



UNIVERSITÀ
DEGLI STUDI
DI PALERMO



Programme

First Virtual (XXV) WORKSHOP on
**THE DEVELOPMENTS IN THE ITALIAN PhD RESEARCH ON FOOD SCIENCE
TECHNOLOGY AND BIOTECHNOLOGY** (<https://www.phdfood.it/>)

14-15 September 2021 – Università degli Studi di Palermo

Tuesday, 14 September, 2021

8.00-9.00 Registration

9:15 – 10:00 am - Opening ceremony and greetings from the authorities.

Auditorium Department of Economics, Business and Statistics (SEAS). University of Palermo, Viale delle Scienze Ed. 13

Prof. **Fabrizio Micari**, Rector of University of Palermo

Prof. **Angelo Mineo**, Director of the Department of Economics, Business and Statistics (*SEAS*)

Prof. **Stefano Colazza**, Director of the Department of Agriculture, Food, and Forestry Science

Prof.ssa **Ernestina Casiraghi**, Chair of the Italian Society of Food Sciences and Technologies (*SISTAL*)

Prof. **Luca Settanni**, Delegate of the Chair of the Italian Society of Agro-Food and Environmental Microbiology (*SIMTREA*)

10:00 – 10:50 am - Plenary Lecture: “La ricerca oltre il laboratorio: metodo, responsabilità e ruolo pubblico”, Senatrice **Elena Cattaneo**, Auditorium *SEAS*

Chair: Luciano Cinquanta (University of Palermo)

(PhD students and fellows of the University of Palermo will attend)

11:00 – 12:30

Parallel session #1: Food Quality, *Virtual room 1*

Chairs: Carla Severini (University of Foggia), Deborah Pacetti (University of Marche)

11.00-11.20 **Maria Alessia Schouten, University of Bologna**

Innovative strategies for the mitigation of acrylamide content in different food products

11-20-11.40 **Angelicola Martina, University of Molise**

High amylose wheat flours for the development of healthy cereal based foods

11.40-12.00 **Umer Farooq, University of Teramo**

Application of innovative methods to study the tribological and colloidal properties of complex food systems

12.00-12.20 **Sebastian Imperiale, University of Bolzano**

Quality and authenticity of mountain milk products

11:00 – 12:30

Parallel session #2: Food Quality, Virtual room 2

Chairs: Bruno Zanoni (University of Firenze), Francesco Caponio (University of Bari)

11.00-11.20 **Claudia Favari, University of Parma**

Metabolomics applications to nutritional intervention studies

11.20-11.40 **Gaetano Cardone, University of Milano**

Sprouting as a biotechnological process to improve the functional properties of cereal-based products (FF)

11.40-12.00 **Francesca Cavaliere, University of Parma**

A food contact materials 3D database for food safety using nuclear receptors (ER and AR) as biological tumor markers

12.00-12.20 **Ancuta Cezara Simon, University of Parma**

Antimicrobial resistance of microorganisms isolated from swine chain

11:00 – 12:30

Parallel session #3: Microbial diversity, Virtual room 3

Chairs: Giuseppe Comi (University of Udine), Alessia Levante (University of Parma)

11.00-11.20 **Francesco Riva, University of Napoli**

Possible routes of antibiotic resistance diffusion through horizontal gene transfer in environments linked to the agri-food system

11.20-11.40 **Dea Korcari, University of Milano**

Investigating the biodiversity in spontaneous fermentations as a source of high-performance microorganisms

11.40-12.00 **Mohammad Khairul Alam, University of Teramo**

Functional and technological characterization of lactic acid bacteria in fermented milks

12.00-12.20 **Shadi Pakroo, University of Padova**

Characterization of potential probiotic *Pediococcus* strains with hypocholesterolemic properties isolated from traditional Persian fermented food

11.00-12.30 Poster session: Poster (pre-recorded oral presentation) & Miniposter

12:30 – 14:00

Parallel session #4: Food processing, Virtual room 4

Chairs: Vincenzo Gerbi (University of Torino), Marco Della Rosa (University of Bologna)

12.30-12.50 **Davide De Angelis, University of Bari**

New pulses-based ingredients obtained by dry fractionation to improve the nutritional and technological quality of foods

12.50-13.10 **Tashina Petersson, University of Viterbo**

Reducing GHG emissions and water footprint in the EU through sustainable and healthy diets

