

# FOCiS<sup>®</sup> 2014

JUNE 25-28, CHICAGO, ILLINOIS

Spotlight on Translational Immunology



Scientific Program

**FOCiS<sup>®</sup>**  
Federation of Clinical  
Immunology Societies  
[www.focisnet.org](http://www.focisnet.org)



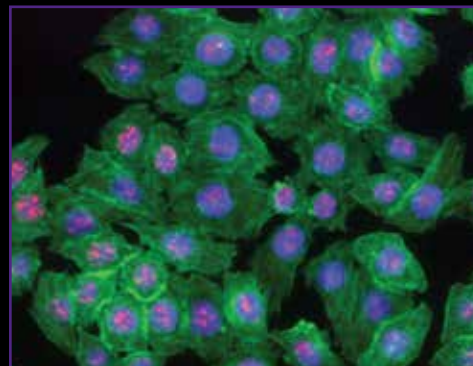


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Dear Colleagues,

Welcome to the 14th annual meeting of the Federation of Clinical Immunology Societies, FOCIS 2014. I am particularly excited about this year's meeting. The scientific program reflects the core tenants of FOCIS by bridging the gap between basic and clinical immunology and discussing novel translational therapies.

We value the participation of each of you who have touched FOCIS in one way or another over the past 14 years, and we hope that you will join us as we move into the future. FOCIS introduced individual membership in 2012, and I invite you to join FOCIS and collaborate with us to promote education, research and patient care around the theme of clinical immunology. Memberships run on a calendar year basis and are available at reasonable prices.

Please join me in extending my most heartfelt thanks to the members of the FOCIS 2014 Scientific Program Committee for their time, energy and expertise. I hope you enjoy the fruit of their labor – FOCIS 2014. Welcome to Chicago!

Sincerely,



Robert Nussenblatt, MD  
FOCIS President



**FOCIS 2014 Mobile App** <http://bit.ly/SrN4mx>



Access the Scientific Program, Educational Courses, Abstracts and create a personalized schedule from your computer, tablet or smartphone.

## FOCIS 2014 SUPPORTERS

FOCIS gratefully acknowledges the support that allows FOCIS to fulfill its mission to foster interdisciplinary approaches to both understand and treat immune-based diseases, and ultimately to improve human health through immunology.

### FOCIS 2014 Major Supporters:



### FOCIS 2014 Contributing Supporters:



## FOCIS 2014 Scientific Program Committee

Mark Anderson, MD, PhD, University of California, San Francisco - Chair  
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 David Rawlings, MD, Children's Hospital & Regional Medical Center - Abstract Co-Chair  
 Robert Nussenblatt, MD, National Eye Institute  
 Frank Nestle, MD, King's College London  
 Matthias von Herrath, MD, La Jolla Institute of Allergy and Immunology  
 Jeff Bluestone, PhD, University of California, San Francisco  
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**Mark Anderson, MD, PhD**  
 University of California,  
 San Francisco



**Kari Nadeau, MD, PhD**  
 Stanford University

## Continuing Medical Education (CME)

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the Federation of Clinical Immunology Societies. The Federation of Clinical Immunology Societies is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education credits for physicians.

The Federation of Clinical Immunology Societies designates this live activity for a maximum of 21 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## FOCIS 2014 General Information

### CME Certificates and Certificates of Attendance

Certificates are made available to delegates via email. Please indicate if you would like to receive a certificate in the daily evaluation.

### Evaluations / Pre-Post Tests

Daily online evaluations are available at [focisnet.org](http://focisnet.org) in the FOCIS 2014 section of the website. Delegates will also receive an email reminder and link to the online system daily during the meeting. Delegates are asked to complete an evaluation for each session attended, as well as the post-test following the meeting.

### Exhibit Hall Hours

Wednesday, June 25	4:00 pm - 8:30 pm
Thursday, June 26	7:30 am - 7:45 pm
Friday, June 27	7:30 am - 7:45 pm

### Poster Hall Hours

Wednesday, June 25	6:15 pm - 8:15 pm
Thursday, June 26	6:15 pm - 7:30 pm
Friday, June 27	6:15 pm - 7:30 pm

### Poster Set-Up and Take-Down Hours

Wednesday, June 25	Set-up:	11:00 am - 12:00 pm
	Take-down:	8:15 pm - 9:00 pm
Thursday, June 26	Set-up:	7:00 pm - 8:00 am
	Take-down:	7:45 pm - 8:30 pm
Friday, June 27	Set-up:	7:00 pm - 8:00 am
	Take-down:	7:45 pm - 8:30 pm

### Registration and Speaker Check-In Hours

Tuesday, June 24	3:00 pm - 6:00 pm
Wednesday, June 25	7:00 am - 5:30 pm
Thursday, June 26	7:00 am - 5:30 pm
Friday, June 27	7:00 am - 5:30 pm

### Speakers

Speakers are asked to report to speaker check-in at the registration desk at least 24 hours prior to the start of their sessions. Computers will be available for review and upload of presentations.

### Photo Policy

Please refrain from photography in the sessions and poster hall.

### Release

Registration and attendance at, or participation in, FOCIS meetings and other activities constitutes an agreement by the registrant to FOCIS' use and distribution (both now and in the future) of the registrant or attendee's image or voice in photographs, videotapes, electronic reproductions and audio tapes of such events and activities.

### Travel Awards

Congratulations to FOCIS 2014 oral abstract presenters. Each presenter this year was awarded with a travel reimbursement to assist in attending the meeting. FOCIS is proud to continue to focus on young investigators and, with the support of our partners, has provided over \$1,000,000 in travel awards in the past 14 years.



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Many achievements in Sanofi's long history have influenced the evolution of pharmaceutical science. Today, Sanofi is a global, integrated healthcare organization that finds and offers therapeutic solutions to many of the world's most pressing health-related challenges. In collaboration with our partners, we strive to grasp the complexity of diseases while listening to patients, understanding their needs, and supporting them in many different ways. We have placed patients at the very heart of our approach.

Sanofi Global R&D is proud to support **FOCIS 2014 - Spotlight on Translational Immunology**.



