (continuation)

Foodborne pathogens I

Meeting Room A

Chairs: Beatrix Stessl. University of Veterinary Medicine Vienna, Austria
Akio Hasegawa. World Health Organization, Switzerland

11:30-11:50

Keynote 6.2 Interventions for the control of NT-*Salmonella* spp. and *Campylobacter* spp. in chicken meat: conclusions of Joint FAO/WHO Expert meetings and initiatives for the comprehensive strategies

Akio Hasegawa. World Health Organization, Switzerland

11:50-12:00

Oral 6.4 Quasi-metagenomic approach for the detection and characterization of *L. monocytogenes* isolates obtained from the fresh produce industry

Guillermo Illán-Ortega. CEBAS-CSIC, Spain

12:00-12:10

Oral 6.5 Unravelling the mysteries of yersiniosis in New Zealand

Lucía Rivas. ESR, New Zealand

12:10-12:15 Questions

12:15-13:00 **FLASH COMMUNICATIONS**

Kinetic and proteomic studies in UHT and raw milk reveal distinct patterns among hypervirulent and hypovirulent *Listeria monocytogenes* clonal complexes
Alba Espí-Malillos. CEU Cardenal Herrera University, Spain

Genome engineering approach to evaluate the pathogenicity potential of STEC O174 strain isolated from dairy environment
Claudia Cortimiglia. University Cattolica del Sacro Cuore, Italy

Slaughter line speed and chilling stage: accessible levers for food business operators to reduce the concentration of *Campylobacter* on broiler carcasses
Francis Lauriau. Secalim, Oniris / INRAE, France

Whole-genome sequencing for the characterization of *Listeria monocytogenes* isolates from environmental sampling of three fresh-cut produce processing plants
María Ayala-San Nicolás. CEBAS-CSI, Spain

Wednesday, July 10th

Control of *Salmonella enteritidis* on ready-to-eat fresh produce using lytic bacteriophage
Christiana Dapuliga. University of KwaZulu-Natal, South Africa

Microbial volatolomics by SPME-GC-HRMS for phenotyping *Listeria monocytogenes* response to acid stress
Aya Fakih. INRAE, France

Definition of pathogenic strains of Shigatoxin-producing *Escherichia coli* (STEC)
Pauline Kooh. ANSES, France

13:00-14:30

Poster

Ground floor lobby & Hall 3rd floor

13:00-14:30

Lunch

3rd floor

13:30–14:30

International Journal of Food Microbiology Editorial Board meeting

Executive Committee Room

14:30-16:10

Parallel Session 7

Technologies for food preservation and sustainability II

Auditorium

Chairs: Carole Tonello. Hiperbaric, Burgos, Spain
Pablo Fernández-Escámez. University of Murcia, Spain

14:30-14:50

Keynote 7.1 High pressure-based technologies for enhanced food preservation and sustainability
Carole Tonello. Hiperbaric, Burgos, Spain

14:50-15:10

Keynote 7.2 Use of essential oils in nanoemulsion to inactivate microorganisms and impact of quantification of microbial acclimation to stress on the apparent resistance to stress factors
Pablo Fernández-Escámez. University of Murcia, Spain

Wednesday, July 10th

15:10-15:20

Oral 7.2 Heat resistance characterization of antimicrobial activity of cell-free supernatants obtained from potential protective cultures

Nerea Garin Murguialday. National Center for Technology and Food Safety (CNTA), Spain

15:20-15:30

Oral 7.3 Optimization of the ohmic-heating process to prepare *Bifidobacterium animalis* paraprobiotic based on the spectrophotometry and flow cytometry analyses

Mahmoud Yolmeh. State University of Campinas, Brazil

15:30-15:40

Oral 7.1 Effect of High Hydrostatic Pressure (HHP) combined with blueberry extract or nisin on food safety and shelf life of beef and plant-based patties

Nikolaos Giannoulis. University of Reading, United Kingdom

15:40-15:50

Oral 7.4 Impact of superchilling technique on the microbiological quality of fresh salmon

Pierre Collin. INRAE, France

15:50-16:00

Oral 7.5 Qualification of *Pediococcus acidilactici* as a surrogate for *Salmonella* in powdered infant formula dried by the new Pulse Spray Drying technology

Sara Bover i Cid. IRTA, Spain

16:00-16:10 Questions

14:30-16:10

Parallel Session 8

Foodborne pathogens II

Meeting Room A

Chairs: Kaye Burgess. Teagasc Food Research Centre, Ireland
Kang Zhou. Food and Agriculture Organization of the United Nations (FAO)

Wednesday, July 10th

14:30-14:50

Keynote 8.1 Mapping areas at risk of foodborne pathogen contamination in fruit and vegetable production

Kaye Burgess. Teagasc Food Research Centre, Ireland

14:50-15:10

Keynote 8.2 Joint FAO/WHO expert meeting on viruses in foods: food attribution, analytical methods, and indicators

Kang Zhou. Food and Agriculture Organization of the United Nations (FAO)

15:10-15:20

Oral 8.1 Whole-genome sequencing of foodborne *Bacillus cereus* isolates indicates no clear association between their genomic diversity and food matrix types.

