

9th Annual Meeting of the International Cytokine & Interferon Society

17 - 20 October

Cardiff, Wales, United Kingdom HYBRID MEETING



# DAY 1 - SUNDAY 17 OCTOBER 2021

### 13:30 - 15:00

Grand opening of the virtual exhibition, virtual meeting platform and iPosters. Sponsors & Exhibitors Breaking News broadcast through the Virtual Meeting Platform.

# 15:00 - 17:30

**Opening Session** 

- 15:00 Welcome and opening remarks / Simon Jones (University of Cardiff, UK)
- 15:05 President's address and presentation of ICIS Awards / Kate Fitzgerald (University of Massachusetts Medical School, US)
- 15:10 Award Ceremony Presentations & Ceremony ICIS Senior & Mid-Career and Young Investigator Awards

ICIS-Mentorship Award / Howard A. Young (NIH, US)

ICIS-Distinguished Services Award / Nancy C. Reich Marshall (Stony Brook University, US)

ICIS-Honorary Lifetime Membership Award / Carl F. Ware (Sanford Burnham Prebys Medical Discovery Institute, US) Regeneron New Investigator Awards for Excellence in Cytokine & Interferon Research (formerly the Milstein Young Investigator Awards) / TBD

Christina Fleischmann Award to Young Women Investigators / TBD

Sidney & Joan Pestka Graduate and Post-Graduate Awards / TBD

ICIS Amanda Proudfoot Tribute Award for Excellence in Chemokine Biology / TBD

- 15:30 Award Presentation Lecture 1: ICIS Pfizer Award for Excellence in Interferon and Cytokine Research (formerly the Seymour & Vivian Milstein Award from 1988 2020) / Jenny Pan-Yun Ting (University of North Carolina, US)
- 15:55 Award Presentation Lecture 2: ICIS-BioLegend William E. Paul Award for Excellence in Cytokine Research: "An emerging field of cytokine pharmacology" / K. Christopher Garcia (Stanford University, US)
- 16:20 Award Presentation Lecture 3: ICIS-Luminex John R. Kettman Award for Excellence in Interferon & Cytokine Research Mid-Career: "It's all about the cytokines" / *Marion Pepper (University of Washington, US)*
- 16:45 Keynote Lecture: Human immunity one cell at a time / Sarah Teichmann (Wellcome Sanger Institute, UK)

17:30 - 19:30

Welcome reception and visit of the exhibition

All attendees, virtual and live, are encouraged to visit the tabletop exhibits and/or virtual booths.

### 19:30 - 20:30

Sponsored Session A: CSF - JAK inhibitor in pain (organised via the CSF)

### 19:30 - 20:30

Sponsored Session B: The Learned Society of Wales - Considering alter career paths in research

# DAY 2 - MONDAY 18 OCTOBER 2021

08:30 -	10:15
Plenary	1: Mechanisms of cytokine and cytokine receptor systems (Sponsored by an unrestricted educational grant from Lilly)

08:33 Keynote Lecture: Mechanisms of cytokine and cytokine receptor systems / David Artis (Weill Cornell Medicine, USA)

08:58 Initiation and resolution of inflammatory responses / Kate Fitzgerald (University of Massachusetts Medical School, USA)

09:18 Cysteine modification as a strategy to limit inflammation / Luke O'Neill (Trinity College Dublin, IE)

09:38 PTPs in JAK/STAT Signalling and anti-tumour immunity / Tony Tiganis (Monash University, AU)

09:28 Q&A

# 10:15 - 10:45

### Coffee break and visit of the exhibition

### 10:45 - 12:25

Symposium 1: Designer cytokines and cytokine immunothera	<b>Symposium</b>	1: Designer	cvtokines and	cvtokine	immunothera
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- 10:50 Designer cytokines and treatment of metabolic disease / Mark Febbraio (Garvan Institute of Medical Research, AU)
- 11:05 Manipulating cytokine activities in different extracellular micro-environments / Ignacio Moraga Gonzalez (University of Dundee, UK)
- 11:20 Synthetic cytokine signaling / Jürgen Scheller (University of Dusseldorf, DE)
- 11:35 Abstract / TBD
- 11:45 Abstract / TBD
- 11:55 Q&A

