WELCOME TO...

13TH INTERNATIONAL

GUT MICROBIOLOGY SYMPOSIUM 2023

The University of Aberdeen warmly welcomes delegates and invited guests to the 13th Joint Symposium organised by the Rowett Institute, University of Aberdeen, Scotland (UK) and INRAE Clermont Auvergne Rhône Alpes Centre, Clermont Ferrand, (France).

Held at P&J Live on the 13-15th June 2023, the 13th International Gut Microbiology Symposium aims to explore the role of the complex microbial ecosystem present in the digestive tract of humans and animals in maintaining host health. A particular focus will be on microbe-microbe and microbe-host interactions to advance our understanding of the role of these interactions in host welfare and health.

Sessions will focus on topics including colonisation resistance, spread of genes through environmental ecosystems, and successes in translating research into practice. Studies on all other topics related to the gut microbiota, including developing new approaches to study interactions between nutrition and gut microbial ecosystems as well as cross-talk between microorganisms and their host will also be welcomed.

Topics will include:

- Interactions between microbiota, pathogens and host
- Impact of nutrition on gut microbiome and health
- One Health Linking microbes in the environment, humans and animals
- Beyond the lab: Applying microbiome research in practice
- Other





Local Scientific Organising Committee:

- Karen Scott (Chairperson)
- Silvia Gratz
- Alan Walker

- Sylvia Duncan
- Petra Louis



French Organising Committee:

- Annick Bernalier-Donadille
- Diego Morgavi
- Milka Popova
- Lucie Etienne -Mesmin
- Evelyne Forano
- Pascale Mosoni
- Panagiotis Sapountzis

Event Organisers:

CPD Services (University of Aberdeen)

TUESDAY 13TH JUNE 2023

08:00 – 13:30		eting Gateway to Global Enteric Methane Reduction (Workshop) I by Sharon Huws & Matthias Hess	Hilton (TECA)
11:00 – 17:30	Main Sympo	P&J Live, First Floor, Upstairs Right View Area	
14:00 – 14:05	Welcome: K	Conference Suite 1A	
14:05 – 15:30		reractions between microbiota, pathogens and host rs – Alan Walker and Lucie Etienne Mesmin	Conference Suite 1A
	14:05 – 14:50	IT 01: Using the Oligo-Mouse-Microbiota to understand gut microbiota ecology, evolution and pathogen exclusion	Bärbel Stecher
	14:50 — 15:10	OT 01 : Towards a better description of the interactions of foodborne pathogen Enterotoxigenic Escherichia coli with intestinal mucus and human microbiome	Lucie Etienne-Mesmin
	15:10 – 15:30	OT 02 : Comparative analysis of 4 enteropathogens in mice with complex and OligoMM12 microbiota	Mathias Klaus-Maria Herzog
15:30 – 16:00	Refreshmen	t Break	Conference Suite 1B/1C
15:30 - 16:00 16:00 - 17:20	Refreshment		Conference Suite 1B/1C Conference Suite 1A
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	Session 1 cor	or 03: An IBD-associated pathobiont collaborates with the NSAID to promote inflammation and cell death in a susceptible	Conference Suite 1A
	Session 1 cor 16:00 – 16:20	ntinued OT 03: An IBD-associated pathobiont collaborates with the NSAID to promote inflammation and cell death in a susceptible host via the caspase-8/NLRP3 axis OT 04: Revealing the causal relationship between age-associated immune remodelling and changes in the gut	Conference Suite 1A Raminder Singh
	Session 1 cor 16:00 – 16:20 16:20 – 16:40	or 03: An IBD-associated pathobiont collaborates with the NSAID to promote inflammation and cell death in a susceptible host via the caspase-8/NLRP3 axis Or 04: Revealing the causal relationship between age-associated immune remodelling and changes in the gut microbiome Or 05: Novel molecular mechanisms by commensal bacteria to	Conference Suite 1A Raminder Singh Selina Stahl

