

**ABSTRACT BOOK**



# 8th Congress of European Microbiologists

In collaboration with  **sfam**  
society for  
applied microbiology



7-11 July 2019 | Glasgow, Scotland | [www.fems2019.org](http://www.fems2019.org)



## TABLE OF CONTENT

Oral presentations (O001 – O302).....	1
Poster Presentations (PM001 – PW498).....	301
Monday (PM001 – PM408).....	301
Tuesday (PT001 – PT412).....	714
Wednesday (PW001- PW498).....	1131

## **PW381 Microbiological characterization of Salame Piemonte IGP: starter cultures selection**

Irene Franciosa<sup>1</sup>, Ilario Ferrocino<sup>1</sup>, Valentina Alessandria<sup>1</sup>, Kalliopi Rantsiou<sup>1</sup>, Luca Cocolin<sup>1</sup>

<sup>1</sup>*University of Turin, DISAFA, Torino, Italy*

**Background:** Salame Piemonte is a typical fermented sausage of Nord-West of Italy that is preserved by Protected Geographical Indication. Their microbiota is specific of the region or area where they are produced, a management of microbial resources is essential to protect the sensory characteristics of the product.

**Objectives:** With the aim of the selection of autochthonous starter cultures for this local fermented sausage, the ecology and microbial dynamics during the fermentation process of three different productions from the same factory were evaluated. The study of fermented sausages was carried out by culture-dependent and independent methods.

**Methods:** Molecular techniques were used for the characterization of the samples and the application of metagenomics approaches helped in the understanding of the correlation between strains and their respective metabolic activities. Physiological characterizations of selected isolates were carried out: about 540 isolates of LAB and CNC were tested for growth rate at different temperatures and under different salt concentrations, acidification capability and for their nitrate reductase activities. Each test was performed in microplates. Lipolytic and proteolytic activity were evaluated using specific agar media by the identification of clear zones. Concerning safety evaluation of selected strains, the antibiotic susceptibility and potential production of biogenic amines by PCR-targeted methods were verified.

**Results:** After selection of individual strains or strain consortia for inclusion in hand-made product, reduction at a pilot scale at the local producer's facility with one or more strain combinations will be performed.