# 10:45 - 12:25

# Symposium 2: Tissue homeostasis and barrier immunity

10:50 TBD / Stacey Harbour (University of Alabama, US)

- 11:05 Chemokines and the orchestration of the inflammatory response / Gerard Graham (University of Glasgow, UK)
- 11:20 ILC2 and Th2 cell kinetic regulation of functional helminth type 2 immunity / Padraic Fallon (Trinity College Dublin, IE)
- 11:35 Abstract / TBD
- 11:45 Abstract / TBD
- 11:55 Q&A

# 12:25 - 12:45

Break

# 12:45 - 13:45

Sponsored Session C: The Royal Society of Biology - Visualisation of big data

### 12:45 - 13:45

Sponsored Session D: Korean Association of Immunologists - Cytokines and bystander T cell activation

- 12:45 IL-15-induced bystander T cell activation and immunopathology / *Eui-Cheol Shin (Korea Advanced Institute of Science and Technology, KR)*
- 13:00 IL-1 family and STAT activators for Bystander T cell activation contributing autoimmune diseases / *Je-Min Choi (Hanyang University, KR)*
- 13:15 Extricating human tumor-unique immune alterations from non-malignant tissue inflammation / Martin Prlic (Fred Hutchinson Cancer Research Center, USA)

### 13:45 - 15:15

#### Symposium 3: Cytokines in anti-viral immunity

- 13:50 The role of IL-2 signalling in attenuated virus specific antibody responses in early life / James Harker (Imperial College London, UK)
- 14:05 New insights into the regulation of virus-induced inflammatory cytokine production / *Ian Humphreys (Cardiff University, UK)*
- 14:20 IL-2, inflammation, and Influenza A virus infection / Tara M. Strutt (University of Central Florida, USA)
- 14:35 Abstract / TBD
- 14:45 Abstract / TBD
- 14:55 Q&A

#### 13:45 - 15:15

#### Symposium 4: Epigenetic control of cytokine-mediated outcomes

- 13:50 Mir-221/222 suppress IL-23 driven Th17 inflammation / Yuka Kanno (NIH, USA)
- 14:05 TBD / Holm Uhlig (University of Oxford, UK)
- 14:20 TBD / TBD
- 14:35 Abstract / TBD
- 14:45 Abstract / TBD
- 14:55 Q&A

### 15:15 - 16:45

E-poster networking session 1

### 16:45 - 18:15

Symposium 5: Mechanisms of cytokine release syndromes

- 16:50 Antiviral and inflammatory cytokine crosstalk / Michael Gale Jr. (University of Washington, USA)
- 17:05 Role of PYHIN proteins in cytokine secretion / Andrew Bowie (Trinity College Dublin, IE)
- 17:20 Targeting PANoptosis for the treatment of inflammatory and infectious diseases / *Thirmula-Devi Kanneganti (St Judes, USA)*
- 17:35 Abstract / TBD
- 17:45 Abstract / TBD
- 17:55 Q&A

Symposium 6: Single cell analysis of inflammatory outcomes

16:50 TBD / Clare Bryant (The University of Cambridge, UK)

- 17:05 Single cell RNA-sequencing and spatial analysis of fat-associated lymphoid clusters of the omentum reveals novel facets of the stromal-immune axis within the peritoneal cavity / *Lucy H. Jackson-Jones (Lancaster University, UK)*
- 17:20 Deciphering virus-specific killer T cell trajectories upon infection / Stephen Turner (Monash University, AU)
- 17:35 Abstract / TBD
- 17:45 Abstract / TBD
- 17:55 Q&A

# DAY 3 - TUESDAY 19 OCTOBER 2021

#### 08:30 - 10:00

Symposium 7: Japanese Society of Interferon & Cytokine Research Symposium: Defense against COVID-19, studies from Japan

