



## 8<sup>th</sup> International Symposium on Molecular Allergology 28 - 30 November 2019, Amsterdam, The Netherlands

### Scientific Programme

#### Thursday, 28 November 2019

- 12:00 – 13:00** **Registration**  
Room: Foyer
- 13:00 – 13:30** **Opening Ceremony**  
Room: Plenary Room  
Moderators: *Edward Knol, The Netherlands*  
*Ronald van Ree, The Netherlands*
- 13:30 – 15:00** **Session 1 – Molecular Diagnosis**  
Room: Plenary Room  
Chairs: *Edward Knol, The Netherlands* / *Jozef Janda, Czech Republic*
- 13:30 – 14:00 From components and clinical history to diagnostic algorithms for risk assessment  
*Ronald van Ree, The Netherlands*
- 14:00 – 14:15 OA 1: Human Monoclonal IgE Epitopes Mapped On Der P 2  
*Geoffrey Mueller, United States*
- 14:15 – 14:30 OA 2: Api M 10 Displays One Dominant Linear IgE Epitope In Honey Bee Venom Allergic Patients,  
*Michèle Myriam Rauber, Germany*
- 14:30 – 15:00 Veterinary allergens: same as in humans?  
*Ralph Mueller, Germany*

**15:00 – 15:30** Room: Exhibition and Catering Area  
**Coffee Break**

**15:30 – 17:00** Room: Plenary Room  
**Session 2 – Immunotherapy**  
Chairs: Fatima Ferreira, Austria / Ronald van Ree, The Netherlands

- 15:30 – 16:00 Innovation in Immunotherapy  
*Mohamed Shamji, United Kingdom*
- 16:00 – 16:15 OA 3: TETI-Study: A Prospective Study of the Gradual Egg-Tolerance Induction in Hen's Egg Allergic Children Who Tolerate Baked Egg, *Liselot De Vlieger, Belgium*
- 16:15 – 16:30 OA 4: The Antigenicity and Safety of Transgenic Rice Seeds Containing Genetically Modified Japanese Cedar Pollen Allergens, *Shinya Takaishi, Japan*
- 16:30 – 17:00 Lessons from immunotherapy in horses  
*Eliane Marti, Switzerland*

Room: Exhibition and Catering Area  
**17:00 – 19:00 Welcome Reception**

## Friday, 29 November 2019

**08:30 – 10:00** Room: Plenary Room  
**Session 3 – Systems Medicine**  
Chairs: Kornel Golebski, The Netherlands / Maria Yazdanbakhsh, The Netherlands

- 08:30 – 09:00 Big data and bio-informatics in health research  
*Marcel Reinders, The Netherlands*
- 09:00 – 09:30 Systems medicine of allergic diseases: a multiscale approach  
*Supinda Bunyavanich, United States*
- 09:30 – 10:00 Tracking tissue inflammation at single cell level  
*Frits Koning, The Netherlands*

Room: Exhibition and Catering Area  
**10:00 – 10:30 Coffee Break**

**10:30 – 12:00** Room: Plenary Room  
**Session 4 - Molecular Epidemiology**  
Chairs: Alexandra Santos, United Kingdom / Jorg Kleine-Tebbe, Germany

- 10:30 – 11:00 Gene-environment interactions in development of food and respiratory allergy  
*Helen Brough, United Kingdom*
- 11:00 – 11:30 Carbohydrate multiplexing: profiles of anti-carbohydrate IgE and disease  
*Maria Yazdanbakhsh, The Netherlands*
- 11:30 – 12:00 Molecular profiling: trajectories towards asthma  
*Paolo Matricardi, Germany*

12:00 – 14:00

Room: Exhibition and Catering Area  
Lunch and Poster Discussion Session

**Poster Session I: Immunology**

Chairs: Edward Knol, The Netherlands / Mohamed Shamji, United Kingdom

*P1: Deletion of IL-4Ra-Responsive B Cells Augments Immune Response of Balb/C Mice to Atopic Dermatitis, Martyna Scibiorek, South Africa*

*P2: Differentially Regulated Translation Events in T Helper Cell Differentiation, Jana Koch, Switzerland*

