

# MEDTECH LINKS

Innovations in Human Microbiome  
Research

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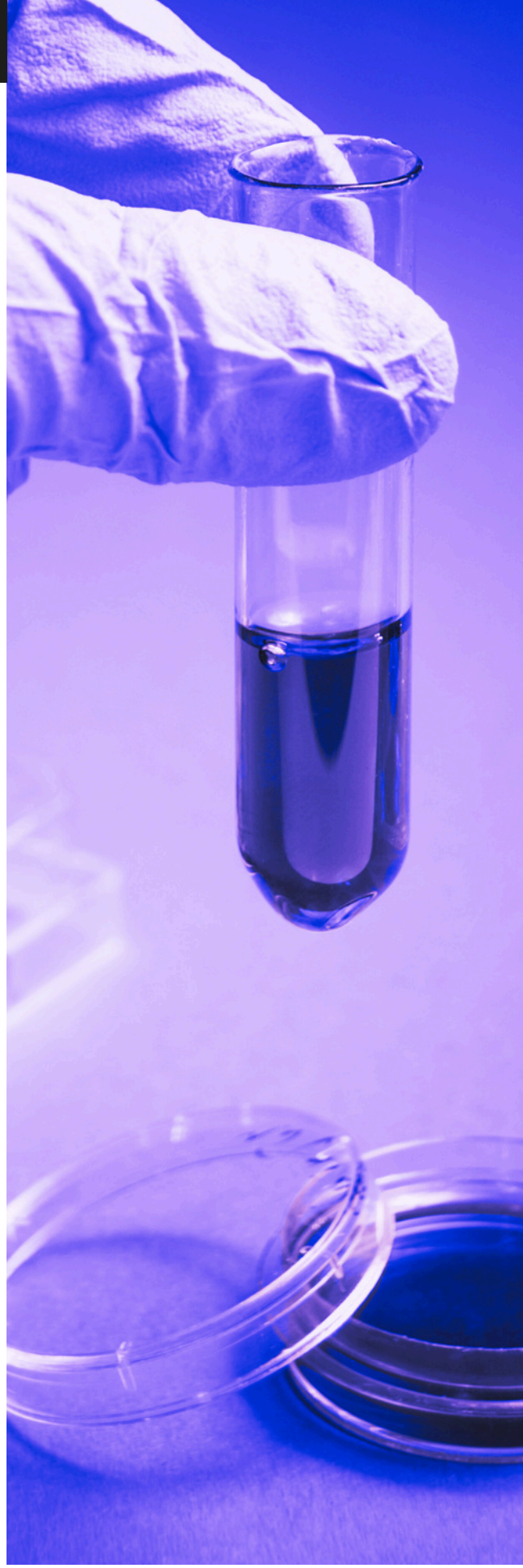
## Event Details

Monday 16th September 2024  
13:00 - 18:30

RSM 2.28 // RSM 3.01 (C, D, E)  
Royal School of Mines  
Imperial College London  
South Kensington

## Overview

Imperial College's research into the Human Microbiome is generating considerable excitement and has the potential to make important contributions to human health. Our event on 16th September offers you the opportunity to hear from and meet academics and clinicians working in the field of the human microbiome and its applications in gut, lung, skin and reproductive health. Please join us to learn about key research projects and how this work is being translated into products and patient care.



# PROGRAMME

## Registration, Lunch and Exhibition

13:00 - 14:00

RSM 3.01 (C, D, E)

## Welcome & Introduction

Dr James Kinross

14:00 - 14:10

RSM 2.28

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## Session 1: Therapeutics

14:15 - 15:30

RSM 2.28

**Professor Bill Cookson** “The lung microbiome: the primary influencer for immunity and infection, and a rich resource for new therapies.”

14:15 - 14:30

**Dr Rachael Barry** “Harnessing microbial proteases: Diagnostic and therapeutic potential for gastrointestinal disorders.”

