9th Meeting of the European Mast Cell and Basophil Research Network (EMBRN) – a Marcus Wallenberg Symposium

June 17-19, 2019

Preliminary program

Monday, June 17
12.00-13.00 Registration
13.00-13.15 Welcome address (Gunnar Pejler)

Session I: Mast cell biology: basics and future
(chaired by Lars Hellman and Silvia Bulfone Paus)
13.15-13.55 K Frank Austen (Harvard Medical School): “Intrinsic and extrinsic directed diversity of tissue mast cells”
13.55-14.15 Magda Babina (Charité - Universitätsmedizin Berlin): “MRGPRX2 and human skin mast cells - functional aspects and regulation by extracellular cues”
14.15-14.25 Petr Draber (Academy of Sciences of the Czech Republic): “ORMDL3 regulates leukotriene biosynthesis and chemotaxis in mast cells”
14.25-14.35 Karla Alina Ramirez-Valadez (Unidad Coapa, México): “Participation of Fyn kinase in the migration of mast cells in response to transforming growth factor β”
14.35-14.45 Gokhan Cildir (University of South Australia): “Immunoglobulin E (IgE)-mediated mast cell activation governs a novel chromatin landscape”
14.55-15.35 Coffee break, poster mounting

Session II: Mast cells/basophils, IgE and inflammatory lung disease
(chaired by Sara Wernersson and Frank Redegeld)
15.35-16.15 Stephen J Galli (Stanford University): “Mast cells and IgE in health and disease”
16.15-16.35 Jenny Hallgren Martinsson (Uppsala University): “The role of mast cells in allergic lung inflammation”
16.35-16.55 Jonas Erjefält (Lund University): “Disease and Microenvironments as Determinants for Tissue Mast cell Phenotypes”
16.55-17.05 Kwok Ho Yip (Centre for Cancer Biology, Adelaide): “A novel role of cytokine receptor common beta subunit in amplifying FcεRI-mediated mast cell activation”
17.05-17.15 Anna-Karin Johnsson (Karolinska Institutet): “Characterization of lipid mediator release in IgE stimulated human CBMC’s and lung mast cells”
17.15-17.25 Jane Warner (University of Southampton): “Combining immunofluorescent imaging and micro-CT to visualize mast cells and 3D networks in human lung tissue”
17.25-17.35 Aida Paivandy (Uppsala University): “Mechanism of oxidative stress-induced mast cell apoptosis in response to granule permeabilization”
17.35-17.45 Lars Hellman (Uppsala University): “Highly selective cleavage of TH2 promoting cytokines by human mast cell tryptase and chymase”

17.45-20.00 Poster session I (snacks and drinks)

Tuesday, June 18
08.00-09.00 EMBRN board meeting
Session III: Basophil biology
(chaired by Stephan Bischoff and Carole Osberitzian)
09.00-09.30 Hajime Karasuyama (Tokyo Medical and Dental University): “Crucial role for basophils in emphysema development in a murine model of COPD”
09.30-09.50 Merav Cohen (Weizmann Institute of Science): “Single cell interaction map reveals a novel role for basophils in lung development”
09.50-10.10 Joakim Dahlin (Karolinska Institute): “Dissection of the basophil-mast cell fate decision at the single-cell level”
10.10-10.20 Yasmine Lamri (Université Paris Diderot): “Basophils contribute to Mixed Connective Tissue Disease (Sharp syndrome) development”
10.20-10.30 Christophe Pellefigues (Malaghan Institute of Medical Research): “Basophils induce the skin barrier dysfunction and participate in the resolution of atopic dermatitis”
10.30-11.00 Coffee break

Session III, continued
11.00-11.20 Nicholas Charles (Université Paris Diderot): “Basophils and IgE in systemic autoimmune diseases”
11.20-11.30 Bernhard F. Gibbs (University of Oldenburg): Human Basophils are Recruited in Bullous Pemphigoid and are Activated by IgE-Dependent Mechanisms
11.30-11.40 Sylvia M.T. Groen (University of Oldenburg): “Serotonin Inhibits IgE-Dependent IL-4 Secretion from Human Basophils”

