

**Inflammation at barrier sites**  
Manchester Institute of Biotechnology  
Manchester

**Wednesday, 26 April 2023**

11:45 Registration and sandwich lunch

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12:30 Conference opening and housekeeping  
Professor Peter Barlow, Edinburgh Napier University, UK

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**GUT SESSION**

Chairs: Dr Matt Hepworth, University of Manchester, UK and Olivia Ridgewell, University of Glasgow, UK

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12:40 **Autophagy controls mucus secretion from intestinal goblet cells by alleviating ER stress**  
Dr Shai Bel, Bar-Ilan University, Israel – *invited speaker*

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13:15 **Bi-directional signalling between the intestinal epithelium and type-3 innate lymphoid cells (ILC3) via the Notch pathway**  
Dr Ainize Pena Cearra, King's College London, UK – *selected short talk*

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13:30 **Vitamin D bioavailability regulates microbiome-dependent cancer immunity**  
Dr Evangelos Giampazolias, CRUK Manchester Institute, UK – *selected short talk*

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13:45 Lightning talks

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14:00 Refreshment break and exhibition

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14:45 **Controlling the activation of intestinal intraepithelial T cells**  
Dr Mahima Swamy, University of Dundee, UK – *invited speaker*

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15:20 **Dysregulation of intestinal V $\delta$ 1 T cell compartmentalisation and functionality in inflammatory bowel disease**  
Dr Carrie Willcox, University of Birmingham, UK – *selected short talk*

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15:35 **Segmented filamentous bacteria-induced epithelial MHCII regulates cognate CD4+ intraepithelial lymphocytes and epithelial turnover**  
Tomáš Brabec, Charles University in Prague, Czech Republic – *selected short talk*

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15:50 **Gamma deltas guts and bugs**  
Dr Neil McCarthy, Queen Mary University of London, UK – *invited speaker*

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16:25 Comfort break

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17:00 **Translating Immunology into New Therapies for Inflammatory Bowel Disease**  
Professor Dame Fiona Powrie, University of Oxford, UK – *KEYNOTE SPEAKER*

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18:00 Networking reception and posters

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19:30 Close

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## Thursday, 27 April 2023

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### LUNG SESSION

Chairs: Dr Madhvi Menon, University of Manchester, UK and Dr Naomi Martin, University of Nottingham, UK

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09:00 **Extracellular matrix fragments as key regulators of inflammation and remodelling in chronic lung disease**  
Professor Rob Snelgrove Imperial College London, UK – *invited speaker*

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09:35 **Alterations in B and T cell profiles associate with long COVID**  
Bethany Potts, University of Manchester, UK – *selected short talk*

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09:50 **Pannexin 1 drives efficient epithelial repair after tissue injury**  
Dr Christopher D. Lucas, University of Edinburgh, UK – *selected short talk*

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10:05 Refreshment break and exhibition

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10:45 **Understanding macrophage diversity in the lung**  
Dr Calum Bain, University of Edinburgh, UK – *invited speaker*

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11:20 **Dermal  $\gamma\delta 17'17$  T cells orchestrate innate and adaptive immunity in distal organs during nematode infection**  
Dr Pedro H. Papotto, University of Manchester, UK – *selected short talk*

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11:35 **Ageing Barrier Immunity – dissecting how inflammageing blocks immunity in the elderly**  
Dr Emma Chambers, Queen Mary University of London, UK – *invited speaker*

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12:10 Lunch, posters and exhibiton

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**SKIN SESSION**

Chairs: Dr Jenna Cash, University of Edinburgh, UK and Megan Priestley, University of Manchester, UK

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- 13:00     **Immune surveillance in epithelial tissue and tumours**  
Dr Jessica Strid, Imperial College London, UK – *invited speaker*
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- 13:35     **The skin microbiome in inflammation and in immunodeficiency**  
Dr Heidi Kong, NIH, USA – *invited speaker*
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- 14:10     **Integrated spatial and single cell transcriptomic analyses reveal a critical role for Vg6 gd T cells in the control of skin inflammation during infection**  
Dr Matthew C. Sinton, University of Glasgow, UK – *selected short talk*
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- 14:25     **A specialised keratinocyte niche permits differentiation of monocytes into Langerhans cells despite ongoing inflammation**  
Dr Anna Appios, University College London, UK – *selected short talk*
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- 14:40     **Delineating mechanisms of immune tailoring at the oral barrier**  
Dr Jo Konkel, University of Manchester, UK – *invited speaker*
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- 15:15     Refreshment break and exhibition
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- 15:40     **Decoding the developing human immune system**  
Professor Muzlifah Haniffa, Wellcome Sanger Institute, UK – **KEYNOTE SPEAKER**
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- 16:25     Closing comments and prize-giving  
Dr Emily Gwyer Findlay, University of Southampton, UK
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- 16:40     Close
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## Lightning talks and poster presentations

