

# IMMUNOLOGY WINTER SCHOOL 2024



📅 08-11 January  
📍 Zakopane, Poland



[eaaci.org](https://eaaci.org)



Monday 8 January

EAACI Winter School 2024

Mon 8 Jan  
17:30 - 18:30

Welcome Reception

Other

Mon 8 Jan  
18:30 - 19:00

Introduction to the Winter School

Other

### Introduction to the Winter School

Milena Sokolowska (Switzerland)

### Introduction to the Winter School (remotely)

Stefano Del Giacco (Italy)

### Introduction to the Winter School (remotely)

Tomás Chivato (Spain)

### Introduction to the Winter School

Maciej Kupczyk (Poland)

Mon 8 Jan  
19:00 - 20:00

Keynote 1: The role of tissue resident B cells in the regulation of antibody responses

Keynote

Chair : Milena Sokolowska (Switzerland), Cristobalina Mayorga (Spain)

19:00

The role of tissue resident B cells in the regulation of antibody responses

Louisa James (United Kingdom)

Mon 8 Jan  
20:00 - 22:00

Dinner

Other



 Tuesday 9 January

EAACI Winter School 2024

**Tue 9 Jan**  
**08:00 - 09:00** | **Keynote 2 – Barrier protection, damage and repair in respiratory viral infections**  
Keynote

Chair : Matthew Burgess (United Kingdom), Gerdien Tramper (Netherlands)

**08:00** | **Barrier protection, damage and repair in respiratory viral infections**  
Andreas Wack (United Kingdom)

**Tue 9 Jan**  
**09:00 - 09:20** | **Coffee Break**  
Other

**Tue 9 Jan**  
**09:20 - 11:00** | **Oral Abstracts Presentation I**  
Oral Abstracts

Chair : Andreas Wack (United Kingdom), Matthew Burgess (United Kingdom)

**09:20**  
001 | **Direct and indirect effects of tofacitinib and dupilumab on keratinocytes in skin models of atopic dermatitis**  
Shauni De Vriese (Belgium)

**09:45**  
002 | **The comparison of the effects of mesenchymal stem cells (MSCs) and derived extracellular vesicles administration in the regulation of neutrophilic airway inflammation in an experimental asthma model**  
Marlena Tynecka (Poland)

**10:10**  
003 | **The in vitro and in vivo anti-inflammatory role of the synthetic cannabinoid WIN55212-2 in aortic endothelial cells**  
Natalia Cuervo López (Spain)

**10:35**  
004 | **Dupilumab-induced conjunctivitis in atopic dermatitis patients is not associated to a decreased expression of conjunctival tight junctions but to an increase in local inflammation**  
Carlos Jose Aranda (Spain)

**Tue 9 Jan**  
**11:00 - 13:15** | **Break**  
Other



Tue 9 Jan

13:30 - 16:00

## Practical Course

Session

Chair : Wojciech Feleszko (Poland)

## 13:30 PC Session 1 : Post-biotics-a step too far beyond pre- and probiotics?

Wojciech Feleszko (Poland)

## 13:50 PC Session 2 : Vaccinations in immunodeficiencies-from basic concepts to the patient's bed

Francesco Cinetto (Italy)

## 14:10 PC Session 3 : Novel toolbox in biologics in T2 dependent diseases

Thomas Eiwegger (Austria)

## 14:30 Coffee Break

## 15:00 PC Session 4 : Dangerous liaisons Between Bacteria, Antimicrobial Therapies, and Allergic Diseases

Gerdien Tramper (Netherlands)

## 15:20 PC Session 5 : Nutrition and immune system: a complicated tango

Carina Venter (United States of America), David Fleischer (United States of America)

## 15:40 PC Session 6 : Separating Fact from Fiction in AllergoOncology

Erika Jensen-Jarolim (Austria)