*P3: The Birch Pollen Matrix Mediates Immune Stimulation Through TLR4 Signaling, Lisa Pointner, Austria*

*P4: Epigenetic Regulation of TLR System (TLR2 & TLR4) In Atopic Dermatitis, Elizaveta Bystrikskaia, Russia*

*P5: Towards Tolerance: Targeting Dendritic Cells to Combat Allergic Disease, Stefanie Busold, The Netherlands*

*P6: Allergen Dynamics and Proteolytic Susceptibility, Anna Sophia Kamenik, Austria*

*P7: The Antigen Presenting Role of The Epithelial Cells in The Dental Caries Cavity Formation, Julia Sergeevna Vysochanskaya, Russia*

*P8: Studies on Inhibitory Effect of Trigonelline On Mast Cells Degranulation, Arita Dewi Nugrahini, Japan*

*P9: Correlation Between Polymorphisms of Forkhead Box Protein-3 T-Regulatory Genew with Interleukin-10 In Patients with Graves' Disease, Dwitya Elvira, Indonesia*

**Poster Session II: Immunoassays**

Chairs: Edward Knol, The Netherlands / Mohamed Shamji, United Kingdom

P10: Comparison of ImmunoCAP ISAC And ALEX Multiplex Assay, Ines Hasanovic, Slovenia

P11: How Patient Management May Be Affected by The Choice and Performance of Specific IgE Tests, Malena Norrgård, Sweden

P12: Dog and Cat Allergen Component Specific IgE Measurements on The NOVEOS Immunoanalyzer: Diagnostic Accuracy and Intermethod Comparison, Gertjan Langen, The Netherlands

P13: Multiplex IgE Peanut Panels: Heterogeneous Analytical Responses of the ISAC, ALEX and EUROLINE IgE Panels Due to Component Isoform and CCD Composition, D. De Boer, The Netherlands

P14: Comparison of IgE Antibodies Against Cow's Milk and Hen's Egg Assay by Immulite Methodology and ISAC Microchip, Simona Belohlavkova, Czech Republic

P15: Development of An In-House Monoclonal Antibody-Based ELISA Method for The Quantification of The Grass Pollen Major Allergen Phl P 1, M. Angeles López-Matas, Spain

P16: Simultaneous Quantification of Major Food Allergens Using A Multiplex Immunoassay – MARIA for Foods, James P Hindley, United Kingdom

P17: Quantification of Major Egg Allergens Gal D 1 (Ovomucoid) And Gal D 2 (Ovalbumin) In Egg-Derived Influenza Vaccines By ELISA, Angharad Cullinane, United Kingdom

### **Poster Session III: Allergen Molecules**

Chairs: Laurian Jongejan, The Netherlands / Domingo Barber, Spain

P18: Characterization of The Major Allergen, Que Ac 1, From Sawtooth Oak, The Most Important Cause of Pollinosis In Korea, Kyoung Yong Jeong, South Korea

P19: Purification and Immuno-Proteomic Characterization of a Novel Pectate Lyase Allergen Hel A 6 From Sunflower, Nandini Ghosh, India

P20: The Major Guinea Pig Allergen Cav P 1 Is A Lipocalin That Strongly Binds Short Chain Fatty Alcohols, Bente Janssen-Weets, Luxembourg

P21: Ole E 6-Like Allergen from Peach Tree Pollen That Can Induce Respiratory Symptoms in Children, Maria Luisa Somoza, Spain

P22: Similarity of The Potential Allergenic Proteins from Vespa Velutina Venom with The Homologs of Vitellogenin And DPPIV From Other Hymenoptera, Raphael Ignacio Monsalve, Spain

P23: Assessment of The Allergenic Potential of Cowpea Proteins and Their Cross-Reactivity with Pea and Peanut Allergens, Mouhamed Mounir Chentouh, Algeria

P24:  $\alpha$ -Gal Carrying Glycolipids Show In Vitro Allergenicity In Patients with Red Meat Allergy, Neera Chakrapani, Luxemburg

P25: Comparing the Venom Proteomes of The Allergy-Relevant Hymenoptera Species Polistes Dominula And Vespula Spp. And Characterization of New Allergens, Johannes Grosch, Germany

