# World Immune Regulation Meeting XII 2018

## 1. Day - Wednesday, 14 March 2018

### Poster Session 1: Dendritic cells

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P001</td>
<td>P002</td>
<td>Maren B. Solhaug, Olaf Perdijk</td>
</tr>
<tr>
<td>P001</td>
<td>P002</td>
<td>Antigen presenting cells of the human oral cavity, Bovine lactoferrin inhibits dendritic cell differentiation and induces small intestine homing on T cells</td>
</tr>
<tr>
<td>P003</td>
<td>P004</td>
<td>Hélène Letscher, Linette Willemsen</td>
</tr>
<tr>
<td>P003</td>
<td>P004</td>
<td>A population a plasmacytoid dendritic cell precursor as potent regulators of autoimmune Experimental Autoimmune Encephalomyelitis, Maturation of dendritic cells in the combined presence of peanut-extract and scFOS/ IcFOS enhances T cell proliferation in an autologous peanut-specific DC-T cell assay</td>
</tr>
<tr>
<td>P005</td>
<td>P006</td>
<td>Timothy Radstake, Sara Feigelson</td>
</tr>
<tr>
<td>P005</td>
<td>P006</td>
<td>Transcriptomics and epigenomic imprinting by CXCL4 drives a pro-inflammatory biology and extra cellular matrix production by dendritic cells, ICAMs are not obligatory for functional immune synapses between naïve CD4 T cells and lymph node DCs</td>
</tr>
<tr>
<td>P007</td>
<td>P008</td>
<td>Karsten Mahnke, Ourania Koltsida</td>
</tr>
<tr>
<td>P007</td>
<td>P008</td>
<td>Induction of T cell hyporesponsiveness by adenosine producing immature dendritic cells, Plasmacytoid dendritic cells drive acute exacerbations of asthma</td>
</tr>
</tbody>
</table>

### Poster Session 2: Epithelium and tissue response

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P009</td>
<td>P010</td>
<td>Anwar Sayed, Marianne Spalinger</td>
</tr>
<tr>
<td>P009</td>
<td>P010</td>
<td>The Effect of Ageing on the Stromal Integrity of The Secondary Lymphoid Organs (SLO), Heat shock protein GP96 is essential for self-renewal of the intestinal epithelial barrier</td>
</tr>
<tr>
<td>P011</td>
<td>P012</td>
<td>Matthias Mack, Veronica Ayechu</td>
</tr>
<tr>
<td>P011</td>
<td>P012</td>
<td>Basophils contribute to cardiac allograft fibrosis by release of IL-4, Activated intestinal epithelial cells conditioned with 2‘-Fucosylactose and CpG ODN instruct moDC to drive Th1 differentiation</td>
</tr>
<tr>
<td>P013</td>
<td>P014</td>
<td>Pedro Papotto, Truong San Phan</td>
</tr>
<tr>
<td>P013</td>
<td>P014</td>
<td>Gamma-delta T cells shape pulmonary innate immune cell compartments at homeostasis, Regulation of skin immune homeostasis by keratinocyte-derived de novo glucocorticoids</td>
</tr>
</tbody>
</table>

### Poster Session 3: T and B cell memory and immune regulation I

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P015</td>
<td>P016</td>
<td>Peter Rhein, Abhinandan Devaprasad</td>
</tr>
<tr>
<td>P015</td>
<td>P016</td>
<td>Imaging flow cytometry enhances the detection of small particles and rare events enabling emerging applications in immunology and oncology, Large scale transcriptome profiling of 24 for immune cell subsets and their progenitors reveals progenitor plasticity and complex regulation of human hematopoietic cell lineages</td>
</tr>
<tr>
<td>P017</td>
<td>P018</td>
<td>Eric Hjalmarsson, Anne Trefzer</td>
</tr>
<tr>
<td>P017</td>
<td>P018</td>
<td>Intra lymphatic immunotherapy (ILIT) affects T-cell differentiation in lymph nodes and peripheral blood and reduces pollen induced nasal symptoms, TCR tuning and exhaustion of CD4+ T cells by persisting antigen</td>
</tr>
<tr>
<td>P019</td>
<td>P020</td>
<td>Raj Raghupathy, Barbara Stanic</td>
</tr>
<tr>
<td>P019</td>
<td>P020</td>
<td>Immunoregulatory cytokine profiles in intra-uterine growth restriction (IUGR), Identification and validation of immunogenic peptides of Staphylococcus epidermidis in the patients with bone infection</td>
</tr>
<tr>
<td>P021</td>
<td>P022</td>
<td>Karim Brandt, Christopher Piper</td>
</tr>
<tr>
<td>P021</td>
<td>P022</td>
<td>Follicular regulatory helper T cells control the response of regulatory B cells to a high-cholesterol diet, The Aryl Hydrocarbon Receptor (AhR) is a key transcriptional regulator of IL-10 in B cells</td>
</tr>
<tr>
<td>P023</td>
<td>P024</td>
<td>Pattraporn Satitsuksanoa, Joerg Schlegel</td>
</tr>
<tr>
<td>P023</td>
<td>P024</td>
<td>Large scale transcriptome profiling of 24 for immune cell subsets and their progenitors reveals progenitor plasticity and complex regulation of human hematopoietic cell lineages, Mechanisms of immune tolerance to food allergens, Virtual sorting as a new image cytometry method for deep phenotyping of rare cells in the blood of oncology patients</td>
</tr>
<tr>
<td>P025</td>
<td>P026</td>
<td>Mara Biasin, Josefine Negrassus</td>
</tr>
<tr>
<td>P025</td>
<td>P026</td>
<td>The interleukin 21 (IL 21)/ microRNA-29 (mir29) axis is associated with natural resistance to HIV-1 infection, A critical role for the orphan nuclear receptor LRH-1/NR5a2 in the regulation of T cell functions</td>
</tr>
</tbody>
</table>