Tue 9 Jan

16:00 - 16:30

## Coffee Break

Other

Tue 9 Jan

16:30 - 17:30

## Keynote 3 – Tissue resident T cells; generation and maintenance

Keynote

Chair : Thomas Eiwegger (Austria), Rubén Fernández-santamaría (Spain)

## 16:30 Tissue resident T cells; generation and maintenance

Marc Veldhoen (Portugal)



Tue 9 Jan  
17:30 - 17:50

Coffee Break  
Other

Tue 9 Jan  
17:50 - 19:30

Oral Abstracts Presentation II  
Oral Abstracts

Chair : Marc Veldhoen (Portugal), Gómez-Casado Cristina (Spain)

17:50 **High suppression of gamma delta T cells in glioblastoma multiforme patients' blood**  
005 Natalia Lehman (Poland)

18:15 **The role of IgE and T regulatory cells in the pathophysiology of Crohn's disease**  
006 Andrés de la Rocha-Muñoz (Spain)

18:40 **Frequency of changes in immunoglobulins, B-cells, and B-regulatory cells in patients with immediate hypersensitivity reactions to amoxicillin over time after the acute reaction**  
007 Rubén Fernández-santamaría (Spain)

19:05 **Metabolomics of circulating human memory CD4+ T effector and T regulatory cells reveals that Phenylalanine is a metabolic checkpoint of pathogenic Th2 cell development**  
008 Abhijeet J Kulkarni (Switzerland)

Tue 9 Jan  
19:30 - 21:00

Dinner  
Other



Tue 9 Jan  
21:00 - 22:00

## Poster Session I - Topic 1 Asthma | P01 – P10

Poster

Chair : Gerdien Tramper (Netherlands), Matthew Burgess (United Kingdom), Andreas Wack (United Kingdom)

- P02 **Rhinovirus HRV16 may limit the replication of coronavirus HCoV-229E during infection of the lung vascular endothelium**  
Mateusz Gawrysiak (Poland)
- 
- P03 **The potential protective effect of eosinophils in the respiratory viral infection of human lung vascular endothelium**  
Jonatan Rataj (Poland)
- 
- P04 **Association between vitamin D receptor gene polymorphisms TaqI, FokI and vitamin D levels in patients with atopy**  
Daina Bastyte (Lithuania)
- 
- P05 **Different effects of acute and chronic inflammation on lung remodeling in experimental asthma models**  
Alicja Walewska (Poland)
- 
- P06 **Human rhinovirus HRV16 and IL-33 may up-regulate inhibitory checkpoint molecule genes in the human lung microvascular endothelium**  
Adrian Bekier (Poland)
- 
- P07 **Immunocytological pulmonary response to chronic inhalation of hypochloric acid (HOCl) fog in rats**  
Anna Gil (Poland)
- 
- P08 **Analysis of miRNAs expression in patients with NSAIDs exacerbated respiratory disease**  
Adrian Gajewski (Poland)
- 
- P09 **Maternal caffeine intake during pregnancy and the risk of childhood asthma by 10 years of age – Evidence from The Generation XXI birth cohort study**  
Francisca Castro Mendes (Portugal)
- 
- P10 **Disease remission in severe asthma patients on mepolizumab treatment: Polish real-life data**  
Piotr Damiański (Poland)
-



Tue 9 Jan  
21:00 - 22:00

Poster Session I - Topic 2 Adaptive/innate immunity | P11 - P19  
Poster

Chair : Luke AJ O'Neill (Ireland), Marc Veldhoen (Portugal), Milena Sokolowska (Switzerland)

P11 **Inflammation May Play a Role in the Prognosis of Ataxia-Telangiectasia: Evaluation of Urine and Serum Pterins**

Hatice Betul Gemici Karaaslan (Türkiye)

P12 **Inflammatory profiles in patients with asthma and concomitant sarcoidosis- data from a tertiary pulmonary center**

Piotr Lacwik (Poland)

P13 **Variable Clinical Presentation of DCLRE1C Deficiency from Childhood to Adulthood**

