

## IMMUNOLOGY WINTER SCHOOL Digital 2021

Basic Immunology Research in  
Allergy and Clinical Immunology

22 to 24 January



EAACI.org



## 19<sup>th</sup> EAACI Immunology Winter School “Basic Immunology Research in Allergy and Clinical Immunology”

22 - 24 January 2021  
Digital

### Scientific Programme

#### Friday, 22 January 2021

- 08:00 - 08:10**      **Welcome Address**  
*Stefano del Giacco, Italy*  
*VP Specialty and Education, EAACI President elect*
- 08:10 - 08:20**      **Introduction to the Winter School**  
*Eva Untersmayr-Elsenhuber, Austria*  
*Chair Basic and Clinical Immunology section*
- 08:20 - 09:20**      **Metabolic and Epigenetic Reprogramming in Myeloid Cells**  
*Mihai Netea, The Netherlands*  
Chair: Andrzej Eljaszewicz, Poland
- 09:20 - 09:30      Industry Session
- 09:20 - 09:40      Coffee Break
- 09:40 - 11:20**      **Oral Abstracts Presentations I**  
Chair: Andrzej Eljaszewicz, Poland and Jagadeesh Bayry, France
- 09:40 - 10:05      001 - Polybacterial MV140 And Candida Albicans V132 Combination As A Potential Novel Trained Immunity-Based Vaccine For Genitourinary Tract Infections.  
Ana Carmen Sevilla Ortega, Spain
- 10:05 - 10:30      002 - Bronchial Epithelial Cells Directionally Secrete Small Extracellular Vesicles That Might Contribute To Asthma Pathophysiology  
Lukas Hintz, Germany
- 10:30 - 10:55      003 - The Inclusion Of TLRs Agonists Improves Basophil Activation Test Sensitivity In Amoxicillin Allergic Patients.  
Rubén Fernández Santamaría, Spain

- 10:55 – 11:20 O04 - Butyrate And Propionate Restore Esophageal Epithelial Barrier Function After IL-13-Induced Impairment  
Mirelle T. A. Kleuskens, The Netherlands
- 11:20 - 12:00 Break
- 12:00 – 12:40** **Practical Course: Flow cytometry-functional assays**  
**Andrzej Eljaszewicz, Poland**  
Chair: Wojciech Feleszko, Poland
- 12:40 - 12:50 Coffee Break
- 12:50 – 13:30** **Practical Course: Flow cytometry - multicolor panel design**  
**Jozef Janda, Czech Republic**  
Chair: Wojciech Feleszko, Poland
- 13:30 - 13:40 Coffee Break
- 13:40 – 14:20** **Practical Course: Novel primary human cells culture systems and organoids**  
**Inge Kortekaas Krohn, Belgium / Taha Elajnaf, United Kingdom**  
Chair: Wojciech Feleszko, Poland
- 14:20 - 14:50 Coffee Break
- 14:50 - 16:30** **Oral Abstracts Presentations II**  
Chairs: Milena Sokolowska, Switzerland and Lydia Lynch, United States
- 14:50 – 15:15 O05 - A Protozoan Commensal Ignites An ILC2-Dependent Susceptibility To Allergic Asthma Across The Gut-Lung Axis.  
Kyle Burrows, Canada
- 15:15 – 15:40 O06 - The Synthetic Cannabinoid WIN55212-2 Induces Tolerogenic Human Dendritic Cells Via Autophagy And Metabolic Reprogramming  
Mario Pérez-Diego, Spain
- 15:40 – 16:05 O07 - Prevention Of Food Allergy Induced Anaphylaxis By Systemic Administration Of Sphingosine-1-Phosphate  
Johanna Rohrhofer, Austria
- 16:05 – 16:30 O08 - Metabolic Alterations In Allergic Enteritis  
Elisa Violeta Zubeldia-Varela, Spain
- 16:30 - 17:30** **Integration of cellular and systemic immunometabolism: Immune Cells Are What We Eat**  
**Lydia Lynch, United States**  
Chair: Milena Sokolowska, Switzerland
- 17:30 - 19:00 Dinner break
- 19:00-20:00** **Networking event**
- 20:00 - 21:00** **Poster Session I**  
**Topic 1 Asthma | P01 – P08**  
Chairs: Jürgen Schwarze, United Kingdom and Wojciech Feleszko, Poland

P01 - Analysis Of Stable Asthma And Asthma Exacerbations In Moderate-Severe Asthma

Geertje Maria de Boer, The Netherlands

P02 - A NutrimiRomics Analysis: The Association Between Diet Diversity And Asthma-Related MicroRNA In Exhaled Breath Condensate Of School-Aged Children

Francisca De Castro Mendes, Portugal

P03 - May T2-Type Cytokines IL-5 And IL-25 Modulate Rhinovirus-Induced Cytokine Response And Chemokine Profile Of The Human Pulmonary Vascular Endothelium?