### Poster Session 4: Innate immune response

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P027</td>
<td>P028</td>
<td>Alaa Terkawi, Simon Melderis</td>
</tr>
<tr>
<td>P027</td>
<td>P028</td>
<td>Transcriptional profile of human macrophages stimulated by ultra-high molecular weight polyethylene particulate debris of orthopedic implants reveals a novel mechanism of osteolysis, Amphiregulin aggravates glomerulonephritis via recruitment and activation of myeloid cells</td>
</tr>
<tr>
<td>P029</td>
<td>P030</td>
<td>Ahmet Eken, Hung-Wei Cheng</td>
</tr>
<tr>
<td>P029</td>
<td>P030</td>
<td>Absence of group 3 innate lymphoid cells in DOCK8-defective HIES patients, A two-signal program in myofibroblastic niches controls reticular cell network formation in the splenic white pulp</td>
</tr>
<tr>
<td>P031</td>
<td>P032</td>
<td>Celine Weckerle, Grace Poon</td>
</tr>
<tr>
<td>P031</td>
<td>P032</td>
<td>Development and characterization of mouse Th17-related V-PLEX® assays, Isolation of particle-free human ILC2s from peripheral blood mononuclear cells</td>
</tr>
<tr>
<td>P033</td>
<td></td>
<td>Elke Scandella</td>
</tr>
<tr>
<td>P033</td>
<td></td>
<td>CCL19-expressing fibroblast stromal cells form an essential niche for intestinal innate lymphoid cells</td>
</tr>
</tbody>
</table>
Marloes Hofstee - Severe musculoskeletal polytrauma induces reduced anti-bacterial responses in neutrophils

Monika Gad - In vitro models for screening of immune modulating properties of drug candidates under immunosuppressed conditions

Wolftram Hoetzenecker - HLA-I shield tumor skin T lymphocytes from NK-cell-mediated elimination

Haluk Barbaros Oral - Downregulation of CD80/86 expression on the surface of mouse bone marrow-derived dendritic cells via CTLA4 expression in endoplasmic reticulum

Haluk Barbaros Oral - Silencing of CD80 and CD86 on the surface of RAW 264.7 cells via CRISPR/Cas9

2. Day - Thursday, 15 March 2018

**Poster Session 5**

Novel vaccines, biologicals and treatments I

- **19:30, Room: Foyer A1**
  - Chairs: Helga Kahlert, Steen Klysner

  - **Lukas Flatz**
    - Immunoglobulin subclasses and tumor specific IgG during checkpoint inhibitor therapy in melanoma patients

  - **Ufuk Karakus**
    - Development of Treg cell-stimulating IL-2/anti-IL-2 antibody complexes

  - **James Rush**
    - The novel anti-CD40 monoclonal antibody CFZ533 shows beneficial effects in patients with primary Sjogren’s syndrome

  - **Safa Baris**
    - 25 (OH) vitamin D as an adjunct to subcutaneous allergen immunotherapy

  - **Tony Nguyen**
    - Interleukin-2 complexes induce long-term acceptance of fully mismatched islet allografts

  - **Federico Storni**
    - Allergens displayed on virus like particles are highly immunogenic but fail to induce human derived mast cell degranulation

**Poster Session 6**

Allergy and asthma

- **19:30, Room: Foyer A1**
  - Chairs: Nadine Karschuk, Willem van de Veen

  - **Sandra Ekstedt**
    - A possible role for neutrophils in allergic rhinitis revealed after cellular subclassification