### FOCIS 2014 SCIENTIFIC PROGRAM

#### Tuesday, June 24th

8:00 am - 5:00 pm Basic Immunology in Medicine: Update 2014 (separate registration required)  
3:00 pm - 6:00 pm Registration Open

Chicago VIII  
Chicago Promenade

#### Wednesday, June 25th

7:00 am - 5:30 pm Registration Open  
7:30 am - 2:45 pm FOCIS Centers of Excellence Trainee Satellite Symposium (invitation only)  
8:30 am - 4:15 pm Interventional Immunology Course (separate registration required)

Chicago Promenade  
Chicago VI  
Chicago VIII

#### Member Society Symposia (included in FOCIS 2014 registration)

##### 7:50 am - 12:15 pm **Biomarkers for T1D and Other Autoimmune Diseases: Challenges and Opportunities**

Michigan A/B

Organized by the Juvenile Diabetes Research Foundation



7:50 am - 8:00 am Introduction - *Simi Ahmed, PhD, JDRF & Jerry Nepom, MD, PhD, Benaroya Research Institute*  
8:00 am - 8:30 am Keynote: Immunology, Biomarkers and the Biology of Clinical Outcomes - *Ken Smith, PhD, University of Cambridge*  
8:30 am - 9:40 am **State of T1D Biomarkers** - Chair: *Jerry Nepom, MD, PhD, Benaroya Research Institute*  
8:30 am - 8:45 am T1D Biomarkers: Where Are We? - *Mark Peakman, MD, PhD, King's College London*  
8:45 am - 9:00 am Clinical Endpoints in T1D Trials: What Can We do Better? - *Matthias von Herrath, MD, PhD, La Jolla Institute*  
9:10 am - 9:30 am Highlights from the JDRF Biomarkers Working Group - *Jerry Nepom, MD, PhD, Benaroya Research Institute*  
9:30 am - 9:40 am **Coffee Break**  
9:40 am - 11:00 am **Insights from Biomarker Efforts in Non T1D Fields** - Chair: *Ken Smith, PhD, University of Cambridge*  
9:40 am - 10:00 am Lessons Learned from Immune Biomarker Efforts in RA - *William Robinson, MD, PhD, Stanford University*  
10:00 am - 10:20 am Lessons Learned from Immune Biomarker Efforts in Psoriasis - *Frank Nestle, MD, King's College London*  
10:20 am - 10:40 am Biomarkers in Personalized Health(care) - *Iain van Gool, PhD, Radboud University Nijmegen*  
10:40 am - 11:00 am Biomarker Advancement, Qualification, and Application - *Carolyn Compton, MD, PhD, University of Arizona*  
11:00 am - 12:00 pm **Panel Discussion** - Chair: *Jerry Nepom, MD, PhD, Benaroya Research Institute*  
11:00 am - 12:00 pm Cancer Perspective - *Pamela Ohashi, PhD, Ontario Cancer Institute*  
11:00 am - 12:00 pm T1D Perspective - *Ake Lernmark, MD, PhD, Lund University*  
11:00 am - 12:00 pm Biostats/Informatics - *Raphael Gottardo, PhD, Fred Hutchinson Cancer Research Center*  
11:00 am - 12:00 pm Industry Perspective - *Jaya Goyal, PhD, Biogen Idec*  
12:00 pm - 12:15 pm Summary and Closing Comments - *Bart Roep, MD, PhD, Leiden University*

##### 8:00 am - 12:10 pm **Cardiovascular Inflammation and Damage in Rheumatic Disease**

Chicago VII

Organized by the American College of Rheumatology



8:00 am - 8:45 am Inflammation and its Failure to Resolve in Atherosclerotic Vascular Disease - *Edward Fisher, MD, PhD, MPH, New York University*  
8:45 am - 9:30 am Cardiovascular Disease in Rheumatoid Arthritis - *Joan Bathon, MD, Columbia University*  
9:30 am - 9:55 am Myocardial Dysfunction in Rheumatoid Arthritis - *Jon Giles, MD, Columbia University*  
9:55 am - 10:15 am **Coffee Break**  
10:15 am - 11:00 am Cardiovascular Disease in Systemic Lupus Erythematosus - *Mariana Kaplan, MD, National Institute of Arthritis and Musculoskeletal and Skin Disease*  
11:00 am - 11:25 am The Inflammasome in Vascular Disease - *J. Michelle Kahlenberg, MD, PhD, University of Michigan*  
11:25 am - 12:10 pm Imaging Vascular Inflammation - *Nehal Mehta, MD, National Heart, Lung and Blood Institute*

##### 8:00 am - 5:00 pm **Lymphocyte Epithelial Interactions in Intestinal Inflammation**

Superior A/B

Organized by the Society for Mucosal Immunology & Crohn's and Colitis Foundation of America



8:00 am - 8:30 am Adaptive Immune Responses to the Microbiota - *Charles Elson, MD, University of Birmingham*  
8:30 am - 9:00 am Host-Microbial Interactions in the Intestine - *Eugene Chang, MD, University of Chicago*  
9:00 am - 9:30 am Gastrointestinal Malignancy and the Microbiome - *Maria Abreu, MD, University of Miami*  
9:30 am - 10:00 am Regulation of Homeostatic Pathways and Macrophage Activation by the Enteric Microbiota - *Scott Plevy, MD, Janssen Biotech*



**Wednesday, June 25th (cont.)**

10:00 am - 10:15 am

**Coffee Break**

10:15 am - 10:45 am

When Oral Tolerance Fails: Immune Mechanisms of Food Allergy - *Cecila Berlin, Mount Sinai Hospital*

10:45 am - 11:15 am

Treat to Target in IBD - *Jean-Frederic Colombel, MD, Mount Sinai Hospital*

11:15 am - 11:45 am

New Targets and New Therapies for IBD - *Stephan Targan, MD, Mount Sinai Hospital*

11:45 am - 12:15 pm

Deciphering and Manipulating Human Immunoregulatory Pathways - *Scott Snapper, MD, PhD, Brigham and Women's Hospital*

12:15 pm - 1:15 pm

**Lunch Break** (not provided)

1:15 pm - 1:45 pm

Pouchitis: A Key to Understanding Crohn's Disease - *Iris Dotan, MD, Tel Aviv Medical Center*

1:45 pm - 2:15 pm

The Molecular Mechanism Underlying NOD2 Dysfunction in Crohn's Disease - *Warren Strober, MD, National Institutes of Health*

