Program: ECMC-2025 (August 18th-21st) Copenhagen

Day 1 (Monday, August 18)

13.00-14.00 Arrival and registration

14.00-14.15 Conference opening: Mette M. Rosenkilde/Martin Gustavsson/Gertrud Hjortø (University of Copenhagen)

14.15-16.00 Session I: Chemokines in the regulation of innate immunity

14.15-14.45 Mia Philipsson (Uppsala University, Sweden) "CXCL12-Dependent Mobilization of Proangiogenic Neutrophils from the Spleen Is Controlled by Sympathetic Signaling Following Ischemic Insult"

14.45-15.15 Douglas Dyer (University of Manchester, UK) "The endothelial and immune cell surface glycocalyx regulate chemokines in immune cell recruitment and function"

15.15-15.30 TBD

15.30-15.45 Julia Gutjahr (Institute for Cell Biology and Immunology Thurgau, Switzerland) "From Mice to Men: CXCR4 Trafficking and Signaling in Erythroblasts"

15.45-16.00 Pedro Elias Marques (KU Leuven, Belgium) "Autoantibodies against chemokines as new modulators of immunity"

16.00-16.30 Coffee

16.30-18.30 Session II: The chemokine system in cancer: mechanisms and therapeutic strategies

16.30-17.15 Martine Smit (VU Amsterdam, Netherlands) "Targeting constitutively active properties of oncogenic chemokine receptors"

17.15-17.45 Antal Rot (Queen Mary University, London, UK) "Altered tumour-host interface aggravates experimental prostate cancer in mice with the African rs2814778-like single-nucleotide polymorphism in the Ackr1 gene"

17.45- 18.00 Gwendal Lazennec (CNRS, France) "Crucial involvement of CXCR2 and neutrophils in breast cancer"

18.00-18.15 Sofya Novikova (Ulm University Medical Center, Germany) "GPR15LG and its derived peptides for the modulation of CXCR4 signaling"

18.15- 18.30 Joshua Farber (NIAID, USA) "Targeting CXCL9 for imaging T-cell activation in vivo"

18.30-21.00 Welcome reception on the top floor of the Maersk tower (and group photo)

Day 2 (Tuesday, August 19)

8.00-9.00 Light breakfast (in front of the Hannover auditorium)

9.00-11.00 Session I: Chemokine receptor structure function

9.00-9.45 Brian Volkman (Medical College of Wisconsin, USA)

- 9.45-10.15 Cherine Bechara (Montpellier University, France) "Charged for Discovery: Mass Spectrometry Unlocks Chemokine Receptor dynamics and interactions"
- 10.15- 10.30 Fernando Salgado Polo (University of Copenhagen, Denmark) "Uncovering the molecular basis for the regulation of CXCR4 activity by cholesterol"
- 10.30- 10.45 Thomas Lamme (Vrije Universiteit Amsterdam, Netherlands) "Signal termination of the chemokine receptor CCR9 is governed by an arrestin-independent phosphorylation mechanism"
- 10.45-11.00 Shirsha Saha (Indian Institute of Technology, Kanpur) "Molecular basis of promiscuous ligand engagement, biased signaling and structural mimicry at chemokine receptors"

11.00-11.30 Coffee

11.30-13.00 Session II: Chemokine signaling and regulation by GAGs and modulators

- 11.30-12.00 Rebecca Miller (University of Copenhagen, Denmark)
- 12.00-12.30 Shoumo Bhattacharya (University of Oxford, UK) "Bug to Drug: Chemokine network inhibitors from ticks"
- 12.30- 12.45 Natalia Janowiak (VU Amsterdam, Netherlands) "Defining the functional role of an underexplored CXCL12g isoform in a human ISPC-derived endothelial cell model"
- 12.45- 13.00 Steve Matthews (Imperial College London, UK) "Structural basis of CXCL8 inactivation by the Group A streptococcal anti-chemotactic protease SpyCEP"

13.00-14.30 Lunch and poster session

14.30-16.00 Session III: Signaling and cell migration

14.30-15.15 Michael Sixt (IST, Austria)

- 15.15-15.45 Mario Mellado, (Centro Nacional de Biotecnología, Spain) "Chemokine receptor oligomerization: a new paradigm in functional plasticity"
- 15.45-16.15 Sudarshan Rajagopal (Duke University, USA) "Biasing Chemokine Receptor Signaling"

