



Join Keystone Symposia
for the 2016 conference on:

B Cells at the Intersection of Innate and Adaptive Immunity

May 29–June 2, 2016

Clarion Hotel Sign | Stockholm | Sweden

Scientific Organizers:

Mikael C. I. Karlsson, Claudia Mauri, Eric Meffre and Andrea Cerutti

In the last few years, the role of B cells in the innate immune response and effector functions beyond antibody production has started to be appreciated. This meeting puts emphasis on newly discovered roles of B cells and discusses novel concepts in B cell biology that will open new venues to design B cell-directed treatments. It will thus highlight the function of B cells as general responders and regulators of inflammation and contrast this to their function and latest discoveries of their role as antibody producers.

Session Topics:

- Creating and Maintaining the B Cell Repertoire
- Innate B Cell Activation
- B Cell Subset
- B Cell Tolerance
- Mucosal B Cell Responses
- Antibody Effector Functions and Antigen Recognition by the BCR
- B Cells as Regulators of the Immune Response
- Targeting B Cells for Treatment



Submitting an abstract is a great way of participating in the conference through poster presentation and possible selection for a short talk.

Scholarship & Discounted Abstract Deadline: Jan 28, 2016

Abstract Deadline: Feb 29, 2016

Discounted Registration Deadline: Mar 29, 2016

For additional details, visit www.keystonesymposia.org/16E3.

KEYSTONE SYMPOSIA™
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SUNDAY, MAY 29

Arrival and Registration

MONDAY, MAY 30

Welcoming Remarks and Keynote Address

***Michel C. Nussenzweig**, HHMI/Rockefeller University, USA

Klaus Rajewsky, Max Delbrück Center for Molecular Medicine, Germany

Struggle for Life in the B Cell World

Creating and Maintaining the B Cell Repertoire

***Eric Meffre**, Yale University School of Medicine, USA

***Tomohiro Kurosaki**, WPI Immunology Frontier Research Center, Osaka University, Japan

Meinrad Busslinger, Research Institute of Molecular Pathology, Austria

Transcriptional Control of Late B Cell Development

Marcus R. Clark, University of Chicago, USA

BRWD1 Orchestrates Ig-kappa Recombination and Late B Cell Development

Deborah Dunn-Walters, University of Surrey, UK

The B Cell Repertoire and Immune Senescence

Trine A. Kristiansen, Lund University, Sweden

Short Talk: Cellular Barcoding Links B-1a B Cell Potential to a Reversible Fetal Hematopoietic Stem Cell State at the Clonal Level

Luka Mesin, Rockefeller University, USA

Short Talk: Visualizing Clonal Selection in Germinal Centers

Workshop 1

***Deborah Dunn-Walters**, University of Surrey, UK

***Michael P. Cancro**, University of Pennsylvania, USA

Kathrin Pieper, Institute for Research in Biomedicine, Switzerland

A New Mechanism of Immunoglobulin Diversification Generates Broadly Reactive Antibodies to Plasmodium Falciparum

Caroline Rönnberg, Karolinska Institutet Solna, Sweden

A Prospective Study of B Cell Dynamics in Patients with Malaria using Mass Cytometry

Amit Saxena, Karolinska Institutet, Sweden

Reactive Oxygen Species Control Autoreactive B Cell Tolerance in a Mouse Model of Rheumatoid Arthritis

S. Rameeza Allie, University of Alabama, Birmingham, USA

Identification of Germinal Center Dependent, Lung Resident Memory B Cells after Influenza infection

Kristine Oleinika, University College London, UK

Regulatory B Cells Control Inflammation through the Induction of Suppressive Invariant Natural Killer T Cells

Marta E. Alarcón Riquelme, GENYO. Center for Genomics and

Oncological Research, Spain

BANK1 Controls IgG Class Switching Through TLR7-Dependent STAT1 Activation

Peter P. Bönelt, Research Institute of Molecular Pathology, Austria

Autoimmunity Caused by Premature Blimp1 Expression during B Cell Development

Innate B Cell Activation

***Mikael C. I. Karlsson**, Karolinska Institutet, Sweden

***Gunilla B. Karlsson Hedestam**, Karolinska Institutet, Sweden

Andrea Cerutti, Mount Sinai School of Medicine, USA

Innate Signaling Networks in B Cell Activation

John F. Kearney, University of Alabama, Birmingham, USA

Effects of Neonatal Microbial Exposure on B Cell Development and Protection Against Allergic and Autoimmune Disease

