

# INTERNATIONAL CONFERENCE ON FERMENTED FOODS

NOI TECHPARK  
BOLZANO, ITALY

27-30TH  
OF OCTOBER  
2025

# PROGRAMME

## MONDAY, 27.10.2025

11:00 REGISTRATION: NOI TECHPARK, BOLZANO, ITALY

14:00-14:25 ● Philipp Achammer  
Provincial Minister for Research and Innovation  
● Vincent Mauroit  
Director of Innovation & Tech Transfer, NOI AG  
● Marco Gobetti  
Chief Scientist, NOI AG, and Chair of the Conference  
WELCOME ADDRESS AND CONFERENCE OPENING

14:25-15:00 ● Maria Marco  
University of California, USA  
OPENING LECTURE: DECONSTRUCTING THE COMPLEXITY  
OF HEALTH BENEFITS FROM FERMENTED FOODS

### SESSION 1: PLANT FERMENTED FOODS

Chairpersons ● Raffaella Di Cagno  
Free University of Bozen-Bolzano, Italy  
● Pasquale Filannino  
University of Bari Aldo Moro, Italy

15:00-15:30 ● Nam Soo Han  
Chungbuk National University, South Korea  
INVITED SPEAKER: KIMCHI AND ITS INDUSTRIAL  
PRODUCTION

15:30-15:45 ● Erica Pontonio  
University of Bari Aldo Moro, Italy  
ENHANCING TECHNO-FUNCTIONAL PROPERTIES OF PEA  
FLOUR THROUGH COMBINED ENZYMATIC AND LACTIC  
ACID FERMENTATION FOR A NOVEL VEGAN SPREAD

15:45-16:00 ● Eugenio Parente  
University of Basilicata, Italy  
EXPLORING YEAST COMMUNITIES IN ALCOHOLIC  
BEVERAGES USING THE FOODMICROBIONET DATABASE

### 16:00-16:30 COFFEE BREAK & POSTER VIEWING

16:30-16:45 ● Raffaella Di Cagno  
Free University of Bozen-Bolzano, Italy  
● Matthias Fill  
NOI AG, Italy  
FROM RESEARCH TO INNOVATION: ICOFF AND  
NOI TECHPARK

16:45-17:15 ● Jian Zhao  
University of New South Wales, Australia  
INVITED SPEAKER: FERMENTATION OF COFFEE BEANS  
AND ITS IMPACT ON THE FLAVOUR OF COFFEE

17:15-17:30 ● Nicola Pacher  
BOKU University, Austria  
BACILLACEAE IN ROPY BREAD SPOILAGE: TAXONOMIC  
DIVERSITY, VIRULENCE FACTORS AND SPOILAGE DYNAMICS

17:30-17:45 ● Ali Zein Alabiden Tlais  
Free University of Bozen-Bolzano, Italy  
BEYOND FATTY ACIDS: NEW INSIGHTS INTO BACTERIAL  
FATTY ACID DERIVATIVES USING AVOCADO FERMENTA-  
TION AS A MODEL SYSTEM

17:45-18:00 ● Benedetta Bottari  
University of Parma, Italy  
LACTIC FERMENTATION AS A BIOVALORISATION STRATE-  
GY FOR BLUE CRAB (CALLINECTES SAPIDUS): FROM  
GARUM PRODUCTION TO ANTIMICROBIAL EXTRACTS

18:00-18:15 ● Susanne Miescher Schwenninger  
Zurich University of Applied Sciences, Switzerland  
BIO-VALORISATION OF SWISS YELLOW PEAS THROUGH  
FERMENTATION WITH FUNCTIONAL MICROORGANISMS  
FOR SUSTAINABLE FOOD APPLICATIONS

### 18:15-18:40 FLASH PRESENTATIONS

18:15-18:20 ● Francesca Valerio  
National Research Council, Italy  
OKRA (ABELMOSCHUS ESCULENTUS L.) FLOUR INTE-  
GRATION IN WHEAT-BASED SOURDOUGH: EFFECT ON  
NUTRITIONAL AND TECHNOLOGICAL QUALITY OF BREAD

18:20-18:25 ● Fabienne Vertè  
Puratos NV, Belgium  
INNOVATIVE FOOD FERMENTATION: CASE STUDIES  
RELATED TO COCOA MONOCLONAL VARIETIES AND  
TROPICAL MANGO (PHILIPPINES)