Bram Jacobs. Ghent University, Belgium

15:20-15:30

Oral 8.2 Functional analysis of SigH in *Bacillus cereus* ATCC14579 and regulon prediction in the B. Cereus Group

Marcel Tempelaars. Wageningen University, The Netherlands

15:30-15:40

Oral 8.3 Thymidine auxotrophy of *Clostridium botulinum* Group II strain Beluga triggered by laboratory domestication

Katja Selby. Helsinki University, Finland

15:40-15:50

Oral 8.4 Distribution of virulence genes among *Campylobacter* spp. isolates from Spain

Irene Ortega-Sanz. University of Burgos, Spain

15:50-16:00

Oral 8.5 A proof of concept: Induction and transduction of Stx phages during seed germination

Yuan Fang. University of Arkansas, USA

16:00-16:10 Questions

Wednesday, July 10th

16:10-16:30

Coffee break + Posters + Exhibition

Ground floor lobby & Hall 3rd floor

16:10-16:30

Detailed demonstrations of tools presented at Round Table 3

Meeting Room B

16:30-17:15

Parallel Session 7 (continuation)

Technologies for food preservation and sustainability II

Auditorium

Chairs: Carole Tonello. Hiperbaric, Burgos, Spain
Pablo Fernández-Escámez. University of Murcia, Spain

16:30-17:15 **FLASH COMMUNICATIONS**

The potential of high-pressure processing to control pathogens in durian
Mario González. Hiperbaric, Burgos, Spain

Using supercritical CO_2 to increase the safety and preservation of foods
Alessandro Zambon. University of Bologna, Italy.

Assessment of *Campylobacter* reducing effect of spraying slurry ice on poultry samples.
Cristina Calvo-Fernández. Danmarks Tekniske Universitet (DTU), Denmark

Lactofermented fruit purée as a new preservative solution for food and petfood applications
Pierre Guichebard. Symrise, France

Combination technologies for increased seafood safety and shelf life; Bacteriostatic effects of nisin, chitosan and modified atmosphere packaging on *Listeria monocytogenes* and selected pathogenic and food spoilage bacteria in broth and cold smoked salmon
Trond Løvdal. Nofima, Norway

Identification of genes involved in resistance of *E. coli* K12 during High Pressure Processing in broth and a plant-based matrix
Theocharia Tsagkaropoulou. University of Reading, United Kingdom

Wednesday, July 10th

Investigating possible new products from kiwi waste: how to close the loop
Jasmine Hadj Saadoun. University of Parma, Italy

16:30-17:15

Parallel Session 8 (continuation)

Foodborne pathogens II

Meeting Room A

Chairs: Kaye Burgess. Teagasc Food Research Centre, Ireland
Kang Zhou. Food and Agriculture Organization of the United Nations (FAO)

16:30-17:15 **FLASH COMMUNICATIONS**

Unequal transcription of Shiga toxin subunit genes in enterohemorrhagic *Escherichia coli*
Katrin Neudek. University of Hohenheim, Germany

Growth of *Listeria monocytogenes* and the spoilage microorganisms on mycoprotein during chilled storage in modified atmosphere
Hasmik Hayrapetyan. Wageningen Food & Biobased Research, The Netherlands

Antibiotic resistance of *Vibrio parahaemolyticus* strains isolated from seafood products
Thomas Brauge. Anses, France

Study of the microbial dynamics of *Hermetia illucens* along the rearing and processing steps: an insight for the future safe introduction for human food.
Boris Misery. SECALIM/ONIRIS, France

Characterization of the viable but not cultivable (VBNC) cells in long-term cultures of *Listeria monocytogenes*
Sara Benetti. University of Padova, Italy

Evaluation of Yeast Surface Display and Secretion of CRISPR-Cas9 Integrated Endolysin
David Saez-Moreno. University of Minho, Portugal

Detection of zoonotic hepatitis E virus (HEV) in game meat in Poland
Ewelina Bigoraj. National Veterinary Research Institute, Poland

Wednesday, July 10th

17:15-19:00

Round table sponsored by EFSA

Auditorium

Persistent bacteria in food and feed processing environments: which, how, where and why?

Coordinator: Winy Messens (EFSA)

17:15-18:00

Keynote presentation of the EFSA scientific opinion
'Persistence of microbiological hazards in food and feed production and processing environments'

Avelino Alvarez-Ordóñez. Universidad de León, León, Spain
Maarten Nauta. Statens Serum Institut, Copenhagen, Denmark

18:00-19:00

Panel discussion

Moderator: Anthony Smith. EFSA

Avelino Alvarez-Ordóñez. Universidad de León, León, Spain
Maarten Nauta. Statens Serum Institut, Copenhagen, Denmark
Séamus Fanning. University College Dublin, Dublin, Ireland
Coen van der Weijden. Netherlands Food and Consumer Product Safety Authority, Utrecht, The Netherlands
Leen Baert. Nestlé Research, Lausanne, Switzerland

Thursday, July 11th

09:00-10:00

Plenary Session

Auditorum

Food, Antimicrobial Resistance and One Health

Bruno González-Zorn. Complutense University in Madrid, Spain

10:00-11:00

Parallel Session 9

Predictive microbiology and microbial risk assessment

Auditorum

Chairs: Antonio Valero. University of Córdoba, Spain
Cristina Serra. Wageningen University, The Netherlands

10:00-10:20

Keynote 9.1 From analyses of the risk analysis to food safety recommendations

Heidy den Besten. Wageningen University, The Netherlands

10:20-10:30

Oral 9.1 Estimating strain variability in thermal inactivation of *Campylobacter jejuni* based on whole genome data