  - **Arturo Rinaldi**
    - Electrical impedance measurements for the assessment of skin epithelial barrier defects

  - **Cheryl Steiman**
    - Farm Exposure Influences Skin Microbiota In Infancy

  - **Angela Fallegger**
    - Trans-maternal exposure to Helicobacter pylori induces stable and highly suppressive regulatory T-cells and protects against allergic asthma

  - **Armin Braun**
    - NK1 receptor positive mast cell subpopulations interact with sensory nerves and lead to increase bronchoconstriction in response to capsaicin using passive sensitized human precision-cut lung slices

  - **Andreas Frey**
    - Analysis of the human IgE target-epitope repertoire for the detection of new IgE specificities in allergic diseases

  - **Cathy Leonard**
    - Early and late cellular changes through successful CpG/Feld1-based immunotherapy in a murine asthma model

  - **Nonhlanhla Lunjani**
    - Novel immune signatures associated with paediatric atopic dermatitis

  - **Tim Stroisch**
    - Langerhans and inflammatory dendritic epidermal cells in atopic dermatitis are tolerized towards TLR2 activation

  - **Jiasi Hu**
    - SATB1 expression and methylation reflect FOXP3+ regulatory T cell activity during grass pollen immunotherapy

**Poster Session 7**

Novel vaccines, biologicals and treatments II

- **19:30, Room: Foyer A1**
  - Chairs: Charlène Niogret, Monique Vogel

  - **Sudhanshu Shekhar**
    - Intranasal immunization with commensal Streptococcus mitis confers protective immunity against virulent pneumococcal lung infection

  - **Martin Klein**
    - Solution for allergic asthma using peptide therapy

  - **Gro Herredsvela Rorvik**
    - A strategy to identify immunogenic peptides from the oral commensal species Streptococcus mitis

  - **Neelam Oswal**
    - The role of T cells in resistance to natural JEV infection

  - **Frank Stolz**
    - Next steps towards an optimal ragweed allergy vaccine based on the peptide carrier principle: single or multi component vaccine?

  - **Jiaqian Tang**
    - Clinical and immunologic effects of a single dose of anti-Fel d 1-IgG4 monoclonal antibodies (mAb1/2) in cat allergic individuals: a randomized placebo-controlled study

  - **Franziska Thoms**
    - Immunization of cats to induce neutralizing antibodies against Fel d 1, the major feline allergen in humans
Poster Session 8  Neuroimmunology

19:30, Room: Foyer A1  Chairs: Mario Clerici, Jens Geginat

P064  Marina Saresella  Stavudine inhibits caspase-1 and IL-18 release but does not modulate in vitro amyloid-beta-phagocytosis by macrophages

P065  Juliana Komuczki  Fate mapping of pathogenic T cells in inflammation

P066  Mario Clerici  The NLRP3/Caspase-8 inflammasome drives neuroinflammation in primary progressive multiple sclerosis

P067  Silvia Tietz  Absence of the junctional adhesion molecule (JAM)-B ameliorates experimental autoimmune encephalomyelitis

Poster Session 9  T and B cell memory and immune regulation II

19:30, Room: Foyer A1  Chairs: Daniel Campbell, Brecht Steeant

P068  Luisa Cervantes-Barragan  Lactobacillus reuteri induces gut intraepithelial CD4+CD8alphaalpha+ T cells

P069  Andrzej Eljaszewicz  BAFF regulate inflammasome activation via BAFF receptor signaling in LPS stimulated monocytes

P070  Ben Herbert  Red blood cells affect T cell proliferation and differentiation by binding and release of cytokines

P071  Wolfram Hoetzenecker  Malignant T cells inhibit anti-cancer immunity in cutaneous T cell lymphoma

P072  Wolfram Hoetzenecker  PD-L1 expression is an independent predictor of favorable outcome in patients with localized esophageal adenocarcinoma

P073  Natalia Pikor  Inflammation-induced remodeling of B cell follicle reticular cells orchestrates germinal center responses

P074  Christoph Schlapbach  Induction of PPAR-γ by IL-4 and TGF-β promotes the IL-9-expressing subpopulation of TH2 cells

P075  Anna Globinska  Identification of an angiogenesis-promoting B cell subsets

P076  Pauline Scholler  Cytokine secretion profile on PBMCs

P077  Jolana Vosahlova  Improved separation of Foxp3+ and Foxp3- cells in a whole blood flow cytometry assay

P078  Christina Zielinski  Tonicity signals drive and anti-inflammatory Th17 cell properties

19:30  Poster presentations of workshops 4 - 6, Room: Main Corridor

3. Day - Friday, 16 March 2018

Poster Session 10  Autoimmunity

19:30, Room: Foyer A1  Chairs: Anna-Carin Lundell, Christina Zielinski

P079  Morad Zayoud  Farnesylthiosalicylic acid, a Ras GTPases inhibitor reduce arthritis severity in the collagen type-II induced arthritis mouse model by modulating the T cells response

