



DAY 1 – SUNDAY 17 OCTOBER 2021

13:30 - 15:00

Grand opening of the virtual exhibition

Exhibitor Breaking News Sessions on the Virtual Meeting Platform

15:00 - 17:30

Opening Session (Sponsored by an unrestricted educational grant from Bristol Myers Squibb)

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)
 - *Rebecca C. Coll (Queen's University Belfast, UK)*
 - *Keke Celeste Fairfax (University of Utah, US)*
 - *Fiachra Humphries (UMASS Medical School, US)*
 - *Shruti Naik (NYU School of Medicine, US)*
 - *Jakob von Moltke (University of Washington, US)*
- Christina Fleischmann Award to Young Women Investigators / *Snehlata Kumari (The University of Queensland Diamantina Institute, AU)*
- Sidney & Joan Pestka Graduate Award / *Brigette Duckworth (Walter and Eliza Hall Institute of Medical Research, AU)*
- Sidney & Joan Pestka Post-Graduate Award / *Ai Ing Lim (National Institute of Allergy and Infectious Diseases, US)*
- ICIS Amanda Proudfoot Tribute Award for Excellence in Chemokine Biology / *Douglas Philip Dyer (Wellcome Centre for Cell-Matrix Research, University of Manchester, UK)*

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): "The all-encompassing importance of innate immune receptors" / *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 & Networking: Visit the Exhibit Hall & Poster Hall

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: Luminex

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 immunotherapy

- 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 O01 - Engineering a Cytokine/Antibody Fusion Protein for Targeted Expansion of Regulatory T Cells / *Derek VanDyke (Johns Hopkins University, US)*

11:45 O02 - Cytokine antagonists from a helminth parasite / *Henry J McSorley (University of Dundee, UK)*

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 O03 - IL-36 cytokines alert epithelial tissue to destructive infection by sensing pathogen-derived proteases / *Tom Macleod (University of Leeds, UK)*

11:45 O04 - Young Investigator Awardee - Tuft cell effector molecules regulating anti-helminth immunity / *Jakob Von Moltke (University of Washington, US)*

11:55 Q&A

12:25 - 12:45

Break

12:45 - 13:45

Sponsored Session C: 10X Genomics

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 O05 - ISG15-dependent Activation of the RNA Sensor MDA5 and its Antagonism by SARS-CoV-2 / *Guanqun Liu (Cleveland Clinic Florida Research and Innovation Center, US)*

14:45 O06 - Interferon-induced transmembrane protein 3 (IFITM3) limits lethality of SARS-CoV-2 in mice / *Jacob Yount (The Ohio State University, US)*

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 / *Simon Jones (University of Cardiff, UK)*

14:35 O07 - Young Investigator Award - Effector and Stem-Like Memory Cell Fates are Imprinted in Distinct Lymph Node Niches Directed by CXCR3 Ligands / *Brigette C Duckworth (Walter and Eliza Hall Institute of Medical Research, AU)*

14:45 O08 - Young Investigator Award - Z-DNA-binding protein-1 regulates necroptosis-mediated skin inflammation / *Snehlata Kumari (The University of Queensland Diamantina Institute, AU)*

14:55 Q&A

15:15 - 16:45

E-poster networking session 1

01. Tissue homeostatis and mucosal immunity

P001 - IL-1R1-Mediated GM-CSF Production by Lung Structural Cells is Required for Murine Survival and Fungal Killing During Pulmonary *Aspergillus fumigatus* Infection / *Kathleen Mills (Weill Cornell Medicine, US)*

P002 - ISG-Tregs in Viral Infection / *Louisa E Sjaastad (University of Minnesota, US)*

P003 - Dysregulation of IL-17 and Calprotectin in the female reproductive tract affects pregnancy outcome following assisted reproductive therapy. / *Federica Giangrazi (Trinity College Dublin, IE)*

P004 - Type I interferons shape the tissue macrophage niche with age. / *Shruti Sharma (Tufts University, US)*

P005 - Retinoic acid receptor alpha regulates the phagocytic ability of gut macrophages through Tim4 in the small intestine / *Chaitanya Dende (University of Texas Southwestern Medical Center, US)*

P006 - Type I, II, and III Interferon Responses of Human Intestinal Organoids in Health and Disease / *David A Constant (Oregon Health & Science University, US)*

P007 - Dynamic properties of endometrial macrophages regulate tissue homeostasis in the uterus / *Elizabeth Mann (University of Manchester, UK)*

- P008 - From antiviral to antiproliferative: the pathogenic potential of type I and III interferons during lung repair / *Jack Major (Francis Crick Institute, UK)*
- P009 - Chemokines Act as Phosphatidylserine-bound Find-me Signals in Apoptotic Cell Clearance / *Sergio M Pontejo (National Institute of Allergy and Infectious Diseases, US)*
- P010 - Alveolar macrophages strictly rely on GM-CSF from alveolar epithelial type 2 cells before and after birth. / *Julia Gschwend (University of Zurich, CH)*
- P011 - Type 2 innate immunity regulates hair follicle homeostasis to control Demodex pathosymbionts / *Roberto Ricardo-Gonzalez (University of California San Francisco, US)*
- P012 - Chronic parasite infection reshapes systemic viral infection by altering tissue resident macrophages / *Christina Zarek (UT Southwestern Medical Center, US)*
- P013 - Association of cytokine levels, monocyte subsets and short-term survival of septic shock patients. / *Jan Frič (FNUSA-ICRC, CZ)*
- P014 - Inflammatory response of the peripheral neuroendocrine system following downhill running. / *Andre Luis Araujo Minari (UNESP, BR)*
- P015 - Sertoli Cells – Future In Cell Therapy? Modulation Of Cytokine Environment Towards Anti-Inflammatory In Vitro And In Vivo / *Bianka Porubská (Faculty of Science, Charles University, US)*
- P016 - Bile acid-sensitive tuft cells regulate biliary neutrophil influx / *Claire E O'leary (UCSF, US)*
- P017 - Elevated Cytokine Signalling in Monocyte-Derived Alveolar Macrophages After Influenza Challenge / *Justina Kulikauskaitė (Francis Crick Institute, UK)*
- P018 - Group 3 innate lymphoid cells produce HB-EGF to protect the intestine from TNF / *Lei Zhou (Weill Cornell Medicine, US)*
- P019 - Identification of microbial factors that govern induction of microbiome-dependent IL-17 at the ocular surface. / *Anthony St. Leger (University of Pittsburgh, US)*
- P020 - IL-17-producing CD4 tissue-resident memory T cells mediate protective immunity against Bordetella pertussis infection in the nasal mucosae / *Lucy Curham (Trinity College Dublin, IE)*
- P021 - Staphylococcus aureus-induced immunosuppression during nasal colonisation enables bacterial persistence / *Alanna Kelly (Trinity College Dublin, IE)*
- P022 - Microbial products promote ubiquitination and accumulation of the innate immune adaptor STING to exacerbate colitis / *Liraz Galia (UMASS medical school, US)*

