8th EAACI-GA²LEN Immunology Winter School

“Basic Immunology Research in Allergy and Clinical Immunology”

11 – 14 February 2010
Eibsee Hotel, Grainau, Germany

Final Program & Abstract Book

Organized by the EAACI Immunology and Dermatology Sections and the Allergy Research Group, Dept. of Dermatology, University Medical Center Freiburg
Scientific Program and Steering Committee

Jan Lötvall, Gothenburg, Sweden (EAACI President)
Cezmi Akdis, Davos, Switzerland (EAACI Vice President Congress)
Luis Delgado, Lisbon, Portugal (EAACI Vice President Education)
Barbara Bohle, Vienna, Austria (EAACI Immunology Section Chair)
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Thilo Jakob, Freiburg, Germany (Chair of Local Organizing Committee)
Torsten Zuberbier, Berlin, Germany (GA²LEN Secretary General)

Keynote Speakers

Shimon Sakaguchi, Kyoto, Japan
Mark Udey, Bethesda, MD
Stefan Martin, Freiburg, Germany
Jean-Francois Nicolas, Lyon, France
Michel Gilliet, Houston, TX
Thomas Bieber, Bonn, Germany
Carolin Sokol, Boston, MA

Faculty

Barbara Bohle, Vienna, Austria
Magdalena Czametzka-Operacz, Poznan, Poland
Marta Ferrer, Pamplona, Spain
Clive Grattan, Norwich, UK
Edward Knol, Utrecht, Netherlands
Antti Lauerma, Helsinki, Finland
Gunnar Nilson, Stockholm, Sweden
Philippe Stock, Berlin, Germany
Peter Schmid-Grendelmeier, Zurich, Switzerland
Carsten Schmid-Weber, London, UK
Claudia Traidl-Hoffmann, Munich Germany

Local Organizing Committee

Thilo Jakob (Chair), Freiburg, Germany
Britta Dorn, Freiburg, Germany
Philipp Esser, Freiburg, Germany
Stefanie Kunz, Freiburg, Germany
Nikolai Pfender, Freiburg, Germany
Felix Weber, Freiburg, Germany

EAACI Head Quarters

Sladjana Scepan, Zurich, Switzerland
Dear colleagues and friends,

Welcome to the 8th EAACI-GA²LEN Immunology Winter School “Basic Immunology Research in Allergy and Clinical Immunology” in Grainau, Germany.

Since 2001 the Immunology Section of the EAACI has been organizing meetings for young doctoral and postdoctoral scientists who are active in allergy and clinical immunology research with the goal to increase the impact of basic immunology research on the fields of allergy and clinical immunology. With the generous support from the EAACI Executive Committee we were now able to organize the 8th EAACI-GA²LEN Immunology Winter School at the Elbsee Hotel in Grainau, right at the base of Germany’s highest mountain, the Zugspitze.

The EAACI-GA²LEN Immunology Winter School has often been organized together with other Section or Interest Groups of the Academy and each time this collaboration has given the Winter School a particular flavor. This time it is a joint effort together with the EAACI Dermatology Section and consequently we will have some focus on immunology of the skin and skin related allergies.

The meeting includes 6 symposia that circle around 4 main topics: innate immunity, adaptive immunity, mechanisms of allergic inflammation and regulation of allergic immune responses. Each symposium will be opened by a keynote lecture followed by presentations of participants as selected from their abstracts. The list of keynote speakers this year includes: Thomas Bieber, Bonn, Germany; Michel Gilliet, Houston, TX; Stefan Martin, Freiburg, Germany; Jean-Francois Nicolas, Lyon, France; Shimon Sakaguchi, Kyoto, Japan; Carolin Sokol, Boston, MA; and Mark Udey, Bethesda, MD.

We have received a large number of outstanding abstracts which were reviewed by an international panel of experts. Based on the scientific quality of the submitted abstract 70 participants were selected and invited. 25 abstracts will be presented as oral presentations. In addition two active poster sessions will be arranged in which participants have the opportunity to discuss their data with the keynote lecturers and organizing scientists. In addition there will be opportunity for winter sports or sightseeing between the morning and the evening sessions.

The goal of the meeting is to create a warm scientific environment in which allergy and asthma related immunological concepts can be covered with ample time for discussions and in which young scientists have the opportunity to directly interact with known capacities in the field. For this reason we also ask the keynote speakers to stay during the entire meeting for further discussions - let it be on the ski slopes, during lunch or dinner or in the evenings at the wine and cheese poster session.