2:15 pm - 2:45 pm

Paneth Cells and Intestinal Inflammation - *Richard Blumberg, MD, Brigham and Women's Hospital*

3:00 pm - 3:30 pm

Innate Immunity at the Epithelial Surface of the Intestine - *Sean Colgan, PhD, University of Colorado-Denver*

3:30 pm - 4:00 pm

Immune Consequences of a Dying Intestinal Epithelium - *Julie Blander, PhD, Mount Sinai Hospital*

4:00 pm - 4:30 pm

Cross Talk between Innate Lymphocytes and Mononuclear Phagocytes Control Immune

Homeostasis in the Intestine - *Miriam Merad, PhD, Mount Sinai Hospital*

4:30 pm - 5:00 pm

Immune Cell Trafficking in the Intestine - *Sergio Lira, MD, PhD, Mount Sinai Hospital*

8:00 am - 12:00 pm

**Alloimmunity and the Consequences of B Cell Memory****Erie**

Organized by The Transplantation Society &amp; American Society for Histocompatibility and Immunogenetics

8:00 am - 8:30 am

Heterogeneity in Memory B Cells - *Justin Taylor, PhD, Fred Hutchinson Cancer Research Center*

8:30 am - 9:00 am

Understanding Long-Lived Plasma Cells - *David Allman, PhD, University of Pennsylvania*

9:00 am - 9:30 am

Controlling the Memory Alloreactive B Cell Responses in Transplantation - *Anita Chong, PhD, University of Chicago*

9:30 am - 10:00 am

Combating B Cell Memory to Enable Successful Transplantation in the Clinic

- *Anat Tambur, DMD, PhD, D(ABHI), Feinberg School of Medicine, Northwestern University*

10:00 am - 10:30 am

**Coffee Break**

10:30 am - 11:00 am

T Cell Subsets Regulating Memory B Cells - *Xian C Li, MD, PhD, Houston Methodist Hospital*

11:00 am - 11:30 am

Autoreactive B Cell Selection in Humans - *Eric Meffre, PhD, Yale School of Medicine*

11:30 am - 12:00 pm

Managing the Risk of Acute and Chronic Antibody-Mediated Rejection - *Karen Nelson, PhD, D(ABHI), Puget Sound Blood Center*

8:00 am - 11:45 am

**Tissue (Parenchymal) - Specific Regulation of Immune Responses****Chicago X**

Organized by the Canadian Society for Immunology &amp; the Canadian Human Immunology Network

8:00 am - 8:05 am

Opening Remarks by Chairs - *Bertus Eksteen, MBChB, FRCP, PhD, University of Calgary & Jörg Fritz, PhD, McGill University*

8:05 am - 8:45 am

Genetic Disease Susceptibility and Hepatic Tolerance - *Bertus Eksteen, MBChB, FRCP, PhD, University of Calgary*

8:45 am - 9:25 am

Innate Partners in Human IBD: From Bench to Clinic - *Marika Sarfati, MD, PhD, University of Montreal*

9:25 am - 10:00 am

Cellular and Molecular Mechanisms for the Development and Maintenance of Ectopic Meningeal Follicles in EAE - *Jennifer Gommerman, PhD, University of Toronto*

10:00 am - 10:20 am

**Coffee Break**

10:30 am - 11:00 am

Uncovering the Dynamic Orchestration of Lung Specific Immune Responses *in vivo* - *Bryan Yipp, MD, MSc, BSc, University of Calgary*

11:00 am - 11:40 am

Mechanism that Regular Type 2 Immunopathology During Viral Lung Infection - *Jörg Fritz, PhD, McGill University*

11:40 am - 11:45 am

Closing Remarks by Chairs - *Bertus Eksteen, MBChB, FRCP, PhD, University of Calgary & Jörg Fritz, PhD, McGill University*

8:00 am - 10:00 am

**Mast Cell Activation Syndrome, Anaphylaxis and Mastocytosis****Chicago IX**

Organized by the FOCIS Allergy Community of Practice

This program is supported by an independent educational grant from Mylan Specialties.



8:00 am - 9:15 am

Anaphylactic Syndromes (Food, Stings, Idiopathic and Rarities) - *Paul Greenberger, MD, Northwestern University*

9:15 am - 10:00 am

Mast Cells Behaving Badly - *Aidan Long, MD, Massachusetts General Hospital*

10:00 am - 10:50 am

**Coffee Break**

10:30 am - 12:00 pm

Mast Cell Activation and Anaphylaxis - *Marianne Frieri, MD, Nassau University Medical Center*



### Wednesday, June 25th (cont.)

12:45 pm - 3:00 pm

#### Lupus Insight Prize Symposium

Chicago IX

Organized by the Alliance for Lupus Research, Lupus Foundation of America, and the Lupus Research Institute

12:45 pm - 12:55 pm

Opening Remarks and Introduction - *Peggy Crow, MD, Hospital for Special Surgery*

12:55 pm - 1:40 pm

Epigenetics and Lupus: The Role of Diet and Oxidative Stress - *Bruce Richardson, MD, PhD, University of Michigan*

1:45 pm - 2:15 pm

Epigenomic Variability: Insights into Genetic Interaction in Lupus - *Amr Hakam Sawalha, MD, University of Michigan*

2:20 pm - 2:50 pm

Environment and Epigenetics in Lupus - *Gary Gilkerson, MD, Medical University of South Carolina*

2:55 pm - 3:00 pm

Closing Remarks – Speaker TBA



12:45 pm - 4:45 pm

#### Mechanisms of Tolerance

Chicago VII

Organized by the Immune Tolerance Network

12:45 pm - 1:25 pm

#### Engrafting Tolerance Using Hematopoietic Stem Cells



12:45 pm - 1:25 pm

Non-Myeloablative Bone Marrow Transplant and High Dose Post-Transplant

Cyclophosphamide for Chimerism Induction and Renal Allograft Tolerance

- *Lode Swinnen, Johns Hopkins University*

1:25 pm - 2:45 pm

#### Getting the Balance Right: T Regulatory T Effectors

1:25 pm - 2:05 pm

A Method for Tracking Alloreactive T Cells and Deletional Tolerance - *Megan Sykes, MD, Columbia University*

