



FOOD MICRO 2010 - Copenhagen 30 August - 3 September

## Preliminary Programme

# The 22nd International ICFMH Symposium - FOOD MICRO 2010 Microbial Behaviour in the Food Chain

### Monday, 30<sup>th</sup> August 2010

- 14:00 – 17:00 Registration  
Venue: Bella Center
- 19:00 – 21:00 Welcome reception  
Venue: Town Hall of Copenhagen

### Tuesday, 31<sup>st</sup> August 2010

**08:00** Registration open  
Venue: Bella Centre

**09:00 – 10:00** Opening session  
**(Aud. 11 and 12) - Chair:** Svend Erik Sørensen, Chairman for the LMC Executive Board, DK

09:00 – 09:10 Official opening by Denmark's Minister for Science, Technology and Innovation, Charlotte Sahl-Madsen

09:10 – 09:20 Centre for Advanced Food Studies (LMC)  
Jacob Holm Nielsen, LMC, Denmark

09:20 – 09:55 Food safety: harvesting experience to improve health  
Jorgen Schlundt, Deputy Director, Technical University of Denmark, Denmark

09:55 – 10:00 Welcome  
Wilhelm Holzapfel, President of ICFMH

10:00 – 10:30 Coffee/tea

**10:30 – 11:50** Plenary session A: Microbial behaviour in food fermentation and spoilage  
**(Aud. 11 and 12) - Chair:** Eric Johansen, DK / Peter Rådström, SE

10:30 – 11:10 Tips on preparing food starter bacteria that live healthier and last longer  
Alexandra Gruss, INRA, France

11:10 – 11:50 Production of bioactives by intestinal bacteria as a basis for explaining probiotic mechanisms  
Paul Ross, Moorepark Food Research Centre, Ireland

11:50 – 12:50 Lunch

**12:50 – 14:30** Parallel sessions A1 and A2

<b>12:50 – 14:30</b>	<p><b>Parallel session A1: Functional starter cultures</b>  <b>(Aud. 11) - Chair:</b> Wilhelm Holzapfel, DE/ Dieter Elsser-Gravesen, DK</p> <p><b>Topics:</b>  A1.1. Starter cultures, fermented foods and functional characteristics  A1.2. Metabolism and regulatory networks  A1.3. Genomics and mobile elements (bacteriophages, plasmids, transposons etc.)</p>
12:50 – 13:05	Food safety of traditional African alkaline fermented products Labia II Ouoba, London Metropolitan University, United Kingdom
13:05 – 13:20	<i>Pediococcus</i> and <i>Lactobacillus</i> starter cultures for Digitaria sourdoughs Mojisola Edema, University of Agriculture, Nigeria
13:20 – 13:35	Cloning and characterization of genes involved in sulfur amino acid metabolism in <i>Lactobacillus casei</i> Biljana Bogicevic, Agroscope Liebefeld Posieux, Switzerland
13:35 – 13:45	Break
13:45 – 14:00	Evaluation of the interaction <i>Saccharomyces cerevisiae</i> and <i>Lactobacillus fermentum</i> in the production of artisanal cachaça Whasley F. Duarte, Federal University of Lavras, Brazil
14:00 – 14:15	Intraspecific genetic diversity of <i>Oenococcus oeni</i> Emmanuel Coton, ADRIA Normandie, France
14:15 – 14:30	Specific metabolic activity of ripening bacteria quantified by quantitative reverse transcription throughout Emmental cheese manufacture Florence Postollec, ADRIA Développement-UMT08, France
<b>12:50 – 14:30</b>	<p><b>Parallel session A2: Microbial metabolites</b>  <b>(Aud. 12) - Chair:</b> Peter Raspor, SI/ Sara Bover-Cid, ES</p> <p><b>Topics:</b>  A2.1. Biopreservation  A2.2. Microbial metabolites and exopolysaccharides  A2.3. Spoilage organisms</p>
12:50 – 13:05	Stress genes expression in <i>Brettanomyces bruxellensis</i> during winemaking with sulphite Tiziana Nardi, Université de Bourgogne, France
13:05 – 13:20	Biological activity and chemical composition of lemon grass and cajuput oil Rajesh Kumar, Banaras Hindu University, India
13:20 – 13:35	Inhibition of <i>Brochothrix thermosphacta</i> and spoilage prevention of cooked peeled shrimp by <i>Lactococcus piscium</i> CNCM I-4031 Papa A. Fall, ONIRIS, France
13:35 – 13:45	Break
13:45 – 14:00	Microbial metabolites and species diversity in beef stored in different packaging conditions Danilo Ercolini, University of Naples Federico II, Italy
14:00 – 14:15	A study on germination time and mycelium growth of <i>Penicillium expansum</i> and <i>Aspergillus niger</i> single spores Kostas Koutsoumanis, Aristotle University of Thessaloniki, Greece

