17th EAACI Immunology Winter School
“Basic Immunology Research in Allergy and Clinical Immunology”
24 - 27 January 2019
Trysil, Norway

SCIENTIFIC PROGRAMME

Thursday, 24 January 2019

18:00 - 18:45 Welcome Reception

18:45 - 19:00 Introduction to the Winter School
Jürgen Schwarze, United Kingdom

19:00 - 20:00 Innate lymphoid cells in mucosal inflammation
Jenny Mjösberg, Sweden
Chair: Madeleine Radinger, Sweden

20:00 - 22:00 Dinner

Friday, 25 January 2019

08:00 - 09:00 Regulatory T Cell Subversion as a Key Pathogenic Mechanism in Allergic Disorders
Talal Chatila, United States
Chair: Milena Sokolowska, Switzerland

09:00 - 09:20 Coffee Break
09:20 - 11:00  Oral Abstracts presentation I – Lymphocytes  
*Chair: Milena Sokolowska, Switzerland | Talal Chatila, United States*

09:20 - 09:45  O01 - Activated Th2 Cells Are Characterized By Fatty Acid Metabolism In Vivo  
*Graham Anthony Heijes, United Kingdom*

09:45 - 10:10  O02 - Experimental Rhinovirus Infection Induces Extensive Antiviral Response In Circulating B Cells From Asthmatic Patients  
*Oliver F Wirz, Switzerland*

10:10 - 10:35  O03 - MicroRNA Expression Patterns In IL-33 Challenged Bone Marrow And Lung – Role Of MTOR And MAPK Signaling Pathways  
*Emma Winberg, Sweden*

10:35 - 11:00  O04 - In Vivo T Regulatory Cell Regulation During Human Rhinovirus Infection  
*Kirstin Jansen, Switzerland*

11:00 - 16:30  Break

16:30 - 17:30  Dendritic cells and macrophages in promotion and regulation of pulmonary type 2 inflammation  
*Andrew S. MacDonald, United Kingdom*  
*Chair: Jürgen Schwarze, United Kingdom*

17:30 - 17:50  Coffee Break

17:50 - 19:30  Oral Abstracts presentation II – Asthma & Asthma models  
*Chair: Jürgen Schwarze, United Kingdom | Andrew S. MacDonald, United Kingdom*

17:50 - 18:15  O05 - Human Volatilome Analysis To Identify Individuals With Asthma In Clinical Settings  
*Mariana Valente Farraia, Portugal*

18:15 - 18:40  O06 - Staphylococcus Aureus-Derived Serine Protease-Like Protein D Induces Allergic Asthma, Dependent On The Genetic Background Of Mice  
*Sharon R. Van Nevel, Belgium*

18:40 - 19:05  O07 - Preventing Airway Mucus By Delivering Allergen Via Microprojection Array Skin Patches To Mice  
*Nicole Monica Dawn van der Burg, Australia*

19:05 - 19:30  O08 - FceRI Expression In Peripheral Blood Mononuclear Cells In The Context Of Asthma  
*Jonatan Leffler, Australia*

19:30 - 21:00  Dinner

21:00 - 22:00  Poster Session I  
**Topic 1: Basic and Clinical Immunology | P01-P10**  
*Chair: Isabella Quinti, Italy | Florentina Sava, United Kingdom*

P01 - Phenotypic And Functional Landscape Of B-Cells In Essential Mixed Cryoglobulinemia  
*Stefania Colantuono, Italy*

P02 - Respiratory Tract Colonization By H. Influenzae And S. Pneumoniae In Common Variable Immunodeficiency: Risk-Factors And Clinical Consequence In Patients With Humoral Defect  
* Federica Pulvirenti, Italy*
P03 - Immunoglobulin G Subclass Deficiencies In Children And Adults: Immunological And Clinical Profile And Need For Immunoglobulin Replacement Therapy?
Jarno F.C. De Craemer, Belgium

P04 - HLA –B52* Is Strongly Associated With Disease Severity In Takayasu’s Arteritis Patients In Serbia
Maja Stojanovic, Serbia

