

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

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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 Czarnetzka-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

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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 Eibsee Hotel in Grainau, right at the base of Germany’s highest mountain, the Zugspitze.

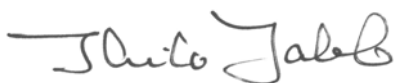
The EAACI-GA²LEN Immunology Winter School has often been organized together with other Section or Interest Groups of the Academy and each time this collaboration has given the Winter School a particular flavor. This time it is a joint effort together with the EAACI Dermatology Section and consequently 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

18.00 Opening and Welcome reception

19.00 – 20:00 Session I:

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

8:00 – 11:00 Session II:

Chairpersons: Thilo Jakob, Freiburg, Germany
Shimon Sakaguchi, Kyoto, Japan

8:00 – 9:00 **Keynote Lecture:**
Unraveling the complexity of cutaneous dendritic cells
Mark Udey, Bethesda, MD

9:00 – 9:20 Break

Oral presentations: Mechanisms of immunoregulation and tolerance induction

- 9:20 – 9:40 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-Reich² (Vienna, Austria), Klaus Schmetterer, Alina Neunkirchner², Daniela Haiderer, Hans Kueng, Peter Steinberger, Barbara Bohle, Winfried F. Pickl²
- 9:40 – 10:00 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 – 10:20 3 Probiotic therapeutic treatment counter-regulates established Th2 responses towards a Th1/Tregulatory profile in a mouse model of food allergen sensitization and anaphylaxis
Elisa Schiavi (Rome, Italy), Bianca Barletta, Cinzia Butteroni, Silvia Corinti, Monica Boirivant, Gabriella Di Felice
- 10:20 – 10:40 4 A role for T cell independent interleukin-10 in allergen specific immunotherapy
Stefanie Kunz (Freiburg, Germany), Mayte Bewersdorff, Sangeetha Surianarayanan, Francesca Alessandrini, Heidrun Behrendt, Martin Mempel, Christopher Karp, Axel Roers, and Thilo Jakob
- 10:40 – 11:00 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 – 16:30 Break

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 Wölffe, 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
Daive Pennino (London, UK), Kilian Eyerich, Claudia Scarponi, Teresa Carbone, Stefanie Eyerich, Francesca Nasorri, Simone Garcovich, 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 Palacín, 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), Maaikje 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, Sonja 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 Knuls

- 15 Mapping the interactions of human IgE with a novel fold: structure and dynamics of Art v 1, the major mugwort pollen allergen
Gabriele Gadermaier (Salzburg, Austria), Guilherme Razzera, Matthias Egger, Marcius S. Almeida, Beatrice Jahn-Schmid, Fabio C. L. Almeida, Ana Paula Valente, Fatima Ferreira
- 16 Pollen exposure-induced oxidative stress triggers phenotypic and functional changes of human monocyte-derived dendritic cell
Aniko Csillag (Debrecen, Hungary), Istvan Boldogh, Kitti Pazmandi, Zoltan Magyarics, Peter Gogolak, Sanjiv Sur, Eva Rajnavolgyi, and Attila Bacsí
- 17 Pollen-derived adenosine modulates dendritic cell function resulting in inhibition of Th1 responses
Stefanie Gilles (Munich, Germany), Agnes Fekete, Xin Zhang, Cornelia Blume, Heidrun Behrendt, Philippe Schmitt-Kopplin, Claudia Traidl-Hoffmann

