

1. Day - Sunday, 4 October 2020

Workshop 1 T and B cell subsets and immune regulation

Chairs/Discussants: *Kirstin Jansen, Jana Pachlopnik Schmid, Sefik Alkan, Urs Christen, Fintan Moriarty*

- 13:00 - 13:10 **Natalia Pikor**
CXCL12-dependent remodeling of light and dark zone follicular dendritic cells governs the germinal center response
- 13:10 - 13:20 **Alexandra Goretzki**
The fusion protein rFlaA:Betv1 consisting of the TLR5-ligand flagellin A and the major birch pollen allergen Bet v 1 induces potential regulatory B cells *in vitro*
- 13:20 - 13:30 **Gizem Günes Günsel**
Histone arginine methylation via NF- κ B regulates B cell activation in COPD
- 13:30 - 13:40 **Willem van de Veen**
In vivo dynamics of the allergen-specific B cell repertoire in a human model of high-dose allergen exposure
- 13:40 - 13:50 **Dirk Baumjohann**
Continued Bcl6 expression prevents the transdifferentiation of established Tfh cells into Th1 cells during acute viral infection
- 13:50 - 14:00 **Lukas Freund**
Near-infrared phototherapy targeting CD8 T cells inhibits cutaneous acute graft-versus-host disease
- 14:00 - 14:10 **Milena Sokolowska**
Multi-omics analysis reveals local and systemic immunometabolic adaptations of allergen-specific T cells to allergen-specific immunotherapy
- 14:10 - 14:20 **Jens Geginat**
A distinct population of gut-resident Th17 cells promotes intestinal inflammation in response to colitogenic bacteria in Crohn's disease
- 14:20 - 14:30 **Rajesh Jayachandran**
Allo-selective immunosuppression: mission possible

Workshop 2 Innate immunity and ILCs

Chairs/Discussants: *Lucienne Chatenoud, Zsolt Komlosi, Pierre-Yves Mantel, Hideaki Morita*

- 13:00 - 13:10 **Paulina Wawrzyniak**
Anti-inflammatory effect of omega-3 fatty acids on activated CD4+T cells
- 13:10 - 13:20 **Maryline Falquet**
Culture conditions have a different impact on the expansion, phenotype and function of human healthy and pathological ILC2s
- 13:20 - 13:30 **Marta Polak**
Langerhans' cells exhaustion in the context of local inflammation perpetuates cutaneous inflammatory responses to allergens in AD patients
- 13:30 - 13:40 **James Davies**
Single cell transcriptomic analysis identifies Langerhans cell immunocompetency is critical for IDO1- dependent ability to induce tolerogenic T cells
- 13:40 - 13:50 **Hesam Movassagh**
Dysregulation of circulating classical monocytes is associated with exposure to air pollution and asthma in children
- 13:50 - 14:00 **Hang Bui**
Cell type-specific regulation of interleukin-1-driven inflammation
- 14:00 - 14:10 **Qingling Fu**
Mesenchymal stem cells regulate type 2 innate lymphoid cells via regulatory T cells through ICOS-ICOSL interaction
- 14:10 - 14:20 **Rabia Ülkü Korkmaz**
C5aR1 participates to the development of the innate lymphoid cells type 2 via dendritic cell functions
- 14:20 - 14:30 **Janice Layhadi**
Generation of functional IL-10-producing Innate Lymphoid Cells following Grass Pollen Sublingual Immunotherapy is associated with clinical benefit: An RDBPC Study