16.15-17.15 Coffee and poster session

17.15-18.45 Session IV: Chemokine receptors and other GPCRs in Drug Discovery

- 17.15-17.45 David Gloriam (University of Copenhagen, Denmark) "Trends in GPCR drug discovery"
- 17.45-18.15 Martin Gustavsson (University of Copenhagen, Denmark) "RaPID discovery of cyclic peptides targeting chemokine receptors"
- 18.15-18.30 Johan Lantto (Synklino A/S, Denmark) "Ex vivo targeting of cytomegalovirus infection through the viral chemokine receptor US28"
- 18.30-18.45 Christoffer Norn (Modulate, Denmark)

19.00- Social event

Day 3 (Wednesday, August 20)

8.00-9.00 Light breakfast (in front of the Hannover auditorium)

9.00-10.30 Session I: Chemokines in inflammatory and autoimmune diseases

9.00-9.30 Sofie Struyf (KU Leuven, Belgium) "Neutrophils, underestimated players in multiple sclerosis"

9.30-10.00 Karl Balabanian (INSERM, France) "CXCR4 signaling, a gatekeeper orchestrating the bone marrow ecosystem"

10.00- 10.15 Charlie Joe Clark (University of Oxford, UK) "Robust and redundant chemokine signalling networks drive immune cell trafficking in human immunoinflammatory disease"

10.15-10.30 Fabio Beretta (KU Leuven, Belgium) "Blocking the chemokine gradient formation prevents early hyperinflammation in severe influenza"

10.30-11.30 Coffee and poster session

11.30-13.00 Session II: Atypical chemokine receptors

11.30-12.00 Martyna Szpakowska (Luxembourg Institute of Health)

12.00-12.30 Daniel Legler (Institute of Cell Biology and Immunology Thurgau, Switzerland) "Mechanistic insights into chemokine scavenging by ACKR4"

12.30-12.45 Nikola Sobczak (Ludwig-Maximilians-Universität München, Germany) "Tracking the drop: investigating erythroid ACKR1 in the duffy-null neutrophil mystery"

12.45- 13.00 Noelia Santander Acerete (Centro Nacional de Biotecnología/CSIC, Spain) "Atypical chemokine receptor 3 (ACKR3) oligomerization as a potential mechanism to modulate chemokine responses"

13.00-14.30 Lunch and poster session

14.30-16.00 Session III: Chemokines and their receptors in neuro-immunology

14.30-15.00 Kristine Freude (University of Copenhagen, Denmark) "Deciphering the Microglia Contribution to Sex Differences in Alzheimer's Disease"

15.00-15.30 Britta Engelhardt (Theodor Kocher Institute, Switzerland) *"The role of the brain barriers in neuroinflammation"*

15.30- 16.00 Nanna MacAuley (University of Copenhagen, Denmark) "Inflammation drives CSF hypersecretion in posthemorrhagic hydrocephalus"

17.00- Excursion and conference dinner

Day 4 (Thursday, August 21)

8.00-9.00 Light breakfast (in front of the Hannover auditorium)

9.00-11.00 Session I: Therapeutic strategies and druggable targets in the chemokine system

9.00-9.45 Arun Shukla (Indian Institute of Technology Kanpur)

- 9.45-10.15 Andreas Kungl (University of Graz/Antagonis, Austria) "Developing biologics which target the glycosaminoglycan-chemokine interface: an entrepreneurial view"
- 10.15-10.45 Natalia Ortiz Zacarias (Leiden University, Netherlands) "From Inhibition to Degradation: Targeting Chemokine Receptor CCR2"
- 10.45-11.00 Una Ivkovic (KU Leuven, Belgium) "Sustained delivery of CXCL12 through encapsulation in chitosan nanoparticles"

11.00-11.30 Coffee

11.30-13.00 Session II: New technologies in chemokine research/ B-ACTIVE doctoral network

- 11.30-12.00 Steffen Goletz (Technical University of Denmark)
- 12.00- 12.30 Sofia de Oliveira (Albert Einstein College of Medicine, USA) "Decoding Neutrophil Dynamics after Polytraumatic Injury: Mechanistic Insights from a Zebrafish Model"
- 12.30- 12.45 Silvia Bergt (University of Copenhagen, Denmark) "Distinct regulation of chemokine receptor function by O-glycosylation"
- 12.45- 13.00 Clara Matteini (University of Graz /Antagonis, Austria) "A potent CXCL8-HAS decoy as a promising biotherapeutic against chronic inflammatory diseases and cancer"
- 13.00-13.15 Caroline Wouters (University of Copenhagen/Synklino, Denmark) "The role of Oglycosylation in the viral chemokine receptor US28 and innovations in targeting CMV"

13.15-13.20: Conference closing