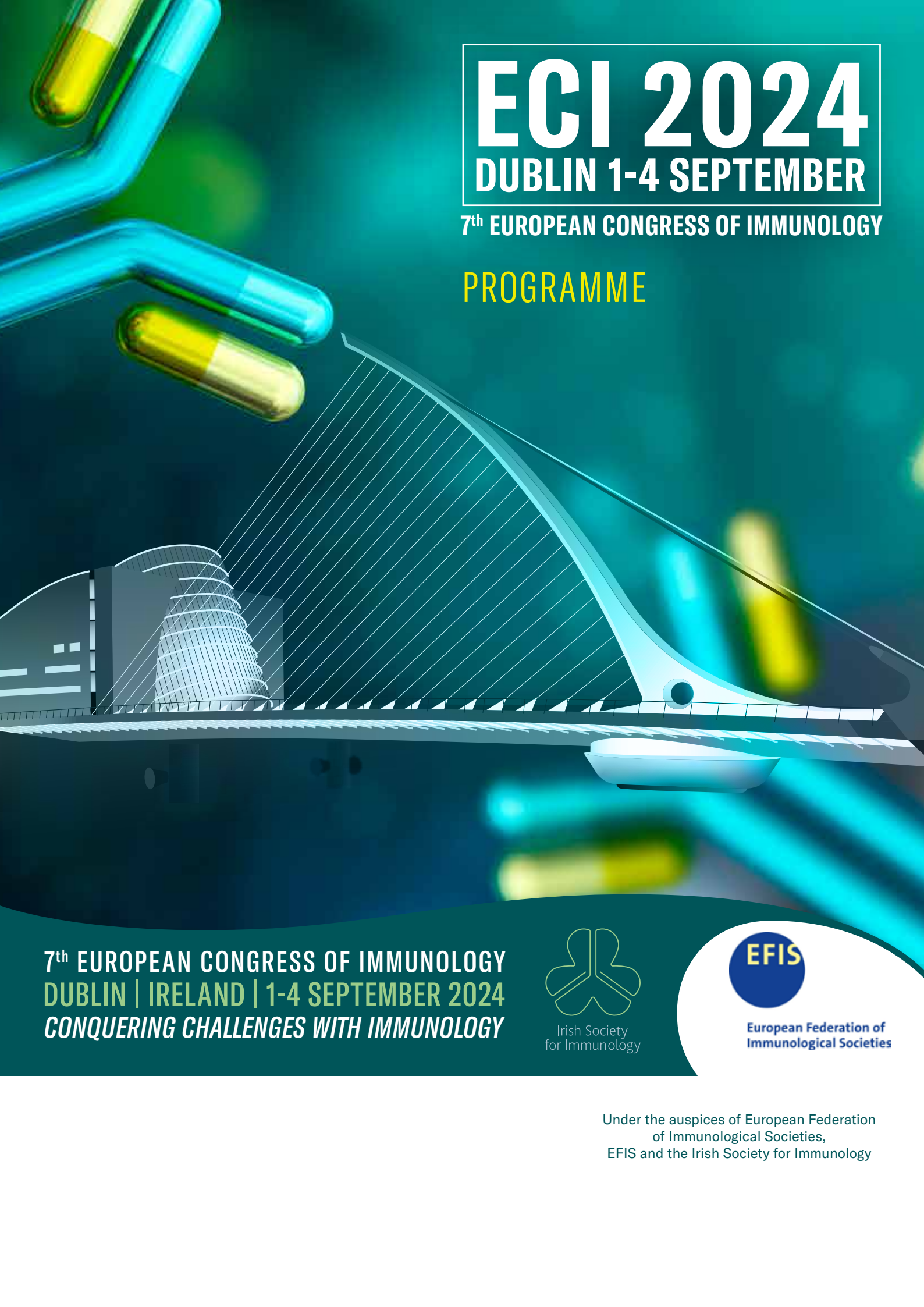




# ECI 2024

## DUBLIN 1-4 SEPTEMBER

### 7<sup>th</sup> EUROPEAN CONGRESS OF IMMUNOLOGY

## PROGRAMME

7<sup>th</sup> EUROPEAN CONGRESS OF IMMUNOLOGY  
DUBLIN | IRELAND | 1-4 SEPTEMBER 2024  
*CONQUERING CHALLENGES WITH IMMUNOLOGY*



Irish Society  
for Immunology



European Federation of  
Immunological Societies

Under the auspices of European Federation  
of Immunological Societies,  
EFIS and the Irish Society for Immunology

### SUNDAY, 1 SEPTEMBER 2024

#### AUDITORIUM | 15:15-16:15

##### PLENARY SESSION 1

Chairs: **Marcos Lopez Hoyos** (*Spain*), **Duygu Sag** (*Turkey*)

- 15:15** Humoral innate immunity in COVID-19  
**Cecilia Garlanda** (*Italy*)
- 15:40** Discussion
- 15:45** Type 2 immunity: macrophages, matrix & metazoan parasites  
**Judith E. Allen** (*United Kingdom*)
- 16:10** Discussion

#### AUDITORIUM | 16:15-17:00

##### KEYNOTE LECTURE 1

Chairs: **Mark Coles** (*United Kingdom*), **Carsten Watzl** (*Germany*)

- 16:15** Immune checkpoint inhibition in cancer therapy: mechanisms of CTLA-4 and PD-1 blockade  
**James P. Allison** (*USA*)
- 16:50** Discussion

MONDAY, 2 SEPTEMBER 2024

**AUDITORIUM | 08:30-09:45**

**EFIS PRESIDENT'S SYMPOSIUM**

Chairs: **Christine Falk** (*Germany*), **Federica Sallusto** (*Switzerland*)

- 08:30 Translating cytokine signaling  
**John O'Shea** (*USA*)
- 08:50 Autoimmunity against cytokines  
**Anne Puel** (*France*)
- 09:10 Multi-omic approaches to stratify Lupus  
**Virginia Pascual** (*USA*)
- 09:30 Discussion

**LIFFEY B | 08:30-09:45**

**SYMPOSIUM - CANCER IMMUNOLOGY**

Chairs: **Joanne Lysaght** (*Ireland*), **Magdalena Winiarska** (*Poland*)

- 08:30 Utilising immune modulatory miRNAs (im-miRs) to overcome immune evasion  
**Barbara Seliger** (*Germany*)
- 08:50 Targeting pro-tumour innate immune cells to enhance cancer immunotherapy  
**Vincenzo Bronte** (*Italy*)
- 09:10 Unconventional T cells in cancer  
**Seth Coffelt** (*United Kingdom*)
- 09:30 Discussion

**AUDITORIUM | 10:30-11:45**

**SYMPOSIUM - ALLERGY**

Chairs: **Björn Rúnar Ludviksson** (*Iceland*), **Rachel McLoughlin** (*Belgium*)

- 10:30 The gut environment in allergy and tolerance development during childhood and adolescence  
**Eva Sverremark Ekstrom** (*Sweden*)
- 10:50 Coeliac disease  
**Ludvig Sollid** (*Norway*)
- 11:10 Respiratory immunity and allergy  
**Philipp Starkl** (*Austria*)
- 11:30 Discussion



### MONDAY, 2 SEPTEMBER 2024

#### LIFFEY A | 08:30-09:45

##### EULAR SYMPOSIUM

##### MOLECULAR AND CELLULAR SIGNATURES OF THE INFLAMED SYNOVIAL JOINT

Chairs: **Michael Bonelli** (*Austria*), **Felice Rivellesse** (*United Kingdom*)

- 08:30** Age specific synovial tissue pathotypes underpin childhood-onset inflammatory arthritis  
**Adam Croft** (*United Kingdom*)
- 08:50** What autoantigens are presented to CD4+ T cells in the RA synovial joint?  
**Kathryn Steel** (*United Kingdom*)
- 09:10** Different synovial tissue macrophage subtypes and their niches in human synovium during inflammation and disease resolution  
**Lucy Macdonald** (*United Kingdom*)
- 09:30** Discussion

MONDAY, 2 SEPTEMBER 2024

WICKLOW HALL 2 | 08:30-09:45

WORKSHOP 1 - ALLERGY AND ASTHMA

- 08:30  
WS1.1 IL-12 expression on allergen-containing VNP prevents Th2 induction in a humanized mouse model of mugwort allergy  
**Bernhard Kratzer, Sandra Hofer, Peter Tauber, Doris Trapin, Mirjam Schaar, Gerhard Hofer, Walter Keller, Gabriele Gadermaier, Winfried Pickl** (*Austria*)
- 08:40  
WS1.2 Development of an in vivo model of IgE-mediated allergy  
**Caterina Vizzardelli, Alessio Gentile, Eva Untersmayr, Alex Farr, Barbara Bohle** (*Austria*)
- 08:50  
WS1.3 Impact of micro- and nanoplastic particles on allergic responses in BALB/c mice  
**Ece Danisman, Sahar Kazemi, My Nguyen, Lukas Wimmer, Lea Ann Dailey, Michelle M. Epstein** (*Austria*)
- 09:00  
WS1.4 Eosinophil responses in adaptive pulmonary type 2 immunity is locally regulated by interferon type 1 and -2  
**Sjoerd Schetters<sup>1</sup>, Stijn Verwaerde<sup>1</sup>, Julien Catherine<sup>1</sup>, Sina Karimi<sup>1</sup>, Sam Dupont<sup>1</sup>, Karel Van Damme<sup>1</sup>, Elisabeth De Leeuw<sup>2</sup>, Louis Boon<sup>2</sup>, Florence Roufosse<sup>1</sup>, Bart Lambrecht<sup>1</sup>** (<sup>1</sup>*Belgium*, <sup>2</sup>*Poland*)
- 09:10  
WS1.5 Heterogeneous ILC responses in severe asthma patients undergoing anti-IL5/5R $\alpha$  therapy  
**Kyle Mincham, Lola Loewenthal, Garance Meyer, Martina Marfia, Minerva Garcia Martin, Pujan Patel, Clare Lloyd, Robert Snelgrove** (*United Kingdom*)
- 09:20  
WS1.6 Selective elimination of allergen-specific B cells in house dust mites allergy model  
**Nikola Ralchev, Nikola Kerekov, Nikolina Mihaylova, Diana Hristova, Andrey Tchorbanov** (*Bulgaria*)
- 09:30 Discussion

MONDAY, 2 SEPTEMBER 2024

### LIFFEY HALL 2 | 08:30-09:45

#### WORKSHOP 2 - INNATE IMMUNE TRAINING

- 08:30**  
**WS2.1** Neutrophil-specific targeting of STAT3 impairs tumor progression via the expansion of cytotoxic CD8+ T cells  
**Irem Ozel<sup>1</sup>, Ekaterina Pylaeva<sup>1</sup>, Gennadiy Zelinskyy<sup>1</sup>, Cornelius Kürten<sup>1</sup>, Zvika Granot<sup>2</sup>, Jadwiga Jablonska<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Israel)
- 08:40**  
**WS2.2** Pharmacological activation of free fatty acid receptor 2 in intestinal type 3 innate lymphoid cells ameliorates experimental autoimmune encephalomyelitis  
**Milica Lazarević<sup>1</sup>, Goran Stegnjaić<sup>1</sup>, Suzana Stanisavljević<sup>1</sup>, Neda Nikolovski<sup>1</sup>, Miljana Momčilović<sup>1</sup>, Mirjana Dimitrijević<sup>1</sup>, Graeme L. Fraser<sup>2</sup>, Dorde Miljkovic<sup>1</sup>, Bojan Jevtic<sup>1</sup>** (<sup>1</sup>Serbia, <sup>2</sup>Belgium)
- 08:50**  
**WS2.3** Early measles immunization in children before 12 month of age affects specific memory B cell responses  
**Maaïke van der Staak, Hinke ten Hulscher, Jelle de Wit, Rik de Swart, Nynke Rots, Rob van Binnendijk** (Netherlands)
- 09:00**  
**WS2.4** IFN- $\gamma$  induced trained immunity metabolically reprograms macrophage metabolism and promotes immunity to *Mycobacterium tuberculosis*  
**Dearbhla Murphy, Isabella Batten, Sarah Connolly, Grainne Jameson, Donal Cox, Joseph Keane, Sharee Basdeo** (Ireland)
- 09:10**  
**WS2.5** Trained immunity drives neutrophil reprogramming providing protection against pneumococcal sepsis  
**Charly Gilbert, Tiia Snäkä, Maelick Brochut, Charlotte Theroude, Marta Reverte, Didier Le Roy, Thierry Roger** (Switzerland)
- 09:20**  
**WS2.6** Sepsis-trained macrophages promote anti-tumoral tissue-resident T cells  
**Alexis Broquet<sup>1</sup>, Victor Gourain<sup>1</sup>, Thomas Goronflot<sup>1</sup>, Virginie Le Mabecque<sup>1</sup>, Sihna Debajyoti<sup>1</sup>, Jacqueline Cédric<sup>1</sup>, Mitra Ashayeripana<sup>2</sup>, Pierre Martin<sup>1</sup>, Marion Davieau<sup>1</sup>, Léa Boutin<sup>1</sup>, Cécile Poulain<sup>1</sup>, Florian P. Martin<sup>1</sup>, Cynthia Fourgeux<sup>1</sup>, Mélanie Petrier<sup>1</sup>, Maeva Guillonnet<sup>1</sup>, Laurent Legenti<sup>1</sup>, Vincent Ferrieres<sup>1</sup>, Fathia Mami-Chouaib<sup>1</sup>, Jean François Mosnier<sup>1</sup>, Nicolas Mauduit<sup>1</sup>, Hamish McWilliam<sup>2</sup>, Jose Villadangos<sup>2</sup>, Pierre Antoine Gourraud<sup>1</sup>, Jérémie Poschmann<sup>1</sup>, Antoine Roquilly<sup>1,2</sup>** (<sup>1</sup>France, <sup>2</sup>Australia)
- 09:30** Discussion



MONDAY, 2 SEPTEMBER 2024

WICKLOW HALL 1 | 08:30-09:45

WORKSHOP 3 - IMMUNOMODULATION BY DIET, EXERCISE AND HORMONES

- 08:30**  
**WS3.1** Sustained immune and metabolic effects of a traditional African diet and fermented beverage versus a Western diet: insights from a short dietary transition study in Kilimanjaro, Tanzania  
**Godfrey Temba<sup>1</sup>, Tal Pecht<sup>2</sup>, Vesla Kullaya<sup>1</sup>, Nadira Vadaq<sup>3</sup>, Mary Mosha<sup>1</sup>, Paolo Lionetti<sup>4</sup>, Andre van der Ven<sup>3</sup>, Duccio Cavalieri<sup>4</sup>, Leo Joosten<sup>3</sup>, Blandina Mmbaga<sup>1</sup>, Joachim L. Schultze<sup>2</sup>, Mihai Netea<sup>2,3</sup>, Quirijn de Mast<sup>3</sup>** (<sup>1</sup>Tanzania, <sup>2</sup>Germany, <sup>3</sup>Netherlands, <sup>4</sup>Italy)
- 08:40**  
**WS3.2** Regulatory T cells require IL-6 receptor alpha signaling to control skeletal muscle function and regeneration  
**Maike Becker, Sini Susan Joseph, Francisco Garcia-Carrizo, Robby Z. Tom, Daria Opaleva, Isabelle Serr, Matthias H. Tschöp, Tim J. Schulz, Susanna M. Hofmann, Carolin Daniel** (Germany)
- 08:50**  
**WS3.3** Local thyroid hormone action in T cells and its role for protective immunity  
**Christina Wenzek<sup>1</sup>, Devon Siemes<sup>1</sup>, Eva Pastille<sup>1</sup>, Torben Knuschke<sup>1</sup>, Sebastian Hönes<sup>1</sup>, Anita Boelen<sup>2</sup>, Astrid Westendorf<sup>1</sup>, Daniel Robert Engel<sup>1</sup>, Lars Möller<sup>1</sup>, Dagmar Führer<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Netherlands)
- 09:00**  
**WS3.4** Oleic acid improves clinical features in psoriasis mouse model: effects on immune cells  
**Beatriz Burger<sup>1</sup>, Roberta Sagiorato<sup>1</sup>, Isabela Baccarin<sup>1</sup>, Hernandez Moura Silva<sup>2</sup>, Hosana Rodrigues<sup>1</sup>** (<sup>1</sup>Brazil, <sup>2</sup>USA)
- 09:10**  
**WS3.5** Hyperandrogenism cause tissue specific alterations of NK cells in a mouse model of polycystic ovary syndrome  
**Sara Torstensson, Haojiang Lu, Allan Zhao, Sanjiv Risal, Eva Lindgren, Gustaw Eriksson, Benedict Chambers, Maria Johansson, Anna Benrick, Elisabet Stener-Victorin** (Sweden)
- 09:20**  
**WS3.6** High glucose diet promotes development of cross-reactive intestinal IgA responses via the TLR4/TNF axis  
**Marina Bondareva<sup>1,2</sup>, Iaroslav Semin<sup>1</sup>, Natalia Sharanova<sup>2</sup>, Pawel Durek<sup>1</sup>, Sergei Nedospasov<sup>2</sup>, Mir-Farzin Mashreghi<sup>1</sup>, Andrey Kruglov<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Russian Federation)
- 09:30** Discussion



MONDAY, 2 SEPTEMBER 2024

LIFFEY HALL 1 | 08:30-09:45

### WORKSHOP 4 - GRANULOCYTE DIFFERENTIATION AND FUNCTION

- 08:30**  
**WS4.1** Single-cell proteomics and transcriptomics resolve the development of eosinophils and the role of IL-5 in their lineage transit amplification  
**Joseph Jorssen, Glenn Van hulst, Kirena Mollers, Julien Pujol, Georgios Petrellis, Antonio P. Baptista, Sjoerd Schetters, Frédéric Baron, Jo Caers, Bart Lambrecht, Benjamin Dewals, Fabrice Bureau, Christophe J. Desmet** (*Belgium*)
- 08:40**  
**WS4.2** Neutrophils: not as ready-to-go as we thought?  
**Cora Schwendele, Andreas Müller** (*Germany*)
- 08:50**  
**WS4.3** Deciphering phenotype, dynamics, and function of early-life neutrophils using single-cell RNA sequencing and lineage tracing  
**Julian Hofmann, Laura Lintukorpi, Emmi Lokka, Venla Ojasalo, Sheyla Cisneros Montalvo, Marko Salmi, Pia Rantakari** (*Finland*)
- 09:00**  
**WS4.4** Neutrophils acquire a peculiar phenotype in psoriatic arthritis patients  
**Luca Modestino, Manuela Tumminelli, Marialuisa Trocchia, Annagioia Ventrici, Leonardo Cristinziano, Francesco Palestra, Anne Lise Ferrara, Stefania Loffredo, Francesca Wanda Rossi, Amato de Paulis, Maria Rosaria Galdiero** (*Italy*)
- 09:10**  
**WS4.5** Development of a mast cell depleting antibody for the treatment of mastocytosis  
**William Worrall<sup>1</sup>, Léna Andrieux<sup>1</sup>, Nadine Serhan<sup>1</sup>, Jasper Kamphuis<sup>1</sup>, Alexia Loste<sup>1</sup>, Edouard Leveque<sup>1</sup>, Heleen Dewitte<sup>2</sup>, Emmanuel Mbida<sup>2</sup>, Emilie Maure, Cyprien Pecalvel<sup>1</sup>, Roland Liblau<sup>1</sup>, Nicolas Gaudenzio<sup>1</sup>, Laurent Reber<sup>1</sup>** (<sup>1</sup>*France*, <sup>2</sup>*Belgium*)
- 09:20**  
**WS4.6** Innovative approaches for neutrophil elastase imaging in vivo using low-molecular-weight NIR fluorescent probes in inflammatory disorders  
**Galyna Bila<sup>1</sup>, Sai Kiran Mavileti<sup>2</sup>, Valentyn Utko<sup>3</sup>, Evgenia Bila<sup>3</sup>, Manuela Calin<sup>1</sup>, Elena Butoi<sup>1</sup>, Tamaki Kato<sup>2</sup>, Shyam Pandey<sup>2</sup>, Rostyslav Bilyy<sup>1,3</sup>** (<sup>1</sup>*Romania*, <sup>2</sup>*Japan*, <sup>3</sup>*Ukraine*)
- 09:30** Discussion



MONDAY, 2 SEPTEMBER 2024

LIFFEY MEETING ROOM 2 | 08:30-09:45  
WORKSHOP 5 - DIVERSITY OF ANTIGEN RECOGNITION

- 08:30**  
**WS5.1** Composite peptides spanning PDGFR $\alpha$  and AAV5 virus trigger autoimmunity in systemic sclerosis patients  
**Maria Vittoria Napoli<sup>1</sup>, Gianluca Moroncini<sup>1</sup>, Silvia Svegliati<sup>1</sup>, Chiara Paolini<sup>1</sup>, Antonella Grieco<sup>1</sup>, Matteo Mozzicafreddo<sup>1</sup>, Silvia Agarbati<sup>1</sup>, Manuela Spagnuolo<sup>1</sup>, Angela Amoresano<sup>1</sup>, Gabriella Pinto<sup>1</sup>, Qingxin Chen<sup>2</sup>, Devis Benfaremo<sup>1</sup>, Martina Senzacqua<sup>1</sup>, Nadia Viola<sup>1</sup>, Mario Galgani<sup>1</sup>, Antonio La Cava<sup>3</sup>, Peter Dorfmueller<sup>2</sup>, Antonio Amoroso<sup>1</sup>, Antonio Giordano<sup>1</sup>, Ada Funaro<sup>1</sup>, Antonio Pezone<sup>1</sup>, Enrico Vittorio Avvedimento<sup>1</sup>, Armando Gabrielli<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>Germany, <sup>3</sup>USA*)
- 08:40**  
**WS5.2** Exploring the germline diversity of various macaque B-cell receptor regions  
**Susan Ott, Giang Le, Nanine de Groot, Marit van der Wiel, Jesse Mittertreiner, Natasja de Groot, Jesse Bruijnesteijn, Ronald Bontrop** (*Netherlands*)
- 08:50**  
**WS5.3** Dynamics of T cell and B cell receptor repertoires in response to obesity in a murine model of atherosclerosis  
**Ivana Mikocziova, Lea Mikkola, Senthil Palani, Anne Roivainen, Ana Hernández de Sande, Merja Heinäniemi, Tiit Örd, Minna U. Kaikkonen, Tapio Lönnberg** (*Finland*)
- 09:00**  
**WS5.4** Broadly neutralizing HIV-1 antibodies have unusually high capacity to bind heme  
**Robin Lacombe, Valérie Lorin, Maxime Lecerf, Hugo Mouquet, Jordan Dimitrov** (*France*)
- 09:10**  
**WS5.5** Surrogate light chain-deficient B cells expressing short and hydrophobic H-CDR3 loops escape from the bone marrow and expand in the periphery  
**Alaitz Aranburu, Erik Engström, Erik Demitz-Helin, Weicheng Ren, Alessandro Camponeschi, Timothy Sundell, Lill Mårtensson** (*Sweden*)
- 09:20**  
**WS5.6** Recognition of SARS-CoV-2 spike sequence by HLA-E-restricted CD8<sup>+</sup> T cells  
**Valentina Ferrari, Alice Galante, Donatella Galgano, Philipp Nawrath, Daniela Vaqueirinho, Blanca Fernandez, Sandra Jovic, Federico Mele, Antonio Lanzavecchia, Federica Sallusto** (*Italy*)
- 09:30** Discussion

MONDAY, 2 SEPTEMBER 2024

### LIFFEY MEETING ROOM 3 | 08:30-09:45

#### WORKSHOP 6 - EPIDEMIOLOGY AND IMMUNOGENETICS

- 08:30**  
**WS6.1** Compromised T cell development in Down syndrome is driven by intrinsic defects in early thymocytes  
**Annika Boxnick, Sarah-Jolan Bremer, Laura Glau, Daniel Biermann, Friederike Thiele, Jonathan May, Kati Tillack, Julian Dresse, Manuela Kolster, Romy Hackbusch, Ida Hüners, Martin Munz, Rainer Kozlik-Feldmann, Michael Hübler, Jörg Siegmars Sachweh, Eva Tolosa, Anna Gieras** (*Germany*)
- 08:40**  
**WS6.2** Multi-omic immunophenotyping to identify predictors of mRNA vaccine responsiveness in immunocompromised individuals  
**Sam Murray, Georgina Meacham, Sophie Irwin, Vishal Rao, Kyla Dooley, Amelia Heslington, Carl Goodyear, Stefan Siebert, Iain McInnes, Michelle Willicombe, Maria Predecki, David Thomas, Amit Patel, Lucinda Billingham, Amanda Kirkham, Pamela Kearns, Jordan Rolt, Barbara Kronsteiner-Dobramysl, Paul Klenerman, Susanna Dunachie, Nicholas Provine, Eleanor Barnes, OCTAVE DUO Study** (*United Kingdom*)
- 08:50**  
**WS6.3** Celluloeidemiology - A novel paradigm for quantifying infectious disease dynamics on a population level  
**My Ha, Anna Postovskaya, Pieter Meysman, Sabrina Van Ierssel, Hans de Reu, Jolien Schippers, Karin Peeters, Hajar Besbassi, Leo Heyndrickx, Betty Willems, Joachim Mariën, Esther Bartholomeus, Koen Vercauteren, Philippe Beutels, Pierre Van Damme, Eva Lion, Erika Vlieghe, Kris Laukens, Samuel Coenen, Reinout Naesens, Kevin Ariën, Benson Ogunjimi** (*Belgium*)
- 09:00**  
**WS6.4** The multi-omics landscape of systemic inflammation in people living with HIV  
**Javier Botey-Bataller<sup>1,2</sup>, Nienke van Unen<sup>1</sup>, dos Santos Jéssica<sup>2</sup>, Maartje C.P. Jacobs-Cleophas<sup>2</sup>, Marc J.T. Blaauw<sup>2</sup>, Wilhelm A.J.W. Vos<sup>2</sup>, Louise van Eekeren<sup>2</sup>, Albert Groenendijk<sup>2</sup>, Xun Jiang<sup>1</sup>, Manoj Gupta<sup>1</sup>, Nhan Nguyen<sup>1</sup>, Cheng-Jian Xu<sup>1</sup>, Leo Joosten<sup>2</sup>, Mihai Netea<sup>2</sup>, Andre van der Ven<sup>2</sup>, Yang Li<sup>1,2</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Netherlands*)
- 09:10**  
**WS6.5** Modeling gene-environment interactions in Parkinson's disease: Helicobacter pylori infection of pink1 -/- mice induces autoreactive cd8 t/ regulatory t cell disbalance associated with motor and cognitive dysfunction  
**Alexandra Kazanova, Jacqueline Sung, Christina Gavino, Hicham Bessaiah, Nathalia Luisa Oliveira, Lindsay Burns, Jessica Pei, Morgane Brouillard-Galipeau, Willemien Miller, Sherilyn Junelle Recinto, Moustafa Noh Elemeery, Lei Zhu, Adam MacDonald, Lucia Guerra, Joel Lanoix, Pierre Thibault, Heidi McBride, Michel Desjardins, Jo Anne Stratton, Nathalie Labrecque, Samantha Gruenheid** (*Canada*)
- 09:20**  
**WS6.6** Comparison of immune variability between healthy African and European adults reveals broad similarities and specific differences  
**Etienne Villain<sup>1</sup>, Alba Llibre<sup>1</sup>, Fatoumata Diene Sarr<sup>1</sup>, Babacar Diouf<sup>1</sup>, Aurelie Bisiaux<sup>1</sup>, Pedro Goncalves<sup>1</sup>, Bruno Charbit<sup>1</sup>, Vincent Rouilly<sup>1</sup>, Celine Posseme<sup>1</sup>, Tom Dott<sup>1</sup>, Cécile Alanio<sup>1</sup>, Cecile Artaud<sup>1</sup>, Mamadou Diop<sup>2</sup>, Milena Hasan<sup>1</sup>, Muriel Vray<sup>2</sup>, Amadou Sall<sup>2</sup>, Cheikh Loucoubar<sup>2</sup>, Lluís Quintana-Murci<sup>1</sup>, James Di Santo<sup>1</sup>, Fabien Taieb<sup>1</sup>, Aissatou Toure<sup>1</sup>, Ronald Perraut<sup>1</sup>, Darragh Duffy<sup>1</sup>** (*<sup>1</sup>France, <sup>2</sup>Senegal*)
- 09:30** Discussion

MONDAY, 2 SEPTEMBER 2024

ECOCHEM ROOM | 08:30-09:45

WORKSHOP 7 - PARASITE AND BACTERIAL IMMUNOLOGY

- 08:30**  
**WS7.1** Ruxolitinib restores disease tolerance in malaria-infected glucocorticoid receptor knockout mice by preventing lethal hypoglycemia  
**Fran Prenen<sup>1</sup>, Leen Vandermosten<sup>1</sup>, Sofie Knoops<sup>1</sup>, Emilie Pollenus<sup>1</sup>, Hendrik Possemiers<sup>1</sup>, Pauline Dagneau de Richécour<sup>1</sup>, Giorgio Caratti<sup>2</sup>, Christopher Cawthorne<sup>1</sup>, Sabine Vettorazzi<sup>2</sup>, Christophe Deroose<sup>1</sup>, Uwe Himmelreich<sup>1</sup>, Jan Tuckerman<sup>2</sup>, Philippe Van den Steen<sup>1</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Germany)
- 08:40**  
**WS7.2** Microbial infections trigger tissue mechano-responses to initiate innate immunity  
**Giulia Stucchi, Laura Marongiu, Giuseppe Rocca, Marco Galli, Anna Celant, Stefano Cozzi, Francesca Mingozzi, Alessandra Martorana, Alessandra Polissi, Ivan Orlandi, Marina Vai, Metello Enzo Innocenti, Francesca Granucci** (Italy)
- 08:50**  
**WS7.3** Spatial multi-omics identifies acyltransferase activity associated with granulomas  
**Shoumit Dey<sup>1</sup>, Jian-Hua Cao<sup>2</sup>, Benjamin Balluff<sup>2</sup>, Nidhi Sharma Dey<sup>1</sup>, Peter O'Toole<sup>1</sup>, Grant Calder<sup>1</sup>, Sally James<sup>1</sup>, Lesley Gilbert<sup>1</sup>, Ron Heeren<sup>2</sup>, Paul Kaye<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Netherlands)
- 09:00**  
**WS7.4** Differential antigen patterns during cyst degeneration in porcine neurocysticercosis  
**Luz Toribio<sup>1,2</sup>, Lizzie Tello<sup>2</sup>, Javier A. Bustos<sup>2</sup>, Gianfranco Arroyo<sup>2</sup>, Manuela Verastegui<sup>2</sup>, Hector H. Garcia<sup>2,3</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Peru, <sup>3</sup>USA)
- 09:10**  
**WS7.5** A vaccination strategy utilizing exosomes induces protective immune responses in an experimental model of Leishmania infantum infection in BALB/c mice  
**Antonia Efstathiou, Maria Agallou, Dimitra K. Toubanaki, Evdokia Karagouni** (Greece)
- 09:20**  
**WS7.6** Leishmania mexicana-infected Lutzomyia longipalpis sand flies induce inflammasome derived IL-1 $\beta$  in C57/BL6 mice  
**Somaditya Dey<sup>1,2</sup>, Eva Iniguez<sup>1</sup>, Cláudio Meneses<sup>1</sup>, Jesus Valenzuela<sup>1</sup>, Shaden Kamhawi<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>India)
- 09:30** Discussion



### MONDAY, 2 SEPTEMBER 2024

#### LIFFEY B | 10:30-11:45

##### SYMPOSIUM - CANCER IMMUNOTHERAPY

Chairs: **Enrico Lugli** (*Italy*), **Vera Martins** (*Portugal*)

- 10:30 Harnessing tissue immunity for enhanced immunotherapy  
**Ana Luísa Correia** (*Portugal*)
- 10:50 T cell antigens for cancer  
**Andrew Sewell** (*United Kingdom*)
- 11:10 Immune checkpoint blockade  
**Padmanee Sharma** (*USA*)
- 11:30 Discussion

#### LIFFEY A | 10:30-11:45

##### SYMPOSIUM - FUTURE IMMUNOTHERAPY AND VACCINE APPROACHES

Chairs: **Stefanía P. Bjarnarson** (*Iceland*), **Ihsan Gursel** (*Turkey*)

- 10:30 Advances in attenuated viral vaccines  
**Volker Thiel** (*Switzerland*)
- 10:50 Intracellular antibodies to block protein-protein interactions and antibody paratope-derived compounds for targeting leukaemia  
**Terence Rabbitts** (*United Kingdom*)
- 11:10 Engineered tregs as anti-inflammatory therapeutics  
**Markus Feuerer** (*Germany*)
- 11:30 Discussion

MONDAY, 2 SEPTEMBER 2024

WICKLOW HALL 2 | 10:30-11:45  
WORKSHOP 8 - RESPIRATORY IMMUNOLOGY

- 10:30  
WS8.1 Profiling maternal immune activation-induced alterations and training effects in offspring's immune cell compartments  
**Walaa Jradi, Fabien Prodjinotho, Clarissa Prazeres da Costa** (Germany)
- 10:40  
WS8.2 The influenza virus hemagglutinin (HA): a novel functional ligand for the immunosuppressive receptor LAG-3  
**Dina Khateeb<sup>1</sup>, Ardeshir Ariana<sup>2</sup>, Marceline Cote<sup>2</sup>, Yotam Bar-Onv** (<sup>1</sup>Israel, <sup>2</sup>Canada)
- 10:50  
WS8.3 Role of NK cell circadian clock in Influenza pathogenesis  
**Shaon Sengupta, Oindrila Paul, Mahendra Padmini, Kaitlyn Forrest, James Garifallou** (USA)
- 11:00  
WS8.4 Deletion of dipeptidyl peptidase 3 in mice unleashes protective antibacterial immunity against *Klebsiella pneumoniae*  
**Amanda Facoetti, Luca Lambroia, Elena Fontana, Dario Strina, Maria Lucia Schiavone, Federico Nicchiotti, Ciro Menale, Cecilia Garlanda, Cristina Sobacchi Veronica Marrella, Barbara Cassani** (Italy)
- 11:10  
WS8.5 Mast cell granules serve as endogenous C-type lectin receptor ligands skewing dendritic cell function towards type II immunity  
**Johanna Kotrba, Sascha Kahlfuß, Bernd Lepenies, Anne Dudeck1** (Germany)
- 11:20  
WS8.6 Molecular regulation of innate lymphoid cell type 2 in inflammatory lung disease  
**Wen Jie Yeoh, Kristyna Hlavacková, Philippe Krebs** (Switzerland)
- 11:30 Discussion

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### LIFFEY HALL 2 | 10:30-11:45

#### WORKSHOP 9 - NEUROINFLAMMATION I

- 10:30**  
**WS9.1** IgA production decrease is associated with B cell differentiation and proliferation defects in multiple sclerosis  
**Louise Le Gal, Boussamet Léo, Morille Jeremy, Shah Sita, Mathé Camille, Rodriguez Stephane, Chesneau Mélanie, Mandon Marion, Garcia Alexandra, Amé-Thomas Patricia, Tarte Karin, Dugast Emilie, Nicot Arnaud, Sophie Brouard, Laplaud David-Axel, Michel Laure, Berthelot Laureline** (*France*)
- 10:40**  
**WS9.2** 6-Formylindolo(3,2-b)carbazole ameliorates Graft-versus-host disease of the central nervous system via arylhydrocarbon receptor/NF- $\kappa$ B pathway in microglia  
**Alexander Johannes Zähringer<sup>1</sup>, Sangya Chatterjee<sup>1</sup>, Janaki Manoja Vinnakota<sup>1</sup>, Daniel Erny<sup>1</sup>, Rachael Claire Adams<sup>1,2</sup>, Jana Gawron<sup>1</sup>, Marlene Langenbach<sup>1</sup>, Lennard Schwöbel<sup>1</sup>, Valentin Wenger<sup>1</sup>, Dominik Schmidt<sup>1</sup>, Bodo Grimbacher<sup>1</sup>, Marco Prinz<sup>1</sup>, Robert Zeiser<sup>1</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Australia*)
- 10:50**  
**WS9.3** Long-term use of rituximab increases T cell count in MS patients  
**Gunnar Sigfus Björnsson, Hildur Sigurgrímsdóttir, Solrun Melkorka Maggadóttir, Berglind Osk Einarsdóttir, Olafur Arni Sveinsson, Haukur Hjaltason, Sigurveig Thora Sigurdardóttir, Björn Runar Ludvíksson, Siggeir Fannar Brynjólfsson** (*Iceland*)
- 11:00**  
**WS9.4** Targeting pyruvate kinase M2 to limit T cell pathogenicity in multiple sclerosis  
**Alyssa Schnabl, Elena Ellmeier, Anika Stracke, Katharina Seifried, Cansu Tafrali, Rina Demjaha, Sebastian Wurth, Michael Khalil, Stefano Angiari** (*Austria*)
- 11:10**  
**WS9.5** Natalizumab treatment induces proinflammatory CD4 T cells preferentially in the integrin  $\beta$ 7<sup>+</sup> compartment  
**Iris Hasantari, Mélanie Nguyen Ky, Adrien Duran, Agnes Bru, Mathilde Deloire, Bruno Brochet, Aurélie Ruet<sup>3</sup>, Nathalie Schmitt** (*France*)
- 11:20**  
**WS9.6** Primed monocytes in gamma-herpesvirus-induced EAE exacerbation  
**Annet van de Waterweg Berends, Xiang Du, Justine Javaux, Remy Sandor, Malyvanh Pathammavong, Bieke Broux, Bénédicte Machiels, Niels Hellings, Laurent Gillet** (*Belgium*)
- 11:30** Discussion



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WICKLOW HALL 1 | 10:30-11:45

WORKSHOP 10 - BACTERIAL AND VIRAL IMMUNITY

- 10:30**  
**WS10.1** A comprehensive 31-months longitudinal study on SARS-CoV-2 seroconversion, reinfection, and neutralization spanning several variant waves and vaccination campaigns  
**Bianca Schulte, Enrico Richter, Antonia Buening, Maximilian Baum, Annika Breuer, Jasmin Zorn, Julia Koenig, Melanie Geiger, Monika Eschbach-Bludau, Johanna Heuser, Dominik Zoelzer, Marek Korencak, Ronja Hollstein, Eva Beins, Dorian Emmert, Souhaib Aldabbagh, Anna Maria Eis-Hübinger, Hendrik Streeck** (Germany)
- 10:40**  
**WS10.2** SUV39H1 controls the differentiation of CD8<sup>+</sup> tissue resident memory T cell precursors  
**Guadalupe Suarez, Sandrine Heurtebise-Chrétien, Pierre-Emmanuele Bonte, Diego Sebastian Amigorena** (France)
- 10:50**  
**WS10.3** Latent cytomegalovirus upon intranasal infection provides immune protection against COVID in experimentally infected mice  
**Upasana Kulkarni<sup>1</sup>, Henning Jacobsen<sup>1</sup>, Sarah Leist<sup>2</sup>, Tatjana Lüddecke<sup>1</sup>, Ralph Baric<sup>2</sup>, Luka Cicin-Sain<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- 11:00**  
**WS10.4** Bifidobacterium shapes antimicrobial T-cell responses during infancy and adulthood  
**Katrin Vogel, Aditya Arra, Holger Lingel, Dirk Bretschneider, Florian Prätsch, Denny Schanze, Martin Zenker, Dunja Bruder, Robert Geffers, Thomas Hachenberg, Christoph Arens, Monika Brunner-Weinzierl** (Germany)
- 11:10**  
**WS10.5** Cross reactive responses between filovirus species amongst a cohort of Ebolavirus Zaire survivors in Guinea, West Africa  
**Yasmin Jiwa<sup>1</sup>, Joseph Akoi Bore<sup>1</sup>, Tom Tipton<sup>1</sup>, Francesca Donnellan<sup>1</sup>, Grace Hood<sup>1</sup>, Simon Drape<sup>1</sup>, Kim Fornace<sup>2</sup>, Miles Carroll<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Singapore)
- 11:20**  
**WS10.6** Investigating the effects of variability of *Streptococcus galactiae* isolates on macrophage immune response and pathogenesis  
**Larisa Janzic, Lucija Levstek, Andreja Natasa Kopitar, Alojz Ihan** (Slovenia)
- 11:30** Discussion

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**LIFFEY HALL 1 | 10:30-11:45**

**WORKSHOP 11 - INNATE AND ADAPTIVE IMMUNE CELLS IN INFLAMMATION**

- 10:30**  
**WS11.1** CXCR4 minor pocket ligands inhibit immune response by selectively blocking TLR7/8 mediated phosphorylation of NFκB  
**Birgit Caspar, Séverine Grinberg, Ivana Stoilova, Nassima Bekaddour, Dominique Cathelin, Jean-Philippe Herbeuval** (*France*)
- 10:40**  
**WS11.2** Investigation into obesity related defects in MAIT cells - is glutamine the missing link?  
**Nidhi Kedia-Mehta<sup>1</sup>, Linda Sinclair<sup>2</sup>, Andrew Hogan<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>United Kingdom*)
- 10:50**  
**WS11.3** Eosinophil peroxidase induces a pro-resolving phenotype in macrophages  
**Mohammed Safhi, Gerhard Krönke, Georg Schett, Aline Bozec, Darja Andreev** (*Germany*)
- 11:00**  
**WS11.4** Endogenous secretory leukocyte protease inhibitor contributes to regulation of inflammatory responses in peritoneal macrophages by modulating matrix metalloproteinase-9 production  
**Mariia Tyshchenko, Natalia Pocałun, Patrycja Kwiecińska, Joanna Cichy, Mieszko Wilk, Ewa Oleszycka** (*Poland*)
- 11:10**  
**WS11.5** The involvement of plasmacytoid dendritic cells and endoplasmic reticulum stress in systemic sclerosis-associated fibrosis  
**Beatriz Ferreira<sup>1</sup>, Daniela Barros<sup>2</sup>, Fátima Leite-Pinheiro<sup>1</sup>, Andreia Mendes<sup>1</sup>, Adrienne Paton<sup>3</sup>, James Paton<sup>3</sup>, Iola Duarte<sup>1,2</sup>, Philippe Pierre<sup>1,2</sup>, Catarina Almeida<sup>1</sup>** (*<sup>1</sup>Portugal, <sup>2</sup>France, <sup>3</sup>Australia*)
- 11:20**  
**WS11.6** Cytokine synergy and increased T cell polyfunctionality drives the aggressive synovial fibroblast phenotype in down syndrome associated arthritis  
**Adam Dignam, Serena Foo, Mary Canavan, Viviana Marzaioli, Achilleas Floudas, Ronan Mullan, Charlene Foley, Emma MacDermott, Douglas Veale, Orla Killeen, Ursula Fearon** (*Ireland*)
- 11:30** Discussion

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LIFFEY MEETING ROOM 2 | 10:30-11:45

WORKSHOP 12 - IMMUNE REGULATION IN DISEASE

- 10:30**  
**WS12.1** Halting type 1 diabetes progression: use of regulatory T cell-derived extracellular vesicles  
**Clorinda Fusco<sup>1</sup>, Kristyna Ruggiero<sup>1</sup>, Ilaria Spatocco<sup>1</sup>, Giorgia Mele<sup>1</sup>, Claudio Russo<sup>1</sup>, Giusy De Rosa<sup>1</sup>, Alessandra Colamatteo<sup>1</sup>, Francesca Di Candia<sup>1</sup>, Enza Mozzillo<sup>1</sup>, Claudio Procaccini<sup>1</sup>, Giuseppe Matarese<sup>1</sup>, Mario Galgani<sup>1</sup>, Paola de Candia (Italy)**
- 10:40**  
**WS12.2** Unveiling CD300e as a pivotal immune checkpoint in colorectal cancer  
**Annica Barizza, Stefania Vassallo, Marta Tromboni, Sofia Giacometti, Sara Coletta, Gaia Codolo (Italy)**
- 10:50**  
**WS12.3** Elucidating the interaction of CD96 and its ligand CD155 in T cells  
**Diana Shinko, Meryl Attrill, Rosemarie Ford, Maja Kos, Heather Cross, Rafter Wu, Claudia Hinze, Anne M Pesenacker (United Kingdom)**
- 11:00**  
**WS12.4** Regulatory T-cells in multiple sclerosis are activated by Epstein-Barr virus and produce IL-10 in the central nervous system  
**Nadia Pulvirenti, Camilla Righetti, Francesca Clemente, Barbara Serafini, Chiara Vasco, Maria Gerosa, Daniela Galimberti, Francesca Aloisi, Sergio Abrignani, Elio Scarpini, Jens Geginat (Italy)**
- 11:10**  
**WS12.5** Regulatory functions of redox processes during host-pathogen interactions in tuberculosis  
**Benthe Beu<sup>1</sup>, Tobias Dallenga<sup>1</sup>, Ilana Braunstein<sup>2</sup>, Moran Benhar<sup>2</sup>, Ulrich E. Schaible<sup>1</sup> (<sup>1</sup>Germany, <sup>2</sup>Israel)**
- 11:20**  
**WS12.6** Disentangling the heterogeneity and differentiation process of CD11c+ B cells  
**Alan Courey-Ghaouzi<sup>1</sup>, Linn Kleberg<sup>1</sup>, Maximilian Julius Lautenbach<sup>1</sup>, Girish Malagi<sup>1</sup>, Zaynab Mousavian<sup>1</sup>, Ganesh Phad<sup>2</sup>, Mattias Forsell<sup>1</sup>, Anna Färnert<sup>1</sup>, Christopher Sundling<sup>1</sup> (<sup>1</sup>Sweden, <sup>2</sup>Switzerland)**
- 11:30** Discussion

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**LIFFEY MEETING ROOM 3 | 10:30-11:45**

**WORKSHOP 13 - GASTROINTESTINAL IMMUNOLOGY**

- 10:30**  
**WS13.1** HIV-1 exploits LBPA-dependent intraepithelial vesicular trafficking pathway for persistent infection of human intestinal mucosa  
**Anusca Rader, Alexandra Cloherty, Kharishma Patel, Renee Schreurs, Carla Ribeiro** (Netherlands)
- 10:40**  
**WS13.2** Investigating the impact of Parkinson's Disease-associated genes on intestinal homeostasis  
**Jessica Pei, Sherilyn Junelle Recinto, Alexandra Kazanova, Lindsay Burns, Adam MacDonald, Christina Gavino, Michel Desjardins, Jo Anne Stratton, Samantha Gruenheid** (Canada)
- 10:50**  
**WS13.3** Exploring macrophage heterogeneity in Crohn's disease  
**Monika Mykhaylyshyn<sup>1</sup>, Thomas Laurent<sup>1</sup>, Aurélie Joussaume<sup>1</sup>, Gaëlle Bériou<sup>1</sup>, Nicolas Chapelle<sup>1</sup>, Lucas Brusselle<sup>1</sup>, Camille Lécuroux<sup>1</sup>, Laurence Delbos<sup>1</sup>, Jérémie Poschmann<sup>1</sup>, Cynthia Fourgeux<sup>1</sup>, Arnaud Bourreille<sup>1</sup>, Catherine Le Berre<sup>1</sup>, Caroline Trang<sup>1</sup>, Théo Soudé<sup>1</sup>, Juliette Podevin<sup>1</sup>, Jean-François Mosnier<sup>1</sup>, Cécile Girard<sup>1</sup>, Miriam Merad<sup>2</sup>, Samarth Hedge<sup>2</sup>, Clotilde Hennequin<sup>2</sup>, Jessica Le Berichel<sup>2</sup>, Saurabh Mehandru<sup>2</sup>, Pablo Canales-Herrerias<sup>2</sup>, Ephraim Kenigsberg<sup>2</sup>, Jérôme Martin<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)
- 11:00**  
**WS13.4** IL4 prevents the gluten-induced inflammation in the gut mucosa of children with potential celiac disease  
**Iliaria Mottola, Serena Vitale, Roberta Esposito, Mariantonia Maglio, Renata Auricchio, Riccardo Troncone, Carmen Gianfrani** (Italy)
- 11:10**  
**WS13.5** BAMBI, a regulator of intestinal epithelial cell permeability and apoptosis, controls colitis and colon cancer development  
**Paula Perez Adrián, Marta Muñoz, Vincenzo Cappitelli, Thais M. Gil, M<sup>a</sup> Luisa Cagigal, Jose Andrés Vazquez, Juan Ignacio Raba-Díez, Maria Luisa del Rio, Jose-Ignacio Rodriguez-Barbosa, Jesus Merino, Victoria Casado Medrano, Ramón Merino** (Spain)
- 11:20**  
**WS13.6** T cell responses to dietary antigens  
**Anna Rudnitsky, Ranit Kedmi** (Israel)
- 11:30** Discussion

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ECOCHEM ROOM | 10:30-11:45

WORKSHOP 14 - TRANSPLANTATION IMMUNOLOGY

- 10:30**  
**WS14.1** CXCR4 blockade reduces the severity of murine heart allograft rejection by plasmacytoid dendritic cell-mediated immune regulation  
**Jian Fu<sup>1,2</sup>, Christian H.K. Lehmann<sup>1</sup>, Xinning Wang<sup>1,2</sup>, Ida Allabauer<sup>1</sup>, Benjamin Wilde<sup>1</sup>, Lukas Amon<sup>2</sup>, Andreas Kribben<sup>1</sup>, Joachim Wölflé<sup>1</sup>, Diana Dudziak<sup>1</sup>, Oliver Witzke<sup>1</sup>, Andre Hörning<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>China)
- 10:40**  
**WS14.2** Translation of tacrolimus resistant antiviral T cell products: In depth-efficacy evaluation and human based safety assessment  
**Lisa Burkhardt, Lukas Ehlen, Anna Löwa, Niklas Wiese, Claudia Beltran Mestres, Ugarit Daher, Melanie Rothe, Anna-Catharina Krebs, Janine Arndt, Mathis Hertel, Andy Römhild, Stephan Schlickeiser, Mir-Farzin Mashreghi, Andreas Hocke, Hans-Dieter Volk, Petra Reinke, Michael Schmueck-Henneresse, Leila Amini** (Germany)
- 10:50**  
**WS14.3** Donor HLA-DQ landscape predicts the likelihood of controlling BK polyoma virus replication after kidney transplantation  
**Mathieu Chevalier<sup>1</sup>, Vincent Allain<sup>1,2</sup>, Julien Gras<sup>1</sup>, Juliette Villemonteix<sup>1</sup>, Gillian Divard<sup>1</sup>, Linda Feghoul<sup>1</sup>, Constance Delaugerre<sup>1</sup>, Jean-Michel Molina<sup>1</sup>, Jean-Luc Taupin<sup>1</sup>, Marie-Noelle Peraldi<sup>1</sup>, Cyrille Feray<sup>1</sup>, Sophie Caillat-Zucman<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)
- 11:00**  
**WS14.4** Immunosuppressive therapy modifies anti-Spike IgG subclasses distribution after 4 doses of mRNA vaccination in a cohort of kidney transplant recipients  
**Ignacio Juarez, Isabel Perez-Flores, Arianne Aiffil-Meneses, Ana López Gómez, Natividad Calvo-Romero, Raquel Gonzalez-Garcia, Belen Peix-Jimenez, Manuel Gomez del Moral, Ana Isabel Sanchez-Fructuoso, Eduardo Martinez-Naves** (Spain)
- 11:10**  
**WS14.5** Effects of corticosteroids therapy on immune reconstitution and function upon hematopoietic stem cell transplantation in cancer patients  
**Silvia Santopolo<sup>1</sup>, Cecilia Ciancaglini<sup>1</sup>, Han-Yu Sihi<sup>2</sup>, Paola Vacca<sup>1</sup>, Lorenzo Moretta<sup>1</sup>, Linda Quatrini<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>USA)
- 11:20**  
**WS14.6** Tissue-resident lymphocyte subsets are associated with poor glucocorticoid response in acute gastrointestinal graft-versus-host disease  
**Johanna Strobl, Lukas Gaksch, Sandra Haingartner, Ariane Aigelsreiter, Peter Neumeister, Alexander Deutsch, Georg Stary, Hildegard Greinix** (Austria)
- 11:30** Discussion



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#### AUDITORIUM | 11:55-12:40

##### KEYNOTE LECTURE 2

Chairs: **Güher Saruhan Direskeneli** (*Turkey*), **Bojan Polic** (*Croatia*)

**11:55** Metabolic and neural regulation of immunity and cancer  
**Tak Mak** (*Canada*)

**12:30** Discussion

#### AUDITORIUM | 14:15-15:30

##### SYMPOSIUM - ACTERIA SYMPOSIUM: NOT SO STERILE INFLAMMATION, AFTER ALL

Chairs: **Eduardo Bonavita** (*Italy*), **Anne Hosmalin** (*France*)

**14:15** Liver macrophages between lipids and stellate cells  
**Charlotte Scott** (*Belgium*)

**14:35** Neuron immune interactions in allergy  
**Nicolas Gaudenzio** (*France*)

**14:55** Regulation of monocyte-to-macrophage trajectories in the healthy and diseased lung  
**Thomas Marichal** (*Belgium*)

**15:15** Discussion

#### LIFFEY B | 14:15-15:30

##### SYMPOSIUM - STROMAL CELLS IN IMMUNOLOGY

Chairs: **Marion Espéli** (*France*), **Aideen Ryan** (*Ireland*)

**14:15** Reticular cell immune cell crosstalk  
**Burkhard Ludewig** (*Switzerland*)

**14:35** Strategies to use lymphatic vasculature to tune immune function  
**Amanda Lund** (*USA*)

**14:55** B cell expansion hinders the stroma-epithelium regenerative cross talk during mucosal healing  
**Eduardo Villablanca** (*Sweden*)

**15:15** Discussion



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LIFFEY A | 14:15-15:30

IUIS SYMPOSIUM - AGING AND THE IMMUNE SYSTEM

Chair: **Rita Carsetti** (*Italy*)

- 14:15** Infections and vaccines: impact on immune aging  
**Mihai Netea** (*Netherlands*)
- 14:35** Primary and booster vaccination in elderly and frail individuals  
**Ursula Wiedermann** (*Austria*)
- 14:55** One century of immunity, between inflammaging and hyper-long memory  
**Andrea Cossarizza** (*Italy*)
- 15:15** Discussion

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### WICKLOW HALL 2 | 14:15-15:30

#### WORKSHOP 15 - T CELLS IN AUTOIMMUNITY

- 14:15**  
**WS15.1** Autoantigen-specific CD4 T cells acquire an exhausted phenotype and persist in patients with antigen-specific autoimmune disease  
**Carina Saggau<sup>1</sup>, Petra Bacher<sup>1</sup>, Daniela Esser<sup>1</sup>, Mahdi Rasa<sup>1</sup>, Andreas Hutloff<sup>1</sup>, Sarah-Sophie Schacht<sup>1</sup>, Justina Dargvainiene<sup>1</sup>, Johannes Hartl<sup>1</sup>, Patrick Schindler<sup>1</sup>, Julia K Polansky<sup>1</sup>, Mingxing Yang<sup>1</sup>, Reza Naghavian<sup>2</sup>, Marek Wieczorek<sup>1</sup>, Daniel Berger<sup>1</sup>, Lea Henschel<sup>1</sup>, Guido Heine<sup>1</sup>, Enno Schmidt<sup>1</sup>, Dirk Busch<sup>1</sup>, Simon Fillatreau<sup>3</sup>, Klaus-Peter Wandinger<sup>1</sup>, Kilian Schober<sup>1</sup>, Roland Martin<sup>2</sup>, Friedemann Paul<sup>1</sup>, Frank Leypoldt<sup>1</sup>, Alexander Scheffold<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Switzerland, <sup>3</sup>France)
- 14:25**  
**WS15.2** The tissue-resident memory Th17 (TRM17) cells, the predominant source of interleukin (IL)-17 in inflammatory arthritis, is largely IL-23 independent in their effector function and epigenetically regulated by Bromodomain Containing 1 (BRD1)  
**Feng Liu, Rachel Anscombe, Hui Shi, paul Bowness, liye Chen** (*United Kingdom*)
- 14:35**  
**WS15.3** T cell mediated immune responses in primary intestinal tissue slices from IBD patients ex vivo  
**Klaudia Maria Grieger, Valerie Beneke, Vanessa Neuhaus, Susann Dehmel, Ulf Kulik, Heiko Aselmann, Benjamin Gundert, Armin Braun, Christina Hesse, Katherina Sewald** (*Germany*)
- 14:45**  
**WS15.4** A novel humanized mouse model to study rheumatoid arthritis associated anti-citrulline T cell reactivity  
**Marlene Schüle<sup>1</sup>, Diego Velasques Pulgarin<sup>1</sup>, Aaron Winkler<sup>2</sup>, Lars Klareskog<sup>1</sup>, Alexander Espinosa<sup>1</sup>, Vivianne Malmström<sup>1</sup>, Bruno Raposo<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>USA)
- 14:55**  
**WS15.5** CCL5/RANTES in the pathogenesis of systemic lupus erythematosus (SLE)  
**Xiaolin Cao, Niels van Heusden, Ellen Kaan, Maarten Limper, Marianne Boes** (*Netherlands*)
- 15:05**  
**WS15.6** Unravelling pathological mechanisms of Addison's disease using a novel animal model  
**Ales Neuwirth, Arina Andreyeva, Juraj Michálik, Ondrej Stepanek** (*Czech Republic*)
- 15:15** Discussion

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LIFFEY HALL 2 | 14:15-15:30

WORKSHOP 16 - B CELLS: DEVELOPMENT AND FUNCTION

- 14:15**  
**WS16.1** Systems level analysis of B-cell development across aging identifies BDNF as a driver for B-cell generation in the bone marrow  
**Neta Nevo, Ayelet Alpert, Tim J. Cooper, Neta Milman, Doron Melamed, Shai S. Shen - Orr** (Israel)
- 14:25**  
**WS16.2** The RNA binding protein HuR is required for self-replenishment and preservation of the restricted BCR repertoire of innate B1 cells  
**Dunja Capitan Sobrino, Mailys Mouysset, Manuel Diaz-Munoz** (France)
- 14:35**  
**WS16.3** Intracellular trafficking receptor SorLA is required for BCR uptake and trafficking, regulating B cell-mediated immune responses in vivo  
**Adam McShane, Melibea Berzosa, Pratiti Nanda, Fiona Hills, Dessi Malinova** (United Kingdom)
- 14:45**  
**WS16.4** Active inhibition of chemokine-mediated migration impacts tumour-lymph node crosstalk in TNBC  
**Victoire Boulat, Ellie Alberts, Carin Brundin, Dinis Pedro Calado, Anita Grigoriadis** (United Kingdom)
- 14:55**  
**WS16.5** Human B-cell development at the single-cell level  
**Timothy Sundell, Alessandro Camponeschi, Alaitz Aranburu, Inger Gjertsson, Lill Mårtensson** (Sweden)
- 15:05**  
**WS16.6** New mode of B-cell activation through extracellular release of native antigen by dendritic cells  
**Klara Cik, Louis Vasselin, Morgane Thepaut, Antoine Robert, Paul Courrieu, Florence Niedergang, Fatah Ouaz** (France)
- 15:15** Discussion

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### WICKLOW HALL 1 | 14:15-15:30

#### WORKSHOP 17 - NEUROINFLAMMATION II

- 14:15**  
**WS17.1** Meningeal  $\gamma\delta 17$  T cells and blood-brain barrier disruption: implications for neonatal Group B Streptococcus meningitis  
**Inês Lorga, Ana Magalhães, Ana Teixeira, Manuel Vilanova, Julie Ribot, Elva Bonifácio Andrade** (Portugal)
- 14:25**  
**WS17.2** The interplay between inflammation and oxidative stress supports autistic-related behaviors in two mouse models of autism spectrum disorders  
**Luca Pangrazzi<sup>1</sup>, Enrica Cerilli<sup>2</sup>, Luigi Balasco<sup>2</sup>, Caterina Tobia<sup>2</sup>, Enrico Domenici<sup>2</sup>, Birgit Weinberger<sup>1</sup>, Yuri Bozzi<sup>2</sup>** (<sup>1</sup>Austria, <sup>2</sup>Italy)
- 14:35**  
**WS17.3** Mapping midbrain immune response and potential gateway function of the choroid plexus in chronic gut inflammation  
**Rebecca Katharina Masanetz<sup>1</sup>, Mark Dedden<sup>1</sup>, Iris Stolzer<sup>1</sup>, Claudia Günther<sup>1</sup>, Mathias Linnerbauer<sup>1</sup>, Veit Rothhammer<sup>1</sup>, Wei Xiang<sup>1</sup>, Pavel Kielkowski<sup>1</sup>, Johannes Schlachetzki<sup>2</sup>, Sebastian Zundler<sup>1</sup>, Jürgen Winkler<sup>1</sup>, Patrick Süß<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- 14:45**  
**WS17.4** Effects of microbial infection on the blood-brain barrier - high-dimensional tissue profiling using imaging mass cytometry  
**Marta Kaminska<sup>1</sup>, Anne Klapper<sup>2</sup>, Holger Cynis<sup>2</sup>, Piotr Mydel<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>Germany)
- 14:55**  
**WS17.5** Opposite innate immune signatures in Varicella Zoster Virus and Sendai Virus infected human induced pluripotent stem cell derived neurospheroids  
**Jonas Govaerts, Elise Van Breedam, Claudio D'Incal, Sarah De Beuckeleer, Julia Di Stefano, Siebe Van Calster, Tamariche Buyle-Huybrecht, Marlies Boeren, Marielle Lebrun, Catherine Sadzot-Delvaux, Winnok De Vos, Johan Van Weyenbergh, Wim Vanden Berghe, Benson Ogunjimi, Peter Delputte, Peter Ponsaerts** (Belgium)
- 15:05**  
**WS17.6** Neuroimmune responses to intranasal poly(I:C) are primed by time of day  
**Gregory Pearson, Brennan Falcu, Jiexin Wang, Nathan Santos, Stephanie Gottwals, Giancarlo Denaroso, Saïd Akli, Ilia Karatsoreos** (USA)
- 15:15** Discussion

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LIFFEY HALL 1 | 14:15-15:30

WORKSHOP 18 - IMMUNE DEFICIENCIES AND IMMUNE DYSFUNCTION

- 14:15**  
**WS18.1** Autoinflammatory patients with Golgi-trapped CDC42 exhibit intracellular trafficking defects leading to STING hyperactivation  
**Alberto Iannuzzo<sup>1</sup>, Selket Delafontaine<sup>2</sup>, Rana El Masri<sup>1</sup>, Rachida Tacine<sup>1</sup>, Giusi Prencipe<sup>3</sup>, Masahiko Nishitani-Isa<sup>4</sup>, Rogier T.A. van Wijck<sup>5</sup>, Farzana Bhuyan<sup>6</sup>, Adriana A. De Jesus Rasheed<sup>6</sup>, Simona Coppola<sup>3</sup>, Paul L.A. van Daele<sup>5</sup>, Antonella Insalaco<sup>1</sup>, Raphaela Goldbach-Mansky<sup>6</sup>, Takahiro Yasumi<sup>4</sup>, Marco Tartaglia<sup>3</sup>, Isabelle Meyts<sup>2</sup>, Jerome Delon<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Belgium, <sup>3</sup>Italy, <sup>4</sup>Japan, <sup>5</sup>Netherlands, <sup>6</sup>USA)
- 14:25**  
**WS18.2** NLRC4 mosaicism as the cause of a severe, early-onset autoinflammatory disease  
**Daniel Lorca-Arce<sup>1</sup>, Walaa Shoman<sup>2</sup>, Anna Mensa<sup>1</sup>, Susana Plaza<sup>1</sup>, Virginia Fabregat<sup>1</sup>, Juan Francisco Luchoro<sup>1</sup>, Jordi Yague<sup>1</sup>, Yasmine El Chazli<sup>2</sup>, Juan Ignacio Arostegui<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Egypt)
- 14:35**  
**WS18.3** Functional analysis of inflammasome mutations in the inflammatory skin disease hidradenitis suppurativa  
**Ashish Neve<sup>1</sup>, Daniel Johnston<sup>1</sup>, Desmond Tobin<sup>1</sup>, Lynn Petukhova<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- 14:45**  
**WS18.4** Constitutive phosphorylation of STAT3 hallmarks different subsets of atypical T-bet-expressing B cells in immune mediated disorders  
**Francesca La Gualana, Giulia Garzi, Begi Petriti, Matteo D'Ambrosi, Francesca Maiorca, Alessandra Pinzon Grimaldos, Silvia Piconese, Massimo Fiorilli, Isabella Quinti, Cinzia Milito, Marcella Visentini** (Italy)
- 14:55**  
**WS18.5** Deep immune cell profiling of patients with defects in the leptin-melanocortin signaling pathway  
**Julia Hecker, Lisa Ruck, Désirée Kunkel, Britta Siegmund, Peter Kühnen, Carl Weidinger** (Germany)
- 15:05**  
**WS18.6** Xpr1 deficiency dysregulates CD4+ T-cell responses by impaired calcium signalling and increased mTOR activation  
**Marion Mengel, Benita Kröger, Mandy Malle, Timur Alexander Yorgan, Björn-Philipp Diercks, Reiner Mailer** (Germany)
- 15:15** Discussion



### MONDAY, 2 SEPTEMBER 2024

#### LIFFEY MEETING ROOM 2 | 14:15-15:30

#### WORKSHOP 19 - PATTERN RECOGNITION RECEPTORS AND INNATE IMMUNITY

- 14:15**  
**WS19.1** AHR spying on bacterial communication and quorum during infection  
**Pedro Moura-Alves** (*Portugal*)
- 14:25**  
**WS19.2** PYHIN proteins modulate dendritic cell responsiveness to immune-stimulatory DNA via negative regulation of type I interferon  
**Craig McEntee, Ross W. Ward, Sarah Hayes, Josephine Douglas, Ed Lavelle, Andrew Bowie** (*Ireland*)
- 14:35**  
**WS19.3** NLRP3 is a thermosensor that is negatively regulated by high temperature  
**Wei Wang<sup>1</sup>, Chloe McKee<sup>1</sup>, Junya Zhang<sup>2</sup>, Damien Bertheloot<sup>3</sup>, Marcia Munoz<sup>4</sup>, Amelia Stennett<sup>2</sup>, Shangze Xu<sup>2</sup>, Melanie Cranston<sup>1</sup>, Bernardo Franklin<sup>3</sup>, Michael Rogers<sup>4</sup>, Agnieszka Bronowska<sup>2</sup>, Rebecca Coll<sup>1</sup>** (<sup>1</sup>*Ireland*, <sup>2</sup>*United Kingdom*, <sup>3</sup>*Germany*, <sup>4</sup>*Australia*)
- 14:45**  
**WS19.4** Toll-like receptor 3 (TLR3) Leu412Phe (L412F): a candidate polymorphism in lung microbiome dysregulation and acute exacerbation in idiopathic pulmonary fibrosis patients  
**Aoife McElroy<sup>1</sup>, Rachel Invernizzi<sup>2</sup>, Andrew O'Neill<sup>3</sup>, Andrew Bowie<sup>1</sup>, Padraic Fallon<sup>1</sup>, Toby M. Maher<sup>3</sup>, Cory M. Hogaboam<sup>3</sup>, Philip Molyneaux<sup>2</sup>, Nik Hirani<sup>2</sup>, Seamas Donnelly<sup>1</sup>, Michelle E. Armstrong<sup>1</sup>** (<sup>1</sup>*Ireland*, <sup>2</sup>*United Kingdom*, <sup>3</sup>*USA*)
- 14:55**  
**WS19.5** SARM1 regulates pro-IL-1 $\beta$  expression in monocytes by an NADase-dependent mechanism  
**Ryoichi Sugisawa<sup>1</sup>, Masahiko Honda<sup>1</sup>, Suman Dash<sup>1</sup>, Akiyoshi Komuro<sup>1</sup>, Takeshi Ueda<sup>1</sup>, Andrew Bowie<sup>2</sup>, Hitoshi Okada<sup>1</sup>** (<sup>1</sup>*Japan*, <sup>2</sup>*Ireland*)
- 15:05**  
**WS19.6** MicroRNAs released by UV-treated keratinocytes activate pDCs viaTLR7: a model mechanism of type I interferon triggering in psoriasis  
**Valentina Salvi, Carolina Gaudenzi, Barbara Mariotti, Paolo Bergese, Silvano Sozzani, Flavia Bazzoni, Daniela Bosisio** (*Italy*)
- 15:15** Discussion



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**LIFFEY MEETING ROOM 3 | 14:15-15:30**

**WORKSHOP 20 - MECHANISMS OF ANTIGEN PRESENTATION**

- 14:15**  
**WS20.1** Non-canonical proteome derived from transposable elements is a source of functional protein isoforms and cancer neoantigens  
**Yago Arribas<sup>1</sup>, Maxime Rotival<sup>1</sup>, Blandine Baudon<sup>1</sup>, Pierre-Emmanuel Bonté<sup>1</sup>, Guadalupe Suarez<sup>1</sup>, Marianne Burbage<sup>1</sup>, Benjamin Sadacca<sup>1</sup>, Christel Goudot<sup>1</sup>, Joshua J. Waterfall<sup>1</sup>, Montserrat Carrascal<sup>2</sup>, Lluís Quintana-Murci<sup>1</sup>, Antonela Merlotti<sup>1</sup>, Diego Sebastian Amigorena<sup>1</sup> (<sup>1</sup>France, <sup>2</sup>Spain)**
- 14:25**  
**WS20.2** Ribosome profiling and immunopeptidomics reveal tens of novel conserved HIV-1 open reading frames encoding T cell antigens  
**Arnaud Moris<sup>1</sup>, Lisa Bertrand<sup>1</sup>, Annika Nelde<sup>2</sup>, Isabelle Hatin<sup>1</sup>, Emiliano Ricci<sup>1</sup>, Juliane S. Walz<sup>2</sup>, Olivier Namy<sup>1</sup> (<sup>1</sup>France, <sup>2</sup>Germany)**
- 14:35**  
**WS20.3** Engagement of TNF superfamily regulates the formation of the dendritic cell immunological synapse  
**Camille Clamagirand, Jérémie Rossy (Switzerland)**
- 14:45**  
**WS20.4** Interferon- $\alpha$  promotes neo-antigen formation and preferential HLA-B-restricted antigen presentation in pancreatic  $\beta$ -cells  
**Fatoumata Samassa<sup>1</sup>, Alexia Carré<sup>1</sup>, Zhicheng Zhou<sup>1</sup>, Javier Perez Hernandez<sup>1</sup>, Christiana Lekka<sup>2</sup>, Anthony Manganaro<sup>3</sup>, Masaya Oshima<sup>1</sup>, Hanqing Liao<sup>2</sup>, Robert Parker<sup>2</sup>, Barbara Brandao<sup>1</sup>, Decio Eizirik<sup>4</sup>, Orlando Burgos Morales<sup>1</sup>, Amanda Anderson<sup>3</sup>, Laurie Landry<sup>3</sup>, Farah Kobaisi<sup>1</sup>, Sylvaine You<sup>1,3</sup>, Maki Nakayama<sup>3</sup>, Sarah Richardson<sup>2</sup>, Roberto Mallone<sup>1,3</sup> (<sup>1</sup>France, <sup>2</sup>United Kingdom, <sup>3</sup>USA, <sup>4</sup>Belgium)**
- 14:55**  
**WS20.5** scATAC-seq in epithelial cells of human and mouse thymic medulla reveals a conserved HIV-1 dependent program sustaining their maturation and the control of self-antigen expression  
**Sümeyye Yayilkan, Lucas Brusselle, Erwan Kervagoret, Francine Padonou, Jérémie Poschmann, Matthieu Giraud (France)**
- 15:05**  
**WS20.6** Mapping the RA synovial immune-peptidome  
**Kathryn Steel<sup>1</sup>, Elizabeth Pook<sup>1</sup>, Sri Ramarathinam<sup>2</sup>, Tiing Jen Loh<sup>2</sup>, Jia Jia Lim<sup>2</sup>, Jean-Baptiste Richard<sup>1</sup>, Sarah Ryan<sup>1</sup>, Melody Chin<sup>1</sup>, Nora Ng<sup>1</sup>, Esperanza Perucha<sup>1</sup>, Christopher Buckley<sup>1</sup>, Kim Midwood<sup>1</sup>, Hugh Reid<sup>2</sup>, Jamie Rossjohn<sup>2</sup>, Anthony Purcell<sup>2</sup>, Andrew Cope<sup>1</sup> (<sup>1</sup>United Kingdom, <sup>2</sup>Australia)**
- 15:15** Discussion



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**ECOCHEM ROOM | 14:15-15:30**

**WORKSHOP 21 - CANCER IMMUNOGENETICS**

- 14:15**  
**WS21.1**     Harnessing NK cell-mediated killing of prostate cancer cells through epigenetic modulation  
**Filipa dos Reis, João Lobo, Isa Carneiro, Rui Freitas, Rui Henrique, Carmen Jerónimo, Margareta Correia** (*Portugal*)
- 14:25**  
**WS21.2**     Exploring the interplay between the RNA editing enzyme ADAR1 and innate immune responses in cervical cancer  
**Marta Kaciulis, Stefano Petrai, Valentina Tassinari, Emanuela Maria Greco, Angelina Pernazza, Martina Leopizzi, Francesca Belleudi, Danilo Ranieri, Silvia Ruggeri, Helena Stabile, Marco Cippitelli, Cristina Cerboni, Alessandra Soriani** (*Italy*)
- 14:35**  
**WS21.3**     Clonal evolution analysis of paediatric lymphoma reveals a highly diversified and continuous cellular status and potential target for precision medicine  
**Tracer Yong, Roberta D'Aulerio, Christian Oertlin, Julien Record, Anna Kwiecinska, Fredrik Baecklund, Lisa S. Westerberg** (*Sweden*)
- 14:45**  
**WS21.4**     Light induced expression of gRNA allows for optogenetic gene editing of T lymphocytes in vivo  
**Diego Velasques Pulgarin<sup>1</sup>, Nathalie Pelo<sup>1</sup>, Lin Ferrandiz<sup>2</sup>, Tilen Trselic<sup>1</sup>, William Nyberg<sup>3</sup>, Gary Bowlin<sup>3</sup>, Alexander Espinosa<sup>1</sup>** (<sup>1</sup>*Sweden*, <sup>2</sup>*France*, <sup>3</sup>*USA*)
- 14:55**  
**WS21.5**     A combined multi-omics approach reveals the impact of epigenetic therapies on the immunopeptidome of acute myeloid leukemia  
**Jens Bauer, Regina Bohnert, Jonas Scheid, Marissa Dubbelaar, Annika Nelde, Hans-Georg Rammensee, Matthias Schwab, Elke Schaeffeler, Juliane S. Walz** (*Germany*)
- 15:05**  
**WS21.6**     Lurbinectedin-induced transcriptional reprogramming: a pathway to sensitise SCLC to immunotherapy  
**Joan Russo-Cabrera, Santiago Ponce-Aix, Patricia Cozar, Alicia Luengo, Alejandro Navarro, María de los Reyes Bernabé, María Eugenia Olmedo, José Manuel Trigo, Jon Zugazagoitia, Luis Paz-Ares, Itziar Otano** (*Spain*)
- 15:15**     Discussion

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**AUDITORIUM | 15:55-17:10**

**SYMPOSIUM - AUTOIMMUNITY**

Chairs: **Margarita Dominguez-Villar** (*United Kingdom*), **Adrian Hayday** (*United Kingdom*)

- 15:55**  $\gamma\delta$  T cell selection by BTNL proteins limits progression of IBD  
**Robin Dart** (*United Kingdom*)
- 16:15** Multi-level regulation of autoimmune neuroinflammation by the non-canonical NF- $\kappa$ B signalling pathway  
**Ari Waisman** (*Germany*)
- 16:35** Identifying novel MAIT cell-specific antigens in Type 1 diabetes through drug discovery approaches  
**Iria Gomez-Touriño** (*Spain*)
- 16:55** Discussion

**LIFFEY B | 15:55-17:10**

**SYMPOSIUM - NEUROIMMUNOLOGY**

Chairs: **Yvonne Dombrowski** (*United Kingdom*), **Rana Karabudak** (*Turkey*)

- 15:55** Neural control of anti-inflammatory pathways  
**Gianluca Matteoli** (*Belgium*)
- 16:15** IL-2 and regulatory T cells in the nervous system  
**Adrian Liston** (*United Kingdom*)
- 16:35** Type I IFNs in neurodegeneration  
**Shohreh Issazadeh-Navikas** (*Denmark*)
- 16:55** Discussion

**LIFFEY A | 15:55-17:10**

**AAI SYMPOSIUM**

**Immune responses at barrier tissues**

Chairs: **Stephen Jameson** (*USA*), **Amanda Lund** (*USA*)

- 15:55** Unique mechanisms of early life inflammation  
**Shruti Naik** (*USA*)
- 16:15** Itchy immunity driven by myeloid specific IL-33  
**De'Broski Herbert** (*USA*)
- 16:35** Regulation of mucosal tissue immunity in context of virus infection  
**Jennifer M. Lund** (*USA*)
- 16:55** Discussion

**WICKLOW HALL 2 | 15:55-17:10**

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### WORKSHOP 22 - CANCER VACCINES AND IMMUNOTHERAPIES

- 15:55**  
**WS22.1** Bacterial nanoparticles as a novel platform for personalized cancer vaccines  
**Thomas van den Brekel<sup>1</sup>, Sanne Duinkerken<sup>1</sup>, Laura Kruijssen<sup>1</sup>, Katarina Olesek<sup>1</sup>, Eleonora Nardini<sup>1</sup>, Magali Coccimiglio<sup>1</sup>, Sjoerd Schetters<sup>2</sup>, Wouter Jong<sup>3</sup>, Joen Luirink<sup>1</sup>, Yvette van Kooyk<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Belgium, <sup>3</sup>Sweden)
- 16:05**  
**WS22.2** In-situ vaccination with Flt3L elicits immune responses against hepatocellular carcinoma and improves checkpoint blockade therapy  
**Isabella Lurje<sup>1</sup>, Wiebke Werner<sup>1</sup>, Ajay-Mohan Mohan<sup>1</sup>, Nicola Beindorff<sup>1</sup>, Natalie Nestel<sup>1</sup>, Justus Pein<sup>1</sup>, Anne Schlutt<sup>1</sup>, Yaroslava Shevchenko<sup>1</sup>, Paul Horn<sup>1</sup>, Kirsten Reers<sup>1</sup>, Alix Bruneau<sup>1</sup>, Deniz Uluk<sup>1</sup>, Georg Lurje<sup>1</sup>, Henry Marsh<sup>2</sup>, Michael Yellin<sup>2</sup>, Frank Tacke<sup>1</sup>, Linda Hammerich<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- 16:15**  
**WS22.3** Polymeric nanoparticles targeting conventional type 1 dendritic cells enhance antigen cross-presentation and CD8<sup>+</sup> T cells by activation of the non-canonical inflammasome  
**Jorge Huete-Carrasco, Natalia Muñoz-Wolf, Ross W. Ward, Ed Lavelle** (Ireland)
- 16:25**  
**WS22.4** MV130 as a new innate memory-based mucosae vaccine against cancer  
**Luna Cordeiro Minute, Laura Bravo Robles, Pablo Mata Martinez, Francisco Javier Cueto, Jaime Fernandez-Pascual, Eduardo Lopez-Collazo, Carlos Del Fresno** (Spain)
- 16:35**  
**WS22.5** Can immunotherapies engaging the CD3/ $\gamma\delta$  TCR complex help reactivate exhausted  $\gamma\delta$  T cells in a tumoral microenvironment?  
**Morgane Chauvet, Emmanuel Scotet, Dorothée Bourges** (France)
- 16:45**  
**WS22.6** Enhancing oncolytic virus-infected cellular vaccines with tumor-rejecting lymphocyte transfer for the immunotherapy of triple-negative breast cancer  
**Guillaume St-Cyr, Lauren Daniel, Hugo Giguère, Lee-Hwa Tai** (Canada)
- 16:55** Discussion

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LIFFEY HALL 2 | 15:55-17:10

WORKSHOP 23 - MACROPHAGE FUNCTION AND REGULATION

- 15:55**  
**WS23.1** MafB regulates monocyte-to-macrophage differentiation and imprints tissue resident macrophage identity and function  
**Domien Vanneste, Wen Peng, Joan Abinet, Malik Hamaïdia, Alexis Balthazar, Alexandre Hego, Philippe Compère, Bénédicte Machiels, Thomas Marichal** (*Belgium*)
- 16:05**  
**WS23.2** Pentose phosphate pathway derived NO orchestrates macrophage immunometabolic responses through TCA cycle crosstalk; a target for *Mycobacterium tuberculosis* immune evasion  
**John McGrath, Anna Ledwith, Cian Horneck Johnston, Frederick Sheedy** (*Ireland*)
- 16:15**  
**WS23.3** CXCR3 mediates CD49a+ NK cell differentiation in colorectal cancer liver metastasis by promoting tissue residency in supportive macrophage niches  
**Eleonora Russo, Chiara Di Censo, Chiara D'Aquino, Luana Tomaipitnca, Giuseppe Sciumè, Giovanna Peruzzi, Valerio Licursi, Mattia Laffranchi, Francesca Sozio, Silvano Sozzani, Stefano Garofalo, Cristina Limatola, Angela Santoni, Giovanni Bernardini** (*Italy*)
- 16:25**  
**WS23.4** Myeloid type I IFN sensing facilitates stress erythropoiesis  
**Florian Deckert, Asma Farhat, Alina Fokina, Lisabeth Pimenov, Riem Gawish, Sylvia Knapp** (*Austria*)
- 16:35**  
**WS23.5** Mutual immunomodulatory effect of a high-sodium diet and antihypertensive drugs on mouse macrophages  
**Martyna Cieřlik<sup>1</sup>, Spencer D. Strobel<sup>1,2</sup>, Bernadeta Nowak<sup>1</sup>, Krzysztof Bryniarski<sup>1</sup>, Katarzyna Nazimek<sup>1</sup>** (<sup>1</sup>*Poland*, <sup>2</sup>*USA*)
- 16:45**  
**WS23.6** CD109 as a target for lung cancer and tumor-associated macrophages  
**Tine Haesen<sup>1</sup>, Maximilian Schinke<sup>1</sup>, Vanessa Neuhaus<sup>1</sup>, Susann Dehmel<sup>1</sup>, Mania Ackermann<sup>1</sup>, Pirjo Laakkonen<sup>2</sup>, Armin Braun<sup>1</sup>, Katherina Sewald<sup>1</sup>** (<sup>1</sup>*Germany*, <sup>2</sup>*Finland*)
- 16:55** Discussion

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WICKLOW HALL 1 | 15:55-17:10

WORKSHOP 24 - IMMUNOMETABOLISM IN CANCER

- 15:55**  
**WS24.1** The tumor microenvironment drives mitochondrial metabolic reprogramming in neutrophils during non-small cell lung cancer  
**Marah Runtsch, Oliver Kindler, Thomas Eichmann, Ana Santiso, Kathrin Maitz, Luka Brcic, Joerg Lindenmann, Julia Kargl** (Austria)
- 16:05**  
**WS24.2** Tackling tumor microenvironment metabolism: unveiling IL4i1's role and therapeutic potential  
**Marco Gargaro<sup>1</sup>, Giulia Mencarelli<sup>1</sup>, Andrea Marra<sup>1</sup>, Estevão Carlos Silva Barcelos<sup>1</sup>, Andrea Astolfi<sup>1</sup>, Giorgia Manni<sup>1</sup>, Giulia Scalisi<sup>2</sup>, Doriana Ricciuti<sup>1</sup>, Benedetta Pieroni<sup>1</sup>, Francesco Sarnari<sup>1</sup>, Alessandro Pinzi<sup>1</sup>, Giuseppe Manfroni<sup>1</sup>, Marco Colonna<sup>3</sup>, Robert Schreiber<sup>3</sup>, Maria Letizia Barreca<sup>1</sup>, Peter Murray<sup>4</sup>, Kenneth M. Murphy<sup>3</sup>, Francesca Fallarino<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>France, <sup>3</sup>USA, <sup>4</sup>Germany)
- 16:15**  
**WS24.3** Extracellular  $\alpha$ -ketoglutarate potentiate myeloid cells' capacity to induce Th17 and Tregs  
**Marijana Milanović, Luka Pavlović, Marina Bekić, Aleksandar Bisenić, Jelena Đokić, Miodrag Čolić, Sergej Tomić** (Serbia)
- 16:25**  
**WS24.4** Overcoming the limitations of  $\alpha$ 4-1BB/PD1 dual treatment by exploring the metabolic programming of therapy-responsive T-cells  
**Frédérique de Graaf, Nils Mülling, Felix Behr, Ward Vleeshouwers, Macha Beijnes, Quint Blom, Lucas Brock, Ramon Arens** (Netherlands)
- 16:35**  
**WS24.5** Assessing immune cell infiltration and metabolic activity during immunotherapy in vivo through immuno-metabolic PET/MRI imaging  
**Sixing Li, Marie-Aline Neveu, Laura Kübler, Manfred Kneilling, André Martins** (Germany)
- 16:45**  
**WS24.6** Mitochondrial respiratory complex III sustains IL-10 production in macrophages and promotes tumor-mediated immune evasion  
**Alessia Zotta<sup>1</sup>, Shane O'Carroll<sup>1</sup>, Eva Palsson-McDermott<sup>1</sup>, Juliana Toller-Kawahisa<sup>1</sup>, Emily Day<sup>1</sup>, Ross W. Ward<sup>1</sup>, Dylan Ryan<sup>2</sup>, Marah Runtsch<sup>3</sup>, Kathrin Maitz<sup>3</sup>, Anna Lueger<sup>3</sup>, Julia Kargl<sup>3</sup>, Mark Watson<sup>4</sup>, Martin Brand<sup>4</sup>, Ed Lavelle<sup>1</sup>, Luke O'Neill<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom, <sup>3</sup>Austria, <sup>4</sup>USA)
- 16:55** Discussion



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LIFFEY HALL 1 | 15:55-17:10

WORKSHOP 25 - AI AND BIOINFORMATICS

- 15:55**  
**WS25.1** TCRgrapher: a software for the identification of antigen-specific TCRS  
**Kseniia Lupyr<sup>1</sup>, Pavel Shelyakin<sup>2</sup>, Konstantin Sobyenin<sup>1</sup>, Ruslan Martynov<sup>1</sup>, Vladimir Popov<sup>1</sup>, Sevastyan Rabdano<sup>1</sup>, Irina Linge<sup>1</sup>, Olga Nikitina<sup>1</sup>, Ilya Kofiadi<sup>1</sup>, Dmitry Staroverov<sup>1</sup>, Mikhail Shugay<sup>1</sup>, Dmitriy Chudakov<sup>1,2</sup>, Olga Britanova<sup>1</sup>** (*<sup>1</sup>Russian Federation, <sup>2</sup>United Arab Emirates*)
- 16:05**  
**WS25.2** Modeling variations in antibody response magnitude and longevity  
**Paola Stolfi, Filippo Castiglione, Enrico Mastrostefano, Silvia Scarpetta, Antonella Prisco** (*Italy*)
- 16:15**  
**WS25.3** Unveiling the power of high-dimensional cytometry data with cyCONDOR  
**Charlotte Kroeger<sup>1</sup>, Sophie Müller<sup>1</sup>, Jacqueline Leidner<sup>1</sup>, Theresa Kröber<sup>1</sup>, Stefanie Warnat-Herresthal<sup>1</sup>, Jannis B. Spintge<sup>1</sup>, Timo Zajac<sup>1</sup>, Aleksej Frolov<sup>1</sup>, Caterina Carraro<sup>1</sup>, Simone Puccio<sup>2</sup>, Joachim L. Schultze<sup>1</sup>, Tal Pacht<sup>1</sup>, Marc Beyer<sup>1</sup>, Lorenzo Bonaguro<sup>1</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Italy*)
- 16:25**  
**WS25.4** Bw4 ligand and direct T-cell receptor binding induced selection on HLA A and B alleles  
**Yoram Louzoun, Reut Levi** (*Israel*)
- 16:35**  
**WS25.5** Quantitative comparison of cellular trajectories from single-cell transcriptomics data  
**Lisa Maria Steinheuer, Kevin Thurley** (*Germany*)
- 16:45**  
**WS25.6** The National Research Data Infrastructure for Immunology in Germany (NFDI4Immuno): building a framework for comprehensive immunological data integration and analysis, collaboration and open science  
**Sebastian Ferrara, Amro Abbas, Axel, Ronald Schulz, Christian Busse, Henrik, E. Mei, Hyun-Dong Chang** (*Germany*)
- 16:55** Discussion

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### LIFFEY MEETING ROOM 2 | 15:55-17:10

#### WORKSHOP 26 - IMMUNOLOGY OF SKIN DISEASE

- 15:55**  
**WS26.1** Lin-CD117+CD34+FceRI+ progenitor cells in chronic spontaneous urticaria and atopic dermatitis  
**Katie Ridge, Barry Moran, Cliona O'Fareilly, Alan Irvine, Mark Little, Conor Finlay, Niall Conlon** (*Ireland*)
- 16:05**  
**WS26.2** Single-cell responses to mTOR inhibition in patients with cutaneous sarcoidosis  
**Kveta Brazdilova, Anna Redl, Luisa Unterluggauer, Lisa Kleissl, Thomas Krausgruber, Thomas W. Weichhart, Christoph Bock, Georg Stary** (*Austria*)
- 16:15**  
**WS26.3** The hair canal serves as an EGFR-regulated antimicrobial gatekeeper  
**Lena Artner-Gent, Regina Jin, Karoline Strobl, Dana Krauss, Joana Silva, Petra Pjevac, David Berry, Tatiana Chontorotzea, Jörg Klufa, Thomas Bauer, Maria Sibilia** (*Austria*)
- 16:25**  
**WS26.4** Spermidine/spermine N1-acetyltransferase controls tissue-specific regulatory T cell function in chronic skin inflammation  
**Teresa Neuwirth, Daniel Malzl, Katja Knapp, Panagiota Tsokkou, Lisa Kleissl, Anna Redl, Christian Freystätter, Nara Marella, Ana P. Kutschat, Elisabeth Ponweiser, Arvand Haschemi, Davide Seruggia, Jörg Menche, Erwin F. Wagner, Georg Stary** (*Austria*)
- 16:35**  
**WS26.5** Single cell transcriptomics reveals two fates of hair follicle stem cells in patients with hidradenitis suppurativa and sheds light on the mechanisms of keratinisation and inflammation  
**Audrey Onfroy, Jean-Louis Francette, Etienne Audureau, Philippe Lecorvoisier, Caroline Boucle, Fanny Culpier, Véronique Godot, Pierre Wolkenstein, Yves Lévy, Piotr Topilko, Sophie Hue** (*France*)
- 16:45**  
**WS26.6** Multimodal and longitudinal single-cell analysis of local innate immune response to vaccine in ex vivo natural human skin modules  
**Manon Scholaert<sup>1</sup>, Mathias Peries<sup>1</sup>, Emilie Braun<sup>1</sup>, Jeremy Martin<sup>1</sup>, Nadine Serhan<sup>1</sup>, Alexia Loste<sup>1</sup>, Bruner Audrey<sup>1</sup>, Lilian Basso<sup>1</sup>, Benoit Chaput<sup>1</sup>, Eric Merle<sup>2</sup>, Pascal Descargues<sup>2</sup>, Emeline Pages<sup>1</sup>, Nicolas Gaudenzio<sup>1</sup>** (<sup>1</sup>*France*, <sup>2</sup>*USA*)
- 16:55** Discussion

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LIFFEY MEETING ROOM 3 | 15:55-17:10

WORKSHOP 27 - TISSUE MICROENVIRONMENTS-DAMAGE AND REPAIR

- 15:55**  
**WS27.1** Atherosclerotic patients at high-risk for plaque destabilization show an enhanced adaptive reconfiguration of NK cells in response to HCMV  
**Irene Bonaccorsi, Jose Freni, Maria Crescenti, Esther Bertuccio, Alessandra Fittipaldi, Filippo Benedetto, Paolo Carrega, Guido Ferlazzo** (*Italy*)
- 16:05**  
**WS27.2** Comparative analysis of interferon (IFN) signalling reveals an IFN $\gamma$ -Jak1 axis in the selective control of intestinal stem cell niche damage and fetal injury  
**Megan O'Brien, Caoimhe Cadden, Eóin McNamee** (*Ireland*)
- 16:15**  
**WS27.3** Immune cells play a critical role in cytokine- and endotoxin-mediated endothelial permeability  
**Samira Ortega Iannazzo, Patricia Gogesch, Nicole Rupp, Joachim Rom, Markus Kreuz, Kristin Reiche, Martina Anzaghe, Zoe Waibler** (*Germany*)
- 16:25**  
**WS27.4** IL-18-induced HIF-1 $\alpha$  in ILC3s ameliorates the inflammation of C. rodentium-induced colitis  
**Lucía Sancho, Raquel Castillo-González, Ana Valle, Cristina Villa, Aranzazu Cruz-Adalia** (*Spain*)
- 16:35**  
**WS27.5** Complement-mediated severe hypersensitivity reaction to paclitaxel  
**Jennifer Bolaños, Mariona Pascal, Rosa Muñoz-Cano, Francisco Lozano** (*Spain*)
- 16:45**  
**WS27.6** Anti-Ig-E treatment in patient with severe asthma and eosinophilic granulomatosis with polyangiitis: a case report  
**Nurgul Naurzvai, Haluk Turktaş** (*Turkey*)
- 16:55** Discussion

MONDAY, 2 SEPTEMBER 2024

**ECOCHEM ROOM | 15:55-17:10**

**WORKSHOP 28 - IMMUNE SENESENCE AND AGING**

- 15:55** IL-15 drives NK-receptor mediated cytotoxicity in senescent CD8 T cells  
**WS28.1** **Olivia Bracken, Luciana Covre, Wing Tung Ma, Luisa Chocarro De Erauso, Roel De Maeyer, Christina Rollings, Linda Sinclair, Carlos Henrique Fantecelle, Yanchun Peng, Doreen Cantrell, Tao Dong, Daniel Gomes, Arne Akbar** (*United Kingdom*)
- 16:05** Persistent exposure to cancer-derived granulocyte colony stimulating  
**WS28.2** factor leads to aberrant bactericidal functionality of neutrophils  
**Ekaterina Pylaeva, Olga Shevchuk, Lea Tollrian, Jana Riedesel, Irem Ozel, Cornelius Kürten, Jan Kehrmann, Daniel Robert Engel, Helmut Hanenberg, Stephan Lang, Jadwiga Jablonska** (*Germany*)
- 16:15** Loss of SARM1 attenuates chemokine production & immune cell  
**WS28.3** infiltration during retinal degeneration  
**Luke Gibbons, Chris Greene, Charlotte Leane, Sarah Doyle** (*Ireland*)
- 16:25** Senescence related phenotypic alterations of lymphocytes are  
**WS28.4** affected by dialysis prescription and can predict mortality in dialysis patients  
**Georgios Lioulis<sup>1</sup>, Aliki Xochelli<sup>1</sup>, Theodoros Tourountzis<sup>1</sup>, Michalis Christodoulou<sup>1</sup>, Eleni Moysidou<sup>1</sup>, Stamatia Stai<sup>1</sup>, Aikaterini Papagianni<sup>1</sup>, Ioannis Theodorou<sup>2</sup>, Maria Stangou<sup>1</sup>, Asimina Fylaktou<sup>1</sup>** (*<sup>1</sup>Greece, <sup>2</sup>France*)
- 16:35** Sustainable T and B cell immunity in long-lived rodents (Spalax)  
**WS28.5** **Maria Metsger<sup>1</sup>, Alexey Davydov<sup>1,2</sup>, Pavel Shelyakin<sup>3</sup>, Mark Izraelson<sup>4</sup>, Aleksei Mazalov<sup>4</sup>, Irina Shagina<sup>4,5</sup>, Jessica Nordlund<sup>5</sup>, Ulrika Liljedahl<sup>5</sup>, Valeriia Kriukova<sup>6</sup>, Kseniia Lupyr<sup>4</sup>, Imad Shams<sup>6</sup>, Dmitriy Chudakov<sup>1,4</sup>, Olga Britanova<sup>4</sup>** (*<sup>1</sup>Czech Republic, <sup>2</sup>USA, <sup>3</sup>United Arab Emirates, <sup>4</sup>Russian Federation, <sup>5</sup>Sweden, <sup>6</sup>Israel*)
- 16:45** Aging drives dysregulation of regulatory T cells in the gut mucosa  
**WS28.6** **Jefferson Leite, Natalia Notarberardino Bos, Rebecca Jasser, Zeynep Ergun, Katlynn Carter, Aysan Pousardegh Zonouzi, Emmanouil Stylianakis, Nadine Hoevelmeyer, Ari Waisman** (*Germany*)
- 16:55** Discussion

TUESDAY, 3 SEPTEMBER 2024

**AUDITORIUM | 08:30-09:45**

**SYMPOSIUM - INNATE IMMUNITY TO VIRUSES**

Chairs: **Evangelos Andreakos** (Greece), **Sylvia Knapp** (Austria)

- 08:30 cGAS-STING-NFkB is an ancient antiviral pathway  
**Rune Hartmann** (Denmark)
- 08:50 Role of DNA damage and microbiota in antiviral immunity  
**Nelson Gekara** (Sweden)
- 09:10 Lung mononuclear cells in respiratory tract infections  
**Anna Smed-Sörensen** (Sweden)
- 09:30 Discussion