- P023 - Type I and III interferon signalling restricts Shigella infection of epithelial cells / *Noemie Alphonse (King's College London, UK)*
- P024 - Inhibition of Salmonella enterica invasion and intracellular replication by interferon-stimulated genes. / *Ruth Dickenson (King's College London, UK)*
- P025 - Enhanced IL-36R signaling promotes barrier impairment and inflammation in skin and intestine / *Zaruhi Hovhannisyan (Regeneron Pharmaceuticals, Inc., US)*
- P026 - Microbiota Regulation of Intestinal Eosinophils / *Y. Grace Cao (Harvard School of Public Health, US)*
- P027 - Reg3 induction subverts intestinal healing in Antibiotic treatments and Crohn's disease by *Debaryomyces hansenii* / *Rahul Gupta (-, US)*
- P028 - Divergent role of interleukin-20 family of cytokines in regulation of intestinal epithelial inflammation / *M Arifur Rahman (The University of Queensland, AU)*
- P029 - Basophils support Th2 cell responses during gastrointestinal helminth infection / *Lauren Webb (University of Washington, US)*
- P030 - The role of Interleukin-1beta in colon inflammation / *Elena Voronov (Ben Gurionh University of the Negev, IL)*
- P031 - Prob-eye-otics: Cytokine Producing Therapeutic Ocular Commensals / *Jackie Lynn Shane (University of Pittsburgh, US)*
- P032 - Estrogen-induced Type I interferon, IFN-epsilon, is exploited by *Neisseria gonorrhoeae* to evade innate immune killing / *Evelyn Kurt-Jones (University of Massachusetts Medical School, US)*
- P033 - Exosome mediated cytokine secretion and signaling in respiratory disease / *Jennifer Alexander-Brett (Washington University, US)*
- P034 - IL-36 cytokines enhance endothelial cell barrier integrity and prevent microvascular permeability / *Erin Fahey (Trinity College Dublin, IE)*
- P035 - Differential expression of the cytokine receptors IL-1R1 and IL-6R in human vocal fold fibroblasts from Reinke's edema patients, and differential regulation of IL-1R1 upon cytokine treatment / *Magdalena Grill (Medical University of Graz, AT)*
- P036 - Interleukin-11-producing fibroblasts promotes the development of colorectal cancer / *Takashi Nishina (Toho University, JP)*

[02. Cytokines in anti-viral immunity](#)

- P037 - Regulation of Viral Nucleic Acid Sensing by LUBAC / *Brian Ferguson (University of Cambridge, UK)*

- P038 - T-bet acts during chronic cytomegalovirus infection to promote immune-suppressive T cells that exhibit novel immune-regulatory functionality / *Mathew Clement (Cardiff University, UK)*
- P039 - Murine astrovirus tropism for goblet cells and enterocytes facilitates an IFN- λ response in vivo and in enteroid cultures / *Harshad Ingle (Washington University School of Medicine, US)*
- P040 - Single Cell RNA Sequencing of Zika Virus-Infected Neural Tissues Reveals an Astrocyte-Driven Innate Immune Response Governed by Interferon Beta / *Caleb Stokes (University of Washington, US)*
- P041 - Two cGAS-like receptors induce Sting-dependent antiviral immunity in *Drosophila melanogaster* / *Hans Henrik Gad (Aarhus University, DK)*
- P042 - Cellular nucleic acid-binding protein is essential for type I interferon-mediated immunity to RNA virus infection / *Yongzhi Chen (University of Massachusetts Medical School, US)*
- P043 - dsRNA recognition induces IL-1 and IL-18 secretion and cell death and GSDME cleavage in respiratory epithelial cells / *Coralie Guy (Trinity Biomedical Sciences Institute, IE)*
- P044 - Signaling from the RNA Sensor RIG-I is Regulated by Ufm1ylation / *Daltry Snider (Duke University, US)*
- P045 - Tumor Progression Locus 2 (Tpl2) restricts excessive monocyte and neutrophil influx during late stage Influenza infection / *Krishna Latha (University of Georgia, US)*
- P046 - The RNA Helicase DHX16 Recognizes Specific Viral RNA to Trigger RIG-I-dependent Innate Antiviral Immunity / *Adam Hage (The University of Texas Medical Branch at Galveston, US)*
- P047 - The role of ncBAF complex members in IFN-stimulated antiviral activity / *Nina Mair (University of Zurich, CH)*
- P048 - Cytokine-driven Activation of Innate-like T Cell Populations by Adenovirus Vaccine Vectors / *Nicholas M Provine (University of Oxford, UK)*
- P049 - A subset of CD4⁺ effector memory T cells suppress T cell-mediated immunity to pulmonary viral infection via integrin $\alpha\beta 8$ -dependent activation of latent TGF β / *Mark Travis (University of Manchester, UK)*
- P050 - Nuclear soluble cGAS senses DNA virus infection / *Shitao Li (Tulane University, US)*
- P051 - Evaluation of Ly6e in Distinct Cellular Compartments for Resistance to Coronavirus Infection / *Katrina B Mar (UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER, US)*
- P052 - Conserved induction of distinct antiviral signalling kinetics by primate interferon lambda 4 proteins / *Connor Gavin George Bamford (Queen's University Belfast, UK)*
- P053 - Kinetic Characterization of the RIG-I Signal Transduction Pathway / *Sandy Stephanie Burkart (DKFZ Heidelberg, DE)*