Esra Hazar (Türkiye)

P14 **Immunological Patient Stratification in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome**

Johanna Rohrhofer (Austria)

P16 **Modulation of Proinflammatory Cytokines by Essential Oils: Implications for Inflammatory Conditions**

Sevan Iritsyan (Armenia)

P17 **Notch4 and lung tolerance: Treg cells as a new suspect for a new threat**

Shadi Hambo (Germany)

P18 **Should we start discussing inflammation types in cancer patients? Peripheral blood eosinophilia as a prognostic factor in pancreatic cancer - preliminary study**

Alicja Majos (Poland)

P19 **Two divergent models of response to coronaviral infections- the key to the resilience against viral respiratory infections?**

Robert Szewczyk (Poland)



Tue 9 Jan  
21:00 - 22:00

Poster Session I - Topic 3 Immunotherapy and biologicals | P20 - P29  
Poster

Chair : Thomas Eiwegger (Austria), Cristobalina Mayorga (Spain), Erika Jensen-Jarolim (Austria)

P20 **Allergen exposure chamber and nasal allergen challenge in assessing the efficacy of allergen immunotherapy in patients with rhinoconjunctivitis triggered by house dust mite**  
Magdalena Zemelka-Wiącek (Poland)

P21 **Single-cell RNA Sequencing Reveals Transcriptional Change in Circulating Immune Cells of Patients with Severe Asthma Induced by Biologics**  
Tae-Bum Kim (Korea, Republic of)

P22 **AllergoOncology: Application of the basophil activation test (BAT) in pre-clinical testing and a clinical trial of anti-cancer IgE immunotherapy**  
Jitesh Chauhan (United Kingdom)

P23 **Do AIT-induced allergen-specific IgE-blocking antibodies display high affinity?**  
Katarína Repiská (Austria)

P24 **Dynamic changes in transcriptomic signatures after biological treatment in asthmatic patients**  
Adrian Janucik (Poland)

P25 **Exploring new strategies for generating tolerogenic dendritic cells through postbiotics**  
Sudhichan Mehta (Estonia)

P26 **Facilitated antigen-presentation assays indicate differences in IgE-cross-blocking of antibodies following SLIT with recombinant Bet v 1 or Mal d 1**  
Hilal Demir (Austria)

P27 **Allergen-specific IgE occurrence among patients treated with anti-IL5 and anti-IL5r for severe eosinophilic asthma**  
Anna Mościcka (Poland)

P28 **The efficacy of anti-IL5/IL5Rs treatment in patients with transient elevation of blood eosinophil counts during pollination season compared to patients with persistent eosinophilia**  
Dominika Ochab-Krupnik (Poland)

P29 **Rituximab-induced persistent hypogammaglobulinemia in a patient with Velocardiofacial syndrome**  
Danka Krtinic (Serbia)





📅 Wednesday 10 January

EAACI Winter School 2024

Wed 10 Jan  
08:00 - 09:00

**Keynote 4 – Beneficial modulation of the respiratory microbiome and immunity: positioning the potential of probiotics**

Keynote

Chair : Cristina Gomez-Casado (Germany), Marina Perez-gordo (Spain)

08:00 **Beneficial modulation of the respiratory microbiome and immunity: positioning the potential of probiotics**

Sarah Lebeer (Belgium)

Wed 10 Jan  
09:00 - 09:20

**Coffee Break**

Other

Wed 10 Jan  
09:20 - 11:00

**Oral Abstracts Presentation III**

Oral Abstracts

Chair : Sarah Lebeer (Belgium), Carina Venter (United States of America)

09:20 **The influence of microbial metabolites on lung immunity**

009 Edyta Bulanda (Poland)

09:45 **Bifidobacterium adolescentis CCDM 368 as a source of extracellular vesicles with anti-allergic potential**

