

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

16:30–17:00 ● Jian Zhao
University of New South Wales, Australia
INVITED SPEAKER: FERMENTATION OF COFFEE BEANS
AND ITS IMPACT ON THE FLAVOUR OF COFFEE

17:00–17:15 ● Nicola Pacher
BOKU University, Austria
BACILLACEAE IN ROPY BREAD SPOILAGE: TAXONOMIC
DIVERSITY, VIRULENCE FACTORS AND SPOILAGE DYNAMICS

17:15–17:30 ● 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

17:30–17:45 ● Benedetta Bottari
University of Parma, Italy
LACTIC FERMENTATION AS A BIOVALORISATION STRATE-
GY FOR BLUE CRAB (CALLINECTES SAPIDUS): FROM
GARUM PRODUCTION TO ANTIMICROBIAL EXTRACTS

17:45–18:00 ● Susanne Miescher Schwenninger
Zurich University of Applied Sciences, Switzerland
BIO-VALORISATION OF SWISS YELLOW PEAS THROUGH
FERMENTATION WITH FUNCTIONAL MICROORGANISMS
FOR SUSTAINABLE FOOD APPLICATIONS

18:00–18:25 FLASH PRESENTATIONS

18:00–18:05 ● 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

18:05–18:10 ● Fabienne Vertè
Puratos NV, Belgium
INNOVATIVE FOOD FERMENTATION: CASE STUDIES
RELATED TO COCOA MONOCLONAL VARIETIES AND
TROPICAL MANGO (PHILIPPINES)

18:10–18:15 ● Markus Brandt
Ernst Böcker GmbH Co. KG, Germany
FERMENTED LEGUME-VEGETABLES AS A SEASONING
INGREDIENT

18:15–18:20 ● Wannes van Beeck
University of Antwerp, Belgium
SONMAT: A CITIZEN-SCIENCE ENABLED KIMJANG KIMCHI
CASE STUDY ON ASSOCIATIONS BETWEEN HAND AND
KIMCHI MICROBIOTA

18:20–18:25 ● Nicola Mangieri
University of Milan, Italy
TECHNOLOGICAL CHARACTERISATION AND SAFETY
EVALUATION OF ACETIC ACID BACTERIA ISOLATED FROM
ARTISANAL KOMBUCHA

18:30 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

10:15–10:30 ● Yuyun Lu
National University of Singapore, Singapore
TROPICAL FRUIT WINES AND BEVERAGES FERMENTED
WITH YEASTS AND LACTIC ACID BACTERIA

10:30–11:00 ● 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

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

11:30–12:00 ● Emanuele Zannini
Sapienza University of Rome, Italy
INVITED SPEAKER: CRAFTING FUTURE FOODS:
THE TRANSFORMATIVE ROLE OF FOOD FERMENTATION

12:00–12:15 ● Òscar Boronat Nielsen
CETT Barcelona School of Tourism, Hospitality and
Gastronomy, Spain
FLAVOUR-DRIVEN FERMENTATION: UNLOCKING OKARA'S
POTENTIAL

12:15–12:30 ● Adelfo Escalante
Universidad Nacional Autónoma de México, México
UNCOVERING THE STABLE MICROBIAL CORE OF PULQUE:
INSIGHTS FROM A TRADITIONAL MEXICAN FERMENTATION

12:30–13:00 ● Shao Quan Liu
National University of Singapore, Singapore
INVITED SPEAKER: MICROALGAE AS ALTERNATIVE
PROTEIN-RICH MICROBIAL BIOMASS

13:00–13:25 FLASH PRESENTATIONS

13:00–13:05 ● Oscar van Mastrigt
Wageningen University, The Netherlands
FERMENTED HYBRID CHEESE: SUSTAINABLE, TASTY AND
NUTRITIOUS

13:05–13:10 ● 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

13:10–13:15 ● Antonio Del Casale
Microbion, Verona, Italy
BOOSTERS AND HURDLES TOWARD INNOVATION IN
FERMENTED FOODS

13:15–13:20 ● Cornelia Bär
Agroscope, Bern, Switzerland
DEVELOPMENT OF FUNCTIONAL FERMENTED FOODS TO
UPPORT HUMAN HEALTH

13:20–13:25 ● Chin Xin Hui
National University of Singapore, Singapore
MODULATING THE AROMA AND TASTE PROFILE OF
SOYBEAN USING NOVEL STRAINS FOR FERMENTATION

13:25–13:45 BEST ORAL PRESENTATION AND BEST POSTER AWARDS

13:45–13:55 CLOSING REMARKS, ACKNOWLEDGEMENTS AND ANNOUNCEMENT OF THE 2ND INTERNATIONAL CONFERENCE ON FERMENTED FOODS

13:55 LIGHT LUNCH