**LIFFEY B | 08:30-09:45**

**SYMPOSIUM - PLASMA CELLS**

Chairs: **Andreas Radbruch** (Germany), **Marieke Van Ham** (The Netherlands)

- 08:30 Recruitment of plasma cells to the bone marrow upon vaccination and infection  
**Mir-Farzin Mashregi** (Germany)
- 08:50 Plasma cell responses to SARS-CoV-2 vaccines  
**Rita Carsetti** (Italy)
- 09:10 Regulatory plasma cells  
**Simon Fillatreau** (France)
- 09:30 Discussion

**LIFFEY A | 08:30-09:45**

**EAACI SYMPOSIUM**

**The new nomenclature for allergy and hypersensitivity reactions**

Chair: **Mubeccel Akdis** (Switzerland)

- 08:30 New nomenclature of allergic diseases and hypersensitivity reactions  
**Marek Jutel** (Poland)
- 08:50 The new nomenclature proposal for allergy and autoimmunity  
**Ioana Agache** (Romania)
- 09:10 Epithelial Barrier Theory: Novel evidence on mechanisms of development of allergic and autoimmune disease  
**Cezmi Akdis** (Switzerland)
- 09:30 Discussion

TUESDAY, 3 SEPTEMBER 2024

**WICKLOW HALL 2 | 08:30-09:45**

**WORKSHOP 29 - T CELL IMMUNITY IN CANCER**

- 08:30**  
**WS29.1** Highly multiplexed and 3D microscopy of the bone marrow microenvironment reveals rapidly expanding immature vasculature and PD-1+CD8+ T cell niches driving leukemic progression  
**Lanzhu Li<sup>1</sup>, Geoff Ivison<sup>2</sup>, Isabelle Rottmann<sup>1</sup>, Jan C. Schröder<sup>1</sup>, Yury Goltsev<sup>1</sup>, Garry P. Nolan<sup>1</sup>, Aaron T. Mayer<sup>1</sup>, Bettina Weigelin<sup>1</sup>, Christian M. Schürch<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- 08:40**  
**WS29.2** Mapping T cell signatures associated to response to neoadjuvant chemotherapy in colorectal liver metastasis  
**Maud Mayoux<sup>1</sup>, Fabius Wiesmann<sup>1</sup>, Gioana Litscher<sup>1</sup>, Marijne Vermeer<sup>1</sup>, Stanislav Dergun<sup>1</sup>, Khemara Long<sup>1</sup>, Ariana Karimi<sup>1</sup>, Samira Burr<sup>1</sup>, Nicolas Nunez<sup>1</sup>, Ekaterina Friebe<sup>2</sup>, Tobias Wertheimer<sup>1</sup>, Colin Sparano<sup>1</sup>, Florian Mair<sup>1</sup>, Burkhard Becher<sup>1</sup>, Bettina Sobottka-Brillout<sup>1</sup>, Sònia Tugues<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Switzerland)
- 08:50**  
**WS29.3** Beyond helpers: unraveling the potential of CD4+ cytotoxic T cells in B cell lymphoma  
**Ivana Spasevska, Karoline Kongsrud, Ankush Sharma, Eveline Scherer, Hanna Julie Hoel, Marianna Vincenti, Monica Bostad, Heidi Ødegaard Notø, Idun Dale Rein, Claire Dunn, Kanutte Huse, June H. Myklebust** (Norway)
- 09:00**  
**WS29.4** Distinct spatiotemporal dynamics drive CD8+ T cell fate decision in tumor microenvironment  
**Valentina Russo, Carlo De Intinis, Gaia Montacchiesi, Luca Petiti, Nadia Brasu, Denis Baev, Lucia Lopez, Federica Benvenuti, Anna Sapino, Luigia Pace** (Italy)
- 09:10**  
**WS29.5** Tissue resident T cell responses to immunotherapies at the patient derived tumor-lung tissue interface  
**Tonia Bargmann, Sebastian Konzok, Dirk Schaudien, Christopher Werlein, Patrick Zardo, Lavinia Neubert, Danny Jonigk, Hans-Gerd Fieguth, Katherina Sewald, Susann Dehmel, Armin Braun** (Germany)
- 09:20**  
**WS29.6** Distinct immune resistance profiles of malignant subpopulations contribute to intra-tumoral heterogeneity of pancreatic cancer  
**Abir Hussein, Ayse Nur Menevse, Julian Sax, Leonard Bellersheim, Antonio Sorrentino, Mostafa El-Tager, Daniele Ferrari, Andrea Markus, Ahmed Mahfouz, Marcel Reinders, Frauke Alves, Philipp Beckhove** (Germany)
- 09:30** Discussion



TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 2 | 08:30-09:45

WORKSHOP 30 - NOVEL THERAPEUTICS FOR AUTOIMMUNE DISEASES

- 08:30**  
**WS30.1** Engineered nanobodies as tools to visualize and direct antigen specific tolerance  
**Novalia Pishesha** (USA)
- 08:40**  
**WS30.2** Anti-citrullinated histone antibody CIT-013: targeting neutrophil extracellular traps as an anti-inflammatory therapy in hidradenitis suppurativa  
**Stephanie van Dalen<sup>1</sup>, Josephine Stein<sup>1</sup>, Tirza Bruurmijn<sup>1</sup>, Martyn Foster<sup>2</sup>, John Ingram<sup>2</sup>, Jacek Szepietowski<sup>3</sup>, Piotr Krajewski<sup>3</sup>, Errol Prens<sup>1</sup>, Kelsey van Straalen<sup>1</sup>, Maarten van der Linden<sup>1</sup>, Renato Chirivi<sup>1</sup>, Eric Meldrum<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>United Kingdom, <sup>3</sup>Poland)
- 08:50**  
**WS30.3** Elimination of CD45RChigh T and B cells by anti-CD45RC mAb lead to efficient control of experimental rheumatoid arthritis  
**Cécile Bergua, Marine Besnard, Ghenima Ahmil, Laure-Helene Ouisse, Nadege Vimond, Apolline Salama, Bérangère Evrard, Elise Brisebard, Alexis Collette, Frédéric Blanchard, Thibaut Larcher, Benoit Le Goff, Ronald Van Brempt, Ignacio Anegón, Carole Guillonnet** (France)
- 09:00**  
**WS30.4** RP23: a novel peptide-based therapeutic for inflammatory skin diseases  
**Jack Rawlings, Anneliese Ashhurst, Skye Stockdale, Daniel Ford, Joshua Maxwell, Rachael Ireland, Richard Payne, Scott Byrne** (Australia)
- 09:10**  
**WS30.5** Slamming the brakes on autoimmunity: inhibition of the CD40:CD40L pathway utilizing fab fragments and nanobodies  
**Kathrine Pedersen, Nick Stub Laursen, Yaseelan Palarasah, Søren Egedal Degn, Steffen Thiel** (Denmark)
- 09:20**  
**WS30.6** An unbiased high-throughput screening identifies repurposing drugs and novel molecules that reduce proinflammatory cytokine secretion in the context of rheumatoid arthritis  
**Martin Kotrulev, Beatriz Garcia-Pinel, Rodrigo Bernardez-Alfaya, Yolanda Lopez-Golan, Oscar Javier Cordero, Eddy Sotelo, Rubén Varela-Calvino, Iria Gomez-Touriño** (Spain)
- 09:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

WICKLOW HALL 1 | 08:30-09:45

WORKSHOP 31 - DIET, OBESITY AND IMMUNE MODULATION

- 08:30  
WS31.1 Obesity-induced dysbiosis impairs type 2 immune responses  
**Inaya Hayek<sup>1</sup>, Viviane Schmidt<sup>1</sup>, Lea Semmler<sup>1</sup>, Roman Gerlach<sup>1</sup>, Padraic Fallon<sup>2</sup>, Christian Schwartz<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Ireland)
- 08:40  
WS31.2 Loss of adipose tissue protects mice from intestinal inflammation  
**Toka Omar, Marilena Letizia, Britta Siegmund, Carl Weidinger** (Germany)
- 08:50  
WS31.3 Obesity-induced changes in perivascular adipose tissue fibroblasts in a mouse model of atherosclerosis  
**Lea Mikkola, Ivana Mikocziova, Minna Piipponen, Mira Valkonen, Jimmy Fagersund, Senthil Palani, Anne Roivainen, Ana Hernández de Sande, Merja Heinäniemi, Pekka Ruusuvaori<sup>4</sup>, Tiit Örd, Minna U. Kaikkonen, Tapio Lönnberg** (Finland)
- 09:00  
WS31.4 Structural variations and developmental characteristics of adipose-associated serosal lymphoid tissues in mice  
**Xinkai Jia, Peter Balogh** (Hungary)
- 09:10  
WS31.5 Obesity and sex differences: an overlooked reality in preclinical studies  
**Lisa Schuetz<sup>1,2</sup>, Gayel Duran<sup>1,2</sup>, Paulien Baeten<sup>1,2</sup>, Doryssa Hermans<sup>1,2</sup>, Sarah Chenine<sup>1,2</sup>, Janne Verreycken<sup>1,2</sup>, Tim Vanmierlo<sup>1,2</sup>, Kristiaan Wouters<sup>1</sup>, Bieke Broux<sup>1,2</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Netherlands)
- 09:20  
WS31.6 High fat low carbohydrate is linked to protection against the development of CNS autoimmunity  
**Duan Ni, Jian Tan, Julien Reyes, Alistair Senior, Caitlin Andrews, Jemma Taitz, Camille Potier, Claire Wishart, Alanna Spiteri, Laura Piccio, Nicholas King, Stephen Simpson, Ralph Nanan, Laurence Macia** (Australia)
- 09:30 Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 1 | 08:30-09:45

WORKSHOP 32 - T CELL MEMORY IN HEALTH AND DISEASE

- 08:30**  
**WS32.1** Epigenetic imprints in human T cells reveal DNA replication speed as a driver for memory differentiation  
**Dania Hamo, Ghazaleh Zarrinrad, Anne Schulze, Kristy Ou, Paula Linh Kramer, Judith Gottfreund, Cornelia Peitsch, Marcel Finke, Mingxing Yang, Frederik Hamm, Abdulrahman Salhab, Pascal Giehr, Leila Amini, Verena Wolf, Jörn Walter, Julia K Polansky**
- 08:40**  
**WS32.2** Iron deficiency and acquired immunity: novel perspectives on the effects of iron restriction on immunological memory and protective immune responses  
**Shamsideen Yusuf, Giulia Pironaci, Hannah Murray, Dana Costigan, Philip Holdship, Megan Teh, Alexandra Preston, Andrew Armitage, Fadi Issa, Ronjon Chakraverty, Alexander Hal Drakesmith** (*United Kingdom*)
- 08:50**  
**WS32.3** Leveraging the strategic positioning of central memory CD8<sup>+</sup> T cells in steady state lymph nodes for enhanced secondary recall  
**Brigitte Duckworth, Benjamin Broomfield, Raymond Qin, Carolina Alvarado, Chin Wee Tan, Gabrielle Belz, Verena Wimmer, Melissa Davis, Joanna Groom** (*Australia*)
- 09:00**  
**WS32.4** *Staphylococcus aureus* colonisation expands respiratory tissue-resident memory CD4<sup>+</sup> T-cells, with the potential for heterologous immunity  
**Clíodhna Daly, Seán Cahill, Rachel McLoughlin** (*Ireland*)
- 09:10**  
**WS32.5** A diverse pool of oral mucosa-resident memory T cells protects against viral infection at the site of entry  
**Florian Winkler, Fischer Carmen, Laura Marie Gail, Florian Deckert, Georg Stary, Johanna Strobl** (*Austria*)
- 09:20**  
**WS32.6** A tissue-specific molecular program governs the formation and function of brain-resident CD8<sup>+</sup> T cells  
**Tarek Elmzzahi<sup>1,2</sup>, Darya Malko<sup>1,2</sup>, Mehrnoush Shakiba<sup>1</sup>, Doaa Hamada<sup>1</sup>, Martin Fuhrmann<sup>1</sup>, Kevin Man<sup>2</sup>, Axel Kallies<sup>2</sup>, Marc Beyer<sup>1</sup>** (<sup>1</sup>*Germany*, <sup>2</sup>*Australia*)
- 09:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

**LIFFEY MEETING ROOM 2 | 08:30-09:45**

**WORKSHOP 33 - VACCINES FOR BACTERIAL DISEASES**

- 08:30** Inducing tick immunity by vaccination as a novel strategy to prevent  
**WS33.1** Lyme borreliosis  
**Melissa van Gool, Alexis Burnham, Francisca Bixirao Ferreira Andersen, Hannelore Beaat, Jacqueline van Eck, Abhijeet Nayak, Joppe Hovius** (*Netherlands*)
- 08:40** Immunogenicity and efficacy of vaccination with BCGΔBCG1419c and  
**WS33.2** H1-TT against tuberculosis in mice  
**Cristian Alfredo Segura-Cerda, Maura Epifanía Matus-Ortega, Rogelio Hernández-Pando, Dulce Mata-Espinosa, Jorge Alberto Barrios-Payán, Mirna Burciaga-Flores, Mario Alberto Flores-Valdez** (*Mexico*)
- 08:50** Chitin-derived polymers are promising cGAS-STING dependent  
**WS33.3** mucosal vaccine adjuvants for respiratory pathogens  
**Dorian Dederko, Kate Roche, Jorge Huete-Carrasco, Nicole Roche, Jeremy Aboagye, Lorena García del Río, Roisin Lynch, Hui Ma, Nicole O'Sullivan, Liam Murray, Grainne O'Rourke, Ed Lavelle** (*Ireland*)
- 09:00** Preclinical immunological characterization of GMMA-based vaccine  
**WS33.4** candidates against invasive nontyphoidal Salmonellosis  
**Marta Benincasa, Daniele De Simone, Maria Grazia Aruta, Martina Carducci, Roberta Di Benedetto, Carlo Giannelli, Francesco Berlanda Scorza, Miren Iturriza, Francesca Mancini, Rocio Canals, Omar Rossi** (*Italy*)
- 09:10** The inhibition of IL-10 during immunization with a TLR agonist-  
**WS33.5** based vaccine improves vaccine efficacy against the opportunistic pathogen *Staphylococcus aureus*  
**Alanna Kelly, Simon Carlile, Karen McCarthy, Tracey Claxton, Emilio Voza, Kingston Mills, Rachel McLoughlin** (*Ireland*)
- 09:20** Bacteria-targeting vaccine in prevention of cardiovascular and cardio  
**WS33.6** thrombotic diseases  
**Jonna Alkula, Markus Ojanen, Vili Lampinen, Terho Lehtimäki, Pekka Karhunen, Vesa Hytönen** (*Finland*)
- 09:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY MEETING ROOM 3 | 08:30-09:45  
WORKSHOP 34 - IMMUNE IMPAIRMENT AND EXHAUSTION

- 08:30  
WS34.1 Role of Foxo1 and inflammation on T-cell exhaustion in the course of anti-tumor responses  
**Amélie Lombès, Mathieu Germain, Aurélie Durand, Léa Giraud, Armelle Blondel, Cédric Auffray, Bruno Lucas** (*France*)
- 08:40  
WS34.2 T cell Immunotherapy: thinking beyond inhibitory receptors  
**Ludovic Martinet** (*France*)
- 08:50  
WS34.3 Imiquimod induces gamma-delta T cell exhaustion in mouse psoriatic inflammation  
**Katarzyna Nazimek, Angelika Fedor, Bernadeta Nowak, Paulina Skalska, Martyna Cieślík, Magdalena Gębicka, Katarzyna Zaborowska, Krzysztof Bryniarski** (*Poland*)
- 09:00  
WS34.4 Activated hepatic stellate cells promote the retention and functional impairment of tissue-resident CD8<sup>+</sup>T-cells in the fibrotic liver  
**George Finney, Stephanie Kucykowicz, Emily Naish, Daniel Brown Romero, Walid Al-Akkad, Amir Gander, Krista Rombouts, Mala K. Maini, Laura J. Pallett** (*United Kingdom*)
- 09:10  
WS34.5 Immune checkpoint molecules control the local antigen-specific immune response in the liver  
**Thomas Guinebretière, Anaïs Cardon, Jean-Paul Judor, Richard Danger, Sophie Conchon, Amédée Renand** (*France*)
- 09:20  
WS34.6 Circulating Immune profiling in people living with HIV (PLHIV) reveals that a differential pattern of exhaustion and activation is associated with viral control  
**Adriana Navas<sup>1</sup>, dos Santos Jéssica<sup>1</sup>, Groenendijk Albert<sup>1</sup>, Nadira Vadaq<sup>1</sup>, Maartje C.P. Jacobs-Cleophas<sup>1</sup>, Bram van Cranenbroek<sup>1</sup>, Wilhelm A.J.W. Vos<sup>1</sup>, Marc J.T. Blaauw<sup>1</sup>, Louise van Eekeren<sup>1</sup>, Casper Rokx<sup>1</sup>, Annelies Verbon<sup>1</sup>, Mihai Netea<sup>1,2</sup>, Leo Joosten<sup>1,3</sup>, Hans Koenen<sup>1</sup>, Andre van der Ven<sup>1</sup>** (<sup>1</sup>*Netherlands*, <sup>2</sup>*Germany*, <sup>3</sup>*Romania*)
- 09:30 Discussion

TUESDAY, 3 SEPTEMBER 2024

**ECOCHEM ROOM | 08:30-09:45**

**WORKSHOP 35 - TOLERANCE AND IMMUNE REGULATION**

- 08:30** Understanding immunity at the site of embryo implantation –  
**WS35.1** implications for women with recurrent pregnancy loss  
**Ana Kisovar, Ingrid Granne, Jennifer Southcombe** (*United Kingdom*)
- 08:40** Studies to determine myelin peptide-specific nanoparticle tolerance  
**WS35.2** mechanisms and clinical translation  
**Joseph Podojil, Andrew Cogswell, Ming-Yi Chiang, Sandeep Kakade, Derrick McCarthy, Adam Elhofy, Stephen Miller** (*USA*)
- 08:50** Tolerogenic dendritic cell-based immunotherapy to prevent unwanted  
**WS35.3** immune response in enzyme replacement therapy for lysosomal storage disorders  
**Marta Fortunato, Daniela Tomasoni, Fabio Russo, Serena Gasperini, Simona Fecarotta, Maria Ester Bernardo, Giancarlo Parenti, Alessandro Aiuti, Laura Passerini, Silvia Gregori** (*Italy*)
- 09:00** Tolerogenic dendritic cells are strong producers of extracellular  
**WS35.4** vesicles with immunomodulatory function  
**Mats van Delen, Amber Dams, Hans de Reu, An Jacobs, Pascale Berckmans, Judith Derdelinckx, Inge Nelissen, Nathalie Cools** (*Belgium*)
- 09:10** A new paradigm for the role of AIRE in the regulation of cytoskeleton  
**WS35.5** **Dominik Filipp, Jana Petrusova, Jasper Manning** (*Czech Republic*)
- 09:20** The embryonic lymphoid cells permanently imprint the thymic epithelial  
**WS35.6** compartment  
**Gonçalo Nogueira<sup>1</sup>, Francisca Soares-da-Silva<sup>1</sup>, Nuno Alves<sup>2</sup>, Pablo Pereira<sup>1</sup>, Ana Cumano<sup>1</sup>** (<sup>1</sup>*France*, <sup>2</sup>*Portugal*)
- 09:30** Discussion



TUESDAY, 3 SEPTEMBER 2024

**AUDITORIUM | 10:30-11:45**

**SYMPOSIUM - THE FUTURE OF LEADERSHIP IN ACADEMIA / CHALLENGES FOR LEADERSHIP IN ACADEMIA**

Chairs: **Gunnur Deniz** (Turkey), **Myriam Nabhan** (Ireland)

- 10:30 Impostors, role models and the “lean in” fad: the path to diversity & equality is riddled with traps (and promising practices!)  
**Christopher Begeny** (United Kingdom)
- 11:00 Leading diverse teams  
**Silvie Klein-Franke** (Switzerland)
- 11:30 Discussion

**LIFFEY B | 10:30-11:45**

**SYMPOSIUM - RESOLUTION OF INFLAMMATION**

Chairs: **Attila Bacsí** (Hungary), **Jesmond Dalli** (United Kingdom)

- 10:30 The STING-IFN type I axis in resolving inflammation and fibrosis  
**Amiram Ariel** (Israel)
- 10:50 Regulation of T-Cell immune responses by pro-resolving lipid mediators  
**Sylvaine You** (France)
- 11:10 Apoptosis and wound repair - resolving a perplexing match  
**Adriano Rossi** (United Kingdom)
- 11:30 Discussion

**LIFFEY A | 10:30-11:45**

**CSI SYMPOSIUM**

**Beauty for next-generation tumor immunotherapy**

Chairs: **Linrong Lu** (China), **Yuting Ma** (China)

- 10:30 Lipid metabolism in TAMs governs antitumor immunity and ICB therapy  
**Su Bing** (China)
- 10:45 Targeting of regulatory B cells in cancer immunotherapy  
**Chu Yiwei** (China)
- 11:00 Touching of T cell tumor antigen recognition and differentiation  
**Li Guideng** (China)
- 11:15 Decoupling of differentiation and proliferation programs to manufacture stem cell-like CAR T cells  
**Bo Huang** (China)
- 11:30 Discussion

TUESDAY, 3 SEPTEMBER 2024

### WICKLOW HALL 2 | 10:30-11:45

#### WORKSHOP 36 - T CELL REGULATION AND FUNCTION I

- 10:30**  
**WS36.1** Inheritance of old mitochondria controls early CD8 T cell fate commitment and is regulated by autophagy  
**Mariana Borsa<sup>1</sup>, Ana Victoria Lechuga-Vieco<sup>1,2</sup>, Amir Kayvanjoo<sup>3</sup>, Yavuz Yazicioglu<sup>1</sup>, Ewoud Compeer<sup>1</sup>, Felix C. Richter<sup>1,4</sup>, Hien Bui<sup>5</sup>, Emilia Kuuluvainen<sup>5</sup>, Michael L. Dustin<sup>1</sup>, Linda Sinclair<sup>1</sup>, Doreen Cantrell<sup>1</sup>, Pekka Katajisto<sup>5,6</sup>, Anna Katharina Simon<sup>1,3</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Spain, <sup>3</sup>Germany, <sup>4</sup>Austria, <sup>5</sup>Finland, <sup>6</sup>Sweden)
- 10:40**  
**WS36.2** A subset of  $\alpha\text{v}\beta 8$ -expressing CD4<sup>+</sup> effector memory T cells restrain anti-viral CD8<sup>+</sup> T cell responses and prevent tissue pathology via activation of latent TGF $\beta$   
**Craig McEntee<sup>1,2</sup>, Stephanie Houston<sup>2</sup>, Conor Finlay<sup>1,2</sup>, Susan Christo<sup>3</sup>, Stefano Rossi<sup>2</sup>, Gang Liu<sup>3</sup>, Tovah Shaw<sup>2</sup>, Joshua Casulli<sup>2</sup>, Mark Fife<sup>2</sup>, Catherine Smedley<sup>2</sup>, Thomas Griffith<sup>4</sup>, Marion Pepper<sup>4</sup>, Tracy Hussell<sup>2</sup>, Philip Hansbro<sup>3</sup>, Jean-Marc Schwartz<sup>2</sup>, Laura Mackay<sup>3</sup>, Helena Paidassi<sup>5</sup>, Mark Travis<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom, <sup>3</sup>Australia, <sup>4</sup>USA, <sup>5</sup>France)
- 10:50**  
**WS36.3** Highly-functional myeloid-instructed CD8<sup>+</sup> T-cells accumulate in the peritoneal cavity  
**Erich Freyer<sup>1,2</sup>, Daniel Brown Romero<sup>1</sup>, George Finney<sup>1</sup>, Anandita Mathur<sup>1</sup>, Lucy Cooper<sup>1</sup>, Mala K. Maini<sup>1</sup>, Markus Cornberg<sup>2</sup>, Laura J. Pallett<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Germany)
- 11:00**  
**WS36.4** Long noncoding RNA-124 regulates CD8<sup>+</sup> T cell response to infection  
**Julia Erber<sup>1</sup>, Carmen Stecher<sup>1</sup>, Valerie Plajer<sup>1</sup>, Nina Braun<sup>1</sup>, William Mallard<sup>2</sup>, Loyal Goff<sup>2</sup>, Jun Zhao<sup>1</sup>, Johannes Reisecker<sup>1</sup>, Thomas Mohr<sup>1</sup>, John Rinn<sup>2</sup>, Richard Flavell<sup>1</sup>, Dietmar Herndler-Brandstetter<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>USA)
- 11:10**  
**WS36.5** Exploring biomarkers of clinical response to immunotherapy in lung cancer: insights from peripheral CD8 T cell profiles and ctDNA dynamics post-PD-1 blockade  
**Nikita Dutta<sup>1</sup>, Johanna Svensson<sup>1</sup>, George-Alejandro Saad<sup>2</sup>, Marielle Mello<sup>2</sup>, Ella Eklund<sup>1</sup>, Per Torstensson<sup>1</sup>, Volkan Sayin<sup>1</sup>, Hervé Luche<sup>2</sup>, Anna Rohlin<sup>1</sup>, Andreas Hallqvist<sup>1</sup>, Sukanya Raghavan<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>France)
- 11:20**  
**WS36.6** Activation phenotypes defined by coordinated expression of activation markers discriminate TCR-mediated and bystander T-cell responses  
**Tamara Schenk, Martijn Vos, Debbie van Baarle, Teun Guichelaar** (Netherlands)
- 11:30**  
Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 2 | 10:30-11:45

WORKSHOP 37 - B CELLS IN HEALTH AND DISEASE

- 10:30**  
**WS37.1** Antigen-presenting autoreactive B cells activate regulatory T cells and suppress autoimmune arthritis in mice  
**Mike Aoun** (Sweden)
- 10:40**  
**WS37.2** Elucidation of antigen-specific B cell dynamics after vaccination reveals activated B cell states that precede the classical memory B cell and plasmablast compartments  
**Lisan Kuijper, Laura Fernandez Blanco, Laura Kummer, Sabrina Pollastro, Tineke Jorritsma, Mariël Duurland, Amelie Bos, Niels Verstegen, Marit J. van Gils, Mathieu Claireaux, George Elias, Juan Garcia Vallejo, Taco Kuijpers, Filip Eftimov, Anja ten Brinke, Marieke van Ham** (Netherlands)
- 10:50**  
**WS37.3** The brain-infiltrating B cell in multiple sclerosis: identifying triggers and receptors contributing to its effector program  
**Kirsten Kuiper<sup>1</sup>, Jasper Rip<sup>1</sup>, Laurens Bogers<sup>1</sup>, Marie-Jose Melief<sup>1</sup>, Annet Wierenga-Wolf<sup>1</sup>, Liza Rijvers<sup>1</sup>, Ursula Boschert<sup>2</sup>, Ana Marques<sup>1</sup>, Jamie van Langelaar<sup>1</sup>, Romy Klein Kranenbarg<sup>1</sup>, Beatrijs Wokke<sup>1</sup>, Joost Smolders<sup>1</sup>, Marvin van Luijn<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Germany)
- 11:00**  
**WS37.4** Age-associated B cells drive loss of CD8+ T cells in systemic lupus erythematosus  
**Kristian Savstrup Kastberg<sup>1</sup>, Lasse F. Voss<sup>1</sup>, Gudrun Winther<sup>1</sup>, Kenneth Green<sup>1</sup>, Amanda Juul Howarth<sup>1</sup>, Layla Pohl<sup>1</sup>, Johanne Vium-Heinesen<sup>1</sup>, Lea Fritz<sup>1</sup>, Lisbeth Jensen<sup>1</sup>, Cecilia Fahlquist-Hagert<sup>1</sup>, Thomas R. Wittenborn<sup>1</sup>, Yonglun Luo<sup>1,2</sup>, Anne Troldborg<sup>1</sup>, Lin Lin<sup>1</sup>, Søren Egedal Degn<sup>1</sup>** (<sup>1</sup>Denmark, <sup>2</sup>China)
- 11:10**  
**WS37.5** Contribution of memory B cells to the pool of bone marrow plasma cells through follicular and extrafollicular immune responses in health and disease  
**Marta Ferreira-Gomes, Pawel Durek, Frederik Heinrich, Gabriela M. Guerra, Franziska Szelinski, Tobias Alexander, Thomas Dörner, Andreas Radbruch, Mir-Farzin Mashreghi** (Germany)
- 11:20**  
**WS37.6** Distinct transcriptional profile drives enhanced activation responses in memory B cells compared to naive B Cells  
**Pietro Demela, Laura Esposito, Pietro Marchesan, Blagoje Soskic** (Italy)
- 11:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

WICKLOW HALL 1 | 10:30-11:45

WORKSHOP 38 - IMMUNOMETABOLISM

- 10:30**  
**WS38.1** Mitochondrial perturbation in immune cells enhances cell-mediated innate immunity in *Drosophila*  
**Yuliya Basikhina<sup>1</sup>, Laura Vesala<sup>1,2</sup>, Tea Tuomela<sup>1</sup>, Anssi Nurminen<sup>1</sup>, Emilia Siukola<sup>1</sup>, Tiina Salminen<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>Sweden)
- 10:40**  
**WS38.2** Glutamate dehydrogenase-prostaglandin E2 axis controls Treg cell development with distinct features in maintaining immune tolerance  
**Fabien Prodjinotho<sup>1</sup>, Neeraj Kumar<sup>1</sup>, Jacob Lema<sup>2</sup>, Cylia Crisand<sup>1</sup>, Dominik Stelzle<sup>1</sup>, Charles Makasi<sup>2</sup>, Martin Haslbeck<sup>1</sup>, Chummy Sikasunge<sup>3</sup>, Veronika Schmidt<sup>1</sup>, Andrea Winkler<sup>1</sup>, Bernard Ngowi<sup>2</sup>, Julia Esser-von Bieren<sup>4</sup>, Clarissa Prazeres da Costa<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Tanzania, <sup>3</sup>Zambia, <sup>4</sup>Switzerland)
- 10:50**  
**WS38.3** Targeting amino acid uptake on NK cells to limit pathogenesis of bacterial infections  
**Maxim Nosenko, Simon Carlile, Rachel McLoughlin, David Finlay** (*Ireland*)
- 11:00**  
**WS38.4** Deciphering the immunomodulatory effects of 4-hydroxynonenal in human monocyte-derived macrophages: size does not matter if the impact is radical  
**Melina Ioannidis, Sjors Maassen, Britt Coenen, Martijn den Ouden, Pieter Grijpstra, Danny Incarnato, Geert Van den Bogaart** (*Netherlands*)
- 11:10**  
**WS38.5** Metabolic shift of human (super)antigen-induced T cells in an ex vivo lymphoid cell culture based on tonsils  
**Christopher Neullens, Ohl Kim, Klaus Tenbrock** (*Germany*)
- 11:20**  
**WS38.6** ANGPTL3 deficiency-induced hypolipidemia triggers spontaneous interferon response  
**Alessandra Pinzon Grimaldos, Tiziano Giacomelli, Ilenia Pacella, Simone Bini, Alessia Di Costanzo, Ilenia Minicocci, Laura D'erasmo, Marcello Arca, Silvia Piconese** (*Italy*)
- 11:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 1 | 10:30-11:45

WORKSHOP 39 - NOVEL APPROACHES TO VACCINOLOGY

- 10:30**  
**WS39.1** Limited boosting and long-term immunity of SARS-CoV-2-specific CD8+ T cell responses after COVID-19 mRNA vaccination in people living with HIV  
**Vivien Karl, Anne Graeser, Anastasia Kremser, Liane Bauersfeld, Siegbert Rieg, Susanne Usadel, Christoph Neumann-Haefelin, Matthias Müller, Robert Thimme, Maike Hofmann** (Germany)
- 10:40**  
**WS39.2** Time of day influences the CD8+ T cell response to mRNA vaccination  
**Ward Vleeshouwers, Suzanne van Duikeren, Dominique M.B. Veerkamp, Macha Beijnes, Lucas M. Brock, Laura Kervezee, Ramon Arens** (Netherlands)
- 10:50**  
**WS39.3** Immunization with BM325, a preS-based recombinant grass pollen allergy vaccine can overcome non-responsiveness to HBsAg-based hepatitis B virus vaccines  
**Inna Tulaeva<sup>1,2</sup>, Carolin Cornelius-Nikl<sup>1</sup>, Margarete Focke-Tejkl<sup>1</sup>, Milena Weber<sup>1</sup>, Mikhail Tulaev<sup>1</sup>, Felix Lehmann<sup>3</sup>, Nora Goldmann<sup>3</sup>, Alexandra Dubovets<sup>2</sup>, Alexander Karaulov<sup>2</sup>, Rainer Henning<sup>1</sup>, Dieter Glebe<sup>3</sup>, Rudolf Valenta<sup>1,2</sup>** (<sup>1</sup>Austria, <sup>2</sup>Russian Federation, <sup>3</sup>Germany)
- 11:00**  
**WS39.4** Development of an immunocompetent 3D-bioprinted skin-on-chip model  
**Alexeja Kleiter, Claudia Zelle-Rieser, Nora Kaiser, Judith Hagenbuchner, Michael Ausserlechner, Patrizia Stoitzner** (Austria)
- 11:10**  
**WS39.5** Skin routes of immunization with Langerin-targeted HIV1-gp140 vaccine impacts on germinal center activation and tailors antibody response  
**Juliane S. Lanza, Adele Hammoudi, Joanna De Chiara, Mathieu Surénaud, Mireille Centlivre, Bernard Malissen, Véronique Godot, Yves Lévy, Sandrine Henri, Sylvain Cardinaud** (France)
- 11:20**  
**WS39.6** Exploring cross-functionality elicited by altSonflex1-2-3 vaccine candidate in different animal models  
**Valentina Caradonna, Marika Pinto, Renzo Alfini, Giacomo Vezzani, Carlo Giannelli, Omar Rossi, Miren Iturriza, Donata Medaglini, Francesca Micoli, Francesca Mancini** (Italy)
- 11:30** Discussion

**TUESDAY, 3 SEPTEMBER 2024****LIFFEY MEETING ROOM 2 | 10:30-11:45****WORKSHOP 40 - BIOINFORMATICS IN IMMUNITY AND DISEASE**

- 10:30**  
**WS40.1** Unveiling tissue niches: Integrated analysis of gut resident T cells in humans using single-cell technologies  
**Raquel Bartolome Casado<sup>1</sup>, Rasa Elmentaite<sup>1</sup>, Amanda Jane Oliver<sup>1</sup>, Ni Huang<sup>1</sup>, Batuhan Cakir<sup>1</sup>, Alexander V. Predeus<sup>1</sup>, Ruoyan Li<sup>1</sup>, Ken To<sup>1</sup>, Krzysztof Polanski<sup>1</sup>, Laura Richardson<sup>1</sup>, Rakesh Kapuge<sup>1</sup>, Claudi Semprich<sup>1</sup>, Shani Perera<sup>1</sup>, Liam Bolt<sup>1</sup>, Kjersti Thorvaldsen Hagen<sup>1</sup>, Victoria Therese Karlsen<sup>1</sup>, Danh Phung<sup>1</sup>, Sheraz Yaqub<sup>1</sup>, Krishnaa Mahbubani<sup>2</sup>, Kourosh Saeb-Parsy<sup>2</sup>, Espen S. Bækkevold<sup>1</sup>, Frode Jahnsen<sup>1</sup>, Sarah Teichmann<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>United Kingdom)
- 10:40**  
**WS40.2** The frail immune system: a frailty DNA methylation surrogate in circulating immune cells predicts preclinical ageing and future clinical outcomes  
**Matt McElheron<sup>1,2</sup>, Jordan Davies<sup>1</sup>, Etienne Patin<sup>2</sup>, Belinda Hernandez<sup>1</sup>, Lluís Quintana-Murci<sup>2</sup>, Darragh Duffy<sup>2</sup>, Cathal McCrory<sup>1</sup>, Rose Anne Kenny<sup>1</sup>, Aisling O'Halloran<sup>1</sup>, Nollaig Bourkev** (<sup>1</sup>Ireland, <sup>2</sup>France)
- 10:50**  
**WS40.3** Diffusion-limited cytokine signaling in T cell populations  
**Brunner Patrick, Kiwitz Lukas, Li Lisa, Kevin Thurley** (Germany)
- 11:00**  
**WS40.4** Deep immune phenotyping of the ageing immune system  
**Lennart Riemann<sup>1</sup>, Rodrigo Gutierrez<sup>1</sup>, Ivan Odak<sup>2</sup>, Joana Barros-Martins<sup>2</sup>, Lennart M. Rösner<sup>1</sup>, Ximena Leon Lara<sup>1</sup>, Christine Falk<sup>1</sup>, Thomas F. Schulz<sup>1</sup>, Gesine Hansen<sup>1</sup>, Thomas Werfel<sup>1</sup>, Reinhold Foerster<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- 11:10**  
**WS40.5** Pancreas-infiltrating T cells in Type 1 diabetes: an integrated investigative approach using spectral flow cytometry and bioinformatics analysis  
**Astrid Fabri, Lina Petersone, Natalie Edner, Chunjing Wang, Lucy Walker** (United Kingdom)
- 11:20**  
**WS40.6** Dissecting chromatin regulatory landscape during B cell activation  
**Pietro Marchesan, Pietro Demela, Laura Esposito, Blagoje Soskic** (Italy)
- 11:30** Discussion



TUESDAY, 3 SEPTEMBER 2024

LIFFEY MEETING ROOM 3 | 10:30-11:45

WORKSHOP 41 - MOLECULAR MECHANISMS IN INNATE IMMUNITY

- 10:30**  
**WS41.1** The human leukocyte antigen (HLA) locus harbors translated lncRNAs with immunomodulatory functions  
**Ana Pinheiro Lopes, Alex Van Opstal, Marina Reixachs Solé, Jip T. Van Dinter, Luuk A. Broeils, Cornelis P.J. Bekker, Sebastiaan Van Heesch** (*Netherlands*)
- 10:40**  
**WS41.2** Study of the non canonical signalling induced by the binding of small molecules to CXCR4  
**Séverine Grinberg, Birgit Caspar, Ivana Stoilova, Mariette Matondo, Eleonore Bouscasse, Stephane Giorgiutti, Vincent Gies, Nikaia Smith, Nassima Bekaddour, Dominique Cathelin, Anne-Sophie Korganow, Jean-Philippe Herbeuval** (*France*)
- 10:50**  
**WS41.3** Concentration dependent pro- and anti-inflammatory signaling by the SCFA butyrate  
**Muwei Jiang, Geert Van den Bogaart** (*Netherlands*)
- 11:00**  
**WS41.4** Identification of novel interactors of T cell specific adaptor protein TSA<sub>d</sub> - an adaptor molecule with elusive function  
**Hanna Chan<sup>1</sup>, Pawel Borowicz<sup>1</sup>, Brian Christopher Gilmour<sup>1</sup>, Maria Stensland<sup>1</sup>, Iván García Loza<sup>1</sup>, Santosh Phuyal<sup>1</sup>, Romina Matter<sup>2</sup>, Lukas Jeker<sup>2</sup>, Tuula Anneli Nyman<sup>1</sup>, Anne Spurkland<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>Switzerland)
- 11:10**  
**WS41.5** Peroxiredoxin 4 links redox homeostasis to innate antiviral immunity  
**Vasile Mihai Sularea, Jamie Sugrue, Andreea Atanasescu, Cliona O'Fareilly** (*Ireland*)
- 11:20**  
**WS41.6** A role for natural killer cells in establishment of non-reactivating latent HSV-1 reservoirs  
**Oscar Haigh, Kenza Breton, Paul Mazet, Jean Armengaud, Nolwenn Poccardi, Noemie Oziol, Roger Le Grand, Patrick Lomonte, Antoine Rousseau, Marc Labetoulle** (*France*)
- 11:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

ECOCHEM ROOM | 10:30-11:45

WORKSHOP 42 - NK-BASED CANCER IMMUNOTHERAPIES

- 10:30**  
**WS42.1** CAR-NK cell therapy combined with checkpoint inhibition induces a NKT cell response in glioblastoma  
**Florian Strassheimer, Philipp Elleringmann, Bastian Roller, Jadranka Macas, Tijna Alekseeva, Blerina Aliraj, Katharina Weber, Melanie Demes, Torsten Tonn, Yvonne Reiß, Karl Plate, Andreas Weigert, Winfried Wels, Joachim Steinbach, Michael Burger** (Germany)
- 10:40**  
**WS42.2** Defective NK cell function in metastatic melanoma patients underpinned by metabolic abnormalities  
**Eimear Mylod, Jack Behan, Fergal Kelleher, Clair Gardiner** (Ireland)
- 10:50**  
**WS42.3** Targeting intrinsic inhibitory checkpoints using nano-carriers to unleash NK cell anti-tumor activity  
**Batel Sabag, Guy Biber, Abhishek Puthenveetil, Mira Barda-Saad** (Israel)
- 11:00**  
**WS42.4** Dual blockage of PD-L/PD-1 and IL33/ST2 axes improves antitumor immunity by enhancing NK cells' tumoricidal potential  
**Marina Jovanovic, David Geller, Nevena Gajovic, Milena Jurisevic, Milan Jovanovic, Gordana Supic, Danilo Vojvodic, Ivan Jovanovic** (Serbia)
- 11:10**  
**WS42.5** The NKG2A-HLA-E immune checkpoint: novel-IC therapy based on mAb to specific HLA-E-peptide complexes  
**Muhammad Abu Ahmad, Olga Radinsky, Kamran Manzoor Waidha, Frank Momburg, Angel Porgador** (Israel)
- 11:20**  
**WS42.6** Primary NK cells modified by CD33-CAR insertion and CRISPR/Cas9-based disruption of the KLRC1 gene mediate high efficacy against acute myeloid leukemia  
**Tobias Bexte, Nawid Albinger, Ahmad Al-Ajami, Philipp Wendel, Jamal Alzubi, Alec Gessner, Sebastian Wolf, Hadeer Mohamed Rasheed, Beate Anahita Jung, Olaf Penack, Thomas Oellerich, Jan Henning Klusmann, Toni Cathomen, Michael Rieger, Katharina Imkeller, Evelyn Ullrich** (Germany)
- 11:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

**AUDITORIUM | 11:55-12:55**

**PLENARY SESSION 2**

Chairs: **Arne Akbar** (*United Kingdom*), **Meritxell Genescà** (*Spain*)

- 11:55** How a break in mitochondrial endosymbiosis might lie at the heart of inflammatory diseases  
**Luke O'Neill** (*Ireland*)
- 12:20** Discussion
- 12:25** The monocyte / macrophage link, revisited  
**Steffen Jung** (*Israel*)
- 12:50** Discussion

**AUDITORIUM | 14:30-15:45**

**SYMPOSIUM - TISSUE RESIDENT T MEMORY CELLS**

Chairs: **Frode Jahnsen** (*Norway*), **Kingston Mills** (*Ireland*)

- 14:30** Human tissue resident cells in skin and mucosal membranes  
**Georg Stary** (*Austria*)
- 14:50** Tissue resident T cells in psoriasis  
**Liv Eidsmo** (*Denmark*)
- 15:10** Tissue resident memory T cells to urinary tract infection  
**Molly Ingersoll** (*France*)
- 15:30** Discussion

### TUESDAY, 3 SEPTEMBER 2024

#### LIFFEY A | 14:30-16:30

#### SYMPOSIUM - EASTERN STARS AWARDEES SYMPOSIUM

Chairs: **Peter Balogh** (*Hungary*), **Winfried Pickl** (*Austria*)

- 14:30** Immune cell crosstalk during neuroinflammation  
**Marina Babić Čač** (*Croatia*)
- 14:45** Role of secretory leukocyte protease inhibitor (SLPI) on local upper respiratory and systemic immune responses  
**Mieszko Wilk** (*Poland*)
- 15:00** Manipulation of T cell memory to enhance vaccine efficiency  
**Felix Wensveen** (*Croatia*)
- 15:15** Deconstructed inflammasomes comprising cytokine release and deferred pyroptosis enhance antitumor immunity against diverse types of tumors  
**Iva Hafner-Bratkovic** (*Slovenia*)
- 15:30** The role of intestinal ILC3 in CNS autoimmunity  
**Dorde Miljkovic** (*Serbia*)
- 15:45** The molecular basis of T-cell memory  
**Ondrej Stepanek** (*Czech Republic*)
- 16:00** Discussion

TUESDAY, 3 SEPTEMBER 2024

WICKLOW HALL 2 | 14:30-15:45

WORKSHOP 43 - CONTROL OF TISSUE INFLAMMATION AND REPAIR

- 14:30**  
**WS43.1** Macrophage-fibroblast crosstalk in the rheumatoid arthritis synovium is defined by sexually dimorphic extracellular matrix patterning and drives disruption of tissue homeostasis  
**Linda Mies, Jean-Baptiste Richard, Moustafa Attar, Stephen Sansom, Sarah Short, Joanna Hester, Andrew Filer, Christopher Buckley, Kim Midwood** (*United Kingdom*)
- 14:40**  
**WS43.2** Elucidating the role of interleukin-4 receptor alpha signalling in the pathogenesis of haemophilic arthropathy  
**Alexander Lawrence<sup>1</sup>, Anne Chevalier<sup>1</sup>, Peter Turecek<sup>2</sup>, James O'Donnell<sup>1</sup>, Padraic Fallon<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>Austria*)
- 14:50**  
**WS43.3** Staphylococcal Enterotoxin B Binding to CD28 mediates inflammatory T cell-dependent intestinal epithelial barrier dysfunction  
**Carola Amormino, Emanuela Russo, Valentina Tedeschi, Maria Teresa Fiorillo, Alessandro Paiardini, Francesco Spallotta, Laura Rosanò, Loretta Tuosto, Martina Kunkl** (*Italy*)
- 15:00**  
**WS43.4** Exploring the roles of  $\gamma\delta$  intraepithelial lymphocytes in gut physiology  
**Ambra Natalini, Vivien Kohlhaas, Robin Dart, Cara Brown, James Wilmouth Jr, Rocco D'Antuono, Lucinda Tullie, Colin Hutton, Vivian Li, Adrian Hayday** (*United Kingdom*)
- 15:10**  
**WS43.5** Utilizing integrated spatial transcriptomics to elucidate localized immune responses within human coronary arteries throughout the progression of atherosclerosis  
**Joana Campos, Desley Neil, Pasquale Maffia, Claudio Mauro** (*United Kingdom*)
- 15:20**  
**WS43.6** Current anti-TNF therapies do not prevent scar formation in Hidradenitis suppurativa (HS)  
**Conor Smith<sup>1</sup>, Barry Moran<sup>1</sup>, Alexandra Zabarowski<sup>1</sup>, Mark Ryan<sup>1</sup>, Jozsef Karman<sup>2</sup>, Robert Dunstan<sup>2</sup>, Kathleen Smith<sup>2</sup>, Roisin Hambly<sup>1</sup>, Emily Pender<sup>1</sup>, Jana Musilova<sup>1</sup>, Andreea Petrasca<sup>1</sup>, Margaret O'Donnell<sup>1</sup>, Siun Murphy<sup>1</sup>, Karsten Hokamp<sup>1</sup>, Kingston Mills<sup>1</sup>, William Housley<sup>2</sup>, Des Winter<sup>1</sup>, Brian Kirby<sup>1</sup>, Jean Fletcher<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>USA*)
- 15:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 2 | 14:30-15:45

WORKSHOP 44 - COVID-19 IMMUNITY

- 14:30**  
**WS44.1** Non-classical HLA-E class I molecule and its potential role in SARS-CoV-2 infection  
**Mahsa Rafieiyan, Giusto Davide Badami, Mojtaba Shekarkar azgomi, Marco Pio La Manna, Francesco Dieli, Nadia Caccamo** (*Italy*)
- 14:40**  
**WS44.2** SARS-CoV-2 virions hijack host cellular proteins to escape destruction by innate immunity  
**Laura Gebetsberger, Zahra Malekshahi, Gabor Tajti, Aron Teutsch, Frédéric Fontaine, Nara Marella, André Mueller, Lena Prantl, Hannes Stockinger, Heribert Stoiber, Anna Ohradanova-Repic** (*Austria*)
- 14:50**  
**WS44.3** Individually expressed SARS-CoV-2 ORF3a disrupts cellular structure and lipid metabolism in lung epithelial cells  
**Ana de Lucas Rius, Laura Mendoza García, Blanca Dies López-Ayllón, Federico Gattini, Natalia Redondo, Ana Joaquina Pérez Berná, Tránsito García García, Raúl Fernández Rodríguez, Sara Zaldívar López, María Josefa Rodríguez Gómez, Biagio Mandracchia, Diego Megías, Daniel Luque, Eva Pereiro, Juan J. Garrido, María Ángela Oliva, María Montoya** (*Spain*)
- 15:00**  
**WS44.4** Enhanced early type I interferon signaling is associated with resistance to SARS-CoV2 infection  
**Cian Reid<sup>1</sup>, Jamie Sugrue<sup>2</sup>, Federica Giangrazi<sup>1</sup>, Adam Dyer<sup>1</sup>, Sean Kennelly<sup>1</sup>, Liam Townsend<sup>1</sup>, Jean Dunne<sup>1</sup>, Niall Conlon<sup>1</sup>, Nollaig Bourke<sup>1</sup>, Darragh Duffy<sup>2</sup>, Cliona O'Farrelly<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>France*)
- 15:10**  
**WS44.5** Longitudinal serosurveillance of severe acute respiratory syndrome coronavirus 2 in urban and rural cohorts in Malawi: characterising population exposure and protective immunity to viral variants  
**Mhairi McCormack<sup>1</sup>, Louis Banda<sup>2</sup>, Stephen Kasenda<sup>2</sup>, Ellen Hughes<sup>1</sup>, Lina Leonard<sup>1</sup>, Annie Mwale<sup>2</sup>, Estelle McLean<sup>2</sup>, Alison Price<sup>2</sup>, Amelia Crampin<sup>2</sup>, David Chaima<sup>2</sup>, Abena Amoah<sup>2</sup>, Tonney Nyirenda<sup>2</sup>, Antonia Ho<sup>1</sup>, Brian Willett<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>Malawi*)
- 15:20**  
**WS44.6** The long Pentraxin PTX3 serves as an early predictive biomarker of co-infections in COVID-19  
**Francesco Scavello<sup>1</sup>, Enrico Brunetta<sup>1</sup>, Sarah Mapelli<sup>1</sup>, Emanuele Nappi<sup>1</sup>, Ian Garcia<sup>1</sup>, Marina Sironi<sup>1</sup>, Roberto Leone<sup>1</sup>, Giovanni Angelotti<sup>1</sup>, Domenico Supino<sup>1</sup>, Silvia Carnevale<sup>1</sup>, Hang Zong<sup>1</sup>, Elena Magrini<sup>1</sup>, Matteo Stravalaci<sup>1</sup>, Alessandro Protti<sup>1</sup>, Alessandro Santini<sup>1</sup>, Elena Costantini<sup>1</sup>, Victor Savevski<sup>1</sup>, Antonio Voza<sup>1</sup>, Barbara Bottazzi<sup>1</sup>, Michele Bartoletti<sup>1</sup>, Maurizio Cecconi<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Paola Morelli<sup>1</sup>, Federica Maria Pilar Tordato<sup>1</sup>, Cecilia Garlanda<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>United Kingdom*)
- 15:30** Discussion



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WICKLOW HALL 1 | 14:30-15:45

WORKSHOP 45 - STROMAL CELLS IN IMMUNITY AND TISSUE REPAIR

- 14:30  
WS45.1 Enhanced long-term protective effects of CXCR4/IL10-expressing mesenchymal stromal cells in a preclinical model of inflammatory bowel disease  
**Mercedes Lopez-Santalla<sup>1</sup>, Marta Covadonga Ordoñez-Velasco<sup>1</sup>, Miriam Hernando-Rodríguez<sup>1</sup>, Maria Fernandez-Garcia<sup>1,2</sup>, Juan Antonio Bueren<sup>1</sup>, Rosa Maria Yañez<sup>1</sup>, Marina Garin<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>France)
- 14:40  
WS45.2 Development of a 3D model of colorectal cancer to assess the stromal-mediated effects on T cells in a stromal-rich colorectal cancer tumour microenvironment  
**Eileen Reidy, Lei Lei, Niamh Leonard, Louise Rabbitt, Merah Al Busaidy, Abhay Pandit, Aileen Ryan** (Ireland)
- 14:50  
WS45.3 Ehf and Fezf2 regulate thymic tissue homeostasis and thymic tuft cell development  
**Kristin Rattay** (Germany)
- 15:00  
WS45.4 Characterization of an IL-33 expressing, immune active fibroblast subpopulation  
**Lisa Schmidleithner, Niklas Beumer, Frauke Hoffmann, Joachim Seebass, Thomas Hehlhans, Markus Feuerer** (Germany)
- 15:10  
WS45.5 Stromal cells shape the immune response to mycobacteria  
**Anne Lösslein, Jana Neuber, Leonhard Wagner, Roman Sankowski, Sagar Sagar, Philipp Henneke** (Germany)
- 15:20  
WS45.6 A circadian clock compound selectively impairs inflammation-induced antifibrinolytic activity to restore clot breakdown pathways  
**Paula Klavina<sup>1</sup>, Aisling M. Rehill<sup>1</sup>, Steven J. Humphreys<sup>2</sup>, Claire S. Whyte<sup>2</sup>, Nicola J. Mutch<sup>2</sup>, Roger J. S. Preston<sup>1</sup>, Annie M Curtis<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)
- 15:30 Discussion

TUESDAY, 3 SEPTEMBER 2024

### LIFFEY HALL 1 | 14:30-15:45

#### WORKSHOP 46 - DENDRITIC CELL DIFFERENTIATION AND FUNCTION

- 14:30**  
**WS46.1** Antigen-specific dendritic cell immunotherapy to halt autoimmunity in type 1 diabetes  
**Aurora Forlani, Gloria Giacomello, Laura Passeri, Fabio Russo, Francesca Santoni de Sio, Anna Zanardini, Marina Scavini, Lorenzo Piemonti, Andrea Annoni, Laura Passerini, Silvia Gregori** (*Italy*)
- 14:40**  
**WS46.2** Distinct ontogenetic lineages dictate cDC2 heterogeneity  
**Carlos M. Minutti<sup>1,3</sup>, Cécile Piot<sup>1</sup>, Mariana Pereira da Costa<sup>1</sup>, Probir Chakravarty<sup>1</sup>, Neil Rogers<sup>1</sup>, Hector Huerga Encabo<sup>1</sup>, Ana Cardoso<sup>1</sup>, Jane Loong<sup>1</sup>, Gilles Bessou<sup>2</sup>, Cyrille Mionnet<sup>2</sup>, Jean Langhorne<sup>1</sup>, Dominique Bonnet<sup>1</sup>, Marc Dalod<sup>2</sup>, Elena Tomasello<sup>2</sup>, Caetano Reis e Sousa<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>France, <sup>3</sup>Portugal*)
- 14:50**  
**WS46.3** Skin DCs display circadian (24 hour) rhythms in metabolic function which may be harnessed by dissolvable microneedle patch to improve vaccine efficacy  
**Cloé Payet<sup>1</sup>, Christine Butler<sup>1</sup>, Aoife Rodgers<sup>1</sup>, Sandrine Henri<sup>2</sup>, Ryan Donnelly<sup>1</sup>, Annie M Curtis<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>France*)
- 15:00**  
**WS46.4** Claudin 1-mediated maturation of thymic dendritic cells type 1 promotes clonal deletion and Treg selection via antigen transfer  
**Jiri Brezina<sup>1</sup>, Tomas Brabec<sup>1</sup>, Matous Voboril<sup>1</sup>, David Machac<sup>1</sup>, Kristina Jancovicova<sup>1</sup>, Vojtech Sykora<sup>1</sup>, Ondřej Ballek<sup>1</sup>, Jan Dobes<sup>1</sup>, Martina Dobesova<sup>1</sup>, Adela Cepkova<sup>1</sup>, Michal Kolar<sup>1</sup>, Petr Kasperek<sup>1</sup>, Radislav Sedlacek<sup>1</sup>, Sachiko Tsukita<sup>2</sup>, Bernard Malissen<sup>3</sup>, Graham Anderson<sup>4</sup>, Dominik Filipp<sup>1</sup>** (*<sup>1</sup>Czech Republic, <sup>2</sup>Japan, <sup>3</sup>France, <sup>4</sup>United Kingdom*)
- 15:10**  
**WS46.5** Click chemistry allows the visualization of an immunogenic HLA-A2-restricted epitope on human monocyte-derived dendritic cells  
**Thijmen Mostert, Amy Kessler, Robbie Luijten, Diana Torres García, Ward Doelman, Sander van Kasteren, Sonja Buschow** (*Netherlands*)
- 15:20**  
**WS46.6** Factors determining dendritic cell identity in peripheral tissues  
**Sally Connolly, Elke Schwarzenberger, Carmen Tam-Amersdorfer, Magdalena Lang, Christina Passegger, Herbert Strobl** (*Austria*)
- 15:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY MEETING ROOM 2 | 14:30-15:45

WORKSHOP 47 - CAR-T DEVELOPMENT AND DESIGN

- 14:30**  
**WS47.1** Regnase-1 KO B7-H3 CAR T cells for osteosarcoma: improved antitumor activity and potency to reprogram endogenous immune cells  
**Adeleye Adeshakin, Hao Shi, Phuong Nguyen, Scott Perry, Xiang Sun, Peipei Zhou, Jean-Yves Metais, Anil KC, Heather Sheppard, Liqing Tian, Deanna Langfitt, Jason Yustein, Giedre Krenciute, Christopher DeRenzo, Hongbo Chi, Stephen Gottschalk (USA)**
- 14:40**  
**WS47.2** FOXO1 enhances CAR T stemness, metabolic fitness and efficacy  
**Jack Chan, Christina Scheffler, Isabelle Munoz, Kevin Sek, Junyun Lai, Paul Beavis, Phillip Darcy (Australia)**
- 14:50**  
**WS47.3** Generating CRISPR/CAS9 armoured CAR- and TCR-T cells for the treatment of solid tumours  
**Phoebe Dunbar, Paul Beavis, Phillip Darcy, Amanda Chen, KahMin Yap (Australia)**
- 15:00**  
**WS47.4** MALT1-induced Roquin cleavage in T cells and CAR T cells is critical for anti-tumor immunity  
**Arlinda Negraschus, Anne Holtermann, Stephanie Edelmann, Luise Rupp, Franziska Fuchsl, Angela Krackhardt, Marc Schmitz, Sebastian Kobold, Vigo Heissmeyer (Germany)**
- 15:10**  
**WS47.5** Learning the effect of CAR T cell design on single cell distributions  
**Alice Driessen, Rocio Castellanos Rueda, Sai Reddy, Marianna Rapsomaniki (Switzerland)**
- 15:20**  
**WS47.6** Microfluidic approach to study T and CAR-T confined and 3D cell migration  
**Jack Zhang Zhou, Carmen Oñate Salafranca, Nieves Movilla Meno, Maria José Gomez-Benito, Pedro Enrique Guerrero, Julian Pardo Jimeno, Jose Manuel García-Aznar (Spain)**
- 15:30** Discussion

**TUESDAY, 3 SEPTEMBER 2024****LIFFEY MEETING ROOM 3 | 14:30-15:45****WORKSHOP 48 - CYTOKINES AND CHEMOKINES IN CANCER**

- 14:30** IL-1R8 acts as an immune checkpoint in CD8<sup>+</sup> T cells, limiting  
**WS48.1** cytokine-induced anti-tumor immune responses  
**Domenico Supino<sup>1</sup>, Roberto Garuti<sup>1</sup>, Andrea Mariancini<sup>1</sup>, Chiara Perucchini<sup>1</sup>, Silvia Carnevale<sup>1</sup>, Andrea Ponzetta<sup>2</sup>, Federico Simone Colombo<sup>1</sup>, Elena Magrini<sup>1</sup>, Anna Rigatelli<sup>1</sup>, Luna Cordeiro Minute<sup>1</sup>, Sarah Mapelli<sup>1</sup>, Martina Molgora<sup>3</sup>, Francesco Scavello<sup>1</sup>, Irene Di Ceglie<sup>1</sup>, Giovanni Pezone<sup>1</sup>, Laura Falcone<sup>1</sup>, Monica Casucci<sup>1</sup>, Enrico Lugli, Sebastien Jaillon<sup>1</sup>, Alberto Mantovani<sup>1,4</sup>, Cecilia Garlanda<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Sweden, <sup>3</sup>USA, <sup>4</sup>United Kingdom)
- 14:40** Investigating regulators of CXCL9 and CXCL10 expression to improve T  
**WS48.2** cell infiltration and immunotherapy responses in solid tumors  
**Emily Derrick, Phillip Darcy, Paul Beavis** (*Australia*)
- 14:50** Interferon epsilon limits ovarian cancer metastasis via regulation of  
**WS48.3** peritoneal immune cells  
**Nicole Campbell, Linden J. Gearing, Jodee Gould, Georgie Wray-McCann, Nicole de Weerd, Paul Hertzog** (*Australia*)
- 15:00** Targeting IL1R2<sup>+</sup> tumor-infiltrating regulatory T cells with an anti-IL1R2  
**WS48.4** nanobody construct induces a strong anti-tumor effect in combination with anti-PD1 therapy  
**Sana Arnouk<sup>1</sup>, Daliya Kancheva<sup>1</sup>, Helena Van Damme<sup>1</sup>, Yvon Elkrim<sup>1</sup>, Jolien Van Craenenbroeck<sup>1</sup>, Els Lebegge<sup>1</sup>, Timo De Groof<sup>1</sup>, Aleksandar Murgaski<sup>1</sup>, Emile Clappaert<sup>1</sup>, Ayla Debraekeleer<sup>1</sup>, Jan Brughmans<sup>1</sup>, Mate Kiss<sup>1</sup>, Louis Boon<sup>2</sup>, Nadja Van Boxel<sup>1</sup>, Cecile Vincke<sup>1</sup>, Bruno Dombrecht<sup>1</sup>, Catelijne Stortelers<sup>1</sup>, Geert Raes<sup>1</sup>, Damya Laoui<sup>1</sup>, Jo Van Ginderachter<sup>1</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Poland)
- 15:10** Role of the atypical chemokine receptor ACKR2 in the immune  
**WS48.5** response to tumors  
**Francesca Albano, Elisa Zaghen, Raffaella Bonecchi** (*Italy*)
- 15:20** Targeting IL-38 triggers  $\gamma\delta$  T cell-dependent anti-tumor immunity  
**WS48.6** **Priscila da Silva<sup>1</sup>, Javier Mora<sup>1</sup>, Svenja Wiechmann<sup>1</sup>, Mateusz Putyrski<sup>1</sup>, Javier Garcia-Pardo<sup>1,2</sup>, Xin You<sup>1</sup>, Aimo Kannt<sup>1</sup>, Andreas Ernst<sup>1</sup>, Bernhard Brüne<sup>1</sup>, Andreas Weigert<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Spain)
- 15:30** Discussion

TUESDAY, 3 SEPTEMBER 2024

ECOCHEM ROOM | 14:30-15:45

WORKSHOP 49 - REGULATION OF ADAPTIVE IMMUNITY

- 14:30  
WS49.1 T-cell receptor triggering requires inactivation of Lim kinase-1 by Slingshot-1 phosphatase  
**Alvaro Gomez Moron, Sergio Alegre Gomez, Oscar Aguilar Sopena, Carlos Carrasco Padilla, Camila Scagnetti, Alicia Hernaiz Esteban, Rocio Ramirez-Muñoz, Raul Torres-Ruiz, Sandra Rodriguez Perales, Francisco Sanchez-Madrid, Noa Beatriz Martín-Cófreces, Pedro Roda Navarro** (*Spain*)
- 14:40  
WS49.2 Smoking changes adaptive immunity with persistent effects  
**Violaine Saint-André<sup>1</sup>, Bruno Charbit<sup>1</sup>, Anne Biton<sup>1</sup>, Anthony Bertrand<sup>1</sup>, Florian Dubois<sup>1</sup>, Vincent Rouilly<sup>1</sup>, Celine Posseme<sup>1</sup>, Maxime Rotival<sup>1</sup>, Jacob Bergstedt<sup>1,2</sup>, Etienne Patin<sup>1</sup>, Matthew Albert<sup>1</sup>, Lluís Quintana-Murci<sup>1</sup>, Darragh Duffy<sup>1</sup>** (*France*, <sup>2</sup>*Sweden*)
- 14:50  
WS49.3 IFN- $\gamma$  suppresses T follicular helper cell differentiation and antibody responses  
**Eleonora Sala, Maria Nelli, Chiara Laura, Marta Mangione, Pietro Di Lucia, Elisa Bono, Leonardo Giustini, Giuliana Furiato, Davide Marotta, Chiara Malpighi, Eleonora Consolo, Cristian Beccaria, David Eyal, Cohen Merav, Giladi Amir, Amit Ido, Luca G. Guidotti, Matteo Iannacone, Mirela Kuka** (*Italy*)
- 15:00  
WS49.4 Tlr7 bi-allelism defines a transcriptionally and functionally distinct B cell subset  
**Mélissa Nieucel, Charles-Henry Miquel, Léa Ferrayé, Anne-Laure Iscache, Magali Savignac, Julie Chaumeil, Jean-Charles Guéry** (*France*)
- 15:10  
WS49.5 Centromeric AA haplotype and -21 dimorphism in HLA-B T/T as powerful predictors for recurrent pregnancy loss  
**Raquel Gil Laborda, Nabil Subhi-Issa, María Guzmán-Fulgencio, Juliana Ochoa Grullon, Silvia Sanchez Ramon, Miguel Fernandez Arquero** (*Spain*)
- 15:20  
WS49.6 Effect of rs2204985 polymorphism on human thymic T cell differentiation at the single cell level  
**Camille Kergaravat, Agata Cieslak, Abad Flores José David, Salvatore Spicuglia, Vahid Asnafi, Emmanuel Clave, Antoine Toubert** (*France*)
- 15:30 Discussion

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**AUDITORIUM | 16:10-17:25**

**SYMPOSIUM - IMMUNOMETABOLISM**

Chairs: **Silvia Piconese** (*Italy*), **Guenter Weiss** (*Austria*)

- 16:10** Immunometabolism of regulatory T cells in autoimmunity  
**Giuseppe Matarese** (*Italy*)
- 16:30** Regulatory B cell immunometabolism  
**Claudia Mauri** (*United Kingdom*)
- 16:50** Metabolic requirements of NK cells  
**David Finlay** (*Ireland*)
- 17:10** Discussion

**LIFFEY B | 16:10-17:25**

**SYMPOSIUM - B CELL - MUCOSA CROSSTALK**

Chairs: **Rudi Hendriks** (*The Netherlands*), **Eva Piano Mortari** (*Italy*)

- 16:10** A spatially resolved atlas of the human lung characterizes a gland-associated immune niche  
**Kerstin Meyer** (*United Kingdom*)
- 16:30** Metabolites and secretory immunoglobulins: messengers and effectors of the host-microbiota intestinal equilibrium  
**Stéphane Paul** (*France*)
- 16:50** A self-sustaining layer of early-life-origin B cells drives steady-state IgA responses in the adult gut  
**Joan Yuan** (*Sweden*)
- 17:10** Discussion



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WICKLOW HALL 2 | 16:10-17:25

WORKSHOP 50 - INNATE IMMUNITY IN CANCER I

- 16:10**  
**WS50.1** The memory phenotypic immunity of tumor-draining lymph nodes in ovarian carcinoma patients  
**Nachi Nathan, Philipp Paparoditis, Idan Milo, Leeat Keren, Adva Levy-Barda, Natalia Yanichkin, Oded Raban, Ram Eitan, Ziv Shulman** (*Israel*)
- 16:20**  
**WS50.2** Prior acute influenza infection drives a transient pro-tumoural state in the lungs  
**Ryan Devlin, Chiara Pirillo, Jack McCowan, Amy Shergold, Alberto Bravo-Blas, Sarwah Al-Khalidi, Leo Carlin, Ed Roberts** (*United Kingdom*)
- 16:30**  
**WS50.3** Dissecting macrophage diversity in cancer to unveil distinct contributions to therapeutic resistance  
**Marta Pandini, Divya Mishra, Marta Iovino, Giulia Marelli, Federica Portale, Roberta Carriero, Desiree Giuliano, Gianluca Basso, Gabriele De Simone, Paolo Kunderfranc, Piergiuseppe Colombo, Marcello Manfredi, Paolo Casale, Massimo Lazzeri, Diletta Di Mitri** (*Italy*)
- 16:40**  
**WS50.4** Role of JNK in chronic intestinal inflammation and its relationship with tumor development  
**Benigno Rivas-Pardo, Beatriz Martín Adrados, Raquel González-García, Chaobo Chen, Adela Solsona-García, Elena Martínez-Zamorano, Yolanda Campos-Martin, Manuel María Gómez del Moral, Francisco Javier Cubero, Eduardo Martínez-Naves** (*Spain*)
- 16:50**  
**WS50.5** Deciphering the myeloid cell landscape of neuroblastoma  
**Javiera Villar, Claudia Pasqualini, Margaux Gardet, Marco Moreira, Kevin Mulder, Dominique Valteau, Veronique Minard, Florent Ginhoux** (*France*)
- 17:00**  
**WS50.6** Tissue-resident macrophages and circulating monocytes might contribute to bacterial infection susceptibility of lung cancer patients  
**Francesco Palestra, Gina Memoli, Anne Lise Ferrara, Leonardo Cristinziano, Noemi Maria Giorgiano, Alforonso Fiorelli, Stefania Loffredo** (*Italy*)
- 17:10** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY HALL 2 | 16:10-17:25

WORKSHOP 51 - VIRAL IMMUNITY I

- 16:10**  
**WS51.1** Prevotella timonensis enhances HIV-1 transmission by primary human blood dendritic cells  
**Marleen Y. van Smoorenburg, John L. van Hamme, Ester B.M. Remmerswaal, Julia L. Nerwinska, Celia Segui Perez, Karin Strijbis, Teunis B.H. Geijtenbeek** (Netherlands)
- 16:20**  
**WS51.2** Cross-reactive immune responses following concomitant immunization against flaviviruses  
**David Wullmann, Mira Akber, John Tyler Sandberg, Marcus Buggert, Hans-Gustaf Ljunggren** (Sweden)
- 16:30**  
**WS51.3** Longitudinal antibody and T cell response to Ebolavirus disease amongst a cohort of survivors in Guinea  
**Tom Tipton<sup>1</sup>, Joseph Akoi Bore<sup>2</sup>, Grace Hood<sup>1</sup>, Saa Sabass Temessadouno<sup>2</sup>, Emmanuel Sovogui<sup>2</sup>, Saa 4 Kamano<sup>2</sup>, Thomas Strecker<sup>3</sup>, Piet Maes<sup>4</sup>, Yasmin Jiwa<sup>1</sup>, Verena Kraehling<sup>3</sup>, Joseph Timothy<sup>1</sup>, Mandy Kader Konde<sup>2</sup>, N'faly Magassouba<sup>2</sup>, Kim Fornace<sup>5</sup>, Miles Carroll<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Guinea, <sup>3</sup>Germany, <sup>4</sup>Belgium, <sup>5</sup>Singapore)
- 16:40**  
**WS51.4** Single-cell profiling reveals signatures of protective immunity to human SARS-CoV-2 challenge  
**Lorenz Kretschmer, Kaylee Worlock, Lisa Dratva, Susan Jackson, Andrew Mawer, Krzysztof Polanski, Josephine Barnes, Masahiro Yoshida, Kerstin Meyer, Christopher Chiu, Helen McShane, Marko Nikolic, Sarah Teichmann** (United Kingdom)
- 16:50**  
**WS51.5** NK cell derived IFN- $\gamma$  mobilizes free fatty acids from adipose tissue to promote B cell activation during viral infection  
**Mia Krapic<sup>1</sup>, Inga Kavazovic<sup>1</sup>, Sabine Helmuth<sup>2</sup>, Bojan Polić<sup>1</sup>, Tamara Turk Wensveen<sup>1</sup>, Felix Wensveen<sup>1</sup>** (<sup>1</sup>Croatia, <sup>2</sup>Germany)
- 17:00**  
**WS51.6**  $\beta$ -glucan immunometabolic rewiring enhances anti-viral immunity via Interferon-dependant anti-viral training (IDAT)  
**Cian Horneck Johnston, Anna Ledwith, John McGrath, Hannah Prendeville, Jamie Murphy, Frederick Sheedy** (Ireland)
- 17:10** Discussion

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WICKLOW HALL 1 | 16:10-17:25

WORKSHOP 52 - REGULATORY T CELLS IN HOMEOSTASIS AND DISEASE

- 16:10**  
**WS52.1** Homeostatic balance of GUT resident pTregs and tTregs plays a pivotal role in maintaining bone health under post-menopausal osteoporotic conditions  
**Rupesh Kumar Srivastava, Asha Bhardwaj, Leena Sapra** (India)
- 16:20**  
**WS52.2** A novel aryl hydrocarbon receptor ligand inhibits the development of type 1 diabetes by enhancing the function of tolerogenic dendritic cells and regulatory T cells  
**Natalija Jonić<sup>1</sup>, Ivan Koprivica<sup>1</sup>, Christos Chatzigiannis<sup>2</sup>, Antonis Tsailanis<sup>2</sup>, Stavroula Kyrkou<sup>2</sup>, Eleftherios Paraskevas Tzacos<sup>2</sup>, Aleksandar Pavić<sup>1</sup>, Mirjana Dimitrijević<sup>1</sup>, Andjelina Jovanović<sup>1</sup>, Milan B. Jovanović<sup>1</sup>, Sérgio Marinho<sup>3</sup>, Inês Castro-Almeida<sup>3</sup>, Vesna Otašević<sup>1</sup>, Pedro Moura-Alves<sup>3</sup>, Andreas Tzacos<sup>2</sup>, Ivana Stojanović<sup>1</sup>** (<sup>1</sup>Serbia, <sup>2</sup>Greece, <sup>3</sup>Portugal)
- 16:30**  
**WS52.3** The role of regulatory T cells in thymic regeneration  
**Andri Lemarquis, Anastasia Kousa, Kimon Argyropoulos, Jarrod Dudakov, Susan Dewolf, Marcel van den Brink** (USA)
- 16:40**  
**WS52.4** Conventional type 2 dendritic cells license FoxP3<sup>+</sup> regulatory T cells in a Ccr4-dependent manner to suppress allergic inflammation  
**Jenny Mannion, Creel Ng Cashin, Nandini Samanta, Alexandra-Chloé Villani, Rod Rahimi** (USA)
- 16:50**  
**WS52.5** Regulatory T cells drive OPC differentiation independent of MHC-II  
**Jessica White<sup>1</sup>, Alerie Guzman de la Fuente<sup>1,2</sup>, Andrew Young<sup>1</sup>, Rebecca Ingram<sup>1</sup>, Yvonne Dombrowski<sup>1</sup>, Denise Fitzgerald<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Spain)
- 17:00**  
**WS52.6** Revisiting the role of the transcription factor Foxo1 in the biology of thymic and peripheral regulatory T cell subsets  
**Léa Giraud, Aurélie Durand, Charlotte Guillou, Nelly Bonilla, Sonia Carvalho, Alexandra Lainé, Céline Charvet, Bruno Martin, Bruno Lucas, Cédric Auffray** (France)
- 17:10** Discussion

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LIFFEY HALL 1 | 16:10-17:25

### WORKSHOP 53 - T CELLS IN AUTOIMMUNE AND INFLAMMATORY DISEASE

- 16:10**  
**WS53.1** The interplay between innate Immunity mechanisms in advancing neurodegeneration  
**Elena Zenaro, Enrica Caterina Pietronigro, Bruno Santos-Lima, Eleonora Terrabuio, Anna Slanzi, Aferdita Suli, Somayehsadat Ghasemi, Nicola Lopez, Beatrice D'Ulivo, Gabriele Angelini, Alessandro Bani, Ermanna Turano, Matteo Calgaro, Gabriele Tosadori, Nicola Vitulo, Davide Risso, Sara Cremona, Francesca Di Norscia, Rajasekar Nagarajan, Vittorina Della Bianca, Barbara Rossi, Giulia Iannoto, Monica Castellucci, Bruno Bonetti<sup>4</sup>, Gabriela Constantin** (*Italy*)
- 16:20**  
**WS53.2** Post-translational modification of LL37, the autoantigen of psoriasis, polarize responder CD4-T-cells towards an alternative T helper phenotype  
**Roberto Lande, Anna Mennella, Giuseppe Ocone, Rebecca Favaro, Elisabetta Botti, Mario Falchi, Antonio Costanzo, Loredana Frasca** (*Italy*)
- 16:30**  
**WS53.3** Characterising effector T-cell responses to novel autoantigens in rheumatoid arthritis  
**Elizabeth Pook, Kathryn Steel, Sarah Ryan, Carl Coyle, Esperanza Perucha, Leonie Taams, Andrew Cope** (*United Kingdom*)
- 16:40**  
**WS53.4** Caveolin-1/PPAR $\alpha$  axis restrains pathogenic T follicular helper cell response in primary Sjögren's syndrome  
**Xiang Lin** (*Hong Kong*)
- 16:50**  
**WS53.5** Rapamycin rescues loss-of-function in blood-brain barrier-interacting regulatory T cells  
**Paulien Baeten<sup>1</sup>, Ibrahim Hamad<sup>1</sup>, Cindy Hoeks<sup>1</sup>, Michael Hiltensperger<sup>1</sup>, Bart Van Wijmeersch<sup>2</sup>, Veronica Popescu<sup>2</sup>, Lilian Aly<sup>1</sup>, Veerle Somers<sup>1</sup>, Thomas Korn<sup>1</sup>, Markus Kleinewietfeld<sup>1</sup>, Niels Hellings<sup>1</sup>, Bieke Broux<sup>1</sup>** (<sup>1</sup>*Germany*, <sup>2</sup>*Belgium*)
- 17:00**  
**WS53.6** The effects of CXCR5, PD-1 and ICOS molecules of helper T Cells on B cell responses and the implications in myasthenia gravis  
**Merve Cebi, Arman Çakar, Hacer Durmuş, Yeşim Parman, Güher Saruhan Direskeneli** (*Turkey*)
- 17:10** Discussion

TUESDAY, 3 SEPTEMBER 2024

LIFFEY MEETING ROOM 2 | 16:10-17:25

WORKSHOP 54 - MICROBIOTA IN HEALTH AND DISEASE

- 16:10**  
**WS54.1** iNKT cell immunomodulation and mucosal healing by microbiota-derived lactate  
**Federica Perillo, Chiara Amoroso, Alberto Baeri, Flavio Caprioli, Federica Facciotti, Francesco Strati** (*Italy*)
- 16:20**  
**WS54.2** Microbial-derived metabolites promote NKT22 responses in colitis associated colorectal cancer patients  
**Federica Perillo, Alberto Baeri, Chiara Amoroso, Flavio Caprioli, Francesco Strati, Federica Facciotti** (*Italy*)
- 16:30**  
**WS54.3** Neutrophils mediate protection against colitis and carcinogenesis by controlling bacterial invasion and driving IL-22 production by  $\gamma\delta$ T cells  
**Silvia Carnevale<sup>1</sup>, Andrea Ponzetta<sup>1</sup>, Anna Rigatelli<sup>1</sup>, Roberta Carriero, Simone Puccio<sup>1</sup>, Domenico Supino<sup>1</sup>, Giovanna Grieco<sup>1</sup>, Piera Molisso<sup>1</sup>, Irene Di Ceglie<sup>1</sup>, Francesco Scavello<sup>1</sup>, Chiara Perucchini<sup>1</sup>, Fabio Pasqualini<sup>1</sup>, Camilla Recordati<sup>1</sup>, Claudio Tripodo<sup>1</sup>, Beatrice Belmonte<sup>1</sup>, Andrea Mariancini<sup>1</sup>, Paolo Kunderfranco<sup>1</sup>, Giuseppe Sciumè<sup>1</sup>, Enrico Lugli<sup>1</sup>, Eduardo Bonavita<sup>1</sup>, Elena Magrini<sup>1</sup>, Cecilia Garlanda<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Sebastien Jaillon<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>United Kingdom*)
- 16:40**  
**WS54.4** Differential effects on fecal microbiota, gut immunity and vaccine response conveyed by a natural environment vs. co-housing with wild or pet store mice  
**Henriette Arnesen<sup>1</sup>, Signe Birkeland<sup>1</sup>, Harriet Stendahl<sup>1</sup>, Klaus Neuhaus<sup>2</sup>, Ryan Langlois<sup>3</sup>, David Masopust<sup>3</sup>, Harald Carlsen<sup>1</sup>, Preben Boysen<sup>1</sup>** (*<sup>1</sup>Norway, <sup>2</sup>Germany, <sup>3</sup>USA*)
- 16:50**  
**WS54.5** Integrating functional metagenomics to decipher microbiome-immune interactions  
**Puspendu Sardar, Amelia Soderholm, Sarah Whiteside, Benjamin Beresford-Jones, Paula Kuo, Rahul Roychoudhuri, Virginia Pedicord** (*United Kingdom*)
- 17:00**  
**WS54.6** Gut microbiota and maternal immune transfer at birth precede pre-allergic clinical outcome  
**Remy Villette<sup>1</sup>, Djelika Traore<sup>1</sup>, Elise Dhilly<sup>1</sup>, Marta Schuhmacher<sup>2</sup>, Isabella Annesi-Maesano<sup>1</sup>, Martin Larsen<sup>1</sup>** (*<sup>1</sup>France, <sup>2</sup>Spain*)
- 17:10** Discussion

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### LIFFEY MEETING ROOM 3 | 16:10-17:25

#### WORKSHOP 55 - ADOPTIVE CELL THERAPY FOR CANCER AND INFECTIOUS DISEASE

- 16:10**  
**WS55.1** Identification of serial killing natural killer cells  
**Jens Niemann<sup>1</sup>, Maren Claus<sup>1</sup>, Vanna Imsirovic<sup>2</sup>, Carsten Watzl<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Croatia)
- 16:20**  
**WS55.2** A novel CD5-based adoptive cell transfer therapy for systemic fungal infection  
**María Velasco-de Andrés, Cristina Català, Laura Carrillo-Serradell, Violeta Planells-Romeo, Marta Español-Rego, Lorena Pérez-Amill, Pedro Puerta-Alcalde, Carolina Garcia-Vidal, Beatriz Martín-Antonio, Francisco Lozano** (Spain)
- 16:30**  
**WS55.3** Dual modulation of cytotoxic and checkpoint receptors tunes the efficacy of Delta One T cells against colorectal cancer  
**Rafael Blanco Domínguez, Leandro Barros, Mariana Carreira, Sofia Mensurado, Bruno Silva-Santos** (Portugal)
- 16:40**  
**WS55.4** Engineering NK cell immunotherapy to optimise liver homing and T cell regulation  
**Mariana Diniz, Yiya Zhong, Stephanie Kucykowicz, Daniel Brown Romero, Jessica Davies, Joseph McDowell, John Counsell, Mala K. Maini** (United Kingdom)
- 16:50**  
**WS55.5** Development of  $\gamma\delta$  T cell immunotherapy against glioblastoma  
**Gabriel Marseres<sup>1,2</sup>, Coline Gentil<sup>2</sup>, Victor Bigot<sup>2</sup>, Maxime Courant<sup>2</sup>, Valerie Prouzet-Mauleon<sup>2</sup>, Vincent Pitard<sup>2</sup>, Atika Zouine<sup>2</sup>, Sofia Mensurado<sup>3</sup>, Claire Larrieu<sup>2</sup>, Béatrice Turcq<sup>2</sup>, Bruno Silva-Santos<sup>3</sup>, Olivier Mollier<sup>2</sup>, Julien Engelhardt<sup>2</sup>, Lionel Couzi<sup>2</sup>, Thomas Daubon<sup>2</sup>, Julie Dechanet-Merville<sup>2</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>France, <sup>3</sup>Portugal)
- 17:00**  
**WS55.6** Ethanol-treated human fibroblasts and their extracellular vesicles modulate TCD4+ lymphocytes  
**Daniella Figueiredo, Ariane Fidelis Busso-Lopes, Tatiane De Rossi, Rodrigo Gomes Bernardo Cruz, João Silva Vitor Ormonde, Jamile de Oliveira Sá, Larissa Tinô de Carvalho Silva, Adriana Franco Paes Leme** (Brazil)
- 17:10** Discussion



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**AUDITORIUM | 08:30-09:45**

**SYMPOSIUM - IMMUNE REGULATION AND TOLERANCE**

Chairs: **Silke Appel** (Norway), **Dominik Filipp** (Czech Republic)

- 08:30 AIRE-mediated central tolerance  
**Ludger Klein** (Germany)
- 08:50 Targeted deletion of self reactive T cells  
**Dmitriy Chudakov** (Czech Republic)
- 09:10 AIRE and immune tolerance  
**Pärt Peterson** (Estonia)
- 09:30 Discussion

**LIFFEY B | 08:30-09:45**

**SYMPOSIUM - SEX DIFFERENCES IN IMMUNE RESPONSES**

Chairs: **Darragh Duffy** (France), **Jean-Charles Guéry** (France)

- 08:30 Consequences of sex differences in type I IFN responses  
for the regulation of antiviral immunity  
**Marcus Altfeld** (Germany)
- 08:50 Sexual dimorphism in immunity and ageing  
**Jennifer C. Regan** (United Kingdom)
- 09:10 Sex differences in immune response across human populations in health and disease  
**Mihai Netea** (The Netherlands)
- 09:30 Discussion

**LIFFEY A | 08:30-09:45**

**SYMPOSIUM - NOVEL APPROACHES TO UNDERSTAND IMMUNE  
SYSTEM DIVERSITY**

Chairs: **Reinhold Foerster** (Germany), **Doris Wilflingseder** (Austria)

- 08:30 Mapping the temporal and spatial dynamics of the human immune system  
**Roser Vento-Tormo** (United Kingdom)
- 08:50 Innovative models to enhance generation of neutralizing antibodies  
**Facundo Batista** (USA)
- 09:10 Single-cell genomics to study developmental immunology  
**Cecilia Dominguez** (Italy)
- 09:30 Discussion

WEDNESDAY, 4 SEPTEMBER 2024

### WICKLOW HALL 2 | 08:30-09:45

#### WORKSHOP 56 - REGULATION OF AUTOIMMUNE AND INFLAMMATORY DISEASE

- 08:30**  
**WS56.1** Tolerogenic presentation of an alpha-synuclein antigen on a chimeric major histocompatibility complex class Ib molecule induces regulatory T cells and confers neuroprotection in an animal model for Parkinson's disease  
**Valentin Bruttel, Jingjing Wu, Fadhil Ahsan, Ann-Kathrin Karl, Shriya Mamatha Jayaram, Heike Wecklein, Maja Heubner, Daniela Brännert, Rhonda McFleder, Jörg Wischhusen, Chi Wang Ip** (Germany)
- 08:40**  
**WS56.2** Coenzyme A fueling with pantethine limits autoreactive T cell pathogenicity in experimental neuroinflammation  
**Elena Ellmeier<sup>1</sup>, Tommaso Carlucci<sup>2</sup>, Simona L. Budui<sup>2</sup>, Simone D. Bach<sup>2</sup>, Silvia Dusi<sup>2</sup>, Julia Walter<sup>1</sup>, Alyssa Schnabl<sup>1</sup>, Cansu Tafrali<sup>1</sup>, Rina Demjaha<sup>1</sup>, Michael Khalil<sup>1</sup>, Natalie Bordag<sup>1</sup>, Gabriele Angelini<sup>1</sup>, Eleonora Terrabuio<sup>1</sup>, Elena Zenaro<sup>1</sup>, Carlo Laudanna<sup>2</sup>, Barbara Rossi<sup>2</sup>, Gabriela Constantin<sup>2</sup>, Stefano Angiari<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Italy)
- 08:50**  
**WS56.3** Role of the combination of serum neurofilaments light chains and IgM bands in the prediction of progression in multiple sclerosis  
**José Luis Veiga, Enric Monreal, Alexander Roder, Susana Sainz de la Maza, Mercedes Espiño, Raquel Sainz, Noelia Villarrubia, Juan Luis Chico, Fernando Rodríguez, Lucienne Costa-Frossard, Luisa María Villar** (Spain)
- 09:00**  
**WS56.4** Size matters; particle size regulates the induction of anti-inflammatory responses and immune tolerance via  $\alpha v \beta 3$  mechano-sensor engagement  
**Roisin Lynch, Jorge Huete-Carrasco, Ed Lavelle** (Ireland)
- 09:10**  
**WS56.5** Single cell sequencing of antigen-specific autoreactive B cells in MuSK myasthenia gravis  
**Laurent Paardekooper<sup>1</sup>, Jessica van Bokkum<sup>1</sup>, Yvonne Fillié-Grijpma<sup>1</sup>, Theresa Kissel<sup>2</sup>, Susan Kloet<sup>1</sup>, Martijn Tannemaat<sup>1</sup>, Jan Verschuuren<sup>1</sup>, Silvere van der Maarel<sup>1</sup>, Maartje Huijbers<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Germany)
- 09:20**  
**WS56.6** Microbiota-dependent T-cell response to  $\alpha$ -synuclein-derived antigens triggers motor and non-motor symptoms associated to Parkinson's disease  
**Rodrigo Pacheco, Zulmary Manjarres, Valentina Ugalde, Carolina Prado, Ornella Chovar, Margarita Calvo** (Chile)
- 09:30** Discussion

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LIFFEY HALL 2 | 08:30-09:45

WORKSHOP 57 - RESPIRATORY INFLAMMATION

- 08:30**  
**WS57.1** Recruited atypical Ly6G<sup>+</sup> macrophages license alveolar regeneration after lung injury  
**Cecilia Ruscitti, Joan Abinet, Pauline Marechal, Margot Meunier, Constance de Meeûs d'Argenteuil, Domien Vanneste, Pierre Janssen, Marc Thiry, Fabrice Bureau, Benjamin Dewals, Mutien-Marie Garigliany, Akeila Bellahcene, Coraline Radermecker, Thomas Marichal** (Belgium)
- 08:40**  
**WS57.2** Targeting neutrophil extracellular traps to reduce immunopathology in tuberculosis  
**Julia Kutschenreuter, Ramla Cusman, Keira Skolimowska, Jon S. Friedland, Deborah L W Chong** (United Kingdom)
- 08:50**  
**WS57.3** Elevated matrix-metalloproteinase and pro-inflammatory cytokine activity due to helminth co-infection drives pulmonary tissue destruction in tuberculosis  
**Maria Cristina Loader<sup>1,2</sup>, Sory Vasquez Alves<sup>2</sup>, Manuela Verastegui<sup>2</sup>, Robert H. Gilman<sup>2,3</sup>, Jon S Friedland<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Peru, <sup>3</sup>USA)
- 09:00**  
**WS57.4** Single cell RNA sequencing reveals endothelial cell killing and resolution pathways in experimental malaria-associated acute respiratory distress syndrome  
**Emilie Pollenus, Hendrik Possemiers, Sofie Knoops, Fran Prenen, Leen Vandermosten, Chloë Thienpont, Saeed Abdurahiman, Sofie Demeyer, Jan Cools, Gianluca Matteoli, Jeroen Vanoirbeek, Greetje Vande Velde, Philippe Van den Steen** (Belgium)
- 09:10**  
**WS57.5** Identification of specific monocyte epigenetic signatures in sarcoidosis and tuberculosis patients  
**Marie Robert, Nader Yatim, Tom Dott, Arthur Mageau, Florian Dubois, Nicolas Charles, Tiphaine Goulenok, Violaine Saint-André, Karim Sacre, Darragh Duffy** (France)
- 09:20**  
**WS57.6** Clinically severe chronic obstructive pulmonary disease patients are characterised by a distinct immune lung cell signature  
**Natalie Bordag<sup>1</sup>, Katharina Jandl<sup>1</sup>, Ayu Hutami Syarif<sup>1</sup>, Juergen Gindlhuber<sup>1</sup>, Diana Schnoegl<sup>1</sup>, Ayse Ceren Mutgan<sup>1</sup>, Konrad Hoetzenecker<sup>1</sup>, Panja Böhm<sup>1</sup>, Vasile Foris<sup>1</sup>, Katarina Zederv, Slaven Crnkovic<sup>1,2</sup>, Francesca Polverino<sup>3</sup>, Grazyna Kwapiszewska<sup>1,2</sup>, Leigh Marsh<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Germany, <sup>3</sup>USA)
- 09:30** Discussion

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### WICKLOW HALL 1 | 08:30-09:45

#### WORKSHOP 58 - T CELL REGULATION AND FUNCTION II

- 08:30**  
**WS58.1** The RNA-binding proteins TIA1 and TIAL1 control T-cell activation and germinal centre formation  
**Trang-My Nguyen, Orlane Maloudi, Maïlys Mouysset, Ines Claire Osma-Garcia, Dunja Capitan-Sobrinho, Yann Aubert, Manuel Diaz-Munoz** (*France*)
- 08:40**  
**WS58.2** CD4-Lck signalling activates CDK1 to enhance nuclear transport in T cells  
**Dejan Mesner, Matt Whelan, Maitreyi Shivkumar, Clare Jolly** (*United Kingdom*)
- 08:50**  
**WS58.3** NRK1-dependent cytoplasmic NAD/H synthesis determines CD4+ T cell inflammatory function and survival  
**Myah Ali, Victoria Stavrou, Nancy Gudgeon, Emma Bishop, Taylor Fulton-Ward, Bethany Turley, Silke Heising, Sally Mohamed, Sofia Hain, Lorna George, Bryan Marzullo, Minghao Deng, Daniel Tennant, Craig Doig, Gareth Lavery, Rebecca Drummond, Sarah Dimeloe** (*United Kingdom*)
- 09:00**  
**WS58.4** Extracellular ATP induces aging-associated traits in CD4 T Cells  
**Sonja Rittchen, Anja Zdouc, Stefano Angiari, Johannes Fessler** (*Austria*)
- 09:10**  
**WS58.5** Spatial and functional association of CD69 leukocyte activation receptor with Peroxiredoxin-1  
**María Jiménez-Fernández, Diego Calzada-Fraile, Danay Cibrián, Hortensia De la Fuente, Francisco Sanchez-Madrid** (*Spain*)
- 09:20**  
**WS58.6** A novel interaction between E-cadherin and PD-1 leads to inhibition of T cell function  
**Puja Kumari, Dibyendu Samanta, Gayatri Mukherjee** (*India*)
- 09:30** Discussion

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LIFFEY HALL 1 | 08:30-09:45

WORKSHOP 59 - T CELLS IN INFLAMMATORY AND INFECTIOUS DISEASES

- 08:30**  
**WS59.1** Blood brain barrier transmigration triggers inflammasome activation in Th lymphocytes during neuroinflammation  
**Gayel Duran<sup>1</sup>, Lisa Schuetz<sup>1,2</sup>, Janne Verreycken<sup>1</sup>, Paulien Baeten<sup>1</sup>, Baharak Hosseinkhani<sup>1</sup>, Sam Duwe<sup>1</sup>, Jelle Hendrix<sup>1</sup>, Ilse Dewachter<sup>1</sup>, Niels Hellings<sup>1</sup>, Bieke Broux<sup>1</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Netherlands)
- 08:40**  
**WS59.2** CD29hi CD99hi T cells are upregulated in primary Sjögren's syndrome  
**Ayibaota Bahabayi, Zhonghui Zhang, Yiming Gao, Danni Liu, Pingzhang Wang, Chen Liu** (China)
- 08:50**  
**WS59.3** SARS-CoV-2-specific antibody and T-cell responses after COVID-19 BA.1 bivalent boosting  
**Barbara Kronsteiner-Dobramysl, Melissa Govender, Chang Liu, Eleanor Barnes, Thushan de Silva, Christopher Duncan, Victoria Hall, Susan Hopkins, Katie Jeffery, Rebecca Payne, Alex Richter, Gavin Screaton, Lance Turtle, Paul Klenerman, Miles Carroll, Susanna Dunachie, on behalf of the PITCH Consortium+** (United Kingdom)
- 09:00**  
**WS59.4** SIMON says: Using machine learning to understand correlates of protection for SARS-CoV-2 vaccines in non-human primate challenge studies  
**Caolann Brady<sup>1</sup>, Tom Tipton<sup>1</sup>, Oliver Carnell<sup>1</sup>, Stephanie Longet<sup>1,2</sup>, Karen Gooch<sup>1</sup>, Yper Hall<sup>1</sup>, Francisco J. Salguero<sup>1</sup>, Adriana Tomic<sup>3</sup>, Miles Carroll<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>France, <sup>3</sup>USA)
- 09:10**  
**WS59.5** Local skin enrichment of chemical-specific T cells as strategy for causative allergen identification  
**Caterina Curato<sup>1</sup>, Uwe Paasch<sup>1</sup>, Sonja Molin<sup>3,4</sup>, Andreas Luch<sup>1</sup>, Ines Schreiver<sup>1</sup>, Katherina Siewert<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Algeria, <sup>3</sup>Canada)
- 09:20**  
**WS59.6** Single-cell sequencing reveals disrupted skin tissue resident memory T cell dynamics in allogeneic hematopoietic stem cell transfer and acute graft-versus-host disease  
**Laura Marie Gail, Florian Deckert, Luisa Unterluggauer, Ruth Dingelmaier-Hovorka, Johanna Strobl, Lisa Kleissl, Bärbel Reininger, Anna Redl, Lisa Ellen Shaw, Matthias Farlik, Werner Rabitsch, Georg Stary** (Austria)
- 09:30** Discussion