Adrian Lukasz Gajewski, Poland

P04 - Some Features Of Mucosal Innate Immunity Of The Upper Airways In Children With Asthma And Allergic Rhinitis

Yaroslav Vilenskyi, Ukraine

P05 - Global Asthma Network Phase I Study In Mexico. Prevalence Of Asthma Symptoms, Risk Factors And Altitude Associations: A Cross-Sectional Study.

Nayely Reyes Noriega, Mexico

P06 - Comparative Evaluation Of Differential Gene Expression Of Toll-Like Receptor Signaling Pathway In Children With Bronchial Asthma

Alena Minina, Belarus

P07 - Associations Between Pediatric Asthma And High Cholesterol During Adulthood

Nirmin Juber, Taiwan

P08 - Exacerbations In Bronchiectasis: If There Is A Role Of Comorbid Asthma?

Kseniia Suska, Ukraine

## **Topic 2 Adaptive immunity | P09 – P15**

Chairs: Thomas Eiwegger, Canada and Rodrigo Jimenez-Saiz, Spain

P09 - Retrospective Analysis Of Clinical And Biochemical Patterns Associated With Anti-Ro52 Antibodies

Aleksandra Opinc, Poland

P10 - Comparison Of Two Strategies To Generate Specific Human Monoclonal Antibodies: Which Method To Choose For Which Purpose?

Anna Maria Ehlers, The Netherlands

P11 - CD8 Expression On NK Lymphocytes Has Different Significance For Killing HLA-Positive And HLA-Negative Targets

Taras Petrovych Baranovskyi, Ukraine

P13 - Characteristic Of The Subpopulation Composition Of Lymphocytes In Children Suffering From A Gastrointestinal Form Of Food Allergy

Valeriy Mukhorthykh, Russia

P14 - A Rare Case Of Adult Onset Periodic Fever Accompanied By Aphthous Stomatitis, Pharyngitis And Cervical Adenitis Syndrome (PFAPA Syndrome) Coinciding With Selective IgA Deficiency  
Seda Altiner, Turkey

P15 - Naringenin Supplementation During Breastfeeding Abrogates Eosinophilic And Neutrophilic Lung Inflammation Via An Increase In Regulatory T Cells  
Ricardo Wesley Alberca-Custódio, Brazil

### **Topic 3 Microbiome and metabolism | P16 – P23**

Chairs: Eva Untersmayr-Elsenhuber, Austria and Milena Sokolowska, Switzerland

P16 - Targeted Identification Of New Parasite Immunomodulators Against Allergic Asthma  
Vivien Shek, United Kingdom

P17 - Basophil Activation Test From The Bench To The Bedside: In-Vitro Approach Of Hypersensitivity Reactions Induced By Antineoplastic Agents.  
Claudia Geraldine Rita, Spain

P18 - M-MDSC Are Expanded In Chronic Lymphocytic Leukaemia (CLL) Patients And Have Highly Suppressive Phenotype  
Michal Konrad Zarobkiewicz, Poland

P19 - The Characterisation Of Monocyte-Derived Dendritic Cells (MoDCs) From UPM Exposed Triple Cell Co-Culture Model Of Asthma, COPD Patients And Healthy Controls  
Paulina Misiukiewicz-Stepien, Poland

P20 - Latest Insights On The Effects Of Physical Exercise On Cellular Immunosenescence  
Emelyn Mathot, Belgium

P21 - Application Of Vitamin D3 As A New Potential Target In Mutual Interactions Regulation Of Orbital Fibroblasts And Immune Cells Derived From Graves' Orbitopathy Patients.  
Aleksandra Starosz, Poland

P22 - Plasma Level Of IL-19, IL-17A, IL-4 And IL-1beta In Children With Atopic Dermatitis.  
Karolina Dumycz, Poland

P23 - Characterisation Of Long Term Myeloid Cell Dynamics During Respiratory Syncytial Virus Infection.  
Matthew Oliver Burgess, United Kingdom