2:05 pm - 2:45 pm

Rebalancing the Immune System into Type I Diabetes with Alefacept: Putting Theory into Practice - *Mark Rigby, MD, PhD, Emory University*

3:25 pm - 4:45 pm

#### Exhaustion: A Route to Tolerance

3:25 pm - 4:05 pm

The Spectrum of Activation, Exhaustion and Senescence as it Relates to Tolerance - *Allan Kirk, MD, PhD, Duke University School of Medicine*

4:05 pm - 4:45 pm

Exhaustion: A Mechanism of Spontaneous Tolerance - *Sandy Feng, MD, University of California, San Francisco*

12:45 pm - 4:45 pm

#### Scavenger Receptor Biology and Nomenclature

Michigan A/B

Organized by the National Institute of Allergy and Infectious Diseases

12:45 pm - 12:55 pm

Introduction - *Mercy Prabjudas, PhD, National Institutes of Health*

12:55 pm - 1:15 pm

The Initial Molecular Identification and Characterization of Scavenger Receptors

- *Monty Krieger, PhD, Massachusetts Institute of Technology*

1:15 pm - 1:35 pm

Phagocytosis, Endocytosis and Motility: Scavenger Receptor Functions at the Interface of Homeostasis and Host Defense - *Dawn Bowdish, PhD, McMaster University*

1:35 pm - 1:55 pm

Role of Scavenger Receptors in Efferocytosis and Autoimmunity

- *Terry Means, PhD, Massachusetts General Hospital and the Broad Institute*

1:55 pm - 2:15 pm

The Hemoglobin Scavenger Receptor CD163 and Inflammation - *Soren Moestrup, MD, Aarhus University*

2:15 pm - 2:35 pm

CD36 and TLR2 are Essential for P. Gingivalis Mediated Inflammasome Activation: A Potential Link Between

Periodontal Disease and Atherosclerosis - *Maria Febbraio, DDS, University of Alberta*

2:35 pm - 2:55 pm

SCARF and Host-Pathogen Interactions - *Joseph El Khoury, MD, Massachusetts General Hospital and Harvard Medical School*

2:55 pm - 3:05 pm

#### Coffee Break

3:05 pm - 3:20 pm

Proposed Scavenger Receptor Nomenclature Recommendations - *Joseph El Khoury, MD, Massachusetts General Hospital and Harvard Medical School*

3:20 pm - 4:05 pm

Panel Discussion: All Faculty

4:05 pm - 4:25 pm

Vote on Nomenclature Recommendations

4:25 pm - 4:45 pm

Outcome and Closing Comments

*Mercy PrabhuDas, PhD, National Institutes of Health*

*Joseph El Khoury, MD, Massachusetts General Hospital and Harvard Medical School*





## Wednesday, June 25th (cont.)

12:45 pm - 4:40 pm	<b>Personalized Treatment for Autoimmune Diseases and Transplantation</b> Organized by the Association of Medical Laboratory Immunologists & the American Society for Histocompatibility & Immunogenetics	Chicago X
12:45 pm - 12:55 pm	Introduction - <i>Barbara Detrick, PhD, Johns Hopkins University</i>	
12:55 pm - 1:40 pm	Personalized Health Care to Meet the Challenges of Drug Discovery and Patient Care - <i>Andrew Chan, MD, PhD, Genentech</i>	
1:40 pm - 2:25 pm	Sequencing Antibody Repertoires to Decipher Pathogenic Mechanisms in Rheumatoid Arthritis - <i>William Robinson, MD, Stanford University</i>	
2:25 pm - 3:10 pm	Inflammatory Bowel Disease: Leveraging Gut Microbiome to Improve Risk Assessment and Outcomes - <i>Eugene Chan, MD, University of Chicago</i>	
3:10 pm - 3:55 pm	Genomic Biomarkers in Transplantation - <i>Minnie Sarwal, PhD, California Pacific Medical Center</i>	
3:55 pm - 4:40 pm	Proteomic Biomarkers in Transplantation - <i>Peter Nickerson, MD, University of Manitoba</i>	
12:30 pm - 5:00 pm	<b>Immunologic Memory and Its Relevance to Autoimmune Diseases</b> Organized by the Juvenile Diabetes Research Foundation and the British Society for Immunology	Erie
12:30 pm - 12:45 pm	Introduction - <i>Rafi Ahmed, PhD, Emory University; Richard Isnel, MD, JDRF</i>	
12:45 pm - 1:15 pm	T Cell Memory Populations, Lineages, and Memory Stem Cells - <i>Luca Gattinoni, MD, National Cancer Institute</i>	
1:15 pm - 1:45 pm	B Cell Memory - <i>Mark Shlomchik, MD, PhD, University of Pittsburgh</i>	
1:45 pm - 2:15 pm	Human Circulating and Tissue-resident Memory T Cells - <i>Donna Farber, PhD, Columbia University</i>	
2:30 pm - 3:00 pm	Memory Cells and Metabolism - <i>Ananda Goldrath, PhD, University of California, San Diego</i>	
3:00 pm - 3:30 pm	T Memory Cell Long-Term Maintenance and Strategies for Targeting them in Autoimmune Diseases - <i>Phillip Ashton-Rickardt, PhD, Imperial College of London</i>	
3:30 pm - 4:00 pm	Novel Therapies for Memory Cells in Autoimmune Diseases - <i>Peter Calabresi, MD, Johns Hopkins University</i>	
4:00 pm - 5:00 pm	Panel Discussion	
5:30 pm - 6:15 pm	<b>Opening Keynote Address</b> - <i>Chair: Robert Nussenblatt, MD, National Eye Institute</i> Cutting Gordian Knots with the Shears of Genomics: A Quarter Century and Counting - <i>Daniel Kastner, MD, PhD, National Human Genome Research Institute</i>	Chicago VI/VII

6:15 pm - 8:15 pm	<b>Opening Reception</b> (includes Exhibits & Poster Sessions with authors present)	River Exhibition Hall B
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## Thursday, June 26th