The organizers are looking forward to a productive meeting and hope to reach the goals that we set ourselves.

Thilo Jakob
on behalf of the Organizing Committee
# Program of the 8th EAACI GA²LEN Immunology Winter School

## Basic Immunology Research in Allergy and Clinical Immunology

February 11th - 14th, 2010  
Grainau, Germany

### Thursday, February 11th

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<tr>
<td>18.00</td>
<td>Opening and Welcome reception</td>
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<td>19.00</td>
<td><strong>Session I:</strong></td>
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|        | **Chairpersons:** Barbara Bohle, Vienna, Austria  
|        | Peter Schmid-Grendelmeier, Zurich, Switzerland |
|        | **Keynote Lecture:** Control of immune responses by regulatory T cells  
|        | Shimon Sakaguchi, Kyoto, Japan              |
| 20.00  | Buffet dinner                              |

### Friday, February 12th

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<tr>
<td>8:00</td>
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|        | **Chairpersons:** Thilo Jakob, Freiburg, Germany  
|        | Shimon Sakaguchi, Kyoto, Japan              |
| 8:00   | **Keynote Lecture:** Unraveling the complexity of cutaneous dendritic cells  
|        | Mark Udey, Bethesda, MD                     |
| 9:00   | Break                                      |

**Oral presentations: Mechanisms of immunoregulation and tolerance induction**

<table>
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<tr>
<th>Time</th>
<th>Presentation</th>
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</table>
| 9:20   | 1 Multicistronic vector based introduction of T-cell receptor alpha and beta chains and Foxp3 or TGF-beta generates human transgenic allergen-specific T-regulatory cells  
|        | Victoria Leb-Reichl (Vienna, Austria), Klaus Schmetterer, Alina Neunkirchner, Daniela Haiderer, Hans Kueng, Peter Steinberger, Barbara Bohle, Winfried F. Pickl |
| 9:40   | 2 Induction of CD4 CD8$^-$ double-negative T cells, acting as suppressor cells in IgE immune responses, is antigen dose-dependent  
|        | Verena Raker (Mainz, Germany), Christina Barwig, Evelyn Montermann, Stephan Grabbe, Angelika B. Reske-Kunz, Stephan Sudowe |
| 10:00  | 3 Probiotic therapeutic treatment counter-regulates established Th2 responses towards a Th1/Tregulatory profile in a mouse model of food allergen sensitization and anaphylaxis  
|        | Elsa Schiavi (Rome, Italy), Bianca Barletta, Cinzia Butteroni, Silvia Corinti, Monica Boirivant, Gabriella Di Felice |
| 10:20  | 4 A role for T cell independent interleukin-10 in allergen specific immunotherapy  
|        | Stefanie Kunz (Freiburg, Germany), Mayte Bewersdorff, Sangeetha Surianarayanan, Francesca Alessandri, Heidrun Behrendt, Martin Mempel, Christopher Karp, Axel Roers, and Thilo Jakob |
| 10:40  | 5 Identification and Characterization of Human Regulatory B cells  
|        | Willem van de Veen (Utrecht, Netherlands), Barbara Stanic, Görkem Yaman, Beate Rückert, Deniz Akdis, Cezmi Akdis and Mübeccel Akdis |
| 11:00  | Break                                      |
Friday, February 12th

16:30 – 20:00  Session III:

Chairpersons:  Clive Grattan, Norwich, UK
               Mark Udey, Bethesda, MD

16:30 – 17:50  Keynote Lectures:

The role of innate immunity in contact hypersensitivity
Stefan Martin, Freiburg, Germany

The role of adaptive immunity in contact hypersensitivity
Jean-Francois Nicolas, Lyon, France

17:50 – 18:10  Break

Oral presentations: Mechanisms of allergic contact dermatitis

18:10 – 18:30  6  Role of dendritic cell homing upon sensitisation
               Sabine Wolf (London, UK) & James Pease

18:30 – 18:50  7  Active transport of contact allergens in human epidermal keratinocytes and human monocytes derived
dendritic cells is mediated by multidrug resistance related proteins
               Claudia Skazik (Aachen, Germany), Hagen Ott, Ruth Heise, Yvonne Marquardt, Hans F. Merk,
               Jens Malte Baront