## **Saturday, 23 January 2021**

**08:00 - 09:00**

**Human inflammatory ILC2 in type 2 inflammations  
*Hergen Spits, The Netherlands***

Chair: Inge Kortekaas Krohn, Belgium

- 09:00 - 09:20 Coffee Break
- 09:20 - 11:00 Oral Abstracts Presentations III**  
Chair: Inge Kortekaas Krohn, Belgium and Cristina Gomez-Casado, Spain
- 09:20 - 09:45 O09 - The Fusion Of FlaA, The TLR5-Ligand Flagellin A, With The Birch Pollen Allergen Bet V 1 Induces Regulatory B Cells With TH2-Suppressing Capacity In Vitro  
Alexandra Goretzki, Germany
- 09:45 - 10:10 O10 - Macrophages Stimulated With The Flagellin Allergen Fusion Protein RFlaA:Betv1 Display A MyD88- And MAPK-Dependent Activation Of Glycolysis And Suppress Allergen-Specific Th2 Responses In Vitro  
Yen-Ju Lin, Germany
- 10:10 - 10:35 O11 - Agnuside Ameliorates Allergen Induced Airway Inflammation By Modulating PI3K/Akt/NF-KB, STAT-3/P38 Signaling And GATA-3 Mediated Th2 Response In Murine Model  
Narendra Vijay Tirpude, India
- 10:35 - 11:00 O12 - Transcriptomic Profiling Of MSC-Mediated Regulation Of Neutrophilic Lung Inflammation Reveled A Novel Metabolic Mechanism  
Marlena Tynecka, Poland
- 11:00 - 14:50 Break
- 14:50 - 16:30 Oral Abstracts Presentations IV**  
Chair: Jürgen Schwarze, United Kingdom and Jessica Strid, United Kingdom
- 14:50 - 15:15 O13 - Human Precision Cut Intestinal Slices As A Novel Ex Vivo Model Of Acute, IgE Mediated Food Allergy  
Lisa Hung, Canada
- 15:15 - 15:40 O14 - Quantification Of Pru P 3-Specific IgG1 In Lipid Transfer Protein Allergic Patients  
Carmela Pablo-Torres, Spain
- 15:40 - 16:05 O15 - Characterization Of B Cells In Food Allergic Children During Oral Immunotherapy And Natural Tolerance  
Pattraporn Satitsuksanoa, Switzerland
- 16:05 - 16:30 O16 - Basophil Activation Test Shows High Accuracy In The Diagnosis Of Peanut And Tree Nut Allergy: The Markers Of Nut Allergy Study (MONAS)  
Lucy Duan, Canada
- 16:30 - 17:30 A role for the IgE-FcεRI axis in host defence**  
**Jessica Strid, United Kingdom**  
Chair: Jürgen Schwarze, United Kingdom
- 17:30 - 19:00 Dinner break
- 19:00-20:00 Networking event**

**20:00 - 21:00**

**Poster Session II**

**Topic 4 Immunotherapy and biologicals | P24 – P31**

Chairs: Thomas Eiwegger, Canada and Anna Sediva, Czech Republic

P24 - Modulatory Effect Of Untreated And Inactivated Bifidobacterium Adolescentis CCDM 373 On Cells Of The Respiratory System

Marcelina Pyclik, Poland

P25 - Molecular Sensitization Profile In Patients Allergic To Bee Venom And Possible Association With Reaction During Ultra-Rush Induction Protocol

Maria Inês Silva, Portugal

P26 - Assessment Of Various Methods Of In Vivo And In Vitro Diagnosis Of Patients With Rhinoconjunctivitis Caused By House Dust Mite (HDM) As An Assessment Of Potential Biomarkers Of Allergen Tolerance

Anna Kosowska, Poland

P27 - Effectiveness Of The Bifidobacterium Surface Molecules In The Treatment Of Allergy Diseases

Katarzyna Pacyga, Poland

P28 - Determining The Mode Of Action Of Hookworm Protein For The Treatment Of Inflammatory Bowel Disease

Jessica Lauren Wilkie, Australia

P29 - Features Of Sensitization To Weeds In Russia

Anatoly Bala, Russia

P30 - Generation Of Monoclonal Antibodies Against Atlantic Cod Parvalbumin And Their Reactivity With Recombinant Fish Allergens

Aiste Sliziene, Lithuania

P31 - Desensitization To Trimetopim / Sulfametoxazole In Infection With Toxoplasma Gondii.