- P054 - Loss of Adar1 Increases T Cell Migration and Prolongs Survival in Ovarian Cancer / *Stephanie Gomez (The George Washington University, US)*
- P055 - Role of Type I IFNs in the Development of an Immunoregulative Myeloid Cell Population Following Respiratory Viral Infection / *Kimberly Oliva (University of GA, US)*
- P056 - Systemic IL-15, IFN-gamma and IP-10/CXCL10 Signature Associated with Effective Immune Response in BNT162b2 mRNA Vaccine Recipients / *Cristina Bergamaschi (National Cancer Institute at Frederick, US)*
- P057 - The Impact of Type I Interferon Signaling on the Plasmablast Response to Viral Pathogens / *Tara L Steffen (Saint Louis University, US)*
- P058 - The Role of CD8+ Cell-Associated Cytokines in Natural Immunity of Baboons against Immunodeficiency Virus Infection / *Amanda Rae Mannino (UT Health San Antonio, US)*
- P059 - Investigation of the mechanisms behind anti-viral effect of Nrf2 activation with 4-octyl-itaconate (4OI) / *Angela Anna Paula Victoria Herengt (Aarhus University, DK)*
- P060 - Defining the maternal decidual response to acute and persistent Zika virus infection during first-trimester pregnancy / *Julie Eggenberger (University of Washington, US)*
- P061 - A TLR7 antagonist controls interferon-dependent and -independent immunopathology in severe influenza / *Katja Finsterbusch (The Francis Crick Institute, UK)*
- P062 - RNA structure modulates sensing of Alphavirus RNA by the intracellular innate immune system / *Sarah Hickson (University of Washington, US)*
- P063 - CRISPR Screening Reveals a Limited Set of Genes with Antiviral Activity Against Venezuelan Equine Encephalitis Virus / *Matthew B McDougal (UT Southwestern Medical Center, US)*
- P064 - Genetic variation in the RSV fusion protein controls strain-dependent increases in pro-inflammatory cytokine production driving the development of a pathogenic Th17 response and severe disease / *Kody Waldstein (University of Iowa, US)*
- P065 - Influenza virus replication in cardiomyocytes directly drives cardiac dysfunction and fibrosis / *Jacob Yount (The Ohio State University, US)*
- P066 - Influenza A virus induces LDHA expression and Lactate formation to inhibit type I IFN and promote replication in primary human airway epithelium / *Jacob Thyrtsted (Aarhus University, DK)*
- P067 - The glutamate-cystine antiporter SLC7A11 plays a role in anti-viral immunity / *Julia Blay Cadanet (Aarhus University, DK)*
- P068 - Characterization of chemically dissimilar agonists of the STING protein as vaccine adjuvants / *Dylan T Boehm (Oregon Health and Science University, US)*

- P069 - Type I IFN and plasmacytoid DC at the crossroad of antiviral and humoral response directed against tick-borne encephalitis virus / *Daniela Ricci (Istituto Superiore di Sanità, IT)*
- P070 - Cooperative Effects of RIG-I-Like Receptor Signaling and IRF1 on DNA Damage-Induced Cell Death / *David Yves Zander (German Cancer Research Center (DKFZ), DE)*
- P071 - Human STING Knockin Mice: A Model for Characterization of Clinically Relevant STING Ligands / *Victor DeFilippis (Oregon Health and Science University, US)*
- P072 - Establishing NSP15 as an immune regulator across Coronavirus genera / *Neel Salukhe (University of Washington, US)*
- P073 - Transcriptional reprogramming by viral infection defines unique Interferon-dependent roles for infected and bystander inflammatory monocytes in orchestrating the innate immune response / *Carolina R Melo-Silva (Thomas Jefferson University, US)*
- P074 - The Elongator complex regulates TLR4 and type I interferon gene induction responses / *Jamie Murphy (Trinity College Dublin, IE)*
- P075 - Identifying enhancers of innate immune signaling as potential antivirals active against emerging viruses / *Ghizlane Maarifi (CNRS, FR)*
- P076 - New Mechanism to Balance the Production of Type I Interferon and Proinflammatory Cytokines in Response to Viral Infections / *Hector Huerga Encabo (The Francis Crick Institute, UK)*
- P077 - Differential Effects of Conventional Dendritic Cell Subsets on enhancing T-independent B cell Response / *Ya-Ru Yu (National Taiwan University College of Medicine Graduate Institute of Immunology, TW)*
- P078 - The Effect of Probiotic Bifidobacterium lactis BI-04 on Host Antiviral Responses in vitro / *Sanna M Mäkelä (IFF, FI)*
- P079 - Inhibition of Sting Signalling with Flavonoid Compounds / *Tomalika Rahmat Ullah (Hudson Institute of Medical Research, AU)*
- P080 - Blocking Neuropilin-1: forestalling B.1.617 pathogenesis? / *Rahul Gupta (-, US)*
- P081 - Immune Modulation of HCMV Infected moDC by Birch Pollen Extract Treatment / *Zeinab Fneish (Twincore, DE)*
- P082 - Proximity labelling to uncover novel factors in antiviral type I interferon signalling / *Samira Nadine Schiefer (University of Zurich, CH)*
- P083 - Inhibition of early stage HCMV infection by designing small molecule inhibitors targeting the HCMV UL35-UL82 complex / *Ramya Ramani (Helmholtz Centre for Infection Research, DE)*

P084 - Cytokine response to rubella virus (RV) in 10 healthy university aged volunteers with RV-IgG titers >10 IU/mL in Alberta, Canada. / *Amy Boucher (University of Alberta, CA)*

P085 - The NRF2 driven gene responsible for decreasing the type I interferon response / *Jacob Storgaard (Aarhus university, DK)*

03. Systems approaches in cytokine control

P086 - Unravelling the InterferonScape: Insight into STAT and IRF Regulated IFN Stimulated Genes, Pathways and Networks / *Shamith Samarajiwa (University of Cambridge, UK)*

P087 - Abnormal cytokine levels in obese mice induce dysfunctional virus-specific immune responses / *Elizabeth Geerling (Saint Louis University, US)*

P088 - Regulation of Inflammatory NF-kB Target Gene Activation by Jak-STAT Signaling / *Bikash Mishra (Weill Cornell Medicine, US)*

P089 - The chromatin reader SP140 regulates intestinal innate immune responses to microbes / *Isabella Fraschilla (Massachusetts General Hospital, US)*

P090 - Next Generation Sequencing Methods Open New Insights into Disease Heterogeneity in Synovitis / *Stuart Taliesin Owain Hughes (Cardiff University, UK)*

P091 - Higher-order chromatin architecture in control of cytokine production / *Han-Yu Shih (NIAMS, NIH, US)*

P092 - A knowledge-driven approach towards a deeper understanding of HBV vaccination non-responsiveness / *Annett Ziegler (Twincore GmbH, DE)*

P093 - Smoking affects innate and adaptive induced cytokine responses with persistent effects on adaptive immunity / *Darragh Duffy (Institut Pasteur, FR)*

P094 - Machine Learning and Statistical Methods for Classification of Risk and Gender specific Pattern Identification of Plasma Cytokines for Coronary Artery Disease / *Seema Singh Saharan (UC Berkeley Extension, US)*

04. Cytokine release syndromes & interferonopathies

P095 - CALHM6: A novel synaptic protein important for the innate instruction of natural killer cell activation during infection / *Sara Danielli (Kennedy Institute of rheumatology, UK)*

P096 - New Mechanisms of Gasdermin D Pore Formation And Interleukin-1 Release / *Shiyu Xia (Harvard Medical School and Boston Children's Hospital, US)*

P097 - Determining Long Noncoding RNA GAPLINC's role in inflammation and Modulating Endotoxic Shock / *Diana Escalona (UC Santa Cruz, US)*