Mikael C. I. Karlsson, Karolinska Institutet, Sweden

Short Talk: Neutrophils License NKT Cells to Regulate Self-Reactive B Cell Responses

Lieselotte S.M. Kreuk, University of California, Berkeley, USA

Short Talk: Characterizing the Ontogeny and Downstream

Immunological Significance of Anti-Commensal IgG with the Use of an IgG3 Reporter Mouse

Andrew Getahun, University of Colorado School of Medicine, USA

Short Talk: Continuous Inhibitory Signaling by Both SHP-1 and SHIP-1 Pathways is Required to Maintain Unresponsiveness of Autoreactive B Cells

Poster Session 1

TUESDAY, MAY 31

B Cell Subsets

***Thomas L. Rothstein**, Western Michigan University, USA

***Joan Yuan**, Lund University, Sweden

Marc K. Jenkins, University of Minnesota Medical School, USA

Tracking Protein Antigen-specific Memory B Cells

Nicole Baumgarth, University of California, Davis, USA

B-1 Cells and Immune Protection

Jean-Claude Weill, Institut Necker-Enfants Malades, INSERM

U1151, France

Mouse B Cell Memory Responses to External or Internal Challenges

Bart N. Lambrecht, VIB, Ghent University, Belgium

New Insights in Marginal Zone B Cell Development by Analysis of Taok3 Deficient Mice

Lars Nitschke, University of Erlangen, Germany

Short Talk: Siglec-G, an Inhibitory Receptor on B Cells

Workshop 2

***Lisa Westerberg**, Karolinska Institutet, Sweden

***Troy D. Randall**, University of Alabama at Birmingham, USA

Heike Schmitt, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Siglec-H Protects from (Herpes-) Virus Triggered Severe Systemic Autoimmunity

Edina Andrea Schweighoffer, Francis Crick Institute - Mill Hill

Laboratory, UK

BCR – TLR Crosstalk in the LPS Response of B Cells

Gabriel Kristian Pedersen, Statens Serum Institut, Denmark

TACI Expression is Impaired in the Absence of Functional IkkappaBNS

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Kai-Ting Chuang Shade, Massachusetts General Hospital, USA
A Single Glycan on IgE is Indispensable for Initiation of Anaphylaxis

Vera Greiner, Dana-Farber Cancer Institute, USA
Genome Editing of the Human B Cell Receptor with CRISPR/Cas9

Jourdan K. Posner, University of Hawaii, Manoa, USA
Pattern Recognition Receptor Ligands Drive the Differentiation and Activation of Human B Cell Subsets

Soren E. Degn, Harvard Medical School, USA
Autoreactive Germinal Center Dynamics and the Evolution of Autoreactive B Cells

B Cell Tolerance

***Ann Marshak-Rothstein**, University of Massachusetts Medical School, USA

***Frances E. Lund**, University of Alabama at Birmingham, USA

Eric Meffre, Yale University School of Medicine, USA
Resetting Early B Cell Tolerance Checkpoints Defective in Patients with Autoimmune Diseases

Christopher Sundling, Garvan Institute of Medical Research, Australia
Plasma Cell Differentiation from Conventional and Rogue GC B Cells

Michael P. Cancro, University of Pennsylvania, USA
Age Associated B Cells: T-bet Driven Effectors of Protective and Autoimmune Responses

David J. Rawlings, University of Washington, Seattle Children's Hospital Research Institute, USA
B Cell-Intrinsic Signals Critical for T Cell-Dependent vs. Independent Loss of Tolerance

Poster Session 2

WEDNESDAY, JUNE 1

Antibody Effector Functions and Antigen Recognition by the BCR

***Lill Martensson**, University of Gothenburg, Sweden

***Birgitta Heyman**, Uppsala University, Sweden

Michel C. Nussenzweig, HHMI/Rockefeller University, USA
The Germinal Center Reaction

Maureen McGargill, St Jude Children's Research Hospital, USA
Generation of Antibodies to Conserved Influenza A Epitopes