- 08:35 Sarbecovirus ORF6 proteins hamper the induction of interferon signaling / Kei Sato (Tokyko University, Japan)
- 08:50 Identification, crystallization and epitope determination of public TCR shared and expanded in COVID-19 patients / *Sho Yamasaki (Osaka University, Japan)*
- 09:05 An infectivity-enhancing site on the SARS-CoV-2 spike protein targeted by antibodies / *Hisashi Arase (Osaka University, Japan)*
- 09:20 Abstract / Taisho Yamada
- 09:30 Abstract / TBD
- 09:40 Q&A

### 08:30 - 10:00 Symposium 8: Cytokines in pain and psychoneuroimmunology

- 08:35 Importance of Interleukin-6 and Il-6st/gp130 in neuropathic pain disorders / *Michaela Kress (Medical University Innsbruck, AT)*
- 08:50 The IL-6/IL-6R pathway as a potential treatment target for depression / Golam Khandaker (University of Cambridge, UK)
- 09:05 Neuro-immune interactions in pain where do all the cytokines come from? / *Franziska Denk (King's College London, UK)*
- 09:20 Abstract / TBD
- 09:30 Abstract / TBD
- 09:40 Q&A

# 10:00 - 11:45

E-poster networking session 2

### 11:45 - 12:45

Sponsored Session E: The Royal Society - Building academic-industry partnerships

### 11:45 - 12:45

Sponsored Session F: Targeting cytokines in COVID-19 (Sponsored by an unrestricted educational grant from Humanigen)

11:45 Cytokines in respiratory viral infections / Peter Openshaw (Imperial College London, UK)

12:00 TBD / TBD

12:15 Inhaled Interferon beta - a therapeutic for COVID-19? / Tom Wilkinson (University of Southampton, UK)

### 12:45 - 13:00

Coffee break and visit of the exhibition

### 13:00 - 14:45

Plenary 2: Understanding complexities of immune mediated diseases (Sponsored by an unrestricted educational grant from Pfizer)

- 13:03 Keynote Lecture: Fibroblasts as cytokine factories / Chris Buckley (Universities of Birmingham and Oxford, UK)
- 13:28 A little knowledge: What have patients with monogenic diseases taught us? / Helen Lachmann (UK National Amyloidosis Centre, UK)
- 13:48 Specific blockade of IL-6 trans-signaling in patients with inflammatory bowel disease / *Stefan Rose-John (University of Kiel, DE)*
- 14:08 The role of interferons in autoinflammatory diseases / Raphaela T. Goldbach-Mansky (NIH, USA)

14:28 Q&A

### 14:45 - 15:15 Coffee break and visit of the exhibition

# 15:15 - 16:45 Symposium 9: Determinants of disease heterogeneity

- 15:20 Differential cytokine targeting and precision medicine / Douglas Veale (University of Dublin, IE)
- 15:35 Investigating control of ectopic lymphoid-like structure development through gp130-signalling cytokines / Gareth Jones (University of Bristol, UK)
- 15:50 TBD / Partha Biswas (University of Pittsburgh, USA)
- 16:05 Abstract / TBD
- 16:15 Abstract / TBD
- 16:25 Q&A

#### 15:15 - 16:45

### Symposium 10: Cytokines in allergic reactions (Sponsored by an unrestricted educational grant from Regeneron)

- 15:20 TBD / Jamie Orengo (Regeneron, USA)
- 15:35 Dendritic cells and macrophages: central players in orchestration of fungal allergic airway inflammation / Andrew MacDonald (University of Manchester, UK)
- 15:50 Cytokine regulation of immunity in the allergic lung / Clare M. Lloyd (Imperial College London, UK)
- 16:05 Abstract / TBD
- 16:15 Abstract / TBD
- 16:25 Q&A