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### LIFFEY MEETING ROOM 2 | 08:30-09:45

#### WORKSHOP 60 - MACROPHAGES IN INFECTIOUS AND AUTOIMMUNE DISEASES

- 08:30**  
**WS60.1** Loss of synovial tissue macrophage homeostasis precedes rheumatoid clinical onset  
**Megan Hanlon<sup>1</sup>, Conor Smith<sup>1</sup>, Mary Canavan<sup>1</sup>, Nuno Neto<sup>1</sup>, Qingxuan Song<sup>2</sup>, Myles Lewis<sup>3</sup>, Aoife O'Rourke<sup>1</sup>, Órla Tynan<sup>1</sup>, Brianne Barker<sup>1</sup>, Phil Gallagher<sup>1</sup>, Ronan Mullan<sup>1</sup>, Conor Hurson<sup>1</sup>, Barry Moran<sup>1</sup>, Michael Monaghan<sup>1</sup>, Costantino Pitzalis<sup>3</sup>, Jean Fletcher<sup>1</sup>, Sunil Nagpal<sup>3</sup>, Douglas Veale<sup>1</sup>, Ursula Fearon<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>USA, <sup>3</sup>United Kingdom*)
- 08:40**  
**WS60.2** Long-lasting protection against listeriosis and peritonitis by trained immunity  
**Charly Gilbert, Tiia Snäkä, Maelick Brochut, Didier Le Roy, Thierry Roger** (*Switzerland*)
- 08:50**  
**WS60.3** Rheumatoid arthritis and psoriatic arthritis circulatory onocytes display metabolic changes, with dysfunctional circadian rhythm and mitochondrial dynamics  
**Alyssa Gilmore, Success Amaechi, Megan Hanlon, Dumitru Anton, Carl Orr, Viviana Marzaioli, Douglas Veale, Ursula Fearon** (*Ireland*)
- 09:00**  
**WS60.4** Macrophage reprogramming in chronic organ disease - a lesson from the liver  
**Felix Heymann, Moritz Peiseler, Yuting Wang, Paul Horn, Leon Haas, Tianjiao Zhang** (*Germany*)
- 09:10**  
**WS60.5** Functional heterogeneity of tissue resident macrophages of distinct origin during polymicrobial sepsis  
**Stephan Culemann, Stavroula Litsiou, Claudia Waskow** (*Germany*)
- 09:20**  
**WS60.6** Immunological tools for the prediction of poor outcome in oligoarthritis  
**Federica Raggi, Simone Pelassa, Chiara Rossi, Francesca Antonini, Martina Bartolucci, Chiara Artale, Federica Briasco, Silvia Maria Orsi, Marco Gattorno, Angelo Ravelli, Alessandro Consolaro, Maria Carla Bosco** (*Italy*)
- 09:30** Discussion



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LIFFEY MEETING ROOM 3 | 08:30-09:45

WORKSHOP 61 - CANCER IMMUNE REGULATION AND EVASION

- 08:30**  
**WS61.1** Exploring the impact of CD300e in colorectal cancer: insights from obesity-related murine models  
**Stefania Vassallo, Annica Barizza, Sofia Giacometti, Sara Coletta, Marina de Bernard, Gaia Codolo** (*Italy*)
- 08:40**  
**WS61.2** Type 2 innate lymphoid cells fuel breast cancer development by inhibiting anti-cancer immunity  
**Pascal Naef, Jacob I. Rodriguez, Hannah Savage, Isam Adam, Armando S. Villalta, Devon A. Lawson, Kai Kessenbrock** (*USA*)
- 08:50**  
**WS61.3** IL411 expression in macrophages leads to their pro-tumor profile and T-cell exhaustion in the course of tumor progression  
**Malvina Seradj, Saniya Kari, Anna Llebaria-Fabrias, Renée Lengagne, Armelle Blondel** (*France*)
- 09:00**  
**WS61.4** TNFR2 expression by Tregs is critical for suppressing tumor immunity by regulating inflammatory cytokines  
**Morgane Hilaire, Maryam Koshravi, Angéline Mimoun, Emilie Ronin, Wilfrid Richer, Léonie Cagnet, Sahar Kassem, Alexandre Boissonnas, Elisa Bonnin, Eliane Piaggio, Benoît L. Salomon** (*France*)
- 09:10**  
**WS61.5** A second tumor escape system mediated by HHLA2: Biological and therapeutic implications on effector cells  
**Raphaëlle Leau, Mélanie Néel, Veronique Daguin, Fabienne Haspot** (*France*)
- 09:20**  
**WS61.6** Investigating the Immunomodulatory role of epithelial YAP/TAZ in gastric metaplasia  
**Jacqueline Sung, Zhaoping Ju, Alex Gregorieff, Samantha Gruenheid** (*Canada*)
- 09:30** Discussion



### WEDNESDAY, 4 SEPTEMBER 2024

#### AUDITORIUM | 11:15-12:30

##### SYMPOSIUM - DIVERSITY OF INNATE LYMPHOID CELLS

Chairs: **Dominique Bullens** (*Belgium*), **Ivana Stojanović** (*Serbia*)

- 11:15 Inflammation triggers ILC3 patrolling of the intestinal barrier  
**James Di Santo** (*France*)
- 11:35 ILC heterogeneity in inflammatory conditions  
**Chiara Romagnani** (*Germany*)
- 11:55 ILC heterogeneity in cancer  
**Guido Ferlazzo** (*Italy*)
- 12:15 Discussion

#### LIFFEY B | 11:15-12:30

##### SYMPOSIUM - HOST-MICROBE INTERACTIONS

Chairs: **Miloslav Kverka** (*Czech Republic*), **Irma Schabussova** (*Austria*)

- 11:15 Why whooping cough is back and how does its agent interact with airway mucosa  
**Peter Sebo** (*Czech Republic*)
- 11:35 Immune-microbe interactions early in life  
**Petter Brodin** (*Sweden*)
- 11:55 Microbiota and psychiatric disorders  
**John Cryan** (*Ireland*)
- 12:15 Discussion

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LIFFEY A | 11:15-12:30

WORKSHOP 62 - T CELL REGULATION AND FUNCTION III

- 11:15**  
**WS62.1** Roles and functions of the Foxk1 transcription factor to control T cell responses  
**Léa Baugé<sup>1</sup>, Valentin Mellado<sup>1</sup>, Alice Clément<sup>1</sup>, Anne Gonzalez de Peredo<sup>1</sup>, Sven Enerback<sup>2</sup>, Bernard Malissen<sup>1</sup>, Guillaume Voisinne<sup>1</sup>, Romain Roncagalli<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Sweden)
- 11:25**  
**WS62.2** Characterization of DNA methylation dynamics during human thymic T lymphocyte development  
**Frederik Hamm, Marcel Finke, Emilie Coppin, Anne Schulze, Mingxing Yang, Abdulrahman Salhab, Gilles Gasparoni, Jörn Walter, Claudia Waskow, Julia K Polansky** (Germany)
- 11:35**  
**WS62.3** Not so TOP after all: cytokine 3'untranslated regions dictate responsiveness to mTOR-mediated translation in human T cells  
**Anouk Jurgens, Branka Popovic, Josephine Zwiijnen, Floris Van Alphen, Arjan Hoogendijk, Aurelie Guislain, Monika Wolkers** (Netherlands)
- 11:45**  
**WS62.4** A truncated LAT isoform lacking the 5 distal tyrosines still allows the development of gamma delta T cells  
**Mikel Arbulo-Echevarria<sup>1</sup>, Luis M. Fernandez-Aguilar<sup>1</sup>, Inmaculada Vico-Barranc'o, Isaac Narbona-Sanchez<sup>1</sup>, Elke Kurz<sup>2</sup>, Bernard Malissen<sup>3</sup>, Michael L. Dustin<sup>2</sup>, Enrique Aguado<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>United Kingdom, <sup>3</sup>France)
- 11:55**  
**WS62.5** ISG20L2 is a novel RNA-based regulator of T cell function  
**Ana Rodríguez Galán, Sara G Dosil, Lola Fernández-Messina, Francisco Sanchez-Madrid** (Spain)
- 12:05**  
**WS62.6** S1P-signaling inhibition suppresses Th1-like Treg generation by rewiring mitochondrial metabolism  
**Rachel Coulombeau, Claudia Selck, Nicolas Giang, Allison Maher, Richard Nicholas2, Margarita Dominguez-Villar** (United Kingdom)
- 12:15** Discussion

WEDNESDAY, 4 SEPTEMBER 2024

#### WICKLOW HALL 2 | 11:15-12:30

#### WORKSHOP 63 - GENETIC AND ENVIRONMENTAL TRIGGERS OF AUTOIMMUNITY

- 11:15**  
**WS63.1** Unraveling the enigmatic role of atypical ANCAs: a novel pathophysiological mechanism in ulcerative colitis - Targeting neutrophil extracellular traps  
**Erick Arturo Mendieta Escalante, Daniela Parada Venegas, Arno Bourgonje, Marcela Hermoso, Klaas Nico Faber, Gerard Dijkstra** (*Netherlands*)
- 11:25**  
**WS63.2** EBV infection accumulates T-bet+ B cells that migrate to the CNS and cause MS-like lymphocyte infiltration in brain tissue of humanized mice  
**Fabienne Läderach, Ioannis Piteros, Elena Bremer, Lisa Rieble, Sandra Schmid, Christian Münz** (*Switzerland*)
- 11:35**  
**WS63.3** Human genetic and environmental factors affect type I interferon protein production in a pathway specific manner  
**Jamie Sugrue, Vincent Bondet, Elizabeth Maloney, Lea Deltourbe, Anthony Bertrand, Violaine Saint-André, Florian Dubois, Chloe Albert-Vega, Etienne Patin, Molly Ingersoll, Lluís Quintana-Murci, Darragh Duffy** (*France*)
- 11:45**  
**WS63.4** The T cell response against the EBV is shaped by HLA risk alleles in multiple sclerosis  
**Sanne Reijm, Jasper Rip, Jamie van Langelaar, Annet Wierenga-Wolf, Marie-Jose Melief, Harm de Wit, Yvonne Müller, Joost Smolders, Marvin van Luijn** (*Netherlands*)
- 11:55**  
**WS63.5** Integration of in silico analysis and in vitro functional analysis reveals tissue factor pathway inhibitor 2 (TFPI2) as a master transcriptional regulator and potential target to impede infliximab resistance in adult ulcerative colitis patients  
**Hannah Fitzgerald<sup>1</sup>, Flavia Genua<sup>1</sup>, Ololade Lawal<sup>1</sup>, Alexander Kel<sup>2</sup>, Miriam Tosoetto<sup>1</sup>, Roisin Stack<sup>1</sup>, Kieran Sheahan<sup>1</sup>, Gregory Yochum<sup>3</sup>, Glen Doherty<sup>1</sup>, Sudipto Das<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>Germany, <sup>3</sup>USA*)
- 12:05**  
**WS63.5** Maternal autoimmunity drives autoreactivity and potential neuropsychiatric sequelae in offspring independently of genetic factors  
**Sofie Fonager<sup>1</sup>, Gudrun Winther<sup>1</sup>, Yamira Weber<sup>1</sup>, Thomas R. Wittenborn<sup>1</sup>, Lisbeth Jensen<sup>1</sup>, Lisbeth Ahm Hansen<sup>1</sup>, Michael Carroll<sup>2</sup>, Yonglun Luo<sup>1,3</sup>, Lin Lin<sup>1</sup>, Søren Egedal Degn<sup>1</sup>** (*<sup>1</sup>Denmark, <sup>2</sup>USA, <sup>3</sup>China*)
- 12:15** Discussion

WEDNESDAY, 4 SEPTEMBER 2024

LIFFEY HALL 2 | 11:15-12:30

WORKSHOP 64 - REGULATORY T CELLS: DIFFERENTIATION AND REGULATION

- 11:15**  
**WS64.1** Selective ablation of thymic and peripheral Foxp3<sup>+</sup> regulatory T cell development  
**Dimitra Maria Zevla, Rikke Malmkvist, Carlos Alejandro Bello Rodríguez, Pablo Undurraga, Emre Kirgin, Marie Boernert, David Voehringer, Olivia Kershaw, Susan Schlenner, Karsten Kretschmer, Acelya Yilmazer** (*Germany*)
- 11:25**  
**WS64.2** The activation and functional states of TIGIT<sup>+</sup>CD226<sup>+</sup> regulatory T cells (Tregs) and their role in autoimmunity  
**Meryl Attrill, Diana Shinko, Rosemarie Ford, Vicky Alexiou, Melissa Kartawinata, CHARMS study, JIAP study, Lucy R Wedderburn, Anne M Pesenacker** (*United Kingdom*)
- 11:35**  
**WS64.3** A binary Cre transgenic approach to study the differentiation and function of tissue-Treg cells  
**Philipp Stüve, Lisa Schmidleithner, Stefanie Brey, Thomas Winkler, Thomas Hehlhans, Markus Feuerer** (*Germany*)
- 11:45**  
**WS64.4** CREB regulates Foxp3<sup>+</sup>ST-2<sup>+</sup> Tregs with enhanced IL-10 production  
**Sudheendra Hebbar Subramanyam<sup>1</sup>, Judit Hriczko<sup>1</sup>, Thomas Look<sup>1</sup>, Tim Clarner<sup>1</sup>, Eva Verjans<sup>1</sup>, Svenja Böll<sup>1</sup>, Christopher Neullens<sup>1</sup>, Ivan Costa<sup>1</sup>, Jochen Huehn<sup>1</sup>, Lin Gan<sup>1</sup>, Angela Schippers<sup>1</sup>, Stefan Flöß<sup>1</sup>, Tobias Bopp<sup>1</sup>, Martin Zenke<sup>1</sup>, Bart Lambrecht<sup>2</sup>, Rudi Beyaert<sup>2</sup>, Hermann Wasmuth<sup>1</sup>, Ron Winograd<sup>1</sup>, Norbert Wagner<sup>1</sup>, Kim Ohi<sup>1</sup>, Klaus Tenbrock<sup>1,3</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Belgium, <sup>3</sup>Switzerland*)
- 11:55**  
**WS64.5** Tachykinin receptor 1 antagonism promotes the Foxp3<sup>+</sup> regulatory CD4 T cells and controls gut inflammation and autoimmunity  
**Amrita Mishra, Surojit Karmakar, Namrita Halder, Mir Ahmad Habib, Dharmendra Kumar, Girdhari Lal** (*India*)
- 12:05**  
**WS64.6** Ontogeny and functions of peripheral regulatory CD4 T cells  
**Sonia Carvalho, Léa Giraud, Benjamin Saintpierre, Franck Letourneur, Aurélie Durand, Jacques Dutrieux, Bruno Lucas, Cédric Auffray** (*France*)
- 12:15** Discussion

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### WICKLOW HALL 1 | 11:15-12:30

#### WORKSHOP 65 - ADOPTIVE T CELL THERAPY

- 11:15**  
**WS65.1** Advancing CD8<sup>+</sup> Treg cell therapy to the clinic for the treatment of kidney transplanted patients  
**Séverine Bézie, Mariane Lucazeau, Soraya Saiagh, Marie-Christine Leveque, Cecile Braudeau, Mina Benjelloun Zahar, Florence Vrignaud, Cecile Guillot Gueguen, Emmanuelle Papuchon, Béatrice Clemenceau, Regis Josien, Gilles Blanco, Diego Cantarovich, Ignacio Anegon, Carole Guillonnet** (France)
- 11:25**  
**WS65.2** Use of nonengineered multiantigen specific Tissue-resident memory T cells for adoptive cellular therapy in gastrointestinal patients with liver metastases  
**Emilien Laloy, Jean Rene Pallandre, Syrine Abdeljaoued, Christophe Borg** (France)
- 11:35**  
**WS65.3** Chasing antigen-specific T cells with high avidity (CATCH)  
**Kalliopi Zampeta, Larissa Henze, Andreas Thiel, Lucie Loyal** (Germany)
- 11:45**  
**WS65.4** Optimized platform for the production of personalized T cells with transgenic TCRs for a chronic lymphocytic leukemia therapy development  
**Andrea Aran, Andrea Alonso, Roberto Martínez, Iván García-Loza, Berta Casanovas Albertí, Alejandro Ramírez-Chacón, E. Azucena González Navarro, Manel Juan Otero** (Spain)
- 11:55**  
**WS65.5** A folate receptor alpha specific, CD28/CD40-based chimeric costimulatory antigen receptor (CoStAR™), enhances anti-tumour activity of T cells and tumour infiltrating lymphocytes  
**Milena Kalaitidou, Owen Moon, Leyuan Bao, Mark Dudley, Robert Hawkins, Gray Kueberuwa, John Stephen Bridgeman** (USA)
- 12:05**  
**WS65.6** Adoptive PD1<sup>+</sup> tumor-infiltrating lymphocyte therapy for metastatic TNBC: production results of the safety run-in phase of the TILS001 clinical trial  
**E. Azucena González Navarro, Marta Español-Rego, Laura Angelats, Marta Santiesteban, Cristina Saura, Eva Ciruelos, Luis Alvarez-Vallina, Juan Jose Lasarte, Alena Gros, Mafalda Olivera, Pablo Tolosa, Libertad Heredia, Daniel Jiménez, Catherina De Guzman, Fara Brasó-Maristany, Lorea Villanueva, Jordi Canes, Tomas Pascual, Manel Juan Otero, Aleix Prat** (Spain)
- 12:15** Discussion



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LIFFEY HALL 1 | 11:15-12:30

WORKSHOP 66 - CANCER IMMUNE EVASION AND RESISTANCE

- 11:15**  
**WS66.1** Identification of self-reactive T follicular helper cells in ovarian cancer patients  
**Philipp Paparoditis, Nachi Nathan, Avital Sarusi-Portuguez, Liat Stoler-Barak, Adva Levy-Barda, Roei Mazor, Ronnie Blecher, Revital Ronen, Natalia Yanichkin, Oded Raban, Ram Eitan, Ziv Shulman** (*Israel*)
- 11:25**  
**WS66.2** Probing tumour immune evasion via local immune profiling with fine needle aspirates in hepatocellular carcinoma (HCC)  
**Gloryanne Aidoo-Micah, Stephanie Kucykowicz, Vishnu Naidu, Nathalie Schmidt, Daniel Brown Romero, Rushabh Shah, Tate McKinnon-Snell, Yiya Zhong, Upkar Gill, Mariana Diniz, Laura J. Pallett, Edward Green, Alexa Childs, Tim Meyer, Mala K. Maini** (*United Kingdom*)
- 11:35**  
**WS66.3** CX3CR1 loss by CD8 tumor infiltrating lymphocytes mediates immune evasion in colorectal cancer  
**Ugo Chartral<sup>1</sup>, Eric Hervouet<sup>1</sup>, Maxime Fredon<sup>1</sup>, Nawfel Adib<sup>1</sup>, Pauline Martin<sup>1</sup>, Sylvain Simon<sup>2</sup>, Paul Peixoto<sup>1</sup>, Adeline Bouard<sup>1</sup>, Syrine Abdeljaoued<sup>1</sup>, Kathleen Ducoin<sup>1</sup>, Nathalie Labarrière<sup>1</sup>, Yann Godet<sup>1</sup>, Angélique Viennot<sup>1</sup>, Christophe Borg<sup>1</sup>, Marie Kroemer<sup>1</sup>, Romain Loyon<sup>1</sup>** (*France, <sup>2</sup>USA*)
- 11:45**  
**WS66.4** IFN- $\gamma$  predisposes acute myeloid leukemia to therapy resistance  
**Bianca E Silva, Alison Daubry, Charline Faville, Mégane Jassin, Frédéric Baron, Grégory Ehx** (*Belgium*)
- 11:55**  
**WS66.5** Lack of TREM2 during anti-PD1 therapy reprograms intestinal macrophages and microbiota to enhance tumor rejection  
**Martina Molgora, Blanda Di Luccia, Darya Khantakova, Natalia Jaeger, Hao-Wei Chang, Rafael Czepielewski, Beth Helmink, Emily Onufer, Jose Fachi, Bishan Bhattarai, Tihana Trsan, Patrick Rodrigues, JinChao Hou, Jennifer Bando, Cristiane Secca da Silva, Marina Cella, Susan Gilfillan, Robert Schreiber, Jeffrey Gordon, Marco Colonna** (*USA*)
- 12:05**  
**WS66.6** Liver metastases of colorectal carcinoma contain different subsets of tissue resident memory CD8 lymphocytes correlated with distinct risk of relapse following surgery and mediate immune checkpoint responses  
**Syrine Abdeljaoued, Emilien Laloy, Jean Rene Pallandre, Marie Kroemer, Laurie Spehner, Adeline Bouard, Virginie Mougey, Ugo Chartral, Angélique Viennot, Franck Monnien, Alexandre Doussot, Romain Loyon, Christophe Borg** (*France*)
- 12:15** Discussion

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### LIFFEY MEETING ROOM 2 | 11:15-12:30

#### WORKSHOP 67 - GLYCOSYLATION

- 11:15**  
**WS67.1** Investigating the effects of targeting stromal cell sialylation on the tumour immune microenvironment in colorectal cancer  
**Aoise O'Neill<sup>1</sup>, Hannah Egan<sup>1</sup>, Norashikin Zakaria<sup>1</sup>, Oliver Treacy<sup>1</sup>, Sean Hynes<sup>1</sup>, Aisling Hogan<sup>1</sup>, Jenny Che<sup>2</sup>, Li Peng<sup>2</sup>, Aideen Ryan<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- 11:25**  
**WS67.2** N-glycosylation shapes the thymic differentiation of gd T-cells  
**Rúben Pinheiro, Beatriz Santos-Pereira, Eduarda Leite-Gomes, Inês Alves, Salomé S. Pinho, Bruno Silva-Santos** (Portugal)
- 11:35**  
**WS67.3** Siglec-1/CD169+ macrophages orchestrate immune reaction and matrix deposition in pancreatic cancer  
**Ana Hennino<sup>1</sup>, Kevin Thierry<sup>1</sup>, Melissa Masmoudi<sup>1</sup>, Zhichong Wu<sup>2</sup>** (<sup>1</sup>France, <sup>2</sup>China)
- 11:45**  
**WS67.4** Glycosylation of  $\gamma\delta$ T cells defines its activity and function associated with autoimmunity  
**Beatriz Santos-Pereira, Inês Alves, Manuel Vicente, Ana Campar, Carlos Vasconcelos, António Marinho, Salomé S. Pinho** (Portugal)
- 11:55**  
**WS67.5** The interaction between TLR4 and sialic acid governs monocyte phenotype variations  
**Loise Råberg, Alexandra Stubelius** (Sweden)
- 12:05**  
**WS67.6** T cell glycosylation as a key player during colitis-associated carcinogenesis  
**Eduarda Leite-Gomes<sup>1</sup>, Mariana Silva<sup>1</sup>, Ana M. Dias<sup>1</sup>, Guilherme Faria<sup>1</sup>, Ângela Fernandes<sup>1</sup>, Rafaela Nogueira<sup>1</sup>, Beatriz Santos-Pereira<sup>1</sup>, Henrique Fernandes-Mendes<sup>1</sup>, M<sup>a</sup> Jesus Fernández-Aceñero<sup>2</sup>, Carlos Taxonera<sup>2</sup>, Paula Lago<sup>1</sup>, Ricardo Marcos-Pinto<sup>1</sup>, Salomé S. Pinho<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>Spain)
- 12:15** Discussion

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LIFFEY MEETING ROOM 3 | 11:15-12:30

WORKSHOP 68 - TRANSLATIONAL CANCER IMMUNOLOGY

- 11:15**  
**WS68.1** Lymphatic-derived oxysterols promote immunity and response to immunotherapy in melanoma  
**Mengzhu Sun<sup>1</sup>, Laure Garnier<sup>1</sup>, Chen Wang<sup>1</sup>, Julien Angelillo<sup>1</sup>, Julien Montorfani<sup>1</sup>, Martin Roumain<sup>2</sup>, Dale Brighthouse<sup>1</sup>, Nadine Fournier<sup>1</sup>, Tatiana Petrova<sup>1</sup>, Camilla Jandus<sup>1</sup>, Daniel Speiser<sup>1</sup>, Jean-Marc Llobaccaro<sup>3</sup>, Manfred Kopf<sup>1</sup>, Caroline Pot-kreis<sup>1</sup>, Christoph Scheiermann<sup>1,4</sup>, Giulio Muccioli<sup>2</sup>, Abhishek D. Garg<sup>2</sup>, Stéphanie Hugues<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Belgium, <sup>3</sup>France, <sup>4</sup>Germany)
- 11:25**  
**WS68.2** Profiling CRC liver metastasis immune microenvironment at steady state and after pre-surgical therapy  
**Cristina Faccani** (*Italy*)
- 11:35**  
**WS68.3** Complement activation sustains tumor progression and vasiveness in human and mouse colorectal cancer - CRC  
**Elena Magrini<sup>1</sup>, Kevin Berthenet<sup>1</sup>, Monica Dambra<sup>1</sup>, Luna Cordeiro Minute<sup>1</sup>, Giovanni Pezone<sup>1</sup>, Fabio Grizzi<sup>1</sup>, Roberta Carriero<sup>1</sup>, Fabio Pasqualini<sup>1</sup>, Sarah Mapelli<sup>1</sup>, Sebastien Jaillon<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Cecilia Garlanda<sup>1</sup>** (*Italy*, <sup>2</sup>United Kingdom)
- 11:45**  
**WS68.4** Investigating the immune profile of early stage HER2+ breast cancer patients receiving chemotherapy and HER2-targeted therapies  
**Denis M. Collins<sup>1</sup>, Nicola Gaynor<sup>1</sup>, Stephen Madden<sup>1</sup>, Sinead Toomey<sup>1</sup>, Ji Qiu<sup>2</sup>, Jaine Blayney<sup>1</sup>, Alfonso Blanco<sup>1</sup>, Jean Fletcher<sup>1</sup>, Barry Moran<sup>1</sup>, Damien Kaukonen<sup>1</sup>, Javier Sanchez Ramirez<sup>1</sup>, Elaine Kay<sup>1</sup>, Darran O'Connor<sup>1</sup>, Ausra Teiserskiene<sup>1</sup>, Alex Eustace<sup>1</sup>, Richard Kennedy<sup>1</sup>, Joshua LaBaer<sup>2</sup>, William Gallagher<sup>1</sup>, Bryan Hennessy<sup>1</sup>, John Crown<sup>1</sup>** (*Ireland*, <sup>2</sup>USA)
- 11:55**  
**WS68.5** Flow cytometric analysis of TILs from different layers of human glioblastoma samples revealed an enrichment of T cells expressing PD-1 and tissue-resident markers in the intermediate and marginal layers  
**Anna Vanni, Laura Maggi, Camilla Bonaudo, Francesca Matani, Giulia Lamacchia, Alessio Mazzoni, Lorenzo Salvati, Manuela Capone, Lucia Bartoli, Mirko Petti, Filippo Nozzoli, Lorenzo Cosmi, Francesco Liotta, Alessandro Della Puppa, Francesco Annunziato** (*Italy*)
- 12:05**  
**WS68.6** Understanding the mechanism of cancer-associated fibroblast subpopulation reprogramming-mediated immunomodulation in colorectal cancer  
**Lei Lei, Eileen Reidy, Niamh Leonard, Aoise O'Neill, Oliver Treacy, Louise Rabbitt, Catherine Timon, Merah Al-Busaidy, Aisling Hogan, Sean Hynes, Aideen Ryan** (*Ireland*)
- 12:15** Discussion



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#### AUDITORIUM | 13:30-14:15

##### KEYNOTE LECTURE 3

Chairs: **Tracy Hussell** (*United Kingdom*), **Mossadegh-Keller** (*France*)

**13:30** Immune control of host physiology  
**Yasmine Belkaid** (*France*)

**14:05** Discussion

#### AUDITORIUM | 14:25-15:40

##### SYMPOSIUM - YEFIS: EMERGING YOUNG EUROPEAN SCIENTISTS

Chairs: **Yasmine Belkaid** (*France*), **Annika Hausmann** (*Denmark*)

**14:25** Tumour immune evasion mechanisms and regulatory T cells  
**Nuria Garcia Diaz** (*Norway*)

**14:40** Post-transcriptional checkpoints in autoimmunity  
**Rami Bechara** (*France*)

**14:55** Systems immunology and female immune system  
**Tal Pecht** (*Germany*)

**15:10** Immune cells and tissue microenvironment  
**Matteo Villa** (*Austria*)

**15:25** Discussion

#### LIFFEY B | 14:25-15:40

##### SYMPOSIUM - AI/COMPUTATIONAL MODEL APPLICATION TO THE IMMUNE SYSTEM

Chairs: **Simon McDade** (*Ireland*), **Inge Wortel** (*The Netherlands*)

**14:25** Computational and experimental tools to decipher, read, predict and re-engineer antibody and T-cell repertoires  
**Davide Corti** (*Switzerland*)

**14:45** Computational immunology on T cells  
**Inge Wortel** (*The Netherlands*)

**15:05** Germinal centre modeling  
**Michael Meyer-Hermann** (*Germany*)

**15:25** Discussion

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**LIFFEY A | 14:25-15:40**

**SYMPOSIUM - THE DENDRITIC CELL FAMILY**

Chairs: **Marco Cassatella** (*Italy*), **Charlotte Scott** (*Belgium*)

- 14:25** IDO in DC functions  
**Francesca Fallarino** (*Italy*)
- 14:45** Human DC development and heterogeneity  
**Venetia Bigley** (*United Kingdom*)
- 15:05** Targeting glycans for DC manipulation in therapy  
**Yvette Van Kooyk** (*The Netherlands*)
- 15:25** Discussion

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### WICKLOW HALL 2 | 14:25-15:40

#### WORKSHOP 69 - CANCER IMMUNOTHERAPIES

- 14:25**  
**WS69.1** Development of a soluble form of TIGIT with immune modulatory property  
**Namrata Ganguli, Dibyendu Samanta** (*India*)
- 14:35**  
**WS69.3** Using nanoparticles as artificial antigen presenting cells to activate human CD4 T cells for immunotherapy  
**Si-Sim Kang, Ariel Isser, Jonathan Schneck** (*USA*)
- 14:45**  
**WS69.4** Potent CD8+ T cell effector functions induced by NaCl in cancer immunotherapy  
**Caterina Scirgolea, Rosa Sottile, Marco De Luca, Alberto Susana, Enrico Lugli** (*Italy*)
- 14:55**  
**WS69.5** A novel combined treatment approach for pancreatic ductal adenocarcinoma enhances immune response and tumour reduction  
**Immacolata Maietta, Rosana Simón Vázquez, Africa González Fernández** (*Spain*)
- 15:05**  
**WS69.6** CD69-deficiency confers susceptibility to anti-PD1-induced myocarditis  
**Enrique Ortega-Sollero, Rosa Jiménez-Alejandre, Raquel Sánchez-Díaz, Pilar Martin** (*Spain*)
- 15:15** Discussion



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LIFFEY HALL 2 | 14:25-15:40

WORKSHOP 70 - IMMUNITY IN RESPIRATORY INFECTIONS

- 14:25**  
**WS70.1** Developing bispecific antibody for sustained suppression of influenza virus  
**Romila Moirangthem<sup>1</sup>, Sapir Cordela<sup>1</sup>, Dina khateeb, Ben Shor<sup>1</sup>, Ivan Kosik<sup>2</sup>, Dina Schneidman Duhovny<sup>1</sup>, Michal Mandelboim<sup>1</sup>, Friederike Jönsson<sup>3</sup>, Jonathan W. Yewdell<sup>2</sup>, Timothée Bruel<sup>3</sup>, Yotam Bar-On<sup>1</sup> (<sup>1</sup>Israel, <sup>2</sup>USA, <sup>3</sup>France)**
- 14:35**  
**WS70.2** Myeloid-derived OLAH (oleoyl-ACP hydrolase) and its main catalytic products act as early biomarkers of life-threatening illness from diverse viral respiratory infections  
**Jeremy Chase Crawford<sup>1</sup>, Xiaoxiao Jia<sup>2</sup>, Robert C. Mettelman<sup>1</sup>, Heather S. Smallwood<sup>1</sup>, Amanda M. Green<sup>1</sup>, Lee-Ann Van de Velde<sup>1</sup>, Ryan S. Thwaites<sup>3</sup>, Tanya Novak<sup>1</sup>, Adrienne G. Randolph<sup>1</sup>, Paul Thomas<sup>1</sup>, Tim Flerlage<sup>1</sup>, Zhongfang Wang<sup>1,2</sup>, Brendon Y. Chua<sup>2</sup>, Katherine Kedzierska<sup>1,2</sup> (<sup>1</sup>USA, <sup>2</sup>Australia, <sup>3</sup>United Kingdom, <sup>4</sup>China)**
- 14:45**  
**WS70.3** Leptin is expressed in lung granulomas of *Mycobacterium tuberculosis*-infected DBA/2 mice and impairs anti-mycobacterial capacity of immune cells  
**Claudia La Rocca, Carla Palma, Maria Teresa Lepore, Carla Bromuro, Cristiana Barbati, Vincenzo Gigantino, Fortunata Carbone, Giuseppe Matarese (Italy)**
- 14:55**  
**WS70.4** High-parameter cytometry by time of flight (CyTOF) and unbiased bioinformatical analysis to identify biomarkers of post-Covid syndrome ME/CFS and of response to immunoadsorption therapy  
**Lucas Arendholz, Lev Petrov, Annika Elisa Stein, Cornelia Heindrich, Kirsten Wittke, Laura Kim, Franziska Sotzny, Janina Behrens, Martín Álvarez Puga, Christiana Franke, Harald Prüß, Judith Bellmann-Strobl, Uta Behrends, Susen Burock, Carsten Finke, Carmen Scheibenbogen, Birgit Sawitzki (Germany)**
- 15:05**  
**WS70.5** Study of *Bdellovibrio bacteriovorus* as a live antibiotic against *Mycobacterium tuberculosis*  
**Archana Singh, Vidushi Sharma, Alisha Arora, Deepak Vats (India)**
- 15:15**  
**WS70.6** Tissue-specific immunophenotyping reveals divergent immune responses to *Mycobacterium tuberculosis* in lung parenchyma and vasculature of tuberculosis mice model  
**Sergio Diaz Fernandez, Marco Antonio Fernandez Sanmartín, Yaiza Rosales, Jorge Díaz Pedroza, Guillem Safont Gonzalez, Joan Puñet Ortiz, Pablo Soldevilla Lax, Pere Joan Cardona Iglesia, Jose Antonio Dominguez, Irene Latorre Rueda (Spain)**
- 15:25** Discussion

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**WICKLOW HALL 1 | 14:25-15:40****WORKSHOP 71 - VACCINES FOR VIRAL INFECTIONS**

- 14:25**  
**WS71.1** Investigating long-term T cell memory responses to COVID-19 vaccines in people living with HIV  
**Maxine Höft<sup>1</sup>, Roanne Keeton<sup>1</sup>, Lee Fairlie<sup>1</sup>, Penny Moore<sup>1</sup>, Alex Sigal<sup>1,2</sup>, Catherine Riou<sup>1</sup>, Wendy Burgers<sup>1</sup>** (<sup>1</sup>South Africa, <sup>2</sup>Germany)
- 14:35**  
**WS71.2** Role of antigen bio-distribution and persistence in early and long-term immune responses to the yellow fever vaccine in non-human primates  
**Julie Bigay, Matthieu Van Tilbeurgh, Paul Mazet, Aurélie Mauras, Caroline Manet, Marco Leonec, Camille Ludot, Sophie Luccantoni, Pauline Maisonnasse, Flavie Misplon, Yaël Glasson, Laure-Agnes Chepeaux, Laetitia Bossevot, Julien Lemaître, Francis Relouzat, Laura Junges, Nathalie Bosquet, Anne-Sophie Gallouet, Quentin Pascal, Henri-Alexandre Michaud, Catherine Caillet, Nathalie Mantel, Frédéric Martinon, Pascal Blanc, Roger Le Grand** (France)
- 14:45**  
**WS71.3** Repeated SARS-CoV-2 mRNA vaccination results in decreased capacity of spike-specific serum antibodies to activate NK cells in older adults  
**Anne Gelderloos, Marije Verheul, Gaby Smits, Irene Middelhof, Rob van Binnendijk, Anne-Marie Buisman, Puck van Kasteren** (Netherlands)
- 14:55**  
**WS71.4** Mesoporous silicon microparticles (MSMPs) as a new adjuvant in a vaccine against the SARS-COV-2 virus  
**Ana López Gómez, Jana Ausió Cendra, Natalia Cuesta-Rubio, Alicia García-Culebras, Raúl José Martín-Palma, Eduardo Martínez-Naves, Manuel María Gómez del Moral** (Spain)
- 15:05**  
**WS71.5** Vaccine-induced virus neutralizing antibody responses against seasonal influenza virus H1N1 strains are not enhanced upon subsequent pandemic H1N1 infection  
**Petra Mooij<sup>1</sup>, Daniella Mortier<sup>1</sup>, Aafke Aartse<sup>1</sup>, Alexandre B. Murad<sup>2</sup>, Ricardo Correia<sup>2</sup>, António Roldão<sup>2</sup>, Paula M. Alves<sup>2</sup>, Zahra Fagrouch, Dirk Eggink<sup>1</sup>, Norbert Stockhofe<sup>1</sup>, Othmar G. Engelhardt<sup>3</sup>, Ernst J. Verschoor<sup>1</sup>, Marit J. van Gils<sup>1</sup>, Willy M. Bogers<sup>1</sup>, Manuel J.T. Carrondo<sup>2</sup>, Edmond J. Remarque<sup>1</sup>, Gerrit Koopman<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Portugal, <sup>3</sup>United Kingdom)
- 15:15**  
**WS71.6** Adaptable live-attenuated SARS-CoV-2 OTS vaccines show preclinical safety and broad protection  
**Tuba Barut<sup>1</sup>, Nadine Ebert<sup>1</sup>, Bettina Salome Trüb<sup>1</sup>, Etori Aguiar Moreira<sup>1</sup>, Péter Demeter Túrós<sup>1</sup>, Llorenç Grau-Roma<sup>1</sup>, Jacob Schön<sup>2</sup>, Inês Berenguer Veiga<sup>1</sup>, Annika Kratzel<sup>1</sup>, Jenna N. Kelly<sup>1</sup>, Melanie Brügger<sup>1</sup>, Charaf Benarafa<sup>1</sup>, Donata Hoffmann<sup>2</sup>, Martin Beer<sup>2</sup>, Volker Thiel<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Germany)
- 15:25** Discussion

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LIFFEY HALL 1 | 14:25-15:40

WORKSHOP 72 - INNATE IMMUNITY IN CANCER II

- 14:25**  
**WS72.1** Dissecting molecular drivers of NK cell dysfunction to enhance anti-tumor activity  
**Batel Sabag, Abhishek Puthenveetil, moria Levy, Noah Joseph, Fatima Awwad, Shahar Ashkenazi, Mira Barda-Saad** (*Israel*)
- 14:35**  
**WS72.2** Anti-CD20 mediated apoptosis in B-cell lymphoma impairs “don’t-eat-me” CD47 signaling and boosts Fc receptor-mediated phagocytosis  
**Oanh Nguyen<sup>1</sup>, Sandra Lara<sup>1</sup>, Giovanni Ferro<sup>1</sup>, Matthias Peipp<sup>2</sup>, Sandra Kleinau<sup>1</sup>** (*<sup>1</sup>Sweden, <sup>2</sup>Germany*)
- 14:45**  
**WS72.3** Lipid-associated macrophages are induced by cancer-associated fibroblasts and mediate immune suppression in breast cancer  
**Eleonora Timperi<sup>1</sup>, Paul Gueguen<sup>1</sup>, Martina Molgora<sup>2</sup>, Ilaria Magagna<sup>1</sup>, Yann Kieffer<sup>1</sup>, Silvia Lopez Lastra<sup>1</sup>, Philemon Sirven<sup>1</sup>, Laura G Baudrin<sup>1</sup>, Sylvain Baulande<sup>1</sup>, André Nicolas<sup>1</sup>, Gabriel Champenois<sup>1</sup>, Didier Meseure<sup>1</sup>, Anne Vincent-Salomon<sup>1</sup>, Anne Tardivon<sup>1</sup>, Enora Laas<sup>1</sup>, Vassili Soumelis<sup>1</sup>, Marco Colonna<sup>2</sup>, Fatima Mechta-Grigoriou<sup>1</sup>, Diego Sebastian Amigorena<sup>1</sup>, Emanuela Romano<sup>1</sup>** (*<sup>1</sup>France, <sup>2</sup>USA*)
- 14:55**  
**WS72.4** Wiring the transcription factor network to prime Natural Killer anti-tumor immunity in triple-negative breast cancer  
**Veronica Manicardi, Gloria Manzotti, Elisa Salviato, Federica Torricelli, Elisa Gasparini, Alessia Ciarrocchi, Francesca Reggiani** (*Italy*)
- 15:05**  
**WS72.5** PD-L1 ligation enhances NK cell anti-tumor function by inducing a metabolic shift  
**Katja Srpan, Kyle Lupo, Katharine Hsu** (*USA*)
- 15:15**  
**WS72.6** ERAP1 controls NK cell responses by regulating peptide-dependent interactions between HLA class I and NK cell inhibitory receptors in hematological malignancies  
**Kamila Król, Maria Troiano, Michela Falco, Marco Andreani, Doriana Fruci** (*Italy*)
- 15:25** Discussion

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### LIFFEY MEETING ROOM 2 | 14:25-15:40

#### WORKSHOP 73 - VIRAL IMMUNITY II

- 14:25**  
**WS73.1** Developing intracellular antibodies that harness innate antiviral mechanisms to prevent HIV-1 infection  
**Florence Stel, Esther Zijlstra-Willems, Neeltje Kootstra, Teunis B.H. Geijtenbeek** (Netherlands)
- 14:35**  
**WS73.2** ULBP2-expressing HCMV mutants affect NK cell function and activation  
**Greta Meyer, Anna R Simes, Jenny F. Kuehne, Irina Bevzenko, Kerstin Beushausen, Jana Keil, Karen Wagner, Lars Steinbrück, Eva-Maria Borst, Martin Messerle, Christine Falk** (Germany)
- 14:45**  
**WS73.3** Antiviral protective signature of V $\delta$ 2 T cells in pediatric patients after  $\alpha\beta$ /CD19-depleted hematopoietic stem cell transplantation  
**Veronica Bordoni, Federica Guarracino, Federica Galaverna, Valentina Bertaina, Giuseppina Li Pira, Marco Rosichini, Angela Pitisci, Enrico Velardi, Pietro Merli, Franco Locatelli, Chiara Agrati** (Italy)
- 14:55**  
**WS73.4** CD4+ T-cell tissue lymphopenia in human-papillomavirus-driven anal dysplasia in people living with human immunodeficiency virus  
**Rehana Hewavisenti, Zong-Hong Zhang, Cecilia Chang, Tony Wang, Priyanka Hastak, Fengyi Jin, Isobel M. Poynten, Alexander Swarbrick, Andrew E. Grulich, Anthony Kelleher, Sarah C Sasson** (Australia)
- 15:05**  
**WS73.5** Increased levels of intestinal CD103+ cells and plasma IgG/IgA ratio are associated to spontaneous HIV control  
**Joana Vitallé, Beatriz Domínguez-Molina, Sara Bachiller, Carmen Gasca-Capote, Cristina Moral-Turón, Isabel Gallego, Francisco José Ostos, Mohamed Rafii-El-Idrissi Benhnia, Jorge Carrillo, Julià Blanco, Luis Fernando López-Cortés, Ezequiel Ruiz-Mateos** (Spain)
- 15:15**  
**WS73.6** CD4+T cells license Kupffer cells to revert the CD8+T cell dysfunction induced by hepatocellular priming  
**Valentina Venzin<sup>1</sup>, Cristian Beccaria<sup>1</sup>, Valeria Fumagalli<sup>1</sup>, Federica Moalli<sup>1</sup>, Chiara Perucchini<sup>1</sup>, Chiara Laura<sup>1</sup>, Pietro Delfino<sup>1</sup>, Elisa Bono<sup>1</sup>, Leonardo Giustini<sup>1</sup>, Marta Grillo<sup>1</sup>, Keigo Kawashima<sup>1</sup>, Micol Ravà<sup>1</sup>, Anna Celant<sup>1</sup>, Pietro Di Lucia<sup>1</sup>, Giorgia De Simone<sup>1</sup>, Fulvia Vascotto<sup>2</sup>, Luca G Guidotti<sup>1</sup>, Matteo Iannaccone<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Germany)
- 15:25** Discussion

WEDNESDAY, 4 SEPTEMBER 2024

LIFFEY MEETING ROOM 3 | 14:25-15:40

WORKSHOP 74 - TRIGGERS OF AUTOIMMUNE AND  
INFLAMMATORY DISEASE

- 14:25**  
**WS74.1** Tlr7 bi-allelism defines a functionally distinct B cell subset and drives systemic autoimmunity  
**Léa Ferrayé, Charles-Henry Miquel, Berenice Faz-Lopez, Magali Savignac, Jean-Charles Guéry** (France)
- 14:35**  
**WS74.2** Biological effect of cytokine specific auto-antibodies on immune responses in a healthy population  
**Florian Dubois<sup>1</sup>, Jakob Hjorth Von Stemmann<sup>1</sup>, Violaine Saint-André<sup>1</sup>, Vincent Bondet<sup>1</sup>, Celine Posseme<sup>1</sup>, Bruno Charbit<sup>1</sup>, Lluís Quintana-Murci<sup>1</sup>, Morten Bagge Hansen<sup>1,2</sup>, Sisse Rye Ostrowski<sup>1,2</sup>, Darragh Duffy<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Denmark)
- 14:45**  
**WS74.3** Exploratory study of the utility of the detection of licroRNAs in urine of patients with immune-mediated inflammatory diseases  
**Marisa Pardines Ortiz, Ana Triguero Martínez, Nuria Montes, Hortensia De la Fuente, Ana Romero Robles, Rosario García Vicuña, Amalia Lamana, Ana M. Ortiz, Rebeca Hernández Martínez, Mónica Marazuela, Isidoro González Álvaro** (Spain)
- 14:55**  
**WS74.4** Presence and characterization of circulating endothelial cells in individuals-at-risk and patients with rheumatoid arthritis  
**Brianne Barker, Mary Canavan, Dumitru Anton, Aoife O'Rourke, Carl Orr, Douglas Veale, Ursula Fearon** (Ireland)
- 15:05**  
**WS74.5** Deciphering the impact of epigenetic imprinting for T cell differentiation in humans using an induced pluripotent stem cell (iPSC)-based in vitro model  
**Marcel Finke, Christopher Kressler, Frederik Hamm, Anne Schulze, Ramonique Lim, Harald Stachelscheid, Julia K Polansky** (Germany)
- 15:15**  
**WS74.6** Interleukin-17-induced granulopoiesis alters neuroautoimmune susceptibility in a mouse model of multiple sclerosis  
**Katlynn Carter, Rebecca Jasser, Michaela Blanford, Tommy Regen, Ari Waisman** (Germany)
- 15:25** Discussion

AUDITORIUM | 15:50-16:20

Closing Ceremony



**POSTER SESSION 1****P1.01 ADOPTIVE CELL THERAPY**

- P1.01.01** Both NK92 cells stably transfected with CD16 and expanded primary NK cells exert potent antibody-dependent cytotoxicity against multiple myeloma cells in vitro and in vivo  
**Evelyn Galano-Frutos, David GiralDOS, Chantal Reina-Ortiz, Laura Cambronero, Isabel Marzo, Javier Naval, Alberto Anel** (Spain)
- P1.01.02** Tolerogenic dendritic cells manifest strong cellular respiration as evidenced by oxygen consumption and lactate production  
**Antonia Peter, Tamara Traitteur, Sara Tekavec, Mats van Delen, Amber Dams, Morgane Vermeulen, Hans de Reu, Nathalie Cools** (Belgium)
- P1.01.03** Coculture with human umbilical cord-derived mesenchymal stromal cells facilitates ex vivo expansion of human regulatory T cell subpopulations  
**Qifeng Ou, Shirley Hanley, Rachael Power, Sarah Hontz, Sarah Cormican, Stephen J. Elliman, Janusz Krawczyk, Neema Negi, Matthew D. Griffin** (Ireland)
- P1.01.04** The effect of adoptive cellular immunotherapy on solid tumors of a novel human JBT19 UPS sarcoma cell line  
**Kateřina Krausov, Pavla Tborsk, Dmitry Stakheev, Pavol Luk, Lenka Rajsiglov, Luca Vannucci, Daniel Smr** (Czech Republic)
- P1.01.05** Tertiary lymphoid structure-related immune infiltrates in NSCLC tumor lesions correlate with low tumor-reactivity of TIL products  
**Suzanne Castenmiller, Nandhini Kanagasabesan, Aurelie Guislain, Benoit Nicolet, Marleen van Loenen, Kim Monkhorst, Alexander Veenhof, Egbert Smit, Koen Hartemink, John Haanen, Rosa de Groot, Monika Wolkers** (Netherlands)
- P1.01.06** Exploring the impact of immune reconstitution on clinical outcomes following allogeneic stem cell transplantation and CAR-T cell therapy  
**Hayley Foy-Stones, Christopher Armstrong, Christopher Larry Bacon, Nina Orfali, Derek G. Doherty, Anthony McElligott, Tor Hervig, Aoife Kilgallon, Nicola Gardiner** (Ireland)
- P1.01.07** Genome  
**Conor Lawlor<sup>1</sup>, Michael Freeley<sup>1</sup>, Monika Ziminska<sup>2</sup>, Emma Carroll, Jordan Wilson<sup>2</sup>, Helen McCarthy<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)
- P1.01.08** gd T cell therapy for post-transplant cytomegalovirus infection: preclinical proof-of-concept  
**Gabriel Marseres<sup>1</sup>, Coline Gentil<sup>1</sup>, Claire Tinevez<sup>1</sup>, Maxime Courant<sup>1</sup>, Anas Cosentino<sup>1</sup>, Hannah Kaminski<sup>1</sup>, Victor Bigot<sup>1</sup>, Vincent Pitard<sup>1</sup>, Atika Zouine<sup>1</sup>, Myriam Capone<sup>1</sup>, Isabelle Garrigue<sup>1</sup>, Valerie Prouzet-Mauleon<sup>1</sup>, Batrice Turcq<sup>1</sup>, Dany Anglicheau<sup>1</sup>, Benoit Rousseau<sup>1</sup>, Edouard Forcade<sup>1</sup>, Bruno Silva-Santos<sup>2</sup>, Pierre Merville<sup>1</sup>, Julie Dechanet-Merville<sup>1</sup>, Lionel Couzi<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Portugal)
- P1.01.09** Generating metabolically superior T cells as a novel immunotherapy to treat solid tumors  
**Michael Berger, Yarden Engel, Amijai Saragovi, Zahala Baron, Dinorah Friedmann-Morvinski, Alina Brosque** (Israel)



## POSTER SESSION 1

- P1.01.10** Exploring DARPins to detect MHC class I restricted antigen presentation  
**Sandra Schmid, Fabienne Läderach, Obinna Chijioke, Birgit Dreier, Andreas Plückthun<sup>2</sup>, Christian Münz** (Switzerland)
- P1.01.11** CAR-T cell therapy for solid tumors against a carbohydrate target  
**Beatriz Amorós-Pérez, Benigno Rivas-Pardo, Raquel González-García, Irene Real-Arévalo, Marcos Viñuela-Martín, Oana Hangiu, Oscar Aguilar Sopena, Pedro Roda Navarro, Luis Álvarez-Vallina, Manuel María Gómez del Moral, Jose Luis Subiza, Eduardo Martínez-Naves** (Spain)
- P1.01.12** Cytotoxicity of V $\delta$ 1  $\gamma\delta$  T cells isolated from healthy donor PBMCs against colorectal cancer cells  
**Amy Walsh, Anthonia Ekperuoh, Rosemary O'Connor, Henry Paul Redmond, Cathriona Foley** (Ireland)
- P1.01.13** Epigenetic editing for conventional to regulatory T cell reprogramming  
**Ramonique Lim, Christopher Kressler, Carina Saggau, Viktor Glaser, Mingxing Yang, Anamika Giri, Dania Hamo, Stephan Schlickeiser, Hans-Dieter Volk, Alexander Scheffold, Dimitrios Laurin Wagner, Julia K. Polansky** (Germany)
- P1.01.14** In vitro targeting of non-hematological tumour cells by immortalized NK cells engineered with a CD6-based chimeric antigen receptor  
**Lucía Aragón-Serrano<sup>1</sup>, Laura Carrillo-Serradell<sup>1</sup>, Violeta Planells-Romeo<sup>1</sup>, Cristina Català<sup>1</sup>, Michael O'Dwyer<sup>2</sup>, María Velasco-de Andrés<sup>1</sup>, Francisco Lozano<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Ireland)
- P1.01.15** Eosinophil counts in anti-CD19 CAR-T cell therapy. Could they predict efficacy and prognosis?  
**Cristina Arnaldos Pérez, Marta Español-Rego, Valentín Ortiz-Maldonado, Núria Martínez Cibrián, Susana Rives, Anna Alonso Saladrígues, Sergio Navarro Velázquez, Leticia Alserawan, Libertad Heredia, Daniel Jiménez, Catherina De Guzman, Mercedes Montoro Lorite, Álvaro Urbano Ispizua, Julio Delgado, Mariona Pascal, Manel Juan Otero, E. Azucena González Navarro** (Spain)
- P1.01.16** Study on the effect of corticosteroids on lung development with the SSEA1+ stem/progenitor cells derived lung organoid model  
**Yan-Ru Cho, Bor-Luen Chiang** (Taiwan)
- P1.01.17** Galectin-1-deficient Foxp3+ regulatory T cells show limited long-term protection in experimental inflammatory bowel disease  
**Raquel Fernández-Pérez, Rebeca Sánchez-Domínguez, Omaira Alberquilla, Miguel A. Martín, Juan Antonio Bueren, Marina Garin** (Spain)
- P1.01.18** Antibacterial activity of KHYG-1 cells stably expressing a lymphoid scavenger-like receptor-based chimeric antigen receptor  
**Violeta Planells-Romeo<sup>1</sup>, Laura Carrillo-Serradell<sup>1</sup>, Lucía Aragón-Serrano<sup>1</sup>, Cristina Català<sup>1</sup>, Michael O'Dwyer<sup>2</sup>, María Velasco-de Andrés<sup>1</sup>, Francisco Lozano<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Ireland)
- P1.01.19** Search and find: regulatory T cells  
**Katja Leben Zupet<sup>1</sup>, Kristina Manzoni<sup>2</sup>, Jon Žnidarčič<sup>1</sup>, Karen Butina Ogorelec<sup>1</sup>, Andrea Šarac<sup>1</sup>, Maša Čater<sup>1</sup>, Simon Horvat<sup>1</sup>, Anže Smole<sup>1</sup>, Jelka Pohar<sup>1</sup>** (<sup>1</sup>Slovenia, <sup>2</sup>Croatia)

**POSTER SESSION 1**

- P1.01.20** Novel A20 based therapeutic strategies to fight lung cancer  
**Monika Homolya, Max Schwab, Michael Machtinger, Emilio Casanova, Herwig Moll** (Austria)
- P1.01.21** Glutaminase is essential for NK cell cytotoxicity  
**Marek Jedlicka, Tereza Feglarová, Eva Mašíonová, Lucie Janstová, Jana Szabová, Veronika Švubová, Katerina Kuzelova, Marcela Hortova-Kohoutkova, Jan Frič** (Czech Republic)
- P1.01.22** Developing image-based cell assays to effectively monitor T-cell apoptosis and CAR expression  
**Bo Lin, Leo Chan** (USA)
- P1.01.23** Modulation of antigen-specific B cell responses by engineered IL-10-producing tolerogenic dendritic cells  
**Konstantina Morali<sup>1</sup>, Juulke Steuten<sup>2</sup>, Fabio Russo<sup>1</sup>, Francesca Santoni de Sio<sup>1</sup>, Charlotte Menage<sup>2</sup>, Valentina Concoli<sup>1</sup>, Andrea Annoni<sup>1</sup>, Silvia Iaia<sup>1</sup>, Marieke van Ham<sup>2</sup>, Anja ten Brinke<sup>2</sup>, Silvia Gregori<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Netherlands)

**P1.02 ALLERGY AND ASTHMA**

- P1.02.01** Quantitative transcriptome analysis of purified equine mast cells identifies a dominant mucosal mast cell population  
**Srinivas Akula, Miia Riihimäki, Ida Waern, Magnus Abrink, Amanda Raine, Lars Hellman, Sara Wernersson** (Sweden)
- P1.02.02** Short chain fatty acids and other microbiota metabolites in lipid transfer proteins allergy  
**Paula Álvarez Romero, Laura Carrero Chiquillo, Rocío Aguado Álvarez, Juan Molina Alcaide, Berta Ruiz León, Aurora Jurado Roger** (Spain)
- P1.02.03** PLAUR alternative splice pattern analysis in patients with bronchial asthma and rheumatoid arthritis  
**Jiri Litzman, Petra Kuliskova, Lucie Ballonova, Peter Slanina, Marcela Vlkova, Petr Nemec, Jan Baros, Julie Stichova, Premysl Soucek, Tomas Freiburger** (Czech Republic)
- P1.02.04** Lymphocyte transformation test in assessing allergic causality and cross reactivities to glycopeptides and lipoglycopeptides in non-severe cutaneous adverse reactions  
**Daniela Aguilar, Laura Miguel Berenguel, Ricardo Cuesta Martin de la Camara, Elena Ramírez, Olga Rogozina, Miguel González Muñoz** (Spain)
- P1.02.05** Recombinant *Blomia tropicalis* allergens for precise differential diagnosis of allergic sensitization  
**Nishelle Dsouza<sup>1</sup>, Milena Weber<sup>1</sup>, Eszter Sarzsinszky<sup>1</sup>, Gabrielle Pauli<sup>2</sup>, Huey Jy Huang<sup>1</sup>, Margarete Focke-Tejkl<sup>1</sup>, Mikhail Tulaev<sup>1</sup>, Walter Keller<sup>1</sup>, Thomas Schleder<sup>1</sup>, Rudolf Valenta<sup>1</sup>, Susanne Vrtala<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>France)

## POSTER SESSION 1

- P1.02.06** Impact of crosstalk between Th2 cells, ILC2s and cDC2s on lung eosinophilia in a mouse model of allergic bronchopulmonary aspergillosis  
**Lisa-Marie Graf, Stefan Wirtz, David Voehringer** (Germany)
- P1.02.07** Skin mast cells require integrin  $\beta 1$  for their perivascular alignment and induction of contact hypersensitivity  
**Aaron Hoffmann, Katsoulis-Dimitriou Konstantinos, Dudeck Jan, Anne Dudeck** (Germany)
- P1.02.08** Characterisation of Furin deletion in myeloid cells during allergic inflammation  
**Martín I. González-Rodríguez, Tanja Salomaa, Marko Pesu, Ilkka S. Junttila** (Finland)
- P1.02.10** Effect of diesel exhaust particles on immune response of primary human nasal epithelial cells in HDM-allergic rhinitis patients  
**Nahyun Kim, Moo Kyun Park, Doo Hee Han** (South Korea)
- P1.02.11** Specific immunoglobulin E binding patterns to wheat salt-soluble proteins in Thai patients with wheat-induced anaphylaxis  
**Pisit Ubonsri** (Thailand)
- P1.02.12** GM-CSF-primed eosinophils enhance mast cell activation  
**Xue-Ying Luo<sup>1</sup>, Sherezade Moñino-Romero<sup>1</sup>, Francesca Levi-Schaffer<sup>1,2</sup>, Marcus Maurer<sup>1</sup>, Stefan Frischbutter<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Israel)
- P1.02.13** Global associations of macronutrient supply and asthma disease burden  
**Duan Ni, Alistair Senior, David Raubenheimer, Stephen Simpson, Laurence Macia, Ralph Nanan** (Australia)
- P1.02.14** How nutritional landscapes impact food allergy  
**Duan Ni, Alistair Senior, Jian Tan, Laurence Macia, Ralph Nanan** (Australia)
- P1.02.18** Peanut-allergic young children after 1 year of oral immunotherapy show changes in their gut microbiota composition and functional potential  
**Isabella Badolati, Ymke de Jong, Carina Uhl, Marleen Joustra, Caroline Nilsson, Anna Asarnej, Eva Sverremark Ekstrom** (Sweden)
- P1.02.19** Comparison of two multiplex arrays for in vitro allergy diagnosis with the reference singleplex method  
**Adrian Marynowski, Melissa E. Liriano-Alba, Fabio Román-Balderrama, Alberto Martínez-Cano, Aitana Alberdi Callejo, María Catalá, José González-Fernández, Celia González-Agudo, Reyes Tejedor-Lázaro, Fátima González-Chantal, Carlos Blanco-Guerra, Arantzazu Alfranca** (Spain)
- P1.02.20** Oral tolerance to walnut and peanut evaluated through basophil degranulation  
**Laura Carrero Chiquillo, Ana Navas, Juan Molina Alcaide, Raquel Bernardo, Javier Torres, Aurora Jurado Roger** (Spain)
- P1.02.22** Development of atopic diseases among offspring of mothers belonging to gestational diabetes mellitus (GDM) risk group  
**Anu Bärenson, Aili Tagoma, Heili Varendi, Raivo Uibo** (Estonia)

### POSTER SESSION 1

- P1.02.23** Interleukin-1 $\beta$  signaling is critical to urban particulate matter induced exacerbation of airway allergic inflammation  
**Tien-Hsuan Chen, Bor-Luen Chiang** (*Taiwan*)
- P1.02.24** In vitro characterisation of the role of human macrophage migration inhibitory factor in driving house dust mite mediated trained immunity  
**Molly Dunlop, Hazel Dunbar, Ian Hawthorne, Patrick Mitchell, Karen English** (*Ireland*)
- P1.02.25** Development of monoclonal antibodies against cat allergen Fel d 3 and their application for the analysis of cat allergen extracts  
**Vytautas Rudokas, Aurelija Zvirbliene** (*Lithuania*)
- P1.02.26** Macropinocytosis is the principal uptake mechanism of antigen-presenting cells for allergen-specific virus-like nanoparticles  
**Armin Kraus, Bernhard Kratzer, Al Nasar Ahmed Sehgal, Doris Trapin, Matarr Khan, Nicole Boucheron, Winfried Pickl** (*Austria*)
- P1.02.27** TCR- and HLA-transgenic humanized mouse model for birch pollen allergy  
**Mirjam Schaar, Bernhard Kratzer, Al Nasar Ahmed Sehgal, Doris Trapin, Barbara Bohle, Alina Neunkirchner, Ursula Wiedermann, Rudolf Valenta, Winfried Pickl** (*Austria*)
- P1.02.28** Clinical relevance of molecular diagnosis in patients sensitized to olive tree (*Olea europaea*) pollen in a cohort of patients from the province of Cádiz  
**Javier Galán Picón, Alberto Gallardo García, Jorge Mannelli, Raquel De la Varga-Martínez** (*Spain*)
- P1.02.29** More severe symptoms are associated to specific IgE detection of a higher number of LTPs using microarray technology  
**Juan López Pérez, María Pilar Osácar Puyoles, Sergio Zuheros Serrano, Carlos Colás Sanz, Luis Martínez-Lostao** (*Spain*)
- P1.02.30** Performance characteristics of a novel, fully automated immunoassay microarray for the qualitative serological detection of specific IgE directed against Bet v 1  
**Yasemin Ataman-Önal, Brian Steele, Gerber Gomez, Rocio Pasion-Galvan, Jose Santiago, Michael Hausmann, Christian Fischer** (*Switzerland*)
- P1.02.31** LPS in combination with amoxicillin increases basophil activation and can be used to improve basophil activation test for IgE-mediated allergy  
**Jose A. Cespedes, Ruben Fernandez-Santamaria, Bogas Gador, Adriana Ariza, Inmaculada Doña, Maria Salas, Marina Labella, Tahia Fernandez Duarte, Cristobalina Mayorga, Maria Jose Torres, Cecilia Frecha** (*Spain*)
- P1.02.32** The crucial role of lipid receptors on pathogenic T helper cells during house dust mite allergic airway inflammation  
**Anna Krone, Simon Schreiber, Tobias Franz, Negele Jonas, Johanna Kotrba, Marc Roder, Anja Sammt, Camilla Merten, Nouria Jantz-Naeem, Robert Geffers, Christoph Garbers, Anne Dudeck, Andreas Müller, Burkhard Schraven, Sascha Kahlfuß** (*Germany*)
- P1.02.33** Interactions of metal allergens with T cell receptors  
**Franziska Riedel, Caterina Curato, Marina Aparicio Soto, Leonie Maibaum, Wiebke K. Peitsch, Katherina Siewert** (*Germany*)

POSTER SESSION 1

- P1.02.34 A novel alveolar macrophage depletion mouse model identifies IRF4 as a master regulator of alveolar macrophage effector function during type 2 lung inflammation  
**Stijn Verwaerde<sup>1</sup>, Jean-François Hastir<sup>1</sup>, Sjoerd Schetters<sup>1</sup>, Ursula Smole<sup>1</sup>, Leen Seys<sup>1</sup>, Karel Van Damme<sup>1</sup>, Martijn Schuijs<sup>1</sup>, Sofie De Prijck<sup>1</sup>, Kim Deswarte<sup>1</sup>, Laura Bub<sup>2</sup>, Tim Willinger<sup>2</sup>, Martin Guillems<sup>1</sup>, Bart Lambrecht<sup>1</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Sweden)
- P1.02.35 Serum levels of TSLP and CD14 are lower in children with atopic dermatitis and food allergy to cow's milk or a combination of cow's milk and eggs  
**Tomáš Thon, Tereza Svabova, Lucie Bulantova, Eliska Kopelentova, Anna Sediva, Stepanka Capkova, Miloslav Kverka, Helena Tlaskalova-Hogenova, Dagmar Srutkova, Andrea Polouckova, Zuzana Jirásková-Zakostelská** (Czech Republic)
- P1.02.36 Molecular insights into shrimp allergy  
**Dhouha Krir, Ines Ben Sghaier, Yosra Nasri, Mariem Marrak, Imen Zamali, Ahlem Ben Hmid, Hayet Kbaier, Mouldi Hidri, Walid Hamdi, Yousr Galai, Melika Ben Ahmed, Samar Samoud** (Tunisia)
- P1.02.37 Component-resolved allergy diagnostics in Honeybee venom allergy  
**Georgi Nikolov, Radoslava Emilova, Yana Todorova, Maria Nikolova, Bogdan Petrunov** (Bulgaria)
- P1.02.38 Obesity-induced gut dysbiosis is associated with lung endothelial glycocalyx shedding and exacerbation of asthma  
**Nubia Sabrina Martins, Guilherme Rodrigues de Mira, Thais Fernanda de Campos Fraga-Silva, Médeton Mahoussi Michaël Boko, Ualter Guilherme Cipriano Rosa, Maíra Nilson Benatti, Daniel Rodrigues, Leandra Naira Zambelli Ramalho, Andrea de Cássia Vernier Antunes Cetlin, Elcio Oliveira Vianna, Rita Tostes, Livia Soares Zaramela, Vania Luiza Deperon Bonato** (Brazil)
- P1.02.39 Lung microbiota analysis of asthmatics reveals pathogenic microbial blooms corresponding to lung inflammation and reduced microbial diversity  
**John Mac Sharry, Laura Walsh, Desmond Murphy** (Ireland)
- P1.02.40 Airway and systemic immunoglobulin profiling and immune response in adult asthma  
**John Mac Sharry, Laura Walsh, Desmond Murphy** (Ireland)
- P1.02.42 Prime time for changing the light's course: C1 inhibitor quantification by nephelometry and turbidimetry  
**Adrián García García, Lydia García Serrano, Francisco Morandeira, Jordi Bas Minguet, Ramón Lleónart, Virginia Mas-Bosch** (Spain)
- P1.02.43 Comprehensive analysis of lung macrophages and dendritic cells in two murine models of allergic airway inflammation using spectral flow cytometry  
**Belinda Camp, Ilka Jorde, Franka Sittel, Alexander Pausder, Andreas Jeron, Dunja Bruder, Jens Schreiber, Sabine Stegemann-Koniszewski** (Germany)
- P1.02.44 Simultaneous immediate and delayed hypersensitivity to galcanezumab - case report  
**Refki Peter, Aude Belbezier, Pralong Pauline** (France)
- P1.02.45 The impact of alarmins and co-stimulatory signals on pathogenic Th2 cell differentiation and effector function  
**Verena Fuhrmann, Matarr Khan, Marlis Alteneder, Nicole Boucheron** (Austria)



**POSTER SESSION 1**

- P1.02.46** Are hypersensitivities towards metals causing implant failure in orthopedics?  
**Lea Heinemann, Stefanie Donner, Sven Geißler** (Germany)
- P1.02.47** The prevalence of allergic reactions to insect sting, in certain group of patients presented in Private polyclinic in Prishtina, Kosovo  
**Luljeta Ahmetaj, Ylli Ahmetaj, Mirsije Shahini** (Kosovo)
- P1.02.48** Single cell analysis of upper and lower respiratory tract reveals novel mechanism of dust mite antigen presentation in allergic asthma  
**Wojciech Lason, James Melhorn, Devika Agarwal, Xiawei Zhang, Julian Knight, Calliope Dendrou, Timothy Hinks** (United Kingdom)

**P1.03 ANTIGEN PRESENTATION**

- P1.03.01** Antigen presenting cells in melanoma – role in tumor regression  
**Monica Teodora Neagu, Carolina Constantin, Carmen Dumitru, Sabina Zurac** (Romania)
- P1.03.02** Targeting the unconventional  
**Michele Mishto** (United Kingdom)
- P1.03.03** Celiac disease defined by over-sensitivity to gliadin activation and superior antigen presentation of dendritic cells  
**Michael Hudec, Kamila Riegerová, Jan Pala, Viera Kútna, Marie Černá, Valerie Bríd O' Leary** (Czech Republic)
- P1.03.04** Screening and application of hepatocellular carcinoma-related antigen AFP specific T cell epitope spectrum  
**Suyue Zhu, Yi Wu, Yu Zhao, Yandan Wu, Fangping Yue, Chuanlai Shen** (China)
- P1.03.05** Exploring the role of T cell epitopes in the development of non-specific lipid transfer proteins allergy  
**Paula Álvarez Romero, Juan Molina Alcaide, Rocío Aguado Álvarez, Ana Navas, Bárbara Manzanares Martín, Aurora Jurado Roger** (Spain)
- P1.03.06** A new look on the antigens involved in multiple sclerosis: using immuno-peptidomics to identify naturally processed myelin epitopes  
**Eline Mertens, Judith Derdelinckx, Karin Schildermans, Mats van Delen, Geert Baggerman, Inge Mertens, Nathalie Cools** (Belgium)
- P1.03.07** Closer peptide repertoire similarity of HLA-B14:03 and HLA-B27:05 sheds light on ankylosing spondylitis susceptibility  
**Laura Cobos-Figueroa, Javier Robles-Parrado, Carmen Mir, Ana Pintor-Poveda, Pilar Lauzurica, Elena Lorente** (Spain)
- P1.03.08** Unlocking HLA diversity: innovative CRISPR strategies for peptide repertoire analysis  
**Laura Cobos-Figueroa, Carmen Mir, Ana Pintor-Poveda, Pilar Lauzurica, Elena Lorente** (Spain)
- P1.03.09** Optimization of dendritic cell activation via HIV-1 infection under xeno-free conditions  
**Paul Schweighofer, Wilfried Posch, Doris Wilflingseder** (Austria)



## POSTER SESSION 1

- P1.03.10** The hidden power of anti-inflammatory macrophages: unveiling their role as cross-presenters in the activation of cytotoxic T cells  
**Alexine de Wit, Geert Van den Bogaart, Frans Bianchi** (*Netherlands*)
- P1.03.11** Increasing contribution of mitochondria-derived peptides to the HLA-DR immunopeptidome on different T1D stages  
**Manel Garcia<sup>1</sup>, Yago Arribas<sup>2</sup>, Saioa Auzmendi<sup>1</sup>, Mercè Rubió<sup>1</sup>, Dolores Jaraquemada<sup>1</sup>, Carme Roura-Mir<sup>1</sup>** (*<sup>1</sup>Spain, <sup>2</sup>France*)
- P1.03.13** Effect of tapasin during peptide exchange on MHC class I proteins  
**Alexandra Mitlehner, Moritz Becker, Huan Lan, Christian Freund** (*Germany*)
- P1.03.14** Thiol-binding methylisothiazolinone affects human antigen processing enzyme cathepsin B in human immune cells  
**Sebastian Wolf, Antonia Körber, Hermann-Josef Thierse** (*Germany*)
- P1.03.15** Analysis of HLA-DR immunopeptidome derived from dendritic cells pulsed with tumor extracts  
**Gonzalo Lázaro Bermejo, Andrea Aran, Maitane Faus, Laia Garrigós, Juan Antonio Cedano, Javier Cortés, Mercè Martí** (*Spain*)
- P1.04 ANTIGENS**
- P1.04.01** Genetic and immunological analysis of PfEBA175 gene and antibody responses in malaria patients from different transmission settings in Ghana  
**Linford Otoo, Festus Acquah, Linda Amoah** (*Ghana*)
- P1.04.02** Proteomes of gut commensal bacterial extracellular vesicles: search for conserved surface epitopes  
**Roselydiah Makunja, Arina Maltseva, Tiina Pessa-Morikawa, Masuma Khatun, Mikael Niku** (*Finland*)
- P1.04.03** Selection of high affinity recombinant antibodies against human complement protein C3  
**Ginka Cholakova, Rada Poryazova, Alexandra Kapogianni, Ivanka Tsacheva** (*Bulgaria*)
- P1.04.04** Uncovering untapped potential: noncanonical neoepitopes and T-cell metabolism in paediatric acute lymphoblastic leukaemia  
**Nicole Acuti<sup>1</sup>, Julia Stachowiak<sup>2</sup>, Hanna P. Roetschke<sup>1,2</sup>, Yehor Horokhovskiy<sup>2</sup>, Henning Urlaub<sup>1,2</sup>, Juliane Liepe<sup>2</sup>, Michele Mishto<sup>1</sup>, Anna Schurich<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>Germany*)
- P1.04.05** Potential cross-reactivity between tislular transglutaminase neo-epitope antibodies and Helicobacter pylori antibodies in coeliac disease diagnosis  
**Marc Perez-Guzman, Juliana Ochoa Grullon, Silvia Sanchez Ramon, Miguel Fernandez Arquero, María Guzmán-Fulgencio, Alejandro Pereiro Rodríguez, María Palacios Ortega, Angela Villegas Mendiola, Teresa Guerra Galan, Kauzar Mohamed Mohamed, Maria Dolores Mansilla Ruiz, Maria del Carmen Rodriguez, María Ruiz** (*Spain*)

**POSTER SESSION 1**

- P1.04.06** Expansion of CD8 T-cells recognizing tumor-shared antigens is correlated to the clinical outcomes of hepatocellular carcinoma patients treated with atezolizumab and bevacizumab  
**Laurie Spehner, Adeline Bouard, Christophe Borg, Angélique Vienot** (*France*)
- P1.04.07** A SARS-CoV-2 nucleocapsid protein-derived peptide influences primary and memory cellular responses by affecting the signal 1 and 2 during T cell activation  
**Davide Proietto<sup>1</sup>, Elena Torreggiani<sup>1</sup>, Beatrice Dallan<sup>1</sup>, Martina De Laurentis<sup>1</sup>, Eleonora Gallerani<sup>1</sup>, Valentina Albanese<sup>1</sup>, Victor Appay<sup>2</sup>, Lacey Sian Llewellyn<sup>3</sup>, Salvatore Pacifico<sup>1</sup>, David A. Price<sup>3</sup>, Antonella Caputo<sup>1</sup>, Riccardo Gavioli<sup>1</sup>, Francesco Nicoli<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>France, <sup>3</sup>United Kingdom)
- P1.04.10** Chimeric virus-like particles as an efficient carrier for generating monoclonal antibodies against conserved epitopes of SARS-CoV-2 spike protein  
**Agne Rimkute<sup>1</sup>, Milda Norkiene<sup>1</sup>, Danguole Ziogiene<sup>1</sup>, Kerstin Wernike<sup>2</sup>, Aurelija Zvirbliene<sup>1</sup>, Indre Kucinskaite-Kodze<sup>1</sup>** (<sup>1</sup>Lithuania, <sup>2</sup>Germany)
- P1.04.11** Identification of the novel HLA-C\*01:65:02 allele  
**Juan López Pérez, Mercedes Inda Landaluce, Luis Martinez-Lostao** (*Spain*)
- P1.04.12** Anti-MPO and anti-PR3 doble-positive: more is less  
**Lydia García Serrano, Sergi Cantenys Molina, Adrián García García, Jordi Bas Minguet, Francisco Morandeira Rego** (*Spain*)
- P1.04.13** Immunology laboratory landscape in the repeated determination of extractable nuclear antigens  
**Juan López Pérez, Mercedes Inda Landaluce** (*Spain*)
- P1.04.14** Plasmin-clipped beta-2-glycoprotein I: novel structures lead to increased antibody binding  
**Hannah Bradford<sup>1</sup>, Christophe Lalaurie<sup>1</sup>, Jayesh God<sup>1</sup>, Xin Gao<sup>1</sup>, Charis Pericleous<sup>1</sup>, Stephen Perkins<sup>1</sup>, Hannah Britt<sup>1</sup>, Konstantinos Thalassinou<sup>1</sup>, Ian Giles<sup>1</sup>, Anisur Rahman<sup>1</sup>, Mihaela Delcea<sup>2</sup>, Paul Dalby<sup>1</sup>, Thomas McDonnell<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Germany)
- P1.04.15** Rationale and design of a study to investigate a possible association between group A streptococcal M-peptide antibodies and rheumatic heart disease  
**Taariq Salie, Caitlin Meyer, Liesl Zühlke, Mpiko Ntsekhe, Mark Engel** (*South Africa*)
- P1.04.16** Role of microbial infections in instigated autoimmune responses: a large scale study  
**Vani Janakiram, Mugdha M, Siva V** (*India*)

## POSTER SESSION 1

### P1.05 ARTIFICIAL INTELLIGENCE AND IMMUNITY

- P1.05.01** Prediction of specific TCR-peptide binding from large dictionaries of TCR-peptide pairs for personalized cellular therapy  
**Yoram Louzoun, Ido Springer** (*Israel*)
- P1.05.02** Counting is almost all you need  
**Yoram Louzoun, Ofek Akerman** (*Israel*)
- P1.05.03** Naive and memory T cells TCR-HLA-binding prediction  
**Yoram Louzoun, Ofek Akerman, Neta Glazer** (*Israel*)
- P1.05.04** Development of a novel machine-learning prognostic scoring system for patients presenting with spinal metastases utilizing analysis of existing datasets to predict prognosis, morbidity and mortality  
**Omar Hadidi, Meghan Mulqueen, Sandra O'Malley, Seamus Morris, Joanne Lysaght** (*Ireland*)
- P1.05.05** Leveraging multi-modal data and AI to dissect pathogenic mechanisms and identify novel immunometabolic targets in IBD  
**Nadine Biesemann<sup>1</sup>, Lu Zhang<sup>2</sup>, Nima Nouri<sup>2</sup>, Samuel Lessard<sup>2</sup>, Richard Xu<sup>2</sup>, Ekaterina Zezina<sup>1</sup>, Verawan Boonsanay-Michel<sup>1</sup>, Özen Sercan-Alp<sup>1</sup>, Dieter Schmoll<sup>1</sup>, Zhaohui Du<sup>2</sup>, Thomas Kreutzberg<sup>1</sup>, Michael Tsabar<sup>2</sup>, Giorgio Gaglia<sup>2</sup>, Andre Kurlovs<sup>2</sup>, David Habel<sup>2</sup>, Terry K. Means<sup>2</sup>, Clément Chatelain<sup>2</sup>, Heming Xing<sup>2</sup>, Virginia Savova<sup>2</sup>, Corneliu A. Bodea<sup>2</sup>, Matthias Herrmann<sup>1</sup>, Emanuele de Rinaldis<sup>2</sup>** (<sup>1</sup>*Germany*, <sup>2</sup>*USA*)
- P1.05.06** Identification of distinct NK cell and monocyte subpopulations in recurrent pregnancy loss and recurrent implantation failure through flow cytometry unsupervised analysis  
**Nabil Subhi-Issa, Raquel Gil Laborda, Maria Palacios Ortega, Lydia Pilar Suarez, Ignacio Cristobal, Silvia Sanchez Ramon** (*Spain*)
- P1.05.07** Comparative analysis of FTIR spectroscopy of plasma and Raman spectroscopy of peripheral blood mononuclear cells for the differential diagnosis of autoimmune disease  
**Mollie O'Neill, Neha Chaudhary, Muddassar Ahmad, Grainne Kearns, Eoghan McCarthy, Claire Wynne, Aidan Meade** (*Ireland*)
- P1.05.08** Differential diagnosis of ANCA vasculitis subtypes with Fourier transform infrared spectroscopy of serum  
**Mollie O'Neill, Amrita Dwivedi, Eithne Nic An Riogh, Claire Wynne, Mark Little, Aidan Meade** (*Ireland*)

### P1.06 B LYMPHOCYTE REGULATION AND FUNCTION

- P1.06.01** Dynamic micropatterns as a novel tool to study immune synapse formation and activation of B cells  
**Blanca Tejada González<sup>1</sup>, Sara Hernandez-Perez<sup>2</sup>, Pieta Mattila<sup>1</sup>** (<sup>1</sup>*Finland*, <sup>2</sup>*United Kingdom*)
- P1.06.02** Exploring B cell-derived autophagosome-like vesicle: mechanism and function  
**Yu-Diao Kuan, Chao-Yuan Tsai, Tomoyuki Nishikawa, Jiayu Anna Tai, Kunihiro Yamashita, Chin-Yang Chang** (*Japan*)

**POSTER SESSION 1**

- P1.06.03** Human B-cell intersection between systemic and the upper respiratory tract  
**Eva Piano Mortari, Mattia Laffranchi, Bianca Laura Cinicola, Sabina Barresi, Valentina Marcellini, Marco Scarsella, Ezio Giorda, Gabriele Volpe, Silvano Sozzani, Rita Carsetti** (*Italy*)
- P1.06.04** Early-onset common variable immunodeficiency in a patient with heterozygous variants in interferon response-associated genes TRAF3 and IRF4  
**Kim My Le<sup>1</sup>, Nanni Mamia<sup>1</sup>, Meri Kaustio<sup>1</sup>, Salla Keskitalo<sup>1</sup>, Kaisa Kettunen<sup>1</sup>, Markku Varjosalo<sup>1</sup>, Mikko R.J. Seppänen<sup>1</sup>, Timi Martelius<sup>1</sup>, Janna Saarela<sup>1,2</sup>, Juha Grönholm<sup>1</sup>** (<sup>1</sup>*Finland*, <sup>2</sup>*Norway*)
- P1.06.06** Enhanced antibody responses in CD19-Cre mice  
**Sara Hernandez-Perez<sup>1,2</sup>, Diogo M. Cunha<sup>2</sup>, Pieta Mattila<sup>2</sup>** (<sup>1</sup>*United Kingdom*, <sup>2</sup>*Finland*)
- P1.06.07** Antigen-dependent regulation of the early stages of unwanted human B cell differentiation and antibody formation  
**Charlotte Menage, Mariël Duurland, Tineke Jorritsma, Anja ten Brinke, Marieke van Ham** (*Netherlands*)
- P1.06.08** Regulation of B cell function and expression of CD11c, T-bet, and FcRL5 in response to different activation signals  
**Linn Kleberg, Alan Courey-Ghaouzi, Maximilian Julius Lautenbach, Anna Färnert, Christopher Sundling** (*Sweden*)
- P1.06.09** FAHD1 as a novel regulator of B cell metabolism  
**Athanasios Seretis, Pidder Jansen-Duerr, Elia Cappuccio** (*Austria*)
- P1.06.10** A TNFR2-specific TNF fusion protein with improved vaccine effectiveness  
**Yin Xiao, Nadine Hundhausen, Olena Zaitseva, Harald Wajant, Friederike Berberich-Siebelt** (*Germany*)
- P1.06.11** Unravelling the B cell immune synapse: septin cytoskeleton as a new master regulator of B cell activation  
**Diogo Cunha<sup>1</sup>, Sara Hernandez-Perez<sup>2</sup>, Luqman Awoniyi<sup>1</sup>, Alexandre Carisey<sup>3</sup>, Guillaume Jacquemet<sup>1</sup>, Pieta Mattila<sup>1</sup>** (<sup>1</sup>*Finland*, <sup>2</sup>*United Kingdom*, <sup>3</sup>*USA*)
- P1.06.12** Belimumab after rituximab combination therapy preferentially targets IgA2+ B cells in systemic lupus erythematosus  
**Dan McCluskey<sup>1</sup>, Muhammad Shipa<sup>1</sup>, Laura Cooney<sup>2</sup>, Michael Ehrenstein<sup>1</sup>** (<sup>1</sup>*United Kingdom*, <sup>2</sup>*USA*)
- P1.06.13** Clinical and biological impact of CD6 expression in chronic lymphocytic leukemia  
**Laura Carrillo-Serradell, Juan Antonio Piñeyroa, Pablo Mozas, Pablo Bousquets-Muñoz, Violeta Planells-Romeo, Lucía Aragón-Serrano, Sergi Casadó-Llombart, Alejandra Leyton-Pereira, María Velasco-de Andrés, Xose S. Puente, Julio Delgado, Francisco Lozano** (*Spain*)
- P1.06.14** Retrospective observational study of persistent polyclonal B cell lymphocytosis in our centre  
**Jorge Mannelli, Javier Galán Picón, Daniel García-Cuesta, Raquel De la Varga-Martínez** (*Spain*)

POSTER SESSION 1

- P1.06.15** Regulatory B cells expressing granzyme B in renal graft tolerant transplant patients: highly differentiated B cells with a unique pathway, a specific regulatory profile and strong interactions with immune system cells  
**Nicolas Sailliet, Amandine Dupuy, François Brinas, Karine Renaudin, Luc Colas, Clarisse Kerleau, Cynthia Fourgeux, Jérémie Poschmann, Magali Giral, Nicolas Degauque, Hoa Le Mai, Richard Danger, Sophie Brouard** (France)
- P1.06.16** The actin regulator WASp associates with chromatin and regulates RNA polymerase II transcription  
**Roberta D'Aulerio<sup>1</sup>, Minghui He<sup>1</sup>, Eusra Mohammad<sup>1</sup>, Julien Record<sup>1</sup>, Jean Gautier<sup>2</sup>, Lisa S. Westerberg<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>USA)
- P1.06.17** Aberrant B cell receptor signaling responses in double-negative B cells of ankylosing spondylitis patients  
**Rudi Hendriks, Rick Wilbrink, Stefan Neys, Anneke Spoorenberg, Frans Kroese, Odilia Corneth, Gwenny Verstappen** (Netherlands)
- P1.06.18** TLR-mediated innate signaling drives early B cell differentiation after influenza virus infection  
**Nicole Baumgarth, Emma Keller, Jonathan Lam** (USA)
- P1.06.19** Tyrosine kinase 2 modulates splenic B cells through type I IFN and TLR7 signaling  
**Marta Jaén Castaño, Estíbaliz Alegría Carrasco, Alejandro Arrabal Sierra, Pablo Delgado-Wicke, Irene Bodega Mayor, Belén de Andrés Muguruza, Maria Luisa Gaspar Alonso-Vega, Elena Fernández Ruiz** (Spain)
- P1.06.20** Extracellular vesicles produced by regulatory B cells: new approach in kidney transplantation  
**Amandine Dupuy, Rousselière Amélie, Drapeau Léo, Nguyen Thi-Van-Ha, Nicolas Sailliet, Grangier Alice, Cam Sylvain, Richard Danger, Brun Amanda, Gazeau Florence, Sophie Brouard, Mai Hoa** (France)
- P1.06.21** Regulatory factor X 7 limits B cell activation and lymphomagenesis  
**Berenice Fischer, Hanif Javanmard Khameneh, Jessica Guerra, Alessandro Zenobi, Pedro Ventura, Alessandra Pfister, Jessica Barizzi, Lara Mattei, Daniele Cavalli, Andrea Rinaldi, Simone Moro, Ivo Kwee, Egle Radice, Marcus Thelen, Davide Rossi, Greta Guarda** (Switzerland)
- P1.06.22** Regulation of humoral immune responses differs from COVID-19 in MIS-C cases  
**Abdurrahman Simsek, Muhammed Ali Kizmaz, Tugce Bozkurt, Eren Cagan, Ali Eren Iskin, Ferah Budak** (Turkey)
- P1.06.23** Regulatory B cell exhaustion: molecular characteristics and mechanisms of reversion  
**Elna Zheremyan, Ksenia Kubenko, Alina Ustiugova, Elena Pushkova, Anastasia Radko, Elvina Bogomolova, Denis Demin, Aksinya Uvarova, Ekaterina Stasevich, Ekaterina Gorshkova, Violetta Gogoleva, Denis Kamelskikh, Olga Aleshina, Nataliya Melnikova, Alexey Dmitriev, Apollinariya Bogolyubova, Dmitry Kuprash, Kirill Korneev** (Russian Federation)



**POSTER SESSION 1**

- P1.06.25** Immunomodulatory effects of epitope-specific CD37 targeting in mouse  
**Philipp M. Hagemann, Frauke Koops, Gesine Rode, Erwin Duitman, Sebastian Schulz, Friedrich Koch-Nolte, Friedrich Haag, Hans-Martin Jäck, Zane Orinska** (Germany)
- P1.06.27** Mass cytometry immunophenotyping reveals significantly decreased frequencies of circulating B cells in autoimmune polyendocrine syndrome type 1  
**Shahinul Islam, Bergithe E. Oftedal, Kari Lima, Anders P. Jørgensen, Jorn Skavland, Eystein S. Husebye, Anette S.B Wolff** (Norway)
- P1.06.28** Helicobacter infection increases the mitochondrial metabolism of B cells  
**Zeynep Nur Senturk, Bahar Deniz, Ayça Sayı Yazgan** (Turkey)
- P1.06.29** B and T lymphocytes interactions via VISTA-PSGL1 is associated with tumor recurrence in early-stage NSCLC  
**Domenico Lo Tartaro<sup>1</sup>, Sara De Biasi<sup>1</sup>, Beatrice Aramini<sup>1</sup>, Valentina Masciale<sup>1</sup>, Nikolaos Paschalidis<sup>2</sup>, Lara Gibellini<sup>1</sup>, Franco Stella<sup>1</sup>, Massimo Dominici<sup>1</sup>, Andrea Cossarizza<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Greece)
- P1.06.30** A screening platform for immunomodulatory compounds targeting B lymphocytes  
**Ummay Honi, Kuhulika Bhalla, Alex Roberts, David Loughton, Stuart Thomson, John Unitt** (United Kingdom)
- P1.06.31** Longitudinal assessment of memory B cell response against SARS-CoV-2 in solid cancer patients: Implications for vaccination strategies  
**Ki Seong Lee, Eunjin Lee, Seung Jin Han, Ji Eun Oh** (South Korea)
- P1.06.32** Natural neonatal Bregs contribute to immune regulation in adulthood  
**Anna Vallduriola Martin<sup>1</sup>, Amanda Duhlin<sup>1</sup>, Diana Matei<sup>1</sup>, Paul Blair<sup>1</sup>, Hannah Bradford<sup>1</sup>, Claudia Monaco<sup>1</sup>, Stephen Malin<sup>2</sup>, Claudia Mauri<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Sweden)
- P1.06.33** The function and activity of RNA binding proteins in germinal center B cells  
**Chia-I Lien, Sabine Helmrath, David Rieß, Francisco Osorio Barrios, Thomas Engleitner, Riccardo Trozzo, Rupert Öllinger, Roland Rad, Julia Mergner, Marc Schmidt-Supprian** (Germany)
- P1.06.34** ACAT1 identification as an immunotherapeutic target by tertiary lymphoid structure increase in non-small-cell lung cancer  
**Ronghua Liu, Mengxia Jiao, Yiwei Chu** (China)
- P1.06.35** Understanding the role of lysosomal signaling in autoimmunity  
**Julia Johnstone, Alex Clarke** (United Kingdom)



## POSTER SESSION 1

### P1.07 BACTERIAL, VIRAL, FUNGAL, AND PARASITIC IMMUNOLOGY

- P1.07.01** Novel GPR84 agonists prime macrophages to enhance phagocytosis and killing of Gram-negative bacteria  
**Kacper Kurzyp, Vincent Luscombe, Pinqi Wang, Isobel Davis, Annabell Roberti, Rachel Exley, Angela Russell<sup>2</sup>, Christoph Tang, David Greaves** (*United Kingdom*)
- P1.07.02** Diuretics alone or combined with captopril modulate the phagocytosis of *Staphylococcus aureus* by mouse macrophages  
**Paweł Bryniarski, Bernadeta Nowak, Martyna Cieślík, Magdalena Gębicka, Paulina Skalska, Angelika Fedor, Krzysztof Bryniarski, Katarzyna Nazimek** (*Poland*)
- P1.07.03** Helminth Co-infection diminishes Antibody Responses to Natural SARS-CoV-2 Infection but not to COVID-19 vaccination: insights from a Ghanaian study  
**Julia Meyer<sup>1</sup>, Ute Klarmann-Schulz<sup>1</sup>, Alexander Yaw Debrah<sup>2</sup>, Linda Batsa Debrah<sup>2</sup>, Achim Hoerauf<sup>1,2</sup>, Tomabu Adjobimey<sup>1,3</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Ghana, <sup>3</sup>Benin*)
- P1.07.04** Deep immunophenotyping to decipher immunological changes in post-infectious fatigue after SARS-COV-2 infection  
**Silke Sommen, Lise Lund-Berven, Sunniva Segtnan, Joel Selvakumar, Lise Beier Havdal, Tonje Stiansen-Sonerud, Siri Mjaaland, Unni Nygaard, Ratnadeep Mukherjee, Vegard Wyller** (*Norway*)
- P1.07.06** The role of microbiota and co-localization in the dissemination of vector transmitted pathogens  
**Leon Melo<sup>1</sup>, Matheus Carneiro<sup>1</sup>, Chukwunonso Nzelu<sup>1</sup>, Shokouh Ahmadi<sup>1</sup>, Emily Bennett<sup>1</sup>, Jenny Yoo<sup>1</sup>, Markus Geuking<sup>1</sup>, Cláudio Meneses<sup>2</sup>, Nathan Peters<sup>1</sup>** (*<sup>1</sup>Canada; <sup>2</sup>USA*)
- P1.07.07** Colony morphotype governs innate and adaptive pulmonary immune responses to *Mycobacterium abscessus* infection in C3HeB/FeJ mice  
**Kia Ferrell, Erica Stewart, Claudio Counoupas, James Triccas** (*Australia*)
- P1.07.08** Repeated *Plasmodium falciparum* infection in humans drives the clonal expansion of an adaptive  $\gamma\delta$  T cell repertoire  
**Anouk von Borstel<sup>1</sup>, Priyanka Chevour<sup>1,2</sup>, Daniel Arsovski<sup>1,2</sup>, Jamie Rossjohn<sup>1</sup>, Edward Giles<sup>1</sup>, Boubacar Traore<sup>3</sup>, Kim Williamson<sup>4</sup>, Kirsten Lyke<sup>4</sup>, Peter Crompton<sup>4</sup>, Martin Davey<sup>1,2</sup>** (*<sup>1</sup>Australia, <sup>2</sup>United Kingdom, <sup>3</sup>Mali, <sup>4</sup>USA*)
- P1.07.09** Dynamics of vaginal immunity during murine filarial and Herpes-Simplex-Virus-2 co-infection  
**Lisa Wadephul<sup>1</sup>, Alexander Palmen<sup>1</sup>, Kathrin Arndts<sup>1</sup>, Gnatoulma Katawa<sup>2</sup>, William Horsnell<sup>3,4</sup>, Achim Hoerauf<sup>1</sup>, Manuel Ritter<sup>1</sup>** (*<sup>1</sup>Germany, <sup>2</sup>Togo, <sup>3</sup>South Africa; <sup>4</sup>United Kingdom*)
- P1.07.10** Imbalance of CCR6+ CD4 T cells and IFN- $\gamma$  CD8 T cells in patients with long-COVID  
**Pedro Martinez-Fleta, Celeste Marcos, Daniel Jimenez-Carretero, Jose Maria Galvan-Roman, Rosa Giron, Ana Arcos, Hortensia De la Fuente, Laura Esparcia-Pinedo, Javier Aspa, Julio Ancochea, Arantzazu Alfranca, Francisco Sánchez-Madrid** (*Spain*)
- P1.07.11** Metabolic profiling of lymphocytes in diseases caused by intracellular pathogens  
**Shilpa Sengupta, Mitali Chatterjee** (*India*)