P098 - The superantigens SpeC and TSST-1 specifically activate TRBV12-3/12-4+ memory T cells / *James E McLaren (Cardiff University, UK)*

P099 - Deciphering a role for IL-6-trans-signalling in a syngeneic mouse model of cytokine release syndrome induced by CD19-CAR T cells / *Lise Nouveau (Light Chain Bioscience - Novimmune SA, CH)*

P100 - Hypoxia, expression and correlation of HIF- α and cytokine MIF and their probable role in mechanism of Cytokine Release Syndrome in virus infection (Covid19). / *Paraskevi Rapti (Endocrinologist, GR)*

P101 - Endothelial cells mediate the pathogenesis of cerebral interferonopathies / *Barney Viengkhou (The University of Sydney, AU)*

P102 - Widespread protein phosphorylation is a novel mechanism for type I interferons to mediate cellular responses / *Markus Johannes Hofer (University of Sydney, AU)*

P103 - Partial recessive USP18 deficiency underlies infection and inflammation / *Marta Martin-Fernandez (Icahn School of Medicine At Mount Sinai, US)*

P104 - Cancer cells produce interferon- β for survival through the cGAS-STING pathway / *Hyeon Joo Cheon (Cleveland Clinic, US)*

P105 - Endogenous RNA control of PKR / *Hachung Chung (Columbia University, US)*

05. Determinants of cell fate

P106 - Follicular helper T cells are critically regulated by ferroptosis / *Di Yu (The University of Queensland, AU)*

P107 - Temporal dissection of the T cell-intrinsic factors that maintain T follicular helper cell identity and germinal centers / *Dirk Baumjohann (University Hospital Bonn, DE)*

P108 - Lipid nanoparticles are key immunostimulatory components of messenger RNA vaccines eliciting potent germinal center responses via induction of IL-6 / *Michela Locci (University of Pennsylvania, US)*

P109 - Metabolic control of inflammatory cell death / *Charles Lee Evavold (Boston Children's Hospital, US)*

P110 - The fate of Th17 cells in periodontitis / *Flora Ann McClure (University of Manchester, UK)*

P111 - SAM68/KHDRBS1 is essential for STING-mediated apoptotic cell death in macrophages, but not the canonical type I interferon response / *David Olagnier (Aarhus University, DK)*

P112 - Genetic programming M2-polarization locked repair macrophages / *Shyam Sushama Jose (University of Edinburgh, UK)*

P113 - Priming is a Fundamental Mechanism of Inflammasome Regulation in Myeloid Cells / *Chloe M. McKee (Wellcome-Wolfson Institute for Experimental Medicine, UK)*

06. Targeted cytokine therapies

P114 - AXL inhibition enhances Type 1 interferon (IFN) response and potentiates chemo-immunotherapy / *Sushil Dhakal (University of Bergen, NO)*

P115 - Histamine analogue Clobenpropit inhibits inflammatory cytokine production by monocytes from arthritic patients and controls disease progression in collagen-induced arthritis mouse model / *Nassima Bekaddour (Université de Paris, FR)*

P116 - FANCC in control of LPS induced septic shock and bone marrow failure / *Swarna Beesetti (St Jude Childrens Research Hospital, US)*

P117 - Antiviral Potential of the Antimicrobial Drug Atovaquone against SARS-CoV-2 and Emerging Variants of Concern / *Madalina Elena Carter-Timofté (Aarhus University, DK)*

P118 - Distinct Interferon Signature and Novel Biomarkers of Secondary Progressive Multiple Sclerosis / *Anthony T Reder (Univ of Chicago, US)*

P119 - IRF5 Inhibition Potentially Alleviates Osteoarthritis (OA) Severity / *Su Song (Feinstein Institute for Medical Research, US)*

P120 - Optimizing biological therapy for bone and cartilage repair / *Dan Li (The Feinstein Institute for Medical Research, US)*

P121 - Prolonged IFN signatures by Plegridy compared to Avonex in Multiple Sclerosis (MS) / *Xuan Feng (Univ of Chicago, US)*

P122 - Reporter nanoplatfrom for real-time monitoring of inflammasome activity / *Dipika Nandi (University of Massachusetts, Amherst, US)*

P123 - Assessment of Drug-induced Mast Cell Mediated Injection Site Reactions with an Immunocompetent Human Skin Model / *Shiven Kapur (Eli Lilly and Company, US)*

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, US)*

17:35 O09 - Innate immunomodulation by virally-encoded cytokine response modifiers as a strategy to mitigate virus-induced cytokine release syndrome / *E. Taylor Stone (Saint Louis University, US)*

17:45 O10 - hMDA5 R822Q transgenic mice with systemic inflammation and lethal cytokine response / *Francine Lianne Castañeda Emralino (Kyoto University, JP)*

17:55 Q&A

16:45 - 18:15

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 O11 - Genotype and Th2 cytokines control pleural cavity myeloid cell differentiation during helminth infection / *Conor M Finlay (Trinity College Dublin, IE)*

17:45 O12 - Multiomics analysis identifies an autoimmune profile and superantigen-like T cell expansion in multisystem inflammatory syndrome in children / *Rebecca A Porritt (Cedars Sinai Medical Center, US)*

17:55 Q&A

18:30 - 19:30

Sponsored Session E: BioLegend Industry Symposium

18:30 Differential interferon- α subtype immune signatures suppress SARS-CoV-2 infection / *Kathrin Sutter (University Hospital Essen, DE)*

18:30 - 19:30

Sponsored Session F: TBD

DAY 3 – TUESDAY 19 OCTOBER 2021

08:30 - 10:00

Symposium 7: Japanese Society of Interferon & Cytokine Research Symposium: Type I interferon and disease pathogenesis

08:35 The histidine transporter SLC15A4 coordinates mTOR-dependent inflammatory responses and pathogenic antibody production / *TBD*

08:50 IRF5 as a target of treatment for systemic lupus erythematosus / *Tomohiko Tamura (Yokohama City University Graduate School of Medicine, Japan)*

09:05 C9orf72 in myeloid cells suppresses STING-induced inflammation / *TBD*

09:20 O13 - Young Investigator Award - A diamidobenzimidazole STING agonist protects against SARS-CoV-2 infection / *Fiachra Humphries (Umass Medical School, US)*

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 O14 - Type I interferon propels memory impairment associated with Alzheimer's disease / *Wei Cao (Baylor College of Medicine, US)*

09:30 O15 - IL-23 in arthritic and inflammatory pain development / *Kevin Ming-Chin Lee (The University of Melbourne, AU)*