14:15 – 14:30 Anti-listerial activity of subtilisin alone and combined with curcumin, polylysin and zinc lactate  
Tahar Amrouche, M. Mammeri University, Algeria

14:30 – 17:00 Coffee/tea and **Poster session**

**17:00 – 18:00 Seminar: Food Microbiology in food safety**  
**(Aud. 11 and 12) - Chair:** Peter Raspor, SI/ Susanne Knøchel, DK

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17:00 – 17:25 Inter-connections and dis-connections between food microbiology and food safety education  
Peter Raspor, SI

17:20 – 17:35 Are international courses needed?  
Susanne Knøchel, DK

17:35 – 18:00 Discussion round

### Wednesday, 1<sup>st</sup> September 2010

**09:00 – 10:20 Plenary session B: Microbial behaviour in adverse environments**  
**(Aud. 11 and 12) - Chair:** Hanne Ingmer, DK/ Claes v Wachenfeldt, SE

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09:00 – 09:40 An unexpected post-genomic bonus: new insights into the physiology of bacterial lag phase  
Jay Hinton, Norwich Research Park, United Kingdom

09:40 – 10:20 Integrated stress responses in *Salmonella*  
Ferric Fang, University of Washington School of Medicine, USA

10:20 – 10:50 Coffee/tea and **Poster session**

**10:50 – 12:10 Plenary session C: Microbial behaviour in risk assessment**  
**(Aud. 11 and 12) - Chair:** Paw Dalgaard, DK/ Henrik Wegener, DK

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10:50 – 11:30 Modelling microbial ecology in food safety risk assessment: How much detail is needed?  
Tom Ross, University of Tasmania, Australien

11:30 – 12:10 Risk assessment of food borne pathogens at the EU level  
Arie Havelaar, RIVM, Netherland

12:10 – 13:05 Lunch

**13:05 – 14:45 Parallel sessions B1 and C1**

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**13:05 – 14:45 Parallel session B1: Microbial pathogenesis**  
**(Aud. 11) - Chair:** Larry Beuchat, USA/ Tibor Deak, HU