Hiroki Abe. National Agriculture and Food Research Organization, Japan

10:30-10:40

Oral 9.2 Exploring the biodiversity of a targeted microbial core of lactic acid bacteria: connecting experimental datasets with predictive models

Alessia Levante. University of Parma, Italy

10:40-10:50

Oral 9.3 Modeling the growth and dynamics of the uropathogenic *Escherichia coli* (UPEC) in sugarcane juice

Liu-Yean Goh. National Taiwan University, Taiwan

10:50-11:00 Questions

Thursday, July 11th

10:00-11:00

Parallel Session 10

Microbial resistance/One health

Meeting Room A

Chairs: David Rodríguez Lázaro. University of Burgos, Spain
Fernando Pérez-Rodríguez. University of Córdoba, Spain

10:00-11:20 **Keynote 10.1** Quantifying antibiotic resistance dynamics in the food chain: a One Health approach from food to the human gut
Fernando Pérez-Rodríguez. University of Córdoba, Spain

10:20-10:30 **Oral 10.1** Exploration of genetic determinants of dry-heat resistance in *Salmonella*
Hui Li. Chinese Academy of Agricultural Sciences, China

10:30-10:40 **Oral 10.2** Resistome characterization of reclaimed water use as irrigation water of leafy greens and its link with human health risk.
Jesús López-Cañizares. CEBAS-CSIC, Spain

10:40-10:50 **Oral 10.3** Biofilm formation by *Brochothrix thermosphacta*. Impact of food industrial surfaces on the biofilm features and structure
Emmanuel Jaffres. UMR INRAE-ONIRIS SECALIM, France

10:50-11:00 Questions

11:00-11:30

Coffee break + Posters + Exhibition

Ground floor lobby & Hall 3rd floor

11:30-13:00

Parallel Session 9 (continuation)

Predictive microbiology and microbial risk assessment

Auditorium

Chairs: Antonio Valero. University of Cordoba, Spain
Cristina Serra. Wageningen University, The Netherlands

11:30-11:50

Keynote 9.2 Advancements in predictive microbiology in foods: bridging disciplines for a safer food future

Antonio Valero. University of Córdoba, Spain

11:50-12:00

Oral 9.4 Thermal inactivation of *Bacillus licheniformis, Bacillus subtilis* & *Bacillus cereus* spores in a pea-based milk alternative

Chrysanthi Champidou. Nestlé & Oniris INRAE, Switzerland

12:00-12:10

Oral 9.5 Insights into pork spoilage under modified atmospheres: unraveling and modeling the relationship between *Brochothrix thermosphacta* levels and volatile metabolite production

Linyun Chen. Ghent University, Belgium

12:10-12:15 Questions

12:15-13:00 **FLASH COMMUNICATIONS**

Exploring the role of pH on the microbial responses of foodborne pathogens in food products stored under different temperatures
Olga María Bonilla-Luque. University of Córdoba, Spain

Sampling as useful and risk-based strategy to avoid listeriosis cases from "Rakfisk", a traditional ready-to-eat, high risk fish product with increasing popularity
Taran Skjerdal. Norwegian Veterinary Institute, Norway

Decision support tool for the safety of plant-based meat analogues: a new growth and growth boundary model for *Listeria monocytogenes* with novel modules for organic acids and strain variability
Cristina Serra. University of Wageningen, The Netherlands

Predicting and optimising the dynamics of bacteria under antimicrobials in the food industry through a new battery of dynamic mathematical models
Miriam García. IIM-CSIC, Spain

Salt reduction and temperature abuse implications on *Listeria monocytogenes* behaviour in chourição
Beatriz Silva. University Católica Portuguesa, Portugal

Mathematical modelling of the stress adaptation of *Listeria monocytogenes* under isothermal conditions.
Oktay Haykır. Hungarian University of Agriculture and Life Sciences, Hungary

Enhanced food preservation for a sustainable future through a novel gas-washing bottle incubation system: modeling *Listeria monocytogenes* growth under controlled environmental conditions
Seren Oguz. Gent University, Belgium

11:30-13:00

Parallel Session 10 (continuation)

Microbial resistance/One health

Meeting Room A

Chairs: David Rodríguez-Lázaro. University of Burgos, Spain
Fernando Pérez-Rodríguez. University of Córdoba, Spain

11:30-11:50

Keynote 10.2 Antimicrobial resistance and global health: animals, food and humans, a "One Health" concern
David Rodríguez-Lázaro. University of Burgos, Spain

11:50-12:00

Oral 10.4 Antimicrobial resistance and microbial transmission in beef production
Tea Movsesijan. FFoQSI, Austria

12:00-12:10

Oral 10.5 Food safety network for the development, harmonization and adoption of methodologies based on One Health oriented to the assessment of new microbiological risk (OneHealth4Food)
Elena Carrasco Jiménez. University of Córdoba, Spain

12:10-12:15 Questions

12:15-13:00 **FLASH COMMUNICATIONS**

Microbiological and genetic analysis of *Listeria monocytogenes* in biofilm and planktonic states: Impact of transfer to cooked ham, subsequent storage and simulated in vitro gastrointestinal digestion
Salud María Serrano-Heredia. University of Córdoba, Spain

The persistence phenomenon of food-associated *Listeria monocytogenes*. A case of opportunism or adaptation?
Lauren Alteio. Austrian Competence Centre for Feed and Food Safety, Quality and Innovation - FFoQSI GmbH, Austria