18:50 – 19:10  8  A role for endogenous danger signals in contact allergen-induced skin inflammation
               Philipp R. Esser (Freiburg, Germany), Ute Wölfe, Thilo Jakob, Christoph M. Schempp,
               and Stefan F. Martin

19:10 – 19:30  9  The role of CD4+ and CD8+ T cells in contact hypersensitivity responses
               Nanna Fyhrquist (Helsinki, Finland), Henrik Wolff, Antti Lauerma, Harri Alenius

19:30 – 19:50 10  IL-17 amplifies skin immune responses by licensing Th1 to kill autologous keratinocytes in an
                ICAM-1-dependent, antigen non-specific manner
                Davide Pennino (London, UK), Kilian Eyerich, Claudia Scarponi, Teresa Carbone, Stefanie Eyenich,
                Francesca Nasoni, Simone Garrovich, Claudia Traidl-Hoffmann, Cristina Albanesi, Andrea Cavani

20:00 – 21:00  Dinner

21:00 – 23:00  Session IV: Poster Discussion 11- 33

Chairpersons:  Claudia Traidl-Hoffmann, Munich, Germany
               Philippe Stock, Berlin, Germany
               Jean-Francois Nicolas, Lyon, France
               Antti Lauerma, Helsinki, Finland

Allergens, allergen carrier and immunotherapy

11  Cross-reactivity between profilins: Characterization of IgE epitopes of Cuc m 2, the major melon allergen
    Leticia Tordesillas (Madrid, Spain), Luis F. Pacios, Arantxa Palacin, Javier Cuesta-Herranz,
    M Madero and Araceli Diaz-Perales

12  Recombinant tropomyosin from Pandalus borealis – as model allergen for a novel vaccine
    against food allergy
    Heidi Myrset (Oslo, Norway), Maaike Dooper, Keith Thompson, and Eliann Egaas

13  Susceptibility to lysosomal degradation as marker for the immunogenicity of Bet v 1 isoforms
    Claudia Asam (Salzburg, Austria), Alexander Jürets, Matthias Egger, Sosja Mutschlechner,
    Barbara Bohle, Peter Briza, Fátima Ferreira, Michael Wallner