**POSTER SESSION 1**

- P1.07.12** Innate - Adaptive synergy in malaria  
**Pengjun Xi, Patrick Sandoz, Maximilian Julius Lautenbach, Björn Önfelt, Anna Färnert, Christopher Sundling** (Sweden)
- P1.07.14** Myeloid-derived suppressor-like cells as a prognostic marker in critically ill patients: insights from experimental endotoxemia and intensive care patients  
**Schrijver Irene<sup>1</sup>, Herderschee Jacobus<sup>1</sup>, Theroude Charlotte<sup>1</sup>, Kritikos Antonios<sup>1</sup>, Leijte Guus<sup>2</sup>, Didier Le Roy<sup>1</sup>, Maelick Brochut<sup>1</sup>, Chiche Jean-Daniel<sup>1</sup>, Perreau Matthieu<sup>1</sup>, Pantaleo Giuseppe<sup>1</sup>, Guery Benoit<sup>1</sup>, Kox Matthijs<sup>2</sup>, Peter Pickkers<sup>2</sup>, Calandra Thierry<sup>1</sup>, Thierry Roger<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Netherlands)
- P1.07.15** Characterization of the MAIT cell response to *Staphylococcus aureus* and the influence of bacterial immune evasion  
**Elisa J.M. Raineri, Elli Mouchtaridi, Marion Humbert, Caroline Boulouis, Karolinska IHOPE study group, Johan K. Sandberg** (Sweden)
- P1.07.16** T cell responses in patients infected with *Neoehrlichia mikurensis*  
**Linda Wass, Catharina Lewerin, Daniel Jaén-Luchoro, Seija Brundin, Christine Lingblom, Christine Wennerås** (Sweden)
- P1.07.17** Using weight loss to predict outcome and define a humane endpoint in preclinical sepsis studies  
**Maelick Brochut, Tytti Heinonen, Tiia Snäkä, Charly Gilbert, Didier Le Roy, Thierry Roger** (Switzerland)
- P1.07.18** Unveiling trypanosoma cruzi extracellular vesicles as masters of host immune regulation  
**Armanda Rodrigues, Mafalda Meunier, Victória Tavares, Aleska Silva, Graça Alexandre-Pires, Cláudia Moreno, Isabel Pereira da Fonseca, Gabriela Santos-Gomes** (Portugal)
- P1.07.19** Gut helminth infection promotes lung anti-viral immunity in a monocyte dependent manner  
**Matthew Burgess, Karla Berry, Piotr Janas, Amanda McFarlane, Mariana Beltran-Sierra, Neil Henderson, Calum Bain, Henry McSorley, Jorgen Schwarze** (United Kingdom)
- P1.07.20** Impact of tissue micromilieu factors on the secretion of extracellular vesicles by *Leishmania major* and on its survival in phagocytic cells  
**Noor-A-Kasida Islam, André Gemeinhardt, Tobias Utikal, Anna Kashkanova, Vahid Sandoghdar, Ulrike Schleicher, Didier Soulat, Christian Bogdan** (Germany)
- P1.07.21** Pertussis vaccine-induced regulatory T cells suppress protective nasal tissue-resident memory T cells, which can be overcome using novel adjuvants and nasal vaccination  
**Caitlín Ní Chasaide<sup>1</sup>, Pauline Schmitt<sup>1</sup>, Béré K. Diallo<sup>1</sup>, Charlotte Leane<sup>1</sup>, Lisa Borkner<sup>1</sup>, Lucy Curham<sup>1</sup>, Seyed Davoud Jazayeri<sup>1</sup>, Mieszko Wilk<sup>1,2</sup>, Kingston Mills<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Poland)
- P1.07.23** *Chlamydia caviae* infection in human epithelial lung cells  
**Tamara Weinmayer, Madeleine Haas, Irma Schabussova, Ursula Wiedermann, Aleksandra Inic-Kanada** (Austria)
- P1.07.24** Candida-triggered oral tumorous epithelial cell responses at the posttranscriptional regulatory level  
**Renata Toth, Marton Horvath, Attila Gacser** (Hungary)

## POSTER SESSION 1

- P1.07.26** Dermaseptin S4 improves the innate immunity of gingival cells against oral pathogens (*C. albicans* and *E. faecalis*)  
**Mahmoud Rouabhia, Jamila Chakir** (Canada)
- P1.07.28** Distinct profiles of cytokines and chemokines in cerebrospinal fluid can differentiate bacterial meningitis from viral meningitis  
**Ramona Cerasela Caragheorgheopol, Cătălin Țucureanu, Veronica Lazăr, Simin-Aysel Florescu, Dragoș Ștefan Lazăr, Iuliana Caraș** (Romania)
- P1.07.29** Immunological changes during the progression of *Clostridioides difficile* infection in mouse models  
**Elena Blázquez-López, Marta Fernández-Castillo, Ainara Barco-Tejada, Marjorie Pion, Rafael Correa-Rocha, Patricia Muñoz, Manuel Desco, Lorena Cussó** (Spain)
- P1.07.30** Advancing towards systems immunology: understanding immunological dynamics in human experimental enterotoxigenic *Escherichia coli* infection through cytometry, proteomics, and computational approaches  
**Sehee Rim, Sunniva Todnem Sakkestad, Oda Barth Vedøy, Hans Steinsland, Dimitrios Kleftogiannis, Kurt Hanevik** (Norway)
- P1.07.32** Elucidating the role of IL4/IL13 signaling in tuberculous granuloma formation  
**Miriam Herbert, Mark R. Cronan** (Germany)
- P1.07.33** Exploring distinct T-cell subsets in the upper respiratory tract during Influenza A and Bordetella pertussis infections  
**Anna Kratochvílová, Jana Holubová, Ondrej Stanek, Veronika Niederlová, Juraj Michálik, Peter Sebo, Ondrej Stepanek** (Czech Republic)
- P1.07.34** IL-36 receptor expression is required to mount effective dendritic cell responses upon exposure to *Staphylococcus aureus*  
**Sam McGlynn, Patrick T. Walsh** (Ireland)
- P1.07.35** SLAMF7 and SLAMF8 receptors shape human plasmacytoid dendritic cell responses to intracellular bacteria  
**Joaquín Pellegrini<sup>1</sup>, Anne Keriell<sup>1</sup>, Laurent Gorvel<sup>1</sup>, Sean Hanniffy<sup>1</sup>, Vilma Arce Gorvel<sup>1</sup>, Mile Bosilkovski<sup>1</sup>, Javier Solera<sup>2</sup>, Stéphane Méresse<sup>1</sup>, Sylvie Mémet<sup>1</sup>, Jean Pierre Gorvel<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Spain)
- P1.07.36** The role of extracellular vesicles in oral squamous cell carcinoma- *Candida* interaction  
**Éva Veres, Zóra Szilovics, Dóra Adamecz, Gergő Svorenj, Krisztina Buzás, Mónika Kiricsi, Attila Gacser** (Hungary)
- P1.07.37** Can trained immunity decrease *Candida albicans* induced cancer progression in human oral epithelial cells?  
**Máté Lajos Csikós, Zsolt Tasi, Máté Vadovics, Csaba Papp, Petra Molnár, Attila Gacser** (Hungary)
- P1.07.38** Transcriptomic signature of pediatric sepsis  
**Koichi Yuki, Sophia Koutsogiannaki** (USA)

#### POSTER SESSION 1

- P1.07.39** Memory  $\gamma\delta$ T cells demonstrate a unique metabolic profile resulting in enhanced protection against *Staphylococcus aureus*  
**Brenda Morris, Eoin O'Brien, Simon Carlile, Rachel McLoughlin** (Ireland)
- P1.07.40** Pneumococcal surface protein A (PspA) prevents killing of *Streptococcus pneumoniae* by the antimicrobial peptide indolicidin  
**Natalha T. Waz<sup>1</sup>, Barbara Milani<sup>1</sup>, Maria Eduarda P. Mendes<sup>1</sup>, Emilly Rodrigues<sup>1</sup>, Anders Hakansson<sup>2</sup>, Thiago Rojas Converso<sup>1</sup>, Michelle Darrieux<sup>1</sup>** (<sup>1</sup>Brazil, <sup>2</sup>Sweden)
- P1.07.41** Effect of in vitro indolicidin treatment in polymyxin-susceptible and polymyxin-resistant *Acinetobacter baumannii*  
**Natalha T. Waz, Jhosany R. Madeira, Clarissa O.A. Ramos, Raquel Girardello, Michelle Darrieux** (Brazil)
- P1.07.43** Antibody levels and predictors for low response to childhood vaccines among 7-14-year-old children in Norway  
**Johanna Bodin, Nina Iszatt, Marta Baranowska-Hustad, Berit Berit Brunstad Granum, Thea Kristine Rogne Møller, Tove Karin Herstad, Audun Aase, Merete Åse Eggesbø, Gro Tunheim** (Norway)
- P1.07.44** Mice deficient for either interleukin-27 receptor-alpha or Epstein-Barr virus-induced gene 3 are differentially susceptible to Mycobacterium tuberculosis infection  
**Kristina Ritter, Alexandra Hölscher, Johanna Volz, Jochen Behrends, Hanna Erdmann, Christoph Hölscher** (Germany)
- P1.07.45** Exploring the effect of Leishmania infantum and Trypanosoma cruzi extracellular vesicles on dendritic cell-lymphocyte interactions  
**Mafalda Meunier, João Durães-Oliveira, Armanda Rodrigues, Ana Valério-Bolas, Joana Palma-Marques, Flávia Fróis-Martins, Rui Ferreira, Inês Cardoso, Graça Alexandre-Pires, Telmo Nunes, Isabel Pereira da Fonseca, Gabriela Santos-Gomes** (Portugal)
- P1.07.46** Exploring the immunomodulatory properties of zymosan on human peripheral blood mononuclear cells: an in vitro study  
**Elżbieta Kozłowska, Justyna Agier, Sylwia Różalska, Aleksandra Góralczyk-Bińkowska, Paulina Żelechowska** (Poland)
- P1.07.48** Development of an ex vivo bronchoalveolar lavage model towards in vivo neonatal non-human primate models of respiratory infections  
**Alistair Ridyard, Claire-Maëlle Fovet, Laetitia Lacroix, Camille Pimienta, Julie Morin, Nathalie Bosquet, Quentin Pascal, Francis Relouzat, Elisabeth Menu, Roger Le Grand, Nabila Seddiki** (France)
- P1.07.49** Interleukin-32 producing CD8+ memory T cells define IDO1 / PD-L1 niche in human cutaneous leishmaniasis  
**Nidhi Sharma Dey<sup>1</sup>, Shoumit Dey<sup>1</sup>, Naj Brown<sup>1</sup>, Sujai Senaratne<sup>2</sup>, Luiza Campos Reis<sup>3</sup>, Ritika Sengupta<sup>4</sup>, Shalindra Ranasinghe<sup>2</sup>, Mitali Chatterjee<sup>4</sup>, Paul Kaye, Hiro Goto<sup>3</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Sri Lanka, <sup>3</sup>Brazil, <sup>4</sup>India)
- P1.07.50** Impaired NK cell response contributes to ageing-associated susceptibility to *Pneumococcal pneumonia*  
**Rong Xu, Daan Beentjes, Laura C. Jacques, Daniel R. Neill, Neil French, Aras Kadioglu** (United Kingdom)



## POSTER SESSION 1

- P1.07.51** Towards novel COVID-19 therapy based on natural products with anti-SARS-CoV-2 activity  
**Dorentina Osmani, Stine Hellestø, Fan Zhou, Manpreet Hans, Vilde Sigfrid Skar Bulling, Malgorzata Dominika Szymczak, Knut Teigen, Rebecca Jane Cox Brokstad, Marta Kaminska, Torgils Fossen, Silke Appel** (Norway)
- P1.07.52** Serum calprotectin in severe and mild COVID-19 patients  
**Germà Julià Agulló, Marc Pedrosa Aragon, Juan Francisco Delgado de la Poza, Silvia Vidal Alcorisa** (Spain)
- P1.07.53** Regulation of NLRP3 inflammasome-related gene expressions in the progression to chronicity in brucellosis with bone joint involvement  
**Tugba Senbuz, Muhammed Ali Kizmaz, Ali Eren Iskin, Abdurrahman Simsek, Tugce Bozkurt, Gülçin Tezcan, Ferah Budak** (Turkey)
- P1.07.54** Schistosoma mansoni proteases and their effect on host extracellular vesicle production: a strategy to modulate the immune system  
**Michael Thaler<sup>1</sup>, Lukas Neuninger<sup>1</sup>, Magda Wyszomolek<sup>1</sup>, Agnieszka Razim<sup>1</sup>, Anna Schmid<sup>1</sup>, Jan Dvořák<sup>2</sup>, Martin Horn<sup>2</sup>, Adrian Leontovych<sup>2</sup>, Michael Mareš<sup>2</sup>, Muhammed Faruk Saglam<sup>1</sup>, Viktor Cerny<sup>1</sup>, Aleksandra Inic-Kanada<sup>1</sup>, Ursula Wiedermann Schmidt<sup>1</sup>, Irma Schabussova<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Czech Republic)
- P1.07.55** Toll-like receptor 4 improves replication of *Chlamydia trachomatis* serovar D in the uroepithelial T24/83 cell line  
**Svetlana Kuhn, Simone Albrecht, Lina Kellner, Xaver Rait, Hannah Griffiths, Carolina De La Torre, Norbert Gretz, Thomas Miethke** (Germany)
- P1.07.56** Antibody-based approaches for studying potential adhesion proteins of *Gardnerella* spp.  
**Indre Dalgediene, Aistė Bulavaitė, Raminta Reskevičiūtė, Danas Ivanauskas, Aurelija Zvirbliene, Milda Plečkaitytė** (Lithuania)
- P1.07.57** Promising vaccine antigens against *Klebsiella pneumoniae* reduce bacterial burden in a sepsis model  
**Yueran Hou<sup>1</sup>, Paulina Zarodkiewicz<sup>2</sup>, Julen Tomás Cortázar<sup>1</sup>, Dominic Stoner<sup>1</sup>, Miguel Valvano<sup>2</sup>, Rebecca Ingram<sup>2</sup>, Siobhán McClean<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)
- P1.07.58** Genetic deficiency of long pentraxin 3 dampens *Staphylococcus aureus* infection in a murine model of osteomyelitis  
**Raffaella Parente<sup>1</sup>, Valentina Possetti<sup>1</sup>, Dario Strina<sup>1</sup>, Valentina Granata<sup>1</sup>, Francesca Liberati<sup>1</sup>, Maria Lucia Schiavone<sup>1</sup>, Sonia Valentino<sup>1</sup>, Maša Filipović<sup>2</sup>, Nataša Kovačić<sup>2</sup>, Danka Grčević<sup>2</sup>, Barbara Bottazzi<sup>1</sup>, Alberto Mantovani<sup>1,3</sup>, Cristina Sobacchi<sup>1</sup>, Antonio Inforzato<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Croatia, <sup>3</sup>United Kingdom)
- P1.07.59** Chemical and infectious colitis models show different immune profiles  
**Elena Blázquez-López, Marta Fernández-Castillo, Ainara Barco-Tejada, Marjorie Pion, Rafael Correa-Rocha, Patricia Muñoz, Manuel Desco, Lorena Cussó** (Spain)
- P1.07.60** Triacetylfusarinine C (TAFC) as a potential diagnostic biomarker of invasive pulmonary aspergillosis  
**Kristyna Sloupenska, Vladimir Havlicek, Hynek Macha, Radim Dobias, Milan Raska** (Czech Republic)
- P1.07.61** B-cell responses induced by *Neoehrlichia mikurensis* infection in patients with malignant B-cell lymphomas  
**Rima Alsalihi, Linda Wass, Anna Grankvist, Beatrice Bergström, Catharina Lewerin, Christine Lingblom, Christine Wennerås** (Sweden)

#### POSTER SESSION 1

- P1.07.62** Immune programs in human dendritic cells upon immunization with *Chlamydia trachomatis*  
**Katja Knapp, Marlene Kranawetter, Ruth Dingelmaier-Hovorka, Ram Pandey, Christoph Grimm, Georg Stary** (Austria)
- P1.07.63** Microbial SIMs: role in inflammatory balance  
**Vani Janakiram** (India)
- P1.07.64** Immunometabolic profiling of myeloid cells in pediatric patients represents a tool how to depict the dynamics of sepsis progression  
**Marcela Hortova-Kohoutkova<sup>1</sup>, Lukas Homola<sup>1</sup>, Gabriela Blazkova<sup>1</sup>, Rafael Argüello<sup>2</sup>, Jan Frič<sup>1</sup>** (<sup>1</sup>Czech Republic, <sup>2</sup>France)
- P1.07.65** Influence of the infection by *Mycobacterium tuberculosis* on the host's ability to control viral superinfection  
**Joan Fine, Valentin Sencio, Jonathan Chatagnon, Francois Trottein, Arnaud Machelart** (France)
- P1.07.66** Impact of *Mycobacterium tuberculosis* infection on host and macrophages response against *Streptococcus pneumoniae* superinfection  
**Valentin Sencio, Joan Fine, Arnaud Machelart** (France)
- P1.07.67** The function of CD14+HLA-DR-/low monocytic myeloid-derived suppressor cells in the pathogenesis of dermatophytic infection  
**Praveen Kumar Singh, Shukla Das, Gargi Rai, Mohammad Ahmad Ansari** (India)
- P1.07.68** Bottling it all up: using parasite population biology to identify susceptibility pathways in leishmaniasis  
**Ciara Loughrey, Paul Kaye, Jeremy Mottram, Naj Brown, Helen Ashwin, Juliana Carnielli, Shoumit Dey** (United Kingdom)
- P1.07.69** Synergistic effect of Interferon- $\gamma$  and interleukin-6 in *Chlamydia trachomatis* induced reactive arthritis  
**Praveen Kumar, Suchitra Morya, Bhupendra Mandawat, Sangita Rastogi** (India)
- P1.07.70** Development of broadly-reactive monoclonal antibodies against  $\beta$ -lactamases conferring bacterial resistance to antibiotics  
**Indrė Kučinskaitė-Kodžė, Karolina Bielskė, Silvija Juciutė, Aliona Avižinienė, Rasa Petraitytė Burneikienė, Aurelija Zvirbliene** (Lithuania)
- P1.07.71** An HLA-E-targeted TCR bispecific molecule redirects T cell immunity against *Mycobacterium tuberculosis*  
**Marco Pio La Manna<sup>1</sup>, Luis Godinho<sup>2</sup>, Giusto Davide Badami<sup>1</sup>, Mariolina Salio<sup>2</sup>, Nadia Caccamo<sup>1</sup>, Francesco Dieli<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Kingdom)
- P1.07.72** Distinct impact in the cytokine production by adaptive and innate immunity in trypanosoma cruzi-infected mice following alcohol consumption  
**Mariléia Chaves Andrade, Paulo Henrique Tolentino Moura, Diego Patrick Soares Lopes, Waldemar de Paula-Júnior** (Brazil)
- P1.07.73** Growth-stage-dependent changes in porphyromonas gingivalis OMVs boost virulence and immune activation  
**William Singleton, Jason Lenzo, James Holden, Ali Mohammed, Neil O'Brien-Simpson, Eric Reynolds** (Australia)



## POSTER SESSION 1

- P1.07.74** Porphyromonas gingivalis LPS antagonism is dependent on TLR4 concentration  
**James Holden, William Singleton, Neil O'Brien-Simpson, Eric Reynolds** (Australia)
- P1.07.75** Introducing StrepScan: a phage-based platform for deep serological profiling of the Group A Streptococcus antibodiome  
**Lauren Carlton<sup>1</sup>, Reuben McGregor<sup>1</sup>, Tim O'Donnell<sup>2</sup>, Elliot Merritt<sup>2</sup>, Charles Tiu<sup>3</sup>, Madeline Kwek<sup>3</sup>, Linfa Wang<sup>3</sup>, Mark Davies<sup>4</sup>, Uri Laserson<sup>2</sup>, Nicole Moreland<sup>1</sup>** (<sup>1</sup>New Zealand, <sup>2</sup>Singapore, <sup>3</sup>Australia)
- P1.07.76** THE Covid-19 pandemic changed the specific maternal-neonatal immunity against respiratory syncytial virus: an observational study  
**Maria Giulia Conti, Leonardo Sorrentino, Laura Petrarca, Enrica Mancino, Greta Di Mattia, Alessandra Pierangeli, Raffaella Nenna, Fabio Midulla** (Italy)
- P1.07.77** Cellular and molecular dynamics of splenic myeloid cells during blood-stage malaria  
**Katharina Mauel<sup>1,2</sup>, Daria Hirschmann<sup>1,2</sup>, Nelli Blank-Stein<sup>1</sup>, Marie-Louise Diefenbach-Wilke<sup>1</sup>, William Heath<sup>2</sup>, Lynette Beattie<sup>2</sup>, Elvira Mass<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Australia)
- P1.07.78** Dual burden of COVID-19 and tuberculosis: a retrospective study of clinical outcomes  
**Nadeem Fazal, Konul Karimova, Afa Khalilova, Bahar Graefen** (Azerbaijan)
- P1.07.79** Leishmania donovani: CD2 biased immune response skews the SAG mediated therapy for a predominant Th1 response in experimental infection  
**Sukrat Sinha** (India)
- P1.07.80** Lactobacillus salivarius HunMin-U boosts innate immunity against norovirus infection  
**Juwon Choi, Da Hyun Kim, Jae Hwan Kim, Sanguine Byun, Myeong Soo Park** (South Korea)
- P1.07.81** Detection of chimeric secretory IgA: TB multi-epitopes protein in milk samples and protein purification in development of mucosal vaccine against tuberculosis  
**Min Xuan Keh<sup>1</sup>, Nur Ain Binti Mohd Asri<sup>1</sup>, Norazmi Bin Mohd Nor<sup>1</sup>, Frank Camacho<sup>2</sup>, Rapeah Binti Suppian<sup>1</sup>, Maryam Azlan<sup>1</sup>** (<sup>1</sup>Malaysia, <sup>2</sup>Chile)
- P1.07.82** Bacillus Calmette-Guérin (BCG) vaccine's role in modulating immune responses against severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) and respiratory syncytial virus (RSV) in children  
**Magdalena Jurczak, Joanna Kaczmarek, Magdalena Kowalewska-Pietrzak, Magdalena Druszczyńska** (Poland)
- P1.07.83** Harnessing the host's innate immune response with a novel, bifunctional immunotherapy to treat Gram-negative bacterial infections  
**Bailey Hairsine<sup>1</sup>, Hassan Al-Bewani<sup>1</sup>, Edward Rhodes<sup>1,2</sup>, Adam Johnson<sup>1</sup>, Matthew Bushdyhan<sup>1</sup>, Dave Chapman<sup>1</sup>, Mike Westby<sup>1</sup>, Helen Bright<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Sweden)

**POSTER SESSION 1****P1.08 BIOINFORMATICS AND IMMUNOLOGY**

- P1.08.02** A comprehensive immune single-cell atlas of (auto)immune-related diseases: exploring disease and treatment risks in cancer immune-checkpoint therapy  
**António Sousa, Sini Junttila, Laura Elo** (*Finland*)
- P1.08.03** Towards deciphering the T cell receptor-antigen-HLA code with single cell genomics  
**Lisa Dratva, Lorenz Kretschmer, Yizhou Yu, Krzysztof Polanski, Lisa Marie Milchsack, Sarah Teichmann** (*United Kingdom*)
- P1.08.05** Identification of transcriptional regulatory networks that control variable human immune responses  
**Anthony Bertrand, Florian Dubois, Lluís Quintana-Murci, Violaine Saint-André, Darragh Duffy** (*France*)
- P1.08.06** Exploring systemic immune response and faecal microbiome associations in the Milieu Intérieur healthy donor cohort  
**Auxence Desrentes, Etienne Villain, Vincent Bondet, Jamie Sugrue, Allyson Byrd, Lluís Quintana-Murci, Darragh Duffy** (*France*)
- P1.08.07** A unique human cord blood CD8+CD45RA+CD27+CD161+ T cell subset identified by flow cytometric data analysis using Seurat  
**Duan Ni, Julen Reyes, Brigitte Nanan, Gabriela Pinget, Lucie Kraftova, Thomas Ashhurst, Felix Marsh-wakefield, Claire Wishart, Jian Tan, Peter Hsu, Nicholas King, Laurence Macia, Ralph Nanan** (*Australia*)
- P1.08.08** Comprehensive post-translational modifications mapping of centrosomes in T cell activation  
**Marta Lozano-Prieto, Noa Martín Cofreces, Inmaculada Jorge Cerrudo, Emilio Camafeita Fernández, Andrea Laguillo Gómez, Enrique Calvo Alcocer, Cristina Amparo Devesa Arbiol, Rafael Barrero Rodríguez, Jesús María Vázquez Cobos, Francisco Sánchez-Madrid** (*Spain*)
- P1.08.09** Unraveling the autoimmune cellular and histological transitions of Sjögren's syndrome  
**Tomás Gomes<sup>1</sup>, Rui do Amaral Vieira<sup>1</sup>, Vasco Romão<sup>1</sup>, Saumya Kumar<sup>2</sup>, Filipa Ribeiro<sup>1</sup>, Pedro Ribeiro<sup>1</sup>, Matilde Bandeira<sup>1</sup>, Beatriz Filipe<sup>1</sup>, Dolores López-Presa<sup>1</sup>, João Forjaz-Lacerda<sup>1</sup>, Nikita Khmelinskii<sup>1</sup>, João Eurico Fonseca<sup>1</sup>, Luís Graça<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>Germany)
- P1.08.10** Blood immune cells of post-COVID-19 syndrome patients present with distinct alterations in their transcriptional states  
**Charlotte Kröger, Sophie Müller, Lorenzo Bonaguro, Rainer Knoll, Martina van Uelft, Jonas Schulte-Schrepping, Sophie Steiner, Julie-Anne Gabelich, Sophia Brumhard, Anna Hiller, Annick D. Fehrer, Sarah Ahmad, Gudrun Hack, Kim Melanie Kaiser, Helma Freitag, Matthias Becker, Manfred Schmolz, Marc Beyer, Franziska Sotzny, Benjamin Krämer, Jacob Nattermann, Leif Erik Sander, Joachim L. Schultze, Carmen Scheibenbogen, Anna C. Aschenbrenner** (*Germany*)
- P1.08.11** The dog as the immunologist's best friend for identifying potential genomic biomarkers for atopic dermatitis: an integrated bioinformatic analysis with translational potential  
**Carolina R. Sanz, Inés Rodríguez, Soledad Sanz-Alfárez** (*Spain*)
- P1.08.12** Computational stabilization and functional characterization of single-chain T cell receptors targeting a cancer epitope  
**Johanna Moeller, Max Alexander Lingner, Victoria Most, Clara Tabea Schoeder** (*Germany*)

## POSTER SESSION 1

- P1.08.13** A simple and robust bulk TCR sequencing-based method for identification of antigen-specific TCR $\alpha\beta$  pairs  
**Evgeny Egorov<sup>1</sup>, Ekaterina Serebrovskaia<sup>1</sup>, Lilian Andrea Martinez Carrera<sup>1</sup>, Nojan Jelveh<sup>1</sup>, Kevin Bisdorf<sup>1</sup>, Simona Karolin Matzke<sup>1</sup>, Svetlana Khorkova<sup>1</sup>, Andreas Bosio<sup>1</sup>, Dmitriy Chudakov<sup>2</sup>, Olaf Hardt<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Czech Republic)
- P1.08.14** Development of an user-friendly application for automated analysis of skin immune landscape based on the multiplex annotated tissue imaging system technology  
**Manon Scholaert<sup>1</sup>, Raissa Houmadi<sup>1</sup>, Jeremy Martin<sup>1</sup>, Nadine Serhan<sup>1</sup>, Marie Tauber<sup>1</sup>, Emilie Braun<sup>1</sup>, Mathias Peries<sup>1</sup>, Lilian Basso<sup>1</sup>, Eric Merles<sup>2</sup>, Pascal Descargues<sup>2</sup>, Carle Paul<sup>1</sup>, Cristina Bulai Livideanu<sup>1</sup>, Laurence Lamant<sup>1</sup>, Emeline Pages<sup>1</sup>, Nicolas Gaudenzio<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)
- P1.08.15** Glycosyltransferase and glycosidase changes in Natural Killer (NK) cells after cytokine stimulation; a bioinformatic analysis  
**Catherine Bannon, Roisín O'Flaherty, Mark Robinson** (Ireland)
- P1.08.16** Genetic signature for early prediction of anti-TNF response in rheumatoid arthritis patients  
**Lucía Santiago Lamelas<sup>1</sup>, Josefina Durán<sup>2</sup>, Enrique J. de Andrés Galiana<sup>1</sup>, Juan Luis Fernández Martínez<sup>1</sup>, Patricia Castro Santos<sup>1</sup>, Roberto Díaz Peña<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Chile)
- P1.08.17** Employing single-cell RNA sequencing dataset analysis to probe the functional and metabolic state of NK cells infiltrating Glioblastoma tumour sites, and comparing them to the transcriptomic profiles of circulating NK cells derived from healthy donor datasets  
**Andrew Roche, David Finlay, Clair Gardiner** (Ireland)
- P1.08.19** Integrated analysis of single-cell and bulk RNA sequencing data reveals a memory-like Natural Killer cell subset associated with *Mycobacterium tuberculosis* latency  
**Giusto Davide Badami, Mojtaba Shekarkar Azgomi, Marianna Lo Pizzo, Bartolo Tamburini, Costanza Dieli, Marco Pio La Manna, Francesco Dieli, Nadia Caccamo** (Italy)
- P1.08.20** Identification of relevant tissue-specific factors regarding the formation and maintenance of human tertiary lymphoid structures  
**Tomás Guerreiro, Rui do Amaral Vieira, Beatriz Filipe, Pedro Gaspar, Luís Graça, Tomás Gomes** (Portugal)
- P1.08.22** Human DNA adaptome: the unbiased multiplex PCR-based profiling of the whole set of TCR and BCR chains at the DNA level  
**Anna Miroshnichenkova<sup>1</sup>, Bella Minasyan<sup>1</sup>, Valeria Tkachenko<sup>2</sup>, Anna Fedosova<sup>1</sup>, Oleg Suchalko<sup>1</sup>, Pavel Shelyakin<sup>1</sup>, Dmitriy Chudakov<sup>1,3</sup>, Alexander Komkov<sup>1</sup>** (<sup>1</sup>United Arab Emirates, <sup>2</sup>Russian Federation, <sup>3</sup>Czech Republic)
- P1.08.23** VISH-Pred: an ensemble of fine-tuned ESM models for protein toxicity prediction  
**Ankita Singh, Raghvendra Mall, Chirag Patel, Gregory Guirimand, Filippo Castiglione** (United Arab Emirates)
- P1.08.25** Multi-omic single cell analysis reveals immune cell perturbations in sepsis  
**Joshua Flynn<sup>1</sup>, Anne-Marie Baird<sup>1</sup>, Eamon Breen<sup>1</sup>, Ciara McNevin<sup>1</sup>, Lisa McDermott<sup>1</sup>, Elaine Kenny<sup>1</sup>, Edyta Kowalczyk<sup>2</sup>, John Davis Coakley<sup>1</sup>, Thomas Ryan<sup>1</sup>, Derek G. Doherty<sup>1</sup>, Orla Sheils<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)

### POSTER SESSION 1

- P1.08.26** Computational identification of long non-coding RNAs from T-cell subtypes  
**Sini Junttila, Niklas Paulin Paulin, Inna Starskaia, Tea Ammunét Ammunét, Ubaid Ullah Kalim, Omid Rasool, Tanja Buchacher, Syed Bilal Ahmad Andrabi, Riitta Lahesmaa, Laura Elo** (*Finland*)
- P1.08.27** Single-cell RNA sequencing coupled with AI-based structure prediction using AlphaFold enables discovery of antibodies against the SARS-CoV-2 Spike protein  
**Elif Çelik, Eren Can Ekşi, Efe Elbeyli, Cevriye Pamukcu, Tolga Sutlu** (*Turkey*)
- P1.08.28** Central role of integrin complex in A151 oligodeoxynucleotide-induced immune modulation in mouse splenocytes  
**Volkan Yazar<sup>1</sup>, Ismail Cem Yilmaz<sup>1</sup>, Artun Bulbul<sup>2</sup>, İhsan Gürsel<sup>1</sup>** (*<sup>1</sup>Turkey, <sup>2</sup>Germany*)
- P1.08.29** Simultaneous profiling of one million single-cell BCRs and whole transcriptomes from diseased and healthy B cells in a single experiment using combinatorial barcoding  
**Alex Stretton, Ajay Sapre, Efthymia Papalexi, Alec Salvino, Simone Marrujo, Gary Geiss, Guillermo Gallareta-Olivares, Charlie Roco, Alex Rosenberg** (*USA*)
- P1.08.30** Investigating the role of enhancer elements in mediating monocyte stimulus response with single-cell multi-omics  
**Surya Koturan<sup>1</sup>, Shev Acharya<sup>1</sup>, Noemie De Broeck<sup>2</sup>, Ivan Andrew<sup>1</sup>, Laurence Game<sup>1</sup>, Bhavik Patel<sup>1</sup>, James Elliot<sup>1</sup>, Amit Patel<sup>1</sup>, Simon Yona<sup>3</sup>, Valeriya Malysheva<sup>2</sup>, Mikhail Spivakov<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>Belgium, <sup>3</sup>Israel*)

### P1.09 CANCER IMMUNOTHERAPY

- P1.09.01** Programmed salmonella blocks cancer metastasis by activating NK cells in an IFN- $\gamma$ -dependent manner  
**Li Rong, Qiubin Lin, Shuhai Lin, Guo Fu, Jiandong Huang** (*China*)
- P1.09.02** Ex vivo modeling of precision immuno-oncology responses in lung cancer  
**Bassel Alsaed, Johannes Smolander, Linh Lin, Lilja Lahtinen, Hanna Laitinen, Mikko Rasanen, Ville Heistman, Shadi Jansouz, Mari Ainola, Eva Sutinen, Pipsa Saharinen, Ilkka Ilonen, Heidi Haikala** (*Finland*)
- P1.09.03** CD40 agonist affects maintenance of B-cell acute lymphoblastic leukemia in patient-derived xenograft mouse models  
**Pierre-Simon Bellaye, Paola Ballerini, Corentin Richard, Romain Boidot, Guillaume Chevreux, Véronique Legros, Aleksandra Georgievski, Julien Guy, Jessica Racine, Bertrand Collin, Carmen Garrido, Ronan Quéré** (*France*)
- P1.09.04** Fractalkine: a chemokine with pro-tumourigenic effects in oesophageal adenocarcinoma that can be attenuated by CX3CR1 modulation  
**Caroline Marion, Eimear Mylod, Niamh O'Conno, Meghana Menon, John V. Reynolds, Maeve Lowery, Niamh Lynam-Lennon, Stephen Maher, Joanne Lysaght, Melissa J. Conroy** (*Ireland*)
- P1.09.05** Anti-tumoral potential of the new granulysin-based and Tn/MUC-1-targeted 5E5GRNLY immunotoxin  
**Ana Pilar Tobajas, Raquel Ibáñez-Pérez, Patricia Guerrero-Ochoa, Ruth Soler-Agesta, Evelyn Galano-Frutos, Laura Cambronero, Blanca Conde, Eva Barrio, Ramón Hurtado-Guerrero, Alberto Anel** (*Spain*)



**POSTER SESSION 1**

- P1.09.06** Combination of the granulysin-based and CEA-targeted MFE23GRNLY immunotoxin with a BCLXL-selective BH3-mimetic in a lung cancer model  
**Raquel Ibáñez-Pérez, Ana Pilar Tobajas, Patricia Guerrero-Ochoa, Laura Cambroner, Ruth Soler-Agosta, Isabel Marzo, Javier Naval, Laura Sanz, Alberto Anel** (Spain)
- P1.09.07** Effect of the HLA-G/ILT2 pathway as an immune system checkpoint in gastric cancer  
**Christian Vaquero-Yuste, Oscar Aguilar Sopena, Inmaculada Lasa-Unzue, Adela Lopez-García, Remedios Gomez-Sanz, Alberto Gutierrez-Calvo, Pedro Roda Navarro, Jose Manuel Martin-Villa, Ignacio Juarez** (Spain)
- P1.09.08** UniCAR T-cell potency - A matter of affinity?  
**Hugo Boutier, Liliana Rodrigues Loureiro, Lydia Hoffmann, Claudia Arndt, Anja Feldmann, Michael Bachmann** (Germany)
- P1.09.09** Development of patient-derived 3D tumor organoids combined with immune cells, as preclinical testing platform for personalized cancer immunotherapy  
**Gabriella Antignani** (Finland)
- P1.09.10** Unveiling the potential of oncolytic virotherapy in inducing tertiary lymphoid structures for enhanced anti-tumor responses  
**Ana Houel, Johann Foloppe, Marie-Caroline Dieu-Nosjean** (France)
- P1.09.11** First-in-class inhibitors of ERAP1 generate novel cancer antigens as targets for mhc-i-directed therapies  
**Wayne Paes, Sam Humphrey, Juanita Carrey, Kris Clark, Emma Sparrow, Ana Ribeiro, Michael Cundell, Milos Aleksic, Henry Leonard, Ali Remtulla, Michael Pinggera, Kate Anderton, Jason Shiers, Juliet Morgan, Maik Mueller, Nicola Ternette, Martin Quibell, Peter Joyce** (United Kingdom)
- P1.09.12** CCL20 is upregulated in KRAS-driven non-small cell lung cancer via a FOXL2 - NF- $\kappa$ B axis and displays prognostic ambivalence  
**Oliver Kindler<sup>1</sup>, Philipp Moser<sup>1</sup>, Kathrin Maitz<sup>1</sup>, Anna Lueger<sup>1</sup>, Marah Runtsch<sup>1</sup>, Eva Achhammer<sup>1</sup>, Ana Santiso<sup>1</sup>, Vito Telebar-Zbulj<sup>1</sup>, Xiaodong Zhu<sup>2</sup>, A. McGarry Houghton<sup>2</sup>, Vanessa Jäger<sup>1</sup>, Michael Dengler<sup>1</sup>, Philipp Jost<sup>1</sup>, Julia Kargl<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>USA)
- P1.09.13** Breaking boundaries: next-level  $\gamma\delta$ -T cell isolation with REAlease  
**Vanessa Brühl, Maike Lang, Christin Donner, Ermanila Dhana, Lotta Rätty, José Alberto Villacorta Hidalgo, Susanne Höher-Peters, Gregor Winkels** (Germany)
- P1.09.14** Transforming growth factor  $\beta$  inducer as a novel secreted immune checkpoint counter-inhibiting tumor-associated T cells  
**Eleonora Timperi<sup>1</sup>, Manuela Rosado<sup>1</sup>, Ombretta Melaiu<sup>1</sup>, Sophie Bachy<sup>1</sup>, Alessio Grimaldi<sup>1</sup>, Maria Chiara Corrado<sup>1</sup>, Vanessa Mancini<sup>1</sup>, Gabriela Leonte<sup>1</sup>, Filippo Conti<sup>1</sup>, Ilenia Cammarata<sup>1,6</sup>, Stephanie Kucykowicz<sup>2</sup>, Gloryanne Aidoo-Micah<sup>2</sup>, Daniele Accapezzato<sup>1</sup>, Laura Forcina<sup>1</sup>, Andrea Picchetto<sup>1</sup>, Massimo Chiaretti<sup>1</sup>, Giancarlo Dambrosio<sup>1</sup>, Giuseppe Giannini<sup>1</sup>, Francesca Belardinilli<sup>1</sup>, Gian Luca Grazi<sup>1</sup>, Antonio Musarò<sup>1</sup>, Mala K. Maini<sup>2</sup>, Doriana Fruci<sup>1</sup>, Ana Hennino<sup>1</sup>, Vincenzo Barnaba<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Kingdom)
- P1.09.15** Split identity of IFN $\gamma$  in remodeling of undifferentiated pleomorphic sarcoma cell line JBT19 towards chemotherapeutic resistance and anti-tumor immunity and its implication for adoptive cellular immunotherapy  
**Pavla Tábořská, Dmitry Stakheev, Daniel Smrž** (Czech Republic)

**POSTER SESSION 1**

- P1.09.16** Improving CAR-T cell immunotherapy with CRISPR/Cas9 gene editing  
**Andrea Šarac, Karen Butina Ogorelec, Jelka Pohar, Simon Horvat, Anže Smole** (Slovenia)
- P1.09.17** Targeting cellular metabolism for modulation of T lymphocytes function  
**Mojca Pavlin<sup>1</sup>, Jernej Repas<sup>1</sup>, Tadeja Snedec<sup>1</sup>, Tjaša Frlic<sup>1</sup>, Andreja Natasa Kopitar<sup>1</sup>, Andrej Janež<sup>1</sup>, Harald Sourij<sup>2</sup>** (<sup>1</sup>Slovenia, <sup>2</sup>Austria)
- P1.09.18** Semaglutide as a potent activator of anti-tumor immune response in breast cancer  
**Isidora Stanisavljevic, Ivan Jovanovic, Bojana Simovic Markovic, Irfan Corovic, Tamara Krajnovic, Sanja Mijatovic, Sladjana Pavlovic** (Serbia)
- P1.09.19** 2-deoxy-D-glucose and metformin alter effector functions of T cells from peripheral blood mononuclear cells  
**Tjaša Frlic, Tadeja Snedec, Jernej Repas, Mojca Pavlin** (Slovenia)
- P1.09.20** Targeting the sialic acid-Siglec glyco-immune checkpoint in melanoma  
**Magali Coccimiglio, Laura Kruijssen, Ernesto Rodriguez Camejo, Babet Springer, Fabrizio Chiodo, Yvette van Kooyk** (Netherlands)
- P1.09.21** Assessment of the efficacy of a monoclonal antibody against pancreatic tumour cells by complement-dependent cytotoxicity assay  
**Diana Ceballos Francisco<sup>1</sup>, Inmaculada Ruiz Lorente<sup>1</sup>, Maria Victoria Martínez Sánchez<sup>1</sup>, Lourdes Gimeno Arias<sup>1</sup>, Marta Pares<sup>1</sup>, Sebastian Heidt<sup>2</sup>, Fran Claas<sup>2</sup>, Matthias Niemann<sup>3</sup>, Eric Spierings<sup>3</sup>, Victor Pallaruelo-Santamaría<sup>1</sup>, Cristina Fillat<sup>1</sup>, Alfredo Minguela Puras<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Netherlands, <sup>3</sup>Germany)
- P1.09.22** DSP502 – A novel approach for targeting TIGIT and PD-1 for cancer immunotherapy  
**Lucy Ghantous, Esther Stern, Ori Wald, Shirley Greenwald, Jasmine Avichzer, Lior Tsveyer, Jacob Rachmilewitz, Michal Dranitzki Elhalel, Ayelet Chajut** (Israel)
- P1.09.23** A new pathway towards immunotherapy-supported radiology  
**Klaus Spohr, Marius Jurca, Neagu Teodora Monica, Paunescu Virgil** (Romania)
- P1.09.24** Metformin promotes antitumor activity of NKT cells via overexpression of NFAT and STAT4  
**Andela Petrović, Ivan Jovanovic, Bojan Stojanovic, Milena Jurisevic, Bojana Simovic Markovic, Marina Jovanovic, Milan Jovanovic, Mihailo Jovanovic, Nevena Gajovic** (Serbia)
- P1.09.25** Phenotypic and functional analysis of cytokine-induced memory-like natural killer cells  
**Isabel María Vallejo Bermúdez, Monica Espinar Garcia, Carmen María Gutiérrez González, Ester Irene Reina Alfonso, Pablo Álvarez Heredia, Alexander Batista Duharte, Alejandra Pera Rojas, Raquel Tarazona, Rafael Solana Lara, Fakhri Hassouneh** (Spain)
- P1.09.26** Sex differences in immune checkpoint receptor expression in patients with upper gastrointestinal malignancies: potential implications for patient response to immune checkpoint inhibitor therapy  
**Aoife Kilgallon, Meghana Menon, Kirstan Murphy, Brendan Moran, John V. Reynolds, Joanne Lysaght** (Ireland)



## POSTER SESSION 1

- P1.09.27** Role of ion channels in CAR T cells  
**Ghofrane Medyouni, Vivien Jusztus, Orsolya Vörös, György Panyi, Péter Béla Hajdu** (Hungary)
- P1.09.28** Miniaturization of T cell cultivation and utilization for process development  
**Hanne Haslene-Hox, Hanne Hein Trøen, Margrét Sigfúsdóttir, Ane Marit Wågbø, Lea Rosselle, Fatemeh Kaveh, Maxi-Lu Boesch, Evan Zynda, Tuva Holt Hereng, Sebastien Walchli, Håvard Sletta, Else Marit Inderberg, Geir Klinkenberg** (Norway)
- P1.09.29** Polymorphonuclear myeloid-derived suppressor cells impair the anti-tumor efficacy of GD2. CAR T-cells in patients with neuroblastoma  
**Nicola Tumino<sup>1</sup>, Gerrit Weber<sup>2</sup>, Francesca Besi<sup>1</sup>, Francesca Del Bufalo<sup>1</sup>, Valentina Bertaina<sup>1</sup>, Paola Paci<sup>1</sup>, Linda Quatrini<sup>1</sup>, Matilde Sinibaldi<sup>1</sup>, Concetta Quintarelli<sup>1</sup>, Biagio De Angelis<sup>1</sup>, Franco Locatelli<sup>1</sup>, Lorenzo Moretta<sup>1</sup>, Ignazio Caruana<sup>2</sup>, Paola Vacca<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Germany)
- P1.09.30** Development of novel anti BCMA (B cell maturation antigen) antibody as a live cell therapy candidate in multiple myeloma  
**Ashna Gupta, Gunjan Dagar, Ravi Chauhan, Kalpana Luthra, Mayank Singh** (India)
- P1.09.31** Continuous B cell destruction and regeneration is crucial for effective response to anti CD19 CAR-T cell therapy  
**Neta Nevo, Neta Milman, Tim J. Cooper, Tsila Zuckerman, Shai S. Shen - Orr** (Israel)
- P1.09.32** Local repeated delivery of checkpoint blockade therapy through an actuatable reservoir to treat ovarian cancer  
**Hannah Prendeville, Aoibhín Sheedy, Michael O'Dwyer, Garry Duffy, Eimear Dolan** (Ireland)
- P1.09.33** Adeno-associated virus-mediated IL-10 delivery reduces the infiltration of tumor-associated macrophages and suppresses tumor growth in hepatocellular carcinoma  
**Yu-Hsin Hsu, Yu-Wen Wang, Ya-Hui Chuang** (Taiwan)
- P1.09.34** The impact of antigen-binding domains on antigen-directed and tonic chimeric antigen receptor (CAR) signaling  
**Vivian Haas, Markus Barden, Patrick Elsenbroich, Moritz Ertelt, Hinrich Abken, Clara Tabea Schoeder** (Germany)
- P1.09.35** Identification of novel ICOSL isoforms recurrently expressed in Sezary syndrome  
**Loubna Oumeslakht<sup>1,2</sup>, Armand Bensussan<sup>1,2</sup>, Jerome Giustiniani<sup>2</sup>, Sanae Benmkaddem<sup>1</sup>, Nicolas Ortonne<sup>2</sup>** (<sup>1</sup>Morocco, <sup>2</sup>France)
- P1.09.36** Leveraging single B cell technologies in the development of anti-PD-L1 antibodies  
**Ali Mert Sencer, Bilgi Güngör, Asli Kurden-Pekmezci, Dogu Sayili, Ayca Zeybek Kuyucu, Serhat Ozgenc, Ceren Ulker, Sibel Kalyoncu, Mehmet Inan** (Turkey)
- P1.09.37** Computational free flow cytometry for Sézary cells identification and quantification  
**Thi Van Anh Ta, Elisabeth Cohen, Vial Jean Philippe, Veyrrat-Masson Richard, Marie Beylot Barry, Martine Bagot, Adèle de Masson, Caroline Ram Wolff, Helene Moins** (France)
- P1.09.38** The MHC MACSimer technology combines flexibility, quality and releasability for the detection of antigen specific T cells  
**Urmi Roy, Lea Henschel, Lilly Geiger, Lennart Wessels, Gritt Günther, Marc Schuster, Jennifer Jaufmann, Marek Wieczorek** (Germany)

**POSTER SESSION 1**

- P1.09.39** Preparación de nanopartículas para evaluación del efecto antitumoral en un modelo de melanoma  
**Ariel Ramírez Cortes, Andres Elieu Castell Rodríguez, Miguel Herrera Enríque, Katya Jarquín Yáñez, Gabriela Piñón Zarate** (*Mexico*)
- P1.09.40** Enabling fast and convenient immune profiling of fresh and long-term stabilized human whole blood samples with CyTOF  
**Michael Cohen<sup>1</sup>, Shakir Hasan<sup>1</sup>, Stephen Li<sup>1</sup>, Christina Loh<sup>1</sup>, Dawar Pasha<sup>1</sup>, Gloria Martrus Zapater<sup>2</sup>** (*<sup>1</sup>Canada, <sup>2</sup>Spain*)
- P1.09.41** Exposure to cancer spheroids leads to human NK cell degranulation and anti-tumor activity, which is enhanced with cytokine preactivation and/or cetuximab  
**Ainara Lopez-Pardo, Mario Stan Fontoba, Ainhoa Amarilla-Irusta, Victor Sandá, Gabirel Astarloa, Laura Amo, Francisco Borrego** (*Spain*)
- P1.09.42** The impact of Fc receptors and host characteristics on myeloid phagocytic response to rituximab-treated 3D-cultured B-cell lymphoma  
**Sandra Kleinau** (*Sweden*)
- P1.09.43** Deciphering the role of immune microenvironment during CD19 CAR-T treatment in leukemia  
**Mathilde Chambre, Lisa Aziez, Ismael Boussaid, Rudy Birsén, Marguerite Vignon, Didier Bouscary, Justine Decroocq, Nicolas Chapuis, Yannick Simoni** (*France*)
- P1.09.44** Complexes of IL-2 and anti-IL-2 mAb selectively stimulating CD25<sup>+</sup> T cells in combination with immune checkpoint inhibitors possess potent antitumor activity but the timing is crucial  
**Irfan Baki Kilic, Petra Weberova, Katerina Behalova, Bohumil Ptacek, Milada Sirova, Vladyslav Mazhara, Katerina Kubesova, Blanka Rihova, Marek Kovar** (*Czech Republic*)
- P1.09.45** CD25-biased IL-2-based immunocytokines in combination with immune-checkpoint inhibitors completely eradicate large established tumors in CD8<sup>+</sup> T cell-dependent manner  
**Irfan Baki Kilic<sup>1</sup>, Petra Weberova<sup>1</sup>, Derek VanDyke<sup>2</sup>, Milada Sirova<sup>1</sup>, Katerina Kubesova<sup>1</sup>, Charina S. Fabilane<sup>2</sup>, Vladyslav Mazhara<sup>1</sup>, Kathy Liu<sup>2</sup>, Blanka Rihova<sup>1</sup>, Jamie B. Spangler<sup>2</sup>, Marek Kovar<sup>1</sup>** (*<sup>1</sup>Czech Republic, <sup>2</sup>USA*)
- P1.09.46** Introducing SequiMACS technology: pioneering multi-cell isolation in single complex blood samples  
**Rebecca Königsmark, Hassan Ahmed, Christian Keßel, Philipp Steinbrück, Susanne Höher-Peters, Vanessa Brühl, Christin Donner, Stefano Vergani, Gregor Winkels, Ermanila Dhana, Lotta Rätty, Christian Dose, Jonathan Fauerbach** (*Germany*)
- P1.09.47** Antitumoral activity of bacterioruberin, a rare carotenoid from haloarchaea, in solid tumor models  
**Andrés Baeza-Morales, Miguel Medina-Garcia, Carolina Pujalte-Satorre, Sandra Pascual García, Pascual Martínez-Peinado, Ana Belen Lopez-Jaen, Alicia Navarro-Sempere, Yolanda Segovia-Huertas, María Magdalena García-Irles, Rosa María Martínez Espinosa, Jose Miguel Sempere-Ortells** (*Spain*)
- P1.09.48** Viral infections for cancer immunotherapy  
**Yeaji Kim, Yong Woo Jung** (*South Korea*)

POSTER SESSION 1

- P1.09.49** Checkpoint molecules on antigen-loaded extracellular vesicles modulate their anti-tumoral effects in a mouse model of melanoma  
**Loïc Steiner, Loes Teeuwen, Annemarijn Offens, Gözde Güçlüler Akpınar, Daniel Martinez Martinez, Jesse Kuipers, Jules Mazouin, Benedict Chambers, Susanne Gabrielsson** (Sweden)
- P1.09.50** Phenotypic analysis of cytokine-induced killer cells (CIK): identification of receptors involved in their functional capacity  
**Fakhri Hassounah, Nelson López-Sejas, Alejandra Pera Rojas, Carlos Blanco-Benitez, Rafael Solana Lara, Raquel Tarazona** (Spain)
- P1.09.51** Programmed death-ligand 1 expression on T lymphocytes is associated with  $\beta$ 2-microglobulin Levels in treatment-naïve patients with chronic lymphocytic Leukaemia  
**Zekhetelo Mkhwanazi, Aviwe Ntsethe, Bongani Nkambule, Tawanda Nyambuya, Phwayinkosi Dlodla** (South Africa)
- P1.09.52** Developing new and effective strategies for adoptive T- cell therapy in pediatric gliomas  
**Or Zohar, Maria Castro, Adi Anaki, Rachela Popovtzer, Dinorah Friedmann-Morvinski** (Israel)
- P1.09.54** Identification of different subsets of cytokine-induced memory-like NK cells according to their phenotypic and proteomic profile: correlation with effector function  
**Sofía Carreira-Santos, Marina González-Sánchez, Nelson López-Sejas, Inmaculada Jorge Cerrudo, Esther Durán, Elena Delgado, Rafael Solana Lara, Javier G. Casado, Raquel Tarazona** (Spain)
- P1.09.55** Tumor-specific, AAV-mediated anti-PD-1 therapy combined with CAR-NK-cells as experimental immunotherapy for glioma  
**Philipp Elleringmann, Florian Strassheimer, Maja Strecker, Tijna Alekseeva, Muhammed Burak Demircan, Liang Xu, Torsten Tonn, Andreas Weigert, Winfried Wels, Joachim Steinbach, Christian Buchholz, Michael Burger** (Germany)
- P1.09.56** Potential of inhibition of NLRP3 inflammasome in enhancement of immunotherapy in prostate cancer  
**Kateřina Kalkuřová, Dmitry Stakheev, Pavla Tábořská, Jiřina Bartůňková, Daniel Smrř** (Czech Republic)
- P1.09.57** Towards the deciphering of immunological mechanisms of tumor immunotherapy-induced cardiotoxicity  
**Chiara Catalano, Marinos Kallikourdis** (Italy)
- P1.09.58** The effect of aberrant N-glycosylation of PD-L1 on the potency of anti-PD-1 treatments  
**Bar Kaufman, Nofar Erlichman, Tsipi Meshel, Adit Ben-Baruch, Moshe Elkabets, Angel Porgador** (Israel)
- P1.09.59** The influence of the metabolic phenotype of CD8<sup>+</sup> T cells on immunotherapy response in patients with non-small cell lung cancer (NSCLC)  
**Sze Ying Tan, Ella Kearney, Saoirse Flanagan, David O'Reilly, Jarushka Naidoo, Catriona Dowling** (Ireland)
- P1.09.60** Immunomodulatory effect of ferric/nickel nanoparticles in vitro  
**Lenka Rajsiglova, Dmitry Stakheev, Kateřina Krausová, Pavol Lukáč, Paolo Tenti, Michal Babic, Daniel Smrř, Luca Vannucci** (Czech Republic)

**POSTER SESSION 1**

- P1.09.61** Expression relationship of nectin-2 and immune checkpoint molecules in pancreatic cancer patients  
**Mualla İlknur Gündüz, Rukiye Abanoz, Melek Gunindi Korkut, Berkay Yahşi, Nalan Akyürek, Füsün Özmen** (Turkey)
- P1.09.62** Assessing immune checkpoints on NK cells and the potential for immune checkpoint inhibition to reverse NK cell exhaustion in metastatic melanoma patients  
**Jack Behan, Eimear Mylod, Clair Gardiner, Fergal Kelleher** (Ireland)
- P1.09.63** Identifying vulnerabilities to immune checkpoint inhibitors of oncogene-addicted non-small cell lung cancer subgroups  
**Inés Díaz-Cano, José Gracia, Patricia Cozar, Belén Revuelta, Nuria Carrizo, Juan Dubrot, Luis Paz-Ares, Itziar Otano** (Spain)
- P1.09.64** Signatures of response to CD19 CAR-T-cells in diffuse large B-cell lymphoma  
**Luisa Ohlmeier, Jens Löber, Corinna Grunert, Antonia Busse, Björn Chapuy** (Germany)
- P1.09.65** Real-time visualization the efficacy of immunotherapy in the combination of radiation therapy and immune checkpoint inhibitor in cancer immunomodulatory  
**Terence Lee, Jinwoong Kim, Kubra Akyildiz, Hyungjin Kwon, Hyunseok Kim** (South Korea)
- P1.09.66** Loss of  $\beta$ 2-integrin function results in metabolic reprogramming of dendritic cells, leading to increased dendritic cell functionality and anti-tumor responses  
**Heidi Harjunpää, Riku Somermäki, Guillem Saldo Rubio, Manlio Fusciello, Sara Feola, Imrul Faisal, Anni Nieminen, Liang Wang, Marc Lloret Asens, Hongxia Zhao, Ove Eriksson, Vincenzo Cerullo, Susanna Fagerholm** (Finland)
- P1.09.67** The impact of the pancreatic tumour microenvironment on cytotoxic T lymphocyte migration and tumour eradication  
**Matteo Golo<sup>1</sup>, Maximiliane Finkbeiner<sup>1,2</sup>, Florence Piastra-Facon<sup>1,3</sup>, Feyza Colakoglu<sup>1</sup>, Szun Tay<sup>1</sup>, Celine Heu<sup>1</sup>, Renee Whan<sup>1</sup>, David Herrmann<sup>1</sup>, Paul Timpson<sup>1</sup>, Daryan Kempe<sup>1</sup>, Maté Biro<sup>1</sup>** (<sup>1</sup>Australia, <sup>2</sup>Germany, <sup>3</sup>France)
- P1.09.68** Investigating the applicability of KHYG-1 cell therapy for obesity-associated cancer  
**Joyce Barry, Caroline Marion, Eimear Mylod, Niamh O'Connor, Meghana Menon, John V. Reynolds, Maeve Lowery, Niamh Lynam-Lennon, Stephen Maher, Joanne Lysaght, Melissa J. Conroy** (Ireland)
- P1.09.69** Liveocyte: analysis of T-cell killing interaction kinetics using label free imaging of T-cells  
**Meetal Jotangia, Jessica Rickman, Peter Djali, Giovanni Giangreco, Robert Koechl** (United Kingdom)
- P1.09.70** Anti-CD94-induced expansion of highly functional adaptive NKG2C+NKG2A-CD57+selfKIR+ NK cells from CMV-seropositive healthy donors  
**Chiara Giordano<sup>1</sup>, Simona Carlomagno<sup>1</sup>, Michela Falco<sup>1</sup>, Claudia Cantoni<sup>1</sup>, Massimo Vitale<sup>1</sup>, Ignazio Caruana<sup>2</sup>, Cristina Bottino<sup>1</sup>, Letizia Muccio<sup>1</sup>, Simona Sivori<sup>1</sup>, Mariella Della Chesa<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Germany)
- P1.09.71** Immune related hepatitis: a case report of acute hepatitis in cutaneous malignant melanoma treated with nivolumab and ipilimumab  
**Ece Tolgay, Alper Coşkun, Erdem Çubukçu, Türkan Evrensel** (Turkey)

## POSTER SESSION 1

- P1.09.72** Effect of peripheral blood mononuclear cells on formation of patient-derived tumor organoids  
**Madeleine Nadolny, Jürgen Loskutov, Manuela Regenbrecht, Christian Rene Alexander Regenbrecht** (Germany)
- P1.09.73** Next generation binding: measuring cell avidity to fully characterize cell-cell interactions and understand mechanism of action for cellular therapies  
**Debarati Shome, Irene Sarkar, Kushal Das, Rogier Reijmers, Andrea Candelli** (Netherlands)
- P1.09.74** Parainfluenza virus 5 V protein blocks interferon gamma-mediated upregulation of NK cell inhibitory ligands and improves NK cell killing of neuroblastoma cells  
**Elisabeth Shiffer, Jeremiah L. Oyer, Alicja J. Copik, Griffith Parks** (USA)
- P1.09.75** Transcriptomic characterization of TCR-NK cells reveals challenges associated with CD3 $\zeta$  overexpression  
**Elif Çelik, Mertkaya Aras, Serra Özari, Tolga Sütlü** (Turkey)
- P1.09.76** Enhancing the immunogenic effect of radiotherapy with gold nanoparticles  
**Shalini Iyer, Carine Michiels, Anne-Catherine Heuskin** (Belgium)
- P1.09.77** Collagen affinity improves the efficacy and reduces the toxicity of anti-CTLA-4 antibody  
**Chuyi Wang<sup>1</sup>, Jun Takei<sup>2</sup>, Satoru Osuka<sup>2</sup>, Jun Ishihara<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>USA)
- P1.09.78** Evaluation of a human peripheral blood NK humanized hIL-15 mouse model lacking murine Fc gamma receptors  
**Ditte Olsen, Philip Dubé, Nicholas Smith, Monika Buczek, Megan MacBride, Esther Andino, Emily Sack-Flynn, Debra Freer, Michelle Vedder, Kathleen Bott, Louise Baskin, Janell Richardson** (USA)
- P1.09.79** Evaluation of checkpoint inhibitor efficacy in a humanized immune system mouse model lacking murine Fc gamma receptors  
**Peter Zhi Huan Chew<sup>1</sup>, Nicholas Smith<sup>1</sup>, Monika Buczek<sup>1</sup>, Megan MacBride<sup>1</sup>, Esther Andino<sup>1</sup>, Emily Sack-Flynn<sup>1</sup>, Debra Freer<sup>1</sup>, Michelle Vedder<sup>1</sup>, Kathleen Bott<sup>1</sup>, Louise Baskin<sup>1</sup>, Damien France<sup>2</sup>, Francis Bichat<sup>2</sup>, Caroline Mignard<sup>2</sup>, Janell Richardson<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>France)
- P1.09.80** Evaluation of a reference antibody panel for harmonization of preclinical safety assessment of bispecific antibodies for oncological treatment  
**Deepa Rajagopal, Sandrine Vessillier** (United Kingdom)

## P1.10 CANCER VACCINES

- P1.10.01** Development of ProsVac-INCAN: an mRNA vaccine against prostate cancer  
**Blanca Torres, Dora Emma Vélez Uriza, Miguel Ángel Jiménez Ríos, Greco Hernández Ramírez** (Mexico)
- P1.10.03** Characterization of hypoxanthine phosphoribosyltransferase 1 (HPRT1) mutated Hodgkin lymphoma cells  
**Amomirza Mohammad, Ines Volkmer, Alexander Emmer, Martin Staeger** (Germany)



**POSTER SESSION 1**

**P1.10.04** Induction of mucosal immunity by different therapeutic HPV16 vaccination approaches  
**Ann-Katrin Schlosser, Kathrin Wellach, Philipp Uhl, Armin Kübelbeck, Angelika Riemer** (Germany)

**P1.10.05** Anti-tumor efficacy of a mesothelin-based nanovaccine in a KPC orthotopic mouse model of pancreatic cancer  
**Daniele Ferrari<sup>1</sup>, Andrea Markus<sup>1</sup>, Özmen Cobanoglu<sup>2</sup>, Sana Sayedipour<sup>3</sup>, Omar Luna<sup>4</sup>, Sonia Ferkel<sup>1</sup>, David Agorku<sup>4</sup>, Luis Cruz<sup>3</sup>, Fernando Albericio<sup>4</sup>, Francois Trottein<sup>2</sup>, Frauke Alves<sup>1</sup>, Fernanda Ramos-Gomes<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>France, <sup>3</sup>Netherlands, <sup>4</sup>Spain)

**P1.11 CELL COMMUNICATION AND SIGNALING**

**P1.11.01** Mapping the effect of PD1 immunoreceptor on T-cell receptor signalling  
**Martina Kreileder<sup>1</sup>, Myriam Nabhan<sup>1</sup>, Donagh Egan<sup>1</sup>, Muhammad Zainul Arifin<sup>1</sup>, Vadim Zhernovkov<sup>1</sup>, Kieran Wynne<sup>1</sup>, Anisha Solanki<sup>2</sup>, Rajat Varma<sup>2</sup>, Paul Chariou<sup>2</sup>, Ian Barrett<sup>2</sup>, Claus Bendtsen<sup>2</sup>, Simon Dovedi<sup>2</sup>, Viia Valge-Archer<sup>2</sup>, Donal Brennan<sup>1</sup>, Walter Kolch<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)

**P1.11.02** Engineered albumin as an effector negative scaffold for tailored design of long acting antibody fragment fusions  
**Fulgencio Ruso-Julve, Siri Aastedatter Sakya, Anette Kolderup, Elias Tjärnhage, Sopisa Benjakul, Jeannette Nilsen, Stian Foss, Devin Sok, Inger Sandlie, Jan Terje Andersen** (Norway)

**P1.11.03** Mapping BTLA immunoreceptor signalling pathways in T-cells  
**Myriam Nabhan<sup>1</sup>, Martina Kreileder<sup>1</sup>, Donagh Egan<sup>1</sup>, Vadim Zhernovkov<sup>1</sup>, Anisha Solanki<sup>2</sup>, Rajat Varma<sup>2</sup>, Paul Chariou<sup>2</sup>, Ian Barrett<sup>2</sup>, Claus Bendtsen<sup>2</sup>, Simon Dovedi<sup>2</sup>, Viia Valge-Archer<sup>2</sup>, Donal Brennan<sup>1</sup>, Walter Kolch<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)

**P1.11.04** Integrating Seahorse real-time bioenergetics and click-uptake metabolic fluxes to unlock metabolic heterogeneity  
**Sakshi Sankhla, Maxim Nosenko, David Finlay** (Ireland)

**P1.11.05** Inflammatory cytokines and chemokines are synergistically induced by co-culture of corneal epithelial cells and neutrophils in the presence of particulate matter  
**Yasuhiro Yoshida, Zirui Zeng, Duo Wang** (Japan)

**P1.11.06** Characterization of a directed-evolution-generated mutant form of alpha1-antitrypsin  
**Tomer Eliyahu** (Israel)

**P1.11.07** E. coli O83 EVs interact with human and mouse airway cells  
**Agnieszka Razim<sup>1</sup>, Agnieszka Zablocka<sup>2</sup>, Anna Schmid<sup>1</sup>, Michael Thaler<sup>1</sup>, Viktor Cerny<sup>1</sup>, Tamara Weinmayer<sup>1</sup>, Bradley Whitehead<sup>3</sup>, Anke Martens<sup>4</sup>, Magda Skalska<sup>2</sup>, Mattia Morandi<sup>4</sup>, Katy Schmidt<sup>1</sup>, Marco Brucale<sup>1</sup>, Francesco Valle<sup>1</sup>, Magdalena Wismolek<sup>1</sup>, Peter Nejsum<sup>3</sup>, Jiri Hrdy<sup>4</sup>, Sabina Gorska<sup>2</sup>, Lukas Wisgrill<sup>4</sup>, Aleksandra Inic-Kanada<sup>1</sup>, Ursula Wiedermann<sup>1</sup>, Irma Schabussova<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Poland, <sup>3</sup>Denmark, <sup>4</sup>Czech Republic)



## POSTER SESSION 1

- P1.11.08** The BiST of Burden: Harnessing biased STING agonists to enhance the resolution of inflammation and limit tissue fibrosis  
**Nofar Ben Jasher, Sergei Butenko, Uzma Saqib, Sagie Schiff-Zuck, Amiram Ariel** (Israel)
- P1.11.09** Antiapoptotic and cryoprotective effect of the carotenoid Bacterioruberin on peripheral blood mononuclear cells  
**Miguel Medina-Garcia, Pascual Martinez-Peinado, Alicia Navarro-Sempere, Yolanda Segovia-Huertas, Sandra Pascual Garcia, Andrés Baeza-Morales, Carolina Pujalte-Satorre, Ana Belen Lopez-Jaen, María Magdalena García-Irles, Rosa María Martínez Espinosa, Jose Miguel Sempere-Ortells** (Spain)
- P1.11.10** Nanotechnology-enhanced photodynamic therapy for remodeling the tumor microenvironment in colorectal cancer  
**Austeja Butkute, Agata Mlynska, Evelina Kazlauske, Simona Steponkiene** (Lithuania)
- P1.11.11** Exploring the dynamics of the surface proteins of exosomes and the repertoire of peptides presented by their human leukocyte antigen class I molecules  
**Jaxaira Maggi, Montserrat Carrascal, Joaquin Abian, Daniel Closa** (Spain)
- P1.11.12** An end-to-end flow cytometry approach for the development of particle-based vaccines: implication for immunotherapy studies  
**Messaggio Fanuel<sup>1</sup>, Lui Jen Bon<sup>1</sup>, Castrosin Irene<sup>2</sup>, Alfonso Blanco<sup>3</sup>, Mcgee Margaret<sup>2</sup>, Anis Larbi<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>Ireland, <sup>3</sup>France)
- P1.11.13** A multiple myeloma plasma extracellular vesicle protein signature for monitoring patient response to daratumumab  
**Kieran Brennan<sup>1</sup>, Katrine Fladeland Iversen<sup>2</sup>, Alfonso Blanco<sup>1</sup>, Thomas Lund<sup>2</sup>, Torben Plesner<sup>2</sup>, McGee Margaret<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Denmark)
- P1.11.14** Degradable itaconate biopolymers delivery tools for regulation of pathological macrophage inflammation and fibrosis  
**Zachary Froom, Brenden Wheeler, Kyle Medd, Christian Rempe, Kaitlyn Woodworth, Locke Davenport Huyer** (Canada)

## P1.12 CELLULAR MECHANISMS IN INNATE IMMUNOLOGY

- P1.12.01** Cytotoxic units of innate lymphocytes and innate-like T cells as regulators of mammary gland immunity  
**Gioana Litscher<sup>1</sup>, Colin Sparano<sup>1</sup>, Marijne Vermeer<sup>1</sup>, Chiara Detta<sup>1</sup>, Elisa Rallo<sup>1</sup>, Maud Mayoux<sup>1</sup>, André Fonseca da Silva<sup>1</sup>, Caroline Mussak<sup>1</sup>, Stanislav Dergun<sup>1</sup>, Nicolò Coianiz<sup>1</sup>, Burkhard Becher<sup>1</sup>, Vanda Juranić Lisnić<sup>2</sup>, Sònia Tugues<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Croatia)
- P1.12.02** Calcium macrophage differentiation and maintenance depends on oxidative phosphorylation and fatty acid consumption  
**Syamantak Basu, Supriya Murthy, Isabel Karkossa, Kristin Schubert, Manuela Rossol** (Germany)

### POSTER SESSION 1

- P1.12.03** The involvement of neutrophil extracellular traps in necrotizing enterocolitis: exploring the role of neutrophils and their interaction with other immune cells in different organoid models  
**Laura Blum, Deirdre Vincent, Julia Elrod, Michaela Klinke, Jasmin Knopf, Michael Boettcher** (Germany)
- P1.12.04** The metabolic profile of plasmacytoid dendritic cells from patients with systemic sclerosis  
**Beatriz Ferreira<sup>1</sup>, Carolina Mazedo<sup>1</sup>, Eduardo Dourado<sup>1</sup>, Ana Rita Prata<sup>1</sup>, Rafael Argüello<sup>2</sup>, Iola Duarte<sup>1</sup>, Philippe Pierre<sup>1,2</sup>, Catarina Almeida<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>France)
- P1.12.05** Monocytes drive myofibroblast contraction in a 3D skin model used to understand fibrosis in systemic sclerosis  
**Djúlío Zanin da Silva<sup>1,2</sup>, Nienke van Kooten<sup>1</sup>, Theogiannis Papadimitriou<sup>1</sup>, Daphne Dorst<sup>1</sup>, Birgitte Walgreen<sup>1</sup>, Elly Vitters<sup>1</sup>, Peter van der Kraan<sup>1</sup>, Martijn van den Bosch<sup>1</sup>, Arjan van Caam<sup>1</sup>, Marije Koenders<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Brazil)
- P1.12.06** Systemic immune response to cold exposure is linked to  $\gamma\delta$  T cells dynamics  
**Daniel Vasek, Peter Holíček, František Galatík, Veronika Somova, Natalie Fikarova, Michaela Hájková, Martin Převorovský, Jitka Žurmanová, Magdalena Krulova** (Czech Republic)
- P1.12.07** BNT162b2 COVID-19 vaccination elicits the expansion of CD16+CD8+ T cells endowed with NK cell features  
**Claudia De Pasquale<sup>1</sup>, Fabiana Drommi<sup>1</sup>, Alessia Calabrò<sup>1</sup>, Cirino Botta<sup>1</sup>, Giacomo Sidoti Migliore<sup>2</sup>, Paolo Carrega<sup>1</sup>, Grazia Vento<sup>1</sup>, Amirhossein Gaeini<sup>1</sup>, Gaetana Pezzino<sup>1</sup>, Jose Freni<sup>1</sup>, Irene Bonaccorsi<sup>1</sup>, Gregorio Costa<sup>1</sup>, Riccardo Cavaliere<sup>1</sup>, Guido Ferlazzo<sup>1</sup>, Stefania Campana<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>USA)
- P1.12.08** Development of the first primary mucosal mast cell model  
**Louise Battut** (France)
- P1.12.09** Ankylosing spondylitis-specific isotype immunoglobulin glycan profile reveal unique inflammatory responses of PMA-differentiated THP-1 macrophages  
**Hui-Ling Chiang, Ning-Sheng Lai, Ming-Chi Lu, Chien-Hsueh Tung, Chih-Chia Yu, Yu-Ling Huang, Yi-Ling Ye** (Taiwan)
- P1.12.10** Dissecting monocyte metabolic reprogramming to SARS-CoV-2 vaccination in people living with diabetes  
**Emma Jones<sup>1</sup>, Nicholas Oliver<sup>1</sup>, Harald Sourij<sup>2</sup>, Margarita Dominguez-Villar<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Austria)
- P1.12.11** Rheumatoid arthritis monocytes and monocyte-derived macrophages are more inflammatory, less endocytic but display distinct TET expression and differentiation potential compared to psoriatic arthritis  
**Success Amaechi, Megan Hanlon, Dumitru Anton, Mary Canavan, Sonia Sundanum, Carl Orr, Douglas Veale, Viviana Marzaioli, Ursula Fearon** (Ireland)
- P1.12.12** Polyherbal formulation NOQ19 modulates human macrophage polarization and function  
**Asli Korkmaz, Duygu Sag** (Turkey)
- P1.12.13** Impact of exogenous and endogenous CD40L on macrophage responses to IL-4  
**Ignacio González-Alayón<sup>1</sup>, Mariana Suárez-Martins<sup>1</sup>, Cecilia Casaravilla<sup>1</sup>, Stephen J. Jenkins<sup>2</sup>, Conor Finlay<sup>1,3</sup>, Pedro Papotto<sup>3</sup>, Judith E. Allen<sup>3</sup>, Alvaro Diaz<sup>1</sup>** (<sup>1</sup>Uruguay, <sup>2</sup>United Kingdom, <sup>3</sup>Ireland)

## POSTER SESSION 1

- P1.12.14** Truncating mutations in NFKB1 lead to decreased expression of CCDC22 and COMMD proteins thereby enhancing inflammatory response  
**Kristiina Silventoinen, Katariina Nurmi, Goncalo Barreto, Kari K. Eklund** (Finland)
- P1.12.15** Macrophages activation upon phagocytosis of structurally different antigens  
**Asta Luciunaite, Milda Norkiene, Aurelija Zvirbliene** (Lithuania)
- P1.12.16** Modulation of macrophage inflammatory response by Polyherbal formulation Kabasura Kudineer choornam  
**Duygu Unuvar, Asli Korkmaz, Duygu Sag** (Turkey)
- P1.12.17** Long live the macrophages – memantine as cellular youth elixir?  
**Veljko Blagojević, Ivana Ćuruvija, Ivana Anđelović, Marko Vasić, Radmila Miljković, Ivana Prijić, Biljana Bufan, Jasmina Djuretić** (Serbia)
- P1.12.18** Mouse and human macrophages can be activated to fight cancer  
**Inger Øynebråten<sup>1</sup>, Jan-Morgan Dybdal<sup>1</sup>, Paloma Othero López<sup>1</sup>, Petter Angell Olsen<sup>1</sup>, Else Marit Inderberg<sup>1</sup>, Marianne Skeie<sup>1</sup>, Sebastien Walchli<sup>1</sup>, Adele De Ninno<sup>2</sup>, Luca Simula<sup>3</sup>, Luca Businaro<sup>2</sup>, Stefan Krauss<sup>1</sup>, Nadège Bercovici<sup>3</sup>, Alexandre Corthay<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>Italy, <sup>3</sup>France)
- P1.12.19** Staphylococcal enterotoxins influence the monocyte transcriptional profile and shape subsequent macrophage differentiation  
**Claudia Arasa Cuartiella, Manuel Mata Forsberg, Khaleda Rahman Qazi, Eva Sverremark Ekstrom** (Sweden)
- P1.12.20** Quantitative proteomic analysis of natural dendritic cell subsets  
**Simon O'Shaughnessy, David Finlay** (Ireland)
- P1.12.21** Mitochondrial fission-inducible lipid droplets in macrophage antimicrobial responses  
**Karoline Raven<sup>1</sup>, Syeda Farhana Afroz<sup>2</sup>, James Curson<sup>1</sup>, Ronan Kapetanovic<sup>3</sup>, Robert Parton<sup>1</sup>, Matthew Sweet<sup>1</sup>** (<sup>1</sup>Australia, <sup>2</sup>USA, <sup>3</sup>France)
- P1.12.22** MTADV 5-MER peptide suppresses lung fibrosis of a mouse model and inhibits human fibroblasts biological functions by targeting of SAA, which fuels fibrosis  
**David Naor** (Israel)
- P1.12.24** IFN- $\gamma$  induced plasticity in human alveolar macrophages can be resolved with IL-10: Implications for macrophage plasticity as a therapeutic target for tuberculosis  
**Olivia Sandby-Thomas, Zara Davies Harold, Dearbhla Murphy, Sharee Basdeo, Donal Cox, Joseph Keane** (Ireland)
- P1.12.25** Limosilactobacillus reuteri regulate the monocyte transcriptome and functional macrophage polarization  
**Khaleda Rahman Qazi, Manuel Mata Forsberg, Ludwig Lundberg, Stefan Roos, Eva Sverremark Ekstrom** (Sweden)
- P1.12.26** Platelets as possible biomarker candidates to differentiate between neurodegenerative disorders  
**Noelia Arias Gonzalez, Marc Boigues, Marco antonio Fernandez- Sanmartin, Katrin Beyer, Eva Martínez Cáceres** (Spain)

**POSTER SESSION 1**

- P1.12.27** High production of IL-12p70 by human dendritic cells stimulated with combinations of pattern-recognition receptor agonists  
**Brian Christopher Gilmour, Alexandre Corthay, Inger Øynebråten** (Norway)
- P1.12.28** NFAT is important for NK cell maturation and function  
**Xiaoli Lou, Yin Xiao, Cristina Chiarolla, Snigdha Majumder, Nadine Hundhausen, Boutaina El kenz, Benjamin Lunz, Friederike Berberich-Siebelt** (Germany)
- P1.12.29** Immune excitation of hematopoietic stem cells  
**Roi Gazit** (Israel)
- P1.12.30** Evaluation of NK cell anti-tumor activity by detection of subcellular nitric oxide in response to BCG treatment  
**Inmaculada Ruiz Lorente, Lourdes Gimeno Arias, Alicia López Abad, Maria Victoria Martínez Sánchez, Diana Ceballos Francisco, Francisco Galindo Honrubia, Pedro López Cubillana, Alfredo Minguela Puras** (Spain)
- P1.12.31** Dengue virus exploits secretory autophagy mechanisms to promote viral dissemination by human dendritic cells  
**Anusca Rader, Alexandra Cloherty, Kharishma Patel, Tracy-Jane Eidsen, Sterre van Piggelen, Renee Schreurs, Carla Ribeiro** (Netherlands)
- P1.12.32** IL-2 drives glucose flux through glycolysis and the PPP  
**Conor de Barra<sup>1</sup>, Karen Slattery<sup>1</sup>, Geraldine O'Connor<sup>2</sup>, Clair Gardiner<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P1.12.33** miRNA content in subpopulations of NK cell-derived extracellular vesicles connects to different functional activity  
**Miriam Aarsund<sup>1</sup>, Yunjie Wu<sup>1</sup>, Tirill Marie Trøften Hagen<sup>1</sup>, Kimberly Schell<sup>2</sup>, Amanda Sudworth<sup>1</sup>, Rachel Crossland<sup>2</sup>, Marit Inngjerdengen<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>United Kingdom)
- P1.12.34** IL-33/ST2 signalling in haematopoietic stem cells and myeloproliferative neoplasms  
**Yuning Lu** (United Kingdom)
- P1.12.35** Hypoxia reshapes lysosomal landscape and elicits BCG-induced inflammation  
**Shah Faisal, Ulrike Zedler, Gabriele Stooss, Bjoern Corleis, Gang Pei, Anca Dorhoi** (Germany)
- P1.12.36** Nthy-Ori 3-1 and THP-1 cell interactions in a 3D co-culture model  
**Adeliya Temirbek, Ceren Bozkurt, Ozgur Albayrak, Sana Maher, Farinaz Jafari Ghods, Oguzhan Deyneli, Dilek Yazici, Yıldız Tutuncu** (Turkey)
- P1.12.37** Exposure of RAW 264.7 cells to metabolites differentially modifies phenotype, cell function and, mitochondrial respiratory complexes  
**Perla Mariana Gutiérrez-Cedillo, Miguel Angel Rivero-Silva, Francisco Correa-Segura, Francisco Javier Sánchez-García** (Mexico)
- P1.12.38** Uremic toxin indoxyl sulfate triggers trained immunity in monocytes through the AhR-dependent arachidonic acid pathway in end-stage renal disease  
**Hee Young Kim, Yeon Jun Kang, Dong Hyun Kim, Jiyeon Jang, Su Jeong Lee, Gwanghun Kim, Hyun Mu Shin, Tae-Hyun Yoo, Won-Woo Lee** (South Korea)

## POSTER SESSION 1

- P1.12.39** Inflammasome responses and hyperactivation in primary human DC subpopulations  
**Hatscher Lukas, Christian H.K. Lehmann, Ariawan Purbojo, Onderka Constantin, Liang Chunguang, Hartmann Arndt, Cesnjevar Robert, Bruns Heiko, Gross Olaf, Lukas Amon, Kaszubowski Tomasz, Nimmerjahn Falk, Ivanovic-Burmazovic Ivana, Meik Kunz, Heger Lukas, Diana Dudziak** (*Germany*)
- P1.12.40** IL-12p35 and IL-12p40 functionally synergize to activate NK cells  
**Jinghua Wang<sup>1</sup>, Christian Erickson<sup>1</sup>, Andrew Wilcox<sup>2</sup>, Mark Renelt<sup>1</sup>, Vida Gavino<sup>1</sup>, Jing Sun<sup>1</sup>, Jun Li<sup>1</sup>, Ming Bi<sup>1</sup>, Anthony Person<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>United Kingdom)

## P1.13 CHEMOKINES AND THEIR RECEPTORS

- P1.13.01** Dissection of neutrophil heterogeneity in glioblastoma  
**Lucia Zotti, Francesca Albano, Eleonora Pace, Laura Giordano, Simone Puccio, Pasquale Persico, Matteo Simonelli, Massimo Locati, Raffaella Bonecchi** (*Italy*)

## P1.14 CONTROL OF INFLAMMATION AND TISSUE REPAIR

- P1.14.02** Role of PTX3 in Staphylococcus aureus-induced sepsis  
**Raffaella Parente<sup>1</sup>, Francesco Scavello<sup>1</sup>, Giada Cassanmagnago<sup>1</sup>, Giacomo Iapichino<sup>1</sup>, Maria Rita Fumagalli<sup>1</sup>, Arianna Felicetta<sup>1</sup>, Martina Tagliaferro<sup>1</sup>, Alessia Giordano<sup>1</sup>, Sonia Valentino<sup>1</sup>, Sarah Mapelli<sup>1</sup>, Gainluigi Condorelli<sup>1</sup>, Maurizio Cecconi<sup>1</sup>, Alessandro Protti<sup>1</sup>, Dominique Missiakas<sup>2</sup>, Cecilia Garlanda<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Andrea Doni<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>USA, <sup>3</sup>United Kingdom)
- P1.14.03** Optimizing bronchoalveolar lavage yield in infectious disease immunology research: a comprehensive review  
**Hamida Diab** (*Algeria*)
- P1.14.04** Loss of TLR2 signalling slows retinal degeneration in mouse models of disease  
**Rachel Dalton, Ema Ozaki, Natalie Hudson, Matthew Campbell, Sarah Doyle** (*Ireland*)
- P1.14.06** Dietary fibre and its metabolites regulate alveolar macrophage transcriptional landscape and alter bone marrow progenitor phenotype  
**Aishat Azeez** (*Ireland*)
- P1.14.07** The effect of Th1 and Th2 cells on properties and transcriptomic profile of mare endometrial stromal cells – an in vitro study  
**Anna Wójtowicz<sup>1</sup>, Agnieszka Sadowska<sup>1</sup>, Tomasz Molcan<sup>1</sup>, Dawid Tobolski<sup>1</sup>, Graca Ferreira-Dias<sup>1,2</sup>, Anna Szóstek-Mioduchowska<sup>1</sup>** (<sup>1</sup>Poland, <sup>2</sup>Portugal)
- P1.14.08** The disease with a thousand faces: what's neutrophils' portrait?  
**Sandrine Huot, Paul R. Fortin, Cynthia Laflamme, Philippe Tessier, Martin Pelletier, Marc Pouliot** (*Canada*)



**POSTER SESSION 1**

- P1.14.09** Circulating levels of low density granulocytes and cell-free DNA as predictors of cardiovascular disease and bone deterioration in SLE patients  
**Uxía Tobío Parada, Ana Suárez Díaz, Javier Rodríguez-Carrio, Aleida Martínez-Zapico, Ángel I. Pérez-Álvarez, Silvia Suárez, Luis Caminal-Montero, Patricia López, (Spain)**
- P1.14.10** Whole-brain light-sheet and live-cell microscopy to investigate the role of Gai2 and Gai3 in cerebral ischemia-reperfusion injury  
**Ragini Kushwaha, Bernd Nuernberg, Bettina Weigelin, Sandra Beer-Hammer (Germany)**
- P1.14.11** Zymosan-induced trained innate immunity in mice aggravates myocardial infarction  
**Patricia Kleimann, Pascal Bouvain, Zhaoping Ding, Ulrich Flögel, Sebastian Temme (Germany)**
- P1.14.12** Immune cell activity during anti-TNF treatment in patients with psoriasis and psoriatic arthritis  
**Aleksandra Petrovic, Victoria Marie Samuelsen, Richard Davies, Anders Krogh Aarebrot, Tim Holmes, Irene Sarkar, Brith Bergum, Roland Jonsson, Lene Frøyen Sandvik, Silje Michelsen Solberg, Silke Appel (Norway)**
- P1.14.13** The role of neutrophil extracellular traps in epidermolysis bullosa acquisita  
**Sripriya Murthy, Markus Thieme, Marie Louise Mueller, Lasse Kroeger, Christian Sadik (Germany)**
- P1.14.14** Investigating the autoimmune response in myocarditis and myocardial infarction  
**Adam B. Lokman, Maria-Alexa Cosma, Sarah J. R. Sigal, Christophe Ravaud, Paul R. Riley (United Kingdom)**
- P1.14.15** Obesity comprises tissue repair by altering type 2 immunity  
**Lea Semmler, Inaya Hayek, Andrea Deinzer, Christian Schwartz (Germany)**
- P1.14.16** Modulating effect of astaxanthin in mouse model of osteoarthritis  
**Blagovesta Todorova, Nikolina Mihaylova, Andrey Tchorbanov (Bulgaria)**
- P1.14.17** The impact of miR-21 on epithelial intercellular junctions influencing gut inflammation and barrier repair  
**Kevin Mercurio, Sinéad Corr (Ireland)**
- P1.14.18** Sertoli cell transplantation alleviates acute inflammation and improves sperm quality  
**Natalie Fikarova, Bianka Porubska, Marie Hynkova, Daniel Vašek, Veronika Somova, Ondrej Simonik, Ondrej Sanovec, Katerina Komrskova, Vladimir Krylov, Tereza Tlapáková, Magdalena Krulova (Czech Republic)**
- P1.14.19** Dysregulation of type 2 immune responses and microbiota in patients with obesity  
**Jule Gawor, Inaya Hayek, Christian Schwartz (Germany)**
- P1.14.20** Orthotopically transplanted organoids closely recapitulate human colonocytes in vivo  
**Annika Hausmann, Frederik Post, Andreas Mund, Casper Steenholdt, Ole H. Nielsen, Matthias Mann, Kim B. Jensen (Denmark)**
- P1.14.21** Lymphatic emigration of pro-tolerogenic human epidermal Langerhans cells after tick feeding and tick-borne pathogen transmission  
**Lisa Kleissl, Johanna Strobl, Michiel Wijnveld, Sophie Müller, Sophie Weninger, Aglaja Kopf, Sally Connolly, Laura Marie Gail, Christian Freystätter, Mateusz Markowicz, Herbert Strobl, Hannes Stockinger, Georg Stary (Austria)**



## POSTER SESSION 1

- P1.14.22** Targeting NPM1 epigenetically reprograms macrophage metabolism to facilitate post-infarction cardiac repair  
**Sheng Zhang, Zhenzhen Zhan** (China)
- P1.14.23** SLAMF7 expression of peripheral monocytes in patients with rheumatoid arthritis  
**Hannah R. Spatzier, Kathrin Rothe, Laurin Braune, Anne-Marie Glimm, Phuong Nguyen, Olga Seifert, Marco Krasselt, Matthias Pierer, Ulf Wagner** (Germany)
- P1.14.24** The fibrin-derived peptide B $\beta$ 15-42 (FX06) protects human pulmonary endothelial cells against COVID-19-triggered cytokines  
**Zhiran Wang<sup>1</sup>, Vadim Zhernovkov<sup>1</sup>, Kevin Wu<sup>1</sup>, Dmitrii Lebedev<sup>1</sup>, Kieran Wynne<sup>1</sup>, Alfonso Blanco<sup>1</sup>, Jeremy Simpson<sup>1</sup>, Margaritha M. Mysior<sup>1</sup>, Petra Wülfrot<sup>2</sup>, Walter Kolch<sup>1</sup>, Günther Eissner<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Austria)
- P1.14.25** ICOS/ICOSL/OPN in tissue repair: enhancing wound healing with ICOS-Fc treatment  
**Foteini Christaki, Deepika Pantham, Amirabbas Ghasemi, Reza Abouali, Umberto Dianzani, Ian Stoppa** (Italy)
- P1.14.26** Characterising potential tissue-protective roles of the BTNL- $\gamma\delta$  T cell axis in relation to dietary tissue stress  
**Vivien Mülheims-Kohlhaas, Cara Brown, Adrian Hayday** (United Kingdom)
- P1.14.27** Deregulated pIgR contributes to steatotic liver disease via systemic IgA accumulation  
**Dragana Rajčić, Constanze Höbinger, Tim Hendrikx** (Austria)
- P1.14.28** Development of a novel pathotype-specific therapeutic strategy for osteoarthritis by targeting synovial macrophage subpopulations  
**Anaïs Cardon<sup>1</sup>, Nicolas Gaigeard<sup>1</sup>, Lola Le Vaillant<sup>1</sup>, Julien De Lima<sup>1</sup>, Claire Vinatier<sup>1</sup>, Denis Waast<sup>1</sup>, Benoit Le Goff<sup>1</sup>, Frédéric Blanchard<sup>1</sup>, Virginie Escriou<sup>1</sup>, Jerome Guicheux<sup>1</sup>, Marie-Astrid Boutet<sup>1,2</sup>** (<sup>1</sup>France, <sup>2</sup>United Kingdom)
- P1.14.29** Modulation of lung tissue remodelling induced by Mycobacterium tuberculosis infection by anti-fibrotic drugs  
**Deborah L.W. Chong, Julia Kutschenreuter, Jon S. Friedland** (United Kingdom)
- P1.14.30** Mesenchymal stem cell extracellular vesicles attenuate dendritic cell maturation  
**Fiona Buckley, Pamina Contreras Kallens, Meadhbh Brennan** (Ireland)
- P1.14.31** IL-10 and Gal-3 expression is linked to reduced ulcerative colitis severity in patients with metabolic syndrome  
**Irfan Corovic, Ivan Jovanovic, Bojana Simovic Markovic, Isidora Stanisavljevic, Aleksandar Djukic, Natasa Zdravkovic, Milena Jurisevic, Marina Jovanovic** (Serbia)
- P1.14.32** Investigating innate immune mechanisms in dental pulp repair  
**Huda Alsalamin<sup>1</sup>, Katherine Feeney<sup>1</sup>, Catherine Fulton<sup>1</sup>, Imad About<sup>2</sup>, Fionnuala Lundy<sup>1</sup>, Ikhlas El Karim<sup>1</sup>, Yvonne Dombrowski<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>France)
- P1.14.33** Immunomodulatory capacity of large and small apoptotic bodies derived from human bone marrow mesenchymal stromal cells: an in-vitro investigation  
**Jiemin Wang, Seyedmohammad Moosavizadeh, Manon Jammes, Abbas Tabasi, Trung Bach, Aideen Ryan, Thomas Ritter** (Ireland)

### POSTER SESSION 1

- P1.14.34** Intravenous immunoglobulins: A new therapeutic option for cryptogenic organizing pneumonia?  
**Daniel Albert Mendoza Bravo, Ivan Garcia De La Torre, Celia Ferrez Hernández, Vivian Lizeth Stewart DelCid, Elena Manterola Navarro, Jhonnathan Adrian León Valdiviezo, Rafael Rodriguez Ramos, Ana De Andres Martin** (Spain)
- P1.14.35** Immune cell interaction in pulmonary arterial hypertension  
**Olaya Esparta, Konrad Rosskopf, Panja Böhm, Konrad Hoetzenecker, Grazyna Kwapiszewska, Leigh Marsh** (Austria)
- P1.14.36** The tricarboxylic acid cycle regulates fibroblast-driven tissue remodelling via hypoxia-inducible factor 1 $\alpha$  during Mycobacterium tuberculosis infection  
**Ramla Cusman, Julia Kutschenreuter, Deborah L.W. Chong, Jon S. Friedland** (United Kingdom)
- P1.14.37** Investigating the impact of ECM-based biomaterials in macrophage-mediated tissue regeneration  
**Sinead O'Rourke, Giovanni Gonnella, Josephine Wu, Gabriela Soares Kronemberger, Aisling Dunne, Daniel Kelly** (Ireland)
- P1.14.38** Phosphodiesterase 4 regulates monocyte-dependent fibroblast activity in Mycobacterium tuberculosis (Mtb) infection  
**Sharenja Ratnakumar, Deborah L.W. Chong, Joanna Porter, Jon S. Friedland** (United Kingdom)
- P1.14.39** Comparative effects of Vitamin C, curcumin and sambucus nigra extract on cell viability & cytokine levels of cigarette exposed lung epithelium cell culture  
**A. Eren Ozkaya, Hanife Sevgi Varli Ma, Aysegul Yabaci Tak, Nelisa Turkoglu Lacin, Fatmanur Karakose Okyaltirik** (Turkey)
- P1.14.40** Characterization of fibroblast-like synoviocytes isolated from the synovial fluid of juvenile idiopathic arthritis patients  
**Simone Pelassa, Federica Raggi, Chiara Rossi, Federica Briasco, Chiara Artale, Marco Gattorno, Angelo Ravelli<sup>2</sup>, Alessandro Consolaro, Maria Carla Bosco** (Italy)
- P1.14.42** Teucrium montanum extract ameliorates collagen-induced arthritis in rats  
**Biljana Bufan, Mirjana Marčetić, Jasmina Djuretić, Ivana Čuruvija, Veljko Blagojević, Dragana Božić, Violeta Milutinović, Jelena Sopta, Jelena Kotur-Stevuljević, Nevena Arsenović-Ranin** (Serbia)
- P1.14.43** Modulating human macrophage metabolism through the glycolytic enzyme PKM-2 for the generation of bone regenerative extracellular vesicles  
**Cansu Gorgun, Brenton Cavanagh, David Hoey, Annie M. Curtis** (Ireland)
- P1.14.44** Intermittent actuation decreases the presence of neutrophils in the pericapsular region of implanted biomaterials  
**Hannah Prendeville, Niamh A. Ward, Garry Duffy, Eimear Dolan** (Ireland)
- P1.14.45** Butyrate, tributyrin, and high-fiber diet: improving inflammation in acute and chronic psoriasis  
**Roberta Sagiorato, Beatriz Burger, Vitória Gaspar, Isabela Baccarin, Isabela Grego, Hosana Rodrigues** (Brazil)