WEDNESDAY 14TH JUNE 2023

09:00 – 10:25	Session 2: Imp	Conference Suite 1A	
	09:00 – 09:45	IT 02: Integrating multi-omics and enzymology to untangle systems for typical and atypical glycan processing in gut microbiomes	Sabina Leanti La Rosa
	09:45 10:05	OT 07: Faecal microbiome mediates the effect of diet on colorectal-cancer risk: comparison of meat based versus pescovegetarian diets	Philippe Gérard
	10:05 – 10:25	OT 08: The molecular basis of the degradation of flavan-3-ols by the human gut bacterium Eggerthella lenta	Pascale Mosoni
10:25 – 11:00	Refreshment	Conference Suite 1B/1	
11:00 – 12:20	Session 2 con	Conference Suite 1A	
	11:00 – 11:20	OT 09: p-Cresol derivatives interact with the blood–brain barrier and highlight the complex nature of microbiota–host communication pathways associated with the gut–brain axis	Lesley Hoyles
	11:20 — 11:40	OT 10: Inter-individual differences in segmental transit time and pH are linked to the human gut microbiome composition and metabolism	Nicola Procházková
	11:40 – 12:00	OT 11: Oligofructose Improves Small Intestinal Lipid-Sensing Mechanisms via Alterations to the Small Intestinal Microbiota	Frank Duca
	12:00 – 12:20	OT 12: The impact of seaweed-based nutritional manipulation on the rumen microbiome	Alessandra Ferrillo
12:20 – 13:30	Lunch		Conference Suite 1B/
13:30 – 15:30	Poster session	n ODDS with Tea & Coffee from 15:00	Conference Suite 1B/
15:30 – 16:45		sh Talks (open topic) selected from poster presentations = – Karen Scott and Petra Louis	Conference Suite 1A
	15:30 – 15:35	P008: Mitochondrial complex I dysfunction promotes microbial composition that impacts on ulcerative colitis	Leticia Abecia
	15:35 – 15:40	P023: A gut microbiome perspective of extracellular vesicle-mediated communication between human cells and bacteria	Simon Swift
	15:40 – 15:45	P028: Surf and Turf: The Adaptation of Ruminant Microbiomes to Marine forages	Jeff Tingley
	15:45 – 15:50	P032: The use of a continuous flow in vitro model to assess the role of psyllium as a potential mechanism for FODMAP consumption in IBS patients	Hannah Harris
	15:50 — 15:55	P035: Linking diet and gut microbiota in obesity: usefulness of a new in vitro human mucosal colon model	Stéphanie Blanquet- Diot
	15:55 – 16:00	P072: Microbiome-derive metabolites are powerful biomarkers for anal cancer screening	Jana Seifert
	16:00 – 16:05	P077: Understanding polyunsaturated fatty acid provisioning by gut microbiota elements through the lens of an earthworm model	Stephanie Schnorr
	16:05 – 16:10	P081: Auxotrophies in human gut bacteria are indicative of microbiome stability	Svenja Busche
	16:10 – 16:15	P100: The effect of exercise intervention and cardiorespiratory fitness on the gut microbiome: a Generation 100 cohort study	Natalia Bednarska
	16:15 – 16:20	P107: Distinct effects of anaerobe gut fungi on feed lignocellulose composition and structure during its degradation	Jolanda van Munster
	16:20 – 16:25	P113: Increasing resolution of mycobiome profiling in the human gut	David Schneider
	16:25 – 16:45	Q&A	
	Session 2 con	Conference Suite 1A	
16:45 – 17:30	Jession 2 con		

Bus Timings: 18:45 from P&J Live / leaving at 19:10 from Broad Street, Aberdeen, AB11 5BU. **Return:** 22:30 to 23:00 staggered bus returns to Broad Street and P&J Live. Please ensure you arrive 10 - 15 minutes prior to bus departure.

THURSDAY 15TH JUNE 2023

09:00 – 10:25	Session 4: One Health – Linking microbes in the environment, humans and animals Session Chairs – Karen Scott and Diego Morgavi				
	09:00 - 09:45	IT 04: Antimicrobial resistance in the human gut microbiome	Willem van Schaik		
	09:45 – 10:05	OT 13: Resistome characterization in neonatal calves and their environments on dairy farms: Implications for AMR surveillance and risk mitigation	Katie Lawther		
	10:05 – 10:25	OT 14: RiboTaxa: combined approaches for rRNA genes taxonomic resolution down to the species level from metagenomics data revealing novelties	Oshma Chakoory		
10:25 – 11:00	Refreshment Break		Conference Suite 1B/10		
11:00 – 12:00	Session 4 con	Conference Suite 1A			
	11:00 – 11:20	OT 15: Analysis of milk, feces and soil microbiomes composition and structure across Quebec dairy farms	Dominic Poulin-Laprad		
	11:20 – 11:40	OT 16: Linking environmental pollution and gut microbiome in individuals living in highly contaminated settlements	Francesca De Filippis		
	11:40 – 12:00	OT 17: Recipient independent high accuracy FMT prediction and optimization in mice and humans	Yoram Louzoun		
	12:00 – 12:20	OT 18: The human gut microbiome explored at single nucleotide resolution	Falk Hildebrand		
12:20 – 13:30	Lunch		Conference Suite 1B/10		
13:30 – 15:30	Poster session	Conference Suite 1B/10			
15:30 – 17:40	Session 5: Bey Session Chairs	Conference Suite 1A			
	15:30 – 16:15	IT 05: From Bench to Bedside: The journey of EnteroBiotix	Lynsey Howard		
	16:15 – 16:35	OT 19: Harnessing the gut microbiome to identify novel anaerobic bacteria with biotherapeutic potential	Indrani Mukhopadhya		
	16:35 – 16:55	OT 20: Harnessing diverse prophages of STEC O157:H7 phage- type 8 for rapid identification of fresh produce-associated STEC strains	Janet Nale		
	16:55 – 17:40	IT 06: Leveraging lactobacilli against respiratory viral diseases	Irina Spacova		
17:40 – 18:00	End of conference and announcement of next conference and poster prize winner				
20:00 – 23:00	Conference Ceilidh - with Stovies (food) at 21:15 at the Beach Ballroom, Beach Promenade, Aberdeen, AB24 5NR (return coach transportation will be provided)				

Bus Timings: 19:00 from P&J Live / leaving at 19:20 from Broad Street, Aberdeen, ABI1 5BU. **Return:** 23:15 bus returns to Broad Street and P&J Live. Please ensure you arrive 10 - 15 minutes prior to bus departure.