P05 - Functional Inhibitory Siglec-6 Is Upregulated In Human Colorectal Cancer-Associated Mast Cells
Yingxin YU, The Netherlands

P06 - The Role Of The Transcription Factor T-Bet In B Cell Differentiation And Function
Imran Akdemir, Turkey

P07 - Stress Hormones, Cell Immunity And Genetic Polymorphism Of Protein Coding GABRA6 Gene Among Different Professional Groups Mariya Vlado Ivanovska, Bulgaria

P08 - Wasp Venom Allergy In A Patient With Systemic Mastocitosis: A Challenging Therapeutic Approach
Maria Luis Marques, Portugal

P09 - Th17- And Th22- Related Cytokines In Arterial And Venous Blood Of Patients Affected By Systemic Sclerosis (SSc) With And Without Digital Ulcers (DU)
Stefania Nicola, Italy

**Topic 2: Innate immunity and epithelial barriers | P11-P18**
Chair: Frode Jahnsen, Norway | Edward Pearce, Germany

P011 - Characterization Of Alum-Induced NET-Formation In Human Neutrophils
Manuel Reithofer, Austria

P012 - Electrical Impedance Spectroscopy For The Assessment Of Skin Epithelial Barrier Defects
Arturo Ottavio Rinaldi, Italy

P013 - The Effect Of Bacteriophages On Innate Lymphoid Cells
Anna Globinska, Switzerland

P014 - Oral Mucosa Remodeling Occurs In Severe Allergic Patients
Javier Sanchez Solares, Spain

P015 - Novel Evidence That BAFF Directly Regulate Epithelial Barrier Function
Andrzej Eljaszewicz, Poland

P016 - Bacillus Calmette–Guérin Immunotherapy Boosts Innate Immunity In Recurrent Respiratory Papillomatosis
Evelina Vetskova, Bulgaria

P017 - Activation And Maturation Differences Between Myeloid And Monocyte-Derived Dendritic Cells In Patients With Immediate Allergic Reactions To Betalactams
Rubén Fernández-Santamaria, Spain

P018 - Activated Intestinal Epithelial Cells Conditioned With 2’-Fucosyllactose And CpG ODN Might Instruct MoDC To Drive Th1 Differentiation
Veronica Ayechu Muruzabal, The Netherlands
**Topic 3: Allergens and allergic inflammation | P19-P26**

*Chair: Stefanie Eyerich, Germany | Talal Chatila, United States*

**P019** - Structure Based Epitope Grafting As A Tool For Exploring The Conformational IgE Epitopes Of The Major Birch Pollen Allergen, Bet V 1
*Stefanie Schmalz, Germany*

**P020** - Adolescent Preconceptional Smoking Alters The Body Weight Of The Next Generation In A Sex-Specific Manner
*Barbara Hammer, Germany*

**P021** - Mast Cell Heterogeneity Landscape In Fetal Skin: An Effector Player In Pediatric Allergies?
*Rasha Msallam, Singapore*

**P022** - Longitudinal Immunoglobulin Heavy-Chain Repertoire Profiling Of Memory B Cell, Plasmablasts And Plasma Cells From Peripheral Blood Of Individuals With Birch Pollen Allergy
*Artem Ilyich Mikelov, Russia*

**P025** - Characterization Of Amoxicillin- And Clavulanic Acid-Specific T-Cells In Patients With Amoxicillin-Clavulanic Acid Hypersensitivity Reactions
*Adriana Ariza Veguillas, Spain*

**P026** - Post-Translational Modifications Of Major Allergens Bet V 1 And Ara H 2 Expressed In Nicotiana Benthamiana Plants
*Öykü Uzulmez, Turkey*

---

**Saturday, 26 January 2019**

**08:00 - 09:00**

Clinical and immunological consequences of sublingual immunotherapy with recombinant allergens
*Barbara Bohle, Austria*