09:40 Q&A

10:00 - 11:45

E-poster networking session 2

07. Cytokines in cellular metabolism and immune homeostasis

P124 - Metformin inhibition of ATP-dependent mtDNA synthesis abrogates NLRP3 inflammasome activation and pulmonary inflammation / *Hongxu Xian (University of California San Diego, US)*

P125 - Interferon-gamma (IFN γ) Activates Robust Cell-Intrinsic Defense Against Lysosome-Adapted Pathogens: Lessons from *Coxiella burnetii* / *Sandhya Ganesan (Yale University School of Medicine, US)*

P126 - Citraconate inhibits ACOD1 (IRG1) catalysis, reduces interferon responses and oxidative stress, and modulates inflammation and cell metabolism / *Fangfang Chen (TWINCORE Centre for Experimental and Clinical Infection Research, DE)*

P127 - IFN-I mediated metabolic reprogramming of hepatocytes shapes pathophysiology of viral hepatitis / *Alexander Lercher (The Rockefeller University, US)*

P128 - Regulation of Type I Interferon Responses in Human Phagocytes by the Long Non-coding RNA LUCAT1 / *Tim Vierbuchen (UMass Medical School, US)*

P129 - 14-3-3zeta- A Novel Regulator of IL-17A Signaling / *Ritu Chakravarti (University of Toledo, US)*

P130 - Interferon Gamma Regulates NAD⁺ Metabolism / *Katelyn Mccann (NIH/NIAID, US)*

P131 - Engineering Synthetic Interferon Receptors to Understand How Type I and III Interferon Signaling Differences are Encoded / *Emily V Mesev (Princeton University, US)*

- P132 - An IFN β -specific tolerogenic signal controls lung mucosal tolerance / *Lei Jin (University of Florida, US)*
- P133 - TBK1 and IKK ϵ Act Like an OFF Switch to Limit NLRP3 Inflammasome Pathway Activation / *Fabian Alexander Fischer (Kennedy Institute of Rheumatology, University of Oxford, UK)*
- P134 - TCF-4 negatively regulates IL-17C in human keratinocytes and in a mouse model of psoriasis / *Nicole L. Ward (Case Western Reserve University, US)*
- P135 - Novel mechanisms of TLR/IL-1R-dependent metabolic pathways in obesity / *Xiaoxia Li (Cleveland Clinic, US)*
- P136 - I κ B- ζ dependent fibroblastic reticular cell expansion shapes lymph node angiogenesis and immune response / *Dongwen Wu (University of Pittsburgh, US)*
- P137 - Regulation of IL-36 receptor driven skin inflammation in psoriasis / *Yasmina Esther Hernandez-Santana (Trinity College Dublin, IE)*
- P138 - TNF- α induces glycolytic shift in Fibroblast like Synoviocytes / *Nadine Biesemann (Sanofi, DE)*
- P139 - Heparan sulfate modulates the signal strength of IL-21 to regulate germinal centre selection / *Zhian Chen (University of Queensland Diamantina Institute, AU)*
- P140 - Interleukin-32: Towards the structural and molecular characterization of a multifunctional cytokine. / *Delaney Amati Smith (Ghent University, BE)*
- P141 - Unphosphorylated STAT1 impacts cellular compartmentalization of phospho-STAT1 upon cytokine stimulation / *Priyanka Rajeev Menon (Georg-August-Universität Göttingen, DE)*
- P142 - Crucial role of IL-6 in thrombus resolution in DVT model mouse via induction of proteolytic enzymes / *Mizuho Nosaka (Wakayama Medical University, JP)*
- P143 - The role of cytokines in thermogenic adaptation / *Daniel Vašek (Faculty of Science, Charles University, CZ)*
- P144 - Interleukin-2 Signaling Is Controlled by Adam10- And Adam17-Mediated Cleavage of The Interleukin-2 Receptor Alpha / *Sophia Kirschke (Otto-von-Guericke-University Magdeburg, DE)*
- P145 - Impaired IL-6 production upon LPS stimulation in Fatty Acid Oxidation Disorders / *Krishna Sundar Twayana (Aarhus University, DK)*
- P146 - Structure and mechanism of cytokine-mediated activation of ALK and LTK receptor tyrosine kinases / *Savvas Nicos Savvides (Ghent University, BE)*
- P147 - Salt generates anti-inflammatory Th17 cells but amplifies their pathogenicity in pro-inflammatory cytokine microenvironments / *Julia Matthias (Infection Immunology, DE)*

P148 - Deficiency of IL-38 leads to impairment of regulatory T cell homeostasis / *Arnaud Huard (Université de Genève, CH)*

P149 - Proteolytic Generation of the Soluble Interleukin-6 Receptor by Rhomboid Proteases / *Tim Schumertl (Otto-von-Guericke-University Magdeburg, DE)*

P150 - Intracytoplasmic expression of IL-6 and IL-17A in circulating CD4+ T cells are strongly associated with and predict disease activity in rheumatoid arthritis: A case-control study in GH / *Benjamin Amoani (University of Cape Coast, GH)*

P151 - Poly(dA:dT) activates the NLRP1 inflammasome in unprimed human keratinocytes / *Jeffrey Zhou (University Of Massachusetts Medical School, US)*

P152 - Decreased the colony stimulating factor 1 production causes loss of hepatic macrophage pool in chronic liver disease patients / *Dhananjay Kumar (Institute of Liver and Biliary sciences (ILBS), IN)*

P153 - Lack of ketogenesis impairs the anti-viral T cells response in infections with SARS-CoV-2 / *Christoph Wilhelm (University of Bonn, DE)*

P154 - Evolution of IL-17 family of cytokines and receptors: possible role in development of eutherian pregnancy / *Federica Giangrazi (Trinity College Dublin, IE)*

P155 - Systematic Investigation of Cytokine Signaling Activity at the Tissue and Single-Cell Level / *Peng Jiang (National Cancer Institute, US)*

08. Designer cytokines and cytokine immunotherapy

P156 - Cellular and Molecular Determinants of Cancer Immune Equilibrium Induced by IL-12 Virotherapy / *Michael Walsh (Harvard Medical School, US)*

P157 - The parasite cytokine mimic Hp-TGM fully replicates the regulatory effects of TGF- β on murine T cells / *Madeleine White (University of Glasgow, UK)*

P158 - Multivalency enhances the specificity of Fc-cytokine fusions / *Aaron S Meyer (University of California, US)*

P159 - Elevated IFN- γ in Vitiligo Patient Skin Blisters: Potential Utility of Targeting IFN- γ for Therapy / *Chau Yee Ng (Chang Gung Memorial Hospital, TW)*

P160 - Low-dose IL-2 ameliorates osteoporosis by promoting ILC2-mediated inhibition of osteoclastogenesis / *Pengcheng Zhou (The Australian National University, AU)*