Evolution and persistence of long-term cultures of *Pseudomonas fluorescens* strains under stressful conditions of starvation and refrigeration to simulate the food production environment.
Hooriyeh Mohammadpour. University of Padova, Italy

Surveying *Salmonella* on imported chicken carcasses: occurrence, antimicrobial resistance, and whole-genome sequencing analysis in the United Arab Emirates
Ihab Habib. United Arab Emirates University, United Arab Emirates

Effect of pre-harvest treatment with elicitors on the hygienic-sanitary quality and fungal population of dried figs
Alicia Rodríguez Jiménez. University of Extremadura, Spain

Persistence of foodborne pathogens during hydroponic cultivation of lettuce on nutrients based on source-separated urine
Gunn Thomassen. NTNU, Norway

13:00-14:00

Closure Ceremony

Auditorium


FOOD
micro
2024

POSTERS

POSTERS

Authors are requested to stay in front of their work during the corresponding poster session.

9 JULY

11:00-11:30

Topics:
- Impact of climate change on food safety and spoilage
- Microbial food ecology: from processing plants to food
- Food microbiota and impact on human microbiome

16:40-17:00

Topics:
- New methods in food microbiology
- Fermented food
- Food microbes in plastisphere: microbial ecosystem on microplastics

10 JULY

11:00-11:30

Topics:
- Foodborne pathogens

16:10-16:30

Topics:
- Technologies for food preservation and sustainability

11 JULY

11:00-11:30

Topics:
- Predictive microbiology and microbial risk assessment
- Microbial resistance
- One health

FERMENTED FOODS

P-001

PEDIOCOCCUS PENTOSACEUS BACTERIOCINOGENIC STRAINS ARE PREDOMINANT AND WIDELY REPRESENTED IN CHEESE FROM BULGARIAN MIDDLE SCALE DAIRY FACILITY

Kayque Ordonho Carneiro[1], Joao Marcos Scafuro Lima[1], Manuela Vaz-Velho[2], Svetoslav Todorov[1,2]

[1] ProBacLab, and Laboratório de Microbiologia de Alimentos, Departamento de Alimentos e Nutrição Experimental, Faculdade de Ciências Farmacêuticas, Universidade de São Paulo, Brazil; [2] CISAS-Center for Research and Development in Agrifood Systems and Sustainability, Instituto Politécnico de Viana do Castelo, Viana do Castelo, Portugal

P-002

FERMDB: THE LARGEST INTEROPERABLE DATABASE AND MAP OF FERMENTED FOODS TO DATE

Rodrigo Hernández-Velázquez[1], Lena Flörl[1], Anton Lavrinienko[1], Zuzana Sebechlebská[1], Liana Merk[2], Anna Greppi[1], Nicholas Bokulich[1]

[1] Laboratory of Food Systems Biotechnology, Institute of Food, Nutrition and Health, ETH Zurich, Switzerland; [2] Department of Molecular and Cellular Biology, Harvard University, Cambridge, MA, USA

P-003

DYNAMIC CHANGES OF FERMENTATION PROFILES DURING PINEAPPLE JUICE FERMENTATION WITH SINGLE AND CO-CULTURES OF ALLOCHTHONOUS AND AUTOCHTHONOUS YEASTS

On-Ong Chanprasartsuk, Keerati Kharuehanon

Department of Food Science, Faculty of Science, Burapha University, Saensuk, Mueang, Chonburi, Thailand

P-004

LACTICASEIBACILLUS PARACASEI TS35: A PROMISING PROBIOTIC FOR FUNCTIONAL FOOD PRODUCTION

Ilkin Sengun, Aysegul Kirmizigul Peker, Gulden Kilic, Berna Ozturk

Ege University, Engineering Faculty, Food Engineering Department, Izmir, Türkiye

P-005

USE OF BACILLI AS BENEFICIAL FERMENTATION ORGANISMS IN NON-CONVENTIONAL APPLICATIONS

Michael Gaenzle, Jin Xie, María Guadalupe Robles Hernández

University of Alberta, Canadá

P-006

SELECTION OF EXOPOLYSACCHARIDE-PRODUCING LACTIC ACID BACTERIA STRAINS FOR THE STABILIZATION OF FRUIT PREPARATIONS

Dor Zipori, Herbert Schmidt

Department of Food Microbiology and Hygiene, Institute of Food Science and Biotechnology, University of Hohenheim, Garbenstrasse, Stuttgart, Germany

P-007

CHANGES IN THE CHEMICAL PROFILE OF *OPUNTIA FICUS-INDICA* CLADODES AFTER LACTIC ACID FERMENTATION

Martina Marrella[1], Naiara Fernández Hernández[3], Annalisa Ricci[1], Lorenzo Del Vecchio[1], Carolina Ventura[3], Amulya Baniya[3], Valentina Bernini[1,2], Martina Cirlini[1], Maria Rosário Bronze[3,4,5], Camilla Lazzi[1,2]

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P-008

PHYTATE DEGRADATION IN WHEAT, BUCKWHEAT, SOY, AND RICE FLOURS BY LACTOBACILLI AND YEAST ISOLATED FROM AFRICAN AND ASIAN TRADITIONAL FERMENTED FOOD

Linnea Qvirist[1], Donatella Scarafile[2], Francesca Patrignani[2], Monica Modsesto[2], Rosalba Lanciotti[2], Thomas Andlid[3], Paola Mattarelli[2]