14  Differential effects of roasting and saliva treatment on IgE binding to peanut allergens in peanut
    allergic patients
    Maarten Pennings (Utrecht, Netherlands), Els van Hoffen, Andre Penninks, Geert Houben,
    Andre Knuijs
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<td>15</td>
<td>Mapping the interactions of human IgE with a novel fold: structure and dynamics of Art v 1, the major mugwort pollen allergen</td>
<td>Gabriele Gadermaier (Salzburg, Austria), Guilherme Razzera, Matthias Egger, Marcia S. Almeida, Beatrice Jahn-Schmid, Fabio C. L. Almeida, Ana Paula Valente, Ana Paula Valente</td>
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<td>16</td>
<td>Pollen exposure-induced oxidative stress triggers phenotypic and functional changes of human monocyte-derived dendritic cell</td>
<td>Aniko Csillag (Debrecen, Hungary), Istvan Boldogh, Kitti Pazmandi, Zoltan Magyarics, Peter Gogolak, Sanjiv Sur, Eva Rajnavolgyi, and Attila Bacci</td>
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<td>Pollen-derived adenosine modulates dendritic cell function resulting in inhibition of Th1 responses</td>
<td>Stefanie Gilles (Munich, Germany), Agnes Fekete, Xin Zhang, Cornelia Blume, Heidrun Behrendt, Philippe Schmitt-Kopplin, Claudia Traidl-Hoffmann</td>
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<td><strong>Immunotherapy</strong></td>
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<td>18</td>
<td>Searching adjuvants for transcutaneous allergen-specific immunotherapy</td>
<td>Seraina von Moos (Zurich, Switzerland), Ying Waechterle-Men, Pal Johansen, Gabriela Senti, Thomas Kündig</td>
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<td>19</td>
<td>Immune regulation by intralymphatic immunotherapy with modular allergen-translocation MAT vaccines</td>
<td>Anna Zaleska (Davos, Switzerland), Ozge Soyer, Stefan Söllner, Gabriela Senti, Thomas M. Kündig, Cezmi Akdis, Reto Cramer, Műbecsel Akdis</td>
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<td>20</td>
<td>Novel allergen specific DNA vaccine for the modulation of the IgG response in allergy</td>
<td>Maaike Dooper (Oslo, Norway), Heidi Myrset, Keith Thompson, and Eliann Egaas</td>
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<td>21</td>
<td>Effects of immunotherapy with birch pollen on food-allergen specific antibodies</td>
<td>Brinda Subbarayal (Vienna, Austria), Christof Ebner, Norbert Reider, Barbara Bohle</td>
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<td>Activation of the non-canonical NF-κB pathway by CTLA4-Ig potentiates the beneficial effects of specific immunotherapy in a mouse model of allergic asthma</td>
<td>Hadi Maazi (Groningen, Netherlands), Soheila Shirinbak, Yousef Taher, Martijn Nawijn, Antoon van Oosterhout</td>
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<td><strong>Regulation</strong></td>
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<td>Food allergen-specific IgG4 antibodies do not mediate natural tolerance to birch pollen-related foods</td>
<td>Marija Geroldinger-Simić (Vienna, Austria), Thomas Zelinski, Birgit Nagl, Werner Abarer, Christof Ebner, Cornelia Egger, Antonia Greiderer, Nicole Prem, Jonas Lüthi, Michaela Gubesch, Stefan Vieths, and Barbara Bohle</td>
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<td>Increased regulatory T cell differentiation in PARP-1 KO deficiency</td>
<td>Federica Laudisi (Rome, Italy), Manolo Sambucci, Francesca Nasta, and Claudio Pioli</td>
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<td>25</td>
<td>A functional, regulatory role of intestinal γδ T cells during establishment of allergenic sensitization</td>
<td>Marianne Bol-Schoenmakers, Marisa Marcondes Rezende, Rob Bleumink, Ine Hassing, Daniëlle Fiechter, Sue Man, Louis Boon, Raymond Pieters, Joost Smit (Utrecht, Netherlands)</td>
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<td>Sodiumhypochlorite is not capable of breaking inhalation tolerance or aggravating pre-existing allergic airway inflammation in mice</td>
<td>Valérie Hox, Jeroen Vanmoerbeek, Ina Callebaut, Sonia Bobic (Leuven, Belgium), Vanessa De Vooght, Adriana Vermeer, Jan Ceuppens, Benoit Nemery, Peter Hellings</td>
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<td>CD27 is dispensable for tolerance induction and the generation of an asthma-like phenotype in a murine model</td>
<td>Ann-Kathrin Behrendt (Hannover, Germany), Gesine Hansen</td>
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<td>Induction of allergen-specific immunotolerance by the use of heat-killed-Listeria monocytogenes and flagellin as adjuvants</td>
<td>Hendrik Wiesner (Berlin, Germany), Stefan Schülke, Stephan Scheurer, Viola Kohlrautz, Eckard Hamelmann, Ulrich Wahn, Philippe Stock</td>
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<td>29</td>
<td>Regulatory T cells and the cellular source of IL-10 in Low Zone Tolerance</td>
<td>Nikolai Pfender (Freiburg, Germany), Stefanie Kunz, Tim Sparwasser, Christopher Karp, Kerstin Steinbrink, Stefan F. Martin and Thilo Jakob</td>
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<td>The serine protease TmT1 from the midgut of the yellow mealworm acts like C5-convertase in murine bronchoalveolar lavage fluids</td>
<td>Matthias Stiehm (Bochum, Germany), Stephanie Neuhaus, Otto Holst, Imke Steffen, Albrecht Bufl, Marcus Peters</td>
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Friday, February 12th

31 Inhibition of food allergy through the aryl hydrocarbon receptor
V. J. Schulz (Utrecht, Netherlands), J.J. Smit, I. Hassing, D. Fiechter, R. Bleumink, S. Safe, M.B.M van Duursen, M. van den Berg, R.H.H. Pieters

32 Perinatal intervention with probiotic strain Lactobacillus paracasei modulates maternal and neonatal immune responses
Irma Schabussova (Vienna, Austria), Karin Hufnagl, Elisabeth Hofflechner, Angelika Wagner, Adrian Zuercher, Annick Mercenier and Ursula Wiedermann

33 Precolonization with Lactobacillus casei/paracasei ameliorates allergic sensitization in mouse model of birch pollen allergy
Martin Schwarzer (Nový Hrádek, Czech Republic), Dagmar Douskova, Tomas Hrnčír, Bozena Cukrowska, Hana Kozakova