010 Dominika Kozakiewicz (Poland)

10:10 **Intranasal application of peptidoglycan from Bifidobacterium longum ssp. longum CCM 7952 prevents allergic inflammation in a mouse model**

011 Tereza Svabova (Czech Republic)

10:35 **The effect of butyrate on the infection and immune response against RV-A16 in a co-culture model of ALI-PNEC with monocyte-derived macrophages**

012 Natalia Laura Wąsowska (Netherlands)

Wed 10 Jan  
11:00 - 16:30

**Break**

Other



Wed 10 Jan  
16:30 - 17:30

**Keynote 5: Single-cell to tissue-scale memory of infection and inflammation**  
Keynote

Chair : Inge Kortekaas Krohn (Belgium), Francesco Cinetto (Italy)

16:30 **Single-cell to tissue-scale memory of infection and inflammation**  
José Ordovas-Montanes (United States of America)

Wed 10 Jan  
17:30 - 17:50

**Coffee Break**  
Other

Wed 10 Jan  
17:50 - 19:55

**Oral Abstracts Presentation IV**  
Oral Abstracts

Chair : José Ordovas-Montanes (United States of America), Inge Kortekaas Krohn (Belgium)

17:50 **Metabolic regulation of epithelial RIG-I signaling in viral exacerbations of asthma**  
013 Urszula Radzikowska (Switzerland)

18:15 **A macrophage-secreted metabolite with potent antibacterial functions**  
014 Piyal Saha (Austria)

18:40 **Immunometabolic reprogramming of bronchial epithelium in asthma**  
015 Inés Jardón Parages (Switzerland)

19:05 **New nomenclature of allergic reactions**  
017 Magdalena Zemelka-Wiąček (Poland)

Wed 10 Jan  
20:00 - 21:00

**Dinner**  
Other



Wed 10 Jan  
21:00 - 22:00

Poster Session II - Topic 4 Microbiome and metabolism | P30 - P37  
Poster

Chair : Cristina Gomez-Casado (Germany), Marina Perez-gordo (Spain), Sarah Lebeer (Belgium)

P30 **Single cell and bulk energy metabolism profiling of human Th2 cells in vitro and ex vivo**  
Nino Stocker (Switzerland)

P31 **Do Schistosoma mansoni cysteine proteases instruct lung epithelial cells to release immunomodulatory extracellular vesicles?**  
Michael Thaler (Austria)

P32 **Microbial-Derived Tryptophan Metabolites Selectively Influence Cytokine Secretion by Polarized Human Lymphocytes**  
Lu Yao (Ireland)

P33 **Dietary intervention with fructo-oligosaccharides in a mouse-model for house dust mite allergy enhances type 1 development, while lowering HDM specific type 2 responses in the lungs**  
Roos Verstegen (Netherlands)

P34 **Lipid peroxidation associated with nonsteroidal anti-inflammatory drug hypersensitivity**  
Isabel María Jiménez-Sánchez (Spain)

P35 **Metabolite X modulates metabolism of the lung during inflammation**  
Magdalena Wolska (Poland)

P37 **Butein reduces asthma-related fibroblast-to-myofibroblast transition in vitro**  
Jan Raczek (Poland)



Wed 10 Jan  
21:00 - 22:00

Poster Session II - Topic 5 Allergen molecules | P38 - P47

Poster

Chair : Cristobalina Mayorga (Spain), Rubén Fernández-santamaría (Spain), Louisa James (United Kingdom)