[1] Department of Biology and Biological Engineering, Chalmers University of Technology, Gothemburg, Sweden; [2] Department of Agricultural and Food Sciences, University of Bologna, Italy; [3] Andlid Bio Solutions AB, Gothemburg, Sweden

P-009

MICROBIAL PHYTATE DEGRADATION IN SOY MILK FERMENTED PRODUCTS

Linnea Qvirist[1], Donatella Scarafile[2], Francesca Patrignani[2], Monica Modesto[2], Rosalba Lanciotti[2], Thomas Andlid[3], Paola Mattarelli[2]

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P-010

QUANTIFYING DAIRY PROPIONIC ACID BACTERIA IN RAW CHEESE MILK: A TIME-CONSUMING CHALLENGE

Carola Bücher[1], Johanna Burtscher[2], Tamara Rudavsky[1,2], Ulrike Zitz[2], Konrad Domig[2]

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P-011

COMPARATIVE STUDY OF MICROBIAL SPECIES PERFORMANCE IN AMAZAKE PRODUCTION

Alejandra Touceda-Suárez[1,3], Juan Carlos Arboleya[1,2], Pia M. Sörensen [3]

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P-012

EVALUATION OF SPONTANEOUS FERMENTATION WITH BACKSLOPPING METHOD FOR THE PRODUCTION OF ALCOHOLIC GINGER BEER

Michele Avesani, Giacomo Zapparoli

University of Verona, Italy

P-013

LACTIC ACID FERMENTATION AS A TOOL TO IMPROVE AROMA OF MICROALGAL FOOD PRODUCTS: THE CASE OF *CHLORELLA VULGARIS*

Caterina Nicolotti, Lorenzo Del Vecchio, Benedetta Bottari, Martina Cirlini, Monica Gatti, Valentina Bernini, Francesco Martelli

Department of Food and Drug, University of Parma, Italy

P-014

MICROBIAL EVALUATION OF THE ATHINOLIA GREEK OLIVE CULTIVAR USING CLASSICAL MICROBIOLOGICAL AND AMPLICON-BASED METAGENOMICS APPROACHES

Marina Georgalaki[1], Rania Anastasiou[1], Georgia Zoumpopoulou[1], Despoina Giampasakou[1], Alexandra Kokkali[1], George Paraskevakos[2], Effie Tsakalidou[1]

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P-015

ENHANCING FOLATE LEVELS IN DIFFERENT FERMENTED MILKS THROUGH BIOFORTIFICATION AND CONTENT EVALUATION DURING STORAGE USING HPLC-MS/MS ANALYSIS

Marianna Bozzetti[1], Carolina Cerri[1], Sara Morandi[1], Federica Barbieri[2], Giulia Tabanelli[2], Gabriele Rocchetti[1], Luigi Lucini[1], Fausto Gardini[2], Daniela Bassi[1]

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P-016

PATHOGEN BEHAVIOUR IN FERMENTED FOODS: A DESCRIPTION OF VARIOUS FOODBORNE PATHOGENS SURVIVAL IN CHARACTERISED FERMENTATIONS OF KEFIR AND SAUERKRAUT

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P-017

IMPACT OF PARTIAL SUBSTITUTION OF SODIUM CHLORIDE BY POTASSIUM CHLORIDE ON THE FERMENTATION PROFILE OF CV. KALAMATA NATURAL BLACK OLIVES

Elisavet Vakouli, Aikaterini Psarafti, Maria Kazou, Efstathios Panagou

Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens

P-018

SPONTANEOUS VEGETABLE FERMENTATIONS: A FOOD SAFETY PERSPECTIVE

Mieke Uyttendaele[1], Mathis Vermeersch[1], Cintia Csorba[2], Liesbeth Jacxsens[1], Tanja Kostic[2]

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P-019

METAGENOMIC AND METABOLOMIC PROFILE OF MOSCATO WINE PRODUCTION

Vasileios Englezos[1], Panagiotis Arapitsas[2,3], Maria Dimopoulou[2], Paola Di Gianvito[1], Vania Stephanie Saez Pulgar[3], Urska Vrhovsek [3], Ilektra Ksenou[2], Christina Papandreou[2], Luca Cocolin[1], Kalliopi Rantsiou[1]

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P-020

MICROBIOTA DYNAMIC OF GREEN COFFEE FERMENTATION IN APPLE JUICE AND ITS IMPACT ON COFFEE VOLATILE PROFILE

Irene Franciosa[1], Ilario Ferrocino[1], Francesca Trapani[2], Bianca Serito[2], Vladimiro Cardenia[1], Kalliopi Rantsiou[1], Luca Cocolin[1]

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P-021

INVESTIGATING NITRIC OXIDE SYNTHASE ACTIVITY IN COAGULASE-NEGATIVE STAPHYLOCOCCI

Lara Premi[1], Gabriele Rocchetti[2], Annalisa Rebecchi[1]

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P-022

PARAMETERS INFLUENCING WATER KEFIR GRAIN GROWTH DYNAMICS BY IMAGE ANALYSIS

Pia Bethge[1], Thomas Henle[2], Thorsten Mascher[1]