## POSTER SESSION 1

- P1.14.46** Unravelling stem cell destiny: calcineurin-NFAT axis in early stem cell commitment and immune exclusion  
**Stefano Cozzi, Laura Marongiu, Marco Galli, Giulia Stucchi, Giuseppe Rocca, Anna Celant, Ilaria Fontana, Alessia Donato, Metello Enzo Innocenti, Francesca Granucci** (Italy)
- P1.14.47** Extracellular vesicles produced by interleukin 4 polarized macrophages suppress atherosclerosis by reprogramming Ly6Chi monocytes that improve efferocytosis  
**Ngan Khanh Vu<sup>1,2</sup>, Tuan Anh Phu<sup>2</sup>, Martin Ng<sup>2</sup>, Alex Gao<sup>2</sup>, Robert L. Raffai<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P1.14.48** Downregulation of notch signaling is associated with enhanced activity of human osteoclast progenitors in patients with rheumatoid arthritis  
**Alan Šućur<sup>1</sup>, Sara Aničić<sup>1</sup>, Zrinka Jajić<sup>1</sup>, Marina Ikić Matijašević<sup>1</sup>, Mariastefania Antica<sup>1</sup>, Maša Filipović<sup>1</sup>, Ivo Krešić<sup>2</sup>, Pavao Planinic<sup>2</sup>, Marta Radošević<sup>1</sup>, Ozana Jakšić<sup>1</sup>, Katerina Zrinski Petrović<sup>1</sup>, Darja Flegar<sup>1</sup>, Tomislav Kelava<sup>1</sup>, Nataša Kovačić<sup>1</sup>, Danka Grčević<sup>1</sup>** (<sup>1</sup>Croatia, <sup>2</sup>Bosnia and Herzegovina)
- P1.14.49** Dexamethasone and mRNA co-loaded lipid nanoparticles (LNPs): a synergistic approach for efficient mRNA delivery and reduced pro-inflammatory cytokine secretion in immunological cells  
**Rocio Gambaro<sup>1</sup>, Ignacio Berti<sup>1,2</sup>, María-José Limeres<sup>1</sup>, Malin Svensson<sup>1</sup>, Silvia Fraude<sup>1</sup>, Paula Calderon<sup>1</sup>, Ana Pena Vaquero<sup>1</sup>, German Islan<sup>1,2</sup>, Stephan Gehring<sup>2</sup>** (<sup>1</sup>Germany, <sup>2</sup>Argentina)
- P1.14.50** Role of macrophage migration inhibitory factor (MIF) on mesenchymal stromal cell (MSC) therapeutic efficacy in acute lung injury  
**Ian Hawthorne, Courteney Tunstead, Evelina Volkova, Hazel Dunbar, Claudia C. dos Santos, John G. Laffey, Karen English** (Ireland)
- P1.14.51** Time-dependent modulation of peritoneal adhesion post-abdominal surgery: the role of PAD2 in regulating neutrophil extracellular traps and macrophage extracellular traps  
**Yuqing Lu, Elrod Julia, Jasmin Knopf** (Germany)
- P1.14.52** To stress... To resist? The power of stress responses in sepsis  
**Katia Jesus, André Barros, Elsa Seixas, Luís F. Moita** (Portugal)
- P1.14.53** Neutrophil subsets and their functions in the development of periodontitis  
**Banndith Cheat, Jérôme Bouchet, Marjolaine Gosset, Véronique Witko-Sarsa, Catherine Blanc** (France)
- P1.14.54** Attenuation of apoptosis and inflammation in oral lichen planus patients after low level laser therapy  
**Milena Draganova, Maria Mutafchieva, Svitlana Bachurska, Georgi Tomov, Plamen Zagorchev** (Bulgaria)
- P1.14.55** Immuno profile of Inflammatory bowel disease patient response to anti-TNFα therapy  
**Penelope Pelczar, Can Ergen-Behr, Marius Boettcher, Andres Machicote, Morsal Sabihi, Carolin Manthey, Samuel Huber** (Germany)
- P1.14.56** Expression of MIR22 host gene in different cell populations isolated from oligoarticular juvenile idiopathic arthritis patients  
**Chiara Artale, Simone Pelassa, Federica Raggi, Chiara Rossi, Federica Briasco, Francesca Orso, Daniela Taverna, Marco Gattorno, Alessandro Consolaro, Maria Carla Bosco** (Italy)

**POSTER SESSION 1**

- P1.14.57** Novel dairy fermentates have differential effects on key immune responses associated with viral immunity and inflammation  
**Dearbhla Finnegan, Monica Mechoud, Claire Connolly, Jamie Fitzgerald, Tom Beresford, Harsh Mathur, Lorraine Brennan, Paul Cotter<sup>5</sup>, Christine Loscher** (Ireland)
- P1.14.58** Development of an ex vivo approach preserving natural hair follicles and resident immune cells in order to recapitulate hair loss-associated inflammation  
**Emilie Braun, Mathias Peries, Nicolas Giang, Manon Scholaert, Benoit Chaput, Nicolas Gaudenzio, Emeline Pages** (France)
- P1.14.59** Prothrombotic activity of adipose tissue in patients with rheumatoid arthritis treated with JAK kinase inhibitors baricitinib or upadacitinib  
**Krzysztof Bonek, Magdalena Plebanczyk, Maciej Ołdak, Weronika Kurowska, Sylwia Szczygielska, Katarzyna Helon, Agnieszka Zielińska, Anna Felis-Giemza, Włodzimierz Maslinski, Ewa Kuca-Warnawin** (Poland)
- P1.14.60** A protective function of sclerosing cholangitis on inflammatory bowel disease  
**Tanja Bedke, Friederike Stumme, Miriam Tomczak, Babett Steglich, Rongrong Jia, Simon Bohmann, Agnes Wittek, Jan Kempinski, Emilia Göke, Marius Boettcher, Dominik Reher, Anissa Franke, Maximilian Lennartz, Thorben Fründt, Sören Weidemann, Gisa Tiegs, Christoph Schramm, Penelope Pelczar, Samuel Huber** (Germany)
- P1.14.61** CXCL4, CXCL4-DNA/RNA complexes and anti-CXCL4 antibodies are modulated in Systemic Sclerosis patients under Iloprost therapy  
**Giuseppe Ocone, Roberto Lande, Anna Mennella, Katia Stefanantoni, Raffaella Palazzo, Immacolata Pietraforte, Iliana Sciarra, Massimiliano Vasile, Valeria Riccieri, Loredana Frasca** (Italy)
- P1.14.62** USP43 Promotes Inflammation-driven colorectal cancer progression through stabilizing HDAC11 protein  
**Han Wu, Weilin Chen** (China)
- P1.14.63** High-fructose diet and folate insufficiency exacerbate renal inflammation in adenine-induced murine model of chronic kidney disease  
**Ting-Yu Chen, Ya-Ching Chiu, Jennifer Fransisca Budiman, Bi-Fong Lin** (Taiwan)
- P1.14.64** Chronic intestinal inflammation predisposes to the development of acute kidney injury  
**José Arimatéa de Oliveira Nery Neto, Victor Yuji Yariwake, Eloisa Martins da Silva, Raquel Vieira, Cláudia Silva Souza, Suemy Melim Yamada, João Vinícius Honório da Silva, Marcella Cipelli, Samuel dos Santos Oliveira, Laura Quadros-Pereira, Lorena Doretto da Silva, Niels Olsen Saraiva Camara, Vinicius de Andrade-Oliveira** (Brazil)
- P1.14.65** Gentamicin-induced inner ear injury: modulating immune and inflammatory responses with alpha1-antitrypsin for inner ear function preservation  
**Amit Amar, Eli Lewis, Sabri El-Saied, Tehilla Marom, Binyamin Kaminer** (Israel)
- P1.14.66** Soluble immune checkpoints as biomarkers for disease activity in large vessel vasculitis  
**Martina Bonacini, Alessandro Rossi, Ilaria Ferrigno, Cecilia Catellani, Veronica Buia, Francesco Muratore<sup>4</sup>, Chiara Marvisi, Carlo Salvarani, Alessandro Zerbini, Stefania Croci** (Italy)

## POSTER SESSION 1

- P1.14.67** A dynamic interplay between angiogenesis and neutrophils in systemic sclerosis patients  
**Annagioia Ventrìci, Manuela Tumminelli, Luca Modestino, Marialuisa Trocchia, Leonardo Cristinziano, Anne Lise Ferrara, Stefania Loffredo, Giuseppe Spadaro, Francesca Wanda Rossi, Gianni Marone, Amato de Paulis, Maria Rosaria Galdiero** (Italy)
- P1.14.68** Genetic variants and serum levels analysis of indoleamine 2,3-dioxygenase in Behcet's disease  
**Ülkü Uçar, Yagmur Aydin Atalay, Güven Özkaya, Barbaros Haluk Oral** (Turkey)
- P1.14.69** Dysregulated innate immune cell activity in children with periodic fever, aphthous stomatitis, pharyngitis, adenitis  
**Andy Dernstedt, Pauline Girard, Emilie Sallansonnet, Emma Arsac, Paola Fontannaz, Wafae Adouan, Sylvain Lemeille, Arnaud Didierlaurent, Géraldine Blanchard-Rohner** (Switzerland)
- P1.14.70** Role of CD16 receptor in development of diabetes mellitus type 2  
**Vanna Imširović, Felix Wensveen, Bojan Polić, Vedrana Jelencić** (Croatia)
- P1.14.71** Characterisation of T lymphocytes in a rat model of Duchenne muscular dystrophy  
**Suzan Saidin, Valentina Taglietti, Frédéric Relaix** (France)
- P1.14.72** Upregulation of DNase I in systemic lupus erythematosus: a role of mitochondrial DNA  
**Uxía Tobío Parada, Ana Suárez Díaz, Javier Rodríguez-Carrio, Aleida Martínez-Zapico, Silvia Suárez, Patricia López** (Spain)
- P1.14.73** To BCG or not to BCG – a case against trained immunity?  
**Ivana Anđelović, Radmila Miljković, Ivana Ćuruvija, Marko Vasić, Marija Petrušić, Irena Živković, Veljko Blagojević** (Serbia)
- P1.14.74** Th17-cell derived IL-22 plays a non-redundant protective role in a mouse colitis model  
**Antonella Fazio, Babett Steglich, Beibei Liu, Penelope Pelczar, Justus Neuendorff, Anissa Franke, Nicola Gagliani, Samuel Huber** (Germany)
- P1.14.75** Treatment of experimental autoimmune uveitis and effects of probiotic supplementation  
**Petra Prochazkova, Radka Roubalova, Janet Jezkova, Miloslav Kverka, Aneta Klímová, Petra Svozilkova, Jarmila Heissigerova** (Czech Republic)
- P1.14.76** A multidisciplinary approach to diagnosis and management of scleromyositis syndrome with positivity of anti-OJ, anti-PL7 and anti-Scl70 antibodies  
**Dhouha Krir, Imen Zamali, Samar Derbel, Mariem Marrak, Ahlem Ben Hmid, Meysa Abdallah, Melika Ben Ahmed** (Tunisia)
- P1.14.77** Simultaneous hyperbaric oxygen therapy and antioxidant supplementation in the treatment of thermal skin injuries reduce inflammation and alter nociceptive signalling and wound healing  
**Nemanja Jovičić, Dragica Selakovic, Milos Krstic, Bojana Krstic, Marko Simic, Sara Rosic, Natalija Arsenijevic, Gvozden Rosic** (Serbia)
- P1.14.78** Premature ageing in long-term homeless adults  
**Ailbhe Herity, Conor Reddy, Nicole Roche, Matt McElheron, Adam Dyer, Georgia Richard, Nollaig Bourke, Cliona Ni Cheallaigh** (Ireland)



#### POSTER SESSION 1

- P1.14.79** Serum free light chains in systemic lupus erythematosus disease  
**Dhouha Krir, Youssr Galai, Imen Zamali, Ahlem Ben Hmid, Raja Rekik, Monia Khanfir, Alia Fazaa, Habib Houman, Ahmed Laatar, Kamel Bousslema, Melika Ben Ahmed** (Tunisia)
- P1.14.80** Uncovering the role of novel protein FKBPL in obesity associated psoriasis  
**Ananya S Pushpa, Anna Bogdanska, Noor Bakour, Stephanie Annett, Tracy Robson** (Ireland)
- P1.14.81** Cytotoxicity by micronucleus assay exhibit cellular inflammation in drug-addicted mothers and their newborns  
**Ana Lilia Fletes Rayas, Elisa García Morales, Jose De Jesus Lopez Jimenez, Jacqueline-Alejandra Noboa-Velastegui, Rosa Elena Navarro Hernandez** (Mexico)
- P1.14.82** A switch in macrophage ontogeny leads to increased fibrosis during aging after myocardial infarction  
**Tobias Weinberger<sup>1,2</sup>, Clarisabel Garcia Rodriguez<sup>2</sup>, Denise Messerer<sup>1</sup>, Clement Cochain<sup>1</sup>, Christian Schulz<sup>1</sup>, Elisa Gomez Perdiguero<sup>2</sup>** (<sup>1</sup>Germany, <sup>2</sup>France)
- P1.14.83** The effect of lunasin on pulmonary inflammation and fibrosis in A549 alveolar epithelial cells under obese microenvironments  
**Chia-Chien Hsieh, Wan-Sheng Chang** (Taiwan)
- P1.14.84** Systemic autoinflammation caused by T regulatory cell depletion is partially suppressed by manipulating iron homeostasis  
**Dana Costigan, Megan Teh, Alexandra Preston, Shamsideen Yusuf, Hannah Murray, Giulia Pironaci, Andrew Armitage, Alexander Hal Drakesmith** (United Kingdom)
- P1.14.85** Single-cell resolution profiling of mannan-induced psoriatic arthritis-like disease in mice  
**Cyril Allard, Parisa Amini, Eline Angevaere, Dominik Aschenbrenner, Joerg Betschinger, Rachel Cuttat-Theurillat, Katy Darribat, Joerg Eder, Amanda Evans, Enrico Ferrero, Dayme Gonzalez-Rodriguez, Jan Mauer, Ulrike Naumann, Sophie Sarret, Tara Nicole Thorsen, Annick Waldt, Grazyna Wieczorek, Sophia Wild** (Switzerland)
- P1.14.86** KIR and PD-1 on CD8+ T cells in Behçet's disease reveal changes with disease activity  
**Seyda Bilgin, Rabia Deniz, Taylan Kaplan, Fatma Alibaz Oner, Ahmet Gül, Haner Direskeneli, Güher Saruhan Direskeneli** (Turkey)
- P1.14.87** Single cell RNA sequencing of lung cells from idiopathic pulmonary fibrosis patients identifies a disease-specific macrophage subset with a type I IFN signature  
**Vishal Nathwani, Praveen Weeratunga, Tian Hu, Jeongmin Woo, Laura Denney, Agne Antanaviciute, Ling-Pei Ho** (United Kingdom)
- P1.14.88** Pathogenic variants in the NLRP3 LRR domain lead to a boost-dependant atypical caps phenotype  
**Antoine Fayand<sup>1</sup>, Margaux Cescato<sup>1</sup>, Laurent Le Corre<sup>1</sup>, Alexandre Terré<sup>1</sup>, Margaux Wacheux<sup>1</sup>, Yves-Jean Zhu<sup>1</sup>, Armelle Melet<sup>1</sup>, Thomas Moreau<sup>1</sup>, Diego Bletry<sup>1</sup>, Bahram Bodaghi<sup>1</sup>, Gilles Gâteau<sup>1</sup>, Laurence Cuisset<sup>1</sup>, Bénédicte F. Py<sup>1</sup>, Benedicte Neven<sup>1</sup>, Didier Bronnimann<sup>1</sup>, Léa Savey<sup>1</sup>, Raquel Faria<sup>2</sup>, Catharina M. Mulders-Manders<sup>3</sup>, Marie-Elise Truchetet<sup>1</sup>, Guilaine Boursier<sup>1</sup>, Olivier Richer<sup>1</sup>, Jean-Philippe Herbeuval<sup>1</sup>, Mélanie Poinot<sup>1</sup>, Sophie Georgin-Lavialle<sup>1</sup>, Mathieu P. Rodero<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Portugal, <sup>3</sup>Netherlands)



## POSTER SESSION 1

- P1.14.90** Identifying molecular subtypes of critical illness to enable precision medicine  
**Renske Hoekstra, Matthew Fish, Jennifer Rynne, Christopher J Weir, Iain McInnes, Manu Shankar-Hari** (*United Kingdom*)
- P1.14.91** Prevalence and epidemiological profile of patients using immunobiologics for the treatment of Ankylosing Spondylitis in the public health system in a municipality in southern Brazil  
**Ana Benthien, José Eduardo Neis** (*Brazil*)
- P1.14.92** Prevalence and epidemiological profile of patients using Anti-TNF immunobiologics for the treatment of autoimmune diseases in the municipality of Jaraguá do Sul, Brazil  
**Glauce Jane Vieira Assunção, Isadora Maria Gomes, Amanda Varela Da Silva, Ana Benthien** (*Brazil*)
- P1.14.93** A family of helminth-derived TGF- $\beta$  mimics target tissue-resident macrophages and granulocytes in the peritoneal cavity  
**Kyle Cunningham<sup>1</sup>, Natalia Wąsowska<sup>1</sup>, Shashi Singh<sup>1,2</sup>, Maarten van Dinther<sup>3</sup>, Tiffany Campion<sup>1</sup>, Ananya Mukundan<sup>4</sup>, Andrew Hinck<sup>4</sup>, Peter ten Dijke<sup>3</sup>, Rick Maizels<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>India, <sup>3</sup>Netherlands, <sup>4</sup>USA*)
- P1.14.94** Glycolytic macrophages define pathological medical implant fibrosis  
**Christian Rempe, Neal Callaghan, Sarah Nersesian, Zachary Froom, Kyle Medd, Michael Bezuhy, Jeanette Boudreau, Locke Davenport Huyer** (*Canada*)

## P1.15 CYTOKINE AND T LYMPHOCYTE-BASED IMMUNOTHERAPY

- P1.15.02** Interleukin-2 dynamically reduces interleukin-2 receptor  $\beta$  expression and function especially in T cells  
**Charline Sommer, Sophie Jacob, Tonia Bargmann, Susann Dehmel, Vanessa Neuhaus, Armin Braun, Katherina Sewald** (*Germany*)
- P1.15.03** Solving the mystery of immunomodulation in malignant ascites: an exploration of novel unknown immunosuppressive factors in ovarian cancer ascites, and their impact on modern immunotherapeutics.  
**Luke Furtado O'Mahony, Gulsah Albayrak, Mahnoor Nadeem, Hena Khalique, Len Seymour, Kerry Fisher** (*United Kingdom*)
- P1.15.04** A small bispecific antibody induces HIV-1 Env-specific T-cell activation  
**Eudald Vehí Piqué, María Lázaro-Díez, Rodrigo Lázaro Gorines, Ruth Peña, Carlo Carolis, Carmen Dominguez Alonso, Luis Álvarez-Vallina, Julia G. Prado** (*Spain*)
- P1.15.05** Development of an in vivo suppression assay to assess Treg function  
**Joanne Anstee, Julieta Karegli, Michael Worwood, Shanth, Herath, Madhav Kishore, Bahire Kalfaoglu, Sim Tung, Courtney Grant, Georgios Eleftheriadis, Jenny McGovern** (*United Kingdom*)

**POSTER SESSION 1**

- P1.15.06** Functional regulation of human lymphoid cells by IL-1R8 targeting in cancer  
**Roberto Garuti<sup>1</sup>, Domenico Supino<sup>1</sup>, Elena Magrini<sup>1</sup>, Giovanni Pezone<sup>1</sup>, Irene Di Ceglie<sup>1</sup>, Andrea Mariancini<sup>1</sup>, Silvia Carnevale<sup>1</sup>, Laura Falcone<sup>1</sup>, Monica Casucci<sup>1</sup>, Joanna Mikulak<sup>1</sup>, Domenico Mavilio<sup>1</sup>, Enrico Lugli<sup>1</sup>, Sebastien Jaillon<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Cecilia Garlanda<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>United Kingdom*)
- P1.15.07** IL-10 enhances the antitumor immunity in the orthotopic hepatocellular carcinoma mouse model by increasing CD8+T cell cytotoxicity  
**Chia-I Lin, Yu-Wen Wang, Yi-Wei Chiu, Ying-Hsuan Wu, Ya-Hui Chuang** (*Taiwan*)
- P1.15.08** Induction of resident memory CD8+ T cell phenotypes to eliminate the HIV reservoir  
**Cristina Mancebo-Pérez, Aleix Benitez, Judith Grau-Expósito, Sebastián G. Kugel, Núria Massana, Jon Cantero-Pérez, Nerea Sánchez-Gaona, Josep Castellví, Laura Mañalich-Barrachina, Cristina Centeno-Mediavilla, Jordi Navarro, Adrià Curran, Vicenç Falcó, Maria Jose Buzon, Meritxell Genescà** (*Spain*)
- P1.15.09** Apheresis characteristic impacting response to chimeric antigen receptor T-cell therapy  
**Ivan Garcia De La Torre, Carlota García-Hoz Jiménez, Eulalia Rodríguez Martín, Rafael Rodríguez Ramos, Elena Manterola Navarro, José Luis Veiga González, Vivian Lizeth Stewart DelCid, Celia Ferrez Hernández, Daniel Albert Mendoza Bravo, Paula Batres Faba, Kyra Velázquez Kennedy, Roberto Pariente Rodríguez** (*Spain*)
- P1.15.10** Monitoring of immune system in CAR-T infused patients diagnosed of hematological malignancies  
**Raquel Bernardo, Laura Carrero, Ana Navas, Estefania García Torres, Concepción Herrera, Aurora Jurado Roger** (*Spain*)
- P1.15.11** Changes in immunological and metabolic parameters in patients with spondyloarthropathies treated with biologics  
**Krzysztof Bonek, Antonina Markowicz, Maciej Oldak, Magdalena Plebanczyk, Anna Kornatka, Sylwia Szczygalska, Katarzyna Helon, Marek Kajfasz, Paulina Wydrych, Brygida Kwiatkowska, Piotr Głuszko, Anna Felis-Giemza, Ewa Kuca-Warnawin** (*Poland*)
- P1.15.12** Exploring TCR and gene expression diversity: Single cell RNA and TCR sequencing on NY-ESO-1-specific HLA-DRB3\*02:02-restricted CD4+ T cells from cancer-free individuals  
**Berta Casanovas Albertí, Andrea Aran, Ariadna Bartoló, Roberto Martínez, Iván García-Loza, Alejandro Ramírez-Chacón, Mariona Pascal, E. Azucena González Navarro, Manel Juan Otero** (*Spain*)
- P1.15.13** Unveiling therapeutic potential of adoptive T-cell products in cancer treatment by integrating full spectrum flow cytometry with image-based assays  
**Sarah Schulenberg<sup>1</sup>, Michelle Loeser<sup>1</sup>, Martí Farrera-Sal<sup>1</sup>, Jacqueline Keye<sup>1</sup>, Candise Tat<sup>2</sup>, Désirée Kunkel<sup>1</sup>, Bilal A. Omer<sup>2</sup>, Michael Schmueck-Henneresse<sup>1</sup>** (*<sup>1</sup>Germany, <sup>2</sup>USA*)
- P1.15.14** Isolation of a high avidity TCR targeting a newly identified epitope of a common cancer testis antigen expressed by solid tumors  
**Emina Sivo, Martin Klatt, Sefer Elezkurtaj, Caecilia Freund, Corinna Grunert, Ulrich Keller, Antonia Busse** (*Germany*)
- P1.15.15** A novel PEGylated IL-2 mutein, RS2102, selectively induced Regulatory T-lymphocytes (Treg) expansion. Results from a phase 1 single dose ascending study in healthy volunteers  
**Aik Goh, Jia Liu, Dan Pu, Isaac SY Goh, Bo Qu** (*United Kingdom*)

## POSTER SESSION 1

- P1.15.16** Development of a T-cell activation panel using image cytometry in rheumatoid arthritis human samples  
**Bo Lin, Leo Chan** (USA)
- P1.15.17** Multiparametric study to optimize extracellular vesicles production for immunomodulatory potential  
**Christophe Wong, Isaure Rous, Thibaut Fourniols, Jean-Philippe Herbeuval** (France)

## P2.01 CHEMOKINES AND THEIR RECEPTORS

- P2.01.01** Pro-inflammatory cytokine/chemokines pattern in obesity induced experimental psoriasis  
**Carolina Constantin, Mihaela Surcel, Adriana Narcisa Munteanu, Gheorghita Isvoranu, Neagu Teodora Monica** (Romania)
- P2.01.02** A sensitive functional cell-based bioassay for the screening of different recombinant variants of soluble mouse LIGHT to be used in in vivo anti-tumor studies  
**Jose-Ignacio Rodriguez-Barbosa<sup>1</sup>, Pascal Schneider<sup>2</sup>, Maria Luisa del Rio<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Switzerland)
- P2.01.03** Transcriptional and epigenetic regulation of IL23R expression in human CD4<sup>+</sup> T cells  
**Hanane Yahia, Ikram Mezghiche, Victoire Baillet, Daniel J. Cua, Raphaelle Parker, Lars Rogge, Elisabetta Bianchi** (France)
- P2.01.04** GDF-15-driven macrophage reprogramming: impact on IL17RB expression and immune tolerance  
**Lina Susana Silva Bermudez, Jingxuan Xu, Harald Klüter, Julia Kzhyshkowska** (Germany)
- P2.01.05** IFN- $\gamma$  response by medullary thymic epithelial cell in the absence of Aire gene  
**Ana Carolina Monteleone Cassiano<sup>1,2</sup>, Rute Daniela Pinto<sup>2</sup>, Pedro Ferreira<sup>2</sup>, Geraldo Passos<sup>1</sup>, Nuno Alves<sup>2</sup>, Eduardo Donadi<sup>1</sup>** (<sup>1</sup>Brazil, <sup>2</sup>Portugal)
- P2.01.06** The gene expression of TGF- $\beta$  receptor subunits in blood is altered in relapsing-remitting multiple sclerosis and under the influence of dimethyl fumarate  
**Ludmiła Szewczak, Magdalena Kierasińska, Rafał Rola, Anna Karlińska, Katarzyna Donskow-Łysoniewska** (Poland)
- P2.01.08** Changes in levels of leptin, adiponectin, chemerin and resistin in response to progressive resistance training in highly trained athletes and non-trained individuals  
**Olga Sierawska, Marek Sawczuk** (Poland)
- P2.01.10** Evaluating the cytokine profile in steroid naive patients with polymyalgia rheumatica  
**Patricia Harkins, Sharon Cowley, Robert Harrington, Jean Dunne, David Kane, Niall Conlon, Richard Conway** (Ireland)
- P2.01.11** Adipokines dysregulation in the dysfunctional body adipose tissue is associated with immunometabolic biomarkers increase, highlighting dyslipidemias with a greater contribution from the TG-VLDLC-APO B metabolic pathway  
**Jacqueline Noboa-Velástegui, Ana-Lilia Fletes-Rayas, Perla-Monserrat Madrigal-Ruiz, Jorge Castro Albarran, Sandra Luz Ruiz Quezada, Martha Eloisa Ramos Marquez, Rosa Elena Navarro Hernandez** (Mexico)

**POSTER SESSION 2**

- P2.01.12** Sources of variability in multiplex bead array assays: evidence from twelve years of multi-site proficiency testing  
**Wes Rountree, Heather Lynch, Thomas Denny, Gregory Sempowski, Andrew Macintyre** (USA)
- P2.01.13** Uncovering the role of CMTM4 in IL-17 receptor C trafficking  
**Tijana Trivic, Peter Draber** (Switzerland)
- P2.01.14** Regulation of MyD88 signaling in autoimmunity  
**Alzbeta Synackova, Peter Draber** (Czech Republic)
- P2.01.15** Unravelling the secretion of the two different subunits (p35/p40) of IL-12 at the immunological synapse between dendritic cells and T cells  
**Anthi Psoma, Geert van den Bogaart, Frans Bianchi** (Netherlands)

**P2.02 DIVERSITY OF ANTIGEN RECOGNITION**

- P2.02.01** Cross-regulation of antibody responses against viral and host proteins by commensal microbiota via molecular mimicry  
**Marina Bondareva, Pawel Durek, Adrian Schreiber, Philipp Enghard, Mir-Farzin Mashreghi, Andrey Kruglov** (Germany)
- P2.02.02** Deep sequencing of the TCR locus identifies immunodominant T cell responses to COVID-19 vaccination  
**Isabel Ferreirós Vidal, Julián Montoto Louzao, Jacobo Pardo Seco, Xabier Bello, Irene Rivero Calle, Fernando Caamaño, Carmen Durán Parrondo, Alberto Gómez Carballa, Jose Gómez Rial, Antonio Salas, Federico Martínón Torres** (Spain)

**P2.03 EPITHELIAL AND STROMAL CELLS**

- P2.03.01** Packaged food emulsifiers trigger pro-inflammatory activation and disruption of the gut epithelial barrier  
**Duygu Yazici<sup>1</sup>, Yagiz Pat<sup>1</sup>, Ismail Ogulur<sup>1</sup>, Sena Ardicli<sup>1</sup>, Sheri Simmons<sup>2</sup>, Anthony Almada<sup>2</sup>, Christine Avena<sup>2</sup>, Tye Jensen<sup>2</sup>, Manru Li<sup>1</sup>, Yasutaka Mitamura<sup>1</sup>, Huseyn Babayev<sup>1</sup>, Anja Heider<sup>1</sup>, Raja Dhir<sup>2</sup>, Mubeccel Akdis<sup>1</sup>, Kari Nadeau<sup>2</sup>, Cezmi Akdis<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>USA)
- P2.03.02** PPAR $\beta$ / inhibition enhances mesenchymal stromal cell-mediated immunomodulation in the context of acute respiratory distress syndrome  
**Courteney Tunstead<sup>1</sup>, Evelina Volkova<sup>1</sup>, Hazel Dunbar<sup>1</sup>, Ian J. Hawthorne, Alison Bell<sup>1</sup>, Ritu Negi<sup>1</sup>, Bairbre McNicholas<sup>1</sup>, Claudia C. dos Santos<sup>2</sup>, John G. Laffey<sup>1</sup>, Karen English<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Canada)
- P2.03.03** Differential FLS populations define Rheumatoid and Psoriatic Arthritis pathotypes via their functional response to distinct immune regulators  
**Órla Tynan, Conor Smith, Mary Canavan, Achilleas Floudas, Aoife O'Rourke, Dumitru Anton, Carl Orr, Douglas Veale, Ursula Fearon** (Ireland)

## POSTER SESSION 2

- P2.03.05** Investigating the impact of PPAR $\beta/\delta$  on mesenchymal stromal cell immunometabolism  
**Evelina Volkova, Courtney Tunstead, Hazel Dunbar, Ian Hawthorne, Claudia C. dos Santos, John G. Laffey, Karen English** (Ireland)
- P2.03.06** Characterization of PRIME cells identified in circulation of individuals-at-risk and patients with rheumatoid arthritis  
**Brianne Barker, Órla Tynan, Dumitru Anton, Aoife O'Rourke, Carl Orr, Douglas Veale, Mary Canavan, Ursula Fearon** (Ireland)
- P2.03.07** The inflamed joint microenvironment affects endothelial cell function through soluble mediators and cell-cell interactions  
**Aenea Brugman, Órla Tynan, Dumitru Anton, Carl Orr, Viviana Marzaioli, Douglas Veale, Ursula Fearon** (Ireland)
- P2.03.08** Defining the effects of trained innate immunity and metabolic reprogramming on the immune functions of airway epithelial and fibroblast cells  
**Sarah Connolly, Dearbhla Murphy, Grainne Jameson, Isabella Batten, Donal Cox, Joseph Keane, Jean Fletcher, Sharee Basdeo** (Ireland)
- P2.03.09** Human thymus epithelial stem cells - the pillars of T cell development  
**Ildikó Bódi<sup>1</sup>, Sabrina Adorisio<sup>2</sup>, Domenico Delfino<sup>2</sup>, Ivan Mamic<sup>3</sup>, Lucija Bozicevic<sup>3</sup>, Zsolt Prodan<sup>1</sup>, Delfa RadicKristo<sup>3</sup>, Ivana Vinkovic Vrcek<sup>3</sup>, Danka Grčević<sup>3</sup>, Mariastefania Antica<sup>3</sup>** (<sup>1</sup>Hungary, <sup>2</sup>Italy, <sup>3</sup>Croatia)
- P2.03.10** A bacterial metabolite with gut and skin epithelial barrier enhancing and anti-inflammatory activities  
**Yagiz Pat<sup>1</sup>, Duygu Yazici<sup>1</sup>, Ismail Ogulur<sup>1</sup>, Sena Ardicli<sup>1</sup>, Sheri Simmons<sup>2</sup>, Anthony Almada<sup>2</sup>, Christine Avena<sup>2</sup>, Tye Jensen<sup>2</sup>, Manru Li<sup>1</sup>, Xiangting Bu<sup>3</sup>, Yasutaka Mitamura<sup>1</sup>, Anja Heider<sup>1</sup>, Huseyn Babayev<sup>1</sup>, Raja Dhir<sup>2</sup>, Lou Zhang<sup>3</sup>, Mubeccel Akdis<sup>1</sup>, Kari Nadeau<sup>5</sup>, Cezmi Akdis<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>USA, <sup>3</sup>China)
- P2.03.011** The fetal liver stromal compartments and hematopoiesis  
**Yanping Zhou, Francisca Soares-Da-Silva, Mesquita-Peixoto Marcia, Marie-Pierre Mailhe, Ana Cumano** (France)
- P2.03.012** Gene-based COVID-19 vaccines directly transfect lymphatic endothelial cells and alter sinusoidal functions of the draining lymph node  
**Pinja Thorén, Ruth Fair-Mäkelä, Joni Näsiäho, Pia Sundqvist, Laura Kähäri, Ilkka Julkunen, Johanna Ivaska, Bishwa Ghimire, Jonna Alanko, Marko Salmi** (Finland)
- P2.03.013** Investigation of anti-inflammatory products on adipose derived stem cells and adipogenesis  
**Cathy Brougham** (Ireland)
- P2.03.014** Curcumin regulation of mesenchymal stem cells  
**Cathy Brougham** (Ireland)
- P2.03.015** Temporo-spatial single cell atlas of the regenerating alveolar niche in idiopathic pulmonary fibrosis  
**Praveen Weeratunga, Bethany Hunter, Martin Sergeant, Joshua Bull, Colin Clelland, Laura Denney, Chaitanya Vuppusetty, Rachel Burgoyne, Jeongmin Woo, Tian Hu, Lee Borthwick, Jim Shaw, Agne Antanaviciute, Andrew Filby, Helen Byrne, Andrew Fisher, Ling-Pei Ho** (United Kingdom)
- P2.03.016** To investigate the underlying mechanism of cytokine regulation in diabetic patients  
**Cathy Brougham** (Ireland)



## POSTER SESSION 2

- P2.03.017** Evaluation of the effect of a dressing functionalized with an antimicrobial extract in vivo model  
**Leslie Becerril Serna, Josué Raymundo Solis Pacheco, Blanca-Rosa Aguilar-Uscanga, Mario Soto Flores, Erick Omar Cisneros López** (*Guadalajara*)

### P2.04 GENETIC AND ENVIRONMENTAL TRIGGERS OF AUTOIMMUNITY

- P2.04.01** Clinical features and outcome in two paediatric patients with anti-MDA5 and anti-Ro52 antibodies after viral infection  
**Laura Miguel Berenguel, Daniela Aguilar, Ricardo Cuesta Martin de la Camara, Carmen Cámara Hijón, Ana Martínez Feito, Pilar Nozal Aranda** (*Spain*)
- P2.04.02** Increased phosphorylation indicates continuous antigen-mediated autoreactive B-cell activation in rheumatoid arthritis  
**Sanne Kroos, Nienke J. Blomberg, Joanneke C. Kwekkeboom, Rudi Hendriks<sup>2</sup>, Odilia Corneth, René E.M. Toes, Hans U. Scherer** (*Netherlands*)
- P2.04.03** Complete description of the three pathways of the complement system in patients with rheumatoid arthritis  
**Elena González López, Mónica Renuncio García, J. Gonzalo Ocejó Vinyals, Dara Rodríguez González, María García González, Fuensanta Gómez Bernal, Juan Carlos Quevedo Abeledo, Yolanda Fernández Cladera, Agustín F. González Rivero, Alejandro Jiménez Sosa, Candelaria Martín González, Miguel Á. González Gay, Iván Ferraz Amaro** (*Spain*)
- P2.04.04** Loss of thymic interferon signature in autoimmune regulator-deficient mice  
**Adrianna Jebrzycka, Lars Breivik, Anagha Joshi, Eystein S. Husebye, Anette S.B. Wolff, David Dolan, Bergithe E. Oftedal** (*Norway*)
- P2.04.05** The role of bacterial lipopolysaccharides and gut microbiota dysbiosis in type 1 diabetes  
**Satu Silojärvi, Linda Leino, Sakari Pöysti, Arno Hänninen** (*Finland*)
- P2.04.06** The propensity of B cells to infiltrate the multiple sclerosis brain: impact of genetic variation and environment  
**Laurens Bogers<sup>1</sup>, Jasper Rip<sup>2</sup>, Kirsten Kuiper<sup>1</sup>, Florian Ingelfinger<sup>2</sup>, Jamie van Langelaar<sup>1</sup>, Liza Rijvers<sup>1</sup>, Steven Koetzier<sup>1</sup>, Marie-Jose Melief<sup>1</sup>, Annet Wierenga-Wolf<sup>1</sup>, Cato Corsten<sup>1</sup>, Ursula Boschert<sup>2</sup>, Lisa Gerdes<sup>3</sup>, Burkhard Becher<sup>2</sup>, Joost Smolders<sup>1</sup>, Marvin van Luijn<sup>1</sup>** (*<sup>1</sup>Netherlands, <sup>2</sup>Switzerland, <sup>3</sup>Germany*)
- P2.04.07** Methyl-rich diet suppresses the development of lupus-like symptoms in humanized mouse model of the disease  
**Lidiya Kechidzhieva, Nikola Ralchev, Blagovesta Todorova, Kalina Kalina Tumangelova-Yuzeir, Dobroslav Kyurkchiev, Desislava Kalinova, Simeon Monov, Andrey Tchorbanov, Kalina Nikolova-Ganeva** (*Bulgaria*)
- P2.04.08** Exploring the reduced cytokine production capacity of lymph node T cells observed during the earliest phases of rheumatoid arthritis  
**Aoife O'Byrne, Johanna F. Semmelink, Janne W. Bolt, Mario Maas, Marleen G.H. van de Sande, Lisa G.M. van Baarsen** (*Netherlands*);



## POSTER SESSION 2

- P2.04.09** Evaluation of soluble immune checkpoint proteins in systemic lupus erythematosus and Sjögren's syndrome patients  
**Ege Gürlü, Basak Aru, Müge Bıçakçıl Kalaycı, Gülderen Yanıkkaya Demirel** (Turkey)
- P2.04.10** How does SARS-CoV-2 affect the immune system of lupus nephritis patients? A two-year perspective  
**Anna Wardowska, Michał Komorniczak, Barbara Bułło-Piontecka, Katarzyna A. Lisowska** (Poland)
- P2.04.11** Transfer of IgG of Long-COVID patients induces subgroup-specific symptoms in mice  
**Hung-Jen Chen, Brent Appelman, W. Ashwin Mak, Hanneke Willemsen, Judith Prado, Chiara Geyer, Amélie Bos, Sabine Versteeg, Patricia Silva Santos Ribeiro, Braeden Charlton, Eline L. Schüchner, Fanny Boissard, W. Joost Wiersinga, Michèle van Vugt, Marit J. van Gils, Rob C.I. Wüst, Niels Eijkelkamp, Jeroen den Dunnen** (Netherlands)
- P2.04.12** Immune parameters of patients with systemic lupus erythematosus after COVID-19 infection  
**Katarzyna A. Lisowska, Michał Komorniczak, Barbara Bułło-Piontecka, Anna Wardowska** (Poland)
- P2.04.13** Childhood systemic lupus erythematosus  
**Farva Jalil, Tahir Aziz Ahmed** (Pakistan)
- P2.04.14** Detection of autoantibodies anti-RNP70 in the differential diagnosis and classification of connective tissue diseases  
**Azahara Díaz-Lozano, Angela Lucas Blanco, Luz Cheilly Mosquea Jiménez, María Inmaculada Alcalá Peña, María Luisa Vargas Pérez** (Spain)
- P2.04.15** Clinical relevance of duodenal lymphogram as a diagnostic tool for celiac disease in adults  
**Angela Villegas Mendiola, Laura García Bravo, Kauzar Mohamed Mohamed, Maria Palacios Ortega, Alejandro Pereiro Rodriguez, Teresa Guerra Galan, Maria Dolores Mansilla Ruiz, Marc Perez-Guzman, Juliana Ochoa Grullon, Miguel Fernandez Arquero, María Guzmán Fulgencio, Silvia Sanchez-Ramon** (Spain)
- P2.04.16** Exploring the Impact of EBV Infection on T-bet Expression in B Cells and Its Influence on T Cell Activation and Migration  
**Ioannis Piteros, Fabienne Läderach, Sandra Schmid, Christian Münz** (Switzerland)
- P2.04.17** Zbtb20 as a regulator in the development and activation of the immune system in wild type and heterozygous animals.  
**Iliyan Manoylov, Lidiya Kechidzhieva, Katerina Ilieva, Nikolina Mihaylova, Andrey Tchorbanov** (Bulgaria)
- P2.04.18** Real-life implementation of multiple autoantibody detection for Connective Tissue Disease in a single referral center in Northern Spain  
**Mónica Renuncio García<sup>1</sup>, Paolo Miraglia<sup>2</sup>, Juan José Fernández Cabero<sup>1</sup>, Juan Irure Ventura<sup>1</sup>, Marcos Lopez Hoyos<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Italy)
- P2.04.19** The role of sclerodermatosis/myositis-related autoantibodies detected by immunoblot in the diagnosis of systemic autoimmune rheumatoid arthritis diseases in 410 patients from a single referral center  
**Mónica Renuncio García, Carmen Secada Gómez, Diana Prieto Peña, Ricardo Blanco, Juan Irure Ventura, Marcos Lopez Hoyos** (Spain)

**POSTER SESSION 2**

- P2.04.20** The peripheral MAIT cell TCR $\alpha/\beta$  repertoires alter with age of psoriasis vulgaris patients  
**Stana Tokić, Maja Jirouš Drulak, Vera Pluzaric, Marija Sola, Martina Mihalj, Mario Stefanic** (Croatia)
- P2.04.21** Diagnostic efficacy of anti-SSB versus anti-SSA antibodies in Sjögren's Syndrome and other connective tissue diseases  
**Azahara Díaz-Lozano, Angela Lucas Blanco, Ramon Garcia Alaejos, Marta Aguilar Criado, María Luisa Vargas Pérez** (Spain)
- P2.04.22** The TCR repertoire of circulating  $\gamma\delta$  T lymphocytes in psoriasis vulgaris varies with age and disease severity  
**Maja Jirouš Drulak, Mario Stefanic, Vera Pluzaric, Marija Sola, Martina Mihalj, Stana Tokić** (Croatia)
- P2.04.23** Clinical correlation between anti-centromere antibodies (CENP-B) and autoimmune diseases  
**Angela Lucas Blanco, Azahara Díaz Lozano, Iuz cheilly Mosquea Jiménez, Marta Aguilar Criado, María Inmaculada Alcalá Peña, María Luisa Vargas Pérez** (Spain)
- P2.04.24** Impact of COVID-19 on the prevalence of ANA positivity within the Indian population  
**Vikas Saini, Sangita Gupta, Anamika Keshri, Sonia Malik** (India)
- P2.04.25** Diagnosis of antiphospholipid syndrome based on 2023 ACR/EULAR versus 2006 Sydney criteria, in a population of patients from Cádiz, Spain  
**Javier Galán Picón, Joel Gutiérrez Serrudo, Lucía Pedrosa García, Isabel Serrano García, Carmen Rodríguez** (Spain)
- P2.04.26** Establishing the optimal cut-off value to detect clinically relevant figures of anti-citrullinated protein antibodies for the diagnosis of rheumatoid arthritis  
**Alberto Gallardo García, Jorge Mannelli, Jesús Gálvez Remón, Carmen Rodríguez** (Spain)
- P2.04.27** A rare case of rheumatoid arthritis and sarcoidosis co-occurrence  
**Nurgul Naurzvai** (Turkey)
- P2.04.28** Characterization of a model of vitiligo skin depigmentation in C57BL/6/J mouse tail via immunisation with tyrosinase-related protein 2 (TRP2)  
**Laura Casals, Lluís Boix, Charlie Bridgewood, Joan Mañé, José Luis Montero, Özge Uluçkan, Amadeu Gavalda** (Spain)
- P2.04.29** The impact of peripheral T follicular cells in the diagnosis of ANCA associated glomerulonephritis  
**Michalis Christodoulou, Eleni Moysidou, Stamatia Stai, Vasiliki Nikolaidou, Konstantinos Badis, Pantelis Sarafidis, Asimina Fylaktou, Maria Stangou** (Greece)
- P2.04.30** Genetic landscape of ulcerative colitis: possible novel genetic variants in MST1 in two familial clinical cases  
**Maria del Carmen Barrera Aguilera, Mónica Bernal, Ana Marin, Miguel Ángel López-Nevot** (Spain)
- P2.04.31** Increase in the concentration of granzymes, perforin and granulysin in patients with systemic lupus erythematosus  
**Paola Santana Sánchez, Astrid Asminda Ramírez Pérez, Julian Argenis Gajón Martínez, Paolo Alberti Minutti, Laura Cecilia Bonifaz Alfonso, Adriana Karina Chávez Rueda** (Mexico)

## POSTER SESSION 2

- P2.04.32** Stratification of inflammatory arthritis using immunophenotyping  
**Abel Mekonnen Tesfaye, Erlend Holm-Nordli, Guro Løvik Goll, Hilde Berner Hammer, Andreas Lossius, Silje Watterdal Syversen, Asbjørn Christophersen** (Norway)
- P2.04.33** Explorative study on the role of EBV-mimicry autoantibodies in Myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) and post-COVID syndrome  
**Friederike Hoheisel, Franziska Sotzny, Kerstin Rubarth, Sandra Bauer, Frank Konietzschke, Claudia Kedor, Annika Elisa Stein, Kirsten Wittke, Martina Seifert, Carmen Scheibenbogen** (Germany)
- P2.04.34** Using genetic risk and EBV infection status to decipher the disease-inducing B cell in multiple sclerosis  
**Ana Marques, Sanne Reijm, Laurens Bogers, Jamie van Langelaar, Cato Corsten, Marie-Jose Melief, Annet Wierenga-Wolf, André Uitterlinden, Jeroen van Rooij, Beatrijs Wokke, Joost Smolders, Marvin van Luijn** (Netherlands)
- P2.04.35** Identification of Epstein-Barr Virus microRNAs in blood in multiple sclerosis  
**Victoria Hyslop Hvalkof, Malene Bredahl Hansen, Anna Olsson, Stefan Gustavsen, Annette Bang Oturai, Finn Sellebjerg, Helle Bach Søndergaard** (Denmark)
- P2.04.36** Anti-Ro52 positivity is associated with poorer lung function at diagnosis in connective tissue disease and idiopathic inflammatory myopathy associated interstitial lung disease  
**Robert Harrington, Patricia Harkins, Richard Conway, Ruairi Fahy** (Ireland)
- P2.04.37** Investigating biological age and ELOVL2 expression in ANCA-associated vasculitis  
**Jordy Smith, Isabella Batten, Matt McElheron, Mark Little, Nollaig Bourke** (Ireland)
- P2.04.38** The presence of myositis specific and myositis associated antibodies does not alter prognosis in idiopathic pulmonary fibrosis  
**Robert Harrington, Patricia Harkins, Richard Conway, Ruairi Fahy** (Ireland)
- P2.04.39** Assessment of myositis specific/associated autoantibodies during the COVID-19 pandemic and post pandemic period. The experience of a tertiary care hospital  
**Anastasia Bletsa, Stella Pomoni, Kleio Ampelakiotou, Elisavet Kontou, Nikolaos Athanasiou, Antonios Georgountzos, Konstantinos Soufleros, Konstantinos Kotsifas, Georgios Katsikas, Alexandra Tsirogianni** (Greece)
- P2.04.41** Peptidylglycine alpha-amidating monooxygenase (PAM) is a mediator of tissue damage by rheumatoid arthritis synovial fibroblasts  
**Kevin Sheridan<sup>1</sup>, Emma Dorris<sup>1</sup>, Matthew Fisher<sup>2</sup>, Munitta Muthana<sup>2</sup>, Denis Shields<sup>1</sup>, Richard Mains<sup>3</sup>, Betty Eipper<sup>3</sup>, Christopher Buckley<sup>2</sup>, Anthony G. Wilson<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom, <sup>3</sup>USA)
- P2.04.42** Anti-synthetase antibodies. How to assess results in a clinical laboratory practice  
**Andres Baucells, Mireia Fonolleda, Maria Rosa Julià, Juliana Ochoa Grullon, Yolanda Álvaro, Elisabet Moltó, Eduard Gallardo, Laura Martínez Martínez, Anais Mariscal** (Spain)
- P2.04.43** Age-related evolution of autoantibody specificities in the MLR lpr/lpr mouse strain  
**Wahib Mahana** (France)

## POSTER SESSION 2

**P2.04.44** Silent autoimmunity in rare genetic disease *Incontinentia pigmenti*  
**Stefania Picascia<sup>1</sup>, Ezia Spinosa<sup>1</sup>, Jeremie Rosain<sup>2</sup>, Alessandra Pescatore<sup>1</sup>, Carmela Casale<sup>1</sup>, Mattia Ritorti<sup>1</sup>, Alete Colella<sup>1</sup>, Serena Cabaro<sup>1</sup>, Pietro Formisano<sup>1</sup>, Maria Brigida Lioi<sup>1</sup>, Matilde Valeria Ursini<sup>1</sup>, Paul Bastard<sup>2</sup>, Jean-Laurent Casanova<sup>2,3</sup>, Francesca Fusco<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>France, <sup>3</sup>USA)

**P2.04.45** Metabolic rewiring shapes dendritic cell disease promoting function in autoimmunity  
**Nikos Papaioannou<sup>1</sup>, Georgia Kontogianni<sup>1</sup>, Eliana Mavraki<sup>1</sup>, Dimitra Kerdidani<sup>1</sup>, Rafael Argüello<sup>2</sup>, Themis Alissafi<sup>1</sup>** (<sup>1</sup>Greece, <sup>2</sup>France)

## P2.05 IMMUNE DEFICIENCIES

**P2.05.01** STAT3 haploinsufficiency induces an increase in IgE+ B cell development  
**Virginia Andreani, Nils Ott, Bodo Grimbacher** (Germany)

**P2.05.02** Sex differences influence circadian and circannual variation in circulating alpha-1 antitrypsin  
**Emma Leacy, Daniel Fraughen, Mark Murphy, Michelle Casey, Ronan C. Heeney, Tomás Carroll, Annie M. Curtis, Noel G. McElvaney** (Ireland)

**P2.05.03** Mild phenotype of PSTPIP1-associated myeloid-related proteinaemia inflammatory (PAMI) syndrome: case report. A challenging diagnosis  
**Marina Fernandez-Gonzalez, Carlos Sánchez Rodríguez, Rosana Gonzalez-Lopez, Maria Jose Alegria-Marcos, Ana Menasalvas, Gema Salgado Cecilia, Manuel Muro Amador, Ana Galera, Olga Montes-Ares** (Spain)

**P2.05.04** Clues for diagnosis of hidden primary immunodeficiencies in B-cell lymphoproliferative diseases: a logistic regression approach  
**Maria Palacios Ortega, Adolfo Jimenez Huete, Teresa Guerra Galan, Alejandro Peixoto-Rodriguez, Alejandro Pereiro-Rodriguez, Maria Dolores Mansilla Ruiz, Angela Villegas Mendiola, Kauzar Mohamed Mohamed, Marc Perez-Guzman, Victor Sánchez Ciprian, Alejandra Carrero García, María Guzmán Fulgencio, Juliana Ochoa Grullon, Miguel Fernandez Arquero, Silvia Sanchez Ramon** (Spain)

**P2.05.05** Inhibiting autoreactive CD8+ T-cells in Type 1 diabetes using blocking anti-CD8 $\beta$  antibody to inhibit pancreatic  $\beta$ -cell islet destruction  
**Hamzah Aldali, Amy Ward, David J. Morgan, Ian Cadby, Lindsay Nicholson, James Pearson, Linda Wooldridge** (United Kingdom)

**P2.05.06** Defects in T cell distribution and function in WHIM syndrome patients  
**Clémentine Moulin, Pierre-Edouard Debureaux, Jean Donadieu, Marion Espéli, Karl Balabanian** (France)

**P2.05.07** The different faces of inborn errors of immunity with case examples  
**Nesrin Gulez, Ferah Genel, Figen Celebi Celik, Ozgen Soyoz, Berna Uzunoglu, Necmi Can Yuksel, Emre Firat** (Turkey)

**P2.05.08** Logistic regression for the study of common variable immunodeficiency biomarkers  
**Teresa Guerra Galan, Maria Palacios Ortega, Adolfo Jimenez Huete, Kissy Guevara-Hoyer, Angela Villegas Mendiola, Maria Dolores Mansilla Ruiz, Nabil Subhi-Issa, Antonia Rodríguez de la Peña, María Guzmán-Fulgencio, Miguel Fernandez Arquero, Rebeca Perez de Diego, Silvia Sanchez Ramon** (Spain)



## POSTER SESSION 2

- P2.05.09** Biomarkers in patients with haematological malignancy in response to polyclonal gammaglobulin replacement therapy  
**Alejandro Peixoto Rodríguez, Elsa Mayol Hornero, Juliana Ochoa Grullon, Angela Villegas Mendiola, Maria Palacios Ortega, Maria Dolores Mansilla Ruiz, Carlos Jiménez García, Miguel Fernandez Arquero, Silvia Sanchez Ramon** (*Spain*)
- P2.05.10** Flow cytometry-based protocols for the assessment of B lymphocyte activation after CpG stimulation: a diagnostic approach for primary immunodeficiencies  
**Andreja Natasa Kopitar, Larisa Janzic, Lucija Levstek, Ana Kern, Alojz Ihan** (*Slovenia*)
- P2.05.11** Chediak-Higashi syndrome with associated hemophagocytic lymphohistiocytosis in 3-month-old male patient  
**Raquel Montaña, Iván Menéndez, Carmen Luz Avendaño, Gema Ramírez, Primitivo Buendía, Macarena Castillo, Tamara Arias, Ariana Fonseca, Soledad González, Rebeca Alonso** (*Spain*)
- P2.05.12** Synovial histopathological stratification reveals a relationship between pathotypes and clinical presentation in osteoarthritis  
**Nicolas Gaigard<sup>1</sup>, Anaïs Cardon<sup>1</sup>, Claire Vinatier<sup>1</sup>, Frédéric Blanchard<sup>1</sup>, Denis Waast<sup>1</sup>, Benoît Le Goff<sup>1</sup>, Jerome Guicheux<sup>1</sup>, Marie-Astrid Boutet<sup>1,2</sup>** (<sup>1</sup>*France*, <sup>2</sup>*United Kingdom*)
- P2.05.13** Discovering the T-cell receptor repertoire in apced patients  
**Alexandra Elsakova, Jaanika Kärner, Kai Kisand** (*Estonia*)
- P2.05.14** Immune dysregulation, hypopigmentation and silvery hair syndromes, single centre experience  
**Neslihan Karaca, Ilke Bas, Guzide Aksu, Necil Kutukculer** (*Turkey*)
- P2.05.15** Will sarcoidosis help us understand granulomatous disease in common variable immunodeficiency (CVID) patients?  
**Jessica Ceccato, Giulia Gualtierio, Maria Piazza, Samuela Carraro, Helena Buso, Sabrina Manni, Francesco Piazza, Gianpietro Carlo Semenzato, Livio Trentin, Marcello Rattazzi, Carlo Agostini, Riccardo Scarpa, Fabrizio Vianello, Francesco Cinetto** (*Italy*)
- P2.05.16** Human IL12RB1 deficiency reveals essential roles of IL-12 and IL-23 in innate and adaptive immune responses  
**Alessio Mazzoni, Roberto Semeraro, Anna Vanni, Marta Baragli, Lorenzo Salvati, Boaz Palterer, Manuela Capone, Giulia Lamacchia, Benedetta Peruzzi, Sara Bencini, Roberto Caporale, Lucia Bartoli, Francesca Matani, Stefania Francalanci, Francesco Liotta, Lorenzo Cosmi, Paola Parronchi, Laura Maggi, Alberto Magi, Francesco Annunziato** (*Italy*)
- P2.05.17** Obesity leads to reduced vaccine responses to SARS-CoV-2 in male C57BL/6 mice  
**Nora Geissler, Anna Schmid, Maria Orola-Taus, Erika Garner-Spitzer, Pia Gattinger, Rudolf Valenta, Irma Schabussova, Aleksandra Inic-Kanada, Ursula Wiedermann** (*Austria*)
- P2.05.18** Clinical impact of a non-canonical splicing variant in NFKB1 gene  
**Alicia Jurado Orozco, Carmen Morales García, Alba Exposito Bey, Jose Manuel Lucena Soto** (*Spain*)



**POSTER SESSION 2**

- P2.05.19** Common variable immunodeficiency not associating recurrent infections  
**Vivian Lizeth Stewart DelCid, Ernesto Roldan Santiago, Eulalia Rodríguez Martín, Rafael Rodríguez Ramos, José Luis Veiga González, Ivan Garcia De La Torre, Daniel Albert Mendoza Bravo, Paula Batres Faba, Celia Ferrez Hernández, Elena Manterola Navarro, Rebeca Perez de Diego, Ana De Andres Martin** (Spain)
- P2.05.20** Activated phosphoinositide 3-kinase delta syndrome type I in a patient with significant neurodevelopmental delay  
**Jorge Mannelli, Daniel García-Cuesta, María Sánchez-Códez, Estrella Peromingo-Matute, Francisco Mora-López, Raquel De la Varga-Martínez** (Spain)
- P2.05.21** Patients with common variable immunodeficiency should be vaccinated against viral infections - insight into cellular and antibody responses  
**Jitka Smetanova, Michal Rataj, Tomas Milota** (Czech Republic)
- P2.05.22** Clinical, immunological, and genetic features in patients with NF- $\kappa$ B1 and NF- $\kappa$ B2 defects  
**Nazanin Fathi<sup>1</sup>, Matineh Nirouei<sup>1</sup>, Zahra Salimian Rizi<sup>1</sup>, Saba Fekrvand<sup>1</sup>, Hassan Abolhassani<sup>1</sup>, Fereshte Salami<sup>1</sup>, Arsh Haj Mohamad Ebrahim Ketabforoush<sup>1</sup>, Gholamreza Azizi<sup>2</sup>, Amene Saghadzadeh<sup>1</sup>, Marzie Esmaeili<sup>1</sup>, Amir Almasi-Hashiani<sup>1</sup>, Nima Rezaei<sup>1</sup>** (<sup>1</sup>Iran, <sup>2</sup>USA)
- P2.05.23** NAD<sup>+</sup> as a potential biomarker for chronic lymphocytic leukemia and monoclonal gammopathy of undetermined significance patients with secondary immunodeficiency  
**Elsa Mayol Hornero<sup>1</sup>, Kauzar Mohamed Mohamed<sup>1</sup>, Maria Palacios Ortega<sup>1</sup>, Angela Villegas Mendiola<sup>1</sup>, Maria Dolores Mansilla Ruiz<sup>1</sup>, Won Cheol Choi<sup>2</sup>, Silvia Sanchez Ramon<sup>1</sup>, Jaekyung Cecilia Song<sup>2</sup>** (<sup>1</sup>Spain, <sup>2</sup>South Korea)
- P2.05.24** Exploring SEC61A1 deficiency: a rare genetic cause of common variable immunodeficiency  
**Carmen Morales Garcia, Alba Exposito Bey, Alicia Jurado Orozco, Jose Manuel Lucena Soto** (Spain)
- P2.05.25** Neutrophil functions in patients with a rare disease: pulmonary alveolar proteinosis  
**Nurgul Naurzvai, Aysenur Kokoglu, Ferhad Kohansal Koshksaray, Ayshan Mammadova, Cagri Ulukan, Nurdan Kokturk, Nilgun Yilmaz Demirci, Caglar Cuhadaroglu, Haluk Turktas, Gunnur Deniz, Esin Cetin Aktas** (Turkey)
- P2.05.26** The in vitro functional memory B cell response is intact in most patients with common variable immunodeficiency disorder  
**Sophie Steiner, Kirsten Wittke, Carmen Scheibenbogen, Leif Hanitsch** (Germany)
- P2.05.27** The role of LFA-1 and regulatory T cells in skin inflammation  
**Maike Hartmann, Tanja Klaus, Alicia Wilson, Matthias Bros, Tobias Bopp, Stephan Grabbe** (Germany)
- P2.05.28** Expanding the clinical phenotype of TRAF3 haploinsufficiency syndrome  
**Blanca Angelica Urban Vargas, Laura Battle Masó, Marina García Prat, Alba Parra Martínez, Aina Aguiló Cucurull, Janire Perurena Prieto, Mónica Martínez Gallo, Laith Moushib, Maria Antolin Mate, Jacques G. Rivière, Pere Soler Palacin, Romina Dieli Crimi, Clara Franco Jarava, Roger Colobran** (Spain)
- P2.05.29** AD-HIES patients with impaired STAT3 signalling contain pre-Th17-cells that are activated by opportunistic pathogens to produce IL-10  
**Giorgia Moschetti, Chiara Vasco, Francesca Clemente, Sara Maioli, Elena Carelli, Lucia Baselli, Rosy Dellepiane, Maria Carrabba, Giovanna Fabio, Jens Geginat** (Italy)

## POSTER SESSION 2

- P2.05.30** Heterozygous SERPINA1 defects and their impact on clinical manifestations of patients with predominantly antibody deficiencies  
**Styliani Sarrou, Ioanna Voulgaridi, Athanasia Fousika, Katerina Dadouli, Olympia Margaritopoulou, Ioannis Kakkas, Christos Hadjichristodoulou, Fani Kalala, Matthaïos Speletas** (Greece)
- P2.05.31** Lymphocyte subsets analysis in adult patients affected by common variable immunodeficiency  
**Marco Pio La Manna, Pietro Andrea Accardo, Roberta Migliore, Francesco Arcoleo, Serena Meraviglia, Giulia Bivona, Concetta Scazzone, Valentina Calò, Giulia Ficicchia, Francesco Dieli, Nadia Caccamo** (Italy)
- P2.05.32** Immunological and genetical characterization of novel homozygous DIAPH1 variants  
**Ebtehal Al Sheikh, Tracy Briggs, Glenda Beaman, Tracy Hussell, Peter Arkwright** (United Kingdom)
- P2.05.33** Associations between prenatal per- and polyfluoroalkyl substances (PFAS) exposure and antibody response to childhood vaccines in Norwegian children  
**Berit Brunstad Granum, Gro Tunheim, Johanna Bodin, Cathrine Thomsen, Marta Baranowska-Hustad, Azemira Sabaredzovic, Thea Kristine Rogne Møller, Line Småstuen Haug, Merete Åse Eggesbø, Nina Iszatt** (Norway)
- P2.05.34** Heterozygous LIG4 gene variant in a patient diagnosed with common variable immunodeficiency: a case study  
**Joel Gutierrez-Serrudo, Daniel García-Cuesta, Jorge Mannelli, Javier Galán Picón, Raquel De la Varga-Martínez, José Miguel Aparicio, Antonio Nieto** (Spain)
- P2.05.35** Distinct inflammation profiles in pregnant women living with and without human immunodeficiency virus in Cameroon and their children associate with lower anti-respiratory syncytial virus seroconversion  
**Moritz Schmiedeberg<sup>1</sup>, Honore Awanakam<sup>2</sup>, Romeo Djounda<sup>2</sup>, Modeste Ngamaleu<sup>2</sup>, Kevine Tchamda<sup>2</sup>, Michel Besong<sup>2</sup>, Livo Esemu<sup>2</sup>, Christiane-Krystelle Nganou-Makamdop<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Cameroon)
- P2.05.36** NBEAL2 is involved in CTLA-4 expression regulation in conventional T cells, but not in Tregs  
**Laure Delage, Carbone Francesco, Riller Quentin, Zachary Jean-Luc, Kerbellec Erwan, Stolzenberg Marie-Claude, Pasquier Benoit, Rieux-Laucat Frédéric** (France)
- P2.05.37** Enhanced cross-protection to variants of concern in SARS-CoV-2 vaccinated multiple myeloma patients with mild breakthrough infections  
**Angelika Wagner, Erika Garner-Spitzer, Claudia Auer, Pia Gattinger, Ines Zwazl, Rene Platzer, Maria Orola-Taus, Peter Pichler, Fabian Amman, Andreas Bergthaler, Johannes Huppa, Hannes Stockinger, Christoph Zielinski, Rudolf Valenta, Michael Kundi, Ursula Wiedermann Schmidt** (Austria)
- P2.05.38** A conservative approach: managing ARPC1B deficiency without hematopoietic progenitor cell transplantation  
**Andrea Ferranti, Paulina Vásquez Reyes, Daniel Iguasnia Portilla, Helena Fernández Cabrera, Silvia Romero Chala, Luis Miguel Fernández Pereira** (Uruguay)
- P2.05.39** Omenn syndrome first diagnosis by flow cytometry method  
**Ihsan Deveci, Çağman Tan, Uğur Arslanyürekli, Ercan Küçükosmanoğlu, Özlem Keskin, Elif Arık, Mahmut Cesu** (Turkey)

**POSTER SESSION 2**

- P2.05.40** Immune response to SARS-CoV-2 vaccination and/or infection in immunocompromised children and adolescents  
**Birivan Nabova, Peter Ciznar, Eva Kontsekova** (*Slovakia*)

**P2.06 IMMUNE EXHAUSTION**

- P2.06.01** Evidence of exhausted lymphocytes after the third anti-SARS-CoV-2 vaccine dose in cancer patients  
**Kauzar Mohamed Mohamed, Javier David Benitez Fuentes, Carlos Jimenez Garcia, Kissy Guevara Hoyer, Miguel Fernandez Arquero, Silvia Sanchez Ramon, Pedro Perez Segura** (*Spain*)
- P2.06.02** Effect of Pfizer-BioNTech COVID-19 vaccine booster doses: implications for vaccination strategies in healthcare workers  
**Ester Irene Reina Alfonso, Pablo Álvarez Heredia, Mónica Espinar García, Isabel María Vallejo Bermúdez, Carmen María Gutiérrez González, Alexander Batista Duharte, Fakhri Hassouneh, Juan Eduardo Molina Alcaide, Rafael Solana Lara, Alejandra Pera Rojas** (*Spain*)
- P2.06.03** Characterizing tumor microenvironment-mediated exhaustion in CD8 T Cells: Insights from a hepatocarcinoma model  
**Hacene Dreidi, Marie Le Moine, Sébastien Denanglaire, Solange Dejolier, Abdulkader Azouz, Stanislas Goriely, Fabienne Andris** (*Belgium*)
- P2.06.04** Exclusive expression of PD-1/TIGIT versus TIM3 differentially associates with metabolic plasticity and polarization of HIV-specific CD8<sup>+</sup> T cells  
**Ilya Tsukalov, Marta Calvet-Mirabent, Ildfonso Sánchez-Cerrillo, Alba Roca, Aránzazu Rosado-Díez, Olga Popova, Lucio García-Fraile, Ana Quintas, Arantzazu Alfranca, Ana Dopazo, María José Calzada, Eduardo Balsa, Ignacio de Los Santos, Francisco Sánchez-Madrid, Enrique Martín-Gayo** (*Spain*)
- P2.06.05** Atf7ip-deletion results in attenuated T cell exhaustion and reduced tumor growth  
**Sujit Kashyap, Jun Sin, Michael Waterfield** (*USA*)
- P2.06.07** NLRP3 activation of macrophages regulates intratumoral T cell dysfunction in a pancreatic cancer model - dual mechanism of NLRP3-mediated cytokine secretion and PD-L1 expression  
**Vanessa Zimmer, Benedikt Slusny, Bettina Geisel, Katrin Roth, Malte Buchholz, Thomas M. Gress, Christian Bauer** (*Germany*)
- P2.06.08** Dysregulated inflammatory response and poor fracture healing in polytrauma  
**Augustine Saiz, Maryam Rahmati, Robert Gresham, Tony Baldini, Jane Burgan, Mark Lee, Benjamin Osipov, Blaine Christiansen, Thaqif El Khassawna, Florian Wieland, Andre Lopes, Clement Blanchet, Kent Leach** (*Germany*)
- P2.06.09** A pseudo-temporal framework analysis of exhausted CD8 T cells (Tex) across PD-1 therapy revealed limited “reinvigorability” of exhausted progenitor cells and underlying regulatory pathways  
**Jean-Christophe Beltra<sup>1,2</sup>, Sasikanth Manne<sup>2</sup>, Morgan Le Gall<sup>1</sup>, Hélène Mereau<sup>1</sup>, John Wherry<sup>2</sup>** (*<sup>1</sup>Switzerland, <sup>2</sup>USA*)
- P2.06.10** Type 1 interferons and Foxo1 down-regulation play a key role in age-related T-cell exhaustion in mice  
**Aurélien Durand, Nelly Bonilla, Level Théo, Zoé Ginestet, Amélie Lombès, Morgane Le Gall, Bruno Martin, Cédric Auffray, Bruno Lucas** (*France*)

## POSTER SESSION 2

- P2.06.11** The functional effects of PMN-MDSC on PD-1+ and PD-1- effector memory CD4+ T cells under PD-1 immune checkpoint blockade  
**Ece Tavukcuoglu Demir<sup>1,2</sup>, Feyza Gul Ozbay Kurt<sup>2</sup>, Ihor Arkhypov<sup>2</sup>, Samantha Lasser<sup>2</sup>, Kerim Bora Yilmaz<sup>1</sup>, Jochen Utikal<sup>2</sup>, Viktor Umansky<sup>2</sup>, Güneş Esendağlı<sup>1</sup>** (<sup>1</sup>Turkey, <sup>2</sup>Germany)
- P2.06.13** The impact of metformin on circulating natural killer and natural killer T cell activation in prediabetes  
**Adelle Ankadu** (South Africa)
- P2.06.14** Distinct phenotype and function of TIGIT expressing circulating versus intratumoral NK and CD8 T cells in mouse and human sarcoma models  
**Marshall Lammers, Cyrus Sholevar, Sean Judge, Khurshid Iranpur, Lauren Farley, Ryan Nielsen, Arta Monjaze, William Murphy, Robert Canter** (USA)
- P2.06.15** HDAC1 controls the generation and maintenance of effector-like CD8+ T cells during chronic viral infection  
**Ramona Rica, Monika Waldherr, Marlene Schüle, Emi Miyakoda, Lisa Sandner, Valentina Stolz, Darina Waltenberger, Thomas Krausgruber, Christoph Bock, Nicole Boucheron, Wilfried Ellmeier, Shinya Sakaguchi** (Austria)

## P2.07 IMMUNE MEMORY DEVELOPMENT

- P2.07.01** Tbet+CD11c+ B cells: professional antigen-presenting cells in untreated rheumatoid arthritis  
**Sarah McGrath, Kristoffer Nilsson Grimstad, Katrin Thorarinsdottir, Kristina Forslind, Daniel Glinatsi, Monica Leu Agelii, Alaitz Aranburu, Timothy Sundell, Charlotte Jonsson, Alessandro Camponeschi, Anna-Karin Hultgård Ekwall, Andreas Tilevik, Inger Gjertsson, Lill Mårtensson** (Sweden)
- P2.07.03** Diversity and survival of circulating and bone marrow-resident memory T cells  
**Emilia Schneider Revueltas<sup>1</sup>, Lukas Heiberger<sup>1</sup>, Marta Ferreira-Gomes<sup>1</sup>, Pawel Durek<sup>1</sup>, Gabriela M. Guerra<sup>1</sup>, Jun Dong<sup>1</sup>, Koji Tokoyoda<sup>1,2</sup>, Frederik Heinrich<sup>1</sup>, Mir-Farzin Mashreghi<sup>1</sup>, Hyun-Dong Chang<sup>1</sup>, Andreas Radbruch<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Japan)
- P2.07.04** Specificity in encoding and phenotype of innate immune memory  
**Aoife O'Farrell, Zijian Niu, Jingxin Li, Laura Van Eyndhoven, Arjun Raj** (USA)
- P2.07.05** Investigating the impact of *Staphylococcus aureus* exposure on innate immune memory  
**Seán Cahill, Clíodhna Daly, Rachel McLoughlin** (Ireland)
- P2.07.07** Examining B cell maturation and antibody diversity in HIV-1 vaccine response: A multimerization and high-throughput sequencing study in the rhesus macaque model  
**Shawn Herring, Andrew Raappana, Nicholas Dambrauskas, Madeline Glad, Vladimir Vigdorovich, Noah Sather** (USA)
- P2.07.08** Training for disaster: macrophages, obesity, and the potential of mesenchymal stromal cells  
**Laura Bitterlich, Andrew Hogan, Karen English** (Ireland)



**POSTER SESSION 2**

- P2.07.09** Dietary supplementation with b-glucan induces trained immunity, correcting immune-metabolic perturbations and enhancing anti-tumour function in dietary induced obesity  
**Anna Ledwith, Hannah Prendeville, Cian Horneck Johnston, John McGrath, Stephen Cunningham, Frederick Sheedy** (*Ireland*)
- P2.07.11** EBI2 expression is a ubiquitous feature of murine and human tissue-resident memory T cells and functionally segregates them  
**Lucas Arendholz<sup>1</sup>, Yizhu Tian<sup>1</sup>, Julius Schwingen<sup>1</sup>, Tonia Bargmann<sup>2</sup>, Klaudia Maria Grieger<sup>1</sup>, Valerie Beneke<sup>1</sup>, Franziska Keidel<sup>1</sup>, Sonja Moos<sup>1</sup>, Zeina Salloum<sup>1</sup>, Knut Schäkel<sup>1</sup>, Stefano Casola<sup>2</sup>, Florian Kurschus** (<sup>1</sup>Germany, <sup>2</sup>Italy)
- P2.07.12** Exploring MAL signalling as a mechanistic mediator of IFN $\gamma$ -induced trained immunity  
**Isabella Batten, Dearbhla Murphy, Sarah Connolly, Grainne Jameson, Sharee Basdeo** (*Ireland*)
- P2.07.14** Effect of immunosuppressive regimen on cellular and humoral immune response to SARS-CoV-2 vaccination in anti-CD20 treated hematological patients and in solid organ transplant recipients  
**Laura Maggi, Anna Vanni, Manuela Capone, Lorenzo Salvati, Alessio Mazzoni, Giulia Lamacchia, Seble Tekle Kiros, Lorenzo Cosmi, Benedetta Puccini, Vito Terlizzi, Paola Romagnani, Gian Maria Rossolini, Alessandro Bartoloni, Francesco Liotta, Francesco Annunziato** (*Italy*)
- P2.07.15** Killing IgE+ plasma cells: The role of IgE B cell receptor in human IgE+ plasma cell survival  
**Faruk Ramadani, Tooki Chu, Helena Tolarova, Pavel Tolar** (*United Kingdom*)
- P2.07.16** Smallpox-vaccinated individuals preserve long-term immunological memory and mount serological reactivity against selected monkeypox antigens  
**Marcin Chodkowski, Aleksandra Osinska, Magdalena Patrycy, Malgorzata Krzyzowska** (*Poland*)
- P2.07.17** Innate training through diet: recognition of a yeast  $\beta$ -glucan triggers immunometabolic signaling required for trained immunity  
**Cian Horneck Johnston, Anna Ledwith, Mimmi Lundahl, Hugo Charles-Messance, Emer Hackett, Simon O'Shaughnessy, Jonah Clegg, Hannah Prendeville, John McGrath, Aaron Walsh, Sarah Case, Hollie Austen Byrne, Elaine Dempsey, Sinéad Corr, Fred Sheedy** (*Ireland*)
- P2.07.18** SARS-CoV-2 mRNA vaccination expands type 2 and type 4 atypical memory B cells with distinct metabolic requirements and unique class-switch recombination patterns  
**Guillem Montamat, Joseph C. F. Ng, Alexander T Stewart, Christopher Piper, Zara Baig, Daina Kateregga, Paul Blair, Deborah K. Dunn-Walters, Franca Fraternali, Claudia Mauri** (*United Kingdom*)
- P2.07.19** Targeting glutaminolysis pathway in trained immunity induced by oxidized low-density lipoprotein  
**Alice Scarpa<sup>1</sup>, Katarzyna Placek<sup>1</sup>, Vasiliki Matzaraki<sup>2</sup>, Laszlo Groh<sup>2</sup>, Siroon Bekkering<sup>2</sup>, Mihai Netea<sup>2</sup>, Karsten Hiller<sup>1</sup>, Tushar More<sup>1</sup>, Niels Riksen<sup>2</sup>** (<sup>1</sup>Germany, <sup>2</sup>Netherlands)



## POSTER SESSION 2

### P2.08 IMMUNE REGULATION IN CANCER

- P2.08.01** Stiffness regulates dendritic cell and macrophage subtype development and increased stiffness induces a tumor associated macrophage phenotype in cancer co-cultures  
**Carla Guenther** (*Japan*)
- P2.08.02** RNAseq analyses uncover the transcriptional signature of NK cells and reveal S1P5 and CXCR4 as new targets to modulate tumor cell killing  
**Marta Puig Gamez, Martijn Van Attekum, John E Park** (*Germany*)
- P2.08.03** KIR2DL5 in bladder cancer susceptibility and treatment response  
**Inmaculada Ruiz Lorente, Lourdes Gimeno Arias, Alicia López Abad, Maria Victoria Martínez Sánchez, Diana Ceballos Francisco, Pedro López Cubillana, Alfredo Minguela Puras** (*Spain*)
- P2.08.04** Modulation of ILC3 metabolism as a potential therapeutic target for colitis-dependent colorectal cancer  
**Raquel Castillo-González, Lucía Sancho, Lúa Blanco-Axpe, Irene Torres-Pulido, Alba Seguí-Pérez, Cristina Villa-Gómez, Aranzazu Cruz-Adalia** (*Spain*)
- P2.08.05** Multiparametric lymphocyte characterization in ovarian cancer: Identifying possible targets for immunotherapy  
**Veronika Lutz, Hartmann Raifer, Magdalena Huber** (*Germany*)
- P2.08.06** SH2D2A is an indicator of favourable prognosis in bladder cancer and is enriched in activated Treg cells  
**Brian Christopher Gilmour, Johan Georg Visser, Alvaro Kohn-Luque, Andreas Lossius, Anne Spurkland** (*Norway*)
- P2.08.07** Study of the interaction of tumor exosomes with neutrophils. Implication in the induction of NETosis  
**Lara Álvarez Rodríguez, Juan Mozas Gutiérrez, Almudena Rocha Mulero, Carlos Cabañas Gutiérrez, Raquel Reyes Manzananas, Esther M. Lafuente** (*Spain*)
- P2.08.09** Differential regulation of the chemokine CCL21 in the antitumor immune response in non-small cell lung cancer  
**Maria Riutort-Garvi, Pablo Delgado-Wicke, Carlos Cuesta-Mateos, Arantzazu Alfranca** (*Spain*)
- P2.08.10** Exploiting the cGAS/STING pathway to revert the immunosuppressive environment of multiple myeloma and boost Natural Killer cell-mediated immunosurveillance  
**Chiara Cassone, Eleonora Gnocchini, Elena Sproviero, Francesca Fazio, Maria Teresa Petrucci, Cristina Cerboni, Alessandra Soriani, Marco Cippitelli, Alessandra Zingoni** (*Italy*)
- P2.08.11** RNA polymerase I Inhibition and activation of nucleolar stress response in the anticancer activity of natural killer cells against multiple myeloma  
**Elena Sproviero<sup>1</sup>, Tommaso Cipollone<sup>1</sup>, Eleonora Gnocchini<sup>1</sup>, Sara Petillo<sup>2</sup>, Chiara Cassone<sup>1</sup>, Alessandra Zingoni<sup>1</sup>, Alessandra Soriani<sup>1</sup>, Cristina Cerboni<sup>1</sup>, Maria Teresa Petrucci<sup>1</sup>, Francesca Fazio<sup>1</sup>, Marco Cippitelli<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>USA*)

**POSTER SESSION 2**

- P2.08.12** Dendritic cell reprogramming through the tumor secretome affects anti-tumor immunity in PDAC  
**Tharrun Daniel Paul, Benedikt Stegemann, Caroline Lewe, Michael Hertl, Matthias Lauth, Elke Pogge von Strandmann, Prof. Johannes U. Mayer** (Germany)
- P2.08.13** Investigating the expression of soluble immunomodulatory mediators in risk-stratified pancreatic cystic fluid and its effect on immune cell migration and T cell function.  
**Rebecca Lyons, Laura Kane, Gregory Mellotte, Aoife Kilgallon, Barbara Ryan, Stephen Maher, Joanne Lysaght** (Ireland)
- P2.08.14** Characterizing the impact of lymphocyte-derived extracellular vesicles on T cell function in hematologic malignancies  
**Lucija Levstek, Larisa Janzic, Alojz Ihan, Andreja Natasa Kopitar** (Slovenia)
- P2.08.16** An organoid-based model to study innate lymphoid cells in colorectal cancer  
**Lorenzo Lucantonio, Andrea Kosta, Giuseppe Pietropaolo, Francesca Sozio, Silvia Ruggeri, Mattia Laffranchi, Laura Beltrame, Helena Stabile, Rosa Molfetta, Giuseppe Sciumè, Giovanni Bernardini, Silvano Sozzani, Angela Gismondi, Angela Santoni, Cinzia Fionda** (Italy)
- P2.08.17** A prototype of biocompatible solid lipid nanoparticles targeting CD19 antigen  
**Raquel Bernardo, Ana Navas, Juan Eduardo Molina Alcaide, Carmen Gutiérrez, Lide Arana, Aurora Jurado Roger** (Spain)
- P2.08.18** Repeated antigenic stimulation induces expression of surface 'Tumor necrosis factor related apoptosis ligand' on human invariant Natural Killer T cells  
**Zeynep Ayyildiz, Gerhard Wingender** (Turkey)
- P2.08.19** Effect of local X-ray radiation doses on circulating immune populations in melanoma tumour-bearing mice by flow cytometry  
**Ainara Barco-Tejada, Rocio López-Esteban, Elena Blázquez-López, Marjorie Pion, Rafael Correa-Rocha, Manuel Desco, Lorena Cussó** (Spain)
- P2.08.20** Blinatumomab and tyrosine kinase inhibitors in B-acute leukemia: friends, or enemies?  
**Adam Obr, Michal Plodik, Tereza Koranova, Denisa Myslivcova, Katerina Kuzelova, Barbora Frdlikova, Kristyna Smilauerova** (Czech Republic)
- P2.08.21** Comparative analysis of adjuvants and their synergistic effect for the activation of murine liver non-parenchymal cells  
**Malin Svensson, Yanira Zeyn, María-José Limeres, Maximiliano Cacicedo, Rocio Gambaro, Ignacio Berti, German Islan, Matthias Bros, Stephan Gehring** (Germany)
- P2.08.22** B cells as a target for immunotherapy in non-alcoholic steatohepatitis and subsequently for hepatocellular carcinoma  
**Aysan Pousardeghe Zonouzi, Svenja Schühle, Zeynep Ergun, Mathias Heikenwälder, Ari Waisman** (Germany)
- P2.08.23** B cell expansion during gut inflammation exacerbates colorectal cancer development  
**Romy Mittenzwei, Petra Adams-Quack, Thomas Wunderlich, Björn Clausen, Johannes Friedhelm Vogt, Nadine Hoevelmeyer** (Germany)

## POSTER SESSION 2

- P2.08.24** Acquired resistance to trastuzumab and neratinib sensitizes HER2+ breast cancer cells to trastuzumab-dependent cell-mediated cytotoxicity  
**Javier Sanchez Ramirez, Debbie O'Reilly, John Crown, Denis M Collins** (*Ireland*)
- P2.08.25** Microbial metabolites suppress the tumorigenic functions of IL-36 cytokines in colon cancer  
**Méabh Finucane, Aileen Houston, Elizabeth Brint** (*Ireland*)
- P2.08.26** Serial monitoring of the inflammatory response in resectable lung cancer  
**Laura Staunton, Brian Hendersen, Derek G. Doherty, Ronan Ryan, Gary Fitzmaurice, Kathy Gately** (*Ireland*)
- P2.08.27** Cyp27a1-driven metabolic control in macrophages regulates the tumor microenvironment  
**Piyal Saha, Paul Ettel, Roko Sango, Andrea Vogel, Lovro Davidovski, Jayne Louise Wilson, ThomasW Weichhart** (*Austria*)
- P2.08.28** Effect of melanoma on circulating immune populations in a murine model by flow cytometry  
**Ainara Barco-Tejada, Rocio López-Esteban, Elena Blázquez-López, Rafael Correa-Rocha, Marjorie Pion, Manuel Desco, Lorena Cussó** (*Spain*)
- P2.08.29** RANK pathway inhibition impairs immunosuppression in macrophages enhancing the anti-tumour response  
**Alexandra Barranco, Gema Perez-Chacon, Andrea Vethencourt, Eva Maria Trinidad, Marina Ciscar, Edu Dorca, Ana Petit, Maria Teresa Soler-Monso, Maria Jimenez, Ruth Alvarez, Gonzalo Gomez, Elena Piñeiro, Gonzalo Soria-Alcaide, Ander Urruticoechea, Sonia Pernas, Catalina Falo, Eva González-Suárez** (*Spain*)
- P2.08.30** ROR-1 defines a population of atypical B cells in peripheral blood phenotypically linked to malignant cells of chronic lymphocytic leukemia  
**Antonia Mikulova, Olga Vondálová-Blanářová, Hana Plešingerová, Petr Tauš, Jitka Stančíková, Jan Stuchlý, Jana Kotašková, Karla Plevová, Tomáš Arpáš, Tomáš Kalina, Vítězslav Bryja, Pavlína Janovská** (*Czech Republic*)
- P2.08.31** Autoantibodies against AFP in liver diseases  
**Juan Francisco Delgado de la Poza, Jordi Sánchez Delgado, María Isabel Aparicio Calvente, Raquel Escribano Tembleque, Meritxell Casas Rodrigo, Cristina Solé Martí, Mireia Miquel Planas, Mercè Vergara Gómez** (*Spain*)
- P2.08.32** Role of innate CD8 T-cells in the control of residual disease in chronic myeloid leukemia  
**Amandine Decroos, Sarah Meddour, Amélie Pioch, Alice Barbarin, André Herbelin, Jean-Marc Gombert, Emilie Cayssials** (*France*)
- P2.08.33** Immunomodulatory effects of repetitive radiofrequency ablation in inoperable pancreatic adenocarcinoma  
**Nino Toria, Tinatin Chikovani, Malkhaz Mizandari, Nona Janikashvili, Nino Kikodze** (*Georgia*)
- P2.08.34** The tyrosine kinase inhibitor dasatinib impedes adaptive cell surveillance in peripheral lymph nodes  
**Daniela Claudino Carvoeiro<sup>1</sup>, Ana Marcos-Jiménez<sup>2</sup>, Cecilia Muñoz-Calleja<sup>2</sup>, Jens Volker Stein<sup>1</sup>** (<sup>1</sup>*Switzerland*, <sup>2</sup>*Spain*)

### POSTER SESSION 2

- P2.08.35** Dysfunctional  $\gamma\delta$  T cells are associated with aggressive squamous cell carcinoma in *Epidermolysis bullosa*  
**Leonie Schöftner<sup>1</sup>, Julia Feiser<sup>1</sup>, Michael Lew<sup>1</sup>, Anshu Sharma<sup>1</sup>, Suraj Varkhande<sup>1</sup>, Monika Ettinger<sup>1</sup>, Susanne Kimeswenger<sup>1</sup>, Christina Guttman-Gruber<sup>1</sup>, Giorgia Nasi<sup>1</sup>, Iris Gratz<sup>1,2</sup>** (<sup>1</sup>Austria, <sup>2</sup>USA)
- P2.08.36** Role of SHP-2 and PD-1 in lymphoid and myeloid antitumor responses  
**Irene Buzzago, Pedro Ventura, Alessandro Zenobi, Hanif Javanmard Khameneh, Francesca Silini, Laurent Brossay, Greta Guarda** (USA)
- P2.08.37** Analysis of infiltrating MC subsets in colorectal cancer by single-cell RNA-sequencing  
**Erisa Putro, Alessia Carnevale, caterina marangio, Giovanna Peruzzi, Cinzia Fionda, Helena Stabile, Giuseppe Pietropaolo, Giuseppe Sciumè, Angela Gismondi, Rosa Molfetta, Valerio Fulci, Rossella Paolini** (Italy)
- P2.08.38** Intra-tumour mature tertiary lymphoid structures (TLSs) predict better prognosis and response to immunotherapy in clear cell renal cell cancer  
**Jiahe Lu, Wenhao Xu, Xi Tian, Aihetaimujiang Anwaier, Shiqi Ye, Yuhao Wu, Wangrui Liu, Hailiang Zhang, Dingwei Ye** (China)
- P2.08.39** A tale of two species: Unveiling the involvement of tissue type 3 dendritic cells with intratumoral T cell behavior  
**Giuseppe Rocca, Alessia Donato, Giulia Protti, Anna Celant, Marco Galli, Giulia Stucchi, Stefano Cozzi, Ilaria Fontana, Laura Marongiu, Metello Enzo Innocenti, Francesca Granucci** (Italy)
- P2.08.40** Neutrophil subset investigation in stage III melanoma patients undergoing anti-PD-1 immunotherapy or anti-BRAF/MEK target therapy  
**Marialuisa Trocchia, Leonardo Cristinziano, Luca Modestino, Annagioia Ventrici, Stefania Loffredo, Anne Lise Ferrara, Carlo Gabriele Tocchetti, Teresa Troiani, Gianni Marone, Maria Rosaria Galdiero** (Italy)
- P2.08.41** Plasma cell hyperplasia in immune-cold triple negative breast cancer is prognostic of inferior outcome  
**Ellie Alberts, Victoire Boulat, Miu Shing Hung, Fangfang Liu, Thomas Hardiman, Mengyuan Li, Jelmar Quist, Cheryl Gillett, Sarah Pinder, Dinis Pedro Calado, Anita Grigoriadis** (United Kingdom)
- P2.08.42** Hepatocellular carcinoma drives tissue-resident NK cell regulation of CD8+ T cells through the PD-L1 axis  
**Stephanie Kucykowicz, Gloryanne Aidoo-Micah, Daniel Brown Romero, George Finney, Anandita Mathur, Alberto Quaglia, Andrew Hall, Jack Leslie, Derek Mann, Laura J. Pallett, Mala K. Maini, Mariana Diniz** (United Kingdom)
- P2.08.43** Association of circulating inflammatory factors with postoperative complications after gastric cancer surgery  
**Neringa Dobrovolskiene, Agata Mlynska, Daniel Doval, Vita Pasukoniene** (Lithuania)
- P2.08.44** Tumours of different invasiveness secrete small extracellular vesicles of distinct lipid composition influencing CD1a-restricted T cell responses  
**Mikolaj Klimczuk, Felicia Gajdowska, Michał Młynarczyk, Weronika Hewelt-Belka, Danuta Gutowska-Owsiak** (Poland)

## POSTER SESSION 2

- P2.08.45** NK-LGL comprise dominant pools of adaptive NK cells that help distinguish from NK cell expansions  
**Tim Holmes<sup>1,2</sup>, Ram Pandey<sup>2</sup>, Paolo Cirillo<sup>1</sup>, Yenan Bryceson<sup>1,2</sup>** (<sup>1</sup>Norway, <sup>2</sup>Sweden)
- P2.08.47** Lamps and autophagy as predictive markers in colorectal cancer - A pilot study  
**Tsvetomira Ivanova, Diana Molander, Dorian Dikov, Yordan Sbirkov, Maria Kazakova, Valentin Dichev, Nikolay Mehterov, Angel M. Dzhambov, Nikolay Belev, Boyko Atanasov, Victoria Sarafian** (Bulgaria)
- P2.08.48** Significance of standard laboratory techniques in the monitoring of monoclonal gammopathies  
**Mariem Marrak, Dhouha Krir, Imen Zamali, Yosra Nasri, Hayet Kebaier, Ines Ben Sghaier, Ahlem Ben Hmid, Melika Ben Ahmed, Yousr Galai** (Tunisia)
- P2.08.49** Strong YKL-40 expression in the invasive tumor front of colorectal cancer - a pilot study  
**Maria Kazakova<sup>1</sup>, Tsvetomira Ivanova<sup>1</sup>, Diana Molander<sup>1</sup>, Dorian Dikov<sup>2</sup>, Kiril Simitchiev<sup>1</sup>, Yordan Sbirkov<sup>1</sup>, Victoria Sarafian<sup>1</sup>** (<sup>1</sup>Bulgaria, <sup>2</sup>France)
- P2.08.50** Histone 3 acetylation is altered in NK cells from metastatic breast cancer patients  
**Ethan Collins, Clair Gardiner, Ciara O'Hanlon Brown** (Ireland)
- P2.08.51** Activated human macrophages suppress growth and kill cancer cells  
**Jan-Morgan Dybdal, Inger Øynebråten, Alexandre Corthay** (Norway)
- P2.08.52** CD84 as a therapeutic target for breaking immune-tolerance in triple-negative breast cancer  
**Stav Rabani<sup>1</sup>, Emine Gulsen Gunes<sup>2</sup>, Martin Gunes<sup>2</sup>, Bianca Pellegrino<sup>1</sup>, Bar Lampert<sup>1</sup>, Keren David<sup>1</sup>, Aimin Li<sup>2</sup>, Raju Pillai<sup>2</sup>, Shirly Herman<sup>1</sup>, Steven T. Rosen<sup>2</sup>, Idit Shachar<sup>1</sup>** (<sup>1</sup>Israel, <sup>2</sup>USA)
- P2.08.53** Colorectal cancer-infiltrating  $\gamma\delta$  T cells express immunological checkpoints and correlate with microsatellite instability and patients outcome  
**Marta Di Simone, Anna Maria Corsale, Mojtaba Shekarkar Azgomi, Costanza Dieli, Cirino Botta, Serena Meraviglia, Francesco Dieli** (Italy)
- P2.08.54** Does serum free light chain ratio predict the detection of Bence-Jones protein in urine?  
**Laura García Bravo, Mireia Fonolleda, Arnau Sánchez, M<sup>a</sup> Carmen Rico** (Spain)
- P2.08.55** NK cells with adhesion defects and reduced cytotoxic functions are associated with a poor prognosis in multiple myeloma  
**Bineta Rigaud, Eve Blanquart, Ruçhan Ekre, Pierre-Paul Axisa, Ludovic Martinet** (France)
- P2.08.56** Antitumor dynamics of Natural Killer cells in 3D tumor organoid model  
**Jue Shi** (Hong Kong)
- P2.08.57** The expression of metallothionein in various molecular types of breast cancer  
**Damir Grebic, Tamara Gulic, Sara Bilic Knezevic** (Croatia)
- P2.08.58** BAP1 deletion disrupts IFN $\gamma$  signaling and sensitizes cancer cells to NK cell cytotoxicity  
**Chiara Badami, Linnea Kristenson, Frida Svensson, Theebiga Kathirkamanathan, Fredrik Bergh Thorén** (Sweden)



## POSTER SESSION 2

- P2.08.59** Restraining mitochondrial oxidative stress tailors regulatory T cells fate to unleash antitumor immunity  
**Dimitra Kerdidani<sup>1</sup>, Katerina Zacharopoulou<sup>1</sup>, Dimitris Laoutaris<sup>1</sup>, Aggeliki Siafololi<sup>1</sup>, Dimitra Spyropoulou<sup>1</sup>, Nikos Papaioannou<sup>1</sup>, Rafael Argüello<sup>2</sup>, Panayotis Verginis<sup>1</sup>, Themis Alissafi<sup>1</sup>** (<sup>1</sup>Greece, <sup>2</sup>France)
- P2.08.60** Study of Sialic acid/SIGLEC axis in PDAC tumor microenvironment (TME)  
**Shabnam Khalilnezhad, Xiaofei Yu, Kelly Boelaars, Ernesto Rodriguez Camejo, Laura Kruijssen, Febe Maldegem, Yvette van Kooyk** (Netherlands)
- P2.08.61** Deletion of the TMEM30A gene allows leukemic cell evasion of NK cell cytotoxicity  
**Linnea Kristenson<sup>1</sup>, Chiara Badami<sup>1</sup>, Angelica Ljungberg<sup>1</sup>, Erna Islamagic<sup>1</sup>, Yarong Tian<sup>1</sup>, Guojiang Xie<sup>1</sup>, Brwa Hussein<sup>1</sup>, Silvia Pesce<sup>2</sup>, Ka-Wei Tang<sup>1</sup>, Fredrik Bergh Thorén<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>Italy)
- P2.08.62** Investigating neuroinflammation in the human brain tumor microenvironment using the new RNAscope™ multiomic assay  
**Debia Wakhloo<sup>1</sup>, Sonali Deshpande<sup>1</sup>, Li-Chong Wang<sup>1</sup>, Andrew Wilcox<sup>2</sup>, John Pulliam<sup>1</sup>, Ge-Ah Kim<sup>1</sup>, Maithreya Srinivasan<sup>1</sup>, Anushka Dikshit<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>United Kingdom)