P161 - A Single Aromatic Residue in sgp130Fc Allows the Discrimination between Interleukin-6 (IL-6) and IL-11 trans-signaling / *Christoph Garbers (Otto-von-Guericke University Magdeburg, DE)*

P162 - Spatiotemporal Dynamics of Class I/II Cytokine Receptors Assembly and Signaling / *Junel Sotolongo Bellon (University of Osnabrück, DE)*

P164 - Why bat itch: structural elucidation of bat Interleukin-31 / *Yehudi C.M. Bloch (Ghent University, BE)*

P165 - Prevention of CaCl₂-induced aortic inflammation and subsequent aneurysm formation by CCL3 / *Yuko Ishida (Wakayama Med Univ, JP)*

P166 - Engineered synthetic growth factors for blood production and biomimicry of the stem cell niche / *Natalie Di Bartolo (University of Bristol, UK)*

P167 - Targeting CXCR3 chemokines as a novel therapeutic strategy to suppress pancreatic tumor progression through subset T cells / *Xiaobao Yang (Ruijin Hospital, CN)*

P168 - Selectivity and stability engineering of IL2 muteins for induction of selective Treg responses / *Gamze Camdere (Amgen, US)*

P169 - Family of helminth-derived TGF- β mimics provide key insights to Treg and innate immune cell activation / *Kyle Thomas Cunningham (University of Glasgow, UK)*

P170 - Engineering Geographically Precise Activation of Cytokines to Achieve Improved Therapeutic Benefit in Oncology and Beyond / *Rónán O'Hagan (Xilio Therapeutics Inc., US)*

P171 - Antibodies engineered to bias delivery of IL-2 to pro-inflammatory cells and promote anti-tumor activity / *Elissa Kathleen Leonard (Johns Hopkins University, US)*

09. Understanding complexities of immune mediated diseases

P172 - Loss of IL-17A/F-mediated control of gut microbiota confers resistance to CNS autoimmunity / *Tommy Regen (Univ Med Center Mainz, DE)*

P173 - IRF5 plays an important role in the generation of antibody secreting cells in a cell type- and stimuli-dependent manner / *Bharati Matta (The Feinstein Institutes for Medical Research, US)*

P174 - Virus-induced IFN signaling activation and ISG expression in pancreatic beta cells is regulated by a lncRNA associated with type 1 diabetes / *Izortze Santin (University of the Basque Country, ES)*

P175 - Inflammatory IL-17A-secreting $\gamma\delta$ T cell are pathogenic in central nervous system autoimmunity by resisting the regulatory mechanisms that control Th17 cells / *Charlotte M Leane (Trinity College Dublin, IE)*

P176 - Type I Interferon signaling complex is required for Oncostatin-M driven inflammatory responses / *Carl D Richards (McMaster University, CA)*

P177 - Gasdermin D blockers: Managing Coagulation and Sepsis / *Rahul Gupta (-, US)*

- P178 - IL-4/IL-13 blockade is associated with psoriatic disease- evidence from the clinic and in vitro / *Charlie Bridgewood (University of Leeds, UK)*
- P179 - Renal autoimmune glomerulonephritis (AGN) is driven by interconnected post-transcriptional circuits activated by IL-17-induced signal transduction / *Sarah Gaffen (University of Pittsburgh, US)*
- P180 - Antigen presenting group 3 innate lymphoid cells orchestrate neuroinflammation / *John Benji Grigg (Weill Cornell Graduate School of Medical Sciences, US)*
- P181 - Anakinra: for treating DOCK8-/-, WAS and allergic patients / *Rahul Gupta (-, US)*
- P182 - Protection against severe lower respiratory infections in infants by Innate Immune Training: Mechanism-of-action studies / *Niamh Troy (Telethon Kids Institute, AU)*
- P183 - IL-1 β mediates Th17 steroid resistance in inflammatory CNS demyelinating disease / *William Miller-Little (Cleveland Clinic Foundation Lerner Research Institute, US)*
- P184 - Maternal Immune Activation and Schizophrenia-like Behavior: Role of Toll-Like Receptor and Inflammasome Pathways / *Pinku Mani Talukdar (National Institute of Mental Health and Neurosciences (NIMHANS), IN)*
- P185 - Determining HnRNP-A2/B1's role in inflammation and Rheumatoid Arthritis pathology / *Mays Mohammed Salih (UC Santa Cruz, US)*
- P186 - Anti-Interleukin-23 Autoantibodies: The Magician's Twin / *Aristine Cheng (National Institutes of Health, US)*
- P187 - Type I Interferon Potentiates Seeded Aggregation of Tau / *Sophie Sanford (University of Cambridge, UK)*
- P188 - Cytokine storm susceptibility factors IL-18 and cytotoxic impairment converge on pathologic CD8 T-cell hyperactivation / *Emily Landy (University of Pittsburgh, US)*
- P189 - Plectin activation: the cue to NINJI mediated plasma membrane rupture? / *Rahul Gupta (-, US)*
- P190 - Interleukin-20 Exacerbates Acute Hepatitis and Bacterial Infection By Downregulating I κ b ζ Target Genes In Hepatocytes / *Yong He (national institutes of health, US)*
- P191 - Mechanisms of late Germinal Center Formation and Th1/Tfh hybrid (Ifng+Il21+) T Cell function in Plasmodium chabaudi Infection / *Lucinda Puebla (University of Texas Medical Branch, US)*
- P192 - Regulation of cytokine release by myeloid cell autophagy in chronic and acute models of inflammation / *James Harris (Monash University, AU)*
- P193 - Inflammatory Cytokines and Neurocognitive Function in Bipolar Patients across Mood Episodes / *Sandra Ivette Ralat (University Of Puerto Rico, PR)*
- P194 - Interleukin-11 is a Novel Player in Osteoarthritis / *Juliane Lokau (Otto-von-Guericke University Magdeburg, DE)*

P195 - Vascularized 'Synovium-on-a-Chip' - a Novel and Adaptable Model for Dissecting Inflammatory Biology Underlying Rheumatoid Arthritis / *Theresa Wampler Muskardin (NYU Grossman School of Medicine, US)*

P196 - Blocking common gamma chain cytokine signaling ameliorates T cell-mediated disease / *Audrey Le Floc'h (Regeneron, US)*

P197 - Characterizing COVID-19, Castleman's Disease and Rheumatoid Arthritis Based on Patients' Serum Cytokine and Chemokine Patterns Before and After Tocilizumab Treatment Using Partial Least Squares Regression 2 Analysis / *Kazuko Uno (Louis Pasteur Center for Medical Research, JP)*

P198 - Detection of CLCF1 in immune cells by flow cytometry / *Veronique Laplante (Université de Montréal, CA)*

