

Gut Microbiology:

new insights into
gut microbial ecosystems



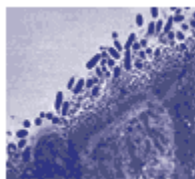
PROGRAMME

Tuesday 22 June 2010

| | | |
|---------------|---|----------------------|
| 19.00 – 21.30 | Registration and Drinks Reception: Aberdeen Exhibition and Conference Centre | Sponsored by Adisseo |
|---------------|---|----------------------|

Wednesday 23 June 2010

| | | | |
|--------------------|---|--------------------------|--------------------|
| 08.30 – 08.50 | Tea, Coffee and Registration | | |
| 08.50 – 09.00 | Introduction to the Conference John Wallace | | |
| Session One | Gut Microbial Communities – Phylogeny, Genomics and Function | | |
| Chairs | Evelyne Forano and Harry Flint | | |
| 09.00 – 09.40 | Invited Lecture Incomplete recovery and individualized responses of the human distal gut microbiota to repeated antibiotic perturbation Les Dethlefsen, Stanford, USA | | Sponsored by ISAPP |
| 09.40 – 10.05 | Pyrotag sequencing of the fecal and mucosal gut microbiome of twins with inflammatory bowel diseases identifies novel differentiating populations | Johan Dicksved | Uppsala, Sweden |
| 10.05 – 10.30 | The intestinal microbiomes in pediatric irritable bowel syndrome: phylochip and 454 sequencing comparisons | Delphine Saulnier | Houston, USA |
| 10.30 – 11.00 | Tea and Coffee | | |

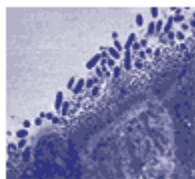


Gut Microbiology:

new insights into
gut microbial ecosystems



| | | | |
|--|---|---------------------------|-------------------------|
| 11.00 – 11.25 | Molecular characterization of hydrogenotrophic microbes associated with the human colonic mucosa | Rex Gaskins | Champaign-Urbana, USA |
| 11.25 – 11.50 | ELDERMET - Gut microbiota as an indicator and agent of nutritional health in elderly Irish subjects | Paul O'Toole | Cork, Ireland |
| 11.50 – 12.15 | New 16S rRNA sequence data mining tools help identify gut microbes associated with colorectal polyp prevalence | Volker Mai | Gainesville, USA |
| 12.15 – 12.40 | Characterization of the human small intestinal microbiota | Tom van den Bogert | Wageningen, Netherlands |
| 12.40 – 13.40 | Lunch | | |
| Poster Session One 13.40 – 15.00 | <ol style="list-style-type: none"> 1. Gut Microbial Communities – Phylogeny, Genomics and Function 2. Microbes and the Environment | | |
| Session Two | Microbes and the Environment | | |
| Chairs | Diego Morgavi and Karen Scott | | |
| 15.00 – 15.40 | Invited Lecture Greenhouse gas emissions and animal agriculture Jamie Newbold, Aberystwyth, UK | Sponsored by Lallemand | |
| 15.40 – 16.05 | Acetogen populations in the bovine rumen and forestomach of the tammar wallaby are different based on analysis of formyltetrahydrofolate synthetase and acetyl-CoA synthase genes | Emma Gagen | St Lucia, Australia |
| 16.05 – 16.25 | Tea and Coffee Sponsored by Danisco | | |



Gut Microbiology:

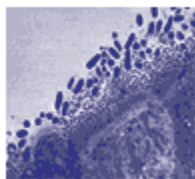
new insights into
gut microbial ecosystems



| | | | |
|---------------|--|---------------------------------|--------------------------|
| 16.25 – 16.50 | Methane emissions and rumen methanogens in sheep harbouring or not protozoa | Milka Popova | Clermont-Ferrand, France |
| 16.50 – 17.15 | Impact of live versus dead bacteria on survival, growth and gene expression in gnotobiotic Atlantic cod (<i>Gadus morhua</i>) larvae | Olav Vadstein | Trondheim, Norway |
| 17.15 – 17.40 | Functional metagenomics for discovery of new Lignocellulose-acting enzymes | Claire Dumon | Clermont-Ferrand, France |
| 18.30 | Civic Reception Beach Ballroom, Aberdeen | Hosted by Aberdeen City Council | |

Thursday 24 June 2010

| | | | |
|----------------------|--|-----------------------------|-----------------------|
| Session Three | Microbial Activities in the Gut | | |
| Chairs | Annick Bernalier-Donadille and Petra Louis | | |
| 09.00 – 09.40 | Invited Lecture <i>Faecalibacterium prausnitzii</i> , a novel anti-inflammatory tool to prevent and to treat inflammatory bowel disease Philippe Langella, Jouy-en-Josas, France | | Sponsored by FEMS |
| 09.40 – 10.05 | Combined gut-cell model to investigate <i>Salmonella</i> and probiotics interactions in infected gut microbiota | Christophe Chassard | Zurich, Switzerland |
| 10.05 – 10.30 | Effects of butyrylated starch supplementation on the gut microbiome of athletes | Claus Christophersen | Adelaide, Australia |
| 10.30 – 11.00 | Tea and Coffee | | |
| 11.00 – 11.25 | A gene-centric approach to investigating the diversity and adaptation of <i>Ruminococcus flavefaciens</i> ecotypes within the rumen microbiome | Bryan White | Champaign-Urbana, USA |