**Topics:**

- B1.1. Pathogenesis and virulence
- B1.2. Microbial toxins

13:05 – 13:20	Expression of virulence genes of <i>Listeria monocytogenes</i> after growth on vacuum-packed cold-smoked salmon, stored at 7°C Els Van Coillie, Institute for Agricultural and Fisheries Research (ILVO)
13:20 – 13:35	Reduced host cell invasiveness and oxidative stress tolerance in double and triple csp gene family deletion mutants of <i>Listeria monocytogenes</i> Taurai Tasara, University of Zurich, Switzerland
13:35 – 13:50	Extended expression of <i>Staphylococcal enterotoxins A and D</i> in pork meat products Nina W. Carlquist, Lund University, Sweden
13:50 – 14:00	Break
14:00 – 14:15	The LC-MS <sup>2</sup> as a quantitative tool to investigate the influence of growth parameters on Cereulide production by <i>Bacillus cereus</i> in food Laurence Delbrassinne, Institute of Public Health, Belgium
14:15 – 14:30	In situ virulence gene expression of <i>Listeria monocytogenes</i> in food Luca Cocolin, University of Turin, Italy
14:30 – 14:45	In vitro and in situ detoxification of Ochratoxin A by yeasts and bacteria of technological importance Panagiotis Skandamis, Agricultural University of Athens, Greece
<b>13:05 – 14:45</b>	<b>Parallel session C1: Predictive microbiology</b> <b>(Aud. 12) - Chair:</b> Kostas Koutsoumanis, GR / Marcel Zwietering, NL  <b>Topics:</b> C1.1. Predictive microbiology C1.2. Methods for monitoring microbial activities C1.3. Typing and detection methods
13:05 – 13:20	Modelling of growth, growth/no-growth interface and inactivation areas of <i>Listeria</i> in foods Louis Coroller, Université Européenne de Bretagne, France
13:20 – 13:35	Modelling osmotic stress by flux balance analysis at the genomic scale Aline Metris, Institute of Food Research, United Kingdom
13:35 – 13:50	Monitoring beef spoilage using multispectral image analysis Bjørn Dissing, Technical University of Denmark, Denmark
13:50 – 14:00	Break
14:00 – 14:15	Modelling gene expression in salmonella using microarray hybridizations under conditions relevant to the pork chain Carman Pin, Institute of Food Research, United Kingdom
14:15 – 14:30	Lipooligosaccharide gene locus classes of <i>Campylobacter jejuni</i> : A predictor for genotype and virulence potential? Ihab Habib, Ghent University, Belgium
14:30 – 14:45	Rapid quantification of viable <i>Campylobacter</i> on chicken carcasses by real-time PCR and propidium monoazide as a tool for quantitative risk assessment Matilde Josefsen, Technical University of Denmark, Denmark
14:45 – 15:50	Coffee/tea and <b>Poster session</b>
<b>15:50 – 17:30</b>	<b>Parallel sessions B2 and C2</b>

15:50 – 17:30

**Parallel session B2: Microbial resistance**

**(Aud. 11) - Chair:** Nils Arneborg, DK / Luca Cocolin, IT

**Topics:**

- B2.1. Stress response
- B2.2. Resistance and spores
- B2.3. Persistence and biofilm

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15:50 – 16:05	Cold tolerance of group I <i>Clostridium botulinum</i> Miia Lindström, University of Helsinki, Finland
16:05 – 16:20	Extreme heat resistance in <i>Salmonella</i> Rob de Jonge, National Institute for Public Health and the Environment, The Netherlands
16:20 – 16:35	Inactivation-Associated formation of reactive oxygen species in heat- and acid-stressed bacteria Alicia Subires, Wageningen University, The Netherlands
16:35 – 16:45	Break
16:45 – 17:00	Contribution of motility and flagella in surface colonization by <i>Listeria monocytogenes</i> Mickaël Desvaux, INRA Clermont-Ferrand, France
17:00 – 17:15	Development of VTEC resistance to commercial biocides and biocidal components Kaye Burgess, Teagasc Ashtown Food Research Centre, Ireland
17:15 – 17:30	Butanediol fermentation supports growth of Enterobacteriaceae at low pH Chris Michiels, K.U.Leuven, Belgium

15:50 – 17:30

**Parallel session C2: Risk assessment**

**(Aud. 12) - Chair:** Tom McMeekin, AU/ Norval Strachan, UK

**Topics:**

- C2.1. Hazard analysis and risk assessment
- C2.2. Emerging viruses and other hazards
- C2.3. Epidemics, consumer protection and climate aspects

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15:50 – 16:05	Risk-based approach applied to commercial sterility of products Jeanne-Marie Membré, UMR-INRA 1014, France
16:05 – 16:20	Logistic simulation-based quantitative microbial risk assessment for <i>E. Coli O157:H7</i> , <i>S. enterica</i> and <i>L. monocytogenes</i> in leafy green vegetables consumed at salad bars Eelco Franz, National Institute for Public Health and the Environment, The Netherlands
16:20 – 16:35	Challenges for the prevention of norovirus and hepatitis A virus in food samples Fabienne Loisy-Hamon, CEERAM, France
16:35 – 16:45	Break
16:45 – 17:00	Inactivation of murine norovirus-1, coliphage øX174 and <i>B. fragilis</i> phage B40-8 on surfaces and shredded Iceberg lettuce by hydrogen peroxide and UV light Lee Baert, Ghent University, Belgium
17:00 – 17:15	Source attribution of human food-borne illnesses in Latin America and the Caribbean using outbreak data Sara M. Pires, Technical University of Denmark, Denmark