Immunotherapy

- 18 Searching adjuvants for transcutaneous allergen-specific immunotherapy
Seraina von Moos (Zurich, Switzerland), Ying Waeckerle-Men, Pal Johansen, Gabriela Senti, Thomas Kündig
- 19 Immune regulation by intralymphatic immunotherapy with modular allergen-translocation MAT vaccines
Anna Zaleska (Davos, Switzerland), Ozge Soyer, Stefan Söllner, Gabriela Senti, Thomas M. Kündig, Cezmi Akdis, Reto Cramer, Mübeccel Akdis
- 20 Novel allergen specific DNA vaccine for the modulation of the IgG response in allergy
Maaïke Dooper (Oslo, Norway), Heidi Myrset, Keith Thompson, and Eliann Egaas
- 21 Effects of immunotherapy with birch pollen on food-allergen specific antibodies
Brinda Subbarayal (Vienna, Austria), Christof Ebner, Norbert Reider, Barbara Bohle
- 22 Activation of the non-canonical NF- κ B pathway by CTLA4-Ig potentiates the beneficial effects of specific immunotherapy in a mouse model of allergic asthma
Hadi Maazi (Groningen, Netherlands), Soheila Shirinbak, Yousef Taher, Martijn Nawijn, Antoon van Oosterhout

Regulation

- 23 Food allergen-specific IgG4 antibodies do not mediate natural tolerance to birch pollen-related foods
Marija Geroldinger-Simić (Vienna, Austria), Thomas Zelniker, Birgit Nagl, Werner Aberer, Christof Ebner, Cornelia Egger, Antonia Greiderer, Nicole Prem, Jonas Lidholm, Michaela Gubesch, Stefan Vieths, and Barbara Bohle
- 24 Increased regulatory T cell differentiation in PARP-1 KO deficiency
Federica Laudisi (Rome, Italy), Manolo Sambucci, Francesca Nasta, and Claudio Pioli
- 25 A functional, regulatory role of intestinal $\gamma\delta$ T cells during establishment of allergic sensitization
Marianne Bol-Schoenmakers, Marisa Marcondes Rezende, Rob Bleumink, Ine Hassing, Daniëlle Fiechter, Sue Man, Louis Boon, Raymond Pieters, Joost Smit (Utrecht, Netherlands)
- 26 Sodiumhypochlorite is not capable of breaking inhalation tolerance or aggravating pre-existing allergic airway inflammation in mice
Valérie Hox, Jeroen Vanoirbeek, Ina Callebaut, Sonja Bobic (Leuven, Belgium), Vanessa De Vooght, Adriana Vermeer, Jan Ceuppens, Benoit Nemery, Peter Hellings
- 27 CD27 is dispensable for tolerance induction and the generation of an asthma-like phenotype in a murine model
Ann-Kathrin Behrendt (Hannover, Germany), Gesine Hansen
- 28 Induction of allergen-specific immunotolerance by the use of heat-killed-*Listeria monocytogenes* and flagellin as adjuvants
Hendrik Wiesner (Berlin, Germany), Stefan Schülke, Stephan Scheurer, Viola Kohlrantz, Eckard Hamelmann, Ulrich Wahn, Philippe Stock
- 29 Regulatory T cells and the cellular source of IL-10 in Low Zone Tolerance
Nikolai Pfender (Freiburg, Germany), Stefanie Kunz, Tim Sparwasser, Christopher Karp, Kerstin Steinbrink, Stefan F. Martin and Thilo Jakob
- 30 The serine protease TmT1 from the midgut of the yellow mealworm acts like C5-convertase in murine bronchoalveolar lavage fluids
Matthias Stiehm (Bochum, Germany), Stephanie Neuhaus, Otto Holst, Imke Steffen, Albrecht Bufe, Marcus Peters

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 Hoflehner, 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 Hrnčir, 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 Meulenbroek² (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 Polyunsaturated 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-Pagès (Barcelona, Spain), Rosa Torres, Aida Herrerías, César Picado, Fernando de Mora

10:40 – 11:00

- 38 Th₂₂ cells in respiratory disease
Pascal Venn (London, UK), Davide Peninno, Stefanie Eyerich, Carsten Schmidt-Weber