14:30 - 14:45

**Dr Charlotte Eve Short** “Beyond antibiotics, novel therapeutics for the management of Bacterial Vaginosis.”

14:45 - 15:00

**Dr David Riglar** “Engineering Biology tools for controlling bugs as drugs.”

15:00 - 15:15





# PROGRAMME



**Dr James Kinross** “Targeting the Microbiome for Cancer Therapeutics.”

15:15 - 15:30

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## **Break and Exhibition**

15:30 - 16:00

RSM 3.01 (C, D, E)

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## **Session 2 : Pharmaceuticals**

16:00 - 16:30

RSM 2.28

**Professor Marc-Emmanuel Dumas** “Chemical messengers from the microbiome and pharmacomicrobiomics.”

16:00 - 16:15

**Tim Sharpington** “Translating the gut microbiome for novel live biotherapeutics.”

16:15 - 16:30

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## **Session 3: Diagnostics**

16:30 - 17:15

RSM 2.28

**Dr Isabel Garcia Perez** “Metabolic phenotyping for food composition, dietary assessment and personalised nutrition.”

16:30 - 16:45

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# PROGRAMME

**Dr Kanta Chechi** “Gut microbiome holds the clue to our heart health.”

16:45 - 17:00

**Dr Lauren Ford** “On the road to commercialisation, providing rapid diagnostic solutions to improve women’s reproductive health.”

17:00 - 17:15

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## Reception and Exhibition

17:15 - 18:30

RSM 3.01 (C, D, E)

# SPEAKERS



## Dr James Kinross

Reader in General Surgery, Dept. of Surgery & Cancer

Dr Kinross is a Reader in Colorectal Surgery and a Consultant Surgeon at Imperial College London. His clinical interest is in robotic surgery and minimally invasive surgery for colorectal cancer. He performs translational research in the fields of early colorectal cancer detection and prevention and in surgical technology transfer.



## Professor Bill Cookson

Professor of Genomic Medicine, National Heart & Lung Institute

Prof Cookson trained as a respiratory physician, and is currently a Professor of Genomic Medicine at Imperial. His research focuses include making progress to understanding the genetic causes of asthma, and understanding molecular interactions between genes and environment.



## Dr Rachael Barry

Advanced Research Fellow, Dept. of Metabolism, Digestion & Reproduction

Dr Barry's research focuses on targeting specialist cutting enzymes, called hydrolases, that are active in inflamed and cancerous gut for the management, treatment and prevention of gastrointestinal disease.



## Dr Charlotte Eve Short

Academic Clinical Lecturer, Dept. of Infectious Disease

Dr Short's research interests aim to continue the work on her doctoral thesis theme, seeking to understand the immunological basis of preterm births in pregnancies of women with HIV-1 infection.

# SPEAKERS



## Dr David Riglar

Proleptic Lecturer in Structural & Synthetic Biology, Dept. of Infectious Disease

The Founder of the Riglar Lab, the lab's work uses a combination of synthetic biology, imaging and sequencing based approaches to better understand the function of the gut and its microbiota during health and disease. This knowledge aims to develop innovative technologies, such as living engineered probiotics, to probe and control the gut environment.



## Professor Marc-Emmanuel Dumas

Chair in Systems Management, Dept. of Metabolism, Digestion & Reproduction

Research led by Professor Dumas targets metabolomics approaches to better understand the challenges in the integrative control of metabolism, blending genomics and microbiomics in systems medicine. He focuses on the role of the microbiome in metabolic and cardiorespiratory diseases, chronic inflammation, and certain types of cancers.



## Tim Sharpington

CEO - Microbiotica

Tim has established a track record of leading, developing and executing company strategy, with experience in product development, fundraising, M&A and licensing. He led the development of AD237 before its successful out license to Novartis; ICON and Sequus, where he led the development of DOXIL, an oncology product which was granted accelerated approval for ovarian cancer.