13.10-13.30 **Silvia Tagliamonte, University of Napoli**

Food digestibility: a physiological approach for new product development

13.30-13.50 **Angela Borriello, University of Napoli**

Novel approaches in healthy cream development

12:30 – 14:00

Parallel session #5: Food processing, Virtual room 5

Chairs: Mauro Moresi (University of Tuscia), Paolo Masi (University of Napoli)

12.30-12.50 **Jessica Genovese, University of Bologna**

Application of Pulsed Electric Field (PEF) for the modulation of chemico-physical properties of different foods (FP)

12.50-13.10 **Monica Macaluso, University of Pisa**

Different strategies to maintain and increase the quality of olive oil and the sustainability of its production chain

13.10-13.30 **Riccardo De Flaviis, University of Teramo**

Qualitative and functional characterization of ancient Abruzzo wheat

13.30-13.50 **Renoldi Niccolò, University of Udine**

Development of functional and innovative cereal-based foods with reduced glycaemic response

12:30 – 14:00

Parallel session #6: Fermented foods, Virtual room 6

Chairs: Gianluigi Mauriello (University of Napoli), Annamaria Ricciardi (University of Basilicata)

12.30-12.50 **Jasmine Hadj Saadoun, University of Parma**

Fermentation as a strategy to produce high value-added compounds from by-products and waste

12.50-13.10 **Mariagrazia Molfetta, University of Bari**

Novel biotechnologies applied to cereal-based food items

13.10-13.30 **Michele Matraxia, University of Palermo**

Biotechnological innovations in fermentation processes in the brewing industry

13.30-13.50 **Pietro Cannazza, University of Milano**

Biocatalytic and fermentative approaches for the production of added value compounds using wild type and genetically modified acetic acid bacteria (AAB)

12.30-14.00 Poster session: Poster (pre-recorded oral presentation) & Miniposter

15:00 – 16:30

Parallel session #7: Food analysis, Virtual room 7

Chairs: Chiara Dall'Asta (University of Parma), Antonella Verzera (University of Messina)

15.00-15.20 **Annalisa Scroccarello, University of Teramo**

Development of nanomaterial-based smart-devices for food analysis: towards a new generation of analytical tools

15.20-15.40 **Matilde Tura, University of Bologna**

Harmonized analytical protocols of medical, herbal, food and industrial cannabis: development and validation of cannabinoids quality control methods and preparation of derivatives from the plant raw material

15.40-16.00 Alessio Tugnolo, University of Milano

Feasibility studies and engineering of optical simplified and stand-alone devices for agri-food applications

16.00-16.20 Annacristina D'Agostino University of Molise

Evaluation of domestic cooking on the content of bioactive compounds in green leafy vegetables

15:00 – 16:30

Parallel session #8: Food analysis, Virtual room 8

Chairs: Donatella Albanese (University of Salerno), Fabio Mencarelli (University of Pisa)

15.00-15.20 Ornella Kongi Mosibo, University of Bolzano

Study of lipid oxidation reaction by isothermal calorimetry

15.20-15.40 Giulia Spaggiari, University of Parma

In silico methods for the detection of endocrine disruptors in food (FA)

15.40-16.00 Tchouakeu Betnga Prudence Fleur, University of Bolza

Interaction studies of closure systems for winery products

16.00-16.20 Giusy Rita Caponio, University of Bari

Evaluation of chemical and nutritional quality of foods through meta-omics approaches

15:00 – 16:30

Parallel session #9: Functional foods, Virtual room 9

Chairs: Maria De Angelis (University of Bari), Angela Capece (University of Basilicata)

15.00-15.20 Vincenzo Castellone, University of Parma

Bioactive compounds from lactic acid bacteria: beneficial effects of fermented foods

15.20-15.40 Angela Bianco, University of Sassari

Study of the biotechnological potentials of brewers' spent grain: from waste product to raw material

15.40-16.00 Melania Casertano, University of Napoli

Selection of psychobiotic microorganisms and development of a dietary supplement with potential effect on mental health

16.00-16.20 Alessio Da Ros, University of Teramo

Microbiome-tailored foods and supplements based on typical Mediterranean Diet components