18:25-18:30 ● Markus Brandt  
Ernst Böcker GmbH Co. KG, Germany  
FERMENTED LEGUME-VEGETABLES AS A SEASONING  
INGREDIENT

18:30-18:35 ● Wannes van Beeck  
University of Antwerp, Belgium  
SONMAT: A CITIZEN-SCIENCE ENABLED KIMJANG KIMCHI  
CASE STUDY ON ASSOCIATIONS BETWEEN HAND AND  
KIMCHI MICROBIOTA

18:35-18:40 ● Nicola Mangieri  
University of Milan, Italy  
TECHNOLOGICAL CHARACTERISATION AND SAFETY  
EVALUATION OF ACETIC ACID BACTERIA ISOLATED FROM  
ARTISANAL KOMBUCHA

18:45 **WELCOME APERITIF**

# TUESDAY, 28.10.2025

## SESSION 2: ANIMAL FERMENTED FOODS

- Chairpersons ● Stefan Weckx  
Vrije Universiteit Brussel, Belgium
- Yong-Su Jin  
University of Illinois, USA
- 08:30–09:00 ● Luca Simone Cocolin  
University of Torino, Italy  
INVITED SPEAKER: THE CHALLENGE OF MICROBIOME BIOBANKING AND STORAGE: THE CASE OF FERMENTED SAUSAGES
- 09:00–09:15 ● Françoise Leroi  
Ifremer, France  
THE SUCCESS OF COLD-SMOKED SALMON BIO-PRESERVATION DEPENDS ON THE PROTECTIVE CULTURE AND MICROBIOME SIGNATURE OF THE PROCESSING PLANT
- 09:15–09:30 ● Jerome Mounier  
INRAE, France  
MICROBIOTA ASSOCIATED WITH COMMERCIAL DRY-AGED BEEF IN FRANCE
- 09:30–10:00 ● Effie Tsakalidou  
Agricultural University of Athens, Greece  
INVITED SPEAKER: DAIRY FOODS: FROM OLD TRADITIONS TO NEW CHALLENGES

### 10:00–10:25 FLASH PRESENTATIONS

- 10:00–10:05 ● Véronique Zuliani  
Novonesis, France  
INNOVATIVE USE OF FOOD CULTURES FOR MEAT AND OTHER READY-TO-EAT PRODUCTS
- 10:05–10:10 ● Vincent Herve  
Université Paris-Saclay, France  
SCRATCHING ON FRENCH PDO CHEESE SURFACES SHEDS LIGHT ON UNEXPLORED MICROBIAL GENOMIC AND METABOLIC DIVERSITY
- 10:10–10:15 ● Martina Moretton  
Fondazione Edmund Mach, Italy  
MONITORING THE EFFECT OF RAW MILK REFRIGERATION ON KEFIR FERMENTATION: IMPLICATIONS FOR QUALITY AND SAFETY

- 10:15–10:20 ● Giuliana Garofalo  
University of Palermo, Italy  
VALORISING OLIVE OIL MILL WASTEWATER AS A FUNCTIONAL INGREDIENT IN TRADITIONAL ITALIAN BREAD TO MITIGATE OXIDATIVE STRESS ASSOCIATED WITH RED MEAT CONSUMPTION
- 10:20–10:25 ● Miriam Zago  
Research Council for Agriculture and Economics, Italy  
PRODUCTION AND COMPOSITION OF A CACIOTTA WITH HIGH RATIO OF CA/P FOR POSSIBLE USE IN PATIENTS WITH CHRONIC RENAL FAILURE
- 10:25–10:55 COFFEE BREAK & POSTER VIEWING**
- 10:55–11:25 ● Alan Kelly  
University College Cork, Ireland  
INVITED SPEAKER: IMPACT OF COAGULANT SELECTION ON FLAVOUR, TEXTURE AND FUNCTIONALITY OF CHEESE
- 11:25–11:40 ● Christian Coelho  
Université Clermont Auvergne, France  
RAW COW MILK FROM PASTURE IN THE PDO MASSIF CENTRAL CHEESE REGION – TO WHAT EXTENT CAN ORIGIN BE KEPT DURING FERMENTATION?
- 11:40–11:55 ● Vincent Somerville  
Université Laval, Canada  
PHAGE AND BACTERIAL HOST CO-EVOLUTION IN NATURAL WHEY STARTER CULTURE OVER AN ENTIRE CHEESEMAKING SEASON