17:15 – 17:30 The changing *Campylobacter* epidemic  
Norval Strachan, University of Aberdeen, United Kingdom

19:30 – 00:30 Congress Dinner  
Venue: Hotel D'Angleterre, Copenhagen

### Thursday, 2<sup>nd</sup> September 2010

**08:30 – 09:50 Plenary session D: Microbial behaviour in primary production and food processing**  
**(Aud. 11 and 12) - Chair:** Elizabeth Borch, SE/ Susanne Knøchel, DK

08:30 – 09:10 Opportunity for mitigating pathogen contamination during food production  
Michael P. Doyle, UGA Center for Food Safety, USA

09:10 – 09:50 New trends and challenges in food preservation  
Frank Devlieghere, Ghent University, Belgium

09:50 – 10:35 Coffee tea and **Poster session**

**10:35 – 11:55 Plenary session E: Microbial behaviour in the intestinal tract**  
**(Aud. 11 and 12) - Chair:** Mogens Jakobsen, DK/ Arthur Ouwehand, FI (TBC)

10:35 – 11:15 Regulation of host physiology and metabolism by the gut microbiota  
Fredrik Bäckhed, University of Gothenburg, Sweden

11:15 – 11:55 Microbial interactions in the intestinal tract  
Willem de Vos, Wageningen Agricultural University, Netherland

11:55 – 12:40 Lunch

**12:40 – 14:20 Parallel sessions D1 and E1**

**12:40 – 14:20 Parallel session D1: Food production**  
**(Aud. 11) - Chair:** Janet Corry, UK/ Jordi Rovira, ES

**Topics:**

D1.1. Primary production

D1.2. Processing technology incl. packaging

D1.3. Hygienic design

12:40 – 12:55 Horticultural assessment scheme in the fresh produce chain  
Imca Sampers, University College of West-Flanders (Howest), Belgium

12:55 – 13:10 Factors related to the prevalence of pathogenic *Yersinia enterocolitica* on finnish pig farms  
Sonja Virtanen, University of Helsinki, Finland

13:10 – 13:25 Attachment behaviour of pathogenic bacteria on food and food contact surfaces in container transport  
Stephen Abban, University of Copenhagen, Denmark

13:25 – 13:35	Break
13:35 – 13:50	Irrigation quantity and timing impact microbial risk of fresh-cut lettuce Maria I Gil, CEBAS-CSIC, Spain
13:50 – 14:05	A novel antimicrobial non-eluting technology for beverage packaging Neta Levy, Oplon Pure Science BV, Israel
14:05 – 14:20	Twenty years of monitoring of <i>Campylobacter</i> in Swedish broilers Eva Olsson Engvall, National Veterinary Institute, Sweden
<b>12:40 – 14:20</b>	<b>Parallel session E1: Human responses to gut microbiota (Aud. 12) - Chair:</b> Ulla Svensson, SE/ Lene Jespersen, DK  <b>Topics:</b> E1.1. Host – gut microbiota interactions E1.2. Food - gut microbiota interactions
12:40 – 12:55	Antibiotic resistance gene transfer from <i>Enterococcus</i> to gut microbiota Martina Haug, ETH Zürich, Switzerland
12:55 – 13:10	Effects of feeding prebiotic to pigs for 1 or 2 weeks before slaughter Annette N. Jensen, Technical University of Denmark, Denmark
13:10 – 13:25	The effect of <i>L. acidophilus</i> NCFM intake on insulin sensitivity and gut microbiota: a randomized placebo-controlled trial Nadja Larsen, University of Copenhagen, Denmark
13:25 – 13:35	Break
13:35 – 13:50	Probiotics and prebiotics in poultry feeding: a strategy to reduce the transmission of <i>C. jejuni</i> along the food chain Loredana Baffoni, University of Bologna, Italy
13:50 – 14:05	Effects of whey protein hydrolyzed formula on metabolic profiles and fecal microbiota of infants with cow's milk protein allergy Pamela Vernocchi, University of Bologna, Italy
14:05 – 14:20	Gut microbiota and metabolome modulation in sourdough bread fed rats Andrea Gianotti, University of Bologna, Italy
14:20 – 14:50	Coffee/tea and <b>Poster session</b>
<b>14:50 – 16:30</b>	<b>Parallel sessions D2 and E2</b>
<b>14:50 – 16:30</b>	<b>Parallel session D2: Food preservation (Aud. 11) - Chair:</b> Andreja Rajkovic, BE / Graham Fleet, AU  <b>Topics:</b> D2.1. Preservation and hurdle technology D2.2. Decontamination methods D2.3. Single cell microbiology
14:50 – 15:05	Effect of initial cell concentration on cold atmospheric plasma inactivation of <i>Salmonella typhimurium</i> cells Ana Fernandez, Institute of food research, United Kingdom