P199 - Non-coding RNA variants in the development of inflammation / *Ainara Castellanos-Rubio (University of the Basque Country, ES)*

P200 - Blocking NETosis and restoring Treg function: a better life with lupus? / *Rahul Gupta (-, US)*

P201 - TREML4: a druggable target for Sepsis and Lupus / *Rahul Gupta (-, US)*

P202 - Concentration changes of serum cytokines in the pathogenesis of rheumatoid arthritis / *Nino Kikodze (Tbilisi State Medical University, GE)*

P203 - Synergy Between TSLP and IL-13 Enhances Type 2 Inflammation / *Sarah Martinez Roth (Sanofi, US)*

10. Determinants of disease heterogeneity

P204 - Analysis of Mutations Within the Interleukin-11 Receptor Associated with Craniosynostosis / *Birte Kespohl (University of Magdeburg, DE)*

P205 - Off-target effects of BCG vaccination on cytokine responses to unrelated pathogens. / *Nicole L Messina (Murdoch Children's Research Institute, AU)*

P206 - Interleukin-6 Trans-Signaling Is Associated in Neurological Involvement During Behçet's Disease / *Houda Belguendouz (LBCM, FSB, USTHB, DZ)*

P207 - Low affinity CD8+ T cells produce interferon gamma and IL-10 during experimental cerebral malaria / *Elizabeth Motunrayo Kolawole (University of Utah, US)*

P208 - Inhibition of Calmodulin-dependent immune signalling by *Shigella sonnei* / *Joe Wanford (Kings College London, UK)*

P209 - Cytokine profiles in patients with liver diseases: effects of disease stage and the PNPLA3I148M variant allele on circulating cytokines in NAFLD and HCC patients / *Mélanie Kirchmeyer (University of Luxembourg, LU)*

P210 - IL-22 as a Pathogenic Driver of Anemia in Myelodysplastic Syndromes (MDS) / *Mahesh Raundhal (Dana-Farber Cancer Institute, US)*

P211 - Hepatic Necroinflammation Identifies Murine Interleukin-22 as Sex-related Cytokine / *Hendrik Stülb (University Hospital Goethe University Frankfurt, DE)*

11. Cancer and immunology, happy neighbours?

P212 - STAT2 inhibits STING-dependent signaling and hinders the DNA-damage response in lung cancer cells / *Yuxin Wang (Cleveland Clinic Foundation, US)*

P213 - The role of tumor-derived and microenvironment IL-1 alpha in breast cancer progression / *Mathumathi Krishnamohan (Ben Gurionh University of the Negev, IL)*

P214 - Mutagenicity of an in vitro chemotherapy-induced cytokine storm / *Harshini Shanika Hewagama Asurappulige (University of the West of England, Bristol, UK)*

P215 - The IL-7 pathway and its partners in T-ALL / *Scott Durum (National Institutes of Health, US)*

P216 - A Unique Signaling Feedback Circuit Defines Interferon Responses in Myeloproliferative Neoplasms / *Diana Saleiro (Northwestern University, US)*

P217 - An investigation into the anti-parallel dimer of STAT3 and its role in cytokine signal transduction / *Priyanka Rajeev Menon (Georg-August-Universität Göttingen, DE)*

P218 - The interleukin 18 and interferon gamma signaling axis identifies severe toxicity and relapse outcomes pre- and early post- CD19 CAR T cell infusion / *Heather Gustafson (Seattle Children's Research Institute, US)*

P219 - Steady IFN α therapy prevents the development of colorectal cancer liver metastases through the activation of liver sinusoidal endothelial cells / *Lorena Maria Ferreira (IRCCS San Raffaele Scientific Institute, IT)*

P220 - Dual Targeting of Multiple Myeloma and its Malignant Niche via Selective Antisense Oligonucleotide Inhibition of Interferon Regulatory Factor-4 / *Leslie Crews (University of California, US)*

P221 - Overcoming resistance to IFN α therapy in the liver: IFNAR1 stabilization in the hepatic metastases microenvironment / *Andrea Monestiroli (IRCCS San Raffaele Scientific Institute, IT)*

P222 - The Innate Immune Response during Initiation of Mesothelioma-like Inflammation in the Pleural Space / *Nadia Iqbal (Lancaster University, UK)*

P223 - Understanding OSM in estrogen receptor-positive (ER+) versus ER- breast cancer / *Cheryl L Jorcyk (Boise State University, US)*

P224 - Anti-CD123 Chimeric Antigen Receptor Natural Killer Cell Therapy to Treat Acute Myeloid Leukemia / *Monika Kizerwetter (Johns Hopkins University, US)*

P225 - EGFR signaling induces autocrine IL-6 trans-signaling via iRhom2-enhanced ADAM17 activity / *Neele Schumacher (Kiel University, DE)*

P226 - Interleukin-8 and Interferon-gamma predict early response to azacytidine in patients with high-risk myelodysplastic syndrome / *Tomas Kupsa (University Hospital and Charles University, CZ)*

P227 - Deciphering mechanisms regulating NK cell function in human solid tumors / *Marie Frutoso (Fred Hutchinson Cancer Research Center, US)*

P228 - IL23A mRNA, but not IL-23 protein, is elevated in colorectal cancer tumours and expressed by epithelial cells / *Elizabeth Mann (University of Oxford, UK)*

P229 - Serum Levels of Soluble Cytokine Receptors in Adult Acute Lymphoblastic Leukemia and Their Association with Prognostic Factors and Survival / *Tomas Kupsa (University of Defence, Faculty of Military Health Sciences, CZ)*

12. Cytokine involvement in COVID-19

P230 - Interferon-lambda Protection in a Murine Model of SARS-CoV-2 Infection / *Nancy C Reich (Stony Brook University, US)*

P231 - Temporal Dynamics of Anti-Type 1 Interferon Autoantibodies in Acute COVID-19 Patients / *Elana Shaw (NIAID, US)*

P232 - A primed pattern recognition system in airway epithelial cells generates robust innate immune responses to SARS-CoV2 infection in vitro and in vivo / *Marco Binder (German Cancer Research Center (DKFZ), DE)*

P233 - Differential Activation of the Inflammasome by Circulating Variants of SARS-CoV-2 / *Kimberly Rousseau (Johns Hopkins University School of Medicine, US)*

P234 - Differential plasmacytoid dendritic cell phenotype and type I Interferon response: towards a more nuanced understanding of asymptomatic and severe COVID-19 infection / *Eliana Marina Coccia (Istituto Superiore di Sanità, IT)*

P235 - SARS-CoV2 is efficiently recognized by pattern recognition receptors in IFN primed epithelial cells / *Vladimir Goncalves Magalhaes (German Cancer Research Center - DKFZ, DE)*