- P38 **The allergy-protective bovine protein beta-lactoglobulin: not only a milk protein**  
Simona Winkler (Austria)
- 
- P39 **Diminished allergenicity of the fungal major allergen Alt a 1 under iron-sufficiency and by direct binding to iron-queracetin complexes**  
Aila Fakhimahmadi (Austria)
- 
- P40 **Neutrophils involvement in patients with hypersensitivity to titanium containing prosthesis**  
Natalia Aliakhnovich (Belarus)
- 
- P41 **Study on the Activation Mechanisms of Basophils Using Different Nanoarchitectures to Enhance Sensitivity in the Assessment of Allergic Reactions to Clavulanic Acid**  
Pablo Torres Fernández (Spain)
- 
- P42 **Bioinformatics analysis and geographical distribution of Euroglyphus Maynei: a retrospective study on the frequency of sensitization in respiratory allergies**  
Stefano Palazzo (Italy)
- 
- P43 **Transcriptomic and bioinformatics analysis to investigate the cellular responses to birch pollen exposure in birch pollen allergic and non-allergic individuals**  
Srinidhi Sudharson (Austria)
- 
- P44 **Allergy to Antibiotics in Common Variable Immunodeficiency (CVID): is this a relevant issue?**  
Patrick Bez (Italy)
- 
- P45 **The consequences of the climate change on Olea europaea allergy**  
Alessandro Cinquantasei (Italy)
- 
- P46 **Clinical evaluation of two molecular multiplex IgE test assays in diagnosing airborne allergies**  
Larissa Koidl (Austria)
- 
- P47 **The IgEome in Peanut Allergy: Determination of Autoreactive IgE**  
Carolin Steinert (Germany)
-



Wed 10 Jan  
21:00 - 22:00

## Poster Session II - Topic 6 Barriers and allergy | P48 - P54

Poster

Chair : Francesco Cinetto (Italy), Carina Venter (United States of America), José Ordoñas-Montanes (United States of America)

P48 **Cold urticaria associated with a novel Phospholipase-C-Gamma-2 (PLC $\gamma$ 2) mutation**

Monique Butze (Germany)

P49 **Microneedle-mediated epicutaneous delivery system based on mesoporous silica nanoparticles for allergen-specific immunotherapy**

Ana M. Pérez-Moreno (Spain)

P50 **Impact of Skin Stretching on Cutaneous Allergic Responses**

Darawan Tabtim-on (France)

P53 **Endotypes of childhood atopic dermatitis based on proteomic profiling of skin tape-stripping and allergic sensitization**

Karolina Dumycz (Poland)

P54 **Novel heterozygous TNFAIP3 mutation resulting in autoinflammation, autoimmunity and infection susceptibility**

Vyanka Redenbaugh (United Kingdom)

## Thursday 11 January

EAACI Winter School 2024

Thu 11 Jan  
08:00 - 09:00

## Keynote 6 - A break in mitochondrial endosymbiosis as a basis for inflammatory diseases

Keynote

Chair : Milena Sokolowska (Switzerland), Inge Kortekaas Krohn (Belgium)

08:00 **A break in mitochondrial endosymbiosis as a basis for inflammatory diseases**

Luke AJ O'Neill (Ireland)

Thu 11 Jan  
09:00 - 09:20

## Coffee Break

Other



Thu 11 Jan

09:20 - 11:00

**Oral Abstracts Presentation V**

Oral Abstracts

Chair : Inge Kortekaas Krohn (Belgium), Rubén Fernández-santamaría (Spain)

09:20

018

**Characterising the blood and airways ILC landscape in patients with severe asthma undergoing anti-IL5/5Ra therapy**

Kyle Mincham (United Kingdom)

09:45

019

**Epigenetic Mechanisms in Allergic Diseases During Pregnancy**

Elisabeth Simonin (United States of America)

10:10

020

**Cannabinoids induce tolerogenic DCs by promoting epigenetic reprogramming and secreting extracellular vesicles that polarize Tregs**

Angel Maldonado (Spain)

10:35

021

**MacDeath: A cell death screen identifies novel macrophage-depleting agents for the therapy of macrophage activation syndrome and cancer**

Paul Ettl (Austria)

Thu 11 Jan

11:00 - 11:30

**Closing Ceremony and Prize Giving**

Other

11:00

**Closing Ceremony and Prize Giving**

Inge Kortekaas Krohn (Belgium)