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P-023

MICROBIAL COMMUNITY OF MEAT ANALOGUES FERMENTED USING MEAT STARTERS

Sara García-Solivelles, Mónica Flores, Carmela Belloch

IATA-CSIC Institute of Agrochemistry and Food Technology, Spain

P-024

DIRECTING FLAVOUR FORMATION BY LACTIC ACID BACTERIA IN HYBRID DAIRY-PLANT INGREDIENT EMULSIONS

Wim Engels[1], Saskia van Schalkwijk[1], Marjo Starrenburg[1], Simon Jacobs[1], Herwig Bachmann[1,2]

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P-025

THE METAOLIVE PROJECT: META-OMIC APPROACHES FOR TRADITIONAL TABLE OLIVE FERMENTATION

Chiara Maria Calvanese[1], Alessandra De Vivo[1], Alessandro Genovese[1], Annamaria Ricciardi[2], Eugenio Parente[2], Francesca De Filippis[1]

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P-026

THE POTENTIAL OF FERMENTATION WITH *PLEUROTUS OSTREATUS* TO DEVELOP PROTEIN-RICH SNACKS FROM FAVA BEANS (*VICIA FABA* L.)

Sara Muñoz Pina[1], Kateryna Khvostenko[1], Jorge García-Hernández[2], Ana Heredia[1], Ana Andrés[1]

[1] Instituto Universitario de Ingeniería de Alimentos-FoodUPV, Universitat Politècnica de València; [2] Centro Avanzado de Microbiología de Alimentos (CAMA), Universitat Politècnica de València, Spain

P-027

ADVANCING LACTIC ACID PRODUCTION: COMPARATIVE ISOTHERMAL MICROCALORIMETRY OF *LACTOBACILLUS PLANTARUM* GROWTH ON BAMBOO VERSUS BACTERIAL CELLULOSE SUBSTRATES

Chun-Ping Lin[1], Shu-Yao Tsai[2], Min Huang[1], Shu-Xuan Wang[2]

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P-028

NUTRITIONAL ENHANCEMENT OF OKARA VIA SOLID-STATE FERMENTATION: SYNERGISTIC EFFECTS OF *CORDYCEPS MILITARIS* AND *LACTOBACILLUS PLANTARUM* ON DIETARY FIBER COMPOSITION AND FUNCTIONAL PROPERTIES

Shu-Yao Tsai[1], Shu-Xuan Wang[1], Jia-Wei Su[2]

[1] Department of Biotechnology, National Formosa University, Taiwan, ROC; [2] Department of Food Nutrition and Health Biotechnology, Asia University, Taiwan, ROC

P-029

CHEESE WHEY TO ECO-PLASTICS: REVOLUTIONIZING SUSTAINABLE PHA PRODUCTION

Andrea Colautti, Giuseppe Comi, Lucilla Iacumin
Department of Agricultural, Food, Environmental and Animal Science, University of Udine, Italy

P-030

EXPLORING THE POTENTIAL OF NATIVE BRAZILIAN FRUITS FOR THE PRODUCTION OF NOVEL LOW-ALCOHOL FERMENTED BEVERAGES

Taís Suhre[1], Caroline Isabel Kothe[2], Jeverson Frazzon[1]
[1] Federal University of Rio Grande do Sul, Institute of Food Science and Technology, Brazil; [2] Technical University of Denmark, Sustainable Food Innovation Group, The Novo Nordisk Foundation Center for Biosustainability, Denmark

P-031

DELVING INTO THE POTENTIAL OF *LACHANCEA THERMOTOLERANS* IN GREEN TABLE OLIVE FERMENTATION

Patricia Gil-Flores, Silvia Martínez-Peláez, Elena Crespo-Murillo, Benjamín Vázquez-Conejo, Joaquín Bautista-Gallego
Department of Biomedical Science, Microbiology Section, University of Extremadura, Badajoz, Spain

P-032

METABARCODING ANALYSIS REVEALS A DIFFERENTIAL BACTERIAL COMMUNITY PROFILE ASSOCIATED WITH 'TORTA DEL CASAR' AND 'QUESO DE LA SERENA' PROTECTED DESIGNATION OF ORIGIN CHEESES

Almudena V. Merchán[1,2], Santiago Ruiz-Moyano[1,2], María José Benito[1,2], María Vázquez[1,2], Catalina Cabañas[1,2]
[1] Animal Production and Food Science, Dept. Nutrition and Bromatology Area, Badajoz, Spain; [2] University Research Institute of Agricultural Resources, Badajoz, Spain

P-033

SOURCE OF ISOLATES AND PROBIOTIC ACTIVITY OF YEASTS FOR SELECTION AS POTENTIAL CANDIDATE STRAINS

Kanyarat Kanyakam, Cheunjit Prakitchaiwattana
Chulalongkorn University, Thailand

P-034

LACTOBACILLI, BEST ALLIES OF MENTAL HEALTH: THE POWER OF COMPARATIVE GENOMICS

Chiara Maria Calvanese , Vincenzo Valentino, Giuseppina Sequino, Danilo Ercolini, Francesca De Filippis
Department of Agriculture Sciences, University of Naples Federico II, Portici, Naples, Italy

P-035

TRADITIONAL FERMENTED FOODS AS A SOURCE OF BENEFICIAL MICROBES: A META-ANALYSIS

Vincenzo Valentino[1], Raffaele Magliulo[1,2], Dominic Farsi[3], Paul D. Cotter[3,4,5], Orla O'Sullivan[3,4,5], Danilo Ercolini[1], Francesca De Filippis[1,2]
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P-036