Saturday, February 13th

8:00 – 11.00 h Session V

Chairpersons: Carsten Schmidt-Weber, London, UK
Michel Gilliet, Houston, TX

08:00 – 9:00 Keynote Lecture:
Role of antimicrobial peptides in immune sensing of self-nucleic acids
Michel Gilliet, Houston, TX

9:00 – 9:20 Break

Oral presentations: Mechanisms of allergic inflammation I

9:20 – 9:40 34 Immunoglobulin free light chains in IgE and non-IgE mediated allergy
Tom Groot Kormelink (Utrecht, Netherlands), Matthias F Kramer, Desmond G Powe and Frank A Redegeld

9:40 – 10:00 35 High levels of naturally occurring IgG antibodies inhibit IgE-facilitated antigen-presentation in adults with cow’s milk allergy
Laura Meulenbroek (Utrecht, Netherlands), Bert Ruiter, Joost van Neerven, Willem van de Veen, Johan Garssen, Carla Bruijnzeel-Koomen, Edward Knol, André Knulst, Els van Hoffen

10:00 – 10:20 36 Polysaturated fatty acids alter the phenotype of human mast cells in vitro
Lieke van den Elsen (Utrecht, Netherlands), Bastiaan Schouten, Martin Balvers, Frank Redegeld, Aletta Kraneveld, Edward Knol, Johan Garssen, and Linette Willemsen

10:20 – 10:40 37 Impact of PGE2 receptor 2 (EP2) modulation in HDM-induced mast cell activity and airway pathology in mice
Mariona Serra-Pagés (Barcelona, Spain), Rosa Torres, Aida Herreñas, César Picado, Fernando de Mora

10:40 – 11:00 38 Th2 cells in respiratory disease
Pascal Venn (London, UK), Davide Peninno, Stefanie Eyerich, Carsten Schmidt-Weber

11:00 – 16:30 Break
16:30 – 19:30 Session VI

Chairpersons:  
Peter Schmidt-Grendelmeier, Zurich, Switzerland  
Thomas Bieber, Bonn, Germany

16:30 – 17:30  
**Keynote Lecture:**  
Atopic dermatitis: Novel concepts of an old disease  
*Thomas Bieber, Bonn, Germany*

17:30 – 17:50  
**Break**

**Oral presentations: Mechanisms of allergic inflammation II**

17:50 – 18:10  
39 Caveolar traffic through nasal epithelium of birch pollen allergen Bet v 1 in allergic patients  
Sanna Toppila-Salmi (Tampere, Finland), Mikko Lehtonen, Paula Salmi, Satu Lehti,  
Jamo Mäkinen, Raija Sormunen, Timo Paavonen, Risto Renkonen

18:10 – 18:30  
40 IgE sensitization to *Ascaris lumbricoides* tropomyosin: a link between parasitic infection and allergic diseases  
Nathalie Acevedo (Salzburg, Austria), Anja Erler, Peter Briza, Franca Puccio,  
Fátilma Ferreira and Luis Caraballo

18:30 – 18:50  
41 Human T cell receptor degeneracy promotes Th2 cytokine production at sites of low antigen concentration  
Hsien Chan (Oxford, UK), Catherine Lee, Aamir Aslam, Emmanuel Favry, Laura Crack,  
Tess McPherson, Bernard Maillefer, Graham Ogg

18:50 – 19:10  
42 Th22 cells represent a distinct human T lymphocyte subset of tissue-signaling leukocytes  
Stefanie Eyrisch (Munich, Germany), Kilian Eyrisch, Davide Pennino, Teresa Carbone,  
Francesca Nasorri, Francesca Cianfarani, Claudia Traid-Hoffmann, Heidrun Behrendt,  
Stephen R. Durham, Carsten B. Schmidt-Weber, Andrea Cavani

19:10 – 19:30  
43 What's new in "Allergy" the European Journal of Allergy and Clinical Immunology.  
*Thomas Bieber (Bonn, Germany)*

20:00 – 21:00  
**Dinner**

21:00 – 23:00 Session VII: Poster Discussion 43 - 64

Chairpersons:  
Stefan Martin, Freiburg, Germany  
Marta Ferrer, Pamplona, Spain  
Magdalena Czarnetzka-Operacz, Poznan, Poland  
Gunnar Nilson, Stockholm, Sweden