11:00 – 16:30

Break

Saturday, February 13th

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, Jarno 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, Fátima 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 Maillere, Graham Ogg
- 18:50 – 19:10 42 Th22 cells represent a distinct human T lymphocyte subset of tissue-signaling leukocytes
Stefanie Eyerich (Munich, Germany), Kilian Eyerich, Davide Pennino, Teresa Carbone, Francesca Nasorri, Francesca Cianfarani, Claudia Traidl-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 (TLR)4 expression on mast cells
Dorota Tułacz (Lodz, Poland), Ewa Brzezińska-Błaszczyk and Maciej Wierzbicki
- 48 Interleukin (IL)-10 inhibits mast cell cysteinyl leukotriene synthesis and release
Maciej Wierzbicki (Lodz, Poland), Ewa Brzezińska-Błaszczyk 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 Woetmann, Lars K. Poulsen, Carsten Bindsvlev-Jensen, Per Stahl 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 Lichtenauer, 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, Hiroyuki Fujita, Norbert Meyer, Beate Ruckert, Liam O'Mahony, Mubeccel 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 A₂ group IVA is regulated by the promoter microsatellites and overexpressed in patients with severe asthma
Milena Sokolowska (Lodz, Poland), Joanna Stefanska, Karolina Wodz-Naskiewicz, Malgorzata Cieslak, Rafal Pawliczak
- 55 Association between gene polymorphism of glutathione-S-transferase and angiotensin-converting enzyme and childhood bronchial asthma
Eva Babusikova (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
Krisztina Szegei (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 Rhyner, Philippe Indermitte, Peter Schmid-Grendelmeier, Mubeccel 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 Scheynius, Lisa Westerberg
- 63 Diagnostic use of IL-6 release by mononuclear cells for the diagnosis of adverse drug reactions (ADR)
J.Mathias Baló-Banqa (Budapest, Hungary), Katalin Schweitzer, József Fűrész, Klára Rásky
- 64 The complement system in Familial Mediterranean fever with and without dermatological signs
Lilit 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,^{1,3,*} Stephan von Gunten,^{2,*} (Bern, Switzerland) Monique Vogel,¹ Sandra Wymann,¹ Monika Rügsegger,³ Beda M. Stadler,¹ Martin Spycher,³ Hans-Uwe Simon,² and Sylvia Miescher,^{1,3}

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

9:20 – 9:40

- 66** Recombinant TLR5-ligand flagellin:Ova fusion protein enhances IL-10 secretion from mDC and represses Th1/Th2 immune response *in vitro*
Stefan Schülke (Langen, Germany), Andrea Wangorsch, Zoe Waibler, Ulrich Kalinke, Masako Toda, Stefan Vieths, Stephan Scheurer

9:40 – 10:00

- 67** Evaluation of different particulate antigen-delivery systems and administration routes for improved allergen-specific immunotherapy
Deepa Mohanan (Zurich, Switzerland), Yvonne Perrie, Wim Jiskoot, Thomas M Kündig, Bruno Gander, Pål Johansen

10:00 – 10:20

- 68** CTB as candidate regulatory adjuvant for allergen immunotherapy
Ghaith Bakdash (Amsterdam, Netherlands), Hermelijn Smits, Darya Sibiryak, Toni van Capel, Hanneke van der Kleij, Dirk-Jan Opstelten, Esther de Jong, Martien Kapsenberg

10:20 – 10:40

- 69** Mucosal conditioning of dendritic cells by Cholera toxin B drives dominant IgA producing B cells, via Retinoic Acid and Nitric Oxide
Gloudemans Anouk (Rotterdam, Netherlands), Plantinga Maud, Willart Monique, Lievers Ellen, Massacand Joanna, Harris Nicola, Hendriks Rudi, Hoogsteden Henk, Hammad Hamida, Yazdanbakhsh Maria, Lambrecht Bart, Smits Hermelijn

10:40 – 11:00

- 70** Covalent coupling of vitamin D3 to rFel d 1 improves the effects of immunotherapy in a mouse model of cat allergy
Jeanette Grundström (Stockholm, Sweden), Theresa Neimert-Andersson, Ola Nilsson, Tiiu Saarne, Mats Andersson, Marianne van Hage and Guro Gafvelin

11:00 – 11:30

Wrap up and Fare well

11:30 – 13:00

Lunch