

PROGRAM | MONDAY 12 DECEMBER

08:00 - 08:35 Registration & coffee

08:35 - 08:45 Welcome by Bart Lambrecht

KEYNOTE

08:45 - 09:30 Type 2 immunity and tissue resilience
Richard M. Locksley, *University of California, San Francisco, US*

SESSION I: TYPE 2 EFFECTOR MECHANISMS

09:30 - 10:00 Cellular Mechanisms of Food Allergy
Stephanie Eisenbarth, *Northwestern Feinberg School of medicine, US*

10:00 - 10:30 Cytokines in Type 2 Inflammation
Jamie Orenge, *VP Research-Allergy & Immunity Regeneron Pharmaceuticals, US*

10:30 - 11:00 Coffee break

11:00 - 11:30 Eosinophil subsets in intestinal inflammation
Isabelle Arnold, *University of Zurich, CH*

11:30 - 12:00 Neuro-immune axis in cancer: ILC-you in the bladder!
Camilla Jandus, *University of Geneva & Ludwig Institute for Cancer Research Lausanne, CH*

12:00 - 12:30 Protein crystals as drivers of Type 2 inflammation and mucus plugging
Bart Lambrecht, *VIB-UGent Center for Inflammation Research, BE*

12:30 - 12:45 *Selected Talk: The aryl hydrocarbon receptor promotes intestinal tissue adaptation of eosinophils*
Abstract 19
Nicola Diny, *The Francis Crick Institute, GB*

12:45 - 12:50 *Sponsored Talk: PerkinElmer*

12:50 - 13:30 Lunch

13:30 - 14:30 Poster Session - Odd numbers

SESSION 2: TYPE 2 IMMUNITY IN PATHOGEN CLEARANCE

14:30 - 15:00 From Zebrafish to Humans: How Pathogenic Mycobacteria Reprogram the Host Immune Response
David Tobin, *Duke University School of Medicine, US*

15:00 - 15:30 Perforin 2 controls unconventional cytokine release from mucosal APC
De'Broski R. Herbert, *University of Pennsylvania, School of Veterinary Medicine, US*

15:30 - 16:00 Matrix Regulation by Type 2 cytokines
Judi Allen, *Lydia Becker Institute for Immunology & Inflammation, The University of Manchester, UK*

16:00 - 16:15 *Selected Talk: Tissue remodeling by an opportunistic pathogen triggers allergic inflammation*
Abstract 2
Karen Agaronyan, *Yale University and HHMI, US*

16:15 - 16:45 Coffee break

SESSION 3: TYPE 2 IMMUNITY-NEURONAL INTERACTIONS

16:45 - 17:15 Non-redundant functions of group 2 innate lymphoid cells
Christoph Klose, *Charité Universitätsmedizin Berlin, DE*

17:15 - 17:45 Neuronal regulation of innate lymphoid cells
Henrique Veiga-Fernandes, *Champalimad Center for the Unknown, PT*

17:45 - 18:00 *Selected Talk: Tuft cell-derived acetylcholine regulates epithelial fluid secretion during homeostasis and Type 2 immunity*
Abstract 8
Tyler Billipp, *University of Washington Seattle, US*

18:00 - 19:00 Reception

19:00 - 20:00 Guided tour to the conference restaurant

20:00 - 22:30 Conference dinner @ VOLTA

08:30 - 09:15 Registration & coffee

SESSION 4: TYPE 2 IMMUNITY METABOLISM

- 09:15 - 09:45 Species-specific regulation of IL-33
Anne Sperling, *University of Virginia, US*
- 09:45 - 10:15 Metabolic roles of Th2 cytokines
Chih-Hao Lee, *Harvard University T.H. Chan School of Public Health, US*
- 10:15 - 10:45 A Metabolic Perspective of Human ILC Differentiation
James Di Santo, *Institut Pasteur, FR*
- 10:45 - 11:15 Coffee break