Tim started his career as a postgraduate researcher at London School of Hygiene and Tropical Medicine before working as Clinical Programme Manager at Pfizer.

# SPEAKERS



## Dr Isabel Garcia Perez

Senior Lecturer in Precision & Systems Medicine, Dept. of Metabolism, Digestion & Reproduction

Dr Perez's work focuses on innovative and novel technologies for evaluating intestinal dysfunction in adults and children with malnutrition disorders.



## Dr Kanta Chechi

ISSF Fellow, National Heart & Lung Institute

Dr Chechi's current research is focused on exploring the causal role of the gut microbiome in cardiometabolic disease development using multi-omics, systems biology, and genetic epidemiology approaches like Mendelian randomization in population settings.

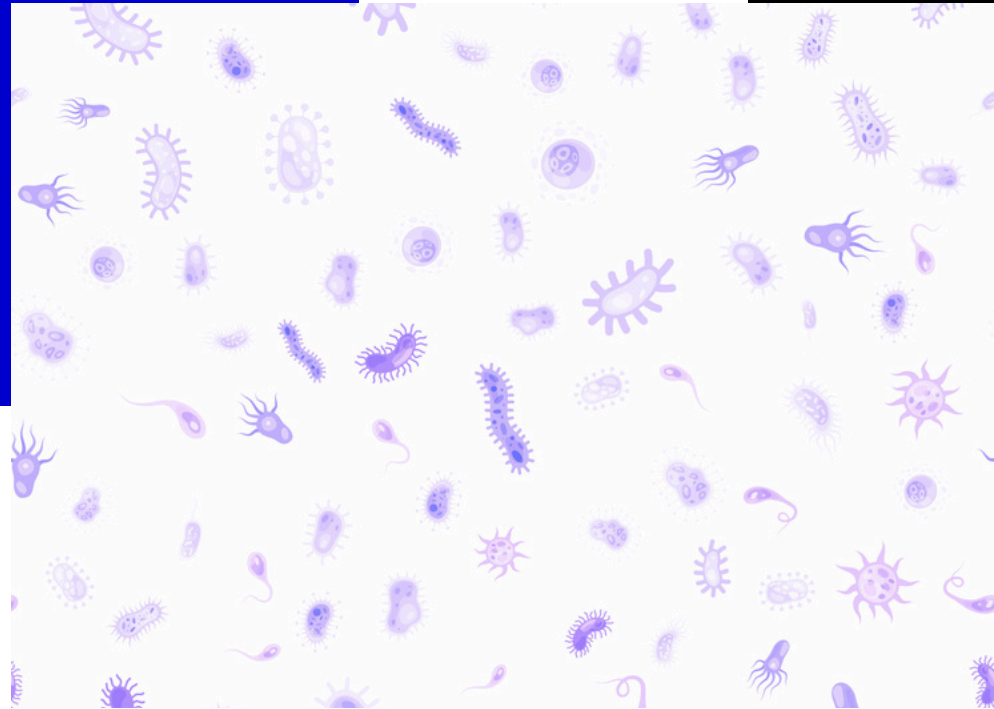
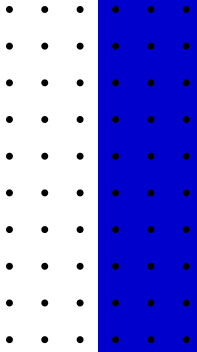


## Dr Lauren Ford

Research Fellow, Dept. of Metabolism, Digestion & Reproduction

Dr Ford's research is based on developing innovative technology and tools to detect cancer at earlier stages when it is easier to treat. Her research team integrates novel mass spectrometry techniques with materials chemistry for increased sensitivity of detection of disease. Dr Ford's primary interests are investigating the metabolome of biofluids for indications of underlying pathologies and developing tools to ensure that this testing is available to population levels through high-throughput and cost effective methods.





## CONTACT INFO



<https://www.imperial.ac.uk/medtechone/>



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