*Chair: Henry Mc Sorley, United Kingdom*

09:00 - 09:20  Coffee Break

**09:20 - 11:00**

**Oral Abstracts presentation III – Allergens & tolerance induction**

*Chair: Henry Mc Sorley, United Kingdom | Barbara Bohle, Austria*

**09:20 - 09:45**

O09 - A New Hypoallergenic Ara H 2 Mutant For Potential Use In AIT-In Vitro And In Vivo Studies
*Angelika Tschepp, Austria*

**09:45 - 10:10**

O10 - Polymerized Allergoids Coupled To Non-Oxidized Mannan (PM) Drive Monocyte Differentiation Into Tolerogenic Dendritic Cells And Anti-Inflammatory Macrophages
*Cristina Benito Villalvilla, Spain*

**10:10 - 10:35**

O12 - Development Of A Potential New Vaccine Candidate For House Dust Mite Allergen Immunotherapy By Destroying IgE-Binding While Preserving Immunogenicity Of The Major Allergen Der P 2.
*Lisa Naomi Pointner, Austria*

11:00 - 16:30  Break
16:30 - 17:30  The role of the microbiome in allergy and asthma  
*Liam O'Mahony, Ireland*  
*Chair: Eva Untersmayr, Austria*

17:30 - 17:50  Coffee Break

17:50 - 19:30  Oral Abstracts presentation IV – Epithelium & microbes  
*Chair: Eva Untersmayr, Austria | Liam O'Mahony, Ireland*

17:50 - 18:15  O13 - Heligmosomoides Polygyrus Infection Induces Anti-Viral Gene Expression In The Lung Epithelium And Immune Cells  
*Matthew Oliver Burgess, United Kingdom*

18:15 - 18:40  O14 - JAK1/3-Inhibition Preserves Epidermal Morphology In Full Thickness 3D Skin Models Of Atopic Dermatitis And Psoriasis  
*Karlijn Lieve Clarysse, Belgium*

*Elke Korb, Austria*

19:05 - 19:30  O16 - Lactobacillus Casei AMB-R2 Restores Nasal Epithelial Barrier Integrity In Chronic Rhinosinusitis By Increasing The Expression Of Tight Junctions  
*Katleen Martens, Belgium*

19:30 - 21:00  Dinner

21:00 - 22:00  Poster Session II

**Topic 4: Mechanisms and treatment of food allergy | P27-P34**  
*Chair: Madeleine Radinger, Sweden | Jenny Mjösberg, Sweden*

P027 - Efficacy And Safety Of Low-Dose Oral Immunotherapy For Patients With Wheat-Induced Anaphylaxis  
*Ken-ichi Nagakura, Japan*

P028 - Impact Of Mouse Feed Composition On Immune Response And Food Allergy Development  
*Nazanin Samadi, Austria*

P029 - In Vitro And In Vivo Evaluation Of A Combination Of Dietary ScGOS:LcFOS And N-3 PUFA In Prevention Of Cow’s Milk Allergy  
*Kirsten Szklany, Denmark*

P030 - Jug R 6 Is The Allergenic Vicilin Present In Walnut Kernels Responsible For IgE Cross-Reactivities To Other Tree Nuts And Seeds  
*Pawel Dubiela, Austria*

P031 - Household Exposure To Food Allergens: A Risk For Sensitization?  
*Izabel Alvares, United Kingdom*

P032 - Functional And Phenotypic Analysis Of Allergen-Specific B Cells In Cow’s Milk Allergy And Tolerance  
*Pattraporn Satitsuksanoa, Switzerland*

P033 - Titanium Dioxide Nanoparticles May Prevent Food Allergy And Anaphylaxis Development  
*Natalia Aliakhnovich, Belarus*

P034 - Unprocessed Cow’s Milk Suppresses Allergic Symptoms In A Murine Model For Food Allergy – A Potential Role For Epigenetics
Suzanne Abbring, The Netherlands

**Topic 5: Respiratory allergies and asthma | P35 - P43**
*Chair: Hermelijn Smits, The Netherlands | Andrew S. MacDonald, United Kingdom*

- P035 - Association Between Circulating And Mucosal Associated Type 2 Innate Lymphoid Cells In Patients With Asthma
  *Lobna Abdelaziz Abdelaziz Elkorashi, Egypt*