Tak W. Mak, Campbell Family Institute for Breast Cancer, Canada
The IgM Fc-Receptor

Jeffrey V. Ravetch, Rockefeller University, USA
Diversification of Antibody Effector Function

Michael Reth, Albert-Ludwigs University Freiburg, Germany
Molecular Requirements for the Sensing of Monovalent Antigens by the Oligomeric B cell Antigen Receptor

Workshop 3

***Lars Nitschke**, University of Erlangen, Germany

***Stephen Malin**, Karolinska Institute, Sweden

Feng Feng, Boston University, USA

An Autoreactive Memory-Derived Plasmablast Response Precedes the Immunogen-Specific Response in the Repeated Anthrax Vaccine in Humans

Hermann Eibel, University Medical Center Freiburg, Germany
Differential Signaling and Processing of BAFF-Receptor in B Cells

Tam Quách, NSLIJ The Feinstein Medical Research Institute, USA
Human B-1 And B-2 Cells Come From A Lin-CD34+CD38lo Progenitor Population

Selina Keppler, Francis Crick Institute, UK
WIP-ing B cells: CD19 as a Generic Hub for PI3K Signaling

Hedda Wardemann, German Cancer Research Center, Germany
Clonal Selection of Memory B Cells Upon Human Malaria Infection

Almudena R. Ramiro, Centro Nacional de Investigaciones Cardiovasculares, Spain
Non-Hodgkin Lymphoma Therapeutics by MicroRNA-28 Replacement

Patricia J. Gearhart, NIA, National Institutes of Health, USA
DNA Breaks in Variable Regions Are Predominantly Single Stranded and Generated by UNG and MSH6 Pathways

Mucosal B Cell Responses

***Andrea Cerutti**, Mount Sinai School of Medicine, USA

***Eduardo J. Villablanca**, Karolinska Institute, Sweden

Jeffrey J. Bunker, University of Chicago, USA
Specificity of IgA Responses

Sergei A. Nedospasov, Engelhardt Institute of Molecular Biology, Russia
ILC3, IgA, Cytokines and Beyond

Claudia Berek, Deutsches Rheuma Forschungszentrum, Germany
A Key Role of Eosinophils for the Normal Organization of the Gut Immune Compartment

Duane R. Wesemann, Harvard Medical School, USA
Short Talk: Microbes Regulate Primary Ig Repertoire Polyreactivity

Yang Yang, Stanford University School of Medicine, USA
Short Talk: Distinct Mechanisms Define Murine B Cell Lineage Immunoglobulin Heavy Chain (IgH) Repertoires

Poster Session 3

THURSDAY, JUNE 2

B Cells as Regulators of the Immune Response

***Paolo Casali**, University of Texas School of Medicine, USA

Frances E. Lund, University of Alabama at Birmingham, USA
Cytokine-Dependent Induction of Novel Human Plasma Cell Precursors in Autoimmune Mice and Humans

***Claudia Mauri**, University College London, UK
Generation of Systemic and Mucosal B Regulatory Cells

Michael C. Carroll, Boston Children's Hospital, Harvard Medical School, USA

Maintenance of Self-Reactive Memory B Cells by FDC

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Yi Hao, Huazhong University of Science & Technology, China
Short Talk: Persistent Germinal Centers and Circulating Antigen-Specific Antibodies Modulate B Cell Memory Responses

Kai Kisand, University of Tartu, Estonia
Short Talk: High-Affinity Disease-Ameliorating Autoantibodies in Patients with Defective Central T Cell Tolerance

Melissa Marie Walker, University of Colorado, USA
Short Talk: Cyclic-di-Nucleotides as STING-Dependent Adjuvants and B Cell Activators

Poster Session 4

Targeting B Cells for Treatment

***Kristina Lejon**, Umeå University, Sweden

***Elizabeth A. Leadbetter**, University of Texas Health Science Center, USA

Simone Cenci, Fondazione Centro San Raffaele, Italy
Autophagy in Plasma Cell Pathophysiology

Andrew C. Chan, Genentech, Inc., USA
B Cell Immunotherapy: 2016 and Beyond

Antonio Lanzavecchia, Institute for Research in Biomedicine, Switzerland
Broadly Neutralizing Antibodies and a New Mechanism of Diversification

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

FRIDAY, JUNE 3

Departure