ISOLATION AND CHARACTERIZATION OF POTENTIAL NEXT GENERATION PROBIOTICS FROM THE HUMAN GUT

Alessia Esposito
University of Naples Federico II, Italy

P-037

IMPACT OF PULSE PROTEINS ON GUT MICROBIOME AND HUMAN HEALTH: A META-ANALYSIS

Roberto Marotta[1], Paola Vitaglione[1,2], Danilo Ercolini[1,2], Francesca De Filippis[1,2]
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P-038

EXPLORING PROBIOTICS POTENTIAL: REBALANCING GUT HEALTH IN NON-CELIAC GLUTEN SENSITIVITY

Ilario Ferrocino[1], Ilaria Goitre[2], Valentina Ponzo[2], Andrea Caratti[3], Fulvia Trapani[3], Erica Liberto[3], Chiara Emilia Cordero[3], Luca Cocolin[1], Simona Bo[2]
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P-039

PROBIOTICS ADMINISTRATION TO TREAT DIFFERENT SKIN CONDITIONS: A META-ANALYSIS

Martina Parziale[1], Francesca De Filippis[1], Sergio Iacopino[2]
[1] University of Naples Federico II, Italy; [2] Arterra Bioscience Spa, Italy

P-040

A MICROBIOME-BASED PRECISION NUTRITION APPROACH TO MAXIMIZE ANTICARCINOGENIC CONJUGATED LINOLEIC ACID (CLA) PRODUCTION BY HUMAN GUT MICROBIOTA

Adriana González [1], Asier Fullaondo[1], Cristina Tirnauca[2], Adrian Odriozola[1]
[1] Department of Genetics, Physical Anthropology and Animal Physiology, University of the Basque Country UPV/EHU, Bilbao, Spain; [2] Department of Mathematics, Statistics and Computer Science, University of Cantabria, Santander, Spain

P-041

BIOACCESSIBILITY OF ISOTHOCYANATES FROM MUSTARD (*SINAPIS ALBA*) AND THEIR INTERACTIONS WITH COLONIC MICROBIOTA

Fernando Cámara-Martos[2], Jose Luis Luque-Ojeda[2], Araceli Bolívar[1], Silvia de la Cruz-Ares[1], Fernando Pérez-Rodríguez[1]
[1] Departamento de Bromatología y Tecnología de los Alimentos, UIC Zoonosis y Enfermedades Emergentes ENZOEM, ceiA3, Universidad de Córdoba, Spain; [2] Departamento de Bromatología y Tecnología de los Alimentos, ceiA3, Universidad de Córdoba, Spain

P-042

UNRAVELING THE NEUROACTIVE POTENTIAL OF GRANA PADANO AND PARMIGIANO REGGIANO CHEESE MICROBIOME

Raffaele Magliulo[1,2], Vincenzo Valentino[1], Giuseppina Sequino[1], Danilo Ercolini[1,3], Francesca De Filippis[1,3]
[1] Department of Agricultural Sciences, University of Naples Federico II, Portici, Italy; [2] NBFC-National Biodiversity Future Center, Palermo, Italy; [3] Task Force on Microbiome Studies, University of Naples Federico II, Italy

P-043

CULTIVATING KNOWLEDGE: INVESTIGATING THE EFFECTS OF FERMENTED FOOD CONSUMPTION THROUGH UNEXPLORED MICROORGANISMS

Roberta Marconi, Niccolò Carlino, Liviana Ricci, Nicola Segata
Centre for Integrative Biology, University of Trento, Italy

FOOD MICROBIOTA AND IMPACT ON HUMAN MICROBIOME

P-044

PREVALENCE AND PERSISTENCE OF LISTERIA MONOCYTOGENES IN A READY-TO-EAT FOOD PROCESSING INDUSTRY

Belén Romero de Castilla López[1,2], Jorge Andaluz Arbe[1,2], M.ª Pilar Conchello Moreno[1,2], M.ª Carmen Rota García[1,2]
[1] University of Zaragoza, Spain; [2] Agrifood Institute of Aragon, Spain

P-045

WHOLE-GENOME COMPARATIVE ANALYSIS OF THE GENETIC DIVERSITY OF *CAMPYLOBACTER* SPP. FROM SPAIN

Irene Ortega-Sanz, Beatriz Melero, Jordi Rovira
University of Burgos, Spain

P-046

PRODIGIOSIN PRODUCTION IN *SERRATIA MARCESCENS* ISOLATED FROM COOKED CHICKEN MEAT IN ITALY

Giulia Magagna, Michela Tilola, Franca Rossi, Virginia Filipello, Marina Nadia Losio, Guido Finazzi
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SOURDOUGH: A MODEL SYSTEM TO STUDY ECO-EVOLUTIONARY DYNAMICS OF MICROBIAL COMMUNITIES IN FOOD

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IDENTIFICATION OF BREAD SPOILAGE ORGANISMS ISOLATED FROM PAR-BAKED BREAD PRODUCED IN EUROPE

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ISOLATION AND SCREENING OF PROBIOTIC POTENTIAL LACTIC ACID BACTERIA FROM FERMENTED PLANT-BASED PRODUCTS AND THEIR GABA PRODUCTION ABILITIES

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FERMENTED SAUSAGE MICROBIOME: INVESTIGATION, STORAGE AND EXPLOITATION

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SULPHITE-RESISTANT VARIANTS OBTAINED BY DIRECTED EVOLUTION ASSAYS IN *SALMONELLA TYPHIMURIUM*

