

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”*

14.45-14.55 **Edismauro Garcia Freitas Filho** (University of São Paulo): *“RACK1: a new scaffold hub for regulated secretion in mast cells”*

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 Fc ϵ RI-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 Oskeritzian)

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”*

12.20-12.30 **Edouard Leveque** (Cancer Research Center of Toulouse): *“Eicosanoids: a new step in deciphering mast cells/ CD4+ T cells Crosstalk”*

12.30-12.40 **Zou Xiang** (Guizhou Medical University, China): *“Fc γ receptor-dependent mast cell apoptosis regulates tissue persistence”*

12.40-12.50 **Yiyu Wang** (Charité – Universitätsmedizin Berlin): *“Lyn controls Syk-independent Fc ϵ RI signaling in Mast Cells”*

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 Sulenti** (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)**