VII INTERNATIONAL SYMPOSIUM ON SOURDOUGH

“SOURDOUGH FOR HEALTH” 6 - 8 June 2018, Cork Ireland

6th June 2018

8:00 to 9:00  Early Registration - Kingsley Hotel, Cork, Ireland
9:00 to 9:15  Welcome and Opening of Symposium
          Dr. Paul Ross - Head of College, University College Cork, Western Road, Cork, Ireland
9:15 to 12:00  Session no. 1: Nutritional properties of sourdough bakery products
      Chairperson: Emanuele Zannini School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland - Marco Gobbetti, Faculty of Sciences and Technology, Libera Università di Bolzano, 39100 Bolzano, Italy
          9:15 to 9:45  Dr Gerard Clarke - Department of Psychiatry, University College Cork, Western Road, Cork, Ireland
                      The Gut Microbiome, Brain Function and Behaviour: Towards a Psychobiotic Revolution? - Keynote lecture
          9:45 to 10:15  Prof. Elke Arendt - School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland
                      Sourdough improving the nutritional properties of cereal products - Keynote lecture
          10:15 to 10:30  Coffee break & poster viewing
          11:00 - 11:15  Qing Li - University of Alberta, Dept. of Agricultural, Food and Nutritional Science, Edmonton, Canada
                      The effects of glutaminase on acid resistance in host-adapted lactobacilli
          11:15 - 11:30  Annabelle Vera - Philibert Savours, Institut R&D, Lyon, France
Use of wheat germ sourdough to improve nutritional value of bread and reduce salt intake

11:30 - 11:45
Aylin W. Sahin - School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland

Leuconostoc citreum TR116: In-situ production of mannitol in sourdough and its application to reduce sugar in burger buns

11:45 - 12:00
Dr. Jorge Gil-Martinez - Anheuser-Busch InBev nv/sa, Global Innovation & Technical Development, Gitec, Brouwerijplein 2, B-3000 Leuven, Belgium

Fermented brewer’s spent grains with sourdough and nutritional perspectives

12:00 - 14:30
Section no.2 - Gluten-free and FODMAP-free sourdough for celiac and IBS patients

Chairperson: Luc De Vuyst - Research Group of Industrial Microbiology and Food Biotechnology, Department of Bioengineering Sciences, Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel, Belgium - Kati Katina, Department of Food and Nutrition, University of Helsinki, Helsinki, Finland

12:00 - 12:30
Dr Muir JG - Department of Gastroenterology, Central Clinical School, The Alfred Centre, Monash University, Melbourne, Australia

Gluten free and low FODMAP sourdoughs for celiac and IBS patients: a biomedical prospective - Keynote lecture

12:30 - 12:45
Jussi Loponen, Head of Research, Fazer Group, POB 4, FI-00941 Helsinki

Zero-FODMAP sourdough technology

12:45 - 13:00
Lilit Ispiryan - School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland

Impact of sourdough and yeast-fermentation on the FODMAP profile of whole-wheat bread

13:00 - 14:15
Lunch & poster viewing

14:15 - 14:30
Stefan Horstmann - School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland

Impact of different S. cerevisiae yeast strains on gluten-free dough and bread quality parameters

14:30 - 15:00
Section no. 3 - Sourdough and consumer perception

Chairperson: Raffaella Di Cagno Faculty of Sciences and Technology, Libera Università di Bolzano, 39100 Bolzano, Italy - Hassina Ait-Abderrahim, Lesaffre International, Marcq-en-Baroeul France

14:30 - 15:00
Speaker to be confirmed

Developments in the sourdough marketplace - a consumer perception Title to be confirmed - invited speaker
15:00 - 15:15  Héliciane Clément - Biofournil, Le Puiset Doré, Montrevault-sur-Evre, France - Flavor team, Matrix and Food, Process/properties - Oniris, LUNAM University, Nantes, France, INRA, Biopolymères, Interactions & Assemblages (BIA), Nantes, France, Food and Industrial Microbiology Laboratory, Oniris, LUNAM University, Nantes, France

Can instrumental characterization help predicting sour taste perception in sourdough bread?