16:45 - 18:15 Symposium 11: Cancer and immunology, happy neighbours?				
16:50 T	BD / Brendan Jenkins (Hudson Institute of Medical Research, AU)			
17:05 T	BD / Hua Yu (City of Hope, USA)			
17:20 T	BD / Ethel Cesarman (Weill Cornell Medicine, USA)			
17:35 A	Abstract / TBD			
17:45 A	Abstract / TBD			
17:55 G	A&A			
16:45 - 18:15 Philip I. Marcus Symposium 12: Mechanisms of interferonopathies (Sponsored by Journal of Interferon & Cytokine Research / Mary Ann Liebert, Inc. Publishers)				
16:50 A	Anti-cytokine autoantibodies / Anne Puel (Inserm, FR)			
17:05 <b>P</b>	Philip I. Marcus Memorial Lecture: Human type I interferonopathies / Yanick Crow (The University of Edinburgh, UK)			
	nborn errors of type I IFN immunity in patients with life-threatening COVID-19 / <i>Qian Zhang (The Rockefeller University, USA)</i>			
17:35 A	Abstract / TBD			
17:45 A	Abstract / TBD			
17:55 G	A&A			
10.20				

### 19:30

**Networking Dinner Event -** Luke O'Neill's band, the Metabollix with special guests, event (live streamed from the historic Coal Exchange Hotel on Cardiff Bay

# DAY 4 - WEDNESDAY 20 OCTOBER 2021

# 08:30 - 10:00

Symposium 13: Stromal tissue as orchestrators of disease outcome

- 08:35 Molecular checkpoints controlling the transition from autoimmunity to inflammation / Gerhard Krönke (University of Erlangen-Nuremberg, DE)
- 08:50 TBD / TBD
- 09:05 Phenotype determination in fibrosis is under the control of a TGFb1/c-Rel/PFKFB3 pathway / *Derek Mann (Newcastle, UK)*
- 09:20 Abstract / TBD
- 09:30 Abstract / TBD
- 09:40 Q&A

### 08:30 - 10:00

#### Symposium 14: Combinatorial drug targeting in immune disease

08:35 Ombinatorial drug targeting in immune disease / lain McInnes (University of Glasgow, UK)

- 08:50 TBD / TBD
- 09:05 TBD / Dane Wittrup (MIT, US)
- 09:20 Abstract / TBD
- 09:30 Abstract / TBD
- 09:40 Q&A

### 10:00 - 10:15

Coffee break and visit of the exhibition

# 10:15 - 12:00

Plenary 3: Systems approaches in precision medicine

- 10:18 Keynote Lecture: Translating immunology into new therapies for Inflammatory Bowel Disease / *Fiona Powrie (Kennedy Institute, UK)*
- 10:43 Tissue-specific adaptations for human immunity / Donna Farber (Columbia University, USA)
- 11:03 Cytokines in induction and regulation of tissue inflammation / Vijay Kuchroo (Harvard Medical School, USA)
- 11:23 TBD / Aaron Ring (Yale University, USA)
- 11:43 Q&A

# 12:00 - 12:15

Coffee break and visit of the exhibition

### 12:15 - 13:45

Symposium 15: Disease stratification and biological therapies

- 12:20 A new pathway in inflammation and pain / John Hamilton (University of Melbourne, AU)
- 12:35 Conditionally active split cytokines as targeted immunotherapeutics / Jamie Spangler (Johns Hopkins University, USA)
- 12:50 TBD / Costantino Pitzalis (Queen Mary University of London, UK)
- 13:05 TBD / Francesca Barone (University of Birmingham, UK)
- 13:20 Q&A

### 12:15 - 13:45

### Symposium 16: Determinants of cell fate

- 12:20 Adaptive immunity and immune memory to SARS-CoV2 and COVID-19 / Shane Crotty (La Jolla Institute of Allergy and Immunology, USA)
- 12:35 IL-1 family members and resistance to infection / Chris Hunter (University of Pennsylvania, USA)
- 12:50 TBD / Laurie Glimcher (Harvard Medical School, USA)
- 13:05 Jakinibs and beyond / John O'Shea (NIH, USA)
- 13:20 Q&A

13:45 -	14:00
Closing	Session

13:45 Closing remarks

13:55 Invitation to Cytokines 2022