**T cell subsets and dendritic cells**

44 Allergen-specific IL-17’IL-4’CD4’ T cells circulate in patients with Type I allergy  
Sonja Mutschlechner (Vienna, Austria), Victoria Leb, Birgit Nagl, Winfried Pickl, and Barbara Bohle

45 Human plasmacytoid dendritic cells support Th17 cell effector function in response to TLR7-ligation  
Chun-Feng Yu (Bonn, Germany), Wen-Ming Peng, Johannes Oldenburg, Jochen Hoch,  
Thomas Bieber, Andreas Limmer, Gunther Hartmann, Winfried Barchet, Anna Maria Eis-Hübinger,  
Natalija Novak

**Mast cells and basophils**

46 Toll Like Receptor (TLR) mediated augmentation of IgE-dependent mast cell activation  
Rohit Saluja (Stockholm, Sweden), Ingrid Delin, Mikael Adner and Gunnar Nilsson

47 Bacterial antigens and cytokines influence Toll-like receptor (TLR4) expression on mast cells  
Dorota Talacz (Lodz, Poland), Ewa Brzezinska-Blaszczzyk and Maciej Wierzbicki

48 Interleukin (IL)-10 inhibits mast cell cysteinyl leukotriene synthesis and release  
Maciej Wierzbicki (Lodz, Poland), Ewa Brzezinska-Blaszczzyk and Anna Pietrzak
49  Metalloproteinase-9 release from monocytes induced by tumor necrosis factor alpha from immunoglobulin-E mediated activation of basophils is inhibited by Remicade
Sidsel Johnsmark (Odense, Denmark), Anders Woelmann, Lars K. Poulsen, Carsten Bindtstev-Jensen, Per Staal Skov

50  A new Approach for Allergy Control: Inhibition of mast cells activation by FcεRI-α siRNA
Safaralizadeh Reza (Teheran, Iran), Soheili Zahra-Soheila, Moin Mostafa, Deezagi Abdolkhaleg, Pourpak Zahra, Samiei Shahram

Lung, asthma and COPD

51  Expansion of a unique, lung specific, auto-reactive T helper cell population in COPD
Konrad Hoetzenecker (Vienna, Austria), Stefan Hacker, Michael Lichtenerauer, Lucian Beer, Moritz Rauch, Andreas Mitterbauer, Walter Klepetko, and Hendrik J Ankersmit

52  Regulation of tight junctions in human airway epithelium by T regulatory cells and their cytokines
Maciej Chalubinski (Davos, Switzerland), Marcin Wawrzyniak, Hiroki Fujita, Norbert Meyer, Beate Ruckert, Liam O’Mahony, Mübcecel Akdis, Cezmi A. Akdis

53  (Endo-)Cannabinoids in a murine model of allergen-induced airway inflammation
Andrea Braun (Munich, Germany), Tabea Engel, Andreas Zimmer, Thilo Jakob, Heidrun Behrendt, Martin Mempel

54  Cytosolic phospholipase A_2 group IVA is regulated by the promoter microsatellites and overexpressed in patients with severe asthma
Milena Sokolowska (Lodz, Poland), Joanna Stefanksa, Karolina Wodz-Naskiewicz, Małgorzata Cieślak, Rafał Pawliczak

55  Association between gene polymorphism of glutathione-S-transferase and angiotensin-converting enzyme and childhood bronchial asthma
Eva Babusíkova (Martin, Slovak Republic), Milos Jesenak, Peter Banovcin, and Dusan Dobrota

56  Allergic airway inflammation induces structural and functional alterations of surfactant protein-D
C. Winkler (Hannover, Germany), E.N. Atochina-Vasserman, F. Schaumann, N. Krug, A.J. Gow, M.F. Beers, and J.M. Hohlfeld

57  The role of Interleukin 31 in Allergic Airway Disease
Bryony Stott (London, UK)

58  Differential susceptibility to Fas-, MHC I- and MHC II-induced apoptosis of peripheral blood mononuclear cells in patients with atopic bronchial asthma
Tatyana Mamontova (Poltava, Ukraine), Igor Kaidashev

Atopic dermatitis, eczema, et al.