P26: Almond Shows A Distinct Allergen Profile That Differs from Allergen Compositions of Other Tree Nuts and Legumes, Stefan Kabasser, Austria

P27: Gene Expression Analysis of The Walnut Oleosin Variants A and B In 3 Different Juglans Regia Cultivars Using RNA Sequencing Data, Shanna Bastiaan-Net, The Netherlands

P28: Recombinant Jug R 2 And Jug R 7: Towards A More Complete Walnut CRD Panel, Serge Versteeg, The Netherlands

P29: Recombinant Expression and Physicochemical Characterization of Peamaclein (Pru P 7) And Its Application for Component Resolved Diagnosis, Christoph Nagl, Austria

P30: Production Of Salmon And Baltic Cod Allergens In E.Coli, Aiste Imbrasaite, Lithuania

#### **Poster Session IV: Epitopes**

Chairs: Laurian Jongejan, The Netherlands / Domingo Barber, Spain

P31: Elevated Frequency of Ara H 2, 6 And 7 Specific B Cells in Peanut Allergic Patients, Constance Florentine Den Hartog Jager, The Netherlands

P32: Ara H 7 Isoforms Share Many Linear Epitopes: Are Conformational Epitopes Crucial To Elucidate Divergent Abilities?, Anna M Ehlers, The Netherlands

P33: IgG Antibodies from Birch Pollen Allergic and Non-Allergic Subjects Recognize Epitopes of Major Birch Pollen Allergen Bet V 1, Which Are Different From IgE Epitopes, Georgii Brazhnikov, Russia

P34: Profiling of The Bet V 1-Specific IgE Epitope Repertoire in Sera of Birch Pollen Allergic Patients, Stefanie Schmalz, Austria

P35: Identification Of B-Cell Linear Epitopes in Major Venom Allergens from Clinically Relevant Hymenoptera, Amilcar Perez-Riverol, Brazil

P36: The Role of IgE And IgG Antibodies in The Allergenicity Towards  $\alpha$ -Gal, Danijela Apostolovic, Sweden

#### **Poster Session V: Food Allergenicity**

Chairs: Lars Poulsen, Denmark / Alexandra Santos, United Kingdom

P37: Why One Apple Is More Allergenic Than Another, Valentina Cova, Italy

P38: Identification of Potentially Allergenic Insect Species in Food, Cristiano Garino, Germany

P39: Does The Modification Of Apple Allergen Isoforms Alter Their Immunological Behaviour? , Jana Unterhauser, Austria

P40: Antibodies, IgG Or Chimeric IgE, Directed to IgE-Binding Epitopes: Tools to Monitor In Vitro Antigenicity and Eliciting Capacity of Wheat Allergens During Food Digestion and Absorption, Olivier Tranquet, France

P41: Variable Impact of Natural Fruit Matrices on Protease Resistance of Strongly and Weakly Allergenic Fruit LTPs, Pru P 3 And Fra A 3, Jaap Akkerdaas, The Netherlands

P42: Differential Effects of Dry Vs. Wet Heating Of  $\beta$ -Lactoglobulin On Formation of SRAGE Binding Ligands and SIgE Epitope Recognition, Hannah E. Zenker, The Netherlands

P43: A Jurkat Based NF $\kappa$ B-EGFP INKT Reporter Cell Line to Evaluate the Interaction of Food-Derived Lipids with INKT Cell Receptors, Piotr Humeniuk, Austria

P44: Evaluating Potential Risks Of Food Allergy Of Novel Food Sources Based On Comparison Of Predicted Proteins Compared To [www.AllergenOnline.Org](http://www.AllergenOnline.Org), Richard E Goodman, United States

### **Poster Session VI: Clinical**

Chairs: Lars Poulsen, Denmark / Alexandra Santos, United Kingdom

P45: A Clinical Case of Sensitization to House Dust Mites, Accompanied Polycross-Sensitization to Tropomyosin by Alex Test, Serhii Yuriev, Ukraine

P46: Anaphylaxis After Sensitization to Snake Venom by Repeated Skin Exposure – A Case Report, Kyra Swiontek, Luxembourg

P47: Molecular Phenotyping of a Pregnant Woman with Severe Cow's Milk Allergy at Risk of Clinical Reactions to Human Milk Allergens During Breastfeeding, Frauke Schocker, Germany