15:05 – 15:20	In search of biomarkers for stress-induced robustness Heidy Den Besten, Wageningen University and Research Centre, the Netherlands
15:20 – 15:35	Influence of flow-rate, surface soiling and pre-exposure to sub-lethal stress on initial attachment of <i>Listeria monocytogenes</i> on solid surfaces under liquid flow Julie Szlavik, Copenhagen University, Copenhagen, Denmark
15:35 – 15:45	Break
15:45 – 16:00	Relevant factors of the decontamination by pulsed light in the food industry Caroline Levy, INRA, France
16:00 – 16:15	Inactivation of <i>Alicyclobacillus acidoterrestris</i> and <i>Bacillus coagulans</i> spores in tomato sauce by high hydrostatic pressure Anne Vercaammen, Food Safety – Biocontrol, New Zealand
16:15 – 16:30	The effect of the <i>Escherichia coli</i> T4 bacteriophage and of the volatile compounds of oregano essential oil on the <i>E.coli</i> growth on beef fillets George Nychas, Agricultural University of Athens, Greece
<b>14:50 – 16:30</b>	<b>Parallel session E2: Probiotics and intestinal interactions</b> <b>(Aud. 12) - Chair:</b> Bruno Biavati, IT / Esben Laulund, DK  <b>Topics:</b> E2.1. Intestinal ecology and evolution E2.2. Prebiotics and Probiotics
14:50 – 15:05	Microbial biodetoxication in the gastrointestinal tract Ed van Niel, Lund University, Sweden
15:05 – 15:20	Kinetic analysis of CLA and CLNA production by Bifidobacteria indicates differences on strain level Lara Gorissen, Ghent University, Belgium
15:20 – 15:35	Genomic typing of <i>Lactobacillus johnsonii</i> : Co-evolution of <i>L. johnsonii</i> strains with their hosts Yechezkel Kashi, Technion, Israel
15:35 – 15:45	Break
15:45 – 16:00	Study of the interactions between the commensal bacteria of the gastrointestinal tract and <i>S. typhimurium</i> Gaspar Avendano-Perez, Institute of Food Research, United Kingdom
16:00 – 16:15	Impact of <i>Kluyveromyces marxianus</i> on the human gut microbial ecology: a combined in vivo and in vitro studies Simone Maccaferri, University of Bologna, Bologna, Italy
16:15 – 16:30	Effect of fermentation on the surface and adhesion properties of <i>Lactobacillus rhamnosus</i> Dimitris Charalampopoulos, University of Reading, United Kingdom
16:30 – 16:40	Break
<b>16:40 – 17:15</b>	<b>Closing session</b> <b>(Aud. 11 and 12) - Chair:</b> Peter Rådström, Lund University, SE

- 16:40 – 16:50 Summing up  
Mogens Jakobsen, University of Copenhagen, Denmark
- 16:50 – 16:55 Poster award – ICFMH Poster Competition  
Larry R. Beuchat, ICFMH
- 16:55 – 17:05 Food Micro 2012, Turkey  
Dilek Heperkan, Istanbul Technical University, Turkey
- 17:05 – 17:15 Closing remarks  
Wilhelm Holzapfel, President of ICFMH
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- 16:40 – 18:00 Exhibition break down  
Venue: Bella Centre

**Friday, 3<sup>rd</sup> September 2010**

- 08:30 – 16:15** EU-seminar (PathogenCombat, ProSafeBeef, BioTracer)