7:00 am - 5:30 pm	<b>Registration Open</b>	Chicago Ballroom Promenade
7:30 am - 8:30 am	<b>Coffee Break</b>	Chicago Ballroom Promenade
8:00 am - 6:15 pm	<b>Poster Session</b> (authors optional)	River Exhibition Hall B
8:00 am - 9:30 am	<b>Robert A. Good Memorial Plenary Session: Microbe-Immune Interaction in Disease</b> - <i>Chair: Mark Anderson, MD, PhD, University of California, San Francisco</i>	Chicago VI/VII
8:00 am - 8:30 am	Host-Microbial Interactions that Drive Intestinal Inflammation - <i>Thaddeus Stappenbeck, MD, PhD, Washington University</i>	
8:30 am - 9:00 am	Pathogen Colonization and Allergic Skin Disease - <i>Gabriel Nuñez, MD, University of Michigan</i>	
9:00 am - 9:30 am	Immunomodulatory Molecules from the Microbiome - <i>Dennis Kasper, MD, Harvard Medical School</i>	
9:30 am - 10:00 am	<b>Coffee Break</b>	Chicago Promenade/Exhibit Hall B



### Thursday, June 26th (cont.)

10:00 am - 11:30 am	<b>Epigenetic Control of Immune Responses</b> - Chair: Daniel Rotrosen, MD, <i>National Institutes of Health</i>	<b>Chicago VI/VII</b>
10:00 am - 10:30 am	Control of Gene Expression by Histone Mimics - Alexander Tarakhovsky, MD, PhD, Rockefeller University	
10:30 am - 11:00 am	Using Dynamic Epigenetic Modifications to Analyze Transcriptional Networks Regulating Lymphocyte Activation - Harinder Singh, PhD - Cincinnati Children's Hospital Medical Center	
11:00 am - 11:30 am	Genetic and Epigenetic Fine-Mapping of Causal Variants in Autoimmune Disease - Alex Marson, MD, PhD, <i>University of California, San Francisco</i>	
11:30 am - 1:00 pm	<b>Lunch</b> (on your own) For available lunch and programs, please see the Lunch & Learn insert in your registration packet.	
1:00 pm - 2:45 pm	<b>Humanized Mice for Studying Immune Disorders</b> - Chair: Kari Nadeau, MD, PhD, Stanford University	<b>Chicago VIII</b>
1:00 pm - 1:25 pm	Humanized Mice in Immunity, Development and Disease - Richard Flavell, PhD, FRS, Yale University School of Medicine	
1:25 pm - 1:40 pm	Abstract Presentation: A Chimeric Human-Mouse Model of Sjögren's Syndrome - Nicholas Young, PhD, <i>Ohio State University</i>	
1:40 pm - 2:05 pm	Humanized Mice for the Study of Human Immunity - Dale Greiner, PhD, University of Massachusetts	
2:05 pm - 2:20 pm	Abstract Presentation: Human Hematopoietic Stem Cells with a Defined Immunodeficiency and Enteropathy Transfer Clinical Phenotype to a Novel Humanized Mouse Strain - Jeremy Goettel, PhD, <i>Boston Children's Hospital</i>	
2:20 pm - 2:45 pm	Personalized Immune Mice - Megan Sykes, MD, Columbia University Medical Center	
1:00 pm - 2:20 pm	<b>Manipulating DCs for Tolerance or Rejection</b> - Chair: Francesco Marincola, MD, Sidra Medical and Research Center	<b>Chicago IX</b>
1:00 pm - 1:25 pm	Antigen-Specific Immunotherapy of Multiple Sclerosis - David Wraith, PhD, University of Bristol	
1:25 pm - 1:40 pm	Abstract Presentation: Expression of Blimp-1 in Dendritic Cells Modulate the Innate Inflammatory Responses in DSS Induced Colitis - Sun Jung Kim, PhD, Feinstein Institute	
1:40 pm - 2:05 pm	Improving Vaccines by Harnessing Dendritic Cell Subsets and T Cell Subsets - Jacques Banchereau, PhD, <i>Jackson Laboratory</i>	
2:05 pm - 2:20 pm	Abstract Presentation: The High Number of Plasmacytoid Dendritic Cells and their Altered Biology in Systemic Sclerosis Correlate with Low Expression of RUNX3 - Asly Affandi, University Medical Center Utrecht	
1:00 pm - 2:45 pm	<b>The Ups and Downs of IL-2</b> - Chair: Takashi Yamamura, MD, PhD, National Institute of Neuroscience	<b>Chicago X</b>
1:00 pm - 1:25 pm	Immunoregulation Without Immunosuppression: The Promise of Low Dose IL2 - David Klatzmann, MD, PhD, <i>Pierre et Marie Curie Université</i>	
1:25 pm - 1:40 pm	Abstract Presentation: Gene Targets of STAT5A and STAT5B in Human CD4+ T Cells - Jennifer Jenks, PhD, <i>Stanford University</i>	
1:40 pm - 2:05 pm	Effects of IL-2 Therapy on Treg Stability and Other Immune Cell Types - Jeff Bluestone, PhD, University of <i>California, San Francisco</i>	
2:05 pm - 2:20 pm	Abstract Presentation: Low-Dose Interleukin-2 Therapy in Active Systemic Lupus Erythematosus - Di Yu, PhD, <i>Monash University</i>	
2:20 pm - 2:45 pm	Selective Immunotherapy Using Interleukin-2 Formulations - Onur Boyman, MD, University of Zurich	
2:45 pm - 3:15 pm	<b>Coffee Break</b>	<b>Chicago Promenade/Exhibit Hall B</b>
3:15 pm - 5:15 pm	<b>Oral Abstract Session: All That Jazz of Genetics</b> - Chair: Timothy Niewold, MD, Mayo Clinic	<b>Chicago VIII</b>
3:15 pm - 3:35 pm	OR.2 Sub-Phenotype Mapping in Systemic Lupus Erythematosus Identifies Multiple Novel Loci Associated with Circulating Interferon $\alpha$ - Timothy Niewold, MD, Mayo Clinic	
3:35 pm - 3:55 pm	OR.3 A Novel Defect in ER-Golgi Transport Provides a Molecular Link Between ER Stress and the Generation of Autoimmunity - Anthony Shum, MD, University of California, San Francisco	