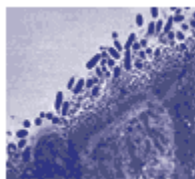
Gut Microbiology:

new insights into
gut microbial ecosystems

Rowett Institute
of Nutrition and Health
University of Aberdeen



| | | | |
|---|---|---|--------------------------|
| 11.25 – 11.50 | Dietary fibre degradation and xylanolytic system of <i>Bacteroides xylanisolvens</i> XB1A and <i>Roseburia intestinalis</i> XB6B4, two fibrolytic bacteria from the human gut | Evelyne Forano | Clermont-Ferrand, France |
| 11.50 – 12.15 | Analysis of the interaction between <i>Fibrobacter succinogenes</i> and cellulolytic ruminococci in the rumen of gnotoxenic lambs | Pascale Mosoni | Clermont-Ferrand, France |
| 12.15 – 12.40 | Biofilm formation and growth dynamics of <i>Prevotella ruminicola</i> during the colonisation of fresh perennial ryegrass | Roderick Mackie | Champaign-Urbana, USA |
| 12.40 – 13.40 | Lunch | | |
| Themed Oral Session – | Food and Health | Supported by Scotland Food and Drink | |
| Chairs | Silvia Gratz and Alan Rowe | | |
| 13.40 – 14.05 | Defining the dominant bacterial species of the human large intestine and their response to dietary change | Alan Walker | Cambridge, UK |
| 14.05 – 14.30 | Guidance for substantiating the evidence of the beneficial effects of probiotics: Current status and recommendations for future research | Ger Rijkers | Utrecht, Netherlands |
| Poster Session Two 14.30 – 16.00 | 3. Microbial Activities in the Gut 4. Impact of Microbial Colonisation on the Host | | |
| 15.30 – 16.00 | Tea and Coffee | Sponsored by Food Standards Agency Scotland | |



Gut Microbiology:

new insights into
gut microbial ecosystems

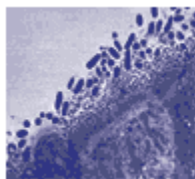


| | |
|--|---|
| Workshops 16.00 – 17.30 | <ol style="list-style-type: none"> 1. ‘omics technologies Chaired by: Bryan White, Illinois, USA and Harry Flint, Aberdeen, UK 2. Bacteria and the mucosal surface: from interactions to interventions Chaired by: Jonathan Rhodes, Liverpool, UK, Andrew Stagg, London, UK, Silvia Gratz, Aberdeen, UK and Angela Patterson, Aberdeen, UK 3. The mechanism of action of pre- or probiotics within the host to improve health Chaired by: Elaine Vaughan, Vlaardingen, The Netherlands and Karen Scott, Aberdeen, UK 4. Mechanisms for microbial survival in the gut Chaired by: Conor P O’Byrne, Galway, Ireland and Petra Louis, Aberdeen, UK |
|--|---|

| | | |
|------------------------|--|---------------------------------------|
| 19.00 for 19.30 | Conference Dinner Ardoe House Hotel, Aberdeen | Pre-dinner Drinks Sponsored by Yakult |
|------------------------|--|---------------------------------------|

Friday 25 June 2010

| | | | |
|---------------------|---|----------------------|-------------------------|
| Session Four | Impact of Microbial Colonisation on the Host | | |
| Chairs | Pascale Mosoni and Angela Patterson | | |
| 09.00 – 09.40 | Invited Lecture Targeted modulation of gut microbiota with prebiotics: consequences for host metabolism Nathalie Delzenne, Louvain, Belgium | | Sponsored by FEMS |
| 09.40 – 10.05 | Gut bacteria - host interactions: the role of mucus binding proteins | Nathalie Juge | Norwich, UK |
| 10.05 – 10.30 | Characterisation of polysaccharides from immunologically active strains of <i>Bifidobacterium</i> | Ian Sims | Wellington, New Zealand |
| 10.30 – 11.00 | Tea and Coffee | | |



Gut Microbiology:

new insights into
gut microbial ecosystems



| | | | |
|---|--|--------------------------|-------------------------|
| 11.00 – 11.25 | The very early intestinal microbiota in human neonates | Caroline Karlsson | Lund, Sweden |
| 11.25 – 11.50 | Local and temporal responses of the mouse intestinal mucosa to conventionalization | Sahar El Aidy | Wageningen, Netherlands |
| 11.50 – 12.15 | Influence of <i>Lactobacillus reuteri</i> on the colonic microbiota in health and DSS-induced colitis | Stefan Roos | Uppsala, Sweden |
| 12.15 – 12.40 | Influence of the dietary heme on cell proliferation and the microbiota of the murine colon | Muriel Derrien | Wageningen, Netherlands |
| 12.40 – 13.40 | Lunch | | |
| Session Five | | | |
| Chair | John Wallace | | |
| Workshops’ Wrap-up Session 13.40 – 15.40 | <ol style="list-style-type: none"> 1. ‘omics technologies 2. Bacteria and the mucosal surface: from interactions to interventions 3. Probiotics and prebiotics as functional foods 4. Mechanisms for microbial survival in the gut | | |
| 16.10 – 16.40 | Keynote Lecture Learning lessons is hard; making predictions difficult Hugh Pennington, Aberdeen, UK | Sponsored by FEMS | |
| 16.40 – 17.00 | Conference Close John Wallace | | |
| 19.00 for 19.30 | Conference Ceilidh with Clachan Yell Strathcona House, Rowett Insitute, Aberdeen | | |