15:15 - 17:00  Section no. 4 - Sourdough ecology and sourd-omic

Chairperson: Rudi Vogel - Lehrstuhl für Technische Mikrobiologie, Technische Universität München Freising - Carlo Rizzello - Department of Soil, Plant and Food Science, University of Bari Aldo Moro, Bari, Italy

15:15 - 15:45  Prof Luc De Vuyst - Research Group of Industrial Microbiology and Food Biotechnology, Department of Bioengineering Sciences, Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel, Belgium

Omics approaches to understand sourdough fermentation processes - Keynote lecture

15:45 - 16:15  Coffee break & poster viewing

16:15 - 16:30  Simon Van Kerrebroeck - Research Group of Industrial Microbiology and Food Biotechnology, Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel Brussels, Belgium

A meta-analysis of the sourdough species diversity as a function of the process conditions

16:30 - 17:15  Sourdough bread sensory section

19:00  Evening Event (included in registration fee)

“Traditional Irish Evening” at the Aula Maxima in UCC

7th June 2018

8:30 - 9:45  Section no. 4 - Sourdough ecology and sourd-omic

Chairperson: Luc De Vuyst - Research Group of Industrial Microbiology and Food Biotechnology, Department of Bioengineering Sciences, Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel, Belgium - Bernard Onno, Food and Industrial Microbiology Laboratory, Oniris, LUNAM University, Nantes, France

8:30 - 9:00  Prof F. Rudi Vogel - Lehrstuhl für Technische Mikrobiologie, Technische Universität München Freising

Stories from comparative genomics of Lactobacillus sanfranciscensis and Lactobacillus lindneri - Keynote lecture

9:00 - 9:15  Elisa Michel - Oniris, Laboratoire de Microbiologie Alimentaire et Industrielle, Nantes, France - INRA, SupAgro, Université de Montpellier, France Montpellier
Role of agronomic and bread-making practices in sourdough microbial diversity and bread nutritional and organoleptic properties

9:15 - 9:30

Maria De Angelis - Department of Soil, Plant and Food Science, Via G. Amendola 165/a, 70126 Bari, University of Bari Aldo Moro

Bran and particle size of wheat flour drive the microbiome and functional features of wheat sourdoughs

9:30 - 9:45

Dr Erica Pontonio - Department of Soil, Plant and Food Sciences, University of Bari A. Moro, Bari, Italy

Quantitative Real Time PCR (qPCR) method to authenticate traditional/typical breads

9:45 -11:30

Section no. 5 - Industrial production of sourdough - competitiveness and functionality

Chairperson: Dr. Jorge Gil-Martinez - Anheuser-Busch InBev nv/sa, Global Innovation & Technical Development, Leuven, Belgium - Bernard Genot, Puratos, Groot-Bijgaarden, Belgium

9:45 -10:00

Markus Brandt - Ernst Böcker GmbH & Co. KG, Minden, Germany

Specialty sourdoughs for specialty baked goods - Invited speaker

10:00 - 10:30

Prof. Michael G. Gänzle - University of Alberta, Dept. of Agricultural, Food and Nutritional Science, Edmonton, Canada

Lifestyles of sourdough lactobacilli - implications for competitiveness and functionality of sourdough microbiota - Keynote lecture

10:30 - 11:00

Coffee break & poster viewing

11:00- 11:15

Gulten Yagmur - Lesaffre International, France

Synergy between selected yeast and bacteria couples in stiff sourdough

11:15 - 11:30

Dr. Christian Faber - Zeppelin Systems GmbH, Rödermark, Deutschland

Further development of a moistening principle as pre-mixer for batch-wise or continuously produced sourdoughs

11:30 - 12:15

Section no. 6 Improvement of cereal quality through sourdough LAB/yeast fermentation properties

Chairperson: Muir JG - Department of Gastroenterology, Central Clinical School, The Alfred Centre, Monash University, Melbourne, Australia - Markus Brandt - Ernst Böcker GmbH & Co. KG, Minden, Germany

11:30 - 12:00

Prof Marco Gobbetti - Faculty of Sciences and Technology, Libera Università di Bolzano, 39100 Bolzano, Italy
Novel insights on the functional/nutritional features of the sourdough fermentation - Keynote lecture