## P2.09 IMMUNE RESPONSE REGULATION: CELLULAR MECHANISMS

- P2.09.01** The interplay between intracellular pathogen proliferation and host cell death induction and metabolism during *L. major* infection  
**Leon-Alexander Dewitz, Iris Baars, Andreas Müller** (Germany)
- P2.09.02** Mitochondria in intercellular communication between stem cells and B cells  
**Veronika Somova<sup>1</sup>, Natalie Fikarova<sup>1</sup>, Daniel Vasek<sup>1</sup>, Natalie Jaborova<sup>1</sup>, Martin Prevorovsky<sup>1</sup>, Zuzana Nahacka<sup>1</sup>, Jiri Neuzil<sup>1,2</sup>, Magdalena Krulova<sup>1</sup>** (<sup>1</sup>Czech Republic, <sup>2</sup>Australia)
- P2.09.03** Molecular mechanisms and therapeutic implications of T and B cell subpopulations in common variable immunodeficiency with granulomatous-lymphocytic interstitial lung disease  
**Alejandro Pereiro Rodríguez, Nabil Subhi-Issa, Maria Palacios Ortega, Teresa Guerra Galan, Kauzar Mohamed Mohamed, Maria Dolores Mansilla Ruiz, Angela Villegas Mendiola, Marc Perez-Guzman, María Guzmán-Fulgencio, Miguel Fernandez Arquero, Silvia Sanchez Ramon** (Spain)
- P2.09.04** Mast cells switch their secreted cytokine profile from pro-inflammatory to pro-tolerant upon prologued IL-33 exposure  
**Andrea Teufelberger<sup>1</sup>, Carolin Költgen<sup>1</sup>, Melanie Heßler<sup>2</sup>, Magda Babina<sup>2</sup>, Peter Wolf<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Germany)
- P2.09.05** Activation of the noncanonical caspase-4/-5 inflammasome in human endothelial cell results in secretion of proinflammatory proteins and macrophage activation  
**Katariina Nurmi<sup>1</sup>, Martina Lorey<sup>1</sup>, Jukka Parantainen<sup>1</sup>, Wojciech Cypriak<sup>2</sup>, Vesa-Petteri Kouri<sup>1</sup>, Tuula Anneli Nyman<sup>3</sup>, Kari K. Eklund<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>Poland, <sup>3</sup>Norway)

## POSTER SESSION 2

- P2.09.06** Signaling lymphocyte activation molecule 7 (SLAMF7) in the differentiation of human, pathogen-specific T cells  
**Lisette Fickenscher, Katrin Vogel, Irina Han, Aditya Arra, Holger Lingel, Jan-Erik Sander, Dirk Bretschneider, Monika Brunner-Weinzierl** (*Germany*)
- P2.09.07** Targeting of SLAMF7 on human CD8<sup>+</sup> T cells to enhance responsiveness against tumor-associated antigens  
**Jan-Erik Sander, Holger Lingel, Katrin Vogel, Aditya Arra, Irina Han, Lisette Fickenscher, Monika Brunner-Weinzierl** (*Germany*)
- P2.09.08** Immunity of lipid-lowering drugs – how statins and PCSK9 inhibition shape immune phenotype and function  
**Philipp Schatzlmaier, Michael Leutner, Sarah Hofer-Zeni, Alexandra Kautzky-Willer, Hannes Stockinger** (*Austria*)
- P2.09.09** Role of the production of cytokines induced by excess mechanical stress in human periodontal ligament cells  
**Hideobu Senpuku, Erika Yamashita, Toshiki Uematsu, Shinichi Negishi** (*Japan*)
- P2.09.10** Cytokine profiling in mouse spleen cell culture supernatants using multiplexed bead-based immunoassay: comparison of flow cytometry and xMAP technology  
**Raluca Chelms, Irina-Elena Ionescu, Iuliana Caras, Vlad Tofan, Catalin Tucureanu, Adrian Onu, Crina Stavaru** (*Romania*)
- P2.09.11** The impact of growth factors and differentiation conditions on murine bone marrow-derived dendritic cells: Phenotypic and functional evaluation  
**Irina-Elena Ionescu, Catalin Tucureanu, Raluca Chelms, Vlad Tofan, Adrian Onu, Crina Stavaru, Iuliana Caras** (*Romania*)
- P2.09.12** Human MAIT cell profiles biased towards IL-17 or IL-10 are transient effector states directed by the cytokine milieu  
**Caroline Boulouis<sup>1</sup>, Elli Mouchtaridi<sup>1</sup>, Thomas R. Müller<sup>1</sup>, Jeffrey Y.W. Mak<sup>2</sup>, David P. Fairlie<sup>2</sup>, Peter Bergman<sup>1</sup>, Jakob Michaëlsson<sup>1</sup>, Jonas Halfvarson<sup>1</sup>, Jenny Mjösberg<sup>1</sup>, Marcus Buggert<sup>1</sup>, Johan K. Sandberg** (<sup>1</sup>*Sweden*, <sup>2</sup>*Australia*)
- P2.09.13** Macrophages treated with interferons induce different response in lymphocytes via extracellular vesicles  
**Daniela Angelini, Flavia Giannessi, Zulema Percario, Valentina Lombardi, Andrea Sabatini, Alessandra Sacchi, Veronica Lisi, Luca Battistini, Giovanna Borsellino, Elisabetta Affabris** (*Italy*)
- P2.09.14** Regulation of natural killer cell metabolism and anti-tumour responses by macrophages  
**Cathal Keane, Maxim Nosenko, Cristhiane Favero de Aguiar, Chloe Choi, David Finlay** (*Ireland*)
- P2.09.15** Dysregulation of the TLR3/IFIH1 pathway at juvenile dermatomyositis onset may implicate viral infection as a disease trigger  
**Thomas Moreau, Vincent Bondet, Chloe Albert-Vega, Yves-Jean Zhu, Florian Dubois, Rahal Farah, Etienne Villain, Bodemer Christine, Samuel Bonhomme, Margaux Cescato, Laurye-Anne Eveillard, Marie-Louise Frémond, Benjamin Fournier, François Maillet, Pierre Quartier, Eugénie Sarda, Adrien Schvartz, Isabelle Melki, Cyril Gitiaux, Brigitte Bader-Meunier, Mathieu Roderio, Darragh Duffy** (*France*)

### POSTER SESSION 2

- P2.09.16** Development of pooled CRISPR screening method for primary human macrophages  
**Miaomiao Qiao, Maximilian Jordan, Feng Liu, Liye Chen** (*United Kingdom*)
- P2.09.17** Dynamics of human Tand B cells following antigenic stimulation  
**Emilia Malvicini<sup>1</sup>, Ganesh Phad<sup>2</sup>, Serena Curti<sup>1</sup>, Valeria Bevilacqua<sup>1</sup>, Federica Sallusto<sup>2</sup>, Ludovica Bruno<sup>1</sup>, Antonio Lanzavecchia<sup>1</sup>** (*<sup>1</sup>Italy, <sup>2</sup>Switzerland*)
- P2.09.18** Investigating the effect of fibroblast growth factor-23 on neutrophil migration  
**Naeman Ali, Onn Shaun Thein, David Tickett, Aaron Scott, Dhruv Parekh** (*United Kingdom*)
- P2.09.19** Analysis of platelet monocyte complexes in patients with ST-elevation myocardial infarction  
**Talia Ahrazoglu, Jennifer Isabel Kluczny, Tamara Straub, Fabian Nienhaus, Jonathan Rohrer, Patricia Kleimann, Lisa-Marie Irschfeld, Maren Döring, Ann Katrin Bergmann, Florian Bönner, Ulrich Flögel, Norbert Gerdes, Sebastian Temme** (*Germany*)
- P2.09.20** Tonsil organoids reveal that plasmacytoid dendritic cells modulate the humoral immune response to ChAdOx1 nCoV-19  
**Maria Pudjohartono, Kate Powell, Eleanor Barnes, Paul Klenerman** (*United Kingdom*)
- P2.09.21** Evaluation of HLA-G levels in human umbilical cord blood-derived mesenchymal stem cells after co-culture with PBMCs  
**Ayşe Erol Bozkurt, Sule Karataş, Figen Abatay Sel, Mediha Süleymanoğlu, Beril Yaşa, Hayriye Şentürk Çiftçi, Fatma Savran Oğuz** (*Turkey*)
- P2.09.22** Peripheral blood lymphocyte cell subsets in subjects with silicosis due to engineered stone  
**Gema Jiménez-Gómez, Antonio Campos-Caro, Alejandro Nuñez-García, Antonio Molina-Hidalgo, Antonio León-Jiménez** (*Spain*)
- P2.09.23** Delineating the immunological responses in people admitted to the ICU with direct and indirect lung injuries using single-cell RNA sequencing  
**Priyanka Hastak, Christopher R. Andersen, Zong-Hong Zhang, Aayushma Lohani, Chansavath Phetsouphanh, David van Bockel, Swosti Shrestha, Frances Bass, Naomi Hammond, Nicodemus Tedla, Anthony Kelleher, Sarah C. Sasson** (*Australia*)
- P2.09.24** Recent thymic emigrants in SARS-CoV-2 infection and post-COVID-19  
**Xiaobo Huang, Suvi Jokiranta, Kirsten Nowlan, Nelli Heikkilä, Anu Kantele, Olli Vapalahti, Eliisa Kekäläinen** (*Finland*)
- P2.09.25** Effect of long-term cryopreservation on peripheral blood mononuclear cell viability and immune cell subset frequency  
**Taliha Inan, Cagla Nigde, Asli Korkmaz, Sinem Gunalp, Duygu Sag** (*Turkey*)
- P2.09.27** Candida-driven modulation of macrophage polarization: influence of *Candida albicans* and non-*albicans* species.  
**Florabelle Cabarrubias, Swagata Chakraborty, Tamás Takács, Attila Gacser** (*Hungary*)

## POSTER SESSION 2

- P2.09.28 Immunomodulatory effect of phenylhydantoin derivatives on myeloid leukemia cells  
**Ana Obradović, Miloš Matić, Branka Ognjanović, Bojan Božić, Biljana Božić Nedeljković** (Serbia)
- P2.09.29 The pathophysiological implications of interleukin-6 concentrations associated with COVID-19 in human trophoblasts  
**Miloš Matić, Ana Obradović, Milica Paunović, Branka Ognjanović** (Serbia)
- P2.09.30 Interferon- $\beta$  exposure and ARTS deficiency promote the generation of hyper-efferocytic Ly-6C<sup>+</sup> macrophages during the resolution of inflammation  
**Orly Zeituni-Timor, Soaad Soboh, Hiba Yaseen, Senthil Kumaran Satyanarayanan, Maha Abu Zeid, Esther Silberberg, Sagie Schiff-Zuck, Sarit Larisch, Amiram Ariel** (Israel)
- P2.09.31 The number of classical and non-classical monocytes are altered in the peripheral blood from patients with silicosis due to engineered stone  
**Alberto Gallardo García, Gema Jiménez-Gómez, Antonio León-Jiménez, Antonio Campos-Caro** (Spain)
- P2.09.32 Cross-reactivity to microbiota shapes natural CD4<sup>+</sup> T cell responses against neo-antigens associated with acute lymphoblastic leukemia  
**Mikhail Goncharov, Petra Bacher, Alexander Scheffold** (Germany)
- P2.09.33 Comparing three methods for the isolation of exosomes from plasma in subjects with overweight and 3T3-L1 cell culture  
**Jacqueline Noboa-Velástegui<sup>1,2</sup>, Juan Carlos Leon Contreras<sup>1</sup>, Jorge Castro Albarran<sup>1</sup>, Ana-Lilia Fletes-Rayas<sup>1</sup>, Iñaki Álvarez<sup>2</sup>, Rosa Elena Navarro Hernandez<sup>1</sup>** (<sup>1</sup>Mexico, <sup>2</sup>Spain)
- P2.09.34 Activated platelets rapidly induce pro-inflammatory phenotype and function in monocytes  
**Nicola Dark, Harriet Allan, Timothy Warner, Dianne Cooper, Paul Armstrong** (United Kingdom)
- P2.09.36 Exploring the human immune response through tonsil-derived organoids  
**Maria Cavaco, Rodrigo Pedroso, Diana Matias, Luís Graça** (Portugal)
- P2.09.37 Deciphering the pathological involvement of circulating immune complexes during viral infections  
**Lucas Auguste, Lamia Bouzi, Léa Domitien, Franck Mennechet, Edouard Tuillon** (France)
- P2.09.38 Unraveling glycan recognition: a cellular approach to studying lectin receptor-ligand interactions  
**Eleonora Nardini, Katarina Olesek, Fabio Balzarini, Eveline Li, Ernesto Rodriguez Camejo, Yvette van Kooyk** (Netherlands)

**POSTER SESSION 2**

- P2.09.39** NK cell regulation of humoral immunity in therapeutic vaccination  
**Joseph McDowell, Stephanie Kucykowicz, Jessica Davies, Dimitra Peppas, Mariana Diniz, Mala K. Maini** (*United Kingdom*)
- P2.09.40** TLR7/8 agonism reshapes hepatic immunity and improves the response to bacterial infection in liver fibrosis  
**Dimitrios Patseas, Eoin Mitchell, Sarah Morel, Cathrin L. Gudd, Prakash Ramachandran, Lucia A. Possamai, Evangelos Triantafyllou** (*United Kingdom*)
- P2.09.41** Induction of immunoregulatory responses at the injection site of vaccine adjuvant alum.  
**Nicole Roche, Aoife Gorman, Katie O'Grady, Dorian Dederko, Ed Lavelle** (*Ireland*)
- P2.09.42** Investigating the salivary gland tissue microenvironment in Sjögren's disease using Imaging Mass Cytometry™  
**Hanne Borge, Stian Tornaas, Tamandeep Kaur Bharaj, Siren Fromreide, Ylva Bratterud Helgesen, Rebecca Jane Cox Brokstad, Karl Brokstad, Johan Gorgas Brun, Roland Jonsson, Brith Bergum, Malin Viktoria Jonsson, Silke Appel, Kathrine Skarstein** (*Norway*)
- P2.09.43** Transcriptomic analysis reveals distinct effect of cigarette smoke on lung and systemic macrophage populations  
**Lynne Faherty<sup>1</sup>, William Z. Zhang<sup>2</sup>, Mays M. Salih<sup>2</sup>, Elektra K. Robinson<sup>2</sup>, Elizabeth Perez<sup>2</sup>, Kihwan Kim<sup>2</sup>, Susan Carpenter<sup>2</sup>, Suzanne Cloonan<sup>1,2</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>USA*)
- P2.09.44** Microbial-derived tryptophan metabolites selectively influence cytokines secretion by polarized human lymphocytes  
**Lu Yao, Brian Forde, Cebile Ndwandwe, Liam O'Mahony** (*Ireland*)
- P2.09.45** Key role of human regulatory T cell-derived extracellular vesicles in the control of immune tolerance  
**Giusy De Rosa, Claudia Russo, Dario Di Silvestre, Alessandra Colamatteo, Claudia La Rocca, Clorinda Fusco, Fortunata Carbone, Pierluigi Mauri, Vincenzo Di Marino, Francesca Brambilla, Valentina Bollati, Annamaria Finardi, Fabio Buttari, Silvia Garavelli, Simona Bonavita, Gianmarco Abbadessa, Antonio Uccelli, Marco Salvetti, Diego Centonze, Roberto Furlan, Giuseppe Matarese, Claudio Procaccini, Paola de Candia** (*Italy*)
- P2.09.46** Cereblon expression in human peripheral blood mononuclear cells in response to in vitro stimulation with *M. Leprae*  
**Edessa Negera Gobena** (*United Kingdom*)
- P2.09.47** Profiling of immune cell metabolism in autoimmune Addison's disease  
**Alexander Hellesen, Thea Sjøgren, Anette S.B Wolff, Bergithe E. Oftedal** (*Norway*)
- P2.09.48** Long lasting in vitro monocyte to macrophage differentiation  
**Luis Alberto De Los Santos-González, Francisco Javier Sánchez-García, María Maximina Bertha Moreno-Altamirano** (*Mexico*)



## POSTER SESSION 2

- P2.09.49** Impact of symbiotic supplementation on white blood cells count in obese adults: a double-blind study  
**Andressa Gomes Batista Manzur, Sergio Avelino Mota Nobre, Waldemar de Paula-Júnior, Rodrigo Gentil Miquilino de Oliveira, Brendha de Almeida, Luiz Gustavo Rodrigues Rocha, Ronize Viviane Jorge de Faria, Mariléia Chaves Andrade** (Brazil)
- P2.09.50** NK cells with lower proliferative capability and higher effector functions generated by human amniotic epithelial cells  
**Fabio Morandi, Martina Della Lastra, Irma Airoidi, Roberto Gramignoli** (Italy)
- P2.09.51** Regulatory T-cell expansion after SARS-CoV-2 in vitro stimulation in non-responders to the COVID-19 vaccine in vulnerable groups  
**María del Mar Pozo-Balado, Helena Clavero-Mestres, Ángel Bulnes-Ramos, Vanesa Garrido-Rodríguez, Israel Olivas-Martínez, Carmen Morales Garcia, Marianela Iriarte-Gahete, Carmen Lozano, María Francisca González Escribano, Manuel Leal, Yolanda M. Pacheco** (Spain)
- ### P2.10 IMMUNE RESPONSE REGULATION: MOLECULAR MECHANISMS
- P2.10.01** ARID5B-mediated LINC01128 epigenetically activated pyroptosis and apoptosis by promoting the formation of the BTF3/STAT3 complex in antiphospholipid syndrome  
**Yuan Tan, Liyan Cui** (China)
- P2.10.02** Neutrophil extracellular trap-associated glycosidases shape the immune response  
**Rebecca Chukwuanukwu, Jasmin Knopf, Martin Herrmann** (Germany)
- P2.10.03** Impairment of alternative NLRP3 inflammasome pathway in peripheral blood monocytes from inflammatory bowel disease patients  
**Carlos Sánchez Rodríguez, Pablo Hurtado Blanco, Almudena Ojalora, Gema Salgado Cecilia, Rosa Moya Quiles, Jose Antonio Galián Megías, Gonzalo Antón Ródenas, Manuel Muro Amador, Helios Martínez Banaclocha** (Spain)
- P2.10.04** The histone variant H2A.J shapes immune responses  
**Tanja Vera Kübelbeck, Daniela Kramer, Antonia Kolb, Berenice Fischer** (Germany)
- P2.10.05** The immunomodulatory functions of long noncoding RNA DANCR in melanoma  
**Ege Amirak<sup>1</sup>, Fatih Sezer<sup>1</sup>, Ryan M. O'Connell<sup>2</sup>, H. Atakan Ekiz<sup>1</sup>** (<sup>1</sup>Turkey, <sup>2</sup>USA)
- P2.10.06** Phosphatases of regenerating liver balance F-actin rearrangements during T cell activation through WD repeat containing protein 1  
**Oscar Aguilar Sopena<sup>1</sup>, Carlos Carrasco Padilla<sup>1</sup>, Alvaro Gomez Moron<sup>1</sup>, Patricia Castro Sanchez<sup>1</sup>, Matias Estaras Hermosel<sup>1</sup>, Salvatore Valvo<sup>2</sup>, Sergio Alegre Gomez<sup>1</sup>, Raul Torres Ruiz<sup>1</sup>, Sandra Rodriguez Perales<sup>3</sup>, Shehan Ismail<sup>3</sup>, Francisco Sanchez-Madrid<sup>1</sup>, Noa Beatriz Martin Cofreces<sup>1</sup>, Michael L. Dustin<sup>1</sup>, Pedro Roda Navarro<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>United Kingdom, <sup>3</sup>Belgium)
- P2.10.07** End-binding protein-1 regulates the metabolic fate of CD4 T lymphocytes through the organisation of the mitochondrial network  
**Alvaro Gomez Moron, Silvia Requena, Clara Pertusa, Marta Lozano-Prieto, Camila Scagnetti, Diego Calzada-Fraile, Ana Adela Calero-Garcia, Manuel Izquierdo-Pastor, Pedro Roda Navarro, Noa Beatriz Martín-Cófreces** (Spain)

**POSTER SESSION 2**

- P2.10.08** Exploring the role of calcium ion channels during mycobacterial infection  
**Priya Ghosh<sup>1,2</sup>, Jacqueline Eich<sup>2</sup>, Tobias Dallenga<sup>2</sup>, Ulrich E. Schaible<sup>2</sup>, Avinash Sonawane<sup>1</sup>** (<sup>1</sup>India, <sup>2</sup>Germany)
- P2.10.09** Interplay of cytoskeleton and membrane morphology during formation of immunological synapse  
**Ondřej Ballek, Valerie Tahtahova, Dominik Filipp** (Czech Republic)
- P2.10.10** Analysis of TAM receptor expression in patients with Sjögren's disease  
**Irene Sarkar<sup>1</sup>, Hanne Borge<sup>1</sup>, Kirsten Lassing<sup>1,2</sup>, Aleksandra Petrovic<sup>1</sup>, Tamandeep Kaur Bharaj<sup>1</sup>, Alireza Molai<sup>1</sup>, Richard Davies<sup>1</sup>, Magdalena Alfredsen<sup>1</sup>, Johan Gorgas Brun<sup>1</sup>, Roland Jonsson<sup>1</sup>, Kathrine Skarstein<sup>1</sup>, Silke Appel<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>Netherlands)
- P2.10.11** Influence of neutrophils and neutrophil extracellular traps on immunoglobulin G N-glycan modifications over the time course of experimental sepsis  
**Jasmin Knopf<sup>1</sup>, Kursat O. Yaykasli<sup>1</sup>, Karin A. van Schie<sup>2</sup>, Manfred Wuhrer<sup>2</sup>, Michael Boettcher<sup>1</sup>, Martin Herrmann<sup>1</sup>, Rostyslav Bilyy<sup>3,4</sup>** (<sup>1</sup>Germany, <sup>2</sup>Netherlands, <sup>3</sup>Ukraine, <sup>4</sup>Romania)
- P2.10.12** Using biorthogonal (CLICK) chemistry to measure nutrient uptake flux in single immune cells  
**Connor Corrigan, Luuk Reinalda, Sander van Kasteren, David Finlay** (Netherlands)
- P2.10.13** Spatiotemporal cellular dynamics related to germinal center reaction in regional lymph node of COVID-19 lungs based on in-situ hybridization at single-cell resolution  
**Young Min Woo, Taehwan Oh, Jung Joo Hong** (South Korea)
- P2.10.14** Phosphatase of regenerating liver-1 regulates the activity of Lck during early T cell receptor signalling.  
**Carlos Carrasco Padilla, Oscar Aguilar Sopena, Alvaro Gomez Moron, Raúl Torres Ruiz, Sandra Rodriguez Perales, Noa Martín Cofreces, Pedro Roda Navarro** (Spain)
- P2.10.15** Vesicle transport inhibitors induce weak Nur77 expression in murine iNKT and B cells, potentially leading to false positive signals  
**Yavuz Mercan, Gerhard Wingender** (Turkey)
- P2.10.16** Maternal microbial metabolites in the fetal intestine and their effects on immunomodulation and epithelial function  
**Roselydiah Makunja, Arina Maltseva, Tiina Pessa-Morikawa, Masuma Khatun, Ville Koistinen, Olli Kärkkäinen, Niko Paalanen, Kati Hanhineva, Terhi Ruuska, Mikael Niku** (Finland)
- P2.10.17** Development of an immunoassay for quantification of soluble human CD40L (CD154) in plasma samples  
**Kathrine Pedersen, Nick Stub Laursen, Annette Gudmann Hansen, Yaseelan Palarasah, Steffen Thiel** (Denmark)
- P2.10.18** Similarly reshaped cytokine profile in malignant and autoimmune hematologic disorders  
**Nino Nanava, Sophia Metreveli, Nino Kikodze, Giorgi Giorgobiani, Tinatin Chikovani, Nona Janikashvili** (Georgia)

## POSTER SESSION 2

- P2.10.20** Crosstalk between innate immune system and bone metabolism is influenced by cell-free DNA quantity and mediated by cyclic GMP-AMP synthase  
**Patrik Škubica, Bhaswarupa Banerjee, Marketa Husakova, Pavlina Dankova** (Czech Republic)
- P2.10.21** Deciphering tissue-specific epigenetic signatures governing memory T lymphocyte residency  
**Xiangyi Deng, Weijie Du, Gilles Gasparoni, Abdulrahman Salhab, Karl Nordström, Jinchan Li, Erping Zhang, Joachim Wachtlin, Juliane Bodo, Simon Reinke, Carsten Perka, Hardt Sebastian, Thomas Dörner, Mario Tönnies, Hyun-Dong Chang, Julia K. Polansky, Jörn Walter, Pawel Durek, Andreas Radbruch, Jun Dong** (Germany)
- P2.10.24** Phospho-flow based immunometabolic biomarkers for pharmacodynamic evaluations: translation from bench to bedside  
**Bas Smal, Diana Pereira, Matthijs Moerland, Lisa van Schijndel** (Netherlands)
- P2.10.25** CTLA-4, PD-, LAG3, TIM3 and TIGIT display distinct vesicular distributions in murine T cells  
**Jiahe Lu<sup>1,2</sup>, Boris Simonetti<sup>1</sup>, Alisa Veler<sup>1</sup>, Stephen Cross<sup>1</sup>, Xiongtao Ruan<sup>3</sup>, Timsse Raj<sup>1</sup>, Andrew Dowsey<sup>1</sup>, Robert F. Murphy<sup>3</sup>, Paul Verkade<sup>1</sup>, Pete Cullen<sup>1</sup>, Christoph Wuelfing<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>China, <sup>3</sup>USA)
- P2.10.26** The effects of the hyposmolar environment developing in hyponatremia on immune system cells  
**Muhammed Ali Kızmaz, Abdulmecit Yildiz, Abdurrahman Simsek, Demir Kaan Demir, Tugce Bozkurt, Yusuf Cescmeci, Aysegul Oruc, Alparslan Ersoy, Elif Gullulu, Mehmet Sezen, Ferah Budak** (Turkey)
- P2.10.27** Functional dissection of RNA modification Pseudouridine in T cells  
**Vanshika Malviya, Thi Cuong Pham, Susan Schlenner** (Belgium)
- P2.10.28** Investigation of the effects of bevacizumab treatment on the immune system in age-related macular degeneration  
**Ali Eren Iskin, Muhammed Ali Kızmaz, Abdurrahman Simsek, Tugce Bozkurt, Tugba Senbuz, Elif Kaçmaz, Gamze Uçan Gündüz, Mehmet Baykara, Ferah Budak** (Turkey)
- P2.10.29** Role of Irisin in autosomal dominant polycystic kidney disease  
**Ali Eren Iskin, Abdulmecit Yildiz, Abdurrahman Simsek, Muhammed Ali Kızmaz, Tugce Bozkurt, Aysegul Oruc, Alparslan Ersoy, Ferah Budak** (Turkey)
- P2.10.30** Dissecting the immune microenvironment in a high grade serous ovarian cancer murine model following platinum treatment and epigenetic modulation  
**Michele De Luca, Francesca Basso, Barbara Belletti, Mario Paolo Colombo, Delia Mezzanzanica, Gustavo Baldassarre, Elena Jachetti** (Italy)
- P2.10.31** Role of autophagy in antitumor activity of human NK cells  
**Piera Filomena Fiore, Ignazio Caruana, Nicola Tumino, Maria Teresa Bilotta, Sergio Forcelloni, Francesca Nazio, Lorenzo Moretta, Paola Vacca** (Italy)
- P2.10.32** Investigating the role of E3 ubiquitin ligase Pellino1 in B cell antigen uptake  
**Pratiti Nanda, Nawal Khan, Theresia Allo Anginan, Dessi Malinova** (United Kingdom)

**POSTER SESSION 2**

- P2.10.33** AKNA is a novel RNA-binding protein that localizes to the centrosome and regulates the germinal center reaction  
**Lisa Kifinger<sup>1</sup>, Gesine Behrens<sup>1</sup>, Rosa Schmitz<sup>1</sup>, Anneli Petes<sup>1</sup>, Kai Höfig<sup>1</sup>, Juliane Merl-Pham<sup>1</sup>, Stefanie Hauck<sup>1</sup>, Joao Guimaraes<sup>2</sup>, Henning Urlaub<sup>1</sup>, Magdalena Götz<sup>1</sup>, Vigo Heissmeyer<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Portugal)
- P2.10.34** Deficiency in nitric oxide production by myeloid cells during LPS-induced inflammation in naked mole-rats *H. glaber*  
**Ekaterina Gorshkova, Ekaterina Gubernatorova, Svetlana Purtova, Olga Averina, Michael Adrianov, Mikhail Vyssokikh, Marina Drutskaya, Sergei Nedospasov** (Russian Federation)
- P2.10.35** Combining single-cell short and long-reads sequencing for dissecting immune cell states  
**Azahara Fuentes-Trillo, Mariacristina De Luca, Davide Bolognini, Luca Seffin, Luca Basso-Ricci, Alessandro Aiuti, Serena Scala, Cecilia Dominguez** (Italy)
- P2.10.38** Dissecting immune cell states in healthy and CMV-infected newborns through single-cell sequencing technologies  
**Altea Gjurgjaj, Azahara Fuentes-Trillo, Mariacristina De Luca, Luca Seffin, Luca Basso-Ricci, Andrea Ronchi, Lorenza Pagni, Alessandro Aiuti, Carlo Pietrasanta, Serena Scala, Cecilia Dominguez** (Italy)
- P2.10.40** Alterations in the natural autoantibody network during pregnancy in Hashimoto's thyroiditis  
**Szabina Erdő-Bonyár, Diána Simon, Ahmed Badawy, Anna Bajnok, Ákos Várnagy, Kálmán Kovács, Emese Mezősi, Tímea Berki** (Hungary)
- P2.10.41** Validation of inflammatory markers' association with rheumatic heart disease in an African cohort  
**Taariq Salie, Zahra Parker, Timothy Spracklen, Liesl Zuhlke, Mpiko Ntsekhe, Mark Engel** (South Africa)
- P2.10.42** Functional analysis of elongation factor 1 alpha 1 in M1 macrophage differentiation  
**Eri Shimura, Ayako Shigenaga, Tadashi Ando, Ryo Ishihara, Takeshi Baba, Fumiyuki Yamakura** (Japan)
- P2.10.44** Immunological changes in humoral and cell immunity in chronic fatigue syndrome  
**Steliyan Petrov, Martina Bozhkova, Teodora Kalfova, Maria Ivanovska, Dobrina Dudova, Katya Vaseva, Ralitsa Nikolova, Mihail Petrov** (Bulgaria)
- P2.10.45** Mechanistic insights into how immunomodulatory drugs mediates resting CD4+ T-cell metabolic reprogramming ex vivo  
**Elisa Formiconi<sup>1,2</sup>, Valentin De Masson d'Autume<sup>1</sup>, Nathan Francois<sup>1</sup>, Virginie W. Gautier<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Italy)

## POSTER SESSION 2

- P2.10.46 HIF1 $\alpha$  regulates Tfr induction that restrains Tfh13 polarization in a murine model of allergy  
**Carmen Camarena, Anuj Tharakan, Rebecca K. Martin (USA)**
- P2.10.47 The influence of sex hormones on the immune checkpoints expression in recurrent pregnancy loss and pregnant women  
**Michał Zych, Monika Kniolek, Filip Dąbrowski, Aleksander Roszczyk, Radosław Zagożdżon (Poland)**
- P2.10.48 Evaluation of IL-10 role in atopic diseases: anti-inflammatory or pro-inflammatory effect?  
**Daina Bastyte, Laura Tamasauskiene, Kamilija Briede, Skaidra Valiukeviciene, Brigita Gradauskiene (Lithuania)**
- P2.10.49 Unraveling the mechanisms of spatial organization in the immunological synapse  
**Artem Kalinichenko, Jakob Huemer, Matthias Haimel, Theresa Humer, Michael Svaton, Celine Prakash, Maximilian von der Linde, Julia Guthrie, Cheryl van de Wetering, Anton Kamnev, Elisa Hahn, Christina Rashkova, Birgit Hoeger, Georg Winter, Loic Dupre, Kaan Boztug (Austria)**

## P2.11 IMMUNE SENESENCE

- P2.11.02 Protective effect of cortistatin upon thymic regression  
**Marina García-Frutos, Marta Caro, José L. Ruiz, Natividad Martin-Morales, Francisco O'Valle, Mario Delgado (Spain)**
- P2.11.03 How an acute stress impacts immunity in elderly patients?  
**Manon Chauvin, Jamila Dhiab, Martin Larsen, Eric Pedruzzi, Hélène Vallet, Jacques Boddaert, Delphine Sauce (France)**
- P2.11.04 Shorter supplementation of vitamin D is associated with an inflammatory and senescent immune profile in older people  
**Maike Mangold, Dicle Celik, Valentin Vetter, Ilja Demuth, Beate Kruse, Manuela Dingeldey, Andreas Thiel, Julian Braun (Germany)**
- P2.11.05 Cross-talk between overweight and immunosenescence in healthy adults  
**Yana Todorova, Radoslava Emilova, Milena Aleksova, Vesselina Koleva, Maria Nikolova (Bulgaria)**
- P2.11.06 Beyond the obstruction: immunological perspectives on aortic stenosis and coronary artery disease  
**Pablo Alvarez-Heredia, Jose Joaquín Domínguez-del-Castillo, Irene Reina-Alfonso, Monica Espinar-Garcia, Isabel Maria Vallejo-Bermudez, Carmen Gutiérrez, Fakhri Hassouneh, Alexander Batista-Duharte, Rafael Solana Lara, Ignacio Muñoz, Alejandra Pera Rojas (Spain)**



**POSTER SESSION 2**

- P2.11.07** Role of  $\beta 2$  integrins on dendritic cells in immunosenescence  
**Christoph Hieber, Yanira Zeyn, Nadine Röhrig, Evelyn Montermann, Matthias Bros, Stephan Grabbe** (Germany)
- P2.11.08** Homelessness and low socioeconomic status drive broad immune dysregulation and impair vaccine induced immunity to SARS CoV2  
**Conor Reddy, Ailbhe Herity, Matt McElheron, Adam Dyer, Nicole Roche, Jean Dunne, Barry Moran, Jean Fletcher, Nollaig Bourke, Cliona Ni Cheallaigh** (Ireland)
- P2.11.10** The metabolic impact of NKG2D co-stimulation on TCR activation in human CD8 T cells during ageing  
**Rino Kimura<sup>1,2</sup>, Souraya Sayegh<sup>1</sup>, Olivia Bracken<sup>1</sup>, Sian Henson<sup>1</sup>, Arne Akbar<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Japan)
- P2.11.11** DNA damage-dependent autophagy in macrophages promotes the MHC-II presentation of immunogenic peptides  
**George Niotis<sup>1</sup>, Ermioni Arvanitaki<sup>1</sup>, Emmanouil Theodorakis<sup>1</sup>, George Garinis<sup>1</sup>, Adrian Schmalen Schmalen<sup>2</sup>** (<sup>1</sup>Greece, <sup>2</sup>Germany)

**P2.12 INNATE LYMPHOID CELLS**

- P2.12.01** Metabolic heterogeneity between tissue-resident NK cells  
**Carrie Corkish, David Finlay** (Ireland)
- P2.12.02** Divergent roles for STAT4 in shaping differentiation of cytotoxic ILC1 and NK cells during gut inflammation  
**Gianluca Scarno<sup>1</sup>, Julija Mazej<sup>2</sup>, Mattia Laffranchi<sup>2</sup>, Chiara Di Censo<sup>3</sup>, Irene Mattiola<sup>4</sup>, Arianna Maria Candelotti<sup>2</sup>, Giuseppe Pietropaolo<sup>2</sup>, Helena Stabile<sup>2</sup>, Cinzia Fionda<sup>2</sup>, Giovanna Peruzzi<sup>2</sup>, Stephen R Brooks<sup>1</sup>, Wanxia Li Tsai<sup>1</sup>, Yohei Mikami<sup>5</sup>, Giovanni Bernardini<sup>2</sup>, Angela Gismondi<sup>2</sup>, Silvano Sozzani<sup>2</sup>, James Di Santo<sup>3</sup>, Christian Vosschenrich<sup>3</sup>, Andreas Diefenbach<sup>4</sup>, Massimo Gadina<sup>1</sup>, Angela Santoni<sup>2</sup>, Giuseppe Sciumè<sup>2</sup>** (<sup>1</sup>USA, <sup>2</sup>Italy, <sup>3</sup>France, <sup>4</sup>Germany, <sup>5</sup>Japan)
- P2.12.03** Oxysterols modulate iNKT cell function  
**Cristhiane Favero de Aguiar, Emily Smith, Cathal Keane, Carrie Corkish, David Finlay** (Ireland)
- P2.12.04** Novel FFAR2 agonist prevents development of type 1 diabetes in C57BL/6 mice  
**Natalija Jonić<sup>1</sup>, Ivan Koprivica<sup>1</sup>, Dragica Mićanović<sup>1</sup>, Tamara Saksida<sup>1</sup>, Bojan Jevtic<sup>1</sup>, Graeme L. Fraser<sup>2</sup>, Dorde Miljkovic<sup>1</sup>, Ivana Stojanović<sup>1</sup>** (<sup>1</sup>Serbia, <sup>2</sup>Belgium)
- P2.12.05** Cobalt exposure enhances group 2 innate lymphoid cell apoptosis in vitro  
**Hsiang-Han Su, Chia-Chi Lin, Jau-Ling Suen** (Taiwan)

## POSTER SESSION 2

- P2.12.06** High-dimensional single-cell analysis of human natural killer cell heterogeneity  
**Lucas Rebuffet<sup>1</sup>, Melsen Janine<sup>2</sup>, Escalière Bertrand<sup>1</sup>, Basurto Lozada Daniela<sup>3</sup>, Bhandoola Avinash<sup>4</sup>, Björkström Niklas<sup>5</sup>, Yenan Bryceson<sup>5</sup>, Roberta Castriconi<sup>6</sup>, Cichocki Franck<sup>4</sup>, Marco Colonna<sup>4</sup>, Davis Daniel M.<sup>3</sup>, Andreas Diefenbach<sup>7</sup>, Haniffa Muzlifah<sup>3</sup>, Horowitz Amir<sup>4</sup>, Lanier Lewis<sup>4</sup>, Malmberg Karl-Johan<sup>8</sup>, Miller Jeffrey<sup>4</sup>, Lorenzo Moretta<sup>6</sup>, Narni-Mancinelli Emilie<sup>1</sup>, Luke O'Neill<sup>9</sup>, Chiara Romagnani<sup>7</sup>, Dylan Ryan<sup>3</sup>, Simona Sivori<sup>6</sup>, Vagne Constance<sup>1</sup>, Vivier Eric<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>Netherlands, <sup>3</sup>United Kingdom, <sup>4</sup>USA, <sup>5</sup>Sweden, <sup>6</sup>Italy, <sup>7</sup>Germany, <sup>8</sup>Norway, <sup>9</sup>Ireland)
- P2.12.07** Analysis of the mechanisms regulating ILC2 immune checkpoints expression and function in the tumor microenvironment  
**Cecilia Ciancaglini, Silvia Santopolo, Paola Vacca, Lorenzo Moretta, Linda Quatrini** (Italy)
- P2.12.09** Involvement of innate lymphocytes in the pathogenic mechanisms of colorectal cancer  
**Giusto Davide Badami, Miriana Fallo, Marianna Lo Pizzo, Marco Pio La Manna, Bartolo Tamburini, Nadia Caccamo, Francesco Dieli** (Italy)
- P2.12.10** PD-1: FABP5 mediated lipid metabolism regulates obese ILC2 functions  
**Hye Young Kim** (South Korea)

## P2.14 LYMPHOCYTE DIFFERENTIATION

- P2.14.01** Role of the transcription factor Foxo1 in the differentiation of naïve CD4 T lymphocytes  
**Théo Level, Charlotte Guillou, Aurélie Durand, Léa Giraud, Nelly Bonilla, Cédric Auffray, Bruno Martin, Bruno Lucas** (France)
- P2.14.02** Preliminary results of the fluctuation of peripheral follicular t cells and their subsets in lupus nephritis  
**Eleni Moysidou<sup>1</sup>, Michalis Christodoulou<sup>1</sup>, Georgios Lioulis<sup>1</sup>, Vasiliki Nikolaidou<sup>1</sup>, Aliko Xochelli<sup>1</sup>, Pantelis Sarafidis<sup>1</sup>, Eleni Frangou<sup>1,2</sup>, Asimina Fylaktou<sup>1</sup>, Maria Stangou<sup>1</sup>** (<sup>1</sup>Greece, <sup>2</sup>Cyprus)
- P2.14.03** Data-independent acquisition mass spectrometry reveals the protein andscape of human regulatory T-cells  
**Kedar Batkulwar, Tanja Buchacher, Ilona Arnkil, Syed Bilal Andrabi, Robert Moulder, Omid Rasool, Riitta Lahesmaa** (Finland)
- P2.14.04** Aryl hydrocarbon receptor signalling contributes to the enhanced ability of human gut-tropic T-cells to acquire a Trm phenotype  
**Joshua McGuire, Beverley Rodger, Harjod Singh Assi, James Lindsay, Andrew Stagg** (United Kingdom)

**POSTER SESSION 2**

- P2.14.05** In-depth characterization of human induced regulatory T cells by mass cytometry  
**Roosa Kattelus, Inna Starskaia, Markus Lindén, Sami Pietilä, Tomi Suomi, Laura Elo, Riitta Lahesmaa, Tanja Buchacher** (*Finland*)
- P2.14.06** Unraveling the contribution of B cells on the differentiation of specific CD4<sup>+</sup> T cells using a novel MHC class II multimer platform  
**Christine Kreher, Daniela di Blasi, Dorina Roem-Haagsma, Britt Windhouwer, Veronique Konijn, Gerard van Mierlo, Laura Kummer, Koos van Dam, Eileen Stalman, Joep Killestein, Luuk Wieske, Taco Kuijpers, Filip Eftimov, Zoé L.E. van Kempen, Theo Rispens, Marieke van Ham, Anja ten Brinke** (*Netherlands*)
- P2.14.07** Thymic cell competition relies on efficient bone marrow contribution to prevent T cell acute lymphoblastic leukemia  
**Rafael Paiva, Bruna Sabino Oliveira, Sara Azenha, Vera Martins** (*Portugal*)
- P2.14.08** DNA methylation profiles guide development and differentiation in T cells in the thymus and in the periphery, but epigenetic recoding of proliferation only occurs after full maturation  
**Frederik Hamm, Dania Hamo, Marcel Finke, Mingxing Yang, Cornelia Peitsch, Anne Schulze, Julia K. Polansky** (*Germany*)
- P2.14.09** T cell-intrinsic PKD3 fine-tunes the development into CD8<sup>+</sup> central memory T cells  
**Jiří Koutník<sup>1</sup>, Grzegorz Sumara<sup>2</sup>, Michael Leitges<sup>3</sup>, Gottfried Baier<sup>1</sup>, Kerstin Siegmund<sup>1</sup>** (*<sup>1</sup>Austria, <sup>2</sup>Poland, <sup>3</sup>Canada*)
- P2.14.10** Mixed phenotype acute leukemia: a case report  
**Beatriz Fernandez Perea, Maria del Carmen Barrera Aguilera, Juan Francisco Gutiérrez-Bautista, Lucía Ballesta Alcaraz, Ana Marin, Mónica Bernal, Jose Ramón Vilchez, Pilar Jimenez** (*Spain*)
- P2.14.11** Bringing your conventional flow cytometer to the spectral dimension: 88-channel detection system in a CytoFLEX LX flow cytometer  
**Andrews Kelly<sup>1</sup>, Zhang Qianjun<sup>2</sup>, Mendez Solis Omayra<sup>1</sup>, Popovic Milan<sup>1</sup>, Zhao Marcus<sup>1</sup>, Han Ellison<sup>1</sup>, Ren Josen<sup>1</sup>, Huang Leon<sup>1</sup>, Anis Larbi<sup>2</sup>, Tung James<sup>1</sup>** (*<sup>1</sup>USA, <sup>2</sup>France*)
- P2.14.12** Starbright dyes - Simplifying flow cytometry with 8-color no compensation panels  
**Sharon Sanderson<sup>1</sup>, Michael Blundell<sup>1</sup>, Magda Santos<sup>2</sup>, Srikanth Perike<sup>2</sup>, Elizabeth Dreskin<sup>2</sup>, Tracey Long<sup>1</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>USA*)

## POSTER SESSION 2

### P2.15 LYMPHOID LINEAGE

- P2.15.01** The role of toll-like receptor agonists in modulating thymocyte development in fetal thymus organ culture  
**Elise Helena Armulik, Artur Stoljar, Uku Haljasorg, Pärt Peterson, Martti Laan** (Estonia)
- P2.15.02** Urinary immune cells in ANCA-associated vasculitis: a marker of disease relapse?  
**Arlena Carney, Conor Finlay, Mark Little, Amrita Dwivedi** (Ireland)
- P2.15.03** Vacuolated lymphocytes in pleomorphic mantle cell lymphoma, case report  
**Alberto Gallardo García, Jorge Mannelli, Daniel García-Cuesta, Maria Paz Garrastazu-Sánchez, Raquel de la Varga-Martínez** (Spain)

### P2.16 MAINTENANCE AND LOCAL REGULATION OF TISSUE SPECIFIC IMMUNITY

- P2.16.01** The impact of T-cell responses on vascular inflammation and thrombosis  
**Reiner Mailer** (Germany)
- P2.16.02** Red complex pathobionts on osteoclast-like cell maturation  
**Arzu Beklen<sup>1,1</sup>, Muhammed Allippara<sup>1</sup>, Katariina Nurmi<sup>1</sup>, Pirkko Pussinen<sup>1</sup>, Mari Ainola, Kari K. Eklund<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>Turkey)
- P2.16.03** CD8 regulatory T cells inhibit antigen-specific CD4 T cell responses during respiratory infection with Bordetella pertussis  
**Caroline Sutton, Caitlín Ní Chasaide, Kingston Mills** (Ireland)
- P2.16.04** Deficiency of the Interleukin-36 Receptor Antagonist (DITRA) disrupts dermal immune homeostasis predisposing to severe psoriatic disease  
**Paloma Narros Fernandez, Shrikanth Chomanahalli Basavarajappa, Heather Loughnane, Larissa Bless, Yasmina Hernandez Santana, Patrick T. Walsh** (Ireland)
- P2.16.05** Ectopic lung germinal centres support functional affinity maturation despite their disordered structure  
**Stephane Guillaume, William Foster, Michelle Linterman, Alice Denton** (United Kingdom)
- P2.16.06** The HLA-G levels of cord blood- and wharton's jelly-derived mesenchymal stem cells from early to late passages  
**Sule Karataş, Ayse Erol Bozkurt, Figen Abatay Sel, Mediha Süleymanoğlu, Beril Yaşa, Hayriye Şentürk Çiftçi, Fatma Savran Oğuz** (Turkey)
- P2.16.07** Investigating the mechanism of human peripheral helper T cells (Tph) generation  
**Linh-Huyen Truong, Rachel Anscombe, Feng Liu, Liye Chen** (United Kingdom)
- P2.16.08** Tissue-specific immunity in the human fetus by  $\gamma\delta$  T cells  
**Guillem Sanchez Sanchez, Isoline Verdebout<sup>2</sup>, Yohannes Tafesse, Moosa Rezwani, Céline La, Panagiotis Vitsos, Aurélie Detavernier, Stanislas Goriely, Maria Papadopoulou, David Vermijlen** (Belgium)

### POSTER SESSION 2

- P2.16.09** Identification of cellular and molecular biomarkers defining end-stage lung parenchyma and lung-draining lymph nodes  
**Evgeny Chichelnitskiy, Kapellos Theodore S., Kerstin Beushausen, Jana Keil, Ius Fabio, Bettina Wiegmann, Kevin Bassler, Danny Jonigk, Joachim L. Schultze, Christine Falk** (*Germany*)
- P2.16.10** Tissue-specific imprinting shapes conventional dendritic cell functionality in tumors and non-malignant tissues  
**Anna Celant, Giulia Protti, Giuseppe Rocca, Francesco Andreata, Giulia Stucchi, Alessia Donato, Marco Galli, Ilaria Fontana, Stefano Cozzi, Laura Marongiu, Metello Enzo Innocenti, Francesca Granucci** (*Italy*)
- P2.16.12** PD-1 pathway in rheumatoid arthritis: applying the brakes on synovial inflammation  
**Hannah Costello, Aoife O'Rourke, Carl Orr, Douglas Veale, Ursula Fearon, Mary Canavan** (*Ireland*)
- P2.16.13** Inflammatory CD1c<sup>+</sup> CD163<sup>+</sup> dendritic cells are enriched in the inflamed joint and contribute to rheumatoid arthritis pathology  
**Hannah Costello, Aoife O'Rourke, Carl Orr, Douglas Veale, Ursula Fearon, Mary Canavan** (*Ireland*)
- P2.16.14** The role of immunological memory in synovial inflammation in rheumatoid arthritis  
**Aoife O'Rourke, Rebecca Stokell, Hannah Costello, Carl Orr, Douglas Veale, Ursula Fearon, Mary Canavan** (*Ireland*)
- P2.16.15** PD-L1-expressing eosinophil-mediated regulation of immunity and pulmonary inflammation  
**Daniel Ivers<sup>1</sup>, Alexander Lawrence<sup>1</sup>, Heike Hawerkamp<sup>1</sup>, Vincent Kelly<sup>1</sup>, Conor Finlay<sup>1</sup>, Christian Schwartz<sup>2</sup>, Padraic Fallon<sup>1</sup>** (<sup>1</sup>*Ireland*, <sup>2</sup>*Germany*)
- P2.16.16** Unveiling the significance of cross-reactive bone marrow resident memory T cells in immune responses: Insights from SARS-CoV-2 and vaccination  
**Jinchun Li<sup>1</sup>, Simon Reinke<sup>1</sup>, Yu Shen<sup>1</sup>, Zixu Wang<sup>1</sup>, Carsten Perka<sup>1</sup>, Hardt Sebastian<sup>1</sup>, Christian Hipfl<sup>1</sup>, Tobias Alexander<sup>1</sup>, Hyun-Dong Chang<sup>1</sup>, Helena Radbruch<sup>1</sup>, Zhihai Qin<sup>2</sup>, Andreas Radbruch<sup>1</sup>, Jun Dong<sup>1</sup>** (<sup>1</sup>*Germany*, <sup>2</sup>*China*)
- P2.16.17** Abnormalities of skeletal muscle regeneration and macrophage polarization in Nakajo-Nishimura syndrome  
**Naoya Kase, Akira Niwa, Nobuo Kanazawa, Megumu Saito** (*Japan*)
- P2.16.18** Marine sulphated polysaccharides stimulate innate immunity to fight infection in a model of post-traumatic immunosuppression  
**Maëva Guillonnet<sup>1</sup>, Marwan Bouras<sup>1</sup>, Alexander Kettner<sup>2</sup>, Marion Davieau<sup>1</sup>, Mélanie Petrier<sup>1</sup>, Cynthia Fourgeux<sup>1</sup>, Cédric Jacqueline<sup>1</sup>, Antoine Roquilly<sup>1</sup>, Karim Asehnoune<sup>1</sup>, Pierre Rocheteau<sup>1,2</sup>** (<sup>1</sup>*France*, <sup>2</sup>*Switzerland*)
- P2.16.19** Signaling pathways and differentially expressed genes associated with placental pathology in antiphospholipid syndrome  
**Anush Martirosyan<sup>1</sup>, Susanna Ghonyan<sup>1</sup>, Eva Kriegova<sup>2</sup>, Anna Petrackova<sup>2</sup>, Jakub Savara<sup>2</sup>, Gayane Manukyan<sup>1</sup>** (<sup>1</sup>*Armenia*, <sup>2</sup>*Czech Republic*)
- P2.16.20** Mast cells and their adipokine receptors: a role of specific ligands in expression shift  
**Paulina Żelechowska, Magdalena Wiktorska, Elżbieta Kozłowska, Justyna Agier** (*Poland*)



## POSTER SESSION 2

- P2.16.21** Uterine natural killer cells in women with recurrent pregnancy loss and implantation failure  
**Nilgun Akdeniz, Burcin Karamustafaoglu Balci, Esin Cetin Aktas, Vuslat Yilmaz, Abdullah Yilmaz, Cemil Akgul, Gunnur Deniz** (Turkey)
- P2.16.22** Characterization of the immune cell signature in pulmonary hypertension associated with chronic lung diseases  
**Bernhard Reiter, Katharina Jandl, Ayu Hutami Syarif, Sophia Auner, Konrad Hoetzenecker, Grazyna Kwapiszewska, Leigh M. Marsh** (Austria)
- P2.16.23** The Jak inhibitor filgotinib concentration-dependently suppresses immune responses in precision cut intestinal tissue slices ex vivo  
**Klaudia Maria Grieger, Valerie Beneke, Vanessa Neuhaus, Susann Dehmel, Ulf Kulik, Benjamin Gundert, Heiko Aselmann, Christina Hesse, Armin Braun, Katherina Sewald** (Germany)
- P2.16.24** Compartmentalized immune response in sepsis  
**Stavroula Litsiou, Stephan Culemann, Claudia Waskow** (Germany)
- P2.16.25** Association of autoantibodies with pregnancy outcomes  
**Chistina Tsigalou, Elisabeth Stavropoulou, Konstantinos Nikolettos, Alexandros Karvelas, Theocharis Konstantinidis, Grigorios Trypsiannis, Nikolaos Nikolettos, Panagiotis Tsikouras** (Greece)
- P2.16.26** Ointment in the flies: augmentation and synergy of host defense peptide against AMR bacteria in epithelial and systemic infection  
**Patrick Lennard<sup>1</sup>, Pieter Hiemstra<sup>2</sup>, Julia Dorin<sup>1</sup>, Peter Nibbering<sup>2</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Netherlands)
- P2.16.27** Functional dichotomy of murine developmental Foxp3<sup>+</sup> treg cell subsets in adipose tissue inflammation and homeostasis  
**Acelya Yilmazer, Anne Eugster, Marie Boernert, Andreas Petzold, Karsten Kretschmer** (Germany)
- P2.16.28** In vitro bovine endometrial epithelial cells synthesize a protective proteome in response to LPs and LTA ligands  
**Ronan Whiston<sup>1</sup>, Aspinas Chapwanya<sup>1</sup>, Kieran Meade<sup>2</sup>, Paolo Nanni<sup>3</sup>, Andre Almeida<sup>4</sup>, Ysabel Wright<sup>1</sup>, Mounir Adnane<sup>5</sup>** (<sup>1</sup>Basseterre, <sup>2</sup>Ireland, <sup>3</sup>Switzerland, <sup>4</sup>Portugal, <sup>5</sup>Algeria)
- P2.16.29** Multi-OMICS signature of human tissue regulatory T cells  
**Clara Cretet-Rodeschini, Aness Haddouche, Jehanne Hassan, Jebrane Bouaoud, Baptiste Fouquet, Mustapha Cherai, Minaine Bouabdallah, Christophe Tresallet, Chloé Bertolus, Emmanuel Martinod, Guy Gorochoy, Makoto Miyara** (France)

## P2.17 MANIPULATION OF TOLERANCE

- P2.17.02** Exploring red blood cells as a novel tolerogenic approach for factor VIII inhibitors employing immuno-dominant FVIII derived peptides presented on MHC class II  
**Mariarosaria Miranda<sup>1</sup>, Eelke Brandsma<sup>1</sup>, Paul Kaijen<sup>1</sup>, Floris Van Alphen<sup>1</sup>, Robin Van Bruggen<sup>1</sup>, Karin Fijnvandraat<sup>1</sup>, Sebastien Lacroix-Desmazes<sup>2</sup>, Jan Voorberg<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>France)

**POSTER SESSION 2**

- P2.17.03** Impact of commonly used immunosuppressants on Treg phenotype and function  
**Daniel Acevedo, Joaquim Coloma, Yiyi Luo, Alexandru Vlaga, Ana Esteve-Solé, Laia Alsina** (Spain)
- P2.17.04** In situ reprogramming of dendritic cells for immunomodulation of FoxP3+ regulatory T cells  
**Elisa Blickberndt, Ari Waisman** (Germany)
- P2.17.05** Induction of neonatal Fc receptor-mediated tolerance to therapeutic factor VIII in Hemophilia A  
**Alejandra Reyes-Ruiz<sup>1</sup>, Sandrine Delignat<sup>1</sup>, Victoria Daventure<sup>1</sup>, Aishwarya Bhale<sup>2</sup>, Krishnan Venkataraman<sup>2</sup>, Jordan D. Dimitrov<sup>1</sup>, Sebastien Lacroix-Desmazes<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>India)
- P2.17.06** Getting dynamic insights into the regulation of autoreactive germinal centers using serial intravital microscopy  
**Layla Pohl<sup>1</sup>, Thomas R. Wittenborn<sup>1</sup>, Cecilia Fahlquist-Hagert<sup>1</sup>, Lisbeth Jensen<sup>1</sup>, Ali Shahrokhtash<sup>1</sup>, Donato Sardella<sup>1</sup>, Alain Pulfer<sup>2</sup>, Kristian Savstrup Kastberg<sup>1</sup>, Duncan Sutherland<sup>1</sup>, Santiago F. Gonzalez<sup>2</sup>, Ina Maria Schiessl<sup>1</sup>, Søren Egedal Degn<sup>1</sup>** (<sup>1</sup>Denmark, <sup>2</sup>Switzerland)
- P2.17.07** Central tolerance mechanisms in a CNS1-/- rat model  
**Artur Stoljar, Martti Laan, Pärt Peterson** (Estonia)
- P2.17.08** The role of thymic B cells in central T cell tolerance  
**João Augusto Freitas, Dario Zebcevic, Christine Federle, Nadia Khouja, Amina Sayed, Ludger Klein, Iliana Siamishi** (Germany)
- P2.17.09** Calorie restriction as a novel therapeutic tool to modulate immune system during multiple sclerosis  
**Alessandra Colamatteo, Fortunata Carbone, Clorinda Fusco, Teresa Micillo, Alice Verdiani, Benedetta Matarese, Claudia Imparato, Federica Isé, Gianmarco Abbadessa, Elisabetta Signoriello, Giacomo Lus, Giorgia Maniscalco, Diego Centonze, Marco Salvetti, Roberta Lanzillo, Vincenzo Brescia Morra, Giovanna Borsellino, Luca Battistini, Giuseppe Matarese** (Italy)
- P2.17.10** Impact of CCR4 ligands on Treg cells in islet autoimmunity  
**Gianmarco Spata, Linda Hammann, David Anz, Carolin Daniel, Isabelle Serr** (Germany)
- P2.17.11** Isolation and characterization of human leukocyte antigen (HLA) class I-naturally presented peptides from synovial fluid and tissue of patients with rheumatoid arthritis  
**Juan Aguillon<sup>1</sup>, Bárbara Pesce<sup>1</sup>, Lilian Soto<sup>1</sup>, Oscar Neira<sup>1</sup>, Carolina Cuellar<sup>1</sup>, Daniela Schneider<sup>1</sup>, Miqueas Jaime<sup>1</sup>, Montserrat Carrascal<sup>2</sup>, Diego Catalán<sup>1</sup>, Jaxaira Maggi<sup>2</sup>** (<sup>1</sup>Chile, <sup>2</sup>Spain)

**P2.18 MECHANISMS OF ATOPIC DISEASE**

- P2.18.01** Peripheral mast cell-derived RANKL is a prerequisite for lymphocyte egress from distant lymph nodes  
**Katsoulis-Dimitriou Konstantinos, Anne Dudeck** (Germany)

## POSTER SESSION 2

- P2.18.02** Integration of LC-MS/MS, network analysis, and cheminformatics to uncover bioactive components of propolis for atopic dermatitis treatment  
**Eun Heo, Ye Ryeong Cho, Sanguine Byun, Ji Yeon Kim, Kyeong Ah Jo** (*South Korea*)
- P2.18.03** Longitudinal colonization trajectories reveal differences in early life LPS exposure and IgE sensitization  
**Aron Arzoomand<sup>1</sup>, Tianai Lou<sup>2</sup>, Rikard Forlin<sup>1</sup>, Aman Mebrahtu<sup>2</sup>, Jun Wang<sup>1</sup>, Lakshmikanth Tadepally<sup>1,2</sup>, Hugo Barcenilla<sup>1</sup>, Laura Gonzalez<sup>1</sup>, Anette Johnsson<sup>1</sup>, Yang Chen<sup>1</sup>, Anna James<sup>1</sup>, Jaromir Mikes<sup>1</sup>, Petter Brodin<sup>1,2</sup>** (<sup>1</sup>Sweden, <sup>2</sup>United Kingdom)
- P2.19 MICROBIOTA**
- P2.19.02** Impact of microbiota from preterm infants on the immune system and infection susceptibility  
**Justine Smout, Diego Ortiz, Mangge Zou, Till-Robin Lesker, Dorothee Viemann, Till Strowig, Jochen Huehn** (*Germany*)
- P2.19.03** Host glycosylation shapes intestinal microbiome and immune response in inflammatory bowel disease  
**Cláudia Rodrigues<sup>1</sup>, Joana Gaifem<sup>1</sup>, Márcia S. Pereira<sup>1</sup>, Maria Francisca Alves<sup>1</sup>, Mariana Silva<sup>1</sup>, Nuno Padrão<sup>1</sup>, Inês Alves, Aonghus Lavelle<sup>2</sup>, Harry Sokol<sup>2</sup>, Salomé S. Pinho<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>France)
- P2.19.04** The microbiome-spine axis: exploring pathology, autoimmunity, and research gaps through a narrative review  
**Muaz Rashid, Hugo Serra Pereira, Salman Keraidi, Nicolas Wipf, Ahmad Issa Alissa, Aubrie Sowa, Jake McDonnell, Stacey Darwish, Joseph Butler** (*Ireland*)
- P2.19.05** Involvement of gut and oral microbiome in the development of allergy to non-specific lipid transfer proteins  
**Paula Álvarez Romero, Laura Carrero, Ana Navas, Nadine Blanco Toledano, Berta Ruiz León, Aurora Jurado Roger** (*Spain*)
- P2.19.06** Immunometabolic state in a porcine model after supplementation of the mixture of lactobacilli isolated from human milk  
**Rosa Elena Navarro Hernandez, David-Roman Sanchez-Chipres, Ana-Lilia Fletes-Rayas, Anaíd Maciel-Rivera, Jacqueline-Alejandra Noboa-Velastegui, Perla-Monserrat Madrigal-Ruiz, Dalia-Alejandra Madrigal-Ruiz, Blanca-Rosa Aguilar-Uscanga** (*Mexico*)
- P2.19.08** Intestinal-derived short chain fatty acid modulates alveolar macrophage response to *Streptococcus pneumoniae*  
**Kate Roche<sup>1</sup>, Craig McEntee<sup>1</sup>, Suzanne Cloonan<sup>1</sup>, Susan Carpenter<sup>2</sup>, Analía Rial<sup>3</sup>, Jose A. Chabalgoity<sup>3</sup>, Ed Lavelle<sup>1</sup>, Natalia Muñoz-Wolf<sup>1</sup>** (*Ireland<sup>1</sup>, USA<sup>2</sup>, Uruguay<sup>3</sup>*)

## POSTER SESSION 2

- P2.19.09** Butyric acid-producing *Faecalimonas* sp. NGB245 strain attenuates the symptoms of experimental autoimmune encephalomyelitis  
**Jelena Đokić, Aleksandar Bisenić, Sergej Tomić, Marina Bekić, Luka Pavlović, Miroslav Dinić, Amarela Terzić-Vidojević, Dušan Radojević, Svetlana Soković Bajić, Hristina Mitrović, Stefan Jakovljević, Nevena Vukotić Todorović, Nataša Golić** (Serbia)
- P2.19.11** Examining the role of the microbiome-immune axis in the development of systemic lupus erythematosus  
**Johannes Skräp<sup>1</sup>, Thomas R. Wittenborn<sup>1</sup>, Cecilia Fahlquist-Hagert<sup>1</sup>, Julia K. Demtröder<sup>1</sup>, Lisbeth Jensen<sup>1</sup>, Gudrun Winther<sup>1</sup>, Janne K. Klitgaard<sup>1</sup>, Miriam Rabenow<sup>2</sup>, Diego Ortiz<sup>2</sup>, Till-Robin Lesker<sup>2</sup>, Till Strowig<sup>2</sup>, Holger Brüggermann<sup>1</sup>, Søren Egedal Degn<sup>1</sup>** (<sup>1</sup>Denmark, <sup>2</sup>Germany)
- P2.19.12** Gut bacteriome in mothers with and without gestational diabetes and their offspring: immunological parallels  
**Kristi Alnek<sup>1</sup>, Aili Tagoma<sup>1</sup>, Anu Bärenson<sup>1</sup>, Oliver Aasmets<sup>1</sup>, Helis Janson<sup>1</sup>, Ondrej Cinek<sup>2</sup>, Elin Org<sup>1</sup>, Raivo Uibo<sup>1</sup>** (<sup>1</sup>Estonia, <sup>2</sup>Czech Republic)
- P2.19.13** Gut microbiota-modulated immunological profile in mouse models of eating disorders  
**Radka Roubalova, Petra Prochazkova, Janet Jezkova, Hana Papežová** (Czech Republic)
- P2.19.14** Influence of the microbiome on dendritic cell phenotype and function  
**Willemien Miller, Alexandra Kazanova, Christina Gavino, Morgane Brouillard-Galipeau, Samantha Gruenheid** (Canada)
- P2.19.15** PD-L1 exaggerates obesity-induced dysbiosis  
**Viviane Schmidt<sup>1</sup>, Roman Gerlach<sup>1</sup>, Padraic Fallon<sup>2</sup>, Christian Schwartz<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Ireland)
- P2.19.16** Mechanisms of action of microbial-derived indoles on inflammation parameters in rheumatoid arthritis  
**Leona Ehnes, Carolin Brandl, Stefan Wirtz, Arne Gessner, Isabel Wank, Andreas Hess, Georg Schett, Mario Zaiss** (Germany)
- P2.19.17** Gut microbiota protects mice from acute colitis by improving intestinal barrier function  
**Michal Kraus, Zuzana Jacková, Eliška Krčmářová, Tomáš Thon, Lenka Súkeníková, Jiri Hrdy, Miloslav Kverka** (Czech Republic)
- P2.19.18** The microbiota-derived metabolite TDCA may contribute to the pathogenesis of pediatric celiac disease  
**Kristina Kelley<sup>1</sup>, Khyati Girdhar<sup>1</sup>, Genesis Soto<sup>1</sup>, Michelle Zhang<sup>1</sup>, Nicole Koutun<sup>1</sup>, Vladimir Tolstikov<sup>1</sup>, Michael Kiebish<sup>1</sup>, Johnny Ludvigsson<sup>2</sup>, Emrah Altindis<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>Sweden)
- P2.19.19** Clostridium sporogenes-derived metabolites protect mice from colitis  
**Felix Krause, Kira Mangold, Rossana Romero, Maik Luu, Ulrich Steinhoff, Burkhard Schütz, Alexander Visekruna** (Germany)
- P2.19.20** The gut microbiome's hidden role in pediatric type 1 diabetes: uncovering critical links  
**Gratiela Gradisteanu, Amalia Arhire, Luminita Marutescu, Carmen Chifiriuc** (Romania)

## POSTER SESSION 2

### P2.20 MOLECULAR MECHANISMS IN INNATE IMMUNOLOGY

- P2.20.01** GBP2 engages galectin-9 for immunity against *Toxoplasma gondii*  
**Daniel Degrandi, Elisabeth Kravets, Veronica Raba, Imke Bradtmöller, Klaus Pfeffer** (Germany)
- P2.20.02** Stimulation of natural killer cell responses by different activating ligands  
**Luca Kröll, Mina Sandusky, Maren Claus, Sabine Wingert, Michèle Saretzki, Carsten Watzl** (Germany)
- P2.20.03** Potent induction of trained immunity by *Saccharomyces cerevisiae*  $\beta$ -glucans  
**Patricia Vuscan, Breda Kischkel, Maria Tintoré** (Spain)
- P2.20.04** Hyper-glycolytic monocytes in obesity have an increased oxidative stress and IL-8 response  
**Janina Berg, Veselina Radusheva, Isabel Karkossa, Martin von Bergen, Matthias Blüher, Kristin Schubert, Manuela Rossol** (Germany)
- P2.20.05** Functional characterization of guanylate binding proteins in the host defense against chlamydia and toxoplasma infection  
**Veronica Raba, Katja Mölleken, Johannes Hegemann, Daniel Degrandi, Klaus Pfeffer** (Germany)
- P2.20.06** Localization of phosphatidylserine binding site in the globular domains of C1q  
**Alexandra Kapogianni, Gabriela Radulova, Ginka Cholakova, Stoyan Iliev, Anela Ivanova, Vanya Bogoeva, Ivanka Tsacheva** (Bulgaria)
- P2.20.07** Innate immune sensing of self-RNA by RIG-I-like receptors  
**Felix Bender<sup>1</sup>, Katharina I. Maser<sup>1</sup>, Gunther Hartmann<sup>1</sup>, Thomas Zilliger<sup>1,2</sup>** (<sup>1</sup>Germany, <sup>2</sup>Denmark)
- P2.20.08** Profiling the circulating pathogen-associated molecular patterns and damage-associated molecular patterns in patients with end-stage liver disease  
**Omar Abdelrahman, Mark Robinson** (Ireland)
- P2.20.09** Exploring monocyte activation, migration, and terminal differentiation in inflammatory arthritis  
**Niamh O'Dowd, Seán Dixon, Dumitru Anton, Sonia Sundanum, Carl Orr, Douglas Veale, Ursula Fearon, Viviana Marzaioli** (Ireland)
- P2.20.11** The tuberculosis plasma milieu induces signatures of inflammation, neutrophil recruitment, and interleukin-10 family-mediated immunomodulation in monocytes  
**Hubert Senanu Ahor<sup>1</sup>, Monika M. Vivekanandan<sup>1</sup>, Difrey Minadzi<sup>2</sup>, Isaac Acheampong<sup>2</sup>, Wilfred Aniagyei<sup>1</sup>, Augustine Yeboah<sup>2</sup>, Millicent Lamptey<sup>2</sup>, Dorcas Owusu<sup>2</sup>, Ernest Adankwah<sup>2</sup>, Julia Seyfarth<sup>1</sup>, Richard O. Phillips<sup>1</sup>, Marc Jacobsen<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Ghana)
- P2.20.12** Dissecting structure and function of the macrophage testraspan MS4A4A  
**Alessia Troilo, Jiazhi Lin, Riccardo Albanesi, Raffaello Viganò, Eleonora Capezzali, Viviana Valeri, Francesca Brambilla, Pierluigi Mauri, Dario Di Silvestre, Luca Mollica, Benedetta Savino, Carlo Pucillo, Massimo Locati, Elena Monica Borroni** (Italy)



### POSTER SESSION 2

- P2.20.13** Using *Drosophila melanogaster* (fruit fly) to investigate the role of two novel immune-induced peptides, IBIN and IBIN-like  
**Matthew Maasdorp<sup>1</sup>, Susanna Valanne<sup>1</sup>, Laura Vesala<sup>1</sup>, Petra Aaltonen<sup>1</sup>, Aino Malin<sup>1</sup>, Tiina Salminen<sup>1</sup>, Dan Hultmark<sup>2</sup>, Mika Rämet<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>Sweden)
- P2.20.14** Investigating the molecular mechanism of tumor necrosis factor-related apoptosis-inducing ligand-induced macrophage polarization: transcriptomic analysis of key signaling molecules  
**Serhat Songoren, Sinem Gunalp, Ahmet Bursalı, Gökhan Karakulah, Duygu Sag** (Turkey)
- P2.20.15** Viral envelope protein fragments can modulate innate immune cell signaling via formylpeptide receptors  
**Heiko Heilmann, Lukas Busch, Celine Buchmann, Islam Mohamed, Adrian Theiß, Stefan Lohse, Bernd Bufe** (Germany)
- P2.20.16** Itaconate drives mtRNA-mediated Type I interferon production via inhibition of succinate dehydrogenase  
**Shane O'Carroll, Christian Peace, Juliana Toller-Kawahisa, Alessia Zotta, Emily Day, Alex Hooftman, Sara Charki, Yukun Min, Aline Zoller, Anne McGettrick, Luke A.J O'Neill** (Ireland)
- P2.20.17** The multifaceted role of lactoferrin in Covid-19  
**Vladimir Leksa** (Slovakia)
- P2.20.18** SHP1 knockdown enhances Toll-like Receptor 7 (TLR7) signalling in the plasmacytoid dendritic cell line CAL-1.  
**Sarah Harkin, Adam Dignam, Marion Butler** (Ireland)
- P2.20.19** Enhanced complement activation and MAC formation accelerates to severe COVID-19  
**Xuebin Qin, Calder R. Ellsworth, Shumei Liu** (USA)
- P2.20.20** Characterisation NKG2C NK cell receptor and genotypes in relation to human cytomegalovirus infection  
**Suruthimitra Okpoluaefe, Rafeezul Mohamed, Norfarazieda Hassan** (Malaysia)
- P2.20.21** The complex role of the human RNA helicase DDX3X during viral infections  
**Cathal Ryan<sup>1</sup>, Dimitrios Anastasakis<sup>2</sup>, Ahsan Polash<sup>2</sup>, James Carolan<sup>1</sup>, Markus Hafner<sup>2</sup>, Martina Schröder<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P2.20.22** Type I interferon regulates interleukin-1 $\beta$  and interleukin-18 production and secretion in human macrophages  
**Rodrigo Díaz<sup>1</sup>, Gillian Rice<sup>1</sup>, Diego San Felipe<sup>1,2</sup>, Tamar Pepanashvili<sup>1</sup>, Paul Kasher<sup>1</sup>, Tracy Briggs<sup>1</sup>, Gloria Lopez-Castejon<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Spain)
- P2.20.23** NKG7 control cytolytic granule maturation and granzyme B levels in NK cells  
**Yunjie Wu<sup>1</sup>, Miriam Aarsund<sup>1</sup>, Susanna Ng<sup>2</sup>, Tuula Anneli Nyman<sup>1</sup>, Marit Inngjerdigen<sup>1</sup>** (<sup>1</sup>Norway, <sup>2</sup>Germany)
- P2.20.24** Ins and outs of autophagy in measles virus infection  
**Mathias Faure** (France)
- P2.20.25** Glutamine metabolism is essential for cytokine-induced natural killer cell training and enhanced effector function  
**Gearóid Conlon, David Finlay, Clair Gardiner, Aisling Dunne** (Ireland)

## POSTER SESSION 2

- P2.20.26** Relation structure/function of Bordetella lipopolysaccharides (LPS): affinity of LPS to TLR4 complex receptor and cell activation  
**Marwan Khenissi, Wei Wei Zhang-Sun, Wahib Mahana** (*France*)
- P2.20.27** Metabolic reprogramming of macrophages by PKM2 promotes IL-10 production via adenosine  
**Eva Palsson-McDermott<sup>1</sup>, Juliana Toller-Kawahisa<sup>1</sup>, Luke O'Neill<sup>1</sup>, Jose C. Alves-Filho<sup>2</sup>** (<sup>1</sup>*Ireland*, <sup>2</sup>*Brazil*)
- P2.20.28** SLC25a39 and SLC25a40 in macrophages  
**Maureen Yin** (*Ireland*)
- P2.20.29** The caspase-activated DNase induces a DNA-damage response to drive innate immunity  
**Abdul Moeed, Nico Thilmany, Frederic Beck, Bhagya K. Puthussery, Noemi Ortmann, Aladin Haimovici, M. Tarek Badr, Elham Bavafaye Haghighi, Melanie Boerries, Rupert Öllinger, Roland Rad, Susanne Kirschnek, Ian E. Gentle, Sainitin Donakonda, Philipp P. Petric, Jonas F. Hummel, Elisabeth Pfaffendorf, Paola Zanetta, Christoph Schell, Martin Schwemmle, Arnim Weber, Georg Häcker** (*Germany*)
- P2.20.30** Optimizing the IMQ model: deep characterization of the human TLR7 response for early drug development  
**Juliette van den Noort, Salma Assil, Micha Ronner, Michelle Osse, Iris Pot, Yalçın Yavuz, Jeffrey Damman, Erik Lubberts, Robert Rissmann, Tessa Niemeyer-van der Kolk, Ingrid Tomljanovic, Manon Jansen, Matthijs Moerland** (*Netherlands*)

## P2.21 MUCOSAL IMMUNITY

- P2.21.01** Initial sensing of segmented filamentous bacteria and subsequent induction of Th17 responses first occur in Peyer's patches by privileged monocyte-derived phagocytes  
**Renan Oliveira Corrêa, Marie Cherrier, Nadine Cerf-Bensussan, Hugues Lelouard, Valérie Gaboriau-Routhiau** (*France*)
- P2.21.02** Role of type III interferons on intestinal tissue restitution  
**Julien Mambu<sup>1</sup>, Kautilya K. Jena<sup>2</sup>, Daniel Boehmer<sup>2</sup>, Benedetta Sposito<sup>2</sup>, Virginie Millet<sup>1</sup>, Lionel Spinelli<sup>1</sup>, Sarah Wurbel<sup>1</sup>, Chloé Riquier<sup>1</sup>, Franck Galland<sup>1</sup>, Philippe Naquet<sup>1</sup>, Vanessa Mitsialis<sup>2</sup>, Katlynn Bugda Gwilt<sup>2</sup>, Jay R. Thiagarajah<sup>2</sup>, Katherine A. Fitzgerald<sup>2</sup>, Scott B. Snapper<sup>2</sup>, Achille Broggi<sup>1</sup>, Ivan Zanoni<sup>2</sup>** (<sup>1</sup>*France*, <sup>2</sup>*USA*)
- P2.21.03** Modulating A-type lamins in immune and stromal cells for therapy in inflammatory bowel disease  
**Raquel Gomez-Bris, Beatriz Herrero-Fernandez, Marina Ortega-Zapero, Marta Amoros-Perez, Alberto del Monte, Vicente Andres, Gabriel Criado, Alicia Usategui, Jose Luis Pablos, Angela Saez, Jose M. Gonzalez-Granado** (*Spain*)
- P2.21.05** Effects of gluten consumption on the transcriptomic landscape of dermatitis herpetiformis  
**Helka Kaunisto, Esko Kempainen, Teea Salmi, Päivi Saavalainen, Katarzyna Leskinen, Heli Pessa, Rebecka Venti-Holmberg, Kaisa Hervonen, Tuire Ilus, Katri Kaukinen, Katri Lindfors** (*Finland*)

**POSTER SESSION 2**

- P2.21.06** Allergen-displaying extracellular vesicles of probiotic *Escherichia coli* strain O83:K24:H31 for mucosal tolerance induction in allergy  
**Viktor Černý<sup>1,2</sup>, Eliška Krčmářová<sup>1</sup>, Stefan Heintz<sup>2</sup>, Michael Thaler<sup>2</sup>, Anna Schmid<sup>2</sup>, Agnieszka Razim<sup>2</sup>, Jiri Hrdy<sup>1</sup>, Aleksandra Inic-Kanada<sup>2</sup>, Ursula Wiedermann<sup>2</sup>, Irma Schabussova<sup>2</sup>** (<sup>1</sup>Czech Republic, <sup>2</sup>Austria)
- P2.21.07** Mapping of the duodenal mucosal microenvironment in irritable bowel syndrome with imaging mass cytometry  
**Aina van der Meeren, Silke Appel, Gülen Arslan Lied, Trygve Hausken, Kurt Hanevik, Eline Margrete Randulff Hillestad, Elisabeth Steinsvik, Birgitte Berentsen,** (Norway)
- P2.21.08** Understanding the anti-inflammatory effects of extracts originating in traditional Taiwanese medicine against chronic gut inflammation  
**Kate Sheehan, Helen Sheridan, Sinéad Corr** (Ireland)
- P2.21.09** Intestinal TIGITnegCD38+ memory T cells proliferate, acquire an ex-Th17/Th1\* pathogenic phenotype and drive inflammation in severe Crohn's disease patients with poor outcome  
**Maud Heredia<sup>1</sup>, Danielle M.H. Barendregt<sup>1</sup>, Irma Tindemans<sup>1</sup>, Renz C.W. Klomberg<sup>1</sup>, Martine A. Aardoom<sup>1</sup>, Beatriz Calado<sup>1</sup>, Lea M.M. Costes<sup>1</sup>, M. (Linda) E. Joosse<sup>1</sup>, Danielle H. Hulleman-van Haften<sup>1</sup>, Bastiaan Tuk<sup>1</sup>, Lisette A. van Berkel<sup>1</sup>, Polychronis Kemos<sup>2</sup>, Frank Ruemmele<sup>3</sup>, Nick Croft<sup>2</sup>, Johanna C. Escher<sup>1</sup>, Lissy de Ridder<sup>1</sup>, Janneke N. Samsom<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>1</sup>United Kingdom, <sup>3</sup>France)
- P2.21.10** Enthesitis-related arthritis can be distinguished from other juvenile-idiopathic arthritis subtypes by a serum biomarker for gut-barrier dysfunction  
**Persephone Jenkins<sup>1</sup>, Nora Pinar<sup>1</sup>, Thea Jakobi<sup>1</sup>, Ania Radziszewska<sup>1</sup>, Vicky Alexiou<sup>1</sup>, Claire Deakin<sup>2</sup>, Lucy R. Wedderburn<sup>1</sup>, Coziana Ciurtin<sup>1</sup>, Diana Matei<sup>1</sup>, Elizabeth Rosser<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Australia)
- P2.21.11** The protective effect of *L. sakei* CVL-001 against DSS-induced colitis through NOD2-dependent CD103 expression in dendritic cells  
**Dong-Yeon Kim, Jung Joo Hong, Jong-Hwan Park** (South Korea)
- P2.21.12** Scrutinizing prime-boost immunization approaches during early-life to enhance immunity against respiratory pathogens  
**Poorya Foroutan Pajoochian<sup>1</sup>, Audur Anna Aradottir Pind<sup>1</sup>, Jenny Lorena Molina Estupinan<sup>1</sup>, Thorunn Asta Olafsdottir<sup>1</sup>, Dennis Christensen<sup>2</sup>, Ingileif Jónsdóttir<sup>1</sup>, Stefanía P. Bjarnarson<sup>1</sup>** (<sup>1</sup>Iceland, <sup>2</sup>Denmark)
- P2.21.13** Lung dendritic cell metabolism underlies susceptibility to viral infection in diabetes  
**Samuel Nobs** (Israel)
- P2.21.14** IL-23 tunes inflammatory functions of human MAIT cells  
**Laetitia Camard<sup>1</sup>, Tharshana Stephen<sup>1</sup>, Hanane Yahia<sup>1</sup>, Vincent Guillemot<sup>1</sup>, Sébastien Mella<sup>1</sup>, Victoire Baillet<sup>1</sup>, Hélène Lopez-Maestre<sup>1</sup>, Claire Leloup<sup>1</sup>, Julie Marsande<sup>1</sup>, Juan Sienes-Bailo<sup>1</sup>, Ambre Dangien<sup>1</sup>, Natalia Pietrosevoli<sup>1</sup>, Milena Hasan<sup>1</sup>, Anne Fourie<sup>1</sup>, Carrie Greving<sup>1</sup>, Barbara Joyce Shaikh<sup>1</sup>, Raphaëlle Parker<sup>1</sup>, Daniel J. Cua<sup>2</sup>, Elisabetta Bianchi<sup>1</sup>, Lars Rogge<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)

## POSTER SESSION 2

- P2.21.15** Parkinson's disease-associated leucine-rich repeat kinase 2 polymorphism promotes neutrophil responses and enteric  $\alpha$ -synuclein pathology during intestinal inflammation  
**Yuan-Kai Cheng, Hao-Sen Chiang** (Taiwan)
- P2.21.16** Optimization of NKTfh cell induction in vivo for improved vaccine protocols  
**Jihana Achour, Yavuz Mercan, Pumla Bhekiwe Manyatsi, Gerhard Wingender** (Turkey)
- P2.21.17** Alterations in serum IgG glycome are associated with Crohn's disease development  
**Joana Gaifem, Cláudia Rodrigues<sup>1</sup>, Francesca Petralia<sup>2</sup>, Inês Alves, Eduarda Leite-Gomes<sup>1</sup>, Bruno Cavadas<sup>1</sup>, Ana M. Dias<sup>1</sup>, Catarina Moreira-Barbosa<sup>1</sup>, Joana Revés<sup>v</sup>, Renee M. Laird<sup>2</sup>, Mislav Novokmet<sup>3</sup>, Jerko Štambuk<sup>3</sup>, Siniša Habazin<sup>3</sup>, Berk Turhan<sup>2</sup>, Zeynep H. Gümüş<sup>2</sup>, Ryan Ungaro<sup>2</sup>, Joana Torres<sup>1</sup>, Gordan Lauc<sup>3</sup>, Jean-Frederic Colombel<sup>2</sup>, Chad K. Porter<sup>2</sup>, Salomé S Pinho<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>USA, <sup>3</sup>Croatia)
- P2.21.18** Relationships between plasma immune protein profiles, extent of inflamed tissue, and density of intestinal infiltration reveal discrete disease courses amongst therapy-naïve ulcerative colitis patients  
**Beatriz Calado, Maud Heredia, Mohammed Charrouf, Renz C.W. Klomberg, Danielle M.H. Barendregt, Danielle H. Hulleman-van Haaften, Bastiaan Tuk, Lisette A. van Berkel, Brenda Bley Folly, Johanna C. Escher, Lissy de Ridder, Janneke N. Samsom** (Netherlands)
- P2.21.19** Investigation of the role of Interleukin-11 (IL-11) in paediatric IBD patient non-responsiveness to therapeutic intervention  
**Debopriya Saha, Larissa Bless, Sarah Cooper, Anna Dominik, Seamus Hussey, Shrikanth Chomanahalli Basavarajappa, Patrick T. Walsh** (Ireland)
- P2.21.20** Deep immune phenotyping reveals endometrial immune modulation in women with endometriosis  
**Ana Kisovar, Christian M Becker, Ingrid Granne, Jennifer Southcombe** (United Kingdom)
- P2.21.21** The gut homing profile of B cells and T cells is altered in experimental models of arthritis  
**Vicky Alexiou, Persephone Jenkins, Diana Matei, Elizabeth Rosser** (United Kingdom)
- P2.21.22** Microbiota-related biomarkers in the serum of patients with DLBCL  
**Katarína Krempaská, Lucie Dlouha, Markéta Tenglerová, Johana Rehakova, Michaela Brichova, Kateřina Benešova, Miloslav Kverka, Jarmila Heissigerova, Petra Svozilkova, Štěpán Coufal, Iva Onděčková, Jana Senavova, Vaclav Herman, Marek Trneny, Klára Kostovčíková** (Czech Republic)
- P2.21.23** Spatially resolved proteogenomic uncovers a sympathetically mediated link between colitis and salivary glands pathology  
**Gustavo Monasterio<sup>1</sup>, Francisca Castillo<sup>1</sup>, Joyce van de Ven<sup>1</sup>, Valentina Olmedo<sup>1</sup>, Ludvig Larsson<sup>1</sup>, Annika Frede<sup>2</sup>, Jennifer Fransson<sup>1</sup>, Dagmara Pietrzak<sup>1</sup>, Srustidhar Das<sup>1</sup>, Eduardo Villablanca<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>United Kingdom)
- P2.21.24** Intraepithelial lymphogram in the diagnosis of celiac disease in adult patients: a validation cohort  
**Rafael Rodríguez Ramos, Miren Garbiñe Roy Ariño, Ana De Andres Martin, Roberto Pariente Rodríguez, Laura Crespo Pérez, Ivan Garcia De La Torre, Vivian Lizeth Stewart DelCid, Daniel Albert Mendoza Bravo, Elena Manterola Navarro, José Luis Veiga González, Carlota García-Hoz Jiménez** (Spain)



**POSTER SESSION 2**

- P2.21.25** Segment-specific regulation of intestinal motility by colitis and the adaptive immune system  
**Raquel Gomez-Bris, Pilar Rodriguez-Rodriguez, Marina Ortega-Zapero, Santiago Ruvira, Angela Saez, Silvia M. Arribas, Jose M Gonzalez-Granado** (Spain)
- P2.21.26** Vaccine induced memory CD8+ T cells efficiently prevent viral transmission from the respiratory tract  
**Jinglin Zhou<sup>1</sup>, Ida Uddbäck<sup>1</sup>, Jacob Kohlmeier<sup>2</sup>, Jan Christensen<sup>1</sup>, Allan Thomsen<sup>1</sup>** (<sup>1</sup>Denmark, <sup>2</sup>USA)
- P2.21.27** Finding their place: maintenance of tissue resident memory T cells in lung infections  
**Jean-Christophe Lone<sup>1</sup>, Gonçalo Malpica<sup>1</sup>, Lisa Dratva<sup>2</sup>, Cristina Ferreira<sup>1</sup>, Leandro Barros<sup>1</sup>, Rui do Amaral Vieira<sup>1</sup>, Catarina Mendes<sup>1</sup>, Afonso Basto<sup>1</sup>, Sarah Teichmann<sup>2</sup>, Luís Graça, Marc Veldhoen<sup>1</sup>** (<sup>1</sup>Portugal, <sup>2</sup>United Kingdom)
- P2.21.28** Impact of murine allergic airway inflammation on plgR-mediated airway immunity and pneumococcal colonization  
**Alexander Pausder, Julia Boehme, Dunja Bruder** (Germany)
- P2.21.29** Cross-reactive T cells directed to commensal and food-derived yeasts drives cytotoxic TH1 cell responses in Crohn's disease  
**Gabriela Rios-Martini, Ekaterina Tikhonova, Elisa Rosati, Laura Sievers, Florian Tran, Stefan Schreiber, Petra Bacher** (Germany)
- P2.21.30** Genetic and inflammatory factors regulate monocyte expression of the TGFβ-activating integrin αvβ8 in IBD  
**Daniel Brice, Sezin Günaltay-Schenk, Mike Burkitt, Mark Travis** (United Kingdom)
- P2.21.31** Isolation of single cells from human Peyer's Patches obtained from biopsies  
**Adrian Huck, Inka Freise, Nadine Sommer, Carl Weidinger, Britta Siegmund, Rainer Glauben** (Germany)
- P2.21.32** Cigarette smoke-induced dysregulation of iron metabolism alters alveolar macrophage response to Streptococcus pneumoniae: implications for chronic obstructive pulmonary disease  
**Lynne Faherty<sup>1</sup>, David Hearne<sup>1</sup>, Patrick Mitchell<sup>1</sup>, Shane O'Brien<sup>1</sup>, Seamas Donnelly<sup>1</sup>, Natalia Muñoz-Wolf<sup>1</sup>, Claire Healy<sup>1</sup>, Suzanne Cloonan<sup>1,2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P2.21.33** Innate immunity changes predict progression of septic shock and perturb mucosal immunity in model of iPSC derived model of lung organoid  
**Marcela Hortova-Kohoutkova, Filip Kafka, Zuzana Tomášiková, Veronika Bosáková, Ioanna Papatheodorou, Martin Helán, Jan Frič** (Czech Republic)
- P2.21.34** Adaptive T cell-mediated immunity to gluten is elicited in the gut mucosa of type 1 diabetes patients only in presence of celiac disease comorbidity  
**Stefania Picascia, Ilaria Mottola, Serena Vitale, Alessandra Camarca, Martina Cesarano, Mariantonio Maglio, Renata Auricchio, Riccardo Troncone, Carmen Gianfrani** (Italy)
- P2.21.35** Nanoconjugates of lactoferrin for treatment of viral infection  
**Martyna Janicka, Marcin Chodkowski, Klaudia Bylinska, Katarzyna Ranoszek-Soliwoda, Emilia Tomaszewicz, Grzegorz Celichowski, Jaroslaw Grobelny, Malgorzata Krzyzowska** (Poland)



## POSTER SESSION 2

- P2.21.36** Role of the cholesterol metabolizing enzyme Cyp27a1 in intestinal regeneration and tumorigenesis  
**Xinxin Luo<sup>1</sup>, Srustidhar Das<sup>1</sup>, Sara Martina Parigi<sup>2</sup>, Francisca Castillo<sup>1</sup>, Eduardo Villablanca<sup>1</sup>** (<sup>1</sup>Sweden, <sup>2</sup>USA)
- P2.21.37** Role of germinal center and CD39<sup>high</sup>CD73<sup>+</sup> B cells in the age-related tonsillar involution  
**Rocio Pastor, Juliana Puysegur, Bibiana Paoli, Fernando Chirido, Eloisa Arana** (Argentina)
- P2.21.38** *Lactobacillus acidophilus* ameliorates inflammatory bone loss under estrogen-deficient conditions via enhancing "Gut resident Tregs"  
**Asha Bhardwaj, Leena Sapra, Rupesh Srivastava** (India)
- P2.21.39** Single cell transcriptomics reveal mast cell heterogeneity in the human gut  
**Hind Hussein, Elodie Modave, Samuel Van Remoortel, Marcello Delfini, Runze Quan, Nathalie Stakenborg, Guy Boeckxstaens** (Belgium)
- P2.21.40** Evaluation of novel adjuvants in a nasal vaccination strategy against SARS-CoV-2  
**Liam Murray, Dorian Dederko, Ed Lavelle** (Ireland)

## P2.22 MYELOID LINEAGE

- P2.22.01** Targeting skin-resident antigen presenting cells to activate skin-resident CD4<sup>+</sup> memory T cells during *Staphylococcus aureus* Vaccination  
**Megan Smith<sup>1</sup>, Jonah Clegg<sup>1</sup>, Giovanni Cova<sup>2</sup>, Alberto Carignano<sup>2</sup>, Emiliano Chiarot<sup>2</sup>, Simona Tavarini<sup>2</sup>, Chiara Sammiceli<sup>2</sup>, Bruna Clemente<sup>2</sup>, Emilio Siena<sup>2</sup>, Monia Bardelli<sup>2</sup>, Michela Brazzoli<sup>2</sup>, Fabio Bagnoli<sup>2</sup>, Rachel McLoughlin<sup>1</sup>, Elisabetta Soldaini<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Italy)
- P2.22.02** A novel myeloid cell population: embryonic tissue-resident neutrophils  
**Laura Lintukorpi, Julian Hofmann, Emmi Lokka, Sheyla Cisneros Montalvo, Venla Ojasalo, Marko Salmi, Pia Rantakari** (Finland)
- P2.22.03** Establishing the role of the V-ATPase-associated heme transporter HRG1 in regulating endolysosomal function and cellular heme-iron homeostasis  
**Neil O'Sullivan, Jean O'Keeffe, Ken Nally, Rosemary O'Connor** (Ireland)
- P2.22.05** Early precursor-derived pituitary macrophages, cells connecting the immune and endocrine systems  
**Henna Lehtonen<sup>1</sup>, Heli Jokela<sup>1</sup>, Julian Hofmann<sup>1</sup>, Lauriina Tola<sup>1</sup>, Arfa Mehmood<sup>1</sup>, Florent Ginhoux<sup>2,3</sup>, Burkhard Becher<sup>4</sup>, Melanie Greter<sup>4</sup>, Marko Salmi<sup>1</sup>, Pia Rantakari<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>China, <sup>3</sup>Switzerland)
- P2.22.06** Assessing the maturation stages of PMN-MDSC to dissect the immunosuppressive mechanisms within TME  
**Maria Teresa Bilotta, Piera Filomena Fiore, Sergio Forcelloni, Lorenzo Moretta, Paola Vacca, Nicola Tumino** (Italy)

