



Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



Symposium 2 | Phagocytes

Organizers: Oliver Soehnlein, Joana R. Viola, Carlos Silvestre-Roig (all Munich, Germany)

Day: Wednesday 22 afternoon, Thursday 23 all day and Friday 24 morning

Meeting room: Wednesday 22: Meeting Room S. Clara & D. Pedro, Hotel Dona Inés (Congress venue 2)
Thursday 23 and Friday 24: Meeting Room Romeu, Hotel Vila Galé (Congress venue 1)

Wednesday, 22 May

14.00-16.00 Session 1: Neutrophil extracellular traps

Chair: Carlos Silvestre-Roig (Munich, Germany)

14.00-14.25 **S2-L1 | The path to NET formation**
Arturo Zychlinsky (Berlin, Germany)

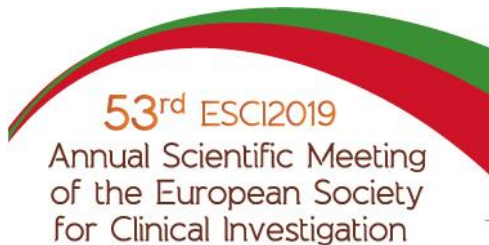
14.35-15.00 **S2-L2 | Neutrophil subsets and NETs in autoimmune diseases**
Mariana Kaplan (Bethesda, USA)

15.10-15.20 **S2-O1 | Layers of NETs inside Neutrophil Swarms Contain *Candida albicans***
Daniel Irimia, Alex Hopke
¹Massachusetts General Hospital, Harvard Medical School, Boston, United States

15.25-15.35 **S2-O2 | Externalized histone H4 orchestrates chronic inflammation by inducing lytic cell death**
Quinte Braster^{1,2,3}, Carlos Silvestre-Roig^{1,2,3}, Kanin Wichapong⁴, Ernest Y. Lee⁵, Jean M. Teulon⁶, José M. Adrover⁷, Julia von Blume⁸, Viacheslav O. Nikolaev^{9,10}, Jean-Luc Pellequer Pellequer⁶, Andrés Hidalgo^{1,7}, Gerry A. F. Nicolaes⁴, Gerard C. L. Wong⁵, Oliver Soehnlein^{1,2,3,10}
¹Institute for Cardiovascular Prevention (IPEK), Munich, Germany, ²Department of Pathology, AMC, Amsterdam, the Netherlands, ³German Center for Cardiovascular Research (DZHK), Munich, Germany, ⁴Department of Biochemistry, CARIM, Maastricht, the Netherlands, ⁵Department of Bioengineering, University of California, Los Angeles, United States, ⁶University of Grenoble Alpes, Grenoble, France, ⁷Area of Developmental and Cell Biology, Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain, ⁸Max Planck Institute of Biochemistry, Martinsried, Germany, ⁹Institute of Experimental Cardiovascular Research, University Medical Center Hamburg- Eppendorf, Hamburg, Germany, ¹⁰Department of Physiology and Pharmacology (FyFa), Karolinska Institutet, Stockholm, Sweden

15.40-15.50 **S2-O3 | Gasdermin D is a key executioner in the formation of neutrophil extracellular traps**
Gabriel Sollberger¹, Axel Choidas², Garth Burn¹, Peter Habenberger², Raffaella Di Lucrezia², Susanne Kordes², Sascha Menninger², Jan Eickhoff², Peter Nussbaumer², Bert Klebl², Renate Krüger³, Alf Herzig¹, Arturo Zychlinsky¹
¹Max Planck Institute For Infection Biology, Berlin, Germany, ²Lead Discovery Center GmbH, Dortmund, Germany, ³Charité-Universitätsmedizin Berlin, Department of Pediatric Pneumology, Immunology and Intensive Care, Berlin, Germany

16:00-16:30 Coffee-break



Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



16.30-18.00 Session 2: Neutrophil extracellular traps, cont'd

Chair: Carlos Silvestre-Roig (Munich, Germany)