59  Lipophilic yeasts Malassezia spp. in pathogenesis of atopic dermatitis
Elena Korovkina (Moscow, Russia), Marina Mokronosova, Anna Glushakova, Elena Smolnikova

60  The proportion of IL-31 positive T-cells is strongly increased in skin lesions of patients with chronic atopic dermatitis
Kristina Spegel (Amsterdam, Netherlands), Sanja Kezic, Nico L.H. Yau, Jan D. Bos, Rosalie M. Luiten, Pieter C. Res and Maritza A. Middelkamp-Hup

61  Endogenous IL-32 modulates keratinocyte-apoptosis and contributes to the pathophysiology of atopic dermatitis
Norbert Meyer (Davos, Switzerland), Maya Zimmermann, Simone Bürgler, Claudio Bassin, Stefan Woehrl, Katharina Moritz, Claudio Rhymer, Philippe Indermitte, Peter Schmid-Grendelmeier, Mübcecel Akdis, Günter Menz, Cezmi A. Akdis

62  Unraveling the role of Wiskott-Aldrich Syndrome protein in development of eczema
Marisa Baptista (Stockholm, Sweden), Agne Liedén, Annika Scheijmys, Lisa Westerberg

63  Diagnostic use of IL-6 release by mononuclear cells for the diagnosis of adverse drug reactions (ADR)
J Mathias Baló-Banga (Budapest, Hungary), Katalin Schweitzer, Jozsef Fürész, Klara Rásky

64  The complement system in Familial Mediterranean fever with and without dermatological signs
Lili Hovhannisyan (Yerevan, Armenia), Anna Boyajyan, Mariam Sargsyan, Eduard Nazaretyan, Gohar Mkrtchyan

65  Dimeric IVIG contains natural anti-Siglec-9 autoantibodies and their anti-idiotypes
Alexander Schaub, Stephan von Gunten, Bern, Switzerland, Monique Vogel, Sandra Wymann, Monika Rüegsegger, Beda M. Studler, Martin Spycher, Hans-Uwe Simon, and Sylvia Miescher
## Sunday, February 14th

### 8:00 – 11:00 Session VIII

**Chairpersons:**
Edward Knol, Utrecht, Netherlands
Caroline Sokol, Boston MA

**8:00 – 9:00**

**Keynote Lecture:**
The role of basophils in allergic immune responses
**Caroline Sokol, Boston, MA**

**9:00 – 9:20**

Break

### Oral presentations: Novel approaches in immunotherapy

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<td>9:20 – 9:40</td>
<td>66 Recombinant TLR5-ligand flagellin:Ova fusion protein enhances IL-10 secretion from mDC and represses Th1/Th2 immune response <em>in vitro</em></td>
<td>Stefan Schülke (Langen, Germany), Andrea Wangorsch, Zoe Waiblinger, Ulrich Kalinke, Masako Toda, Stefan Viehns, Stephan Scheurer</td>
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<td>9:40 – 10:00</td>
<td>67 Evaluation of different particulate antigen-delivery systems and administration routes for improved allergen-specific immunotherapy</td>
<td>Deepa Mohanan (Zurich, Switzerland), Yvonne Perrie, Wim Jiskoot, Thomas M Kündig, Bruno Gander, Pål Johansen</td>
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<td>10:00 – 10:20</td>
<td>68 CTB as candidate regulatory adjuvant for allergen immunotherapy</td>
<td>Ghaith Bakdash (Amsterdam, Netherlands), Hermelijn Smits, Darya Sibiryak, Toni van Capel, Hanneke van der Kleij, Dirk-Jan Opstelten, Esther de Jong, Martien Kapsenberg</td>
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<tr>
<td>10:20 – 10:40</td>
<td>69 Mucosal conditioning of dendritic cells by Cholera toxin B drives dominant IgA producing B cells, via Retinoic Acid and Nitric Oxide</td>
<td>Gloudemans Anouk (Rotterdam, Netherlands), Plantinga Maud, Willart Monique, Lievers Ellen, Massacand Joanna, Harris Nicola, Hendriks Rudi, Hoogsteden Henk, Hamid Hamida, Yazdanbakhsh Maria, Lambrecht Bart, Smits Hermelijn</td>
</tr>
<tr>
<td>10:40 – 11:00</td>
<td>70 Covalent coupling of vitamin D3 to rFel d 1 improves the effects of immunotherapy in a mouse model of cat allergy</td>
<td>Jeanette Grundström (Stockholm, Sweden), Theresa Neimert-Andersson, Ola Nilsson, Tiu Saarne, Mats Andersson, Marianne van Hage and Guro Gafvelin</td>
</tr>
</tbody>
</table>

**11:00 – 11:30**

Wrap up and Fare well

**11:30 – 13:00**

Lunch