## Thursday, June 26th (cont.)

- 3:55 pm - 4:15 pm OR.4 Molecular Mechanisms of ITGAM and Lupus Susceptibility: Combined Effects of Protein and DNA - *Swapan Nath, PhD, Oklahoma Medical Research Foundation* **Chicago VIII**
- 4:15 pm - 4:35 pm OR.5 Cbl-b Deficiency Results in Abnormalities in Response to the Multiple Sclerosis Therapeutic Agent FTY720 and in T Cell Sphingosine-1-Phosphate Receptor 1 Function - *Mai Fujiwara, University of Connecticut School of Medicine*
- 4:35 pm - 4:55 pm OR.6 Immune Perturbation in Patients with TGF $\beta$  Pathway Defects - *Dat Tran, MD, University of Texas Medical School*
- 4:55 pm - 5:15 pm OR.7 Selective Resistance of Effector Memory Th1 Cells to Apoptosis in Type 1 Diabetic Patients and Healthy Subjects who Carry the PTPN22 Autoimmune Risk Allele - *Michael Turner, PhD, Benaroya Research Institute*
- 3:15 pm - 5:15 pm **Oral Abstract Session: Immune Regulations – Closing Da Loop** **Chicago IX**  
- Chair: *Edward Knol, PhD, University Medical Center Utrecht*
- 3:15 pm - 3:30 pm OR.8 Retinoic Acid Regulates THelper Cell Differentiation and Plasticity - *Chrysothemis Brown, MBBS, MA, King's College London*
- 3:30 pm - 3:45 pm OR.9. Combined Immune Checkpoint Protein Blockade and Lymphodepletion for Myeloma - *Byron Johnson, PhD, Medical College of Wisconsin*
- 3:45 pm - 4:00 pm OR.10 A Possible Role for IL-22BP-Producing Eosinophils in Impeding IL-22 Protective Actions in Crohn's Disease, but not in Ulcerative Colitis - *Jrme Martin, PharmD, INSERM U1064*
- 4:00 pm - 4:15 pm OR.11 ROR $\gamma$ t Regulated BTLA Controls  $\gamma\delta$  T Cell Homeostasis and Activation Restricting Dermatitis - *John Sedy, PhD, Sanford-Burnham Medical Research Institute*
- 4:15 pm - 4:30 pm OR.12 Differential Expression of TIGIT and FcRL3 Surface Markers Accurately Discriminates Between Helios<sup>+</sup> and Helios<sup>-</sup> Human Memory Treg Cell Subsets - *Ciriaco Piccirillo, PhD, McGill University Health Centre*
- 4:30 pm - 4:45 pm OR.13 Human B Cell and Glial Cell Interactions: Implications to the Compartmentalized CNS Inflammation of MS - *Hanane Touil, PhD, McGill University*
- 4:45 pm - 5:00 pm OR.14 Podoplanin is Expressed in Multiple Sclerosis Lesions and Perivascular Infiltrates and Regulates T Cell Proliferation and Th17 Differentiation - *Alyssa Nylander, MD, PhD, Yale University*
- 5:00 pm - 5:15 pm OR.15 CREM Promotes Th17 Differentiation and Dependent Autoimmune Pathology - *Nobuya Yoshida, MD, PhD, Harvard Medical School*
- 3:15 pm - 5:15 pm **Oral Abstract Session: Pathway Blues** - Chair: *Terri Laufer, MD, University of Pennsylvania* **Chicago X**
- 3:15 pm - 3:30 pm OR.16 Synthetic Nanoparticle Vaccines for the Induction of Antigen-Specific Immunological Tolerance - *Takashi Kishimoto, PhD, Selecta Biosciences*
- 3:30 pm - 3:45 pm OR.17 Carbon Nanomaterials Treat Autoimmune Diseases by Scavenging Superoxide in Autoreactive T Lymphocytes - *Redwan Huq, PhD, Baylor College of Medicine*
- 3:45 pm - 4:00 pm OR.18 Small-Molecule Inhibition of Stat3 Prevents House-Dust-Mite (HDM)-Induced Airway Inflammation by Blocking Lung Production of Th17 and Th2 Cytokines - *Aries Gavino, MD, Baylor College of Medicine*
- 4:00 pm - 4:15 pm OR.19 Inhibition of TYK2 and JAK1 Ameliorates Imiquimod-Induced Psoriasis-Like Dermatitis by Inhibiting IL-22 and IL-23 - *Melissa Works, PhD, Stanford Research Institute International*
- 4:15 pm - 4:30 pm OR.20 Blocking KCa1.1 Channels Inhibits the Invasive Properties of Fibroblast-Like Synoviocytes and Reduces Disease Severity in Animal Models of Rheumatoid Arthritis - *Mark Tanner, PhD, Baylor College of Medicine*
- 4:30 pm - 4:45 pm OR.21 Interleukin-7 Receptor Blockade Promotes Long-Term Allograft Acceptance - *Hoa Mai, MD, PhD, INSERM UMR 1064*
- 4:45 pm - 5:00 pm OR.22 Human Lymphoid Development in the Absence of Common Gamma Chain Receptor Signaling - *Lisa Kohn, PhD, University of California, Los Angeles*
- 5:00 pm - 5:15 pm OR.23 Treatment of Refractory Systemic Lupus Erythmatosus with the Proteasome Inhibitor Bortezomib Results in Decreased Pathogenic and Protective Antibody Titres - *Stephanie Finzel, MD, University Clinic of Erlangen*
- 3:15 pm - 5:15 pm **Principles of Flow Cytometry for Immune Monitoring Course:** **Sheraton Ballroom I**
- 3:15 pm - 4:15 pm **RNA Detection by Flow Cytometry**  
RNA Based Single-Cell Mapping of Hematopoiesis - *Yury Goltsev, PhD, Stanford School of Medicine*
- 4:15 pm - 5:15 pm The Regulation of Telomere Erosion in Memory T Cells After Immune Challenge *in vivo* - *Arne Akbar, PhD, University College of London*



### Thursday, June 26th (cont.)

5:30 pm - 6:15 pm	<b>Keynote Address</b> - Chair: Frank Nestle, MD, King's College London Immune Memory to Viruses - Rafi Ahmed, PhD, Emory University School of Medicine	Chicago VI/VII
6:15 pm - 7:30 pm	<b>Exhibits and Poster Session</b> (authors present)	River Exhibition Hall B
7:45 pm - 9:00 pm	<b>Collaboration Cocktails</b>	Chi Bar East