SESSION 5: UNSUSPECTED ROLES OF ILCs IN HOMEOSTASIS

- 11:15 - 11:45 Function of ILC2 in bone marrow
Masaru Ishii, *Osaka University Graduate School of Medicine, JP*
- 11:45 - 12:15 Regulation of DC2 differentiation and function by dermal cytokines
Franca Ronchese, *Malaghan Institute of Medical Research, NZ*
- 12:15 - 13:15 Lunch
- 13:15 - 14:15 Poster Session - Even numbers

SESSION 6: TYPE 2 IMMUNITY EARLY LIFE

- 14:15 - 14:45 Stromal-immune interactions drive allergic immunity in the lung
Clare Lloyd, *Imperial College London, UK*
- 14:45 - 15:15 Neonatal exposure to environmental triggers influences type 2 immunity to allergens
Hamida Hammad, *VIB-UGent Center for Inflammation Research, BE*
- 15:15 - 15:30 *Selected Talk:* Co-existing Atoh1+ and Atoh1- progenitors contribute to tuft cell expansion during intestinal helminth infection
Abstract 21
Xiaogang Feng, *Institute of Physiology, University of Zurich, CH*
- 15:30 - 16:00 Coffee break
- 16:00 - 16:30 The gut-lung axis: how early life perturbation of the microbiome influences Type 2 inflammation
Benjamin Marsland, *Monash University, AU*

KEYNOTE

- 16:30 - 17:15 Human T lymphocytes: differentiation, migration and immune regulation
Federica Sallusto, *Institute of Microbiology, ETH Zurich and Institute for Research in Biomedicine, Università della Svizzera Italiana, CH*
- 17:15 - 17:25 Closing remarks by Bart Lambrecht

PROGRAM | WEDNESDAY 14 DECEMBER

SATELLITE: FROM BASIC SCIENCE IN TYPE 2 IMMUNITY TO THE CLINIC

08:15 - 08:40 Registration & coffee

08:40 - 08:45 Welcome

SESSION 1: MUCUS PLUGGING

08:45 - 09:30 *Keynote:* Clinical and molecular phenotypes of type 2 high forms of asthma
John Fahy, *University of California San Francisco, UCSF, US*

09:30 - 10:00 Mucus Plugging in Asthma – more than an obstruction to breathing
Benjamin Medoff, *Mass General Brigham & Harvard Medical School, US*

10:00 - 10:30 Epithelial Barrier Theory and Type 2 Immune Response
Cezmi Akdis, *University of Zurich, CH*

10:30 - 11:00 Coffee break

SESSION 2: BIOLOGIC INTERVENTIONS

11:00 - 11:30 Choosing Biologics Wisely for Severe Asthma: Complex Interplay between Eosinophils and Mucus
Parameswaran Nair, *McMaster University, CA*

11:30 - 12:00 Is targeting the eosinophil sufficient in eosinophilic asthma?
David Jackson, *King's Centre for Lung Health, UK*

12:00 - 12:45 *Keynote:* Specific B cell responses in natural and induced B cell tolerance
Mübecell Akdis, *Swiss Institute of Allergy and Asthma Research, University Zurich, CH*

12:45 - 14:15 Lunch & poster session

SESSION 3: EOSINOPHILS

14:15 - 14:45 Targeting eosinophils in systemic eosinophilic conditions: achievements and challenges
Florence Roufosse, *ULB, BE*

14:45 - 15:15 Modeling human lung disease using iPSC derived airway epithelium
Engi Ahmed, *VIB Center for Inflammation Research, BE*

15:15 - 15:30 *Abstract 36*
Selected Talk: High-dimension flow cytometric screening resolves distinct stages of eosinophil development and Interleukin-5-driven transit amplification in eosinophilia
Christophe Desmet, *Liege University, BE*

15:30 - 16:00 Airway Mucus: Production and Secretion of Glycopolymers in Health and Disease
Christopher Evans, *University of Colorado, US*

16:00 - 16:10 Closing of the conference