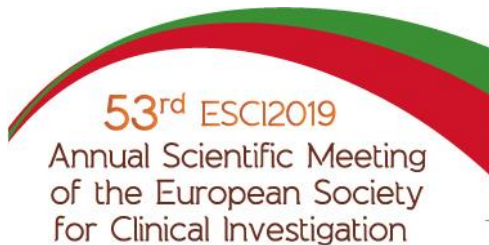
- 16.30-16.55 **S2-L3 | Neutrophil Extracellular Traps Confine Pseudomonas aeruginosa Ocular Biofilms and Restrict Brain Invasion**
Ajitha Thanabalasuriar (Gaithersburg, USA)
- 17.05-17.15 **S2-O4 | Proteomic analysis of neutrophil extracellular traps in rheumatoid arthritis and systemic lupus erythematosus**
Elinor Chapman¹, Max Lyon¹, Mrs Deborah Simpson¹, David Mason¹, Robert Beynon¹, Robert Moots¹, **Helen Wright¹**
¹University Of Liverpool, Liverpool, United Kingdom
- 17.20-17.30 **S2-O5 | Proteolytic modification of NET components affects their recognition by autoantibodies**
Cynthia De Bont¹, Nienke Eerden¹, Wilbert Boelens¹, Ger Pruijn¹
¹Biomolecular Chemistry, Institute of Molecules and Materials, Radboud University Nijmegen, the Netherlands, Nijmegen, Netherlands
- 17.35-17.45 **S2-O6 | Neutrophil extracellular traps accumulate in Cystic Fibrosis sputum and are associated with inflammation and lung function decline**
Sheonagh Law¹, Gareth Hardisty¹, Ian Dransfield¹, Robert Gray¹
¹University Of Edinburgh, Edinburgh, United Kingdom
- 18.00-19.00 Opening Ceremony
19.00-20.00 Opening lecture by a Key-note speaker
20.00-21.00 Welcome drink
22.00-22.00 Champions League in Biomedicine and Experimental Biology

Thursday, 23 May

08.30-10.00 Session 3: Outbreak session

Chair: Andres Hidalgo (Madrid, Spain)

- 08.30-08.55 **S2-L4 | Neuronal regulation of myeloid immunity and host defense**
Isaac Chiu (Boston, USA)
- 09.05-09.15 **S2-O7 | Targeting the neutrophil-clock for cardiovascular protection**
Alejandra Aroca-Crevillén¹, José María Adrover¹, Sandra Martín-Salamanca¹, Georgiana Crainiciuc¹, Andrés Hidalgo¹
¹Spanish National Center For Cardiovascular Research, Madrid, Spain
- 09.20-09.30 **S2-O8 | Neutrophil activation by Immunoglobulin A Exacerbates Pathogenesis of Inflammatory Bowel disease**
Amelie Bos¹, Marjolein van Egmond
¹Vumc Amsterdam, Amsterdam, Netherlands
- 09.35-09.45 **S2-O9 | Characterisation of Neutrophils Generated In Vitro From Immortalized Hoxb8-Transduced Myeloid Progenitor Cells**
Anita Orosz¹, Attila Mócsai¹
¹Semmelweis University, Budapest, Hungary



Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



10:00-10:30 Coffee-break

10.30-12.30 Session 4: Outbreak session, cont'd

Chair: Andres Hidalgo (Madrid, Spain)

10.30-10.55 **S2-L5 | Metabolic adaptation as a defence strategy against infection**
Miguel Soares (Oeiras, Portugal)

11.05-11.30 **S2-L6 | Trained immunity: adaptation within innate immune responses**
Mihai Netea (Nijmegen, the Netherlands)

11.40-11.50 **S2-O10 | The Development of a Novel, Targeted and Less Toxic Anti-Inflammatory Drug for the Treatment of Gout**

Maria Fernandes¹, Guillaume Paré¹, Julien Vitry¹, Myriam Vaillancourt¹, François Marceau¹, Paul Naccache¹, Jack Tuszynski²

¹Université Laval, Québec, Canada, ²University of Alberta, Edmonton, Canada

11.55-12.05

12.10-12.20

12.30-14.00 Poster session 1 and lunch

14.00-16.00 Session 5: Resolution of Inflammation

Chairs: Mauro Perretti (London, UK) and Catherine Godson (Dublin, Ireland)

14.00-14.25 **S2-L8 | Lipid Mediators in the Resolution of Inflammation**
Joan Clària (Barcelona, Spain)

14.35-15.00 **S2-L9 | IFNbeta in resolving inflammation: an old dog with some new tricks**
Amiram Ariel (Haifa, Israel)

15.10-15.20 **S2-O11 | Annexin A1 induces a pro-angiogenic macrophage phenotype to promote myocardial repair**

Bartolo Ferraro^{1,2}, Giovanna Leoni^{1,2}, Rabea Hinkel^{2,4}, Christian Kupatt^{2,4}, Oliver Soehnlein^{1,3,5}

¹Institute for Cardiovascular Prevention (IPEK), Ludwig-Maximilians University, Munich, Germany, ²DZHK, partner site Munich Heart Alliance, Munich, Germany, ³Department of Pathology, AMC, Amsterdam, the Netherlands, ⁴Medizinische Klinik I, TUM, Munich, Germany, ⁵Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden

15.25-15.35 **S2-O12 | Tissue hypoxia induces mobilisation of pro-angiogenic neutrophils from the spleen through sympathetic nerve signalling**

Cédric Seignez¹, Mia Phillipson¹

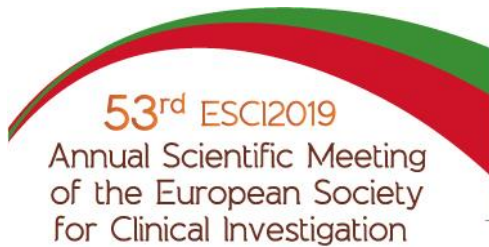
¹Dept. Medical Cell Biology, Biomedical Centre, Uppsala University, Uppsala, Sweden

15.40-15.50 **S2-O13 | Neutrophils activated with Hif-1α are protective in zebrafish tuberculosis in vivo models**

Piotr Szkuta¹, Amy Lewis¹, Stephen Renshaw¹, Alison Condliffe¹, **Philip Elks¹**

¹University Of Sheffield, Sheffield, United Kingdom

16:00-16:30 Coffee-break



Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



16.30-18.00 Session 6: Resolution of Inflammation, cont'd

Chairs: Mauro Perretti (London, UK) and Catherine Godson (Dublin, Ireland)

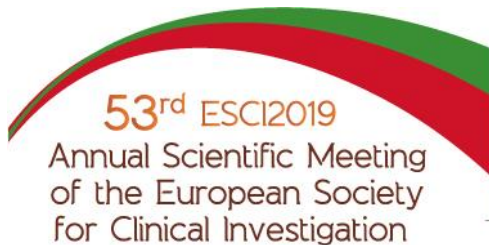
- 16.30-16.55 **S2-O14 | Aspirin-triggered lipoxin A4 enhances phagocytosis-induced neutrophil apoptosis and resolution of acute lung inflammation**
Janos Filep^{1,2}, Driss El Kebir^{1,2}, Meriem Sekheri^{2c}
¹University Of Montreal, Montreal, Canada, ²Research Center, Maisonneuve-Rosemont Hospital, Montreal, Canada
- 17.05-17.15 **S2-L10 | Regulation of tissue neutrophil function and survival by metabolic adaptation to hypoxia**
Sara Walmsley (Edinburgh, UK)
- 17.20-17.30 **S2-O15 | Re-Programming Atherosclerotic Plaque Macrophages Towards An Anti-Atherogenic Phenotype**
Jan Nagenborg¹, Han Jin¹, Eoin Brennan², Pieter Goossens¹, Marjo Donners¹, Erik Biessen¹
¹CARIM - Cardiovascular Research Institute Maastricht, Maastricht, Netherlands, ²UCD Conway Institute of Biomolecular and Biomedical Research, Dublin, Ireland
- 17.35-17.45 **S2-O16 | Anti-EMMPRIN immunization with 161-pAb promotes necroptosis and immunogenic cell death**
Michal (Miki) Rahat^{1,3}, Nizar Hijaze², Max Ledersnaider¹, Elina Simanovich¹, Sameer Kassem^{2,3}
¹Immunotherapy Lab, Carmel Medical Center, Haifa, Israel, ²Internal Medicine A, Carmel Medical Center, Haifa, Israel, ³Ruth and Bruce Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel
- 18.00-19.30 Poster session 2
20.30 Congress dinner

Friday, 24 May

08.30-10.00 Session 7: Neutrophil trafficking

Chair: Barbara Walzog (Munich, Germany)

- 08.30-08.55 **S2-L11 | Del-1: a regulator of neutrophil recruitment and homeostasis**
Trian Chavakis (Dresden, Germany)
- 09.05-09.15 **S2-O17 | Single-live-cell assessment of the role of calcium bursts in chemotaxis and phagocytosis of human neutrophils**
Emmet Francis¹, Volkmar Heinrich¹
¹University Of California, Davis, Davis, United States
- 09.20-09.30 **S2-O18 | The kidney specific glycoprotein Uromodulin induces leukocyte recruitment in vivo**
Monika Prünster¹, Tobias Steffen¹, Roland Immler¹, Georg Hupel¹, Ursula Keller², Jürgen Scherberich³, Bernd Uhl¹, Hanna Mannell¹, Heike Beck¹, Christoph Reichel¹, Bärbel Lange-Sperandio², Markus Sperandio¹
¹Walter Brendel Centre of Experimental Medicine, Biomedical Center, Planegg, Martinsried, Germany ²Dr. von Haunersches Kinderspital, Dept. of Pediatric Nephrology Ludwig-Maximilians Universität München, Munich, Germany, ³Klinikum Harlaching, Lehrkrankenhaus der Ludwig-Maximilians Universität München, Munich, Germany




Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



- 09.35-09.45 **S2-O19 | s100A9 regulates neutrophil migration during experimental lung inflammation and is a novel therapeutic target in respiratory disease**
Gareth Hardisty¹, Sheonagh Law¹, Jonathan Gillan¹, Emily Gwyer Findlay¹, Sonja Vermeren¹, Donald Davidson¹, Robert Gray¹
¹University Of Edinburgh, Edinburgh, United Kingdom
- 10:00-10:30 Coffee-break
- 10.30-12.30 Session 8: Neutrophil trafficking, cont'd**
Chair: Barbara Walzog (Munich, Germany)
- 10.30-10.55 **S2-L12 | Neutrophil breaching of venular walls: Mode, mechanisms & novel concepts**
Sussan Nourshargh (London, UK)
- 11.05-11.30 **S2-L13 | Leukocyte Navigation in Complex Microenvironments**
Jörg Renkawitz (Klosterneuburg, Austria)
- 11.40-11.50 **S2-O20 | ARAP3-mediated integrin inactivation promotes neutrophil recruitment to inflammatory sites**
Barry McCormick¹, Julia Chu¹, Leo Carlin², Sonja Vermeren¹
¹Centre for Inflammation Research, University of Edinburgh, Edinburgh, United Kingdom, ²Cancer Research UK, Beatson Institute, Glasgow, United Kingdom
- 11.55-12.05 **S2-O21 | The neutrophil attractant CXCL5 targets monocytes and proteolytic modification and citrullination alter CXCL5 receptor signaling and specificity**
Mieke Metzemaekers¹, Anneleen Mortier¹, Alessandro Vacchini², Karen Yu¹, Daiane Boff^{1,3}, Rik Janssens^{1,3}, Nele Berghmans¹, Noëmie Pörtner¹, Samantha Milanese², Flavio Almeida Amaral³, Massimo Locati², Elena Monica Borroni², Paul Proost¹
¹Ku Leuven, Leuven, Belgium ²Humanitas Clinical and Research Center, Milan, Italy ³Universidade Federal de Minas Gerais, Belo Horizonte, Brasil
- 12.10-12.20 **S2-O22 | MKL1 deficiency results in a severe neutrophil defect with impaired actin polymerization and excessive degranulation**
Evelien Sprengeler^{1,2}, Stefanie Henriët³, Anton Tool¹, Iris Kreft⁴, Ivo van der Bijl¹, Koen van Aerde³, Gerald Jaspers⁵, Arno van Heijst⁶, Wouter Koole⁷, Thatjana Gardeitchik⁷, Michel van Houdt¹, Martin de Boer¹, Cathelijn Aarts¹, Christine Bruggeman¹, Floris van Alphen⁴, Hans Janssen⁸, Robin van Bruggen¹, Timo van den Berg^{1,9}, Kian Liem⁶, Taco Kuijpers^{1,2}
¹Department of Blood Cell Research, Sanquin Research and Laboratory Services and Landsteiner Laboratory, Amsterdam University Medical Center (AUMC), University of Amsterdam, Amsterdam, The Netherlands, ²Department of Pediatric Hematology, Immunology and Infectious Diseases, Emma Children's Hospital, AUMC, University of Amsterdam, Amsterdam, The Netherlands, ³Department of Pediatric Infectious Diseases and Immunology, Amalia Children's Hospital, Radboud Institute for Molecular Life Sciences, Radboud University Medical Center, Nijmegen, The Netherlands, ⁴Department of Research facilities, Sanquin Research, Amsterdam, The Netherlands, ⁵Department of Pediatric Intensive Care, Radboud University Medical Center, Nijmegen, The Netherlands, ⁶Department of Neonatology, Amalia Children's Hospital, Radboud Institute for Health Sciences, Radboud University Medical Center, Nijmegen, The Netherlands, ⁷Department of Human Genetics, Radboud University Medical Center, Nijmegen, The Netherlands, ⁸Division of Biochemistry, The Netherlands Cancer Institute, Amsterdam, The Netherlands, ⁹Department of Molecular Cell Biology and Immunology, AUMC, Vrije Universiteit Amsterdam, Amsterdam Infection and Immunity Institute, Amsterdam, The Netherlands



53rd ESCI2019
Annual Scientific Meeting
of the European Society
for Clinical Investigation

Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



- 12.30-14.00 Poster session 3 and lunch
- 14.00-16.40 Multi-focus Plenary & ESCI Awards Session
- 16.45-17.30 Closing Ceremony