2. Day - Monday, 5 October 2020

Workshop 3	
Autoimmunity and dendritic cells	
<i>Chairs/Discussants:</i> Marie-Charlotte Brügggen, Leona Gabrysova, Antonios Kolios, Oscar Palomares	
13:00 - 13:10	Radka Cisarova T cell subsets in ex-germ-free NOD mice colonized with human gut microbiota from T1D subjects with slow or rapid beta cell loss and on standard vs. gluten-free diets
13:10 - 13:20	Corrie Wortel Differential phenotypes of disease-specific auto-reactive B cell responses in patients with systemic sclerosis
13:20 - 13:30	Merve Çebi CD4+ T cells of myasthenia gravis patients are characterized by increased IL-21, IL-4 and IL-17A productions and higher presence of PD-1 and ICOS
13:30 - 13:40	Marc Permanyer Unimpaired CD25 expression by regulatory T cells regulates stability, diversity and suppressive function
13:40 - 13:50	Sintia Teichman Elucidating the role of Notch signaling during regulatory T cell maturation and function in a T cell transfer model of colitis
13:50 - 14:00	Luigi Tortola IL-21 promotes allergic airway inflammation by driving apoptosis of FoxP3+ regulatory T cells
14:00 - 14:10	Mojtaba Porbahaie Low doses of diarrhoeagenic <i>E. coli</i> induce enhanced monocyte and mDC responses, and prevent against re-infection in a human challenge model
14:10 - 14:20	Alba Angelina Querencias The synthetic cannabinoid WIN55,212-2 promotes <i>in vivo</i> anti-inflammatory responses via autophagy-dependent mechanisms in dendritic cells
14:20 - 14:30	Larissa Hering PTPN2 in dendritic cells exerts an anti-inflammatory role and is crucial for maintaining tissue tolerance
Workshop 4	
Metabolism	
<i>Chairs/Discussants:</i> Urszula Radzikowska, Milena Sokolowska, Dirk Brenner, Jens Geginat	
13:00 - 13:10	Yusra Ajouaou The oxygen sensor Prolyl hydroxylase domain 2 regulates the phenotype and function of regulatory T cells
13:10 - 13:20	Martina Spiljar Systemic metabolic activation by cold exposure reprograms monocytes and attenuates neuroinflammation
13:20 - 13:30	Bruno Silva-Santos Distinct metabolic programs determine the developmental fate and effector functions of pro-inflammatory $\gamma\delta$ T cell subsets
13:30 - 13:40	Juan Rodriguez-Coira The impact of metabolic alterations on immune response in severe allergic disease
13:40 - 13:50	Markus Kleinewietfeld Salt modulates cellular metabolism of human Tregs
13:50 - 14:00	Vugar Azizov Acetate accumulation in secondary lymphoid organs upon alcohol consumption modulates TFH cell dynamics
14:00 - 14:10	Julia Esser-von Bieren An anti-inflammatory eicosanoid switch mediates the suppression of type-2 inflammation by helminth larval products
14:10 - 14:20	Kim Ohl Impaired cellular energy metabolism in cord blood macrophages contributes to abortive response toward inflammatory threats
14:20 - 14:30	Yen-Ju Lin The flagellin allergen fusion protein rFlaA:Betv1 induces a MyD88-, mTOR-, and MAPK-dependent activation of glucose metabolism in macrophages

3. Day - Tuesday, 6 October 2020

Workshop 5	Tumor Immunity
<i>Chairs/Discussants:</i>	<i>Günnur Deniz, Lukas Flatz, Jan Müller, Daniel Speiser</i>
13:30 - 13:40	Isabelle Arnold Eosinophils in type I immunity
13:40 - 13:50	Susanna Cardell iNKT cell mediated immunomodulation of tumor immunity in murine intestinal polyposis
13:50 - 14:00	Mette-Triin Purde Peripheral tolerance restricts immune responses against melanoma-associated self-antigens
14:00 - 14:10	Egle Katkeviciute PTPN2 deficiency increases the infiltration and cytotoxicity of CD8+ T cells and promotes the immunogenicity in hard to treat solid tumors
14:10 - 14:20	Ieva Saulite Blockade of programmed death-1 (PD-1) in Sézary syndrome reduces Th2 phenotype of non-tumoral T lymphocytes, but may enhance tumour proliferation
14:20 - 14:30	Tim Halim ILC2-driven innate immune checkpoint mechanism antagonizes NK cell antimetastatic function in the lung
14:30 - 14:40	Susanna Fagerholm Beta2-integrins restrict dendritic cell migratory phenotype through a mechanically regulated epigenetic mechanism
14:40 - 14:50	Enja Schneider CD73-mediated adenosine production by T cell-derived extracellular vesicles constitutes an intrinsic mechanism of immune regulation in humans
Workshop 6	Epithelial cells, immune response and tolerance
<i>Chairs/Discussants:</i>	<i>Ibon Eguiluz Gracia, Hideaki Morita, Ismail Ögülür</i>
13:30 - 13:40	Urszula Radzikowska Novel tissue inflammatory mechanisms of rhinovirus in the presence of house dust mite
13:40 - 13:50	Yasutaka Mitamura Distinct molecular features of nonlesional and lesional skin of atopic dermatitis compared to healthy skin: role of bone morphogenic protein 6
13:50 - 14:00	Verena Merk De novo synthesis versus reactivation of immunoregulatory glucocorticoids along the respiratory tree
14:00 - 14:10	Benjamin Al Generating fully-human atopic dermatitis models by introducing TH2 cells into skin equivalents
14:10 - 14:20	Giulia Vanoni Human ILCPs activate the endothelium
14:20 - 14:30	Lukas Freund Interferon gamma drives epithelial necroptosis in graft-versus-host disease
14:30 - 14:40	Jesuthas Ajendra IL-17 regulation of type 2 immunity during nematode infection
14:40 - 14:50	Pierre-Yves Mantel Extracellular vesicles hijack host microRNAs to regulate tolerance and resistance during malaria infections
14:50 - 15:00	Caitlin McManus Heterogeneity of Tregs in Helminth Infection
15:00 - 15:10	Alexandra Wallimann The influence of short-chain fatty acids on bone health