## SESSION 3: FOOD MICROBIOMES

- Chairpersons ● Effie Tsakalidou  
Agricultural University of Athens, Greece
- Eddy J. Smid  
Wageningen University, The Netherlands
- 11:55–12:25 ● Luc de Vuyst  
Vrije Universiteit Brussel, Belgium  
INVITED SPEAKER: FERMENTED FOOD MICROBIOTA: COMPLEX INTERRELATIONSHIPS VS. OPPORTUNISTIC INVADERS
- 12:25–13:55 LUNCH & POSTER VIEWING**
- 13:55–14:25 ● Nicholas Bokulich  
ETH Zürich, Switzerland  
INVITED SPEAKER: MULTI-OMICS INTERROGATION OF FERMENTED FOOD MICROBIOMES
- 14:25–14:40 ● Olga Nikoloudaki  
Free University of Bozen-Bolzano, Italy  
ECOLOGICAL ROLE-BASED ASSEMBLY OF SYNTHETIC SOURDOUGH ECOSYSTEMS ENSURE ROBUSTNESS AND REPRODUCIBILITY IN SOURDOUGH FERMENTATION
- 14:40–14:55 ● Thomas Gettemans  
Vrije Universiteit Brussel, Belgium  
EXPLORATION OF THE MICROBIAL AND METABOLITE DIVERSITY OF HOUSEHOLD AND ARTISAN BAKERY SOURDOUGHS THROUGH A CITIZEN SCIENCE APPROACH
- 14:55–15:10 ● Lorenza Conterno  
Laimburg Research Centre, Italy  
TIME-COURSE METAGENOMICS ANALYSIS DEFINING SUSTAINABLE FOOD FLAVOURING PRODUCTION
- 15:10–15:25 ● Francesca Cristetti  
University of Turin, Italy  
VINEYARD EFFECT ON MICROBIAL COMMUNITIES AND FERMENTATION DYNAMICS OF NEBBIOLO GRAPES: A MICROBIAL PERSPECTIVE ON TERROIR
- 15:25–15:40 ● Annina Meyer  
ETH Zurich, Switzerland  
MAPPING THE BIOGEOGRAPHY OF SOURDOUGH MICROBIOMES THROUGH NEXT-GENERATION CITIZEN SCIENCE
- 15:40–15:55 ● Pier Sandro Cocconcelli  
Università Cattolica del Sacro Cuore, Italy  
THE EVOLVING SAFETY LANDSCAPE OF FOOD FERMENTING MICROORGANISMS: FROM TRADITIONAL ASSESSMENT TO GENOME EDITING
- 15:55–16:10 ● Tanja Kostic  
Austrian Institute of Technology & Microbiome Support Association, Austria  
FERMENTED FOODS AND THE FOOD SYSTEM: WHY A HOLISTIC PERSPECTIVE MATTERS
- 16:10–16:40 COFFEE BREAK & POSTER VIEWING**
- 16:40–17:10 ● Danilo Ercolini  
University of Naples Federico II, Italy  
INVITED SPEAKER: FOOD MICROBIOMES: THEIR IMPORTANCE FOR FOOD QUALITY AND THE CONNECTION TO THE GUT ECOSYSTEM
- 17:10–17:25 ● Iva Fernandes  
Universidade do Porto, Portugal  
FERMENTED FRUIT JUICES AS A SOURCE OF BIOACTIVE ORGANIC ACIDS: UNVEILING THEIR ROLE IN ADIPOGENESIS AND METABOLIC HEALTH

**17:25–17:45 FLASH PRESENTATIONS**

- 17:25–17:30 ● Ayité Adama Hondegla  
Université Paris-Saclay, France  
ASSEMBLING MICROBIAL CONSORTIA FOR LEGUME-BASED MATRIX FERMENTATION
- 17:30–17:35 ● Rachelle Alhosry  
University of Montpellier, France  
MICROBIAL SPECIES DIVERSITY IN KAAK PRODUCTION: INSIGHTS INTO THE ROLE OF CHICKPEA-SOAKED WATER
- 17:35–17:40 ● Alessia Levante  
University of Parma, Italy  
HAS LACTOBACILLUS HELVETICUS CHANGED OVER 50 YEARS? A GENOMIC AND TECHNOLOGICAL CHARACTERISATION OF RECENT AND OLD STRAINS
- 17:40–17:45 ● Neža Čadež  
Univerza v Ljubljani, Slovenia  
INSIGHTS INTO THE DEVELOPMENT OF NOVEL BREWING YEAST STRAINS THROUGH ADAPTIVE LABORATORY EVOLUTION

