



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, 30th August 2010

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

Tuesday, 31st 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

10:50 – 12:50 Lunch

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

12:50 – 14:30 **Parallel session A1: Functional starter cultures**
(Aud. 11)

Chair: Wilhelm Holzapfel, DE/ Dieter Elsser-Gravesen, DK

Topics:

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.)

12:50 – 13:05 *Food safety of traditional African alkaline fermented products*
Labia II Ouoba, London Metropolitan University, United Kingdom

13:05 – 13:20 *Pediococcus and Lactobacillus 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 Lactobacillus casei*
Biljana Bogicevic, Agroscope Liebefeld Posieux, Switzerland

13:35 – 13:45 Break

13:45 – 14:00 *Evaluation of the interaction Saccharomyces cerevisiae and Lactobacillus fermentum in the production of artisanal cachaça*
Whasley F. Duarte, Federal University of Lavras, Brazil

14:00 – 14:15 *Intraspecific genetic diversity of Oenococcus oeni*
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

12:50 – 14:30 **Parallel session A2: Microbial metabolites**
(Aud. 12)

Chair: Peter Raspor, SI/ Sara Bover-Cid, ES

Topics:

A2.1. Biopreservation

A2.2. Microbial metabolites and exopolysaccharides

A2.3. Spoilage organisms

12:50 – 13:05 *Stress genes expression in Brettanomyces bruxellensis 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 Brochothrix thermosphacta and spoilage prevention of cooked peeled shrimp by Lactococcus piscium 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 Penicillium expansum and Aspergillus niger single spores*
Kostas Koutsoumanis, Aristotle University of Thessaloniki, Greece
- 14:15 – 14:30 *Anti-listerial activity of subtilisin alone and combined with curcumin, polylysine 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, 1st 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 and **Poster Session**

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

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 Listeria monocytogenes 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 Listeria monocytogenes*

Taurai Tasara, University of Zurich, Switzerland

13:35 – 13:50 *Extended expression of Staphylococcal enterotoxins A and D in pork meat products*

Nina W. Carlquist, Lund University, Sweden

13:50 – 14:00 Break

14:00 – 14:15 *The LC-MS² as a quantitative tool to investigate the influence of growth parameters on Cereulide production by Bacillus cereus in food*

Laurence Delbrassinne, Institute of Public Health, Belgium

14:15 – 14:30 *In situ virulence gene expression of Listeria monocytogenes in food*

Luca Coccolin, 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

13:05 – 14:45 **Parallel session C1: Predictive microbiology**

(Aud. 12)

Chair: NN / Marcel Zwietering, NL

Topics:

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 Listeria 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 Campylobacter jejuni: A predictor for genotype and virulence potential?

Ihab Habib, Ghent University, Belgium

14:30 – 14:45

Rapid quantification of viable campylobacter 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 and **Poster Session**

15:50 – 17:30

Parallel sessions B2 and C2

15:50 – 17:30

**Parallel session B2: Microbial resistance
(Aud. 11)**

Chair: NN/ NN

Topics:

B2.1. Stress response

B2.2. Resistance and spores

B2.3. Persistence and biofilm

15:50 – 16:05

Cold tolerance of group I Clostridium botulinum

Miia Lindström, University of Helsinki, Finland

16:05 – 16:20

Extreme heat resistance in Salmonella

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 Listeria monocytogenes

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/ Luca Coccolin, IT

Topics:

C2.1. Hazard analysis and risk assessment

C2.2. Emerging viruses and other hazards

C2.3. Epidemics, consumer protection and climate aspects

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 E. Coli O157: H7, S. enterica and L. monocytogenes 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 B. fragilis 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, 2nd 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
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- 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 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)
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- 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/ NN

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 Campylobacter in Swedish broilers*
Eva Olsson Engvall, National Veterinary Institute, Sweden

12:40 – 14:20 **Parallel session E1: Human responses to gut microbiota**

(Aud. 12)

Chair: Ulla Svensson, SE/ Fredrik Bäckhed, SE (TBC)

Topics:

E1.1. Host – gut microbiota interactions

E1.2. Food - gut microbiota interactions

12:40 – 12:55 *Antibiotic resistance gene transfer from Enterococcus 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 L. acidophilus 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 C. jejuni 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 and **Poster Session**

14:50 – 16:30 Parallel sessions D2 and E2

14:50 – 16:30 Parallel session D2: Food preservation (Aud. 11)

Chair: Andreja Rajkovic, BE (TBC) / Graham Fleet, AU

Topics:

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 Salmonella typhimurium 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 Listeria monocytogenes 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 Alicyclobacillus acidoterrestris and Bacillus coagulans spores in tomato sauce by high hydrostatic pressure*
Anne Vercaammen, Food Safety – Biocontrol, New Zealand

16:15 – 16:30 *The effect of the Escherichia coli T4 bacteriophage and of the volatile compounds of oregano essential oil on the E.coli growth on beef fillets*
George Nychas, Agricultural University of Athens, Greece

14:50 – 16:30 Parallel session E2: Probiotics and intestinal interactions (Aud. 12)

Chair: NN/ Esben Laulund, DK

Topics:

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	<i>Kinetic analysis of CLA and CLNA production by Bifidobacteria indicates differences on strain level</i> Lara Gorissen, Ghent University, Belgium
15:20 – 15:35	<i>Genomic typing of Lactobacillus johnsonii : Co-evolution of L. johnsonii strains with their hosts</i> Yechezkel Kashi, Technion, Israel
15:35 – 15:45	Break
15:45 – 16:00	<i>Study of the interactions between the commensal bacteria of the gastrointestinal tract and S. typhimurium</i> Gaspar Avendano-Perez, Institute of Food Research, United Kingdom
16:00 – 16:15	<i>Impact of Kluyveromyces marxianus on the human gut microbial ecology: a combined in vivo and in vitro studies</i> Simone Maccaferri, University of Bologna, Bologna, Italy
16:15 – 16:30	<i>Effect of fermentation on the surface and adhesion properties of Lactobacillus rhamnosus</i> Dimitris Charalampopoulos, University of Reading, United Kingdom
16:30 – 16:40	Break
16:40 – 17:15	Closing session (Aud. 11 and 12) Chair: Peter Rådström, Lund University, SE
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16:40 – 16:50	<i>Summing up</i> Mogens Jakobsen, University of Copenhagen, Denmark
16:50 – 16:55	<i>Poster award – ICFMH Poster Competition</i> Larry R. Beuchat, ICFMH
16:55 – 17:05	<i>Food Micro 2012, Turkey</i> Dilek Heperkan, Istanbul Technical University, Turkey
17:05 – 17:15	<i>Closing remarks</i> Wilhelm Holzapfel, President of ICFMH
16:40 – 18:00	Exhibition break down Venue: Bella Centre

Friday, 3rd September 2010

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