- P036 - Association Of CD14 Rs2569190 Polymorphism With Perennial Allergic Rhinitis In The Population Of Kiev, Ukraine
  *Taras Petrovych Baranovskiy, Ukraine*

- P037 - Glucocorticoid Signaling In Different Asthma Phenotypes – A Potential Role For MRNA-MiRNA Interactions
  *Julie Marie Weidner, Sweden*

- P038 - The Role Of Sphingosine-1-Phosphate In The Pathogenesis Of Asthma
  *Thomas James Aidan Maguire, United Kingdom*

- P039 - MicroRNA Expression In Cytokine Stimulated Airway Epithelial Cells And Their Involvement In Asthma Related Pathways
  *Elisabeth Ax, Sweden*

- P040 - Clinical And Immunological Approaches Between The Obesity Asthma Phenotype
  *Marina Marina Bantulà Fonts, Spain*

- P041 - House Dust Mite (HDM) Allergen Induces Type 2 Inflammation In A Novel Experimental Asthma Model In Guinea Pig
  *Patricia Ramos-Ramirez, Sweden*

- P042 - Characteristics of patients admitted to emergency department for asthma attack: a real life study
  *Monica Fornero, Italy*

- P043 - Protocol For Randomized, Outcome Assessor Blinded, Clinical Study: The ATOM Study: Asthma Severity In Women: The Influence Of Training And Menopause
  *Erik Sören Halvard Hansen, Denmark*

**Topic 6: Allergy treatment and immunomodulation | P44 – P50**
*Chair: Barbara Bohle, Austria | Jan Gutermuth, Belgium*

- P044 - Safety Of Subcutaneous Allergen Immunotherapy In Seniors- 2 Year Observational Study
  *Piotr Lacwik, Poland*

- P046 - Therapeutic Effects Of Mesenchymal Stem Cells In An Animal Model Of Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis
  *In Young Oh, South Korea*

- P047 - The Role Of Allergen-Specific IgG Antibodies In The Induction Of Clinical Tolerance For The Birch Pollen-Related Apple Allergy
  *Gabriela Sánchez Acosta, Austria*

- P048 - Mapping The Antibody Specificity In Birch-Related Soy Allergic Patients Before And After Allergen Immunotherapy
  *Lisbeth Ramirez Caballero, Germany*
P049 - Tolerance Induction By Prophylactic Epicutaneous Allergen-Specific Immunotherapy In A Preclinical Model Of Hymenoptera Venom-Sensitized Mice  
Mathias Schuppe, Germany

P050 - Assessment Of The Potential Anti-Inflammatory Effect Of Phytocannabinoids In An In Vitro Mouse Inflammatory Model System  
Noémi Miltner, Hungary

Sunday, 27 January 2019

08:00 - 09:00 Dynamic metabolic reprogramming during macrophage activation  
Edward Pearce, Germany  
Chair: Frode Jahnsen, Norway

09:00 - 09:20 Coffee Break

09:20 - 11:00 Oral Abstracts presentation V – Innate immunity  
Chair: Edward Pearce, Germany | Frode Jahnsen, Norway

09:20 – 09:45 O17 - House Dust Mite Drives Pro-Inflammatory Eicosanoid Reprogramming And Macrophage Effector Functions  
Fiona Henkel, Germany

09:45 – 10:10 O18 - Induction Of In Vitro And In Vivo Cross-Tolerance In Birch Pollen Allergic Patients With Associated Food Allergy By Human Tolerogenic IL-10 Modulated Dendritic Cells  
Patricia Vanessa Rostan, Germany

10:10 – 10:35 O19 - Neutrophils Promote Allergic Inflammation By Presenting Allergen To Specific CD4+ T-Cells  
Dominika Polak, Austria

10:35 – 11:00 O20 - Reprogramming Of Lipid Mediator Metabolism Determines Macrophage „training“ During Type 2 Immune Responses  
Antonie Friedl, Germany

11:00 - 11:30 Closing Ceremony and Prize Giving  
Eva Untersmayr, Austria