15.00-16.30 Poster session: Poster (pre-recorded oral presentation) & Miniposter

17:00 – 18:00 - Meeting of PhD coordinators

Wednesday, 15 September, 2021

9:00 – 10:00 - Meeting of Costal coordinators

9:00 – 10:30

Parallel session #10: Food by-product, Virtual room 10

Chairs: Marco Poiana (University of Reggio Calabria), Matteo Scampicchio (University of Bolzano)

9.00-9.20 Francesca Curci, University of Bari

Study, analysis, biological evaluation, and formulation of nutraceuticals from unconventional foods and by-products of food matrices of the Mediterranean area

9.20-9.40 Giovanni D'Auria, University of Napoli

A full proteomic profiling of *Moringa oleifera* leaves for application as a novel food (FQ)

9.40-10.00 Ana Cristina De Aguiar Saldanha Pinheiro, University of Bologna

Optimization of emerging treatments for seafood products and by-products valorization

10.00-10.20 Dario Mercatante, University of Bologna

Valorization of by-products and waste from agri-food industries, and their utilization for innovative food formulation

9:00 – 10:30

Parallel session #11: Packaging and shelf-life, Virtual room 11

Chairs: Silvana Cavella (University of Napoli), Giorgia Spigna (University of Piacenza)

9.00-9.20 Stefania Camellini, University of Bologna Mo-Re

Edible antimicrobial coating with a mixture of essential oils against *Listeria monocytogenes* on seafood products (FP)

9.20-9.40 Imeneo Valeria, University of Reggio Calabria

Valorisation of food industry by-products through their use as functional ingredients and for shelf-life extension of food products

9.40-10.00 Begum Akgum, University of Milano

Potential and pitfalls of cellulose nanocrystals in advanced packaging materials: their role in food safety

10.00-10.20 Cesare Rovera, University of Milano

Reinforced plastics and bioplastics using added value additives extracted from food agrowastes

9:00 – 10:30

Parallel session #12: Biocontrol strategies and microbial virulence, Virtual room 12

Chairs: Viviana Corich (University of Padova), Severino Zara (University of Sassari)

9.00-9.20 Simin Sabaghian, University of Bologna

Identification of a novel biocontrol agent inhibiting the grapevine fungal pathogen using proteomic approaches

9.20-9.40 Giorgia Catinella, University of Milano

Synthesis of novel multitarget antimicrobial compounds

9.40-10.00 Buzzanca Davide, University of Torino

Study of *Aliarcobacter butzleri* virulence mechanism during simulated infection of human gut models

10.00-10.20 **Angelo Caporusso, University of Basilicata**

Biotechnological transformation processes of agro-industrial by-products in high added-value bio-products

Parallel session #13: Food quality and preference, Virtual room 13

Chairs: Ella Pagliarini (University of Milano), Antonello Piga (University of Sassari)

9.00-9.20 **Ottavia Prestia, University of Messina**

Design and development of a lactose free pasta filata cheese: the PAT Provola of the Calabrian Region (FQ)

9.20-9.40 **Julia Sick, University of Firenze**

A novel tool to measure food-elicited emotions in children: the emoji-group questionnaire (EGQ)

9.40-10.00 **Elisa Mani, University of Firenze**

Factors underlying individual differences in response to oral tactile stimulation

10.00-10.20 **Valentina Di Nardo, University of Molise**

The “fate” of folates from durum wheat to whole-meal pasta (FQ)

10.20-10.40 **Herdis Agovi, University of Firenze**

Implicit and explicit methods to evaluate sensory, affective and attentive responses to plant-based products

10:30 – 11:00 - Presentation of 5th Edition of “What for?” Award - Federalimentare.

Presentation of the videos of the 6 finalists (2 minutes for each video). Announcement of the winner and awarding ceremony.

11:00 – 12:30 – Tavola rotonda sul tema: “Dottorato industriale: la ricerca per le imprese e con le imprese: esperienze aziendali e ruolo del Ministero dell'Università e della Ricerca”.

Livan Fratini (Unipa); **Francesca Galli** (MUR-Ricerca); **Mauro Fontana** (Cluster Nazionale Agri-Food) – **Emanuele Marconi** (CUN) – **Piero Fici** (Campari, Amaro Averna) – **Donato Di Donna** (Cappadonia gelati) – **Giuseppe Bursi** (Cantine Settesoli) – **Tiziano Caruso** (Unipa).

Coordina il Prof. **Carlo Amenta** (Unipa).

12:30 – 13:00 - Closing remarks