**POSTER SESSION 2**

- P2.22.07** Mast cell-specific expression of non-functional cofilin-1 leads to a mast cell-deficient mouse model fully susceptible to imiquimod-induced psoriasis, 1-fluoro-2,4-dinitrobenzene-induced contact hypersensitivity, and vaccinia virus infection  
**Johanna Kramer, Nadine Kamenjarin, Sonja Moos, Cinthia Silva-Vilches, Günter Küblbeck, Katrin Hodapp, Beate Hilbert, Volodymyr Tsvilovskyy, Marc Freichel, Hans Christian Probst, Florian Kurschus, Karsten Mahnke, Yvonne Samstag** (Germany)
- P2.22.08** Phenotypic and functional analysis of a novel macrophage population expressing a membrane-bound form of IL-18  
**Chiara Vitale<sup>1</sup>, Andrea Petretto<sup>1</sup>, Katia Cortese<sup>1</sup>, sonia carta<sup>1</sup>, Alessandra Dondero<sup>1</sup>, Chiara Lavarello<sup>1</sup>, Davide Cangelosi<sup>1</sup>, Martina Morini<sup>1</sup>, Francesca Bellora<sup>1</sup>, Pietro Arnaldi<sup>1</sup>, Fabrizio Loiacono<sup>1</sup>, Santina Bruzzzone<sup>1</sup>, Francesco Piacente<sup>1</sup>, Silvia Bruno<sup>1</sup>, Annamaria Pessino<sup>1</sup>, Serafina Mammoliti<sup>1</sup>, Alberto Garaventa<sup>1</sup>, Massimo Conte<sup>1</sup>, Massimo Locati<sup>1</sup>, Danilo Norata<sup>1</sup> Vivier Eric<sup>2</sup>, Cristina Bottino<sup>1</sup>, Roberta Castriconi<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>France)
- P2.22.09** Development and characterization of pro-inflammatory M1 macrophage-like cell models  
**Celine Buchmann, Gilles Gasparoni, Ann-Katrin Wentz, Heiko Heilmann, Jörn Walter, Julia Schulze-Hentrich, Bernd Bufe** (Germany)
- P2.22.10** Diagnosis of FISH negative acute promyelocytic leukemia due to molecular biology techniques and optical genome mapping  
**Lucía Ballesta Alcaraz, Mónica Bernal, Jose Ramón Vilchez, María del Carmen Barrera Aguilera, Juan Francisco Gutiérrez-Bautista, Beatriz Fernandez Perea, Pilar Jimenez** (Spain)
- P2.22.11** Investigation of the in vitro use of HL-60 cells induced at different maturation levels as myeloid-derived suppressor cell (MDSC)-like  
**Diğdem Yöyen Ermiş<sup>1</sup>, Didem Akyöney<sup>1,2</sup>, Batuhan Yağcıoğlu<sup>1</sup>, Pınar Karaşar<sup>1</sup>, Barbaros Oral<sup>1</sup>, Güneş Esendağlı<sup>1</sup>** (<sup>1</sup>Turkey, <sup>2</sup>Sweden)
- P2.22.12** M2c-like macrophage associated immunomodulatory function on CD44/CD24 phenotype in triple negative breast cancer (TNBC) subgroups  
**Onur Etgu<sup>1</sup>, Salih Haldun Bal<sup>1</sup>, Fatmanur Dünder<sup>1</sup>, Batuhan Yağcıoğlu<sup>1</sup>, Elif Özalp<sup>1,2</sup>, Barbaros Oral<sup>1</sup>, Diğdem Yöyen Ermiş<sup>1</sup>** (<sup>1</sup>Turkey, <sup>2</sup>Budapest)
- P2.22.13** Investigating the phenotypic heterogeneity in low-density neutrophils across patients with ANCA-vasculitis, cancer and bacterial sepsis  
**Amrita Dwivedi, Isabella Batten, Aisling Ui Mhaonaigh, Martin Barr, Sabina Mason, Elne Noppe, Yvelynne Kelly, Conor Finlay, Mark Little** (Ireland)
- P2.22.14** The immune receptor CD300e: a key player in obesity-associated metabolic dysregulation  
**Simone Pizzini, Sara Coletta, Sebastiano Brichese, Stefania Vassallo, Annica Barizza, Marina de Bernard** (Italy)
- P2.22.16** Immunophenotype of neutrophils in patients with inflammatory joint diseases and *Mycobacterium tuberculosis* infection  
**Marianna Lo Pizzo, Giusto Davide Badami, Bartolo Tamburini, Lidia La Barbera, Chiara Rizzo, Federica Camarda, Miriana Fallo, Marco Pio La Manna, Nadia Caccamo, Giuliana Guggino, Francesco Dieli** (Italy)

POSTER SESSION 2

- P2.22.17 CD14 isolation desensitizes peripheral blood monocytes  
**Britt Coenen, Petri de Jager, Pieter Grijpstra, Romana Schirhagl, Hjalmar Bouma, Geert van den Bogaart** (*Netherlands*)
- P2.22.18 Zeb1 expression by cDC1s is crucial for maintenance of splenic cDC1s and macrophages  
**Bram Verstappe, Bieke Soen, Kathryn Waller, Bavo Vanneste, Liesbet Martens, Tinne Thoné, Fleur Parmentier, Geert Berx, Charlotte Scott** (*Belgium*)
- P2.22.19 Metabolic crosstalk and epigenomic reprogramming of macrophages and colon cancer  
**Kristina Draganic<sup>1</sup>, Janette Pfneissl<sup>1</sup>, Christian de Jesus Cardona<sup>2</sup>, Xu Li<sup>1</sup>, Sabrina Ladstätter<sup>1</sup>, Sergey Isaev<sup>1</sup>, Emine Atas<sup>1</sup>, Marcos Hocevar<sup>1</sup>, Luisa Grader<sup>1</sup>, Gabriele Schweikert<sup>2,3</sup>, Angelika Unterhuber<sup>1</sup>, Cécile Philippe<sup>1</sup>, Christoph Bock<sup>1</sup>, Michael Bergmann<sup>1</sup>, Igor Adameyko<sup>1</sup>, Gerda Egger<sup>1</sup>** (<sup>1</sup>*Austria*, <sup>2</sup>*Germany*, <sup>3</sup>*United Kingdom*)

**POSTER SESSION 3****P3.01 NEUROINFLAMMATION**

- P3.01.01** Clinical and electrophysiological findings of peripheral neuropathy and sensory fiber involvement in Sjögren's syndrome  
**Hacer Erdem Tilki, Furkan Erbaş** (Turkey)
- P3.01.02** Insights from a non-human primate study: understanding the fluid dynamics of neurovascular and immunological factors in the vulnerability of substantia nigra dopaminergic neurons  
**Tiziano Balzano, Natalia López-González del Rey, Noelia Esteban-García, Alejandro Reñares-Sebastián, José Angel Pineda-Pardo, Inés Trigo-Damas, José Angel Obeso, Javier Blesa** (Spain)
- P3.01.03** Peripheral natural killer cells profiling in progressive supranuclear palsy and Parkinson's disease  
**Valentina Lopardo, Marina Serio, Maria Francesca Tepedino, Annibale Alessandro Puca, Paolo Barone, Marina Picillo, Elena Ciaglia** (Italy)
- P3.01.04** The role of transient receptor potential channel subfamily M member 7-kinase in a multiple sclerosis mouse model  
**Katharina Jacob<sup>1</sup>, Anna Thomann<sup>1</sup>, Christian Weber<sup>1</sup>, Thomas Gudermann<sup>1</sup>, Anneli Petes<sup>1</sup>, Susanna Zierler<sup>1,2</sup>** (<sup>1</sup>Germany, <sup>2</sup>Austria)
- P3.01.06** Anti-Caspr2 autoantibodies and abnormal prostate specific antigen levels: a novel biomarker for prostate cancer?  
**Antonio Costa Anzola, Rocío Aguado Álvarez, Raquel Bernardo, Laura Carrero, Ana Navas, Aurora Jurado Roger** (Spain)
- P3.01.07** Mycophenolate mofetil for first-line treatment of anti-NMDA receptor encephalitis: a randomized clinical trial  
**Xue Gong, Kundian Guo, Xingjie Li, Yue Liu, Xiaolin Deng, Xueying Kong, Aiqing Li, Dong Zhou, Jingmei Li, Zhen Hong** (China)
- P3.01.08** Determining the relationship between NLRP3 inflammasome activation and mitophagy in a neuronal progenitor cell line derived Alzheimer's disease model  
**Basak Aru, Nur Ekimci Gürcan, Utku Ozbey, Ömer Faruk Bayrak, Gülderen Yanikkaya Demirel** (Turkey)
- P3.01.09** Differentiation between viral and autoimmune limbic encephalitis (D-VALE): a prospective multicentre cohort study with development and validation of diagnostic model  
**Xueying Kong, Kundian Guo, Xu Liu, Xiaolin Deng, Aiqing Li, Linjun Cai, Xue Gong, Xingjie Li, Ruixi Ye, Zhen Hong** (China)
- P3.01.10** Lipid-accumulating microglia in Alzheimer's disease  
**Xiaoting Wu, Christiane Ruedl** (Singapore)
- P3.01.11** Comparison of immune response in different experimental models of retinal degeneration  
**Kateřina Palacká, Barbora Hermankova, Eliska Javorkova, Vladimir Holan** (Czech Republic)

### POSTER SESSION 3

- P3.01.12** NADPH oxidase (NOX2)-mediated regulation of microglial NLRP3 inflammasome activation in traumatic brain injury  
**Janeen Laabei<sup>1</sup>, Gloria Vegliante<sup>1</sup>, Nathan Ryzewski Strogulski<sup>1</sup>, Sahil Threja<sup>1</sup>, Carly Douglas<sup>1</sup>, Marie Hanscom<sup>1</sup>, Andrew Pearson<sup>1,2</sup>, Aureore Nkiliza<sup>1,2</sup>, Joseph Ojo<sup>1,2</sup>, David Loane<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P3.01.13** The secretome of human amniotic membrane-derived stromal cells inhibits immune cell migration into a pro-inflammatory miPSC-derived neurospheroid model  
**Alexandro Angelo Bufi<sup>1,2</sup>, Julia Di Stefano<sup>1</sup>, Yousra El Ouaamari<sup>1</sup>, Pietro Romele<sup>2</sup>, Andrea Papait<sup>2</sup>, Dorien Verdoodt<sup>1</sup>, Nathalie Coolsv, Elise Van Breedam<sup>1</sup>, Ornella Parolini<sup>2</sup>, Antonietta Silini<sup>2</sup>, Peter Ponsaerts<sup>1</sup>** (<sup>1</sup>Belgium, <sup>2</sup>Italy)
- P3.01.14** Dietary manipulation to control immunological self-tolerance in experimental autoimmune encephalomyelitis  
**Claudia Russo, Giusy De Rosa, Claudia La Rocca, Vincenzo Di Marino, Fortunata Carbone, Claudio Procaccini, Giuseppe Matarese** (Italy)
- P3.01.15** Uncovering the brain-homing nature of T cells at single-cell resolution in people with multiple sclerosis  
**Jasper Rip, Eric Bindels, Laurens Bogers, Ana Marques, Sanne Reijm, Kirsten Kuiper, Fabienne van Puijfelik, Annet Wierenga-Wolf, Marie-Jose Melief, Marvin van Luijn, Joost Smolders** (Netherlands)
- P3.01.16** Loss of Bmal1 in myeloid cells accelerates age-related migration of immune cells to the outer retina  
**Eleanor Noone, Lucia Celkova, Kieva Byrne, Sarah Doyle** (Ireland)
- P3.01.17** Early-to-mid stage idiopathic Parkinson's disease shows enhanced cytotoxicity and differentiation in CD8 T-cells in females  
**Christophe Capelle, Fanny Hedin, Lukas Pavelka, Antonio Cosma, Rejko Krüger, Markus Ollert, Feng Hefeng** (Luxembourg)
- P3.01.18** IL-34 empowers regulatory T cells with novel non-canonical function to safeguard brain barrier integrity in neuroinflammation  
**Janne Verreycken, Lien Van Hoecke, Lore Van Acker, Laura Amelinck, Junhua Xie, Jonas Castelein, Elien Van Wonterghem, Griet Van Imschoot, Marlies Burgelman, Sarah Vanherle, Ilse Dewachter, Paulien Baeten, Bieke Broux, Roosmarijn Vandenbroucke** (Belgium)
- P3.01.19** Neurotransmitter acetylcholine produced by CD4 T cells drive the differentiation of regulatory CD4 T cells during gut inflammation  
**Namrita Halder, Souparni Ghosh, Sourabh Yadav, Snigdha Dhali, Dharmendra Kumar, Girdhari Lal** (India)
- P3.01.20** Immune-related soluble factors associated with anti-LGI1 encephalitis  
**Guillermo Muñoz<sup>1</sup>, Mar Guasp<sup>1</sup>, Laura Naranjo<sup>1</sup>, Rocio Soledad Couso<sup>1</sup>, Mari Carmen Anton<sup>1</sup>, Maria Antonia Romera<sup>1</sup>, Amaia Muñoz Lopetegi<sup>1</sup>, Eugenia Martinez Hernandez<sup>1</sup>, Laia Prades<sup>1</sup>, Francesc Graus<sup>1</sup>, Josep Dalmau<sup>1,2</sup>, Raquel Ruiz García<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>USA)



**POSTER SESSION 3**

- P3.01.21** Investigation of brain inflammation in complete Freund's' adjuvant-free experimental autoimmune encephalomyelitis  
**Suzana Stanisavljević, Goran Stegnjaić, Bojan Jevtic, Milica Lazarević, Mirjana Dimitrijević, Miljana Momčilović, Neda Nikolovski, Dorde Miljkovic** (Serbia)
- P3.01.22** Porphyromonas gingivalis as an etiologic factor in neuroinflammation  
**Noemie Dudzinska<sup>1</sup>, Marta Kaminska<sup>1</sup>, Piotr Mydel<sup>1,2</sup>** (<sup>1</sup>Norway, <sup>2</sup>Poland)
- P3.01.23** Microbiota-induced intestinal Treg cells modulate neuroinflammation  
**Rebecca Jasser, Tommy Regen, Ari Waisman** (Germany)
- P3.01.24** The presence of anti-NMDA Receptor and anti-GABA-B autoantibodies in an elder patient with hallucinations  
**Antonio Costa Anzola, Rocío Aguado Álvarez, Antonio Trujillo, Sara Cantisán, Alba Rodríguez, Aurora Jurado Roger** (Spain)
- P3.01.25** Anti-MOG Antibody in a pediatric patient with autism spectrum disorder  
**Antonio Costa Anzola, Rocío Aguado Álvarez, Antonio Trujillo, Sara Cantisán, Juan Eduardo Molina Alcaide, Aurora Jurado Roger** (Spain)
- P3.01.26** Temporal analysis of the infiltration dynamics of pro-inflammatory cytokine producing innate and adaptive immune cells following experimental traumatic brain injury in mice  
**Sahil Threja, Nathan Ryzewski Strogulski, Janeen Laabei, Carly Douglas, Béré K. Diallo, Kingston Mills, David Loane** (Ireland)
- P3.01.27** The role of A20 in microglia in preventing CD8 T cell-mediated neuronal alterations  
**Yogita Mallu Kattimani<sup>1</sup>, Melanie Müller<sup>1</sup>, Alma Nazlie Mohebiany<sup>2</sup>, Ari Waisman<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Belgium)
- P3.01.28** The beneficial effects of N-methyl-D-aspartate receptor antagonism on experimental autoimmune encephalomyelitis in aged rats  
**Jasmina Djuretić, Ivana Čuruvija, Veljko Blagojević, Ivana Prijić, Biljana Bufan** (Serbia)
- P3.01.29** Investigation of the effect of complement system components C5a and C5a receptor C5aR1 in an in vitro Alzheimer's disease model  
**Abdullah Demir, Gizem Gürel, Furkan Aydin, Basak Aru, Gülderen Yanikkaya Demirel** (Turkey)
- P3.01.30** Impact of parasite antigens on neuroinflammation and tissue remodelling in neurocysticercosis  
**Luz Toribio<sup>1,2</sup>, Deborah L.W. Chong<sup>1</sup>, Hector H. Garcia<sup>2,3</sup>, Jon S. Friedland<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Peru, <sup>3</sup>USA)
- P3.01.31** Inflammatory and bioenergetic abnormalities in patients with ischemic stroke  
**Eleonora Kovacheva, Maria Gevezova, Margarita Koeva, Vasilka Kormova, Emanuela Kostadinova, Yulia Kostadinova, Maria Kazakova, Victoria Sarafian** (Bulgaria)
- P3.01.32** Consecutive occurrence of relapsing polychondritis and mononeuritis multiplex leading to diagnosis of Sjogren's syndrome  
**Milica Terzic, Sladjana Andrejevic, Vesna Tomic-Spiric, Sanvila Raskovic** (Serbia)

### POSTER SESSION 3

- P3.01.33** Inflammatory and autophagy markers as a discriminative tool of bacterial and viral infections in the central nervous system  
**Maria Kazakova, Yordan Kalchev, Valentin Dichev, Petya Argirova, Kiril Simitchiev, Mariana Murdjeva, Victoria Sarafian** (Bulgaria)
- P3.01.34** Neutrophil heterogeneity and susceptibility of NETs formation in patients suffering from autoimmune neurological disorders  
**Eliška Krčmářová, Jiri Hrdy, Viktor Cerny, Petra Petrášková, Olga Novotná, Petra Nytrová, Michaela Týblová, Jana Lízrová, Helena Pilsová, Barbora Beroušková, Helena Posová** (Czech Republic)
- P3.01.35** Correlation between inflammatory and bioenergetic parameters abnormalities in autism spectrum disorder - a possible clue to cellular dysfunction?  
**Maria Gevezova, Zdravko Ivanov, Iliana Pacheva, Elena Timova, Maria Kazakova, Eleonora Kovacheva, Ivan Ivanov, Victoria Sarafian** (Bulgaria)
- P3.01.36** Relationship between miRNAs and immune -bioenergetic dysfunction in autism spectrum disorder  
**Nikolay Mehterov, Maria Gevezova, Iliana Pacheva, Elena Timova, Ivan Ivanov, Victoria Sarafian** (Bulgaria)
- P3.01.37** Plant-derived cannabinoids: regulators of NLRP3 inflammasome signaling in immune cells with relevance to multiple sclerosis  
**Almudena Otálora Alcaraz, Melody Cui Sun, Jack Prenderville, Eric J. Downer** (Ireland)
- P3.01.38** Interferon-gamma induces tolerogenic phenotype and activity in monocyte-derived dendritic cells from patients with multiple sclerosis and healthy donors  
**Brian Parra-Tello, Constanza Vilchez, Karin Jimenez, Carlos Guevara, Rodrigo Naves** (Chile)
- P3.01.39** Therapeutic role of interferon-gamma in experimental autoimmune encephalomyelitis is mediated through a tolerogenic subset of splenic CD11b<sup>+</sup> myeloid cells  
**Gabriel Arellano<sup>1,2</sup>, Eric Acuña, Eileah Loda<sup>2</sup>, Lindsay Moore<sup>2</sup>, Juan Tichauer<sup>1</sup>, Cristian Castillo<sup>1</sup>, Favián Vergara<sup>1</sup>, Paula I Burgos<sup>1</sup>, Pablo Penaloza-MacMaster<sup>2</sup>, Stephen Miller<sup>2</sup>, Rodrigo Naves<sup>1</sup>** (<sup>1</sup>Chile, <sup>2</sup>USA)
- P3.01.40** Interferon-gamma induces tolerogenic dendritic cells with suppressive activity in experimental autoimmune encephalomyelitis  
**Constanza Vilchez, Brian Parra-Tello, Luis González, Carolina Prado, Rodrigo Pacheco, Rodrigo Naves** (Chile)
- P3.01.41** Neuroimmune interactions shape vascular inflammation: evidences from mouse and human studies  
**Sarajo Mohanta, Yuanfang Li, Ting Sun, Shu Lu, Zhe Ma, Benjamin Förster, Mingyang Hong, Xinyi Deng** (Germany)
- P3.01.42** Astaxanthin-loaded polyarginine nanocapsules inhibit astrocyte reactivity  
**Jimena Cordero-Machuca, Constanza Vilchez, Brian Parra-Tello, Luis González, Felipe Oyarzún-Ampuero, Rodrigo Naves** (Chile)

**POSTER SESSION 3**

- P3.01.43** DICAM+ infiltrating monocytes: a mode to control neuroinflammation?  
**Marina von Essen, Marie Mathilde Hansen, Sahla El Mahdaoui, Finn Sellebjerg**  
(Denmark)
- P3.01.44** Significance of second-generation psychotic drugs in regulation mast cell response: an in vitro study  
**Justyna Agier, Elżbieta Kozłowska, Milena Donizy, Magdalena Wiktorska, Paulina Żelechowska** (Poland)
- P3.01.46** Selective alteration to CD4 subset differentiation by heterozygous IRF4 L116R protects against neuroinflammation  
**Rebecca A. Jaeger, Nadia A. Roberts, Cynthia Turnbull, Sandali Seneviratne, Jessica A. Pettitt, Fiona D. Ballard, Rebecca L. Buckland, Anselm Enders, Anne Bruestle**  
(Australia)
- P3.01.47** Serum neurofilament light as a biomarker of cognitive status in patients with polymyalgia rheumatica  
**Patricia Harkins, Sharon Cowley, Robert Harrington, Jean Dunne, David Kane, Niall Conlon, Richard Conway** (Ireland)
- P3.01.48** Flow cytometry live cell-based assay display higher sensitivity to detect autoantibodies against myelin oligodendrocyte glycoprotein (MOG-IgG)  
**Daniel Lorca-Arce, Laura Naranjo-Rondán, Rocío Soledad Couso, Maria Antonia Romera, Mari Carmen Anton, Arnau Trillas, Juan Francisco Luchoro, Jose María Cabrera, Maria Sepúlveda, Albert Saiz, Yolanda Blanco, Thais Armangue, Eugenia Martinez Hernandez, Raquel Ruiz García** (Spain)
- P3.01.49** Liposomal packaging enhances treatment efficacy in neuroinflammation  
**Nadia A. Roberts, Jessica A. Pettitt, Jason Price, Tony Xu, Rebecca L. Buckland, Ines Atmosukarto, Anne Bruestle** (Australia)
- P3.01.50** The peripheral immune landscape in a humanized mouse model of Alzheimer's disease  
**Ruchi Gera, Sumonto Mitra, Simone Tambaro, Per Nilsson, Maria Eriksdotter**  
(Sweden)
- P3.01.51** Flow cytometry live cell-based assay for detection anti-aquaporin 4 antibodies (AQP4-IgG)  
**Raquel Ruiz García, Laura Naranjo-Rondán, Rocío Soledad Couso, Maria Antonia Romera, Mari Carmen Anton, Arnau Trillas, Juan Francisco Luchoro, Jose María Cabrera, Maria Sepúlveda, Yolanda Blanco, Thais Armangue, Eugenia Martinez Hernandez, Albert Saiz, Daniel Lorca-Arce** (Spain)
- P3.01.52** Sex-dependent effects of short-term aerobic exercise on age-related neuroinflammation in the mouse  
**Joana Augusto, Zsuzsanna Barad, Áine, M. Kelly** (Ireland)
- P3.01.53** Unlocking the gut-brain axis: microbiota's impact on neuroinflammation  
**Emely Elisa Neumaier, Lisa-Maria Edrich, Mathias Linnerbauer, Laura Krumm, Thanos Tsaktanis, Markus F Neurath, Beate Winner, Veit Rothhammer, Claudia Günther** (Germany)

POSTER SESSION 3

- P3.01.54 Intestinal inflammation as a precursor for Parkinson's disease  
**Luis Eduardo Goncalves, Bruno Ghirotto Nunes, Vivien Ruder, Claudia Günther, Beate Winner, Markus F. Neurath** (Germany)
- P3.01.55 Investigating the impact of long-term endurance exercise on brain inflammaging in male and female C57BL/6J mice  
**Zsuzsanna Barad, Joana Augusto, Áine, M. Kelly** (Ireland)
- P3.01.56 Comparative analysis of brain-derived neurotrophic factor (BDNF) and amphiregulin (Areg) secretion in multiple sclerosis patients: implications for regenerative therapy  
**Morgane Vermeulen<sup>1</sup>, Jasper Van Den Bos<sup>1</sup>, Hans De Reu<sup>1</sup>, Barbara Willekens<sup>1</sup>, Inez Wens<sup>1</sup>, Nathalie Cools** (Belgium)
- P3.01.57 Cerebrospinal fluid biomarkers soluble CD27 and B-cell maturation antigen in multiple sclerosis and neuroinfection  
**Malene Bredahl Hansen, Helle Bach Søndergaard, Helene Mens, Anne-Mette Lebech, Finn Sellebjerg, Jeppe Romme Christensen** (Denmark)
- P3.01.58 Positivity for anti-NMDAR antibodies exclusively detected by cell-based assay is not associated with clinical presentation and diagnosis of NMDAR encephalitis  
**Laura Naranjo-Rondán, Rocío Soledad Couso, Maria Antonia Romera, Mari Carmen Anton, Arnau Trillas, Mar Guasp, Eugenia Martinez Hernandez, Francesc Graus, Raquel Ruiz García** (Spain)
- P3.01.59 Fas/FasL contributes to HSV-1 brain neuroinflammation and neurodegeneration  
**Malgorzata Krzyzowska<sup>1</sup>, Magdalena Patrycy<sup>1</sup>, Kristina Eriksson<sup>2</sup>** (<sup>1</sup>Poland, <sup>2</sup>Sweden)
- P3.01.60 Functional characterization of conditioned media derived from mesenchymal stem cells transfected with anti-mir-29 family using antagomirs on cell lines of neurodegenerative diseases  
**Violeta Gómez-Vicente, Sandra Pascual Garcia, Jose Miguel Sempere-Ortells, Pascual Martinez-Peinado** (Spain)
- P3.01.61 Autophagy regulation in peripheral blood mononuclear cells of patients with myasthenia gravis  
**Emina Milosevic, Verica Paunovic, Marina Stamenkovic, Stojan Peric, Ivana Basta, Ivo Bozovic, Zorica Stevic, Vladimir Trajkovic** (Serbia)
- P3.01.63 Analysis of immune cell subsets in neuronal ceroid lipofuscinosis 2 and immune response to enzyme replacement therapy  
**Zoe-Isabella Junginger, Lena Marie Westermann, Manuela Kolster, Laura Glau, Anna Marei Mann, Angela Schulz, Eva Tolosa** (Germany)
- P3.01.64 BB cells repopulating after rituximab treatment of persons with Multiple Sclerosis display increased activation at the single-cell transcriptomic level, despite absence of clinical disease activity  
**Chiara Starvaggi Cucuzza, Chiara Sorini, Maria Needhamsen, Susanne Reinsbach, Åsa Björklund, Mohsen Khademi, Nicolas Ruffin, Maja Jagodic, Fredrik Piehl** (Sweden)

### POSTER SESSION 3

- P3.01.65** Exosomes secreted from microglia during chronic virus infection can induce demyelinating disease  
**Nhungoc Luong, Julie Olson** (USA)
- P3.01.66** Diagnostic utility of cerebrospinal fluid MOG-IgG  
**Vyanka Redenbaugh<sup>1,2</sup>, Laura Cacciaguerra<sup>2</sup>, Eoin Flanagan<sup>2</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>USA)
- P3.01.67** B lineage IL-10 affects B cell metabolism and age-associated inflammation of the nervous system  
**Christopher Udoe, Rudolf Manz** (Germany)
- P3.01.68** NKG2D regulates the effector functions of CD4 T cells during neuroinflammation  
**Christoforos Dimitropoulos<sup>1</sup>, Timo Rückert<sup>1</sup>, Bojan Polic<sup>2</sup>, Marina Babic<sup>2</sup>, Chiara Romagnani<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Croatia)
- P3.01.69** FOXP3+ regulatory T cells gatekeep maternal immune activation to secure proper brain development in offspring  
**Ho-Keun Kwon, Gi-Cheon Kim** (South Korea)
- P3.01.70** Detailed characterization, evolution and early events of brainstem tau pathology in anti-IgLON5 disease  
**Raphael Reinecke<sup>1</sup>, Ellen Gelpi<sup>1</sup>, Morten Blaabjerg<sup>2</sup>, M. Elena Erro<sup>3</sup>, Julia Ferrari<sup>1</sup>, Markus Glatzel<sup>4</sup>, Anna Heidbreder<sup>1</sup>, Birgit Högl<sup>1</sup>, Jan Lewerenz<sup>4</sup>, Liisa Myllykangas<sup>5</sup>, Mara Popovic<sup>6</sup>, Peter Schnider<sup>1</sup>, Deniz Yilmazer-Hanke<sup>4</sup>, Lidia Sabater<sup>3</sup>, Carles Gaig<sup>3</sup>, Romana Höftberger<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Denmark, <sup>3</sup>Spain, <sup>4</sup>Germany, <sup>5</sup>Finland, <sup>6</sup>Slovenia)
- P3.01.71** Modulation of neuroinflammation by interleukin-10 in mouse microglial cells  
**Kathryn Nelson<sup>1</sup>, Andrew Wilcox<sup>2</sup>, Nichole Schrantz<sup>1</sup>, Isabel O'Brien<sup>1</sup>, Jim Rivard<sup>1</sup>, Callie Sagarsky<sup>1</sup>, Rainer Grant<sup>1</sup>, Makenna Carlson-Habegger<sup>1</sup>, Megan Larson<sup>1</sup>, Mandy Kubik<sup>1</sup>** (<sup>1</sup>USA, <sup>2</sup>United Kingdom)

### P3.02 NOVEL APPROACHES TO VACCINOLOGY

- P3.02.01** Modulation of HIV-1 Env antibody responses in mice with rationally designed calcium phosphate nanoparticles  
**Dominik Damm, Leonardo Rojas Sánchez, Kathrin Kostka, Christoph Weingärtner, Jannik T. Wagner, Klaus Überla, Matthias Eppe, Vladimir Temchura** (Germany)
- P3.02.02** A two-component vaccination strategy based on polyfunctional calcium phosphate nanoparticles  
**Christoph Weingärtner, Kathrin Kostka, Dominik Damm, Klaus Überla, Matthias Eppe, Vladimir Temchura** (Germany)
- P3.02.03** Design considerations towards a RIG-I adjuvanted CMV mRNA vaccine  
**Svenja Dudek<sup>1</sup>, Jan Kacprzak<sup>1</sup>, Christine Wuebben<sup>1</sup>, Thomas Zilliger<sup>1,2</sup>, Gunther Hartmann<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Denmark)



### POSTER SESSION 3

- P3.02.04** Inorganic fullerene-like tungsten disulfide nanoparticles strongly modulate the immune response in vitro  
**Darinka Popović<sup>1</sup>, Snežana Zečević<sup>1</sup>, Sergej Tomić<sup>2</sup>, Marina Bekić<sup>2</sup>, Sara Rakočević<sup>1</sup>, Maja Kosanović<sup>2</sup>, Dušica Stojanović<sup>2</sup>, Petar Uskoković<sup>2</sup>, Milan Marković<sup>2</sup>, Dejan Bokonjić, Miodrag Čolić<sup>1,2</sup>** (<sup>1</sup>Bosnia and Herzegovina, <sup>2</sup>Serbia)
- P3.02.05** Evaluation of the dose sparing effects of mmCT, dmLT and alum on two different vaccines in a neonatal mouse model  
**Jenny Lorena Molina Estupinan, Poorya Foroutan Pajoochian, Stefanía P. Bjarnarson, Ingileif Jónsdóttir, Audur Anna Aradottir Pind** (Iceland)
- P3.02.06** Spatial analysis of rhesus macaque lung tissue shows a key role for vaccination or previous SARS-CoV-2 challenge in immune pulmonary status  
**Cillian Gartlan, Francisco J. Salguero, Amy R Cross, Peter Todd, Megan Bradbury, Matthieu Miossec, Benjamin Wright, Mark Coles, Fadi Issa, Joanna Hester, Stephen Taylor, Tom Tipton, Miles Carroll** (United Kingdom)
- P3.02.07** RIG-I ligand adjuvanted mRNA vaccines  
**Christine Wuebben<sup>1</sup>, Thomas Zillinger<sup>1,2</sup>, Janos Ludwig<sup>1</sup>, Gunther Hartmann<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Denmark)
- P3.02.08** Recapitulating memory B cell responses in a lymphoid organ-chip to evaluate mRNA vaccine boosting strategies  
**Raphaël Jeger-Madiot<sup>1</sup>, Delphine Planas<sup>1</sup>, Isabelle Staropoli<sup>1</sup>, Jérôme Kervevan<sup>1</sup>, Héloïse Mary<sup>1</sup>, Camilla Collina<sup>1</sup>, Barbara F. Fonseca<sup>1</sup>, Hippolyte Debarnot<sup>1</sup>, Rémy Robinot<sup>1</sup>, Stacy Gellenoncourt<sup>1</sup>, Olivier Schwartz<sup>1</sup>, Lorna Ewart<sup>2</sup>, Michael Bscheider<sup>3</sup>, Samy Gobaa<sup>1</sup>, Lisa Chakrabarti<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA, <sup>3</sup>Switzerland)
- P3.02.09** Improving paediatric vaccine responses: a neonatal mouse model of pneumococcal vaccination  
**Kiva Brennan, Eleanor Noone, Luke Gibbons, Rachel Dalton, Aline Zoller, Ed Lavelle, Natalia Muñoz-Wolf, Sarah Doyle** (Ireland)
- P3.02.10** Investigating SARS-Cov2 antigen cross-reactivity of secreted (monoclonal) antibodies using droplet microfluidic linked deep sequencing  
**Luca Schlottheuber<sup>1</sup>, Klaus Eyer<sup>2</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Denmark)
- P3.02.11** Comprehensive profiling of vaccine-induced tissue response using ex vivo natural human skin modules  
**Manon Scholaert<sup>1</sup>, Mathias Peries<sup>1</sup>, Emilie Braun<sup>1</sup>, Jeremy Martin<sup>1</sup>, Nadine Serhan<sup>1</sup>, Alexia Loste<sup>1</sup>, Bruner Audrey<sup>1</sup>, Lilian Basso<sup>1</sup>, Benoit Chaput<sup>1</sup>, Eric Merle<sup>2</sup>, Pascal Descargues<sup>2</sup>, Emeline Pages<sup>1</sup>, Nicolas Gaudenzio<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)
- P3.02.12** An investigation of novel vaccination strategies for inducing gastric mucosal immunity  
**Nicole O'Sullivan, Dorian Dederko, Ed Lavelle** (Ireland)
- P3.02.13** Determining the immune response to vaccines in healthy individuals and cancer patients using a systems immunology approach  
**Sina Angenendt, Carlotta Schieler, Aileen Schenk, Sina Beer, Thorben Groß, Aylin Heinrich, Estel Collado Camps, Lars Zender, Claudia Lengerke, Klaus Schulze-Osthoff, Florian Wimmers** (Germany)

**POSTER SESSION 3**

- P3.02.14** High affinity “non-cognate” ligand proteins as a new strategy for hepatitis C virus vaccine  
**Petr Kosztyu, Lucie Vankova, Eliska Kopečna, Shiv Bharadwaj, Milan Kuchar, Veronika Daniel Liskova, Hana Petrokova, Leona Raskova Kafkova, Petr Maly, Milan Raska** (Czech Republic)
- P3.02.15** Design and development of a multi-epitope vaccine prototype against SARS-CoV-2  
**Andrey Tchorbanov, Nikola Ralchev, Iliyan Manoylov, Silviya Bradyanova, Nikolina Mihaylova, Irini Doytchinova, Slavka Tcholakova** (Bulgaria)
- P3.02.16** Enhancing HIV vaccine efficacy through oral adjuvants: unveiling the role of aryl hydrocarbon receptor agonists in boosting cytotoxic memory-like natural killer cell responses  
**Mario Alles, Manuja Gunasena, Christina Isckarus, Imini De Silva, Sarah Board, Will Mulhern, Namal Liyanage** (USA)
- P3.02.18** Tailoring the adjuvanticity of lipid nanoparticles by PEG lipid ratio and phospholipid modifications  
**Norbert Pardi<sup>1</sup>, Mate Vadovics Vadovics<sup>1,2</sup>, Kieu Lam<sup>2</sup>, Emily Daley<sup>1</sup>, Owen Daley<sup>2</sup>, Petra Schreiner<sup>2</sup>, Wenchen Zhao<sup>2</sup>, Kendall Lundgreen<sup>1</sup>, Brian Gaudette<sup>1</sup>, Hiromi Muramatsu<sup>1</sup>, Edit Abraham<sup>3</sup>, Zoltan Lipinszki<sup>3</sup>, Paul Bates<sup>1</sup>, David Allman<sup>1</sup>, James Heyes<sup>2</sup>** (<sup>1</sup>USA, <sup>2</sup>Canada, <sup>3</sup>Hungary)

**P3.03 PATTERN RECOGNITION RECEPTORS**

- P3.03.01** Development and functional analysis of inducible RNA agonists for spatiotemporal control of RIG-I activation  
**Sandra Anika Zeidler, Vivien Rose McKenney, Christine Wuebben, Thomas Zilliger, Janos Ludwig, Alexander Heckel, Gunther Hartmann** (Germany)
- P3.03.02** RIG-I like receptor activation by mRNA incorporating modified nucleosides  
**Katharina I. Maser, Katrin Ciupka, Bastian Putschli, Charlotte Hunkler, Martin Schlee, Eva Bartok, Gunther Hartmann, Thomas Zilliger** (Germany)
- P3.03.03** Temperature regulates toll-like receptor signalling in macrophages  
**Ryan Knight, Wei Wang, Rebecca Coll** (Ireland)
- P3.03.04** Characterization of STING agonist-induced monocyte cell death reveals combination of apoptosis, pyroptosis and caspase 8 activation  
**Marketa Pimkova Polidarova, Andrea Brazdova, Ivan Hirsch, Klara Grantz Saskova** (Czech Republic)
- P3.03.05** The RIG-I/MAVS pathway promotes Wnt signaling-dependent osteogenic differentiation and calcification of human aortic smooth muscle cells  
**Madeleine Gräf, Paraskevi Vasileiadou, Sofia Soler, Thomas Zilliger, Eva Bartok, Gunther Hartmann** (Germany)

### POSTER SESSION 3

- P3.03.07** HMGB1 genetic variants: impact on hepatocellular carcinoma susceptibility and progression in the Moroccan population  
**Chaimaa Zerrad** (*Morocco*)
- P3.03.08** Evaluating the determinants of RNA recognition by innate immune sensors using the RNA sensing reporter cell lines  
**Sebastien Desfarges, Clarisse Hemadou-Lozano, Emeline Biret, Benjamin Rauwel, Clemence Prost, Arnaud Debin, Michele Tiraby** (*France*)

### P3.04 POLYMORPHISMS AND MUTATIONS IN IMMUNOGENETICS

- P3.04.01** Model for the study of drug hypersensitivity based on Bucilamine and the HLA-DRB1\*08:02 allele in Colombian Amerindian populations  
**Carlos Parga-Lozano, Nohemí Esther Santodomingo Guerrero** (*Colombia*)
- P3.04.02** Assessing the impact of SERPING1 gene exons 5 and 6 duplications on mRNA expression in type 1-hereditary angioedema  
**Andrea Ferranti, Silvia Romero Chala, Esther Vergara Prieto, Jose Antonio García Trujillo, María Bravo García-Morato, Luis Miguel Fernández Pereira** (*Spain*)
- P3.04.03** High risk PNPLA3 rs738409 single nucleotide polymorphism is associated with higher concentrations of CCL2 in alcoholic end-stage liver disease  
**Tomislav Kelava, Ivan Budimir Bekan, Pavao Planinić, Dino Šisl, Alan Šućur, Ana Bainrauch, Sara Aničić, Katerina Zrinski Petrović, Nataša Kovačić, Danka Grčević, Vibor Šeša, Anna Mrzljak** (*Croatia*)
- P3.04.04** Follow-up with digital PCR of a patient with VEXAS syndrome treated with azacitidine  
**Alba Exposito Bey, Alicia Jurado Orozco, Carmen Morales Garcia, Marco Montes Cano, María Francisca González Escribano, José Raúl García Lozano** (*Spain*)
- P3.04.05** New scenario: interleukin-2 receptor gamma gene mutation as a variant of uncertain significance  
**Vivian Lizeth Stewart DelCid, Ernesto Roldan Santiago, Eulalia Rodríguez Martín, Elena Manterola Navarro, Rafael Rodriguez Ramos, José Luis Veiga González, Celia Ferrez Hernández, Daniel Albert Mendoza Bravo, Ivan Garcia De La Torre, Alexander Rodero Romero, Patricia Fernández San José, Ana De Andres Martin, Rebeca Perez de Diego** (*Spain*)
- P3.04.06** HLA polymorphism in Leishmania infantum infection  
**Juan Francisco Gutiérrez-Bautista, Maria del Carmen Barrera Aguilera, Beatriz Fernandez Perea, Lucía Ballesta Alcaraz, Ana Marin, Mónica Bernal, Pilar Jimenez, Jose Ramón Vilchez, Miguel Ángel López-Nevot** (*Spain*)
- P3.04.07** Impaired reprogramming of the autophagy flux in maturing dendritic cells from Crohn's disease patients with core autophagy gene-related polymorphisms  
**Gaelle Quiniou, Leslie Andromaque, Rémi Duclaux-Loras, Christophe Viret, Stéphane Nancey, Mathias Faure, Aurore Rozieres** (*France*)

**POSTER SESSION 3**

- P3.04.08** Investigation of the role of the toll-like receptor 3 (TLR3) Leu412Phe (TLR3 L412F) single nucleotide polymorphism in the pathogenesis of long COVID  
**Thomas J. Butler, Shane O'Brien, Luka Moric, Muireann Carey, Zara Cunningham, Seamas Donnelly, Michelle E. Armstrong** (*Ireland*)
- P3.04.09** TLR7, IFITM3, and OAS1 polymorphisms shape COVID-19 susceptibility, severity, and outcome  
**Sanja Matic, Natasa Djordjevic, Danijela Todorovic, Suzana Popovic, Zeljko Mijailovic, Dragan Milovanovic, Predrag Djurdjevic, Katarina Vitosevic, Srdjan Stefanovic, Vanja Canovic, Tijana Markovic, Nemanja Djordjevic, Dejan Baskic** (*Serbia*)
- P3.04.10** Proinflammatory cytokine polymorphisms in immune-mediated glomerular disease  
**Aleksandra Djuric, Marina Perić, Nataša Stajić, Jovana Putnik, Aleksandra Paripović, Ivana Novakovic, Vladislav Vukomanović, Emina Milosevic** (*Serbia*)

**P3.05 T LYMPHOCYTE REGULATION AND FUNCTION**

- P3.05.01** The role of NFκB inducing kinase in regulatory T cells and tissue regulatory T cell subtypes  
**Zeynep Ergün, Ari Waisman** (*Germany*)
- P3.05.02** Hybrid SARS-CoV-2 immunity induces durable cellular pan-coronavirus immunity also in the elderly  
**Lucie Loyal, Julian Braun, Andreas Thiel** (*Germany*)
- P3.05.03** Role of co-stimulatory molecules expressed by dendritic cells in formation of immunological synapse  
**Vincent Gloe** (*Switzerland*)
- P3.05.04** Ligand-independent signalling of T cell inhibitory receptors.  
**Sidrah Naseem, Zhengmin Yang, Andrea Nunez, Jesse Goyette** (*Australia*)
- P3.05.05** Histone deacetylases 1 and 2-mediated control of intestinal CD4<sup>+</sup> T cell immunity  
**Phuc Tran Huu, Rafael de Freitas e Silva, Teresa Preglej, Moritz Madern, Birgit Niederreiter, Sara Catarina Da Silva Miranda, Caroline Lassnig, Birgit Strobl, Michael Bonelli, Wilfried Ellmeier** (*Austria*)
- P3.05.06** Two step selection for bias in β Chain V-J pairing  
**Yoram Louzoun, Reut Levi** (*Israel*)
- P3.05.07** Blockade of PD-1 and costimulation of the CD27 pathway drive the Eomes-dependant proliferation of CD8 T cells with an exhausted phenotype  
**Solange Dejolier, Marie Le Moine, Hacene Dreidi, Lune Cassart, Sébastien Denanglaire, Soren Temara, Guillaume Oldenhove, Stanislas Goriely, Fabienne Andris** (*Belgium*)

### POSTER SESSION 3

- P3.05.08** Study of TSLP signaling through dendritic cells in driving skin T cell responses  
**Marine Guivarch, Pierre Meyer, Pierre Marschall, Thien-Phong Vu Manh, Pierre Hener, Justine Segaud, Beatriz Germán Falcón, Marc Dalod, Mei Li** (France)
- P3.05.09** Identification of functional peptide-specific Nsp3, NC and M SARS-CoV-2 T-cell responses in hybrid immunity  
**Laia Bernad Rosa, Raul Pérez-Caballero, Athina Kilpelainen, Oscar Blanch-Lombarte, Luis Romero, Ruth Peña, Gabriel Felipe Rodríguez-Lozano, Josep Maria Manresa-Dominguez, Bonaventura Clotet, Alex OLvera, Christian Brander, Eva María Martínez Cáceres, Concepción Violán, Pere Torán-Montserrat, Julia G Prado** (Spain)
- P3.05.10** Next-level efficiency: StraightFrom Spleen Isolation Kits - standardizing isolation of untouched T cells with minimal hands-on time  
**Amelie Borczewski, Sebastian Flade, Elina Neufeld, Ermanila Dhana, Gregor Winkels, Anna Baranska** (Germany)
- P3.05.11** Oxysterol-mediated inhibition of CD8 T cell metabolism and function  
**Ella Rogerson, Aisling Cameron, Aisling McCrudden, Sakshi Sankhla, David Finlay** (Ireland)
- P3.05.12** The role of G-protein  $\gamma$  subunit 2 in the pathogenicity of CD4<sup>+</sup> T cell in experimental autoimmune uveitis  
**Suci Cendanawati, Benjamin Ede, Amy Ward, Oliver Bell, Dave Copland, Andrew Dick, Anne Ridley, Lindsay Nicholson** (United Kingdom)
- P3.05.13** Exploring affinity-dependent metabolic imprinting of anti-viral T cell responses  
**Hannah Bollons, Tracey Haigh, Nancy Gudgeon, Guillaume Desanti, Graham Taylor, Sarah Dimeloe, Heather Long** (United Kingdom)
- P3.05.14** SARM, a TLR adapter with NADase activity, regulates the differentiation of distinct populations of CD4 T cells and their inflammatory activity  
**Samuel dos Santos Oliveira, José Arimatéa de Oliveira Nery Neto, Eloisa Martins, Raquel Vieira, João Vinícius Honório da Silva, Victor Yuji, Marcella Cipelli, Niels Olsen Saraiva Camara** (Brazil)
- P3.05.15** Polyphosphate regulates T-cell metabolism and differentiation  
**Benita Kröger, Marion Mengel, Mandy Malle, Reiner Mailer** (Germany)
- P3.05.16** RORA proximal enhancers regulate its expression during early human Th17 cell differentiation  
**Ubaid Ullah Kalim<sup>1</sup>, Rahul Biradar<sup>1</sup>, Sini Junttila<sup>1</sup>, Mohd Moin Khan<sup>1</sup>, Subhash Tripathi<sup>1</sup>, Meraj Hasan Khan<sup>1</sup>, Johannes Smolander<sup>1</sup>, Kartiek Kanduri<sup>1</sup>, Tapio Envall<sup>1</sup>, Asta Laiho<sup>1</sup>, Alexander Marson<sup>2</sup>, Omid Rasool<sup>1</sup>, Laura Elo<sup>1,2</sup>, Riitta Lahesmaa<sup>1,2</sup>** (<sup>1</sup>Finland, <sup>2</sup>USA)
- P3.05.17** Identification of highly suppressive human regulatory T cells in old age  
**Lourdes Rocamora Reverte, Jonathan Dieringer, Birgit Weinberger** (Austria)
- P3.05.18** Deciphering the impact of preeclampsia on  $\gamma\delta$  T cells in the decidua  
**Ziqing Wang, Paulina Lukomska, Tao Yang, Aavani Biju Sindhu, Madeleine Wagner, Ralf Schild, Anke Katharina Bergmann, Christine Morfeld, Sarina Ravens** (Germany)



### POSTER SESSION 3

- P3.05.19** Histone deacetylase class I, especially HDAC2 leads to change of the CD4<sup>+</sup> lineage genes and switch the differentiation to CD4<sup>+</sup>CD8 $\alpha$ <sup>+</sup> T cells  
**Laurin Braune, Hannah R. Spatzier, Anne-Marie Glimm, Lina E. Werner, Kathleen Friedrich, Phuong Nguyen, Ulf Wagner, Kathrin Rothe** (Germany)
- P3.05.20** Memory CD8<sup>+</sup> T-cell formation and pathogen origin: Investigating the connection  
**Veronika Cimermanová, Eva Šályová, Veronika Niederlová, Juraj Michálik, Ondrej Stepánek** (Czech Republic)
- P3.05.21** Human CD8<sup>+</sup>HLA-DR<sup>+</sup>CD45RC<sup>-</sup> T cells as a potential regulatory T cell population  
**Gabriel Knoll, Benedikt Mathies, Michael Keller, Brigitte Jenewein, Birgit Weinberger** (Austria)
- P3.05.22** Biology and immunobiology of a population of innate-like T cells in healthy conditions and cancer  
**Irene Di Ceglie<sup>1</sup>, Anna Rigatelli<sup>1</sup>, Paolo Kunderfranco<sup>1</sup>, Simone Puccio<sup>1</sup>, Roberta Carriero<sup>1</sup>, Silvia Carnevale<sup>1</sup>, Domenico Supino<sup>1</sup>, Elena Magrini<sup>1</sup>, Gabriele De Simone<sup>1</sup>, Chiara Camisachi<sup>1</sup>, Ferdinando Cananzi<sup>1</sup>, Giovanni Capretti<sup>1</sup>, Guido Costa<sup>1</sup>, Guido Torzilli<sup>1</sup>, Giovanna Grieco<sup>1</sup>, Piera Molisso<sup>1</sup>, Anna Pia Lasaracina<sup>1</sup>, Enrico Lugli<sup>1</sup>, Giuseppe Sciumè<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Cecilia Garlanda<sup>1</sup>, Sebastien Jaillon<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Kingdom)
- P3.05.23** High-throughput screening of small molecular compounds targeting FoxP3 identifies MAPK and STAT3 inhibitors as regulatory T cell inhibitors  
**Elise Solli, Nuria Garcia Diaz, Ehsan Hajjar, Selma Cornillot-Clément, Johannes Landskron, Rafi Ahmad, Qian Wei, Kjetil Taskén** (Norway)
- 3.05.26** Regulation of T cell homeostasis by extrinsic cell death pathways  
**Farjana Islam, Scott Layzell, Benedict Seddon** (United Kingdom)
- P3.05.27** Pertussis booster vaccination in four age groups reveals different shaping of memory T cell responses related to primary-vaccine background  
**Jolanda Brummelman, Laura van Eijk, Jacquenline van Gaans-van den Brink, Martien Poelen, Cécile van Els** (Netherlands)
- P3.05.28** Splenic and circulating CD4<sup>+</sup> T lymphocyte subsets in autoimmune and malignant hematologic disorders  
**Sophia Metreveli, Nino Nanava, Irina Kvachadze, Nino Kikodze<sup>3</sup>, Giorgi Giorgobiani, Tinatin Chikovani, Nona Janikashvili** (Georgia)
- P3.05.29** Chronic stress fine-tunes the transcriptomics of ageing T cells in 'dirty' mice  
**Chinna Susan Philip<sup>1</sup>, Uku Haljasorg<sup>1</sup>, Igor Filippov<sup>1,2</sup>, Pärt Peterson<sup>1</sup>** (<sup>1</sup>Estonia, <sup>2</sup>Denmark)
- P3.05.30** Breaking barriers: scrutinizing T cells that act at the forefront in people who develop multiple sclerosis  
**Fabienne van Puijfelik, Jasper Rip, Sophie Shyfrin, Steven Koetzier, Annet Wierenga-Wolf, Helga de Vries, Eric Bindels, Jamie van Langelaar, Beatrijs Wokke, Joost Smolders, Marvin van Luijn** (Netherlands)
- P3.05.31** NFAT single-deficient T cells as a therapeutic option for anti-leukemia and anti-lymphoma responses  
**Boutaina El Kenz, Snigdha Majumder, Isabelle Jugovic, Domenica Saul, Luisa Bell, Nadine Hundhausen, Rishav Seal, Andreas Beilhack, Andreas Rosenwald, Dimitrios Mougiakakos, Friederike Berberich-Siebelt** (Germany)

### POSTER SESSION 3

- P3.05.32** Deformability cytometry of Jurkat cells for cell immunotherapy  
**Lija Fajdiga, Nina Bernat, Lara Betocchi, Špela Zemljič Jokhadar, Jure Derganc**  
(Slovenia)
- P3.05.33** Expression of cytotoxic T-lymphocyte associated protein 4 in interleukin-17A-producing T cells and regulatory T cells is critical for immune homeostasis: Implications for sarcoidosis pathogenesis  
**Lieke de Jong, Jelle Miedema, Ingrid Bergen, Jennifer van Hulst, Menno van Nimwegen, Anne-Marie Mus, Erik Lubberts, Rudi Hendriks, Odilia Corneth**  
(Netherlands)
- P3.05.34** Quantitative and functional heterogeneity in CD4<sup>+</sup> T cell responses to primary COVID-19 mRNA vaccination in older adults  
**Yvonne Dogariu, Martijn Vos, Jacquenline van Gaans-van den Brink, Teun Guichelaar, Elske Bijvank, Josine van Beek, Jelle de Wit, Patricia Kaaijk, Cécile van Els, Jolanda Brummelman** (Netherlands)
- P3.05.35** Contribution of circulating Th2-like Tfr and Th2-like treg cell subsets to early detection in patients with lung adenocarcinoma  
**Ziqi Xiong, Ayibaota Bahabayi, Chen Liu** (China)
- P3.05.37** Development of a CRISPR/Cas9 system for functional studies of transmembrane adaptor protein knockout T cells  
**Nouria Jantz-Naeem, Patricia Gintschel, Anja Sammt, Camilla Merten, Andreas Müller, Sascha Kahlfuß, Burkhart Schraven** (Germany)
- P3.05.39** Impact of estrogen receptor signaling on Th17 cell polarization: possible contribution to Systemic lupus erythematosus development?  
**Alisier Malard, Tobias Alexander, Julia K Polansky** (Germany)
- P3.05.40** CD25-biased IL-2/anti-IL-2 mAb complexes potently expand antigen-primed CD8<sup>+</sup> T cells and overcome Treg cell-mediated suppression of activated CD8<sup>+</sup> T cells  
**Petra Weberova, Irfan Baki Kilic, Katerina Behalova, Bohumil Ptacek, Milada Sirova, Blanka Rihova, Marek Kovar** (Czech Republic)
- P3.05.41** Histone deacetylase 1 as a regulator of CD4<sup>+</sup> T cell expansion in skin autoimmunity  
**Melanie Jensen<sup>1</sup>, Alice Taliento<sup>1</sup>, Maria Stigler<sup>1</sup>, Ludwig Erlmeier<sup>1</sup>, Nikolaus Fortelny<sup>1</sup>, Wilfried Ellmeier<sup>1</sup>, Iris Gratz<sup>1,2</sup>** (<sup>1</sup>Austria, <sup>2</sup>USA)
- P3.05.42** Pro-inflammatory response of human memory CD8 T cells are kept in check by GZMB B regulatory B cells  
**Tess Van Meerhaeghe<sup>1,2</sup>, Manuel Laslandes<sup>2</sup>, Nabila Djouadi<sup>2</sup>, Richard Danger<sup>2</sup>, Gaelle Tilly<sup>2</sup>, Sarah Bruneau<sup>2</sup>, Christophe Masset<sup>2</sup>, Alain Le Moine<sup>1</sup>, Mai Hoa<sup>2</sup>, Sophie Brouard<sup>2</sup>, Nicolas Degauque<sup>2</sup>** (<sup>1</sup>Belgium, <sup>2</sup>France)
- P3.05.43** Fast & efficient particle-free isolation of mouse CD304<sup>+</sup> natural regulatory T cells  
**Alistair Chenery, Trevor Rogers, Allen Eaves, Sharon Louis, Frann Antignano**  
(Canada)
- P3.05.44** The role of follicular cytotoxic T cells subsets and their function in chronic lymphocytic leukemia  
**Fatih Akboğa, Fehmi Hindilerden, Ipek Yonal Hindilerden, Emine Gulturk, Gunnur Deniz, Metin Yusuf Gelmez** (Turkey)

#### POSTER SESSION 3

- P3.05.45** Helios and KLRG1 refine the definition of functionally altered CD8<sup>+</sup> T cell subsets that evolve by aging and CMV infection  
**Tamara Schenk, Martijn Vos, Debbie van Baarle, Teun Guichelaar** (Netherlands)
- P3.05.46** TCF1 enhances regulatory T cells and is upregulated in SLE via the Wnt- $\beta$ -catenin pathway  
**Chen Liu, Xingyue Zeng, Ayibaota Bahabay, Xiayidan Alimu** (China)
- P3.05.47** Investigation of canine T cell receptor beta chain constant gene variants: Implications for Immunotherapy of T cell malignancies  
**Marek Pieczka, Leszek Moniakowski, Dominika Kubiak-Nowak, Arkadiusz Miązek** (Poland)
- P3.05.48** Therapeutic targeting of the cyclic-AMP/prostaglandin E2 pathway in ovarian cancer  
**Nathaniel Edward Bennett Saidu, Katharina Bischof, Youxian Li, Mentowa Fürst Bright, Nora Rojahn Bräthen, Kjetil Taskén** (Norway)
- P3.05.49** Uncovering molecular mechanisms of rapid protection mediated by memory CD8<sup>+</sup> T cells  
**Eva Šályová, Ondrej Stepanek** (Czech Republic)
- P3.05.50** A role for a novel factor in T cell biology  
**Gonçalo Malpica, Silvia Ariotti, Himadri Mukhopadhyay, Germano Vicente, Alea Radcke, Marc Veldhoen** (Portugal)
- P3.05.51** Antigen-specificity determines effector function or regulatory capacity of T cells stimulated by B cells  
**Chien-Hui Chien, Chieh-Hsin Liao, Bor-Luen Chiang** (Taiwan)
- P3.05.52** Increased number of Th1 cells and monocytes is associated with infected non-union in patients with long bone fracture  
**Pia Fehrenbach<sup>1,2</sup>, Ferdinand Weisemann<sup>3</sup>, Claudia Siverino<sup>1</sup>, Katharina Trenkwalder<sup>3,4</sup>, Laura Bürgi<sup>1</sup>, Simon Hackl<sup>3</sup>, Sebastianus A.J. Zaat<sup>2</sup>, Esther de Jong<sup>2</sup>, T. Fintan Moriarty<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>Netherlands, <sup>3</sup>Germany, <sup>4</sup>Austria)
- P3.05.53** Impact of CD69 on experimental autoimmune encephalomyelitis development  
**Laura Notario, Alicia Ballester, Sara Ballester, Elena Lorente, Pilar Lauzurica** (Spain)
- P3.05.54** T cell aging deciphered: a comprehensive study of aging-related adaptations in murine intestinal T cells  
**Martina Palatella<sup>1</sup>, Jana Niemz<sup>1</sup>, Ihor Fillipov<sup>2</sup>, Stefan Flöß<sup>1</sup>, Michael Beckstette<sup>1</sup>, Xiaojing Chu<sup>1</sup>, Raimo Franke<sup>1</sup>, Meina Neumann-Schaal<sup>1</sup>, Diego Ortiz<sup>1</sup>, Christine Falk<sup>1</sup>, Oliver Burton<sup>3</sup>, Adrian Liston<sup>3</sup>, Mark Broenstrup<sup>1</sup>, Leif Schauser<sup>2</sup>, Till Strowig<sup>1</sup>, Maria Rohm<sup>1</sup>, Yang Li<sup>1</sup>, Jochen Huehn<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Denmark, <sup>3</sup>United Kingdom)
- P3.05.55** Th17 cells requires the DNA repair protein XPC to control oxidative DNA damage  
**Jefferson Leite<sup>1,2</sup>, Luísa Menezes Silva<sup>2</sup>, Eloisa Martins<sup>2</sup>, Giovana da Silva Leandro<sup>2</sup>, Natalia Notarberardino Bos<sup>2</sup>, Talita Gonçalves de Oliveira<sup>2</sup>, Victor Yuji<sup>2</sup>, José Arimatéa de Oliveira Nery Neto<sup>2</sup>, Samuel dos Santos Oliveira<sup>2</sup>, Marcella Cipelli<sup>2</sup>, Patrick da Silva<sup>1,3</sup>, Sabrina Baroni<sup>1</sup>, Stefanie Scheu<sup>1</sup>, Leandro Colli<sup>2</sup>, Sandra Marcia Muxel<sup>2</sup>, Ari Waisman<sup>1</sup>, Carlos Frederico Martins Menck<sup>2</sup>, Niels Olsen Saraiva Camara<sup>2</sup>** (<sup>1</sup>Germany, <sup>1</sup>Brazil, <sup>1</sup>USA)

POSTER SESSION 3

- P3.05.56** Unraveling the Impact of CD69 Modulation on CD8+ T Cell Responses During Viral Infection  
**Elena Lorente, Yara Cuesta, Ana Pintor-Poveda, Laura Cobos-Figueroa, Laura Notario, Pilar Lauzurica** (Spain)
- P3.05.57** Modelling drug-sensitisation of human T-cells to predict risk of skin rash in the clinic  
**Paul Thomson<sup>1</sup>, David Spiciarich<sup>2</sup>, Sophie Grice<sup>1</sup>, Catherine Betts<sup>1</sup>, Dean Naisbitt<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>USA)
- P3.05.58** Neonatal regulatory T cells persist into adulthood in multiple tissues and are enriched in the skin  
**Morgane Hilaire, Léonie Cagnet, Aristeidis Roubanis, Benoît L. Salomon** (France)
- P3.05.59** Plasmatic extracellular vesicles at the intersection of immune and metabolic dysregulation in obesity and type 2 diabetes  
**Ilaria Spatocco, Giorgia Mele, Giovanni Di Lorenzo, Davide Nilo, Clorinda Fusco, Kristyna Ruggiero, Giusy De Rosa, Claudia Russo, Mirjam Hoxha, Valentina Bollati, Claudio Procaccini, Giuseppe Matarese, Ferdinando Sasso, Paola de Candia** (Italy)
- P3.05.60** An integrated plasma circulating protein-miRNA signature in type 1 diabetes: markers and players of disease progression  
**Giorgia Mele, Ilaria Spatocco, Licia Prestagiacomo, Clorinda Fusco, Kristyna Ruggiero, Giusy De Rosa, Claudia Russo, Alessandra Petrelli, Claudio Procaccini, Giuseppe Matarese, Marco Gaspari, Paola de Candia** (Italy)
- P3.05.61** Mass cytometry-based immune profiling of human Peyer's patches in crohn's disease  
**Adrian Huck, Yasmina Rodriguez Sillke, Christian Bojarski, Désirée Kunkel, Ulrich Steinhoff, Britta Siegmund, Rainer Glauben** (Germany)
- P3.05.62** Activation of memory and naïve Th cells distinctively affected by myeloid cells with different co-stimulation capabilities  
**Sıla Ulutürk, Güneş Esendağlı** (Turkey)
- P3.05.63** Inflammatory cytokine-producing gamma delta T cells are increased in the inflamed skin of hidradenitis suppurativa patients  
**Andreea Petrasca, Conor Smith, Isla David, Orlaith Walsh, Emily Pender, Siun Murphy, Alexandra Zabarowski, Des Winter, Brian Kirby, Barry Moran, Jean Fletcher** (Ireland)
- P3.05.64** Role of Tiam1 in finetuning intestinal Foxp3+ regulatory T cells  
**Susanne Herppich, Lisa Hoenicke, Justine Smout, Friederike Kruse, Jana Niemz, Marina C. Grewelin-Pils, Xiaojing Chu, Bowen Zhang<sup>3</sup>, Yang Li, Jochen Huehn** (Germany)
- P3.05.65** The role of  $\gamma\delta$ TCR in mouse and human  $\gamma\delta$  T cells  
**Miguel Muñoz-Ruiz<sup>1</sup>, Nicolas Veland<sup>2</sup>, Deborah Schneider-Luftman<sup>2</sup>, Annamaria Mavrigiannaki<sup>2</sup>, Duncan Mckenzie<sup>2</sup>, Bethania Garcia-Cassani<sup>2</sup>, Angela Zarco<sup>1</sup>, Daniel Davies<sup>2</sup>, Shraddha Kamdar<sup>2</sup>, Adrian Hayday<sup>2</sup>** (<sup>1</sup>Spain, <sup>2</sup>United Kingdom)
- P3.05.66** Evaluation of the role of mucosal associated invariant T-cells in drug-induced immunotoxicity  
**Georgia Wells, Xiaoli Meng, Dean Naisbitt** (United Kingdom)



**POSTER SESSION 3**

- P3.05.67** Assessment of immunomodulatory effects of compounds on lymphocyte functions in human and rat cell cultures activated with naïve antigens  
**Patryk Kret** (Germany)
- P3.05.68** Splicing-aware single-cell RNA-Seq resolution of peripheral blood CD4 T cells  
**Daniil Lukyanov<sup>1</sup>, Evgeny Egorov<sup>1</sup>, Valeriia Kriukova<sup>2</sup>, Kristin Ladell<sup>3</sup>, David A. Price<sup>3</sup>, Andre Franke<sup>2</sup>, Dmitriy Chudakov<sup>1,4,5</sup>** (<sup>1</sup>Russian Federation, <sup>2</sup>Germany, <sup>3</sup>United Kingdom, <sup>4</sup>Czech Republic, <sup>5</sup>United Arab Emirates)
- P3.05.69** Long noncoding RNA LIRIL2R modulates FOXP3 levels and suppressive function of human CD4<sup>+</sup> regulatory T cells by regulating IL2RA  
**Syed Bilal Ahmad Andrabi<sup>1</sup>, Ubaid Ullah Kalim<sup>1</sup>, Senthil Palani<sup>1</sup>, Mohd Moin Khan<sup>1</sup>, Meraj Hasan Khan<sup>1</sup>, Jimmy Fagersund<sup>1</sup>, Julius Orpana Orpana<sup>1</sup>, Niklas Paulin Paulin<sup>1</sup>, Kedar Batkulwar Batkulwar<sup>1</sup>, Sini Junntila<sup>1</sup>, Tanja Buchacher<sup>1</sup>, Toni Grönroos Grönroos<sup>1</sup>, Lea Toikka Toikka<sup>1</sup>, Tea Ammunét Ammunét<sup>1</sup>, Partho Sen Sen<sup>1</sup>, Matej Oresic Oresic<sup>1,2</sup>, Venla Kumpulainen Kumpulainen<sup>1</sup>, Johanna Tuomisto Tuomisto<sup>1</sup>, Rahul Sinha Sinha<sup>3</sup>, Alexander Marson<sup>3</sup>, Omid Rasool<sup>1</sup>, Laura Elo<sup>1</sup>, Riitta Lahesmaa<sup>1</sup>** (<sup>1</sup>Finland, <sup>2</sup>Sweden, <sup>3</sup>USA)
- P3.05.70** Distinct requirements for CD4<sup>+</sup> T cell help for immune responses induced by mRNA and adenovirus vector SARS-CoV-2 vaccines  
**Lyn Yong, Claire Hutchings, Eleanor Barnes, Paul Klenerman, Nicholas Provine** (United Kingdom)
- P3.05.72** Antigen recall assays to evaluate the effects of immunomodulatory drugs on adaptive immunity  
**Lucy Roadknight, Alex Roberts, David Laughton, Barbara Young, Stuart Thomson, John Unitt** (United Kingdom)
- P3.05.73** Comparison of FOXP3 methylation status using three different methods for Treg stability  
**Collin Hudzik** (USA)
- P3.05.74** Exploring the interaction between T-cells and neurons using human cellular models  
**Diana Cardoso, Lucia Dutan Polit, Laura Sichlinger, Adam Pavlinek, Rebecca Marrow, Elizabeth Gray, Serena Melgrati, Deepak P. Srivastava, Leonie Taams** (United Kingdom)
- P3.05.75** Enkephalin-mediated modulation of basal somatic sensitivity by regulatory T cells in mice  
**Aubert Nicolas, Purcarea Madeleine, Novarino Julien, Schopp Julien, Audibert Alexis, Li Wangtianrui, Fournier Marie, Cagnet Léonie, Naturel Marie, Casrouge Armanda, Marie-Caroline Dieu-Nosjean, Blanchard Nicolas, Dietrich Gilles, Cedric Peirs, Gilles Marodon** (France)
- P3.05.76** Expression of circulating T cells in Type 1 diabetes  
**Maria Legorreta, Ricardo Michelle Vaquero, Paola Santana Sánchez, Aldo Ferreira-Hermosillo, Angélica Castro-Rios** (Mexico)



### POSTER SESSION 3

- P3.05.77** The serine/threonine kinase PIM-3 regulates essential T cell functions  
**Tobias Frey<sup>1</sup>, Kristin Schaffer<sup>1</sup>, Marlene Gerner<sup>1</sup>, Simone Allram<sup>1</sup>, Viola Baur<sup>1</sup>, Anja Wagner<sup>1</sup>, Johanna Strobl<sup>1</sup>, Marlene Hollenstein<sup>1</sup>, Doris Trapin<sup>1</sup>, Johannes Kovarik<sup>1</sup>, Bernhard Jank<sup>1</sup>, Nicholas Campion<sup>1</sup>, Julia Eckl-Dorna<sup>1</sup>, Lukas Unger<sup>1</sup>, Winfried Pickl<sup>1</sup>, Hannes Kührtreiber<sup>1</sup>, Michael Mildner<sup>1</sup>, Franziska Dengler<sup>1,2</sup>, Wilfried Ellmeier<sup>1</sup>, Ci Zhu<sup>1</sup>, Klaus Kratochwill<sup>1</sup>, Georg Stary<sup>1</sup>, Ralf Schmidt<sup>1</sup>, Lisa Wagar<sup>3</sup>, Klaus Schmetterer<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>Germany, <sup>3</sup>USA)
- P3.05.78** Induction of stable human Treg cells from effector CD4<sup>+</sup> T cells in vitro  
**Aness Haddouche, Mustapha Cherai, Clara Cretet-Rodeschini, Baptiste Fouquet, Jehanne Hassan, Gorochoy Guy, Makoto Miyara** (France)
- P3.05.79** Study on the modulation of  $\gamma\delta$ T-cell cytotoxicity at maternal-fetal interface via iKIR-HLA-C axis  
**Diana Manchorova<sup>1</sup>, Marina Alexandrova<sup>1</sup>, Ivaylo Vangelov<sup>1</sup>, Violeta Dimitrova<sup>1</sup>, Lyubomir Djerov<sup>1</sup>, Gil Mor<sup>1</sup>, Tanya Dimova<sup>1</sup>** (<sup>1</sup>Bulgaria, <sup>2</sup>USA)
- P3.05.80** Investigating the impact of perfluoroalkyl substances on CD4<sup>+</sup>T cell differentiation  
**Ziyu Yang<sup>1</sup>, Alex Dickens<sup>1</sup>, Matej Oresic Oresic<sup>1,2</sup>** (<sup>1</sup>Finland, <sup>2</sup>Sweden)
- P3.05.81** DR3 and GITR agonists as novel therapeutic targets to expand tregs and prevent acute GvHD  
**Muhammad Daud, Gamboa Vargas Juan, Lang Isabell, Stepanzow Svetlana, Olena Zaitseva, Arellano Estibaliz, Graf Carolin, Shaikh Haroon, Barkey Sophie, Einsele Hermann, Wajant Harald, Andreas Beilhack** (Germany)
- P3.05.82** Mechanical induction and long-term stability of Treg in MS  
**Muhammad Qasim<sup>1</sup>, Jessica White<sup>2</sup>, Irish Senthilkumar<sup>1</sup>, Eoin McEvoy<sup>1</sup>, Denise Fitzgerald<sup>2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>United Kingdom)
- P3.05.83** ISG20L2, an exonuclease that regulates germinal center reaction  
**Sara G Dosil, Ana Rodríguez Galán, Nieves Fernández-Gallego, Lola Fernández-Messina, Almudena Ramiro, Francisco Sánchez-Madrid** (Spain)

### P3.06 THERAPY IN AUTOIMMUNITY

- P3.06.01** Therapeutic implications of a herbal supplement: a study on alleviating adjuvant-induced rheumatoid arthritis in rats  
**Mehrdad Mosadegh, Aref Khalkhali, Yasaman Sadeghi, Yousef Erfani** (Iran)
- P3.06.02** Delayed-type hypersensitivity component of mouse trinitrobenzenesulfonic acid-induced colitis and collagen-induced arthritis is suppressed by extracellular vesicle-carried miR-150  
**Paulina Skalska, Martyna Cieřlik, Angelika Fedor, Magdalena Gębicka, Angelika Domagała, Katarzyna Nazimek, Krzysztof Bryniarski** (Poland)
- P3.06.03** Characterization of HDM3006, a highly potent and selective leading compound targeting STING for the treatment of systemic lupus erythematosus  
**Mengting Zhao, Chuan He, Hao Pan, Cancan Cai, Yan Huang, Liubin Guo, Chunhua Jiang, Dongzhou Liu** (China)

**POSTER SESSION 3**

- P3.06.04** NK CD45RA+ and CTLs CD62L+ as potential diagnostic biomarkers of Rheumatoid Arthritis, with increased expression of immunosuppressive immune checkpoints following ex vivo cell therapy  
**Carolina Pujalte-Satorre, Jose Miguel Sempere-Ortells, Andrés Baeza-Morales, Jorge Esteve-Girbés, Juan Javaloyes-Anton, Ana Belen Lopez-Jaen, Pascual Martinez-Peinado, Miguel Medina-Garcia, Francisco Javier Navarro-Blasco, Alicia Navarro-Sempere, Cynthia Romera-Lopez, Sandra Pascual Garcia** (*Spain*)
- P3.06.05** Selective CAR-T cell mediated B cell depletion suppresses interferon signature in systemic lupus erythematosus  
**Artur Wilhelm, David Chambers, Fabian Müller, Aline Bozec, Ricardo Grieshaber-Bouyer, Thomas Winkler, Dimitrios Mougiakakos, Andreas Mackensen, Georg Schett, Gerhard Krönke** (*Germany*)
- P3.06.06** Enhanced therapeutic effect of CXCR4/IL10-expressing mesenchymal stromal cells in a preclinical model of inflammatory bowel disease  
**Mercedes Lopez-Santalla<sup>1</sup>, Marta Covadonga Ordoñez-Velasco<sup>1</sup>, Miriam Hernando-Rodríguez<sup>1</sup>, Maria Fernandez-Garcia<sup>1,2</sup>, Juan Antonio Bueren<sup>1</sup>, Rosa Maria Yañez<sup>1</sup>, Marina Garin<sup>1</sup>** (*<sup>1</sup>Spain, <sup>2</sup>France*)
- P3.06.07** Impact of caloric restriction in patients with multiple sclerosis treated with oral disease modifying therapy  
**Alice Verdiani, Marta Pirronello, Silvia D'Orso, Silvia Corbisiero, Beatrice Lista, Corinna Perini, Gisella Guerrera, Manolo Sambucci, Andrea Misiti, Maria Chiara Buscarinu, Fabio Buttari, Federica Isé, Teresa Micillo, Clorinda Fusco, Alessandra Colamatteo, Gianluca Lauritano, Mario Picozza, Fortunata Carbone, Esmeralda Quartuccio, Giuseppe Matarese, Diego Centonze, Marco Salvetti, Claudio Gasperini, Giovanna Borsellino, Luca Battistini** (*Italy*)
- P3.06.08** Study of B cells in subjects with multiple sclerosis treated with cladribine  
**Marta Pirronello, Mario Picozza, Gisella Guerrera, Silvia Corbisiero, Silvia D'Orso, Alice Verdiani, Beatrice Lista, Serena Ruggieri, Esmeralda Quartuccio, Maria Chiara Buscarinu, Francesca De Masi, Carla Tortorella, Marco Salvetti, Claudio Gasperini, Giovanna Borsellino, Luca Battistini** (*Italy*)
- P3.06.09** Innate immunity under high efficacy disease modifying therapy  
**Silvia Corbisiero, Marta Pirronello, Mario Picozza, Andrea Misiti, Alice Verdiani, Silvia D'Orso, Gisella Guerrera, Manolo Sambucci, Beatrice Lista, Elena Olivieri, Serena Ruggieri, Esmeralda Quartuccio, Maria Chiara Buscarinu, Francesca De Masi, Carla Tortorella, Marco Salvetti, Claudio Gasperini, Giovanna Borsellino, Luca Battistini** (*Italy*)
- P3.06.10** Characterization of immunomodulatory effects of dental pulp stem cells for therapy in rheumatoid arthritis  
**Alessandro Rossi, Veronica Galli, Martina Bonacini, Ilaria Ferrigno, Gianluca Carnevale, Rosanna Di Tinco, Maria Grazia Catanoso, Fabio Brandolino, Claudio Galluzzo, Alessandro Zerbini, Carlo Salvarani, Stefania Croci** (*Italy*)
- P3.06.11** Investigating the impact of MSC-EVs on B cell responses  
**Manon Williams<sup>1</sup>, Dessi Malinova<sup>1</sup>, Meadhbh Brennan<sup>2</sup>, Pamina Contreras Kallens<sup>2</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>Ireland*)

### POSTER SESSION 3

- P3.06.12** Methotrexate hampers induction of antigen-specific CD4 T-cells, while TNF inhibitors impede maintenance of antigen-specific B cells in IMiD patients following SARS-CoV-2 mRNA vaccination  
**Laura Kummer, Laura Fernandez Blanco, Christine Kreher, Lisan Kuijper, Veronique Konijn, Tineke Jorritsma, Mariël Duurland, Maryse Tempert, Niels Verstegen, Koos van Dam, Eileen Stalman, Luuk Wieske, Mathieu Claireaux, Marit J. van Gils, Laura Boekel, Gertjan Wolbink, Geert D'Haens, Adriaan Volkers, Theo Rispens, Sander Tas, Filip Eftimov, Taco Kuipers, Anja ten Brinke, Marieke van Ham** (*Netherlands*)
- P3.06.13** Defining the effects of IL-23 inhibitors on local and systemic immune responses in psoriasis  
**Ikram Mezghiche<sup>1</sup>, Claire Leloup<sup>1</sup>, Ambre Dangien<sup>1</sup>, Hanane Yahia<sup>1</sup>, Laetitia Camard<sup>1</sup>, Natalia Pietrosevoli<sup>1</sup>, Claudia Chica<sup>1</sup>, Anne Fourie<sup>2</sup>, Carrie Greving<sup>2</sup>, Barbara Joyce Shaikh<sup>2</sup>, Raphaëlle Parker<sup>1</sup>, Daniel J. Cua<sup>2</sup>, Benedicte Oules<sup>1</sup>, Sarah Guegan-Bart<sup>1</sup>, Sélim Aractingi<sup>1</sup>, Lars Rogge<sup>1</sup>, Elisabetta Bianchi<sup>1</sup>** (*<sup>1</sup>France, <sup>2</sup>USA*)
- P3.06.14** Mesenchymal stem cells expressing anti-inflammatory and anti-fibrotic neuropeptides: a new advanced therapy for autoimmune myocarditis  
**Ana Blázquez-Caraballo, Marta Caro, Natividad Martin-Morales, Francisco O'Valle, Jenny Campos-Salinas, Mario Delgado** (*Spain*)
- P3.06.15** Targeted modulation of myeloid regulatory cells with prostaglandin E2 ameliorates experimental autoimmune encephalomyelitis and preserves gut microbiota  
**Marina Bekić, Dušan Radojević, Nataša Radulović, Dušica Stojanović, Miroslav Dinić, Jelena Đokić, Sergej Tomić** (*Serbia*)
- P3.06.16** Generation of regulatory T cells from human memory CD4<sup>+</sup>T cells by upregulation of NKD2 and downregulation of Wnt- $\beta$  catenin signaling  
**Jiajun He<sup>1,2</sup>, Marcus Maurer<sup>1</sup>, Stefan Frischbutter<sup>1</sup>** (*<sup>1</sup>Germany, <sup>2</sup>China*)
- P3.06.17** B-cell depletion by a novel "2+1" CD19-targeted T-cell engager (TCE) for the treatment of B-cell related autoimmune diseases  
**Gang Bian, Huiling Liu, Tengpeng Li, Ge Lin, Peng Chen, Jay Mei, Bing Hou** (*China*)
- P3.06.18** Effect of extracellular vesicles derived from licensed and unlicensed MSCs on B cell function and activation  
**Pamina Contreras Kallens<sup>1</sup>, Manon Williams<sup>2</sup>, Dessi Malinova<sup>2</sup>, Meadhbh Brennan<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>United Kingdom*)
- P3.06.19** Protective properties of dimethyl fumarate on synovial fibroblast function  
**Aenea Brugman, Dumitru Anton, Carl Orr, Viviana Marzaioli, Douglas Veale, Ursula Fearon** (*Ireland*)
- P3.06.20** Parameters of thrombosis risk and percentage of CD4<sup>+</sup>Foxp3<sup>+</sup> regulatory T cells (Treg) after the first three months of baricitinib treatment of rheumatoid arthritis (RA) patients  
**Magdalena Massalska, Anna Felis-Giemza, Paulina Klimek, Anna Kornatka, Tomasz Burakowski, Magdalena Plebanczyk, Kornelia Chmurzynska, Patrycja Gardias, Weronika Kurowska, Ewa Kuca-Warnawin, Marzena Ciechomska, Włodzimierz Maslinski** (*Poland*)

**POSTER SESSION 3**

- P3.06.21** Bruton's tyrosine kinase inhibitors tolebrutinib, evobrutinib and fenebrutinib affect neutrophil functions in vitro: implications for treatment of autoimmune disease  
**Mirre De Bondt, Janne Renders, Paloma Petit de Prado, Nele Berghmans, Noémie Pörtner, Lotte Vanbrabant, Gayel Duran, Paulien Baeten, Bieke Broux, Mieke Gouwy, Patrick Matthys, Niels Hellings, Sofie Struyf** (*Belgium*)
- P3.06.22** Comparison of three assays to quantify serum concentrations of infliximab and adalimumab  
**Juan López Pérez, Mercedes Inda Landaluce, Luis Martinez-Lostao** (*Spain*)
- P3.06.23** Complex immunomodulation by pomegranate-derived ellagitannins  
**Miodrag Čolić<sup>1,2</sup>, Marina Bekić<sup>2</sup>, Sergej Tomić<sup>2</sup>, Jelena Đokić<sup>2</sup>, Dušan Radojević<sup>2</sup>, Katarina Šavkin<sup>2</sup>, Nataša Miljuš<sup>1</sup>, Milan Marković<sup>2</sup>, Ranko Škrbić<sup>1</sup>** (*Bosnia and Herzegovina, <sup>2</sup>Serbia*)
- P3.06.24** Unique abilities of Acr1 protein of Mycobacterium tuberculosis to elicit Tregs and MDSCs and impart protection against experimental autoimmune encephalomyelitis  
**Taruna Lamba, Javed Naim Agrewala** (*India*)
- P3.06.25** Sialic acid: a novel approach to promote FVIII-specific tolerance  
**Eleonora Nardini, Brigitte Carole Keumatio, Katarina Olesek, Elko Peterse, Hakan Kalay, Eveline Li, Ernesto Rodriguez Camejo, Yvette van Kooyk** (*Netherlands*)
- P3.06.26** Anti-citrullinated histone monoclonal antibody CIT-013 to inhibit eosinophil extracellular trap release  
**Eline Zwiers<sup>1</sup>, Daphne Montizaan<sup>1</sup>, Annemarie Kip<sup>1</sup>, Kelsy Waaijenberg<sup>1</sup>, Sameer Mathur<sup>2</sup>, Paul Fichtinger<sup>2</sup>, Paul Vink<sup>1</sup>, Renato Chirivi<sup>1</sup>, Maarten van der Linden<sup>1</sup>, Eric Meldrum<sup>1</sup>** (*<sup>1</sup>Netherlands, <sup>2</sup>USA*)
- P3.06.27** Anti-citrullinated histone antibody CIT-013 is a dual action therapeutic targeting neutrophil extracellular trap-associated pathology in rheumatoid arthritis  
**Maarten van der Linden<sup>1</sup>, Annemarie Kip<sup>1</sup>, Sangeeta Kumari<sup>1</sup>, Stephanie van Dalen<sup>1</sup>, Martyn Foster<sup>2</sup>, Tirza Bruurmijn<sup>1</sup>, Peter van Zandvoort<sup>1</sup>, Leonie Middelink<sup>1</sup>, Maarten Kraan<sup>1</sup>, Helmuth van Es<sup>1</sup>, Eric Meldrum<sup>1</sup>, Renato Chirivi<sup>1</sup>** (*<sup>1</sup>Netherlands, <sup>2</sup>United Kingdom*)
- P3.06.28** Jakinibs effect on subsets of the innate and adaptative immune system  
**Juan José Fernández Cabero, Alejandra Comins-Boo, Davis San Segundo, Carmen Lasa-Teja, Ricardo Blanco, Marcos Lopez Hoyos** (*Spain*)
- P3.06.29** Which came first, the chicken or the egg? Usefulness of determining total anti-Infliximab antibodies for monitoring biological therapy  
**Victor Mauricio Bohorquez Cruz, Laura Viñas Gimenez, Maria Teresa Sanz Martinez** (*Spain*)
- P3.06.30** Advantages of the TRF-LFIA monotest method for monitoring biological drugs in clinical practice  
**Victor Mauricio Bohorquez Cruz, Laura Viñas Gimenez, Maria Teresa Sanz Martinez** (*Spain*)
- P3.06.31** Gene expression analyses identify biomarkers that distinguish stable and active multiple sclerosis patients treated with fingolimod  
**Helle Bach Søndergaard, Thor Linnet, Annette Oturai, Ana I.F. Jensen, Melinda Magyari, Jeppe Romme Christensen, Finn Sellebjerg** (*Denmark*)

### POSTER SESSION 3

- P3.06.32** Selective suppression of pathogenic B lymphocytes from Hashimoto's thyroiditis patients by chimeric protein molecules  
**Andrey Tchorbanov, Nikola Ralchev, Iliyan Manoylov, Nikolina Mihaylova, Irini Doytchinova, Alexander Shinkov** (*Bulgaria*)
- P3.06.33** Therapeutic development of target-specific antibody-RNA conjugates in a mouse model of autoimmune myasthenia gravis  
**Ruksana Huda** (*USA*)
- P3.06.34** How format impacts activity: structure-activity relationship for optimal FcRn engagement of Fc-based therapeutics  
**Ibo Janssens** (*Belgium*)
- P3.06.35** Secondary lymphoid organs targeted Interleukin-35 for various autoimmune diseases and inflammation treatments  
**Jun Ishihara** (*United Kingdom*)

### P3.07 THERAPY OF ALLERGY AND HYPERSENSITIVITY

- P3.07.01** Treatment of insulin allergy by intranasal Fc-fused preproinsulin  
**Widad Nefida<sup>1</sup>, Grégoire Stym\_Popper<sup>1</sup>, Claire Deligne<sup>1</sup>, Yohan Lorreyte<sup>1</sup>, Peter Achenbach<sup>2</sup>, Roberto Mallone<sup>1</sup>, Sylvaine You<sup>1</sup>** (*<sup>1</sup>France, <sup>2</sup>Germany*)
- P3.07.02** Immunomodulatory impact of the BanLec-Bet v 1 chimera and its variants on antigen-presenting cells  
**Isidora Protić Rosić<sup>1,2</sup>, Bernhard Kratzer<sup>2</sup>, Zorana Lopandić<sup>1</sup>, Gordan Blagojević<sup>1</sup>, Marija Gavrović-Jankulović<sup>1</sup>, Winfried Pickl<sup>2</sup>** (*<sup>1</sup>Serbia, <sup>2</sup>Austria*)
- P3.07.03** Long-term immune changes in patients allergic to bee venom undergoing immunotherapy  
**Paula Álvarez Romero, Raquel Bernardo, Ana Navas, Nadine Blanco Toledano, Aurora Jurado Roger, Berta Ruiz León** (*Spain*)

### P3.08 TRANSPLANTATION IMMUNOLOGY

- P3.08.01** Influence of the glutathione S-transferase theta 1 antibodies on renal function rates after kidney transplant  
**Luz Cheilly Mosquea Jiménez, Sergio Barroso Hernández, Maria Begoña Vazquez Araujo, Rocio Martínez Gallardo, Román Hernández Galledo, María Luisa Vargas Pérez, Rocío Valencia Pereira** (*Spain*)
- P3.08.02** SLC7A5 deletion in T cells or L-leucine restriction in diet efficiently control acute graft-versus-host disease mouse model  
**Nieves Fernández-Gallego Anaya, Susana Luengo-Arias, Raquel Castillo-González, Amelia Rojas-Gomez, Blanca Anega, Marta Ramírez-Huesca, Sara Martínez-Martínez, Maider Bizkarguenaga, Rubén Gil-Redondo, Oscar Millet, Julián Aragonés, Francisco Sanchez-Madrid, Danay Cibrian** (*Spain*)



**POSTER SESSION 3**

- P3.08.03** Reduced ceramides are associated with acute rejection in liver transplant patients and skin graft and hepatocyte transplant mice, reducing tolerogenic dendritic cells  
**Nayoung Kim** (*South Korea*)
- P3.08.04** Following autologous hematopoietic stem cell transplantation decidual-like NK cell subsets are expanded in oncologic patients  
**Gabriel Astarloa, Diego Polanco-Alonso, Victor Sandá, Ainhoa Amarilla-Irusta, Ainara Lopez-Pardo, Raquel Pérez-Garay, Silvia Pérez-Fernández, Naiara G. Bediaga, Carmen González, Alasne Uranga, Mercedes Rey, Marta Alonso, Tomás Carrascosa, Bárbara Manzanares-Martin, Juan J. Mateos-Mazón, Juan C. García-Ruiz, Olatz Zenarruzabeitia, Laura Amo, Francisco Borrego** (*Spain*)
- P3.08.05** BSA dilutions as a helpful tool to treat background in single antigen luminex  
**Daniel Arroyo Sánchez, Francisco Javier Gil Etayo, Jairo Eduardo Niño Ramirez, Pilar Terradillos Sánchez, Isabel Jimenez, Ariadna Vicente Parra, Guadalupe Tabernero Fernández, María Pilar Fraile Gómez, Gabriela González Zhindon, Ramón García Sanz, Amalia Tejada-Velarde** (*Spain*)
- P3.08.06** Quantifying HLA mismatches at epitope level in haploidentical hematopoietic stem cell transplantation: impact in the outcome in strategies using PTCy  
**Francisco Javier Gil, Jairo Eduardo Niño Ramirez, Daniel Arroyo-Sánchez, Marta Fonseca-Santos, Isabel Jimenez, Ariadna Vicente Parra, Pilar Terradillos Sánchez, Miguel Alcoceba, Lucía Lopez-Corral, Ramon García-Sanz, Amalia Tejada-Velarde** (*Spain*)
- P3.08.07** Pharmacodynamic effect of mTOR inhibition-based immunosuppressive therapy on T and B cell subsets after renal transplantation  
**Xinyi Wei, Sabine Weber, Decheng Yin, Ida Allabauer, Tilman Jobst-Schwan, Michael Wiesener, Mario Schiffer, Diana Dudziak, Christian H.K. Lehmann, Joachim Wölfl, Andre Hörning** (*Germany*)
- P3.08.08** Withaferin A suppresses the activation of CD4<sup>+</sup> T cells and the following differentiation of B cells  
**Gukhui Min, Green Kim, Jung Joo Hong** (*South Korea*)
- P3.08.09** Enhanced renal tissue regeneration and functional recovery with IL-15 treatment in acute kidney injury  
**Agnes A. Mooslechner, Konstantin A. Klötzer, Hansjörg Habisch, Tobias Madl, Alexander R. Rosenkranz, Thomas Bärnthaler, Kathrin Eller** (*Austria*)
- P3.08.10** Immunosenescent T-lymphocyte subpopulations are greatly expanded in long-term kidney transplant recipients  
**Evangelos Memmos, Georgios Lioulis, Efstratios Kasimatis, Alikì Xochelli, Lambros Vagiots, Vasiliki Nikolaidou, Nikolaos Antoniadis, Georgios Tsoulfas, Maria Stangou, Asimina Fylaktou** (*Greece*)
- P3.08.11** QuantiFERON-CMV assay by chemiluminescence immunoassay: Is it more suitable for real-live monitoring of transplant patients?  
**Raquel Fernandez Moreno, Aurora Paez-Vega, Diego Rodriguez-Cano, Ana Salinas, Fernando Rodriguez-Cantalejo, Aurora Jurado Roger, Julian Torre-Cisneros, Sara Cantisán** (*Spain*)

POSTER SESSION 3

- P3.08.12 HLA compatibility in renal transplantation: next generation sequencing versus low/intermediate resolution methods in our Centre  
**Ramon Garcia Alaejos, Luz Cheilly Mosquea Jiménez, Azahara Díaz Lozano, Angela Lucas Blanco, Maria Begoña Vazquez Araujo, Marta Aguilar Criado** (Spain)
- P3.08.13 Assessment of clinical-laboratory parameters in patients with autoimmune renal disease following transplantation  
**Elisavet Kontou, Petros Mantzios, Vasiliki Kitsiou, Glykeria Tsouka, Stella Pomoni, Diamanto Kouniaki, Katerina Tarassi, Vasileios Vougas, Maria Darema, Alexandra Tsirogianni** (Greece)
- P3.08.14 Kidney transplantation with several and repeatedly positive crossmatch: making a leap into the void  
**Cristina Torres Durán, Primitivo José Buendía Romero, Luis Bravo González-Blas, Natalia Ridao Cano, Jesús Martínez Borra, Antonio Lopez Vazquez, Jose Ramón Vidal Castiñeira** (Spain)
- P3.08.15 Human leucocyte antigen and eplets - A trimolecular docking method for donor selection in renal transplantation  
**Nidheesh Roy, Elyas K K, Feroz Aziz** (India)
- P3.08.16 Analysis of the relative immunogenicity of mismatched HLA class I eplets in renal transplantation  
**Javier Galán Picón, Alberto Gallardo García, Miriam Vilches-Moreno, Joel Gutierrez-Serrudo, Antonio Nieto** (Spain)
- P3.08.17 Donor organ age correlates with NLRP1 inflammasome activation in immune cells in kidney transplantation  
**Juan Miguel Suárez-Rivero, Juan López Pérez, Antonio Astorga-Gamaza, Ines Muela-Zarzuela, Raquel de la Varga-Martínez, Aurora Aguilera, Teresa Garcia, Auxiliadora Mazuecos, Mario David Cordero** (Spain)
- P3.08.18 Donor age have effects on senescence biomarkers in kidney-transplanted patients  
**Juan López Pérez, Juan Miguel Suárez-Rivero, Ines Muela-Zarzuela, Raquel de la Varga-Martínez, Aurora Aguilera, Teresa Garcia, Antonio Nieto, Auxiliadora Mazuecos, Mario David Cordero** (Spain)
- P3.08.19 Identification and characterization of ten novel HLA alleles. Evaluation of their role in optimal donor selection in transplantation  
**Diamanto Kouniaki, Theofilos Athanassiades, Vasiliki Kitsiou, Katerina Tarassi, Alexandra Tsirogianni** (Greece)
- P3.08.20 Improving lymphocyte purity in flow cytometric crossmatch assays: a comparison of cell isolation methods  
**Daniel Marti, Alexandra Manchón, Nuria Exposito, Jose Luis Caro, Eduard Palou, Juan Torres Canizales** (Spain)
- P3.08.21 A novel calculated panel reactive antibody score calculator incorporating HLA-DQB1/DQA1 and DPB1/DPA1 associations: enhancing allocation for organ transplantation in the spanish population  
**Juan Francisco Luchoro, Jose Luis Caro, Juan Torres Canizales, Montserrat Digon, Nuria Exposito, Silvia Rica, Montserrat Masó, Alexandra Manchón, Maria Dolores Fernández, Nuria Palau, Daniel Lorca-Arce, Eva González, Eduard Palou** (Spain)

**POSTER SESSION 3**

- P3.08.22** Mononuclear phagocyte system readily responds to allogeneic platelets in a murine model of platelet transfusion refractoriness  
**Gabriel Rojas Jiménez, Catherine Angénieux, Blandine Maître** (*France*)
- P3.08.23** Impact of end-stage lung diseases on the immune cell composition in lung parenchyma  
**Bellmas-Sanz Ramon, Hitz Anna-Maria, Bettina Wiegmann, Evgeny Chichelnitskiy, Jenny F Kuehne, Wiebke Rackwitz, Jana Keil, Kerstin Beushausen, Arjang Ruhparwar, Wiebke Sommer, Gregor Warnecke, Edith Plucinski, Regina Engelhardt, Christina Petzold-Muegge, Lavinia Neuebert, Danny Jonigk, Ius Fabio, Christine Falk** (*Germany*)
- P3.08.24** Selective deletion of HLA class I molecules for Improved skin graft compatibility  
**Laura Cobos-Figueroa, Laura Notario, Carmen Mir, Daniel López, Sara Lauzurica, Carlos Molpeceres, Elena Lorente, Pilar Lauzurica** (*Spain*)
- P3.08.25** Longitudinal dynamics of SARS-COV-2 specific humoral and cellular immune responses in patients on waiting list and after lung transplantation  
**Melissa Hübner, Jasper Sauer, Louisa Ruhl, Jenny F. Kuehne, Evgeny Chichelnitskiy, Kerstin Beushausen, Jana Keil, Marion Schael, Tobias Welte, Jens Gottlieb, Ius Fabio, Mark Greer, Christine Falk** (*Germany*)
- P3.08.26** Donor T and NK cells with a special tissue-resident memory phenotype migrate into the periphery of lung transplant recipients - a potential feature for tolerance development  
**Bellmas-Sanz Ramon, Hitz Anna-Maria, Bettina Wiegmann, Jenny F. Kuehne, Evgeny Chichelnitskiy, Theodore Kapellos, Jana Keil, Kerstin Beushausen, Wiebke Sommer, Kristian Händler, Matthias Becker, Kevin Bassler, Danny Jonigk, Mark Greer, Joachim L. Schultze, Ius Fabio, Gregor Warnecke, Christine Falk** (*Germany*)
- P3.08.27** Analysis of the relative immunogenicity of mismatched HLA class I eplets in renal transplantation  
**Javier Galán Picón, Alberto Gallardo García, Miriam Vilches-Moreno, Jorge Mannelli, Joel Gutierrez-Serrudo, Antonio Nieto** (*Spain*)
- P3.08.28** Booster dose of Tozimameran, in renal transplant recipients, is followed by T-cell activation, but not senescence or exhaustion  
**Stamatia Stai, Georgios Lioulis, Alike Xochelli, Anastasia Papadopoulou, Evangelia Yannaki, Efstratios Kasimatis, Michalis Christodoulou, Eleni Moysidou, Georgios Tsoulfas, Maria Stangou, Asimina Fylaktou** (*Greece*)
- P3.08.29** Calcineurin blockade modifies dendritic cell differentiation and induces a tolerogenic phenotype  
**Marco Galli, Laura Marongiu, Stefano Cozzi, Giuseppe Rocca, Giulia Stucchi, Anna Celant, Alessia Donato, Ilaria Fontana, Metello Enzo Innocenti, Francesca Granucci** (*Italy*)
- P3.08.30** Immune signature profiling in patients with graft-versus-host disease following hematopoietic stem cell transplantation  
**Leoni Bücken<sup>1</sup>, Julika Neumann<sup>1</sup>, Adrian Liston<sup>2</sup>, Frédéric Baron<sup>1</sup>, Stephanie Humblet-Baron<sup>1</sup>** (<sup>1</sup>*Belgium*, <sup>2</sup>*United Kingdom*)
- P3.08.31** Non-killer cell immunoglobulin-like receptor profile following allogeneic stem cell transplantation  
**Basak Sayinalp Arslan, Melek Gunindi Korkut, Füsün Özmen, Yahya Buyukasik** (*Turkey*)