### Friday, June 27th

7:00 am - 5:30 pm	<b>Registration Open</b>	Chicago Ballroom Promenade
7:30 am - 8:30 am	<b>Coffee Break</b>	Chicago Ballroom Promenade
8:00 am - 6:15 pm	<b>Poster Session</b> (authors optional)	Exhibit Hall B
8:00 am - 9:30 am	<b>Non-Coding RNA and Immune Diseases</b> - Chair: David Hafler, MD, Yale University	Chicago VI/VII
8:00 am - 8:30 am	MicroRNA Regulation in Th2 Cells and Asthma - Mark Ansel, PhD, University of California, San Francisco	
8:30 am - 9:00 am	Post-Transcriptional Control of T Helper Cell Differentiation - Vigo Heissmeyer, PhD, Ludwig-Maximilians-Universität München	
9:00 am - 9:30 am	Micro-RNA Regulation of Inflammation in Liver Disease - Gyongyi Szabo, MD, PhD, University of Massachusetts Medical School	
9:30 am - 10:00 am	<b>Coffee Break</b>	Chicago Promenade/Exhibit Hall B
10:00 am - 11:30 am	<b>Immunologic Lessons of Rare Diseases</b> - Chair: Jonathan Braun, MD, PhD, University of California, Los Angeles	Chicago VI/VII
10:00 am - 10:30am	Molecular and Cellular Insights into the Phenotypic Spectrum of RAG Deficiency - Luigi Notarangelo, MD, Children's Hospital Boston, Harvard Medical School	
10:30 am - 11:00 am	Allergic Pathways in Monogenic Diseases of Atopy - Joshua Milner, MD, National Institute of Allergy and Infectious Diseases	
11:00 am - 11:30 am	Uncovering New Immunoregulatory Mechanisms by Understanding Genetic Diseases - Michael Lenardo, MD, National Institute of Allergy and Infectious Diseases	
11:30 am - 1:00 pm	<b>Lunch</b> (on your own) For available lunch and programs, please see the Lunch & Learn insert in your registration packet.	
1:00 pm - 2:45 pm	<b>Germinal Center RXn in Autoimmunity</b>	Chicago VIII
1:00 pm - 1:25 pm	- Chair: Abul Abbas, MD, University of California, San Francisco	
1:25 pm - 1:40 pm	Differentiation and Function of Follicular Helper T Cells (Tfh) - Shane Crotty, PhD, La Jolla Institute for Allergy and Immunology	
1:40 pm - 2:05 pm	Abstract Presentation: Negative Regulations of Human B Cell Response: Age, CMV, TNF- $\alpha$ , and MiRs	
2:05 pm - 2:20 pm	- Bonnie Blomberg, PhD, University of Miami	
2:20 pm - 2:45 pm	Tfh Cell Regulation to Prevent Systemic Autoimmunity - Carola Vinuesa, MD, PhD, Australian National University	
	Abstract Presentation: Increased Interferon Activity Precedes SLE Classification but Follows Autoantibody Onset	
	- Melissa Munroe, PhD, Oklahoma Medical Research Foundation	
	<i>In situ</i> Adaptive Immunity in the Pathogenesis of Lupus Nephritis - Marcus Clark, MD, University of Chicago	
1:00 pm - 2:45 pm	<b>Challenges in Vaccine Development</b>	Chicago IX
1:00 pm - 1:25 pm	- Chair: Matthew Albert, MD, PhD, Institut Pasteur	
1:25 pm - 1:40 pm	HSV-2: New Concepts in HSV-2 Vaccine Development - Larry Corey, MD, Fred Hutchinson Cancer Research Center	
1:40 pm - 2:05 pm	Abstract Presentation: Regulatory T Cells Represent an Important Fraction of HIV-Specific T cells	
2:05 pm - 2:20 pm	- Vedran Brezar, PhD, INSERM U955	
2:20 pm - 2:45 pm	Scientific Development of a Highly Successful Malaria Vaccine - Robert Seder, MD, National Institute of Allergy and Infectious Diseases	
	Abstract Presentation: The Adaptor Protein TOLLIP is Associated with Pediatric Tuberculosis	
	Susceptibility in South Africa - Javeed Shah, MD, University of Washington	
	Vaccines that are Difficult to Develop - Jorge Kalil, MD, PhD, University of São Paulo	