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GENETIC AND PHENOTYPIC INSIGHTS INTO ANTIMICROBIAL RESISTANCE AND VIRULENCE OF *CAMPYLOBACTER* ISOLATES FROM POULTRY, SLOVENIA

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ENVIRONMENTAL AND GENETIC FACTORS SHAPING THE PERSISTENT PHENOTYPE OF *L. MONOCYTOGENES* IN AUSTRIAN FOOD PROCESSING ENVIRONMENTS

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DIRECTED EVOLUTION EVIDENCES THAT HEAT RESPONSE MECHANISMS OBSERVED UNDER LABORATORY CONDITIONS MAY BE DIFFERENT FROM THOSE RELEVANT FOR INDUSTRIAL PASTEURIZATION

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COMPARATIVE ANALYSIS OF COMMERCIAL CLEANING AND DISINFECTION FORMULATIONS AND PROTOCOLS FOR EFFECTIVE ERADICATION OF *PSEUDOMONAS FLUORESCENS* BIOFILMS

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SOURCE TRACKING OF ANTIBIOTIC RESISTANCE AND FECAL INDICATOR BACTERIA ALONG THE WHOLE PRODUCTION CHAIN OF MUSSELS IN NORTHERN GREECE

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ANTIMICROBIAL ACTIVITY OF HONEY AND HONEY POWDER

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PHOTODYNAMIC INACTIVATION OF *SALMONELLA ENTERICA* ON CUCUMBERS AND TOMATOES USING CURCUMIN AS PHOTOSENSITIZER

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OPTIMIZATION OF FERMENTATION CONDITIONS FOR BIOETHANOL PRODUCTION BY *PARAGEOBACILLUS THERMOGLUCOSIDASIUS*

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KIWIFRUIT BY-PRODUCTS: INNOVATIVE VALORIZATION ROUTES

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HOW CAN MODELS PREDICT THE PERFORMANCE OF BIOPRESERVATION SOLUTIONS? A CASE STUDY ON THE CONTROL OF MICROBIAL SPOILAGE IN STRAWBERRY PUREE

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OPTIMIZING BREAD PRESERVATION: USE OF SOURDOUGH IN COMBINATION WITH OTHER CLEAN LABEL APPROACHES FOR ENHANCED MOULD-FREE SHELF LIFE OF BREAD

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BIOLOGICAL VALIDATION OF IR PLUS UV PASTEURIZATION COMBINED PROCESS FOR CASHEW NUTS

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USE OF VIRULENT BACTERIOPHAGES TO CONTROL *SALMONELLA* DURING DRY FERMENTED SAUSAGE PRODUCTION

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EVALUATION OF TECHNOLOGICAL TRAITS AND ANTIBIOTIC RESISTANCE OF LACTIC ACID BACTERIA ISOLATED FROM FOOD MATRICES IN SICILY, ITALY

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INVESTIGATING TOMATO PLANT MICROBIOTA AS SOURCE OF BIO-PROTECTIVE MICROORGANISMS FOR APPLICATION IN FRESH PRODUCE

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SUSTAINABLE PRODUCTION OF ANTIMICROBIAL BETA-CHITOSANS AND PROBIOTICS FROM SQUID PEN RESIDUES UNDER A BIOREFINERY APPROACH

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ROLE OF COMPETITION-EXCLUSION FOR TRACE ELEMENTS IN THE ANTIFUNGAL ACTIVITY OF *L. PLANTARUM* L244 AND *L. RHAMNOSUS* CIRM-BIA 1759

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EXPLORING THE CRABTREE EFFECT OF *METSCHNIKOWIA PULCHERRIMA*

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LACTIC ACID BACTERIA AS PROTECTIVE CULTURES FOR PLANT-BASED FOOD

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BIOACTIVITY OF AQUEOUS EXTRACTS FROM AGRI-FOOD BY-PRODUCTS: EFFECT OF PARTICLE SIZE

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ANTIFUNGAL AND ANTIOXIDANT ACTIVITY OF AROMATIC PLANT HYDROSOLS AND ITS POTENTIAL APPLICATIONS TO CONTROL FILAMENTOUS FUNGI IN CHEESE

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ANTIBACTERIAL AND ANTIBIOFILM ACTIVITY OF POTATO (*SOLANUM TUBEROSUM* CV. LAURA) PEEL-DERIVED EXTRACELLULAR VESICLES AGAINST BACILLUS CEREUS ATCC 11778

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ANTIFUNGAL ACTIVITY OF *ORIGANUM VULGARE* ESSENTIAL OIL-LOADED NANOEMULSIONS AGAINST POSTHARVEST FUNGAL PATHOGENS

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EXTRACTION OF PHENOLIC COMPOUNDS FROM *SORBUS AUCUPARIA* TREE LEAVES BY THIN-LAYER CHROMATOGRAPHY AND EVALUATION OF ANTIMICROBIAL ACTIVITY

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PRODUCTION OF HIGH-VALUED FOOD INGREDIENTS FROM THE FERMENTATION OF RED CHICORY (*CICHORIUM INTYBUS* L.) BY-PRODUCTS

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VALORIZATION OF *BRASSICA* BY-PRODUCTS TOWARDS ISOTHIOCYANATES

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NISIN-LOADED CHITOSAN/SODIUM ALGINATE MICROSPHERES ENHANCES THE ANTIMICROBIAL EFFICACY OF NISIN AGAINST *STAPHYLOCOCCUS AUREUS*

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