**19:30 LIGHT DINNER**

## WEDNESDAY, 29.10.2025

### SESSION 4: FERMENTED FOODS AND HEALTH

Chairpersons ● Maria Marco  
University of California, USA  
● Nam Soo Han  
Chungbuk National University, South Korea

- 09:00–09:30 ● Douwe van Sinderen  
University College Cork, Ireland  
INVITED SPEAKER: BIFIDOBACTERIA AS BENEFICIAL MICROBES DURING EARLY LIFE: WHERE, WHAT AND HOW?
- 09:30–09:45 ● Vimac Nolla Ardevol  
Puratos, Belgium  
ADVANCING GUT HEALTH IN BAKERY WITH POSTBIOTIC-ENRICHED SOURDOUGHS
- 09:45–10:00 ● David Rodriguez-Lazaro  
University of Burgos, Spain  
INVITED SPEAKER: THE GOOD, THE BAD AND THE UGLY: STORY OF FERMENTED FOODS AND (GLOBAL) HEALTH
- 10:00–10:15 ● Elisa Salvetti  
University of Verona, Italy  
REDUCED BIOCIDESUSCEPTIBILITY IN COMPANILACTOBACILLUS: A GENOME-TO-PHENOTYPE STUDY WITH IMPLICATIONS FOR THE INTEGRATED SAFETY ASSESSMENT OF LACTIC ACID BACTERIA
- 10:15–10:30 ● Paola Roncaglia  
SciBite, BioData Innovation Centre, United Kingdom  
A FUNCTIONAL FOODS ONTOLOGY: SYSTEMATISING BIOACTIVE INGREDIENTS OF FOODS FOR SPECIFIED HEALTH USES (FOSHU) IN JAPAN
- 10:30–10:45 ● Davide Gottardi  
University of Bologna, Italy  
TARGETED FERMENTATION OF CHICKPEA FLOUR ENHANCES NUTRITIONAL VALUE AND GUT HEALTH-PROMOTING PROPERTIES
- 10:45–11:00 ● Yong-Su Jin  
University of Illinois, USA  
GENOME EDITING OF YEAST AND LACTIC ACID BACTERIA FOR SAFER, TASTIER AND HEALTHIER FERMENTED FOODS

**11:00–11:30 COFFEE BREAK & POSTER VIEWING**

- 11:30–12:00 ● Christophe Courtin  
KU Leuven, Belgium  
INVITED SPEAKER: GRAIN-BASED FOOD FERMENTATIONS AS A TOOL TO PRODUCE HEALTH-PROMOTING FOODS

**12:00–12:20 FLASH PRESENTATIONS**

- 12:00–12:05 ● Rosangela Limongelli  
University of Bari Aldo Moro, Italy  
PROBIOTICS COMBINED WITH PRICKLY PEAR SEED FLOUR AS A MEANS TO FORTIFY FERMENTED MILK-BASED BEVERAGES
- 12:05–12:10 ● Merve Sena Topkaya  
University of Health Sciences, Türkiye  
DOES MATERNAL CONSUMPTION OF FERMENTED FOODS AFFECT NEONATAL HEALTH?
- 12:10–12:15 ● Celine Verdonck  
KU Leuven, Belgium  
SOURDOUGH STARTER CULTURE AND BREADMAKING PROCESS IMPACT WHOLEMEAL BREAD CHARACTERISTICS ASSOCIATED WITH STARCH DIGESTIBILITY
- 12:15–12:20 ● Roberta Prete  
University of Teramo, Italy  
ENRICHMENT OF FERMENTED OLIVE PATÈ WITH LACTIPLANTIBACILLUS PLANTARUM AS A BIOLOGICAL STRATEGY TO ENHANCE ANTI-INFLAMMATORY ACTIVITY AND GUT MODULATION

**12:20–13:50 LUNCH & POSTER VIEWING**

**SOCIAL PROGRAMME**

**19:30 CONFERENCE DINNER**



THURSDAY, 30.10.2025

## SESSION 5: ALTERNATIVE FERMENTED FOODS

Chairpersons ● Rosalba Lanciotti  
University of Bologna, Italy  
● David Rodriguez-Lazaro  
University of Burgos, Spain