4. Day - Wednesday, 7 October 2020

Workshop 7 Allergy and Asthma

Chairs/Discussants: Uta Jappe, Kari Nadeau, Remo Frei, Musa Khaitov

- 12:30 - 12:40 **Claudia Lang**
Major differences in sensitization patterns and immune signatures of atopic dermatitis patients in Tanzania vs. Switzerland
- 12:40 - 12:50 **Patraporn Satitsuksanoa**
B cell responses to food allergy
- 12:50 - 13:00 **Olga Elisyutina**
Monitoring of basophil-, skin- and clinical sensitivity to apple in birch pollen allergic patients before and after the birch pollen season
- 13:00 - 13:10 **Arturo Rinaldi**
Electrical impedance spectroscopy as an efficient tool for the characterization of epithelial barrier in patients with atopic dermatitis
- 13:10 - 13:20 **Alexander Eggel**
The next generation monoclonal anti-IgE antibody ligelizumab efficiently suppresses FcεRI-dependent allergic responses
- 13:20 - 13:30 **Valerie Verhasselt**
A role for early oral exposure to house dust mite allergens through breastmilk in IgE-mediated food allergy susceptibility
- 13:30 - 13:40 **Lorenz Aglas**
Birch pollen extracts program dendritic cells to induce mixed Th2 and tolerogenic immune responses
- 13:40 - 13:50 **Junhua Wang**
Innate and adaptive immune responses following PD-L1 immune checkpoint blockade in treating chronic murine alveolar echinococcosis
- 13:50 - 14:00 **Stefan Schuelke**
The Listeria-derived TLR5-ligand flagellin A (FlaA) possesses allergenic and Th2 adjuvant properties in mice
- 14:00 - 14:10 **Anders Krogh Aarebrot**
Intracellular signaling analyses in peripheral blood mononuclear cells of psoriasis patients on anti-TNF treatment using mass cytometry

Workshop 8 Late breaking discoveries in disease mechanisms

Chairs/Discussants: José Carballido, Winfried Pickl, Peter Schmid-Grendelmeier, Rudolf Valenta

- 12:30 - 12:40 **Mayte Suarez-Farinas**
Expansion of humoral antibody repertoire is associated with eczema status and development of peanut allergy at 5 years in children enrolled in the LEAP trial
- 12:40 - 12:50 **Eva Abel-Fernández**
Allergoid production and characterization of different seafood allergen sources
- 12:50 - 13:00 **Helena Aegerter**
The role of Charcot-Leyden Crystals in mucus plugging during asthma
- 13:00 - 13:10 **Ursula Smole**
Serum amyloid A is a pattern recognition receptor for allergenic fatty acid binding proteins that drive type 2 immunity
- 13:10 - 13:20 **Yves Stanossek**
Deciphering the molecular landscape of the stromal cells in human palatine tonsils at the single-cell level
- 13:20 - 13:30 **Maddalena Marconato**
Multidimensional characterization of circadian changes in human lymphocyte subsets
- 13:30 - 13:40 **Arya Biragyn**
The importance of gut microbiome in activation of innate B cells and subsequent insulin resistance in aging
- 13:40 - 13:50 **Luise Rauer**
Skin microbiome and its association with host cofactors in determining atopic dermatitis severity
- 13:50 - 14:00 **Karthi Duraisamy**
Identification and functional characterisation of venom peptide P17 and its receptor in host defence and immunity