12:00 - 12:15  
**Karoline Schreiber** - *Ernst Böcker GmbH & Co. KG, Minden, Germany*  
Sourdough as an optimization tool in baking processes influenced by different flour qualities

12:15 - 13:00  
**Sourdough bread sensory section**

13:00 - 14:00  
**Lunch & poster viewing**

14:00  
**Departure for Inchydoney Island Lodge & Spa (not included in registration fee)**

19:00  
**Gala dinner (not included in registration fee)**

8th June 2018

9:00 - 13:00  
**Section no. 6 Improvement of cereal quality through sourdough LAB/yeast fermentation properties**

*Chairperson: Michael G. Gänzle, University of Alberta, Dept. of Agricultural, Food and Nutritional Science, Edmonton, Canada*  
*Maria De Angelis - Department of Soil, Plant and Food Science, University of Bari Aldo Moro, Bari*

9:15 - 9:45  
**Dr. Emanuele Zannini** - *School of Food and Nutritional Sciences, University College Cork, Cork, Ireland*  
Sourdough LAB as “farm to fork” bio protection system - Keynote lecture

9:45 - 10:00  
**Bowen Yan** - *University of Alberta, Department of Agricultural, Food and Nutritional Science, Edmonton, AB, Canada*  
*School of Food Science and Technology, Jiangnan University, Wuxi, China*  
Contribution of γ-Glutamyl Cysteine Ligase in *Lactobacillus reuteri* to γ-Glutamyl Dipeptides Biosynthesis in Sourdough Fermentation

10:00 - 10:15  
**Stephanie Jeske** - *School of Food and Nutritional Sciences, University College Cork, Cork, Ireland*  
Polyol producing lactic acid bacteria isolated from sourdough and their application to reduce sugar in quinoa-based milk substitutes

10:15 - 10:30  
**Yan Xu** - *Department of Food and Nutrition, University of Helsinki, Helsinki, Finland*  
Impact of in situ produced exopolysaccharides on rheology and texture of fava bean protein concentrate
10:30 - 11:00  Coffee break & poster viewing

11:00 - 13:00  **Section no. 6 Improvement of cereal quality through sourdough LAB/yeast fermentation properties**

*Chairperson: Elke Arendt School of Food and Nutritional Sciences, University College Cork, Western Road, Cork, Ireland - Marco Gobbetti, Faculty of Sciences and Technology, Libera Università di Bolzano, 39100 Bolzano, Italy*

11:00 - 11:15  **Prof. Kati Katina** - Department of Food and Nutrition, University of Helsinki, Helsinki, Finland

Influence of in situ produced dextran on sensory profile of and texture wheat bread enriched with *faba* bean flour - Invited speaker

11:15 - 11:30  **Hümeyra İspirli** - Yıldız Technical University, Chemistry-Metallurgical Faculty, Department of Food Engineering, Turkey

Effects of glucan type exopolysaccharides (EPS) production on physicochemical properties of sourdough and textural characteristics of sourdough bread

11:30 - 11:45  **Thibaut Thery** - School of Food and Nutritional Sciences, University College Cork, Cork, Ireland

Design of antimicrobial peptides in a clean label approach to extend the shelf-life of sourdough bread

11:45 - 12:00  **Andrea Comasio** - Research Group of Industrial Microbiology and Food Biotechnology, Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel, Belgium

Fermentation strategies with lemon and apple juices to produce innovative sourdoughs

12:00 - 12:15  **Fabio Minervini** - Department of Soil, Plant and Food Science, University of Bari Aldo Moro, Bari

Does tap water affect microbiota of de novo sourdough and/or bread quality?

12:15 - 12:30  **Michela Palla** - Department of Agriculture, Food and Environment, University of Pisa, Italy

Molecular, pro-technological and functional characterization of yeasts isolated from Tuscan sourdoughs to be used as potential starters

12:30 - 12:45  **Denise Müller** - Zurich University of Applied Sciences, Institute for Food and Beverage Innovation
Breakfast cereals from milling by-products: Lactic acid bacteria fermentation of barley white bran and low-grade wheat flour

12:45 - 13:00  VII Sourdough Symposium conclusion

13:00  Light lunch

14:00 - 17:00  Optional tour at UCC Bakery facilities