P48: A False-Positive Specific IgE For Amoxicillin, María José Sánchez-González, Spain

P49: Relation Between Bronchial Asthma and Parasitic Infection in Egyptian Children, Youssef Bakr Habib, Egypt

P50: Development of Local Shellfish Allergen for Measuring Specific IgE Antibodies in Shellfish Allergic Patients, Brenda Leecyous, Malaysia

P51: Anisakis Simplex Sensitization and Diagnosis Tests: Distinguishing Between Symptomatic and Asymptomatic Sensitization, Leticia De Las Vecillas Sanchez, Spain

### **Poster Session VII: CRD and Epidemiology**

Chairs: Paolo Matricardi, Germany / Barbara Bohle, Germany

P52: IgE Sensitization Profiles to Single Birch Allergens and Cross Reacting Carbohydrates in A Population Sample Of Norwegian Birch Pollen Allergic Subjects Using Line-Blot Oligoplex Enzymoimmunoassay, Ivo Nentwich, Norway

P53: Prevalence of Sensitization to Nut Oleosins In Sera of Norwegian Patients with Suspected Nut Allergy Using A Line-Blot Oligoplex Enzymoimmunoassay, Ivo Nentwich, Norway

P54: Progression Of Der P 23 Sensitization – An Observational Study in The MAS Birth Cohort, Leandra Forchert, Germany

P55: Pollen Food Associated Syndrome: Involvement of Gibberellin Regulated Protein Family, Pascal Poncet, France

P56: Ara H 2 Is the Dominant Peanut Allergen Despite Similarities with Ara H 6, Oliver Hemmings, United Kingdom

P57: The Characteristic and Allergen Profiles of Different Seasonal Pollen-Related Food Allergy in China, Junda N/a Li, China

P58: Progress and Perspective of Allergen Component Identification and Diagnosis in China, HanBing Xie, China

P59: Characterization of Serum Immunoglobulin A Responses to Aspergillus Fumigatus Extracts and Components in ABPA And Non ABPA Patients, Joana Vitte, France

P60: BAT With Molecular Allergens of Aspergillus Spp.: From Extract to Molecules to Enhance Diagnosis of Allergic Broncho-Pulmonary Aspergillosis, Moïse Michel, France

P61: Microarray Analysis of IgE Sensitization Profiles to Culicoides Recombinant Allergens in Horses with Insect Bite Hypersensitivity, Eliane Marti, Switzerland

P62: Anaphylactic Reaction to Sunflower Seeds and Mango in Patients Highly Sensitized to Mugwort Defensin Protein Art V-1, Csilla Csáki, Hungary

P63: Insect- And Seafood Sensitization Patterns in Mite Allergic Patients, Martina Aumayr, Austria

P64: Features of Sensitization and Immunotherapy to Weeds in Eastern Ukraine, Galyna Vladimirovna Yeryomenko, Ukraine

P65: Comparative Analysis of Molecular Sensitization Between Children, Adolescents and Adults in Dnipro Region (Ukraine), Viktoriia S Voloshkina, Ukraine

P66: The Characteristic Features of Molecular Profile in Patients with Allergic Diseases in Central And Western Ukraine And The Evaluation Of Sublingual Allergen Immunotherapy Efficiency, Olene Viktorivna Sharikadze, Ukraine

**Room: Plenary Room**

**14:00 – 15:30 Session 5 - Molecular Basis of Cross-Reactivity**

Chairs: Christiane Hilger, Luxemburg / Laurian Jongejan, The Netherlands

14:00 – 14:30 Molecular modelling and cross-reactivity  
*Klaus Liedl, Austria*

14:30 – 14:45 OA 5: IgE Cross-Reactivity Between Peanut 2S-Albumins Ara H 2 And Ara H 6: Alike But Different! *Stéphane Hazebrouck, France*

14:45 – 15:00 OA 6: The Case of Gibberellin-Regulated Proteins (GRP): Track First the Molecular IgE Sensitization Then the Syndromes, *Adriano Mari, Italy*

15:00 – 15:30 Novel foods: predicting allergen cross-reactivity  
*Lars Poulsen, Denmark*