Session IV: A mast cell/basophil smorgasbord
(chaired by Ronit Sagi-Eisenberg and Peter Bradding)
11.40-12.00 Anne Dudeck (Otto-von-Guericke University Magdeburg): “Mast cell and Dendritic cell communication and mutual arming to ensure acute host defense”
12.00-12.20 Hans-Jürgen Hoffmann (Aarhus University & Hospital): “Basophil activation as a model for the allergic response”
12.30-12.40 Zou Xiang (Guizhou Medical University, China): “Fcγ receptor-dependent mast cell apoptosis regulates tissue persistence”
12.50-13.00 Christopher Von Beek (Uppsala University): “Streptococcal streptolysin S encoded by sagA activates a pro-inflammatory response in mast cells by a sublytic mechanism”
13.00-14.00 Lunch

Session V: Mast cells and basophils in disease
(chaired by Magnus Åbrink and Francesca Levi-Schaffer)
14.00-14.20 Silvia Monticelli (Università della Svizzera Italiana): “Transcriptional and post-transcriptional regulation of mast cells”
14.20-14.40 Gunnar Nilsson (Karolinska Institute): “Single-cell analysis to reveal mast cell development in mastocytosis”
14.40-15.00 Adrian Piliponsky (Seattle Children's Research Institute): “Basophil-derived tumor necrosis factor can enhance innate immunity in a sepsis model in mice”
15.00-15.10 Qingqing Jiao (Universitätsmedizin Berlin): “Skin mast cells contribute to Sporothrix schenckii infection”
15.10-15.20 Flavie Ngo Nyekel (Paris Diderot University): “Mast cell degranulation exacerbates skin rejection by enhancing neutrophil recruitment”
15.20-15.30 **Yana Arestova** (Charité – Universitätsmedizin Berlin): “Mast cells modulate antigen-specific CD8 T cell activation during viral infections”
15.30-15.40 **Roberta Sulsenti** (Istituto Nazionale dei Tumori, Milan): “Mast cells-derived osteopontin protects from neuroendocrine prostate cancer”
15.40-15.50 **Martin Houde** (Université de Sherbrooke): “Mouse Mast Cell Protease 4 Deletion Protects Heart Function and Survival After Permanent Myocardial Infarction”
15.50-16.00 **Rajia Bahri** (University of Manchester): “The melanoma micro-milieu alters mast cell characteristics and conditions their activities”

16.00-18.00 **Poster session II** (drinks + snacks)

19.00 **Conference dinner** (Norrlands Nation)

**Wednesday, June 19**
09.00-09.50 **EMBRN general assembly**

09.50-10.20 **Coffee break**

**Session VI: Mast cell and basophils: therapy and diagnostics**
(chaired by Bernard Gibbs and Bettina Jensen)
10.20-10.40 **Ana Olivera** (NIH): “Mastocytosis-derived extracellular vesicles with a mast cell signature as unsuspected contributors to disease pathology”
10.40-10.50 **Jelle Folkerts** (Utrecht University): “Butyrate Inhibits Human Mast Cell Activation Through Regulation of Expression of Key Signal Transducers”
10.50-11.00 **Jesper Säfholm** (Karolinska Institutet): “Prostacyclin Inhibits Mannitol-induced Contractions of Isolated Human Small Airways”
11.00-11.10 **Carole A. Oskeritzian** (University of South Carolina): “Newly uncovered angiogenic remodeling in asymptomatic eczema requires mast cells and sphingosine kinase 1”
11.10-11.20 **Susanne Kaesler** (University Munich): “Targeting melanoma-resident mast cells to boost tumor immune defense”
11.20-11.30 **Devavani Chatterjea** (Macalester College): “Tetrahydrocannabinol reduces DNFB-driven vaginal mast cell accumulation and persistent genital pain in ND4 outbred mice”
11.30-12.00 **Marcus Maurer** (Charité - Universitätsmedizin Berlin): “Mast cells and basophils as therapeutic targets – past, present, future”

12.00-12.10 **Presentation of EMBRN 2021**
12.10-12.20 **Closing remarks**: Gunnar Pejler

12.20-12.40 **Prize ceremony** (travel grants; attendance required for eligibility)