P236 - Effects of Pegylated Interferon-lambda treatment on SARS-CoV-2-specific adaptive immune responses in mild COVID-19 / *Deanna M Santer (University of Manitoba, CA)*

P237 - NRF2 and resistance to SARS-CoV2 infection / *Christian Kanstrup Holm (Aarhus University, DK)*

P238 - Sensing of SARS-CoV-2 infected cells by plasmacytoid dendritic cells promotes a local antiviral response / *Margarida Ribeiro (CIRI - ENS de Lyon, FR)*

P239 - SARS-CoV2-related changes of circulating cytokines in Luxemburgish patients of the Predi-COVID cohort / *Mélanie Kirchmeyer (University of Luxembourg, LU)*

P240 - Differential interferon- α subtype immune signatures suppress SARS-CoV-2 infection / *Stephanie Pfänder (Ruhr University Bochum, DE)*

P241 - Defects in interferon signaling cause increased and prolonged SARS-CoV-2 replication in adult and enhanced disease progression in aged mice / *Daniel Schnepf (Medical Center University of Freiburg, DE)*

11:45 - 12:45

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

11:45 - 12:45

Sponsored Session H: 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 / *Ishac Nazy (McMaster Centre for Transfusion Research, CA)*

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 O16 - microRNA regulation of disease heterogeneity in inflammatory arthritis / *Robert Hywel Jenkins (Cardiff University, UK)*
- 16:15 O17 - Young Investigator Award - Maternal IL-6 Promotes Pre-birth Tissue-Specific Immune Education / *Ai Ing Lim (NIAHD/NIH, US)*
- 16:25 Q&A

15:15 - 16:45

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

- 15:20 Cytokines in Type 2 inflammation / *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 O18 - Molecular regulation of the itch cytokine, IL-31, and its contribution to allergic inflammation / *Priscila Muñoz Sandoval (University of California, US)*
- 16:15 O19 - Young Investigator Award - IL-4 Signaling Regulates the Fate of B Cell Differentiation Via Germinal Center Positioning / *Keke C Fairfax (University of Utah, US)*
- 16:25 Q&A

16:45 - 18:15

Symposium 11: Cancer and immunology, happy neighbours?

- 16:50 TBD / *Brendan Jenkins (Hudson Institute of Medical Research, AU)*
- 17:05 TBD / *Hua Yu (City of Hope, USA)*
- 17:20 TBD / *Ethel Cesarman (Weill Cornell Medicine, USA)*
- 17:35 O20 - Extracellular vesicles purified from a specific Lactobacillus strain induce dendritic cell-mediated IL-12 production and enhance anticancer immune responses / *Jihong Bae (Korea Advanced Institute of Science and Technology, KR)*
- 17:45 O21 - A negative feedback loop driven by IFN γ signalling in cytotoxic T cells restricts anti-tumour responses by inhibiting de novo priming / *Audrey Gerard (University of Oxford, UK)*
- 17:55 Q&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 Anti-cytokine autoantibodies / *Anne Puel (Inserm, FR)*

- 17:05 **Philip I. Marcus Memorial Lecture:** Human type I interferonopathies / *Yanick Crow (The University of Edinburgh, UK)*
- 17:20 Inborn errors of type I IFN immunity in patients with life-threatening COVID-19 / *Qian Zhang (The Rockefeller University, USA)*
- 17:35 O22 - Characterization of 2'-O-methyl oligonucleotides that potently inhibit cGAS and TLR9 DNA sensing / *Michael Paul Gantier (Hudson Institute of Medical Research, AU)*
- 17:45 O23 - Treatment of the cellular phenotype of ISG15 deficiency with itaconic acid and derivatives / *Fakhar Waqas (Medizinische Hochschule Hannover, DE)*
- 17:55 Q&A

19:30

Networking Dinner Event - Luke O'Neill's band, the Metabolix 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 / *Menna Clatworthy (University of Cambridge, UK)*
- 09:05 Phenotype determination in fibrosis is under the control of a TGFb1/c-Rel/PFKFB3 pathway / *Derek Mann (Newcastle, UK)*
- 09:20 O24 - Young Investigator Award - Extracellular matrix components directly facilitate chemokine (CXCL4/PF4) mediated leukocyte recruitment, independent of chemokine receptors / *Douglas Philip Dyer (University of Manchester, UK)*
- 09:30 O25 - Young Investigator Award - Interleukin-17 governs hypoxic adaptation of injured epithelium / *Shruti Naik (NYU, US)*
- 09:40 Q&A

08:30 - 10:00

Symposium 14: Combinatorial drug targeting in immune disease

- 08:35 Combinatorial drug targeting in immune disease / *Iain McInnes (University of Glasgow, UK)*
- 08:50 TBD / *TBD*
- 09:05 TBD / *Dane Wittrup (MIT, US)*
- 09:20 O26 - Engineering Bispecific Antibodies to Synergistically Inhibit Tumor Metastasis / *Huilin Yang (Johns Hopkins University, US)*
- 09:30 O27 - Young Investigator Award - Harnessing the power of NLRP3 – pharmacological strategies for inhibition and activation of the inflammasome / *Rebecca C Coll (Queen's University Belfast, UK)*

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 - 13:15

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

12:15 - 13:15

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

12:15 TBD / *Yvonne Bordon (Nature Reviews Immunology, UK)*

12:30 TBD / *Helen Henderson (Withers and Rogers Patent Law, UK)*

12:45 TBD / *Edith Hessel (Eligo Bioscience, FR)*

13:00 TBD / *Anna Kinsey (Medical Research Council, UK)*

13:15 - 14:45

Symposium 15: Disease stratification and biological therapies

13:20 A new pathway in inflammation and pain / *John Hamilton (University of Melbourne, AU)*

13:35 Conditionally active split cytokines as targeted immunotherapeutics / *Jamie Spangler (Johns Hopkins University, USA)*

13:50 TBD / *Costantino Pitzalis (Queen Mary University of London, UK)*

14:05 TBD / *Francesca Barone (University of Birmingham, UK)*

14:20 Q&A

13:15 - 14:45

Symposium 16: Determinants of cell fate

13:20 Adaptive immunity and immune memory to SARS-CoV2 and COVID-19 / *Shane Crotty (La Jolla Institute of Allergy and Immunology, USA)*

13:35 IL-1 family members and resistance to infection / *Chris Hunter (University of Pennsylvania, USA)*

13:50 TBD / *Laurie Glimcher (Harvard Medical School, USA)*

14:05 Jakinibs and beyond / *John O'Shea (NIH, USA)*

14:20 Q&A

14:45 - 15:00

Closing Session

14:45 Closing remarks

14:55 Invitation to Cytokines 2022