Zulay Maria Almeida Sánchez, Spain

**Topic 5 Allergen molecules | P32 – P40**

Chairs: Cristina Gomez-Casado, Spain and Jozef Janda, Czech Republic

P32 - Identification Of Pru Du 6 As A Potential Marker Allergen For Almond Allergy

Stefan Kabasser, Austria

P33 - The Structure Of Sensitization To Food Allergen Extracts And Molecules Among Patients With Allergic Rhinitis In Dnipro, Ukraine

Kateryna Gashynova, Ukraine

P34 - Autoallergic CSU Patients Exhibit A Distinct Sensitization Profile To Exoallergens

Yi-Kui Xiang, Germany

P35 - A Novel Method For Total IgE Purification From Human Serum

Fariza Badloe, Belgium

P36 - Activated Phosphoinositide 3-Kinase Delta Syndrome 1: Clinical And Immunological Data From An Italian Cohort Of 8 Patients  
Giulio Tessarin, Italy

P37 - The Effect Of Resistance Exercise On The Immune Cell Function In Humans: Protocol For A Systematic Review  
Salimans Lene, Belgium

P38 - Early-Onset Systemic Lupus Erythematosus And Fungal Infections: Do These Gene Mutations Explain The Phenotype?  
Claudia Alejandra Del Carmen Renteria Valdiviezo, Peru

P39 - Diagnostic Value Of Potassium, Ammonium And Calcium Ions Levels In The Oral Fluid After Provocation In Patients With Apple Allergy.  
Alena Matsko, Belarus

P40 - Temperature-Controlled Laminar Airflow (TLA) In Adult Atopic Dermatitis Patients – An Observational Study  
Stephan Traidl, Germany

### **Topic 6 Barriers and allergy | P41 – P48**

Chairs: Wojciech Feleszko, Poland and Inge Kortekaas Krohn, Belgium

P41 - The Potential Benefit Of Synbiotic-Containing Amino-Acid-Based Formula On Otitis Media Outcomes  
Loret Keulers, The Netherlands

P42 - Photodermatitis In Patients With Tattoos And Sensitization To Titanium Dioxide  
Natalia Aliakhnovich, Belarus

P43 - The Influence Of N-Acetylcysteine (NAC) On Barrier And Inflammatory Signatures Of Intestinal Epithelial Cells  
Larissa Koidl, Austria

P44 - Nasal Allergen Challenge: Profiling Airway Inflammation Markers In Nasal Mucosal Lining Fluid From A Single Grass Pollen Allergic Individual  
Eleftheria Pertsinidou, Sweden

P46 - The Effect Of HRV16 On T2-Type Cytokine Profile Of Human Pulmonary Vascular Endothelium – Potential Intracellular Mechanisms  
Mateusz Gawrysiak, Poland

P47 - Transmission Of Rhinovirus HRV16 Infection From Airway Epithelium To The Vascular Pulmonary Endothelium In An In Vitro Model  
Robert Szewczyk, Poland

P48 - IgE Dependent Reactions For Food Additives In Urticaria Patients.  
Beata Sadowska, Poland

## **Sunday, 24 January 2021**

**08:00 - 09:00**      **Immune homeostasis by normal IgG: lessons learnt from intravenous immunoglobulin immunotherapy**

**Jagadeesh Bayry, France**

Chair: Eva Untersmayr-Elsenhuber, Austria

- 09:00 - 09:20 Coffee Break
- 09:20 - 11:00 Oral Abstracts Presentations V**  
Chair: Eva Untersmayr-Elsenhuber, Austria and Jürgen Schwarze, United Kingdom
- 09:20 – 09:45 O17 - Distribution Of SARS-CoV-2 Receptors And Associated Molecules In Health And Disease  
Urszula Radzikowska, Switzerland
- 09:45 – 10:10 O18 - Allergy Is A Modifiable Risk Factor For Respiratory Infections And Exacerbations In Adults With Asthma  
Christian Uggerhoej Woehlk, Denmark
- 10:10 – 10:35 O19 - The Effect Of Epithelium-Derived Innate Cytokines On The Expression Of Coronavirus 229E (AP-N) And Rhinovirus 16 (ICAM-1) Entry Receptors And Inflammatory Cytokines In Human Pulmonary Vascular Endothelium  
Izabela Ewa Gulbas, Poland
- 10:35 – 11:00 O20 - Prediction Of SARS-CoV-2 Infection Status And COVID-19 Disease Severity Based On Clinical Data With Machine Learning  
Damir Zhakparov, Switzerland
- 11:00 - 11:30 **Closing Ceremony**  
**Milena Sokolowska, Switzerland**  
**Secretary Basic and Clinical Immunology section**