15:30 – 16:00 **Room: Exhibition and Catering Area**  
**Coffee Break**

**16:00 – 16:45 Parallel Sessions 1**

**Room: Plenary Room**

**Clinical cases and CRD 1**

Respiratory Allergies

*Ulrika Käck, Sweden / Riccardo Asero, Italy*

**Room: Meeting Room 11**

**Pro/Con Debate 1**

Chair: Paolo Matricardi

Molecular IgE testing: the more multiplex, the better

**Pro:** *Enrico Scala, Italy* **Con:** *Jörg Kleine-Tebbe, Germany*

**Room: Meeting Room 15 + 16**

### **Interactive Debate 1**

Who makes an allergen an allergen?

*Christiane Hilger, Luxemburg / Karin Hoffmann-Sommergruber, Austria*

**Room: Plenary Room**

### **17:00 – 18:30 Session 6 - Properties of Allergens**

Chairs: Lars Poulsen, Denmark / Karin Hoffmann-Sommergruber, Austria

17:00 – 17:30 Antigen-presenting cells and degradome: predicting allergenicity  
*Fatima Ferreira, Austria*

17:30 – 18:00 Initiation of the sensitization process by allergenic proteases  
*Jean-Philippe Girard, France*

18:00 – 18:30 Inherent allergenic properties of ns-LTP  
*Stephan Scheurer, Germany*

## **Saturday, 30 November 2019**

**Room: Plenary Room**

### **08:30 – 10:00 Session 7 – Biomarkers in Food Allergy**

Chairs: Bernadette Eberlein, Germany / Mohammed Shamji, United Kingdom

08:30 – 09:00 Biomarkers of food allergy and oral tolerance in IgE-sensitized children  
*Alexandra Santos, United Kingdom*

09:00 – 09:15 OA 7: Longitudinal Evolution of Pru P 7 Sensitization: A Variable Pollen-Food Cross-  
Reactivity, *Joana Vitte, France*

09:15 – 09:30 OA 8: Ovoinhibitor – A Novel IgE-Reactive Determinant in Egg White Ovoinhibitor – A  
Novel IgE-Reactive Determinant in Egg White, *Lars Mattsson, Sweden*

09:30 – 10:00 Biomarkers for efficacy and safety of OIT  
*Kirsten Beyer, Germany*

**Room: Exhibition and Catering Area**

### **10:00 – 10:30 Coffee Break**

### **10:30 – 11:15 Parallel Sessions 2**

**Room: Plenary Room**

#### **Clinical cases and CRD 2**

Food Allergies

*Martine Morisset, France / Montserrat Fernandez-Rivas, Spain*

**Room: Meeting Room 11**

#### **Pro/Con Debate 2**

Chair: Ronald van Ree, The Netherlands

Recombinant wild-type allergen molecules will never make it into clinical AIT

**Pro:** Domingo Barber, Spain **Con:** Barbara Bohle, Germany

**Room: Meeting Room 15 + 16**

#### **Interactive Debate 2**



Seeds and nuts: how to get the best diagnostic value for your money?  
*Philippe Eigenmann, Switzerland / Edward Knol, The Netherlands*

**Room: Plenary Room**

**11:30 – 13:00 Session 8 – New Diagnostic Developments**

Chairs: Kirsten Beyer, Germany / Montserrat Fernandez-Rivas, Spain

11:30 – 12:00 Serology and in situ prick test in EoE  
*Arjen Bredenoord, The Netherlands*

12:00 – 12:15 OA 9: Development of High-Throughput Technology to Diagnose Allergy Optimised Surface Coating and Characterisation of Protein Microarrays Using ToF-SIMS to Detect Fluorescent RBL Cell Activation, *Marina Kalli, United Kingdom*

12:15 – 12:30 OA 10: Sensitisation Against Maltose-Binding Protein Fusion Protein Is Interfering In Component-Resolved Diagnosis, *D. De Boer, The Netherlands*

12:30 – 13:00 Cellular diagnostic tests in real life?  
*Bernadette Eberlein, Germany*

**Room: Plenary Room**

**13:00 – 13:15 Closing Ceremony**

Moderators: *Edward Knol, The Netherlands*

*Ronald van Ree, The Netherlands*