### POSTER SESSION 3

- P3.08.32 Phenotypic and metabolic assessment of circulating T-cells in liver transplant recipients enrolled in a biomarker-guided immunosuppression withdrawal trial  
**Jorge Torres Yaguana<sup>1</sup>, Elena Perpiñan<sup>1</sup>, Julien Vionnet<sup>2</sup>, Catherine Simpson<sup>1</sup>, Hefin Rhys<sup>1</sup>, Maria Hernandez-Fuentes<sup>1</sup>, Niloufar Safinia<sup>1</sup>, Marc Martinez-Llordella<sup>1</sup>, Alberto Sanchez-Fueyo<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Switzerland)

### P3.09 TUMOR MICROENVIRONMENT

- P3.09.01 B cell anti-tumor immune responses in renal cell carcinoma patients  
**Liat Barak, Shayel Bercovich, Adva Levy-Barda, Avital Sarusi-Portuguez, Ronnie Blecher, Rabab Naamneh, Katharina Imkeller, Shay Golan, Ziv Shulman** (Israel)
- P3.09.02 Oral squamous carcinoma cells differentiate monocytes into immunosuppressive CD25+CD163+CD206+ macrophages  
**Hector F. Pelaez-Prestel, Fernando Gonzalez-Martin, Esther M. Lafuente, Pedro A. Reche** (Spain)
- P3.09.03 Novel human monoclonal antibodies specific to the A33 glycoprotein recognizes prostate cancer  
**Awatef Ben Jemaa, Chaima Ben Slimen, Ridha Oueslati** (Tunisia)
- P3.09.04 Preferential deployment of DNA repair pathways: the tumor associated macrophages acting as a coordinator in response to cisplatin treatment in ovarian cancer  
**Bilash Chatterjee, Amit Srivastava** (India)
- P3.09.05 Differential predictive value of resident memory CD8 T cell subpopulations in non-small cell lung cancer patients treated by immunotherapy  
**Thi Tran, Lea Paolini, Stephanie Cognac, Jean-Philippe Villemain, Marie Wislez, Jennifer Arrondeau, Ludger Johannes, Jonathan Ulmer, Louis-Victorien Vieillard, Josephine Pineau, Alain Gey, Valentin Quiniou, Pierre Barennes, Hang Phuong Pham, Milena Hasan, Isabelle Cremer, Karen Leroy, Pierre Laurent-Puig, Laure Gibault, Patrice Ravel, Fathia Mami-Chouaib, François Goldwasser, Elizabeth Fabre, Diane Damotte, Eric Tartour** (France)
- P3.09.07 Monocytic- and early stage-myeloid derived suppressor cells are expanded in patients with hepatocellular carcinoma and associate with tumor progression  
**Marta Chivite Lacaba, Alberto Utrero Rico, Iago Justo, Cecilia González Cuadrado, Oscar Caso, Patricia Almendro Vázquez, Carlota Cantonad Ruigomez Martín, Angel Alfocea Molina, Esther Mancebo Sierra, Rocío Laguna Goya, Manuel J Del Rey Cerros<sup>4</sup>, Lorena Pascual Palacios, Manuel Serrano, Oscar Cabrera Marante, Daniel Pleguezuelo, Edgard Rodríguez de Frías<sup>4</sup>, Estela Paz Artal** (Spain)
- P3.09.09 To B or not to B in NSCLC: Functional characterisation of tumor infiltrating B cells in NSCLC  
**Ana Santiso<sup>1</sup>, Oliver Kindler<sup>1</sup>, Xiaodong Zhu<sup>2</sup>, Sofia Raftopoulou<sup>1</sup>, Ingeborg Klymiuk<sup>1</sup>, Kathrin Maitz<sup>1</sup>, Zala Mihalic<sup>1</sup>, A. McGarry Houghton<sup>2</sup>, Julia Kargl<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>USA)



### POSTER SESSION 3

- P3.09.10** Rafoxanide negatively modulates STAT3 and NF- $\kappa$ B activity and inflammation-associated colon tumorigenesis.  
**Teresa Pacifico<sup>1</sup>, Carmine Stolfi<sup>1</sup>, Lorenzo Tomassini<sup>1</sup>, Anderson Luiz-Ferreira<sup>2</sup>, Eleonora Franzè<sup>1</sup>, Angela Ortenzi<sup>1</sup>, Alfredo Colantoni<sup>1</sup>, Giuseppe S. Sica<sup>1</sup>, Manolo Sambucci<sup>1</sup>, Ivan Monteleone<sup>1</sup>, Giovanni Monteleone<sup>1</sup>, Federica Laudisi<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>Brazil)
- P3.09.11** High frequency of CD16<sup>+</sup> ILT2<sup>hi</sup> monocytes in colorectal cancer: friend of foe?  
**Ignacio Juarez, Christian Vaquero-Yuste, Marta Molina-Alejandre, Jose Maria Muguerza-Huguet, Cristina Sanchez del Pueblo, Maria Suarez-Solis, Jose Manuel Martin-Villa** (Spain)
- P3.09.12** Myeloperoxidase alters T cell function and plays an immunosuppressive role in non-small cell lung cancer  
**Anna Lueger, Paulina Valadez-Cosmes, Kathrin Maitz, Nejra Cosic Mujkanovic, Oliver Kindler, Marah Runtsch, Julia Karg** (Austria)
- P3.09.13** Dysregulated lipid metabolism is a key driver of immunosuppression in ovarian cancer  
**Karen Slattery<sup>1</sup>, Donal Brennan<sup>1</sup>, Lydia Lynch<sup>1,2</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P3.09.14** Immune checkpoint modulation induced by inflammatory cytokines in colon cancer cells  
**Ilaria ferrigno, Martina Bonacini, Alessandro Rossi, Cecilia Catellani, Veronica Buia, Carlo Salvarani, Alessandro Zerbini, Stefania Croci** (Italy)
- P3.09.15** Modelling macrophages-glioblastoma cross-talk in tumor microenvironment  
**Federica Mornata<sup>1</sup>, Alessandra Maielli<sup>1</sup>, Haralampos Hatzikirou<sup>2,3</sup>, Friedrich Feuerhake<sup>3</sup>, Peter Raab<sup>3</sup>, Benedetta Savino<sup>1</sup>, Massimo Locati<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Arab Emirates, <sup>3</sup>Germany)
- P3.09.16** Profiling the immune populations in paediatric brain tumours: the MIMIC program  
**Tiago Carvalheiro, Joyce I. Meesters-Ensing, Raoull Hoogendijk, Mariëtte Kranendonk, Eelco W. Hoving, Friso G. Calkoen, Jasper van der Lugt, Stefan Nierkens** (Netherlands)
- P3.09.17** Ferroptosis induces immunogenic cell death and reshapes the tumor microenvironment towards improved immunotherapy in hepatocellular carcinoma  
**Wibke Werner, Alix Bruneau, Johanna Kusnick, Katharina Detjen, Isabella Lurje, Nicola Beindorff, Frank Tacke, Linda Hammerich** (Germany)
- P3.09.18** Smoldering inflammation is revealed by the collagen scaffold adaptation and remodeling  
**Luca Vannucci<sup>1</sup>, Dmitry Stakheev<sup>1</sup>, Pavol Lukac<sup>1</sup>, Lenka Rajsiglova<sup>1</sup>, Paolo Tenti<sup>1</sup>, Daniel Hadraba<sup>1</sup>, David Vondrasek<sup>1</sup>, Gianluca Mucciolo<sup>2</sup>, Paola Cappello<sup>3</sup>, Renata Stepankova<sup>1</sup>, Peter Makovicky<sup>1</sup>, Tomas Hudcovic<sup>1</sup>, Petr Sima<sup>1</sup>, Fabian Caja<sup>1</sup>, Daniel Smrz<sup>1</sup>** (<sup>1</sup>Czech Republic, <sup>2</sup>United Kingdom, <sup>3</sup>Italy)
- P3.09.19** Lymphoma B cells express SIRP $\alpha$  and increased SIRP $\alpha$ <sup>+</sup> B cells are associated with inferior clinical outcomes in B-cell non-Hodgkin lymphoma  
**Zhizhang Yang, Hyo Jin Kim, Xinyi Tang, Prithviraj Mukherjee, Vaishali Bhardwaj, Patrizia Mondello, Stephen Ansell** (USA)
- P3.09.20** Expression patterns of transforming growth factor beta - related genes in metastatic brain tumours  
**Boncho Grigorov, Antoniya Grigorova, Stefan Valkanov, Ridvan Yusuf, Lyuba Miteva** (Bulgaria)



### POSTER SESSION 3

- P3.09.21** Effect of IFN- $\gamma$  on MIF-CD74-related immune pathways in triple negative breast cancer cell lines  
**Aysenur Kokoglu<sup>1</sup>, Ali Abdi<sup>1</sup>, Esin Cetin<sup>1</sup>, Suhendan Ekmekcioglu<sup>2</sup>, Gunnur Deniz<sup>1</sup>**  
(<sup>1</sup>Turkey, <sup>2</sup>USA)
- P3.09.22** Tumor specific T cells in acute myeloid leukemia (AML): illusion or reality?  
**Lisa Aziez, Romain Vazquez, Ismael Boussaid, Ania Alik, Zoé Fremont, Kanchanadevi Manasse, Chloe Friedrich, Marie Templé, Justine Decroocq, Rudy Birsén, Olivier Kosmider, Didier Bouscary, Michaela Fontenay, Nicolas Chapuis, Yannick Simoni** (France)
- P3.09.23** Oral colistin improves the therapeutic response of tumors to anti-PD1 treatment through an IFN- $\gamma$ -dependent mechanism  
**Miloslav Kverka, Anietie Francis Udoumoh, Štěpán Coufal, Michal Kraus, Zuzana Jacková, Tomáš Thon, Tomáš Hrnčíř** (Czech Republic)
- P3.09.24** Regulatory macrophages in a murine model of lung carcinoma  
**Barbara Polese, Nicolas Tessandier, Gary Dupont, Céline Legrand, Céline Vanwinge, Fabienne Perin, Amandine Tytgat Tytgat, Laurence Fievez, Fabrice Bureau, Didier Cataldo, Nathalie Jacobs** (Belgium)
- P3.09.25** Unleashing NK cell anti-tumor response in prostate cancer by targeting the CXCR4/CXCL12 axis  
**Federica Portale<sup>1</sup>, Marta Iovino<sup>1</sup>, Nicolò Morina<sup>1</sup>, Marta Pandini<sup>1</sup>, Giulia Marelli<sup>1</sup>, Roberta Carriero<sup>3</sup>, Piergiuseppe Colombo<sup>1</sup>, Clelia Peano<sup>1</sup>, Gianluca Basso<sup>1</sup>, Javier Cibella<sup>1</sup>, Paolo Kunderfranco<sup>1</sup>, Enrico Lugli<sup>1</sup>, Massimo Lazzeri<sup>1</sup>, Paolo Casale<sup>1</sup>, Francesco Cecconi<sup>1,2</sup>, Thomas J. Schmidt<sup>3</sup>, Jiri Eitler<sup>3</sup>, Torsten Tonn<sup>3</sup>, Diletta Di Mitri<sup>1</sup>**  
(<sup>1</sup>Italy, <sup>2</sup>Denmark, <sup>3</sup>Germany)
- P3.09.27** Gene electrotransfer of plasmid DNA encoding chemokines CCL5 and CCL17 combined with irradiation induces immunomodulatory effects in murine tumors  
**Tim Bozic, Iva Santek, Simona Kranjc Brezar, Gregor Sersa, Bostjan Markelc, Maja Cemazar** (Slovenia)
- P3.09.28** Spectral cytometry reveals distinct immunological signature discriminating PDAC from HD patients  
**Teresa Ruckebrod, Hartmann Raifer, Magdalena Huber** (Germany)
- P3.09.29** Neutrophil plasticity in the tumor microenvironment is dependent on HPV status in irradiated head and neck cancer  
**Clara Reichardt, Lia Mogge, Devarshi Dadawala, Marco Munoz Becerra, Udo Gaipl, Benjamin Frey, Luis Munoz** (Germany)
- P3.09.30** Spatial immunoprofiling of the tumor tissue in patients with leiomyosarcomas  
**Iva Benešová, Andrej Ozaniak, Jan Balko, Vira Tovazhnianska, Michal Rataj, Dominika Galová, Jitka Smetanova, Robert Lischke, Jiřina Bartůňková, Zuzana Ozaniak Strížová** (Czech Republic)
- P3.09.31** Exploring the role of mutant Kras-mediated inflammation in endometriosis development using murine models  
**Shin-Ting Wu, Eing-Mei Tsai, Jau-Ling Suen** (Taiwan)

#### POSTER SESSION 3

- P3.09.32** The role of extracellular vesicles in renal cell carcinoma progression  
**Aline Seiko Carvalho Tahyra<sup>1</sup>, Leandro Colli<sup>2</sup>, Martin van Royen<sup>1</sup>, Guido Jenster<sup>1</sup>, Fausto Almeida<sup>2</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Brazil)
- P3.09.33** LYVE-1+ perivascular macrophages represent a therapeutic target in the tumour microenvironment  
**Karen T. Feehan, Jit Sarkar, Tik Shing Cheung, Joanne Anstee, Meriem Bahri, James Rosekilly, Cheryl Gillett, Pawan Dhami, James N. Arnold** (*United Kingdom*)
- P3.09.34** Immunophenotyping in peripheral blood and bone marrow niche of multiple myeloma: focus on innate CD8+ T lymphocytes  
**Emma Narbeburu, Hélène Gardeney, Niels Moya, Arthur Bobin, Anthony Levy, Cecile Gruchet, Xavier Leleu, André Herbelin, Jean-Marc Gombert, Alice Barbarin** (*France*)
- P3.09.35** Next generation of spatial biology: high-throughput multiplexed Imaging Mass Cytometry™ with whole slide modes  
**Qanber Raza<sup>1</sup>, Thomas Pfister<sup>1</sup>, Liang Lim<sup>1</sup>, David Howell<sup>2</sup>, Nikesh Parsotam<sup>1</sup>, David King<sup>2</sup>, Christina Loh<sup>1</sup>, Dawar Pasha<sup>3</sup>, Gloria Martrus Zapater<sup>4</sup>** (<sup>1</sup>Canada, <sup>2</sup>USA, <sup>3</sup>United Kingdom, <sup>4</sup>Spain)
- P3.09.36** Novel whole slide imaging modes for imaging mass cytometry reveal cellular and structural composition of mouse glioblastoma  
**Qanber Raza<sup>1</sup>, Thomas Pfister<sup>1</sup>, Nick Zabinyakov<sup>1</sup>, Nikesh Parsotam<sup>1</sup>, David King<sup>1</sup>, Liang Lim<sup>1</sup>, Christina Loh<sup>1</sup>, Dawar Pasha<sup>2</sup>, Gloria Martrus Zapater<sup>3</sup>** (<sup>1</sup>Canada, <sup>2</sup>United Kingdom, <sup>3</sup>Spain)
- P3.09.37** Novel whole slide imaging modes for imaging mass cytometry unveil extensive cellular heterogeneity in human gliomas  
**Nick Zabinyakov<sup>1</sup>, Qanber Raza<sup>1</sup>, Thomas Pfister<sup>1</sup>, Nikesh Parsotam<sup>1</sup>, David Howell<sup>1</sup>, Liang Lim<sup>1</sup>, Christina Loh<sup>1</sup>, Dawar Pasha<sup>2</sup>, Gloria Martrus Zapater<sup>3</sup>** (<sup>1</sup>Canada, <sup>2</sup>United Kingdom, <sup>3</sup>Spain)
- P3.09.38** Neutrophils-like monocytes increase in patients with colon cancer and induce dysfunctional TIGIT+ NK cells  
**Alessia Calabrò<sup>1</sup>, Fabiana Drommi<sup>1</sup>, Stefania Campana<sup>1</sup>, Giacomo Sidoti Migliore<sup>2</sup>, Grazia Vento<sup>1</sup>, Gaetana Pezzino<sup>1</sup>, Gregorio Costa<sup>1</sup>, Annamaria Petrungaro<sup>1</sup>, Eugenia Quartarone<sup>1</sup>, Riccardo Cavaliere<sup>1</sup>, Guido Ferlazzo<sup>1</sup>, Claudia De Pasquale<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>USA)
- P3.09.39** The impact of ER stress on  $\gamma\delta$  T cells in the tumor microenvironment  
**Leonie Schöftner<sup>1</sup>, Julia Feiser<sup>1</sup>, Amalia Sophianidis<sup>1</sup>, Lara Ronacher<sup>1</sup>, Oliver Nussbaumer<sup>2</sup>, Andrew Hutton<sup>2</sup>, Maurizio Zanetti<sup>3</sup>, Christof Regl<sup>1</sup>, Christina Guttman-Gruber<sup>1</sup>, Stefan Hainzl<sup>1</sup>, Iris Gratz<sup>1,3</sup>, Giorgia Nasi<sup>1</sup>** (<sup>1</sup>Austria, <sup>2</sup>United Kingdom, <sup>3</sup>USA)
- P3.09.40** Stereo-imaging mass cytometry: expansion to 3D of multiparametric single-cell analysis in tissue  
**Maria Rita Fumagalli<sup>1</sup>, Marco Erreni<sup>1</sup>, Damiano Zanini<sup>1</sup>, Elena Magrini<sup>1</sup>, Raffaella Parente<sup>1</sup>, Raffaella D'Anna<sup>1</sup>, Federica Marchesi<sup>1</sup>, Subhra Kumar Biswas<sup>1</sup>, Alberto Mantovani<sup>1,2</sup>, Andrea Doni<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Kingdom)

### POSTER SESSION 3

- P3.09.41** Colorectal cancer microenvironment controls mast cell phenotypical plasticity  
**Caterina Marangio, Erisa Putro, Alessia Carnevale, Helena Stabile, Silvia Ruggeri, Emanuela Pillozzi, Antonella Stoppacciaro, Roberto Caronna, Marcello Gasparrini, Angela Gismondi, Rosa Molfetta, Rossella Paolini** (*Italy*)
- P3.09.42** Siglec ligand-receptor axis: novel insight into extracellular vesicle mediated immunomodulation in colorectal cancer  
**Anastasija Walsh, Clodagh O'Neill, Seyedmohammad Moosavizadeh, Ellen Donohoe, Lei Lei, Roisin Dwyer, Aideen Ryan** (*Ireland*)
- P3.09.43** Exercise-induced extracellular vesicles delay tumor growth by igniting inflammation in immunologically 'cold' triple-negative murine breast carcinomas  
**Agata Mlynska<sup>1</sup>, Neringa Dobrovoliskiėne<sup>1</sup>, Karolina Suveizde<sup>1</sup>, Gabija Lukaseviciute<sup>1</sup>, Krizia Sagini<sup>2</sup>, Beatriz Martin-Gracia<sup>2</sup>, Silvana Romero<sup>2</sup>, Alicia Llorente Martinez<sup>2</sup>, Beatrice Gudaite<sup>1</sup>, Vita Pasukoniene<sup>1</sup>** (<sup>1</sup>*Lithuania*, <sup>2</sup>*Norway*)
- P3.09.44** Xenografting mouse models to study human cutaneous  $\gamma\delta$  T cells in health and disease  
**Giorgia Nasi<sup>1</sup>, Leonie Schöftner<sup>2</sup>, Oliver Nussbaumer<sup>1</sup>, Andrew Hutton<sup>1</sup>, Amalia Sophianidis<sup>1</sup>, Anshu Sharma<sup>1</sup>, Christina Guttman-Gruber<sup>1</sup>, Stefan Hainzl<sup>1</sup>, Susanne Kimeswenger<sup>1</sup>, Monika Ettinger<sup>1</sup>, Iris Gratz<sup>1,3</sup>** (<sup>1</sup>*Austria*, <sup>2</sup>*United Kingdom*, <sup>3</sup>*USA*)
- P3.09.45** Heterotypic 3D cancer spheroids as a controlled modeling platform for studying tumour microenvironment  
**Egle Zymantaite, Agata Mlynska** (*Lithuania*)
- P3.09.46** Role play by endogenous galectin-1 in an experimental model of melanoma  
**Javier Gutiérrez, Berta Segura-Collar, Ricardo Gargini, Marina Garin** (*Spain*)
- P3.09.47** Boosting systemic anti-tumour immunity: the effects of electroporation on proteomic output and immune cell polarization in human ex vivo gastrointestinal cancer explant models  
**Aisling Ui Mhaonaigh, Lorraine Smith, Matt Mcelheron, Aoibhín Woods, Fiona O'connell, Kirstan Murphy, Meghana Menon, Niamh Hallinan, Yasir Bashir, Vincent Varley, Niamh O'connor, Cian Muldoon, Ciara Ryan, Brian Mehigan, Waqas Butt, Narayanasamy Ravi, Claire Donohoe, Noel Donlon, John Larkin, Paul McCormick, Dara Kavanagh, Michael Kelly, John V. Reynolds, Declan Soden, Jacintha O'sullivan** (*Ireland*)
- P3.09.49** Stromal cell-mediated immunosuppression: sialylated ligands as orchestrators of immune evasion in colorectal cancer  
**Norashikin Zakaria, Aoise O'Neill, Hannah Egan, Oliver Treacy, Sean Hynes, Aisling Hogan, Aideen Ryan** (*Ireland*)
- P3.09.50** The impact of the STING pathway on the antitumor response of short-term fasting  
**Raquel Vieira, José Arimatéa de Oliveira Nery Neto, João Vinícius Honório da Silva, Samuel dos Santos Oliveira, Eloisa Martins, Anthony Gabry, Beatriz Leocata, Barbara Padovani, Niels Olsen Saraiva Camara, Rafael Almeida** (*Brazil*)
- P3.09.51** Associations between soluble PD-L1/PD-1 and circulating immune cells for prostate cancer progression  
**Žilvinas Survila, Vita Pašukonienė, Margarita Žvirblė** (*Lithuania*)

**POSTER SESSION 3**

- P3.09.52** Tumor immune microenvironment in ovarian cancer: advanced flow cytometry reveals B-cells variability and therapeutic potential  
**Eleonora Capezzali, Martina Arcieri, Carolina Ricci, Stefano Restaino, Silvia Tonon, Laura Mariuzzi, Maria Orsaria, Carlo Pucillo, Giuseppe Vizzielli, Barbara Frossi** (Italy)
- P3.09.53** Bone marrow immune profiles and their predictive value in multiple myeloma progression and treatment response  
**Anna Maria Corsale, Marta Di Simone, Mojtaba Shekarkar Azgomi, Emilia Gigliotta, Andrea Rizzuto, Francesca Garofano, Maria Speciale, Miriam Sciortino, Cristina Aquilina, Fulvio Brucato, Giusy Corsale, Francesca Buffa, Nadia Caccamo, Sergio Siragusa, Francesco Dieli, Serena Meraviglia, Cirino Botta** (Italy)
- P3.09.54** Lymphocyte profile shifts and checkpoint molecule expression in pancreatic cancer patients  
**Marta Di Simone, Anna Maria Corsale, Miriam Di Caro, Serena Meraviglia, Francesco Dieli** (Italy)
- P3.09.55** Alternative Treg oxygen responses in the tumor microenvironment  
**Jacopo Arrigoni, Francesca Simoncello, Lorenzo Drufuca, Carolina Dossena, Mattia Toninelli, Michaela Fakiola, Ramona Bason, Grazisa Rossetti, Massimiliano Pagani** (Italy)
- P3.09.56** The regulatory effect of curcumin in HER2+ breast cancer  
**Ava O'Meara-Cushen, Visali Umamaheswari Soundararajan, Eileen Lane, Cathy Brougham** (Ireland)
- P3.09.57** Functional interplay between autologous T cell, cancer associated fibroblast and tumour associated macrophage cultures in high grade serous ovarian cancer  
**Caitlin Waddell, Angelica Castaneda, Bethany Potts, Patrick Caswell, Richard Edmondson** (United Kingdom)
- P3.09.58** To determine the effect of miR-204 overexpression on breast cancer and the impact on immunomodulators  
**Cathy Brougham** (Ireland)
- P3.09.59** Tumour metabolites shape Treg chromatin landscape through histone lactylation  
**Anna Beneggi, Lorenzo Drufuca, Carolina Dossena, Ramona Bason, Michaela Fakiola, Grazisa Rossetti, Massimiliano Pagani** (Italy)
- P3.09.60** Infiltrating  $\gamma\delta$  T cells of treatment-naïve patients affected by pancreatic cancer show two different transcriptome profiles  
**Elena Lo Presti, Francesca Cupaioli, Ivan Merelli, Andrea De Gaetano** (Italy)
- P3.09.61** IL-33 enhances eosinophil-driven trogocytosis, facilitating the acquisition of immune checkpoint molecules from tumor cells in a receptor-ligand mediated manner  
**Sara Andreone, Francesca Spadaro, Francesco Noto, Iole Macchia, Mario Falchi, Antonella Tinari, Valentina Pellerito, Davide Vacca, Claudio Tripodo, Silvia Piconese, Claudia Afferni, Fabrizio Mattei, Giovanna Schiavoni** (Italy)
- P3.09.62** Functional APC-T cell interactions in cancer and autoimmune diseases: a focus on sialylation  
**Sofia Ibanez Molero, Katarina Olesek, Magali Coccimiglio, Yvette van Kooyk** (Netherlands)

### POSTER SESSION 3

- P3.09.63** Antigen cross-presentation in hypoxic tumoral microenvironment is a key element driving CD8<sup>+</sup> IL-17 suppressive response  
**Tiffanie Antonio<sup>1</sup>, Berkan Savas<sup>1</sup>, Fida Azar<sup>1</sup>, Kevin Thierry<sup>1</sup>, Zhichong WU<sup>1,2</sup>, Melissa Masmoudi<sup>1</sup>, Ana Hennino<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>China)
- P3.09.64** Dynamic polarization status of tumour-associated macrophages and NK cells and IL-15 expression in the triple negative breast cancer  
**Alma Starčević, Damir Grebic, Manuela Avirovic, Petra Valkovic Zujic, Danijela Veljković, Tamara Gulic** (Croatia)
- P3.09.65** The regulatory link between MITF and VEGFA/FLT1 in melanoma cell lines  
**Parinaz Mahdavi, Eirikur Steingrímsson** (Iceland)
- P3.09.66** Identification of potential immune checkpoint biomarkers for human papillomavirus associated cervical cancer  
**Mariya Alkalbani, Aliya Alansari** (Oman)
- P3.09.67** Chemotherapy drives tertiary lymphoid structures that correlate with ICI-responsive TCF1<sup>+</sup>CD8<sup>+</sup> T cells in metastatic ovarian cancer  
**Michal Hensler<sup>1</sup>, Jitka Fucikova<sup>1</sup>, Tereza Lanickova<sup>1</sup>, Lenka Kasikova<sup>1</sup>, Jana Drozenova<sup>1</sup>, Jan Laco<sup>1</sup>, Michal Halaska<sup>1</sup>, Ales Ryska<sup>1</sup>, Lorenzo Galluzzi<sup>2</sup>, Radek Spisek<sup>1</sup>** (<sup>1</sup>Czech Republic, <sup>2</sup>USA)
- P3.09.68** Immune spectrum in NSCLC tumor microenvironment using spatial transcriptomics  
**Ioana Berindan-Neagoe<sup>1</sup>, Bica-Pop Cecilia<sup>1</sup>, Laura Pop<sup>1</sup>, Victor Curean<sup>1</sup>, Radu Pirlog<sup>1</sup>, Ioana Rusu<sup>1</sup>, Ovidiu Laurean Pop<sup>1</sup>, Manuela Ferracin<sup>2</sup>, Andreas Bender<sup>1</sup>** (<sup>1</sup>Romania, <sup>2</sup>Italy)

### P3.10 VACCINES

- P3.10.03** Specific cellular and humoral response after the third dose of anti-SARS-CoV-2 RNA vaccine in patients with immune-mediated rheumatic diseases on immunosuppressive therapy  
**Kauzar Mohamed Mohamed, Maria Paula Alvarez Hernandez, Carlos Jimenez Garcia, Kissy Guevara Hoyer, Angela Villegas Mendiola, Teresa Guerra Galan, Alejandro Pereiro Rodriguez, Maria Dolores Mansilla Ruiz, Maria Palacios Ortega, Juliana Ochoa Grullon, Miguel Fernandez Arquero, Silvia Sanchez Ramon** (Spain)
- P3.10.04** Assessment of lipid nanoparticle (LNP) uptake and its effects on immune cells in hepatocellular carcinoma (HCC)-burdened versus healthy mice  
**Yanira Zeyn, Paul Schneider, Malin Svensson, Ignacio Berti, German Islan, Benedikt Schober, Mark Helm, Stephan Gehring, Leonard Kaps, Matthias Bros** (Germany)
- P3.10.05** Mass cytometry unveils baseline and vaccine-induced cellular correlates of immune response variability to SARS-CoV-2 vaccination in the elderly  
**Ratnadeep Mukherjee, Linn Margrethe Eggesbø, Asia-Sophia Wolf, Ingrid Fadum Kjønstad, Guri Solum, Anthony Ravussin, Sabin Bhandari, Anna Hayman Robertson, Per Magnus, Lill Trogstad, Anja Kristoffersen, Unni Nygaard, Siri Mjaaland** (Norway)



#### POSTER SESSION 3

- P3.10.06** The safety, early lung transcriptional responses and efficacy of differently adjuvanted subunit tuberculosis vaccines after intrapulmonary delivery  
**Erica Stewart, Claudio Counoupas, Kia Ferrell, Taylor Cootes, Ellis Armitage, Matt Johansen, Shatarupa Das, Philip Hansbro, Nikolai Petrovsky, Warwick Britton, James Triccas** (Australia)
- P3.10.07** Boosting cell-mediated immunity to *Burkholderia pseudomallei* outer membrane protein antigen with cationic nanoparticles  
**Jeremy Aboagye<sup>1</sup>, Jorge Huete-Carrasco<sup>1</sup>, Siobhán McClean<sup>1</sup>, Julen Tomás Cortázar<sup>1</sup>, Thomas Courant<sup>2</sup>, Dorothee Neple<sup>2</sup>, Ed Lavelle<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Switzerland)
- P3.10.08** SphB1 is a potential antigen for inclusion in a pertussis mRNA vaccine to prevent nasal infection with Bordetella pertussis and overcome the challenge of emerging PRN-negative strains  
**Lisa Borkner<sup>1</sup>, Joanne M. O'Hara<sup>2</sup>, Brenda Nguyen<sup>2</sup>, Kimberly L. Carey<sup>2</sup>, Christina Dold<sup>2</sup>, Obadiah Plante<sup>2</sup>, Andrea Carfi<sup>2</sup>, Kingston Mills<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>USA)
- P3.10.09** A third Mumps-Measles-Rubella immunization elicits mumps-specific cellular responses in young adults with distinct responses in immune subgroups  
**Rene Raeven, Maarten Emmelot, Sara Suarez Hernandez, Petra Molenaar, Martijn Vos, Patricia Kaaijk** (Netherlands)
- P3.10.10** Age differentially impacts SARS-CoV-2 spike-specific adaptive immune responses induced by adenoviral versus mRNA vaccines  
**Davide Proietto<sup>1</sup>, Beatrice Dallan<sup>1</sup>, Martina De Laurentis<sup>1</sup>, Eleonora Gallerani<sup>1</sup>, Mara Martino<sup>1</sup>, Sara Ghisellini<sup>1</sup>, Amedeo Zurlo<sup>1</sup>, Stefano Volpato<sup>1</sup>, Benedetta Govoni<sup>1</sup>, Michela Borghesi<sup>1</sup>, Valentina Albanese<sup>1</sup>, Victor Appay<sup>1</sup>, Stefano Bonnini<sup>1</sup>, Lacey Sian Llewellyn<sup>1</sup>, Salvatore Pacifico<sup>1</sup>, Laura Grumiro<sup>1</sup>, Simona Semprini<sup>1</sup>, Vittorio Sambri<sup>1</sup>, Kristin Ladell<sup>1</sup>, Helen M. Parry<sup>2</sup>, Paul A.H. Moss<sup>2</sup>, David A. Price<sup>1</sup>, Antonella Caputo<sup>1</sup>, Riccardo Gavioli<sup>1</sup>, Francesco Nicoli<sup>1</sup>** (<sup>1</sup>Italy, <sup>2</sup>United Kingdom)
- P3.10.11** Using human lymph node culture models to characterize T cell activation dynamics and early immune responses to vaccines  
**Alex George, Julia Davis-Porada, Jenny Huang, David Chen, Jennifer Hwu, Eric Zhang, Donna Farber, Peter Sims** (USA)
- P3.10.13** Effectiveness, immunogenicity and safety of the novel DS-5670 vaccine platform against SARS-CoV-2: evidence from two randomized clinical trials  
**Fumihiko Takeshita, Shoko Nogusa** (Japan)
- P3.10.14** Clonotypic analysis of T cell responses reveals long-term vaccine efficacy  
**Xiuyuan Lu, Sho Yamasaki** (Japan)
- P3.10.15** Non-waning immunity and protection upon a single immunization with a self-boosting vectored vaccine  
**Henning Jacobsen<sup>1</sup>, Kristin Metzendorf<sup>1</sup>, Yeranddy Aguiar Alpizar<sup>2</sup>, Lara Kelchtermans<sup>2</sup>, Elke Maas<sup>2</sup>, Stephanie Tittel<sup>1</sup>, Peggy Riese<sup>1</sup>, Carlos Alberto Guzman<sup>1</sup>, Kai Dallmeier<sup>2</sup>, Luka Cicin-Sain<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Belgium)
- P3.10.16** Micronutrient supplementation supports immune response to seasonal influenza vaccine in mice  
**Biljana Bufan, Nevena Arsenović-Ranin, Irena Živković, Ivana Ćuruvija, Veljko Blagojević, Jelena Kotur-Stevuljević, Gordana Leposavić** (Serbia)

### POSTER SESSION 3

- P3.10.17** BpOmpW antigen administered with CAF01 adjuvant stimulates comparable T cell responses to Sigma adjuvant system  
**Julen Tomás Cortázar<sup>1</sup>, Conor Quinn<sup>1</sup>, Niamh Corcoran<sup>1</sup>, Alfonso Blanco<sup>1</sup> Dennis Christensen<sup>3</sup>, Siobhán McClean<sup>1</sup>** (<sup>1</sup>Ireland, <sup>2</sup>Denmark)
- P3.10.18** Development of a new selection model for selection vaccine candidates against multidrug resistant *Staphylococcus aureus*  
**Brenda Vieira<sup>1</sup>, Giulia Destro<sup>1</sup>, Maria Eduarda Souza Guerra<sup>1</sup>, Karina Cruz Melo<sup>1</sup>, Anders Hakansson<sup>2</sup>, Michelle Darrieux<sup>1</sup>, Thiago Rojas Converso<sup>1</sup>** (<sup>1</sup>Brazil, <sup>2</sup>Sweden)
- P3.10.19** Evaluation of fimbrial subunits as vaccine candidates against *Klebsiella pneumoniae* infection in a mouse model of pneumonia  
**Lucas Assoni, Isabelle B. Ciaparin, Ana Julia M. Couto, Gabriel R. Silva, Vitoria Valim, Thiago Rojas Converso, Michelle Darrieux** (Brazil)
- P3.10.20** Can Lactacisbacillus rhamnosus modulate the immune response to inactivated Influenza vaccine in young and old rats?  
**Marija Petrušić, Veljko Blagojević, Ivana Anđelović, Marko Vasić, Luka Dragačević, Irena Živković** (Serbia)
- P3.10.21** The IL33/ST2 axis negatively regulates vaccine adjuvant induced cell-mediated immunity in a sex-dependent manner  
**Lorena Garcia del Rio, Jorge Huete-Carrasco, Jeremy Aboagye, Dorian Dederko, Kate Roche, Ed Lavelle** (Ireland)
- P3.10.22** Heterologous Bacillus Calmette-Guérin infection reverts the monocytic myeloid-derived suppressor cell phenotype induced by prior *Mycobacterium tuberculosis* immunization into innate and adaptive effector cell responses  
**Arpa Aintablian, Laura Cyran, Haisam Al Attar, Christoph Schön, Nelita du Plessis, Gerhard Walzl, Ulrich E. Schaible, Manfred B. Lutz** (Germany)
- P3.10.23** Immune stimulating properties of lipid nanoparticle formulations containing a polyethylene-glycol alternative  
**Semper Raphaela, Dwain van Zyl, Livia Palmerston Mendes, Christine Rueckert, Patrick Baumhof** (Germany)
- P3.10.24** Delivering SARS-CoV-2 mutated RBD antigens to the CD40 receptor: A strategy for inducing long-term antibody responses  
**Marwa El Hajj<sup>1</sup>, Mathieu Surénaud<sup>1</sup>, Florence Picard<sup>1</sup>, Guillaume Hypolite<sup>1</sup>, Amandine Sansoni<sup>1</sup>, Manon Fabregue<sup>1</sup>, Sarah Sharkau<sup>1</sup>, Camille Pierrini<sup>1</sup>, Sylvain Cardinaud<sup>1</sup>, Mireille Centlivre<sup>1</sup>, Bernard Malissen<sup>1</sup>, Gerard Zurawski<sup>1,2</sup>, Ana Zarubica<sup>1</sup>, Sandra Zurawski<sup>1,2</sup>, Yves Lévy<sup>1</sup>, Véronique Godot<sup>1</sup>** (<sup>1</sup>France, <sup>2</sup>USA)
- P3.10.25** Functional in vitro B cell assay for Tetanus and Diphtheria containing vaccine batch release using memory B cells from healthy donors  
**Olga Ticha, Isabell Franz, Svitlana Skoroplyas, Isabelle Bekerredjian-Ding** (Germany)
- P3.10.26** *Staphylococcus aureus*-specific TIGIT<sup>+</sup> Treg are present in the blood of healthy subjects – a hurdle for vaccination?  
**Elisabetta Soldaini<sup>1</sup>, Jonah Clegg<sup>1,2</sup>, Malgorzata Ewa Mnich<sup>1,3</sup>, Alberto Carignano<sup>1</sup>, Giovanni Cova<sup>1</sup>, Simona Tavarini<sup>1</sup>, Chiara Sammiceli<sup>1</sup>, Bruna Clemente<sup>1</sup>, Megan Smith<sup>1,2</sup>, Emilio Siena<sup>1</sup>, Monia Bardelli<sup>1</sup>, Michela Brazzoli<sup>1</sup>, Fabio Bagnoli<sup>1</sup>, Rachel McLoughlin<sup>2</sup>** (<sup>1</sup>Italy, <sup>2</sup>Ireland, <sup>3</sup>France)

**POSTER SESSION 3**

- P3.10.27** Vaccination with BrpA, biofilm regulator Protein A, induce antibodies that affect biofilm formation in *Streptococcus mutans*  
**Giulia Destro, Brenda Vieira, Maria Eduarda Souza Guerra, Karina Cruz Melo, Michelle Darrieux, Thiago Rojas Converso** (Brazil)
- P3.10.28** A T cell inducing prime-boost vaccine for elephant endotheliotropic herpesvirus (EEHV)  
**Tanja Maehr<sup>1</sup>, Javier Lopez<sup>1</sup>, Gabby Drake<sup>1</sup>, Federico Ferreira<sup>2</sup>, Richard Fraser<sup>1</sup>, Susan L. Walker<sup>1</sup>, Rebecca McKown<sup>1</sup>, Helder Nakaya<sup>2</sup>, Falko Steinbach<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Brazil)
- P3.10.29** The M2SR intranasal H3N2 single replication live influenza virus vaccine induces more potent and broad mucosal secretory IgA response in older adults than the high-dose inactivated FluzoneHD vaccine  
**Lilach M. Friedman<sup>1</sup>, Shelly Shriker<sup>1</sup>, Amos Guetta<sup>1</sup>, David Marshall<sup>2</sup>, Renee Herber<sup>2</sup>, Pamuk Bilsel<sup>2</sup>, Tomer Hertz<sup>1,2</sup>** (<sup>1</sup>Israel, <sup>2</sup>USA)
- P3.10.30** Leishmania extracellular vesicles mediate protection against cutaneous leishmaniasis  
**İbrahim Tokmak, İsmail Cem Yilmaz, Muzaffer Yildirim, Volkan Yazar, Bekir Salih, Ülkü Güler, İhsan Gürsel, Mayda Gürsel** (Turkey)
- P3.10.31** Saponin-based adjuvants: deciphering the molecular mechanism of QS-21  
**Alba Mosteiro-Couso, Adrián Plata, Abhijit Saha, Nagore Sacristán, Juan Anguita, Alberto Fernández-Tejada** (Spain)
- P3.10.32** Distinct cellular and serological cross-reactive responses upon COVID-19 Original/BA.1 bivalent booster vaccination  
**Sara Suarez Hernandez, Lia de Rond, Marjan Bogaard-van Maurik, Petra Molenaar, Emma van Wijlen, Debbie Oomen, Elske Bijvank, Lisa Beckers, Gaby Smits, Mioara Alina Nicolaie, Mardi Boer, Nynke Rots, Alienke Wijmenga, Patricia Kaaijk, Josine van Beek, Cécile van Els, Anne-Marie Buisman, Jelle de Wit, Jolanda Brummelman** (Netherlands)
- P3.10.34** Monitoring of the immune response against SARS-CoV-2 in patients with common variable immunodeficiency vaccinated with mRNA vaccines  
**Juan Francisco Gutiérrez-Bautista, Beatriz Fernandez Perea, Lucía Ballesta Alcaraz, Maria del Carmen Barrera Aguilera, Mónica Bernal, Ana Marin, Pilar Jimenez, Jose Ramón Vilchez, Miguel Ángel López-Nevot** (Spain)
- P3.10.35** T cell responses to the replication-complex of SARS-CoV-2 remain subdominant in the current landscape of SARS-CoV-2 immunity  
**Ruairi McErlean, Selin Cankat, Daniel Brown Romero, Gloryanne Aidoo-Micah, Anandita Mathur, Mariana Diniz, Laura McCoy, Leo Swadling, Mala K. Maini** (United Kingdom)
- P3.10.36** An investigation of immune interference following sequential platform vaccinations in a guinea pig filovirus infection model  
**Courtney Cohen, Darrell Wetzell, Andrew Herbert** (USA)
- P3.10.37** Complete cross strain protection against congenital cytomegalovirus by vaccine targeting key components of the virus life cycle that induces antibody and T cell immunity  
**Alistair McGregor, Nadia El-Hamdi, K. Yeon Choi** (USA)

POSTER SESSION 3

- P3.10.38** Evaluation of the protective efficacy of novel vaccine candidates against *Acinetobacter baumannii* and *Pseudomonas aeruginosa* pathogens  
**Nouran Rezk, Julen Tomás Cortázar, Chaoying Ma, Irene Jurado-Martín, Siobhán McClean** (Ireland)
- P3.10.39** Cellular immunity against SARS-CoV-2 after different vaccination regimens  
**Emina Milosevic, Vladimir Perovic, Dusan Popadic, Ljiljana Markovic-Denic, Verica Jovanovic** (Serbia)
- P3.10.40** Preclinical toxicity and immunogenicity assessment of mRNA vaccine in autoimmune-prone inbred mice  
**So-hyun Park, Eun Young Oh, Sang-Myeong Lee** (South Korea)
- P3.10.41** VLP vaccine against SARS-CoV-2: preclinical and clinical evaluation  
**Irem Evcili, İsmail Cem Yilmaz, Berfu Saraydar Gölcüklü, Emre Mert Ipekoglu, Tugce Bildik, Aslı Gülce Bartan Aksoy, Nilsu Turay, Naz Sürücü, Artun Bülbül, Nese Güvencli, Muzaffer Yildirim, Tugce Canvar Yıldırım, Mayda Gursel, İhsan Gürsel** (Turkey)
- P3.10.42** Fostering consistency in EV-based vaccine development and clinical trials: advancing towards standardization  
**Anis Larbi** (France)
- P3.10.43** QS21 saponin-based adjuvants enhance antibody and T cell responses to various protein antigens  
**Floriane Auderset, Roland Ventura, Marcelle Van Mechelen, Nicolas Collin** (Switzerland)
- P3.10.44** Development of semi-synthetic glycoconjugate vaccine candidates against *Klebsiella pneumoniae*  
**Fabienne Weber<sup>1</sup>, Julinton Sianturi<sup>1</sup>, Rajat Kumar Singh<sup>1,2</sup>, Tilman Lingscheid<sup>1</sup>, Pinkus Tober-Lau<sup>1</sup>, Florian Kurth<sup>1</sup>, Bettina Fries<sup>2</sup>, Peter Seeberger<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>USA)
- P3.10.45** Developing and optimising a translational, adjuvant-screening pipeline  
**Utku Gunes, Larissa Camargo da Rosa, Hannah Scales, James Brewer** (United Kingdom)

**POSTER SESSION 3****P3.11 VACCINES FOR IMMUNOTHERAPY**

- P3.11.01** Lynch syndrome-related neoantigens prediction and validation for a dendritic-cell based cancer prevention vaccine  
**Cristina Bayó Llorens, Giancarlo Castellano, Teresa Ocaña, Rebeca Moreira, Joaquín Castillo, María Pellisé, Liseth Rivero, María Dacá, Oswaldo Ortiz, Manel Juan Otero, Daniel Benítez-Ribas, Francesc Balaguer** (Spain)
- P3.11.02** Chronic infection induces a neutralizing B cell response to Elastase B of *Pseudomonas aeruginosa*  
**Alexandra Albus<sup>1</sup>, Dmitriy Holzmänn<sup>1</sup>, Dominik Kolling<sup>1</sup>, Katharina Rox<sup>1</sup>, Christina Meyer<sup>1</sup>, Robert Brock<sup>1</sup>, Julia Kutschera<sup>1</sup>, Kristin Schmitt<sup>1</sup>, Leon Ullrich<sup>1</sup>, Christoph Kreer<sup>1</sup>, Meike Meyer-Willerscheidt<sup>1</sup>, Michael Hallek<sup>1</sup>, Ernst Rietschel<sup>1</sup>, Silke van Koningsbruggen-Rietschel<sup>1</sup>, Florian Klein<sup>1</sup>, Jesko Koehnke<sup>1,2</sup>, Jan Rybníček<sup>1</sup>, Alexander Simonis<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>United Kingdom)
- P3.11.03** Epigenetic inhibitors together with TLR9 agonist elevated IFN response and Th1 immunity  
**Havva Homak, Banu Bayyurt Kocabas** (Turkey)
- P3.11.04** mRNA-Encoded SFTSV neutralizing antibodies: evaluation of therapeutic potential  
**Hyo-Jung Park, Soo-Yeon Lee, Yebeen Lee, Eun Yong Oh, Jae-Yong Kim, Yoo-Jin Bang, Sang-In Park, Eun-Jin Choi, Jisun Lee, Dahyeon Ha, Ayoung Oh, Seonghyun Lee, Sue Bean Youn, Jeong Soo Park, Hye Won Kwak, Daegun Kim, Sang-Myeong Lee, Nam-Hyok Cho, Jae-Hwan Nam** (South Korea)
- P3.11.05** Recombinant carrier-peptide fusion vaccine for allergen-specific immunotherapy of allergy to cat  
**Daria Trifonova<sup>1,2</sup>, Mirela Curin, Pia Gattinger<sup>1</sup>, Zicheng Liu<sup>1</sup>, Kristina Borochova<sup>1</sup>, Margarete Focke-Tejkl<sup>1</sup>, Marianne van Hage<sup>3</sup>, Jon Konradsen<sup>3</sup>, Ulrika Käck<sup>3</sup>, Renata Kiss<sup>1</sup>, Huey Jy Huang<sup>1</sup>, Susanne Vrtala<sup>1</sup>, Ksenja Riabova<sup>2</sup>, Antonina Karsonova<sup>2</sup>, Alexander Karaulov<sup>2</sup>, Rudolf Valenta<sup>1,2</sup>** (<sup>1</sup>Austria, <sup>2</sup>Russian Federation, <sup>3</sup>Sweden)
- P3.11.06** Study of *Mycobacterium indicus pranii* and human beta defensin-2 as a combinatorial therapy against *Mycobacterium tuberculosis*  
**Deepak Vats, Faisal Shah, Vidushi Sharma, Archana Singh** (India)
- P3.11.08** Harnessing sialic acid signaling in dendritic cells for immune tolerance induction  
**Eveline Li, Eleonora Nardini, Katarina Olesek, Thomas van den Brekel, Brigitte Carole Keumatio, Henk Vietor, Yvette van Kooyk** (Netherlands)
- P3.11.09** Association of immune checkpoint molecules on recombinant virus-like particle-based tolerogenic vaccines  
**Julie Marsande, James Vigneron, Alexandre Glastra, Léa Hily, Bertrand Bellier** (France)



## POSTER SESSION 3

### P3.12 VIRAL IMMUNOLOGY

- P3.12.02** Revealing the role of lamin A/C in dendritic cell-mediated antiviral immunity  
**Beatriz Herrero-Fernandez, Raquel Gomez-Bris, Marina Ortega-Zapero, Angela Saez, Salvador Iborra, Virginia Zorita, Ana Quintas, Ana Dopazo, Francisco Sanchez-Madrid, Silvia M. Arribas, Jose M. Gonzalez-Granado**, (Spain)
- P3.12.04** HIV control status is associated with functional changes in memory natural killer cells  
**Alisa Huber, Groenendijk Albert<sup>1</sup>, dos Santos Jéssica<sup>1</sup>, Adriana Navas<sup>1</sup>, Aysel Gurbanova<sup>1</sup>, Marien de Jonge<sup>1</sup>, Annelies Verbon<sup>1</sup>, Mihai Netea<sup>1,2</sup>, Jan van Lunzen<sup>1</sup>, Leo Joosten<sup>1,3</sup>, Andre van der Ven<sup>1</sup>** (<sup>1</sup>Netherlands, <sup>2</sup>Germany, <sup>3</sup>Romania)
- P3.12.06** High levels of S2-specific IgA antibodies with decreased Fc-effector activity correlate with severe COVID-19  
**Núria Pedreño-López, Ferran Tarrés, Carla Usai, Erola Ainsua-Enrich, Susana Benet, Julieta Carabelli, Edwards Pradenas, Carlos Ávila-Nieto, Núria Roca, Guillermo Cantero, Mònica Pérez, Maria Luisa Rodriguez de la Concepción, Dalia Raich-Regué, Boris Revollo, Agnes Hernandez, Jorge Abad-Capa, Beatriz Mothe, Marta Massanella, Nuria Izquierdo-Useros, Julià Blanco, Bonaventura Clotet, Joaquim Segalés, Júlia Vergara-Alert, Jorge Carrillo** (Spain)
- P3.12.07** B cell expression of the complement receptor 2 (CR2/CD21) constitutes a novel biomarker for COVID-19 severity  
**Ana Marcos-Jiménez, Pablo Delgado-Wicke, Paula Díaz-Fernández, Nuria Montes, Iris Fernández-Lázaro, Rosa M. Andreu-Martínez, Noelia López, Carlos Cuesta-Mateos, Cecilia Muñoz-Calleja** (Spain)
- P3.12.08** Interleukin-36 $\gamma$  is causative for liver damage upon infection with Rift Valley fever virus in type I interferon receptor-deficient mice  
**Martina Anzaghe, Marc A. Niles, Eugenia Korotkova, Dominguez Monica, Stefanie Kronhart, Ingo Bechmann, Malte Bachmann, Heiko Müh, Georg Kochs, Zoe Waibler** (Germany)
- P3.12.09** Anti SARS-CoV2 properties of quinacrine and its analogues identified from Treg regulators screening  
**Qian Wei, Håvard Foyn, Saskia Meyer, Rafi Ahmad, Jo Klaveness, Johanna Olweus, Gunnveig Grødeland, Kjetil Taskén** (Norway)
- P3.12.10** The impact of infection dose on CD8 T cell diversity and differentiation in acute viral infection  
**Ioana Sandu, Natalia Ramirez Comet, Wenning Zheng, Carmen Gerlach** (Sweden)
- P3.12.11** Higher frequencies of memory natural killer cells and altered specific response to SARS-CoV-2 antigens in the lung from critical COVID-19 patients  
**Paul Nicholas Holmes Antón, Ilya Tsukalov, Ildelfonso Sánchez-Cerrillo, María Agudo, Cristina Delgado Arévalo, Olga Popova, Ignacio de Los Santos, Lucio Garcia Fraile, Cecilia Muñoz-Calleja, Arantzazu Alfranca, Jose Palacios, Meritxell Genescà, Maria Jose Buzon, Francisco Sánchez-Madrid, Enrique Martín-Gayo** (Spain)
- P3.12.12** Dual blockade with  $\alpha$ -PD-L1 and  $\alpha$ -TIGIT antibodies restores immune activation on dendritic cells and T-cells during LCMV chronic infection  
**María Lázaro-Díez<sup>1</sup>, Miguel A. Marin<sup>1,2</sup>, Valentina Casella<sup>1</sup>, Laia Bernad Rosa<sup>1</sup>, Eudald Vehí Piqué<sup>1</sup>, Ruth Peña<sup>1</sup>, Gabriel Felipe Rodríguez-Lozano<sup>1</sup>, Enrique Martín-Gayo<sup>1</sup>, Andreas Meyerhans<sup>1</sup>, Julia G Prado<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>South Africa)

### POSTER SESSION 3

- P3.12.13** ULBP2-expressing HCMV mutants modulate NKG2D expression and function of CD8+ T cells  
**Greta Meyer, Anna R. Simes, Irina Bevzenko, Jenny F. Kuehne, Jana Keil, Kerstin Beushausen, Karen Wagner, Lars Steinbrück, Eva-Maria Borst, Martin Messerle, Christine Falk** (*Germany*)
- P3.12.14** Latent cytomegalovirus infection and age do not affect de novo SARS-CoV-2 specific CD8+ T cell frequencies  
**Jet van den Dijssel<sup>1</sup>, Veronique AL Konijn<sup>1</sup>, Mariël Duurland<sup>1</sup>, Rivka de Jongh<sup>1</sup>, Lianne Koets<sup>1</sup>, Barbera Veldhuisen<sup>1</sup>, Hilde Raaphorst<sup>1</sup>, Annelies Turksma<sup>1</sup>, Julian J. Freen-van Heeren<sup>1</sup>, Maurice Steenhuis<sup>1</sup>, Theo Rispens<sup>1</sup>, C Ellen van der Schoot<sup>1</sup>, Marieke van Ham<sup>1</sup>, Rene A.W. van Lier<sup>1</sup>, Klaas P.J.M. van Gisbergen<sup>1</sup>, Anja ten Brinke<sup>1</sup>, Carolien E. van de Sandt<sup>1,2</sup>** (<sup>1</sup>*Netherlands*, <sup>2</sup>*Australia*)
- P3.12.15** Eucalyptus essential oil inhibits cell infection by SARS-CoV-2 spikepseudotyped lentiviral particles  
**Sara Alonso Fernández, Hector F. Pelaez-Prestel, Fernando Gonzalez-Martin, Pedro A. Reche** (*Spain*)
- P3.12.16** Impact of SARS-CoV-2 vaccine and infection history on antiviral immunity post breakthrough infection  
**Carla Saade<sup>1</sup>, Timothée Bruel<sup>1</sup>, Lou-Léna Vrignaud<sup>1</sup>, Martin Killian<sup>1</sup>, Annabelle Drouillard<sup>1</sup>, Véronique Barateau<sup>1</sup>, Maxime Espi<sup>1</sup>, Mariano Natacha<sup>1</sup>, Charlotte Mignon<sup>1</sup>, Lily Bruyère<sup>1</sup>, Liliane Khoryati<sup>1</sup>, William Henry Bolland<sup>1</sup>, Bruce Wines<sup>2</sup>, Mark Hogarth<sup>2</sup>, Olivier Schwartz<sup>1</sup>, Bruno Lina<sup>1</sup>, Martine Valette<sup>1</sup>, Olivier Thaumat<sup>1</sup>, Jean-Baptiste Fassier<sup>1</sup>, Bruno Pozzetto<sup>1</sup>, Stéphane Paul<sup>1</sup>, Thierry Walzer<sup>1</sup>, Sophie Trouillet-Assant<sup>1</sup>** (<sup>1</sup>*France*, <sup>2</sup>*Australia*)
- P3.12.17** Critical COVID-19 unveils the link between viral particle blood dissemination and prolonged Type I Interferon  
**Kahina Saker, Marine Mommert-Tripon, Guy Oriol, Laurence Generenaz, Valérie Cheynet, Antonin Bal, Paul Bastard, Jean-Laurent Casanova, Emmanuel Roux, Karen Brengel-Pesce, Aurore Fleurie, Sylvie Pons, Cécile Barnel, Bouchra Mokdad, Florent Wallet, Olivier Terrier, Jean-Christophe Richard, Sophie Trouillet-Assant** (*France*)
- P3.12.18** The immune landscape of antiviral responses in multiple sclerosis  
**Silvia D'Orso, Gisella Guerrero, Elena Olivieri, Mario Picozza, Alice Verdiani, Marta Pirronello, Silvia Corbisiero, Manolo Sambucci, Daniela Angelini, Andrea Misiti, Beatrice Lista, Carla Tortorella, Marco Salvetti, Rosella Mechelli, Maria Chiara Buscarinu, Serena Ruggeri, Claudio Gasperini, Luca Battistini, Giovanna Borsellino** (*Italy*)
- P3.12.19** Investigating non-structural proteins (NSPs) as novel targets for a SARS-CoV-2 and pan-coronaviridae vaccination  
**Ruby Fell, Tracey Haigh, Hannah Bollons, Graham Taylor, Heather Long** (*United Kingdom*)
- P3.12.20** Localized immunological memory in cynomolgus macaques following SARS-CoV-2 infection  
**Green Kim, Taehwan Oh, YoungMin Woo, Bon-Sang Koo, Seung Ho Baek, Eun-Ha Hwang, You Jung An, June-Young Koh, Jinyoung Won, Youngjeon Lee, Choong-Min Ryu, Kyung Seob Lim, Yujin Kim, Jung Joo Hong** (*South Korea*)

### POSTER SESSION 3

- P3.12.21** Quicker and greater innate immune responses correlate with disease severity after controlled influenza infection of healthy adults  
**Loukas Papargyris<sup>1</sup>, Jiayun Xu<sup>1</sup>, Claire Broderick<sup>1</sup>, Pete Dayananda<sup>1</sup>, Ashley Collins<sup>1</sup>, Min Kyu Park<sup>1</sup>, Stephanie Ascough<sup>1</sup>, Satwik Kar<sup>1</sup>, Helen Wagstaffe<sup>1</sup>, Jun Kwun<sup>1</sup>, Richard McKendry<sup>1</sup>, Emma Bergstrom<sup>1</sup>, Lydia Slater<sup>1</sup>, Tini Grauwet<sup>2</sup>, Myrsini Kaforou<sup>1</sup>, Christopher Chiu<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Belgium)
- P3.12.22** Autoantibodies neutralizing type III interferons are uncommon in patients with severe COVID-19 pneumonia  
**Martti Vanker, Karita Sarekannu, Liis Haljasmägi, Anne Kallaste, Kalle Kisand, Margus Lember, Pärt Peterson, Kai Kisand** (Estonia)
- P3.12.23** Screening and application of SARS-CoV-2 derived T cell epitope spectrum  
**Yu Zhao, Min Peng, Suyue Zhu, Yandan Wu, Fangping Yue, Ruixue Ji, Yi Wu, Guangyu Zhao, Chuanlai Shen** (China)
- P3.12.24** Clinical evaluation of HBV-specific T cell reactivity in CHB patients using a broad-spectrum T-cell epitope peptide library and ELISpot assay  
**Yandan Wu, Ruixue Ji, Min Peng, Yu Zhao, Chuanlai Shen** (China)
- P3.12.25** Recovery plasma from patients with COVID-19 and intravenous immunoglobulin as rescue passive immunization in SARS-COV-2 infection  
**Vancho Donev, Georgi Nikolov** (Bulgaria)
- P3.12.26** Characterization of a VSVΔG S (SARS-CoV-2) hybrid replicating virus as a possible model of mild COVID-19 disease  
**Brianna Kelly, Nicole Grass, Christa Davis, Jillian Matlock, Jessica Trevors, Christopher Ricardson, Saki Sultana, Kimberly Brewer** (Canada)
- P3.12.27** Coinfection of VSVΔG S (SARS-CoV-2 omicron) and E0771.lmb breast cancer results in novel immune phenotypes and increased tumour volumes  
**Brianna Kelly, Nicole Grass, Christa Davis, Jessica Trevors, Jillian Matlock, Christopher Ricardson, Saki Sultana, Kimberly Brewer** (Canada)
- P3.12.28** Mutations within the NS1 immunodominant T cell epitopes of the dengue virus serotype-2 cosmopolitan strain resulting in large outbreaks in Sri Lanka  
**Dinuka Ariyaratne<sup>1</sup>, Shyrar Ramu<sup>1</sup>, Ayesa Syenina<sup>2</sup>, Diyanath Ranasinghe<sup>1</sup>, Chandima Jeewandara<sup>1</sup>, Graham Ogg<sup>3</sup>, Eng Eong Ooi<sup>2</sup>, Neelika Malavige<sup>1,3</sup>** (<sup>1</sup>Sri Lanka, <sup>2</sup>Singapore, <sup>3</sup>United Kingdom)
- P3.12.29** B cell populations in COVID-19 and post-acute impaired olfaction  
**Suvi Jokiranta, Ngoc Anh Nguyen, Xiaobo Huang, Kirsten Nowlan, Tinja Lääveri, Nelli Heikkilä, Anu Kantele, Olli Vapalahti, Eliisa Kekäläinen** (Finland)
- P3.12.30** Primary antibody response after influenza virus infection is first dominated by HA-stem antibodies followed by HA-head antibodies, which then remain stable over years  
**Jacco Bakx, Aafke Aartse, Daniella Mortier, Petra Mooij, Mathieu Claireaux, Willy M. Bogers, Ronald Bontrop, Marit J. van Gils, Gerrit Koopman** (Netherlands)
- P3.12.31** SARS-CoV-2 infection with the Alpha variant B.1.1.7 induced higher levels of IgG antibodies against spike, receptor-binding domain and nucleocapsid than infection with Wuhan-like variants in a Norwegian prospective, longitudinal COVID-19 household study  
**Gro Tunheim, Marta Baranowska-Hustad, Fridtjof Lund-johansen, Sabin Bhandari, Liva Kukule, Thea Kristine Rogne Møller, Anna Hayman Robertson, Terese Bekkevold, Fredrik Oftung, Lisbeth Meyer Næss** (Norway)

**POSTER SESSION 3**

- P3.12.32** Altered frequencies, phenotypes and functions of mucosa-associated invariant T cells and Vδ2+ γδ T cells in patients with severe COVID-19  
**Julie David, Nawal Taher, Nicole Wood, Eamon Breen, Jacklyn Sui, Angel George, Niall Conlon, Cliona Ni Cheallaigh, William Mc Cormack, Aideen Long, Derek Doherty** (Ireland)
- P3.12.33** Selective autophagy impedes KSHV entry after recruiting the membrane damage sensor galectin-8 to virus-containing endosomes  
**Katarina Schmidt<sup>1</sup>, Charlotte Montespan<sup>1</sup>, Laure-Anne Ligeon<sup>1</sup>, Harald Wodrich<sup>2</sup>, Alexander Hahn<sup>3</sup>, Urs Greber<sup>1</sup>, Christian Münz<sup>1</sup>** (<sup>1</sup>Switzerland, <sup>2</sup>France, <sup>3</sup>Germany)
- P3.12.34** Reduced specific antibody response to SARS-CoV-2 vaccination associated with high clozapine dosages  
**Juan Francisco Delgado de la Poza, Itziar Montalvo Aguirrezabala, Albert Rodrigo Parés, Teresa Sagués Junqueras, Antoni Berenguer Llergo, Raquel Rodríguez González, Indira Bhambi Blanco, Patricia Pontón Martínez, Germà Julià Agulló, Diego Palao Vidal, Javier Labad** (Spain)
- P3.12.35** Immune recovery biomarkers in PLWH on long-term cART and CD4AC above 500  
**Damian Vangelov, Radoslava Emilova, Yana Todorova, Reneta Naydenova, Ivailo Alexiev, Lyubomira Grigorova, Nina Yancheva, Maria Nikolova** (Bulgaria)
- P3.12.36** Vδ2 T cells effector response in PLWH and PLWoH up to three months from mpox infection  
**Eleonora Cimini, Eleonora Tartaglia, Andrea Coppola, Stefania Notari, Valentina Mazzotta, Giulia Matusali, Rita Casetti, Germana Grassi, Annalisa Mondì, Alessandra Oliva, Simona Gili, Flavia Cristofanelli, Massimo Tempestilli, Gianluca Prota, Enrico Girdardi<sup>5</sup>, Fabrizio Maggi, Andrea Antinori** (Italy)
- P3.12.38** Inflammatory milieu and specific T cells response after three months and one year from SARS-CoV-2 infection  
**Eleonora Cimini, Claudia Cimaglia, Eleonora Tartaglia, Marta Camici, Stefania Notari, Francesca Colavita, Giulia Matusali, Iliana Mastrorosa, Valentina Mazzotta, Pierangelo Chinello, Paola Mencarini, Maria Letizia Giancola, Amina Abdeddaim, Rita Casetti, Germana Grassi, Simona Gili, Flavia Cristofanelli, Fabrizio Maggi, Pierluca Piselli, Enrico Girdardi, Chiara Agrati, Andrea Antinori, Alessandra Vergori** (Italy)
- P3.12.39** Immune responses in HSV-2 genital herpes and HSV-2 meningitis: a comparative study  
**Moa Bjerhem Viklund, Alexandra Svensson, Marie Studahl, Petra Tunbäck, Christine Lingblom, Azadeh Reyahi, Karolina Thörn, Kristina Eriksson** (Sweden)
- P3.12.40** Tfr-1 as a potential therapeutic target in severe SARS-CoV-2 infection by mitigating macrophage activation syndrome  
**Hussam Abd El Halim, Wilfried Posch, Stefanie Dichtl-Zweimüller, Guenter Weiss, Doris Wilflingseder** (Austria)
- P3.12.41** Interleukin-2 responses to whole spike antigen differentiate healthcare workers with frequent symptomatic SARS-CoV-2 infection and asymptomatic infection  
**Jean Dunne, Liam Townsend, Jacklyn Sui, Carla Sanchez Perez, William Mc Cormack, Gareth Brady, Niall Conlon** (Ireland)



POSTER SESSION 3

- P3.12.42 Significance of IgE antibodies against SARS-CoV-2 in different clinical conditions  
**Juan Francisco Delgado de la Poza, Indira Bhambi Blanco, María Isabel Aparicio Calvente, Antoni Berenguer Llergo, Albert Rodrigo Parés** (Spain)
- P3.12.43 Fluoxetine treatment improves the clinical outcome of age-dependent severe COVID-19  
**Davide Marotta, Chiara Perucchini, Marta Grillo, Chiara Malpighi, Valeria Fumagalli, Leonardo Giustini, Violette Mouro, Lorena Donnici, Raffaele De Francesco, Luca Guidotti, Matteo Iannaccone, Marco De Giovanni** (Italy)
- P3.12.44 In-depth analysis of Respiratory Syncytial Virus-specific Fc-mediated antibody effector functions in children and adults  
**Anke Lakerveld, Rutger Schepp, Anne Gelderloos, Nynke Rots, Puck van Kasteren** (Netherlands)
- P3.12.46 The pathogenesis of MIS-C involves a distinct T cell profile compared to pediatric COVID-19 cases  
**Muhammed Ali Kizmaz, Abdurrahman Simsek, Tugce Bozkurt, Eren Cagan, Ali Eren Iskin, Ferah Budak** (Turkey)
- P3.12.48 TLR7 deficiency accelerates severe COVID-19 through reduced IRF7 activation and interferon production  
**Xuebin Qin, Chenxiao Wang, Shumei Liu** (USA)
- P3.12.49 Immunological profile of long COVID patients reveals persistent virus-specific T cell response  
**Ben Goodwin<sup>1</sup>, Thiago Cerqueira-Silva<sup>2</sup>, Cintia Araujo<sup>2</sup>, Adolfo Hidalgo<sup>2</sup>, Marcioa Barreto<sup>2</sup>, Blenda Pereira<sup>2</sup>, Jessica Jesus-Silva<sup>2</sup>, Sara Sara<sup>2</sup>, Ana Barreto<sup>2</sup>, Ananda Marinho<sup>2</sup>, Ricardo Khouri<sup>2</sup>, Vinicius Maracaja-Coutinho<sup>2</sup>, Manoel Barral-Netto<sup>2</sup>, Aldina Barral<sup>2</sup>, Cristina Cardoso<sup>2</sup>, Natalia Tavares<sup>2</sup>, Jennifer Dan<sup>1,2</sup>, Viviane Boaventura<sup>2</sup>** (<sup>1</sup>USA, <sup>2</sup>Brazil)
- P3.12.50 A new perspective on cellular complement and how opsonized HIV 1 enhances dendritic cell maturation and survival via Mcl-1 stabilization regulated by anaphylatoxin receptors  
**Gabriel Diem, Wilfried Posch, Doris Wilflingseder** (Austria)
- P3.12.51 Latent human cytomegalovirus infection is not associated with decreased vaccine effectiveness against SARS-CoV-2 in patients with stage 5 chronic kidney disease  
**Alexander Jerman, Vanja Persic** (Slovenia)
- P3.12.52 Flow cytometric immune cell subset analyses for the diagnosis of post-COVID syndrome and myalgic encephalomyelitis/chronic fatigue syndrome  
**Annick D. Fehrer<sup>1</sup>, Sophie Steiner<sup>1</sup>, Franziska Sotzny<sup>1</sup>, Charlotte Kröger<sup>1</sup>, Sandra Bauer<sup>1</sup>, Müller Sophie<sup>1,2</sup>, Lorenzo Bonaguro<sup>1</sup>, Claudia Kedor<sup>1</sup>, Annika Elisa Stein<sup>1</sup>, Kirsten Wittke<sup>1</sup>, Leif Erik Sander<sup>1</sup>, Joachim L. Schultze<sup>1</sup>, Aschenbrenner Anna<sup>1</sup>, Carmen Scheibenbogen<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Australia)
- P3.12.53 An IFN $\gamma$ -dependent immune-endocrine circuit lowers blood glucose to potentiate the innate anti-viral immune response  
**Marko Šestan<sup>1</sup>, Sanja Mikašinić<sup>1</sup>, Ante Benić<sup>1</sup>, Stephan Wueest<sup>2</sup>, Christoforos Dimitropoulos<sup>3</sup>, Karlo Mladenčić<sup>1</sup>, Mia Krapić<sup>1</sup>, Lea Hiršl<sup>4</sup>, Yossef Glantzspiegel<sup>4</sup>, Ana Rasteiro<sup>5</sup>, Maria Aliseychik<sup>5</sup>, Đurđica Cekinović Grbeša<sup>1</sup>, Tamara Turk Wensveen<sup>1</sup>, Marina Babić Čač<sup>1</sup>, Irit Gat Viks<sup>4</sup>, Henrique Veiga-Fernandes<sup>5</sup>, Felix Wensveen, Bojan Polić<sup>1</sup>** (<sup>1</sup>Croatia, <sup>2</sup>Switzerland, <sup>3</sup>Germany, <sup>4</sup>Israel, <sup>5</sup>Portugal)



#### POSTER SESSION 3

- P3.12.54** Myeloperoxidase and Xanthine oxidase in association with T cell subsets of people living with HIV on cART with sustained viral suppression  
**Radoslava Emilova, Yana Todorova, Reneta Naydenova, Damian Vangelov, Lyubomira Grigorova, Ivailo Alexiev, Nina Yancheva, Maria Nikolova** (*Bulgaria*)
- P3.12.55** Interference with Co-stimulatory molecule ICOSL by human herpesviruses: impact on antigen presentation and immune evasion  
**Guillem Angulo<sup>1</sup>, Martin Messerle<sup>2</sup>, Pablo Engel<sup>1</sup>, Ana Angulo<sup>1</sup>** (<sup>1</sup>Spain, <sup>2</sup>Germany)
- P3.12.56** Dynamism of anti-SARS-CoV-2 vaccine efficacy studied in mouse model  
**Peter Nemeth, Monika Soos, Fanni Földes, Tímea Berki** (*Hungary*)
- P3.12.57** Viral and immune kinetics of non-persistent HPV genital infections in young adult women  
**Nicolas Tessandier, Baptiste Elie, Tsukushi Kamiya, Vanina Boué, Marion Kerioui, Claire Bernat, Sophie Grasset, Soraya Groc, Massilva Rahmoun, Noemi Bender, Marine Bonneau, Vincent Foulongne, Christelle Graf, Eric Picot, Marie-Christine Picot, Bastien Reyné, Christian Selinger, Vincent Tribout, Édouard Tuailon, Tim Waterboer, Jacques Reynes, Michel Segondy, Nathalie Boule, Ignacio G Bravo, Jérémie Guedj, Carmen Lia Murall, Samuel Alizon** (*Belgium, France*)
- P3.12.58** Inflammatory signature as an early predictor of severe respiratory viral infection  
**Eleonora Olivetta, Ilaria Schiavoni, Annapina Palmieri, Pasqualina Leone, Angelo Carfi, Graziano Onder, Paola Stefanelli, Giorgio Fedele** (*Italy*)
- P3.12.59** Human immunodeficiency virus based pseudotype assays overestimate severe acute respiratory syndrome coronavirus 2 neutralising activity in sera from areas of high human immunodeficiency virus prevalence  
**Mhairi McCormack<sup>1</sup>, Louis Banda<sup>2</sup>, Stephen Kasenda<sup>2</sup>, Abena Amoah<sup>2</sup>, Ellen Hughes<sup>1</sup>, Chris Davis<sup>1</sup>, Agnieszka Szemiel<sup>1</sup>, Amelia Crampin<sup>2</sup>, Antonia Ho<sup>1</sup>, Brian Willett<sup>1</sup>** (<sup>1</sup>United Kingdom, <sup>2</sup>Malawi)
- P3.12.60** High titer against OC43 seasonal coronavirus enhances susceptibility to SARS-CoV-2 infections  
**Hanna Oppenheimer<sup>1</sup>, Shosh Zismanov<sup>1</sup>, Lilach M. Friedman<sup>1</sup>, Lior Nesher<sup>1</sup>, Tomer Hertz<sup>1,2</sup>** (<sup>1</sup>Israel, <sup>2</sup>USA)
- P3.12.61** Differing systemic and mucosal antibody profiles to SARS-CoV-2 in a vaccinated University cohort- revealing increased male salivary anti-Spike IgA and anti-Spike IgG.  
**John Mac Sharry, Eolann Dinneen, Aideen Long, Mary Horgan, Joshua Flynn** (*Ireland*)
- P3.12.62** Guardians of immunity: cytokines, autoantibodies, and lymphocytes in the battle against SARS-CoV-2  
**Martina Bozhkova, Steliyan Petrov, Teodora Kalfova, Alexandra Baldzhieva, Dobrina Dudova, Katya Vaseva, Mihail Petrov** (*Bulgaria*)
- P3.12.63** Mechanisms of mRNA LNP stimulates early innate immune responses further modulating adaptive immunity when co-administered influenza virus vaccine  
**Chau Thuy Tien Le, Ki-Hye Kim Kim, Jannatul Ruhan Raha Raha, Chong Hyun Shin Shin, Noopur Bhatnagar Bhatnagar, Sang-Moo Kang Kang** (*USA*)

### POSTER SESSION 3

- P3.12.64** Mitochondria mediated immunomodulation associated with SARS-CoV2 pathogenesis  
**Reshu Saxena, Sumit Kumar Sharma** (*India*)
- P3.12.65** Thymic function associated with the extent of viral reservoir and inflammatory status in CD4-recovered people living with HIV  
**Vanessa Garrido-Rodriguez, Ángel Bulnes-Ramos, Israel Olivas-Martinez, María del Mar Pozo-Balado, Francisco Tejerina-Picado, Félix Gutierrez, Cristina Marco-Sanchez, Juan Manuel Tirasbochi, Antonia Castillo-Navarro, Enrique Bernal, Maria del Carmen Garcia-Guerrero, Mari Carmen Puertas, Joaquim Peraire, Anna Rull, Javier Martinez-Picado, Yolanda M. Pacheco** (*Spain*)
- P3.12.66** Long-term immunologic and inflammatory changes of simplification to 2DR versus maintenance of 3DR  
**Abraham Saborido Alconchel, María Trujillo Rodríguez, Ana Serna Gallego, Esperanza Muñoz Muela, Ana Álvarez Ríos, Nuria Espinosa, Cristina Roca, Marta Herrero, César Sotomayor, Alicia Gutierréz, Luis Fernando López-Cortés** (*Spain*)
- P3.12.67** Longitudinal analysis of SARS-CoV-2 immunity in patients with head and neck carcinoma (HNC)  
**Luminita Marutescu<sup>1</sup>, Alexandru Enea<sup>1</sup>, Nefeli-Maria Antoniadis<sup>1</sup>, Elena Dragu<sup>1</sup>, Marcela Popa<sup>1</sup>, Diana Antonia Costea<sup>1</sup>, Marian Neculae<sup>1</sup>, Elena Codrici<sup>1</sup>, Gratiela Gradisteanu<sup>1</sup>, Violeta Ristoiu<sup>1</sup>, Carmen Chifiriuc<sup>1</sup>, Veronica Lazar<sup>1</sup>, Raluca Grigore<sup>1</sup>, Petronela Ancuta<sup>1,2</sup>** (<sup>1</sup>Romania, <sup>2</sup>Canada)
- P3.12.68** Defective interfering genomes reduce complement-mediated lysis of cells infected with parainfluenza virus 5  
**Jenna Aquino, Elisabeth Shiffer, Griffith Parks** (*USA*)
- P3.12.69** High-affinity-mediated viral entry triggers innate affinity escape resulting in type I interferon resistance and impaired T cell immunity  
**Piyush Pandey<sup>1</sup>, Haifeng Xu<sup>1</sup>, Harry Ward<sup>1</sup>, Michal Gorzkiewicz<sup>1,2</sup>, Dziuljeta Abromaviciute<sup>1</sup>, Constanze Tinz<sup>1</sup>, Aleksandra Pandyra<sup>1</sup>, Arndt Borkhardt<sup>1</sup>, Karl Lang<sup>1</sup>, Philipp Lang<sup>1</sup>** (<sup>1</sup>Germany, <sup>2</sup>Poland)
- P3.12.70** Assessment of interferon alpha treatment response dynamics in COVID-19 PBMCs  
**Juber Herrera Uribe, Fiona Roche, Karsten Hokamp, Yamei Zhang, Lowela Onggo, Cliona Ni Cheallaigh, Patrick Ormond, Colm Bergin, Nigel Jhon Stevenson** (*Ireland*)
- P3.12.71** Assessment of immunological background and prediction of post-COVID syndrome by extracellular vesicle profiling  
**Gabriella Dobra<sup>1</sup>, Edina Gyukity-Sebestyen<sup>1</sup>, Matyas Bukva<sup>1</sup>, Szabolcs Nyiraty<sup>1</sup>, Barbara Bordacs<sup>1</sup>, Zoltan Szabo<sup>1</sup>, Gabor Kecskemeti<sup>1</sup>, Tamas Varkonyi<sup>1</sup>, Marta Szell<sup>1</sup>, Zoltan Konya<sup>1</sup>, Peter Horvath<sup>1,2,3</sup>, Krisztina Buzás<sup>1</sup>** (<sup>1</sup>Hungary, <sup>2</sup>Germany, <sup>3</sup>Finland)
- P3.12.72** Immunological modulation in European sea bass (*Dicentrarchus labrax*) brain and head-kidney upon infection with nervous necrosis virus  
**Antonia Efstathiou, Dimitra K. Toubanaki, Odysseas P. Tzortzatos, Evdokia Karagouni** (*Greece*)
- P3.12.73** Identifying polio antibody binding signatures are associated with protective poliovirus neutralization titers  
**Mor Tetro<sup>1</sup>, Lilach M. Friedman<sup>1</sup>, Merav Weil<sup>1</sup>, Aharon Freedman<sup>1</sup>, Ravit Bassal<sup>1</sup>, Javier Martin<sup>2</sup>, Lester M. Shulman<sup>1</sup>, Tomer Hertz<sup>1,3</sup>** (<sup>1</sup>Israel, <sup>2</sup>United Kingdom, <sup>3</sup>USA)

**POSTER SESSION 3**

- P3.12.74** Understanding cross-reactive antibody responses to SARS-CoV-2  
**Vennesa Subbiah, Thandeka Moyo-Gwete, Jo-Ann Passmore, Penny Moore, Ntobeko Ntusi, Linda-Gail Becker, Wendy Burgers, Rubina Bunjun** (*South Africa*)
- P3.12.75** The role of CCL3, CCR1 and CCR5 in protective antiviral immunity  
**Daniel Quinn** (*Sint Maarten - Dutch Part*)
- P3.12.76** Replication kinetics of SARS-CoV-2 variants and transcriptomic profiling of innate immune cells  
**Mihaela Kordun, Željka Mačak Šafranko, Kristijan Bodulić, Alemka Markotić, Lidija Cvetko Krajinović** (*Croatia*)

**P3.13 VISUALIZING IMMUNE RESPONSE**

- P3.13.01** Mathematical modeling of IL-6 driven T lymphocyte cross-talk for the selection of treatment modality in rheumatoid arthritis patients  
**Nona Janikashvili, Nino Nanava, Zviad Kalichava, Vladimer Odisharia, Tinatin Chikovani** (*Georgia*)
- P3.13.02** Using bioorthogonal chemistry to measure single immune cells metabolic fluxes  
**Xinyuan Wang<sup>1</sup>, Connor Corrigan<sup>1</sup>, Sander van Kasteren<sup>2</sup>, Linda Sinclair<sup>3</sup>, David Finlay<sup>1</sup>** (*<sup>1</sup>Ireland, <sup>2</sup>Netherlands, <sup>3</sup>United Kingdom*)
- P3.13.03** Exploring small vulnerable newborn immune development in urban Burkina Faso: novel biospecimen collection procedures for flow cytometry in low-income settings  
**Lionel Olivier Ouedraogo, Simon.J. Tavernier, Laetitia Celine Toé, Carl Lachat, Filomeen Haerynck, Trenton Dailey-Chwalibóg** (*Belgium*)
- P3.13.04** Linking effector CD4<sup>+</sup> T cell dynamics and response to pathogen proliferation  
**Ina Sauerland, Yan Fu, Andreas Müller** (*Germany*)
- P3.13.05** Role of regulatory T cells in the cellular immune response to influenza vaccine in older adults  
**Monica Espinar Garcia, Isabel María Vallejo Bermúdez, María Ángeles Onieva, Ester Irene Reina Alfonso, Pablo Álvarez Heredia, Carmen María Gutiérrez González, Fakhri Hassouneh, Inmaculada Salcedo, Alejandra Pera Rojas, Alexander Batista Duharte** (*Spain*)
- P3.13.06** Establishment of a highly sensitive live-cell imaging-based cytotoxicity assay for functional validation of rare epitope-specific CTLs  
**Kathrin Wellach, Angelika Riemer** (*Germany*)
- P3.13.07** Human iPSC-derived cerebral organoids as neuroinflammation models  
**Juan Hidalgo de Quintana<sup>1</sup>, Zhen Qi<sup>2</sup>, Idil Arioz<sup>3</sup>, Rosanna Zhang<sup>2</sup>** (*<sup>1</sup>United Kingdom, <sup>2</sup>USA, <sup>3</sup>Switzerland*)

POSTER SESSION 3

- P3.13.08 Predict the response to CD3xBCMA bispecific immunotherapy in multiple myeloma  
**Nicolas Deredec, Lisa Aziez, Ismael Boussaid, Patricia Franchi, Michaela Fontenay, Lise Willems, Olivier Kosmider, Justine Decroocq, Rudy Birsén, Didier Bouscary, Nicolas Chapuis, Marguerite Vignon, Yannick Simoni** (France)
- P3.13.09 Spatially resolved single-cell metabolic profiling of the melanoma tumor microenvironment using Multiplexed Ion Beam Imaging (MIBI)  
**Sven Truxa, Wiecken Melanie, Hassel Jessica, Hartmann Felix** (Germany)
- P3.13.10 Characterizing the immunometabolism of both the tumor microenvironment and tumor cells at the single-cell level in leukemia  
**Ekaterina Popova, Bailey Leadford, Antoine Monteiro, Lisa Aziez, Ismael Boussaid, Rudy Birsén, Michaela Fontenay, Didier Bouscary, Nicolas Chapuis, Yannick Simoni** (France)
- P3.13.11 Multiplex immunoassays to visualize immune responses in large population-based cohort studies to increase pandemic preparedness, support disease modelling/eradication and define prevalence of climate sensitive infections  
**Manuela Harries, Daniel Junker, Matthias Becker, Patrick Marsall, Tanja Michel, Carolina Klett-Tammen, Barbora Kessel, Nathalie Fernández Villalobos, Max Hassentein, Julia Häring, Rodiah Isti, Gerard Krause, Stefanie Castell, Lange Berit, Alex Dulovic, Nicole Schneiderhan-Marra, Monika Strengert** (Germany)
- P3.13.12 Biomechanics of macrophages during interaction with extracellular stimuli  
**Massimiliano Galluzzi, Zixin Huo, Diana Boraschi** (China)
- P3.13.13 Antiviral immunity revealed by B cell ImmunoSpot informs immunity to future viral exposures  
**Stephen Todryk<sup>1,2</sup>, Georgia Stylianou<sup>1</sup>, Zhigang Liu<sup>2</sup>, Yong Gao<sup>2</sup>, Noemi Becza<sup>2</sup>, Jack Chepke<sup>2</sup>, Xing-Xuang Gao<sup>2</sup>, Paul Lehmann<sup>2</sup>, Greg Kirchenbaum<sup>2</sup>** (United Kingdom, <sup>2</sup>USA)
- P3.13.14 Designing in vitro platforms to study transendothelial T cell migration in colorectal cancer  
**David Bartolomé Català, Jordi Comelles, Aina Abad, María García-Díaz, Elena Martínez** (Spain)
- P3.13.15 Reovirus evasion mechanism from cytotoxic T cell inhibits clearance of tumor cells  
**Raghad Raghad Khaleafi** (Israel)
- P3.13.16 Lymphoid tissue-on-chip to test T cell-dependent antibody responses and vaccine efficacy in vitro  
**Claudia Teufel<sup>1</sup>, Anna-Sophie Schlemmer<sup>1</sup>, Andrea Eiken<sup>1</sup>, Dennis Vöhringer<sup>1</sup>, Eduardo J.S. Brás<sup>1</sup>, Lisa Wagar<sup>2</sup>, Peter Loskill<sup>1</sup>** (Germany, <sup>2</sup>USA)
- P3.13.18 Real-time imaging of immune cell response mechanisms following the injection of a small molecule drug in the tumor microenvironment  
**Jinwoong Kim, Kubra Akyildiz, Terence Lee, Hyungjin Kwon, Hyunseok Kim** (South Korea)

**POSTER SESSION 3**

- P3.13.19** Improving animal welfare by development of an in vitro model to identify complement activation in pre-clinical species  
**Simone Arienti, Mahnoush Bahjat, Patrik Andersson, Catherine Betts** (*United Kingdom*)
- P3.13.20** Automated method to measure frequency of T-cell response  
**Tara Dalton, Eric Dalton, Graham Taylor, Danielle Grehan, Abir Sakly, Paul Murray** (*United Kingdom*)
- P3.13.21** Co-culture of THP-1 cell line to screen phagocytosis with STZ-induced diabetic 1.1B4 cell line  
**Ceren Bozkurt, Ozgur Albayrak, Farinaz Jafari Ghods, Adeliya Temirbek, Burcin Aydin Ozgur, Amirhooman Asadi, Oguzhan Deyneli, Dilek Yazici, Yildiz Tutuncu** (*Turkey*)
- P3.13.22** Targeting the osteoclastogenic cytokine IL-9 as a novel immunotherapeutic strategy in mitigating inflammatory bone loss in post-menopausal osteoporosis  
**Leena Sapra, Rupesh Srivastava** (*India*)
- P3.13.23** Adverse immunostimulation in early-phase clinical research: lessons learned from 3 early-phase clinical trials  
**Marel van Ruissen, Juliette van den Noort, Manon Jansen, Naomi Klarenbeek, Matthijs Moerland** (*Netherlands*)
- P3.13.24** Vascular characterization of redness and swelling as hallmarks of inflammation in LPS-driven dermal inflammatory responses in healthy volunteers  
**Marel van Ruissen, Mihir Kapadia, Liza Botros, Manon Jansen, Robert-Jan Doll, Matthijs Moerland** (*Netherlands*)
- P3.13.25** Enhanced assay reliability: advanced negative control Dextramer® reagents in antigen-specific T cell detection  
**Dilek Inekci, Liselotte Brix, Thomas Holberg Blicher** (*Denmark*)
- P3.13.26** Revolutionizing multiplexed protein profiling: dual-reporter capabilities of Luminex xMAP® technology  
**Ronald Backer, Ruud Jorna, Sherry Dunbar, Stephen Angeloni** (*USA*)
- P3.13.27** Characteristics and dynamics of autoantibodies against cardiac antigens in patients hospitalised for acute heart failure – the prospective AHF-immunomonitoring cohort study  
**Boshra Afshar, Dora Pelin, Maximilian Bauser, Mairin Heil, Thomas Kerkau, Wafaa Al-Hassan, Hanna Hepp, Elisa Kaiser, Janna Lamers, Jannika Paetkau, Fabian Kerwagen, Gustavo Ramos, Ulrich Hofmann, Stefan Frantz, Stefan Störk, Niklas Beyersdorf, Caroline Morbach** (*Germany*)
- P3.13.28** Acid ceramidase expression reduces IFN $\gamma$  secretion by CD4<sup>+</sup> T cells and maintains B cell numbers in mice  
**Rehan Haider Zaidi, Putri Mandasari, Claudia Hollmann, Samira Löw, Jann Schrama, Dominik Wigger, Fabian Schumacher, Burkhard Kleuser, Niklas Beyersdorf** (*Germany*)
- P3.13.29** Characterising MAIT cells using MR1 and TCR dextramer reagents  
**Thomas Holberg Blicher, Bjarke Endel Hansen, Kivin Jacobsen, Liselotte Brix** (*Denmark*)



### POSTER SESSION 3

- P3.13.30** An optimized fluorescent 9-plex spatial proteomics workflow enables single cell quantification within human invasive ductal carcinoma (IDC) breast cancer research  
**Nancie Mooney, Kristi Hamilton, Austin Harvey, Oggie Golub, Edward Parkin (USA)**
- P3.13.31** Development of a high-throughput image cytometric screening method as a research tool for immunophenotypic characterization of human samples from clinical studies  
**Bo Lin, Leo Chan (USA)**

## INDUSTRY SESSIONS - MONDAY, 2 SEPTEMBER 2024

### WICKLOW HALL 2 | 07:30-08:30

#### BECKMAN COULTER LIFE SCIENCES MEET THE EXPERT

How the NEW CytoFLEX mosaic spectral module can improve studies on immunosenescence and vaccine efficacy

**Domenico Lo Tartaro** (*Italy*), **Fanuel Messaggio** (*USA*)

### LIFFEY MEETING ROOM 3 | 07:30-08:30

#### THERMO FISHER SCIENTIFIC MEET THE EXPERT

### LIFFEY HALL 1 | 12:50-14:05

#### CYTEK LUNCH SYMPOSIUM

The Balancing Act Between Number of Colors and Data Quality: Lessons Learned from Human Memory T Cells

**Alberta Paul** (*USA*)

### LIFFEY MEETING ROOM 2 | 12:50-14:05

#### BIOLEGEND LUNCH SYMPOSIUM

Optimized immunophenotyping with high dimensional spectral flow cytometry panels

**Carsten Wiethe** (*Germany*)

### LIFFEY MEETING ROOM 3 | 12:50-14:05

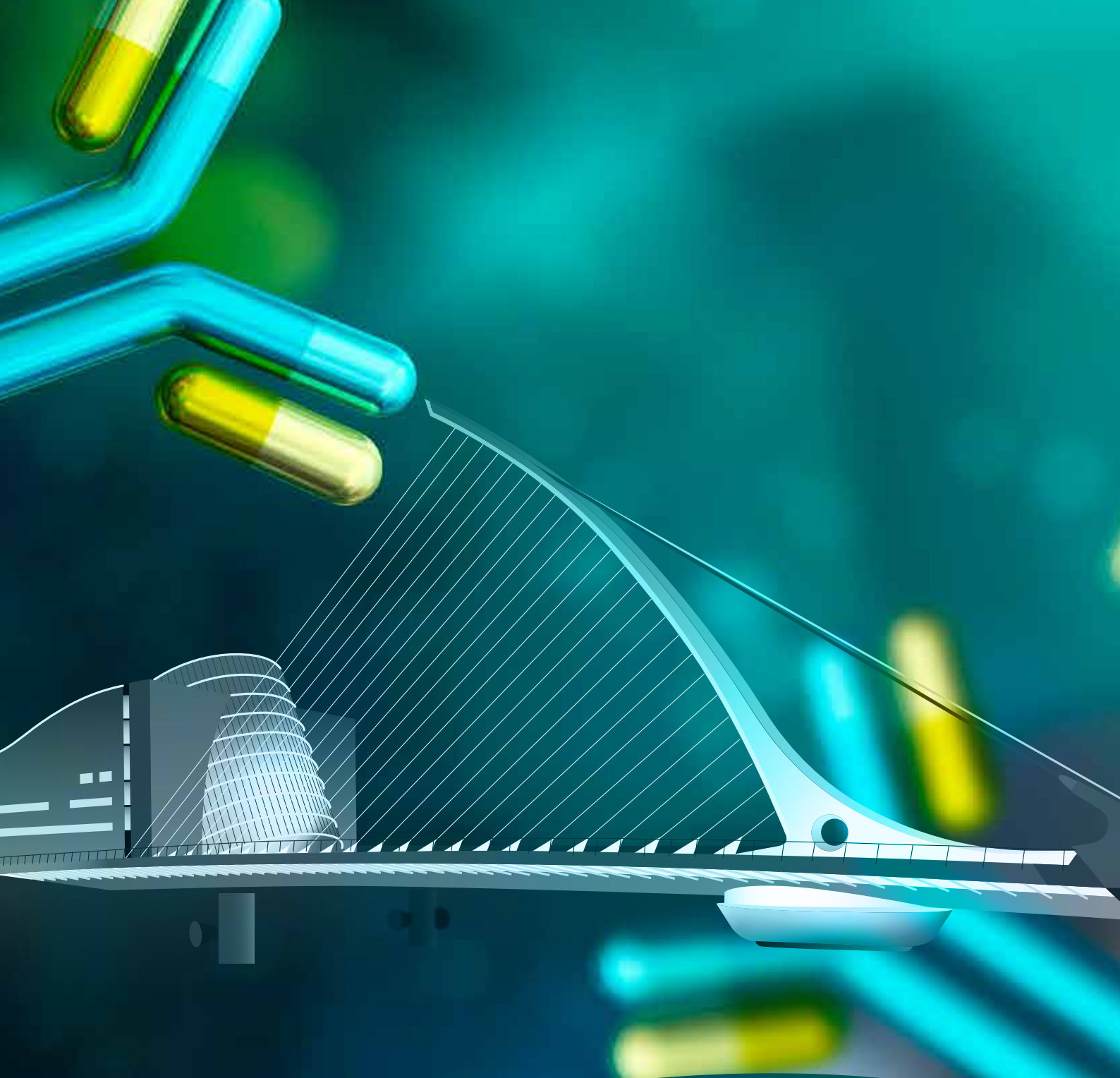
#### THERMO FISHER SCIENTIFIC INDUSTRY LUNCH SYMPOSIUM

### Booth D05 | 10:00-10:15

#### BD BOOTH TALK

Improving resolution and unveiling biology with spectral flow cytometry

**Robert Balderas** (*USA*)



Irish Society  
for Immunology



European Federation of  
Immunological Societies