09:00–09:30 ● Eddy J. Smid  
Wageningen University, The Netherlands  
INVITED SPEAKER: SOLID-STATE FUNGAL FERMENTATION  
OF PLANT-BASED SUBSTRATES IMPROVES THE OVERALL  
PROTEIN QUALITY

09:30–09:45 ● Joshman Villa Macas  
Wageningen University, The Netherlands  
BIOPURIFICATION OF PULSE PROTEIN CONCENTRATES  
BY LACTIC ACID BACTERIA

09:45–10:00 ● Laura Nyhan  
University College Cork, Ireland  
LACTIC ACID BACTERIA FERMENTATION FOR THE VALORI-  
SATION OF BREWER'S SPENT YEAST: ENHANCING NUTRI-  
TIONAL, FUNCTIONAL AND SENSORY CHARACTERISTICS

10:00–10:15 ● Melania Casertano  
Wageningen University, The Netherlands  
BIOPROCESSING FOOD SIDE STREAMS: FERMENTATION  
AS A SUSTAINABLE TOOL FOR FUNCTIONAL INGREDIENT  
DEVELOPMENT

10:15–10:45 ● Carlo G. Rizzello  
Sapienza University of Rome, Italy  
INVITED SPEAKER: UPCYCLING OF AGRI-FOOD SIDE  
STREAMS VIA FERMENTATION: ADVANCING TOWARDS  
“ZERO-WASTE” SUPPLY CHAINS IN PLANT FERMENTED  
FOODS

### 10:45–11:15 COFFEE BREAK & POSTER VIEWING

11:15–11:45 ● Emanuele Zannini  
Sapienza University of Rome, Italy  
INVITED SPEAKER: CRAFTING FUTURE FOODS:  
THE TRANSFORMATIVE ROLE OF FOOD FERMENTATION

11:45–12:00 ● Òscar Boronat Nielsen  
CETT Barcelona School of Tourism, Hospitality  
and Gastronomy  
FLAVOUR-DRIVEN FERMENTATION: UNLOCKING OKARA'S  
POTENTIAL

12:00–12:15 ● Adelfo Escalante  
Universidad Nacional Autónoma de México, México  
UNCOVERING THE STABLE MICROBIAL CORE OF PULQUE:  
INSIGHTS FROM A TRADITIONAL MEXICAN FERMENTATION

12:15–12:45 ● Shao Quan Liu  
National University of Singapore, Singapore  
INVITED SPEAKER: MICROALGAE AS ALTERNATIVE  
PROTEIN-RICH MICROBIAL BIOMASS

### 12:45–13:10 FLASH PRESENTATIONS

12:45–12:50 ● Oscar van Mastrigt  
Wageningen University, The Netherlands  
FERMENTED HYBRID CHEESE: SUSTAINABLE, TASTY AND  
NUTRITIOUS

12:50–12:55 ● Herwig Bachmann  
NIZO Food Research, The Netherlands  
SENSORY QUALITY AND SAFETY OF PLANT-BASED AND  
HYBRID FOODS: THE ROLE OF FERMENTATION,  
MICROBIAL GROWTH AND SUBSTRATE AVAILABILITY

12:55–13:00 ● Antonio Del Casale  
Microbion, Verona, Italy  
BOOSTERS AND HURDLES TOWARD INNOVATION IN  
FERMENTED FOODS

13:00–13:05 ● Cornelia Bär  
Agroscope, Bern, Switzerland  
DEVELOPMENT OF FUNCTIONAL FERMENTED FOODS TO  
UPPORT HUMAN HEALTH

13:05–13:10 ● Chin Xin Hui  
National University of Singapore, Singapore  
MODULATING THE AROMA AND TASTE PROFILE OF  
SOYBEAN USING NOVEL STRAINS FOR FERMENTATION

### 13:10–13:30 BEST ORAL PRESENTATION AND BEST POSTER AWARDS

### 13:30–13:40 CLOSING REMARKS, ACKNOWLEDGEMENTS AND ANNOUNCEMENT OF THE 2ND INTERNATIONAL CONFERENCE ON FERMENTED FOODS

### 13:40 LIGHT LUNCH