- P.01 **Aberrant B cell responses in chronic obstructive pulmonary disease**  
Rinal Sahputra, University of Manchester, UK
- P.02 **Skin Immuno-matrix: The role of the endothelial glycocalyx and heparan sulfate in psoriasis-like skin inflammation**  
Meghan Priestley, University of Manchester, UK
- P.03 **A matrisome-enriched co-expression module associated with the perivascular niche is upregulated in treatment non-responsive inflammatory bowel disease**  
Libby Jennings, University of Oxford, UK

## Poster presentations

- P.04 **CXCL4 drives wide-spread non-receptor mediated immune cell recruitment via interactions with extracellular matrix proteoglycans**  
Amanda J L Ridley, University of Manchester, UK
- P.05 **Investigating Host Susceptibility to Infection**  
Julia Sanchez-Garrido, Imperial College London, UK
- P.06 **Alterations to circulating myeloid cells and bone marrow hematopoiesis following intestinal worm infection**  
Joana C. Oliveira, University of Manchester, UK
- P.07 **Mucosal organoids capture tissue-specific innate lymphoid cell development**  
Joana F. Neves, King's College London, UK
- P.08 **Understanding the role of the endothelial glycocalyx in regulating immune cell recruitment during lung inflammation / infection**  
Iashia Z Mulholland, University of Manchester, UK
- P.09 **A feedback loop between epithelium and Innate Lymphoid Cells controls intestinal TGF- $\beta$ 1 dynamics**  
Diana Coman, King's College London, UK
- P.10 **Maintenance and Metabolism of Intestinal ILC3**  
James I. King, University of Manchester, UK
- P.11 **Investigating how Heligmosomoides polygyrus infection affects gut barrier integrity**  
Olivia J. Ridgewell, University of Glasgow, UK
- P.12 **IL-13 as a modulator of the hyaluronan extracellular matrix in lung**  
Rebecca J Dodd, University of Manchester, UK
- P.13 **Myeloid cell suppressive receptor, CD200R1, promotes IL-17 production by unconventional lymphocytes**  
Saunders A, Lancaster University, UK

- P.14 **Gut lymphoid tissues and group 3 innate lymphoid cells are regulated by a conserved microRNA**  
Luke B. Roberts, University of Manchester, UK
- P.15 **Imaging mass cytometry highlights a novel role for chitinase-like proteins in airway remodelling**  
Hannah E Tompkins, University of Manchester, UK
- P.16 **CD200R1 is required for efficient wound healing in middle-aged mice**  
Joshua Cox, University of Manchester, UK
- P.17 **The immunological links between inflammation in the skin and the respiratory system**  
Lucy Buckingham, University of Manchester, UK
- P.18 **Tissue damage and microbiota modifications provoke intestinal type 2 immunity during *Schistosoma mansoni* infection**  
Alice H. Costain, University of Manchester, UK
- P.19 **Localised intestinal radiotherapy causes systemic immune changes in the lung and thymus**  
Urszula M Cytlak, University of Manchester, UK
- P.20 **Targeting integrin  $\alpha\beta 8$  to promote TGF- $\beta$  activity in IBD**  
Daniel Brice, University of Manchester, UK
- P.21 **Is mitochondria striving to rescue the murine lupus lung?**  
Akhil, Panjab University, Chandigarh, India
- P.22 **Investigating the Effects of Ultraviolet Radiation in Manipulating Skin Microbiome-Host Interactions**  
Hannah J. Serrage, University of Manchester, UK
- P.23 **The role of chemokines in driving normal tissue toxicity in radiotherapy-induced bowel inflammation**  
Nabina Pun, University of Manchester, UK
- P.24 **Ym1 as a Regulator of IL-17**  
Georgia E. Baldwin, University of Manchester, UK
- P.25 **Lung basal cells stimulate the immune system to clear influenza virus then then calm the immune system to repair the damage**  
Patrick Shearer, University of Glasgow, UK
- P.26 **The Role of Lipid Metabolism in an Active T Follicular Helper Cell Response**  
Jack Jones, University of Glasgow, UK
- P.27 **Microplastics induce a pro-thrombotic phenotype and disrupt cellular integrity of respiratory epithelial cells in vitro**  
Naomi Martin, De Montfort University, UK
- P.28 **Allergic Airway Matrix Remodelling Develops Independently of Type 2 Inflammation**  
James E Parkinson, University of Manchester, UK

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