P080  Anna-Carin Lundell  Low serum insulin-like growth factor-1 in boys with recent onset of juvenile idiopathic arthritis

P081  Marina Drutskaya  Myeloid cell-specific TNF inhibition in experimental arthritis in mice

P082  Nasrin Dashti  Estimation of Diagnostic markers in Rheumatoid Arthritis

P083  Jonathan Aldridge  Th2 and CTLA-4+ T cell subsets correlate with higher disease activity in male untreated early rheumatoid arthritis patients

P084  Anwar Sayed  Eltrombopag: more than just a thrombopoietin receptor agonist in Immune Thromboocytopenia (ITP)

P085  Christine Guntermann  Pharmacological inhibition of RORC suppresses the Th17 pathway and alleviates arthritis in vivo

P086  Loui Madakamutil  Integrative analysis reveals CD38 as a therapeutic target for plasma cell-rich rheumatoid arthritis, pre-rheumatoid arthritis and systemic lupus erythematosus

P087  Anna Sediva  Increased mycobacterial susceptibility and autoinflammatory phenotype due to combination of IFNGR1 and NOD2 mutations, case report and immune function analysis

P088  Karin Steinbach  Transient viral infection early in life disrupts brain immune homeostasis and predisposes to CNS autoimmune disease in adulthood

P089  Alex Sunshine  The transcription factor Ets1 cooperates with IL17 signaling to promote autoimmunity and immunodeficiency
<table>
<thead>
<tr>
<th>Poster Session 11</th>
<th>Therapies and transplantation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>19:30, Room: Foyer A1</strong></td>
<td><strong>Chairs: Barbara Stanic, Nathan Karin</strong></td>
</tr>
<tr>
<td>P090</td>
<td>Sonia Tugues Solsona</td>
</tr>
<tr>
<td>P091</td>
<td>Manon Jansen</td>
</tr>
<tr>
<td>P092</td>
<td>Victoria Lavrenenko</td>
</tr>
<tr>
<td>P093</td>
<td>Illip Burmester</td>
</tr>
<tr>
<td>P094</td>
<td>Carolin Brandl</td>
</tr>
<tr>
<td>P095</td>
<td>Avidan Neumann</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poster Session 12</th>
<th>Immune response to infection and commensal microbes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>19:30, Room: Foyer A1</strong></td>
<td><strong>Chairs: Weronika Barcik, Marcin Wawrzyniak</strong></td>
</tr>
<tr>
<td>P096</td>
<td>Madeleine White</td>
</tr>
<tr>
<td>P097</td>
<td>Olav Schreurs</td>
</tr>
<tr>
<td>P098</td>
<td>Emma Savilahti</td>
</tr>
<tr>
<td>P099</td>
<td>Marianne Spalinger</td>
</tr>
<tr>
<td>P100</td>
<td>Mathilde Chayé</td>
</tr>
<tr>
<td>P101</td>
<td>Yaowapa Maneerat</td>
</tr>
<tr>
<td>P102</td>
<td>Marina Sabaté Brescó</td>
</tr>
<tr>
<td>P103</td>
<td>William Horsnell</td>
</tr>
<tr>
<td>P104</td>
<td>Matthew Lacorcia</td>
</tr>
<tr>
<td>P105</td>
<td>Emmanuel Souza</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poster Session 13</th>
<th>Genetics of chronic diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>19:30, Room: Foyer A1</strong></td>
<td><strong>Chairs: Pattarpon Satitsuksanoa, Can Altunbulakli</strong></td>
</tr>
<tr>
<td>P106</td>
<td>Avidan Neumann</td>
</tr>
<tr>
<td>P107</td>
<td>Margarida Castro</td>
</tr>
<tr>
<td>P108</td>
<td>Kiara Homil</td>
</tr>
<tr>
<td>P109</td>
<td>Paulina Wawrzyniak</td>
</tr>
<tr>
<td>P110</td>
<td>Petra Borilova Linhartova</td>
</tr>
<tr>
<td>P111</td>
<td>Nadeem Fazal</td>
</tr>
<tr>
<td>P112</td>
<td>Wolfram Hoetzenecker</td>
</tr>
<tr>
<td>P113</td>
<td>Ismail Ogulur</td>
</tr>
<tr>
<td>P114</td>
<td>Adam Chaker</td>
</tr>
<tr>
<td>P115</td>
<td>Adam Chaker</td>
</tr>
</tbody>
</table>

19:30 Poster presentations of workshops 7 - 12, Room: Main Corridor