## Friday, June 27th (cont.)

1:00 pm - 2:45 pm	<b>NK and NKT Cells in Disease</b> - Chair: Jordan Pober, MD, PhD, Yale University	<b>Chicago X</b>
1:00 pm - 1:25 pm	Antigen Presentation by CD1d and the Varied Functions of NKT Cells - Mike Brenner, MD, Brigham & Women's Hospital	
1:25 pm - 1:40 pm	Abstract Presentation: A Novel Approach to Enhance and Redirect the Anti-Leukemia Properties of Invariant Natural Killer T Cells - Rupali Das, PhD, Children's Hospital of Philadelphia	
1:40 pm - 2:05 pm	NKT Cell-Mediated Adjuvant Cell Therapy on Lung Cancer and Head and Neck Cancer - Masaru Taniguchi, MD, PhD, Riken Center for Integrative Medical Sciences	
2:05 pm - 2:20 pm	Abstract Presentation: Favorable Impact of Natural Killer Cell Reconstitution on Chronic Graft-Versus-Host Disease and CMV Reactivation After Allogeneic Hematopoietic Stem Cell Transplantation	
2:20 pm - 2:45 pm	- Antoine Toubert, MD, PhD, INSERM U11604	
2:20 pm - 2:45 pm	Natural Killer Cells and Viral Immunity - Lewis Lanier, PhD, University of California, San Francisco	
2:45 pm - 3:15 pm	<b>Coffee Break</b>	<b>Chicago Ballroom Promenade/Exhibition Hall B</b>
3:15 pm - 5:15 pm	<b>Oral Abstract Session: DCs in the Wings</b> - Chair: Elaine Reed, PhD, University of California, Los Angeles	<b>Chicago VIII</b>
3:15 pm - 3:30 pm	OR.24 Discovery of Novel HLA-DQ Binding $\beta$ -Cell Peptides Uniquely Processed and Presented by Dendritic Cells - Menno Van Lummel, PhD, Leiden University Medical Center	
3:30 pm - 3:45 pm	OR.25 High Molecular Weight Hyaluronan Promotes Immune Tolerance to Airway Allergens - Paul Bollyky, MD, Benaroya Research Institute	
3:45 pm - 4:00 pm	OR.26 Monocytes but not Dendritic Cells from the Site of Autoimmune Inflammation Impair T Cell Regulation - Femke van Wijk, PhD, University Medical Centre Utrecht	
4:00 pm - 4:15 pm	OR.27 Tolerogenic Properties of Dex/VitD2-Treated Human Tolerogenic Dendritic Cells Remain Stable after Mimic <i>in vivo</i> DC Activation - Anna Klapetkova, MD, Charles University	
4:15 pm - 4:30 pm	OR.28 Characterization of Human Clinical Grade Tolerogenic Dendritic Cells Used in the One Study Clinical Trial - Aurelie Moreau, PhD, ITUN INSERM	
4:30 pm - 4:45 pm	OR.29 Circulating Dendritic Cell Subsets in Human Lupus: Correlations with Circulating Cytokines and Disease Status - Mark Jensen, MD, Mayo Clinic	
4:45 pm - 5:00 pm	OR.30 A Novel Pathway that Controls Autoimmunity: Reciprocal Interaction Between NK Cells and DCs Regulates the Th17 Response by Eliciting an Innate IFN- $\gamma$ /IL-27 Axis - Rachel Caspi, PhD, National Eye Institute	
5:00 pm - 5:15 pm	OR.31 <i>In vitro</i> Evaluation of Intestinal Epithelial TLR Activation in Preventing Food Allergic Responses - Sander de Kivit, PhD, Rush University Medical Center	
3:15 pm - 5:15 pm	<b>Oral Abstract Session: Spotlight on Systems</b> - Chair: Ciriaco Piccirillo, PhD, McGill University	<b>Chicago IX</b>
3:15 pm - 3:30 pm	OR.32 Altered Wiring of Signal Transduction Networks in Human Systemic Lupus Erythematosus $\beta$ Cell Subsets - Michelle Hermiston, MD, PhD, University of California, San Francisco	
3:30 pm - 3:45 pm	OR.33 Analysis of $\beta$ Cell Death in Individuals at Risk for Type 1 Diabetes - Kevan Herold, MD, Yale School of Medicine	
3:45 pm - 4:00 pm	OR.34 Large-Scale and Comprehensive Immune Profiling and Functional Analysis of Normal Human Aging - Chan Whiting, PhD, Stanford University	
4:00 pm - 4:15 pm	OR.35 Transcriptional Profiling of Central Nervous System-Infiltrating CD4+ T Cells Identifies a Lipid-Metabolizing Enzyme as a Novel Therapeutic Target in Experimental Autoimmune Encephalomyelitis - Kareem Graham, PhD, Emory University School of Medicine	
4:15 pm - 4:30 pm	OR.36 Maternal Cell MicroRNA as a Biomarker to Predict Adverse Pregnancy Outcome - Xuhuai Ji, MD, PhD, Stanford University	
4:30 pm - 4:45 pm	OR.37 Massively Parallel Sequencing of Mixed Lymphocyte Culture Reveals a Broad and Stable Alloreactive T Cell Repertoire - Ryan Emerson, PhD, Adaptive Biotechnologies	
4:45 pm - 5:00 pm	OR.38 Genetic Risk Alleles Associated with Autoantibody Production and Responsible for Initial Breach in Tolerance to Self-Antigens in Normal Individuals - Quan-Zhen Li, MD, PhD, University of Texas Southwestern Medical Center	
5:00 pm - 5:15 pm	OR.39 Potency and Stability of LAP+FOXP3+ Tregs in Control GVHD Development - Anha Pham, PhD, University of Texas Medical School	

### Friday, June 27th (cont.)

3:15 pm - 5:15 pm	<b>Oral Abstract Session: Final Cut for Autoantigen Response</b> - Chair: Victoria Werth, MD, University of Pennsylvania	<b>Chicago X</b>
3:15 pm - 3:30 pm	OR.40 Auto-Antibodies in Necrotizing Autoimmune Myopathies: From Diagnosis to Pathogenesis - Olivier Boyer, MD, PhD, INSERM	
3:30 pm - 3:45 pm	OR.41 Autoantigen Microarray Analysis of Sera from New-Onset Pediatric Systemic Lupus Erythematosus Patients Reveal a Signature Associated with Class III/IV Lupus Nephritis - David Haddon, PhD, Stanford University	
3:45 pm - 4:00 pm	OR.42 Detection of Non-HLA Antibodies in Cardiac Transplant Patient with a Multiplex Bead Array - Jeffrey McNamara, PhD, University of California, Los Angeles	
4:00 pm - 4:15 pm	OR.43 Cell-Specific CD8 T Cell Phenotype in Type 1 Diabetes Reflects Chronic Autoantigen Exposure - Ania Skowera, MSc, PhD, Queen Mary University of London	
4:15 pm - 4:30 pm	OR.44 Choline Acetyltransferase+ T Lymphocytes of Unique Ontogeny Relay Neural Signals - Peder Olofsson, MD, PhD, Feinstein Institute	
4:30 pm - 4:45 pm	OR.45 Dual-Reactive T Cells Accelerating Rejection of Allo-islet Graft Transplanted in Autoimmune Diabetic Recipients - Maki Nakayama, MD, PhD, University of Colorado Denver	
4:45 pm - 5:00 pm	OR.46 Proinsulin Specific, HLA-DQ8 Restricted, CD4+ T Cells Infiltrate the Islets in Type 1 Diabetes - Stuart Mannering, PhD, St. Vincent's Institute	
5:00 pm - 5:15 pm	OR.47 Th17 Cell Production of IL-21 Promotes Intestinal IgA Response - Anthony Cao, PhD, University of Texas Medical Branch	

3:15 pm - 5:15 pm	<b>Flow Cytometry for Immune Monitoring Course: Analysis of Intracellular Cytokines and Phosphoproteins</b>	<b>Sheraton Ballroom I</b>
3:15 pm - 4:15 pm	Key Variables in Interleukin Cytokine and Phosphoprotein Analysis by Flow Cytometry - Holden Maecker, PhD, Stanford School of Medicine	
4:15 pm - 5:15 pm	Considerations for Rare Cell Analysis in Flow Cytometry - Philip McCoy, PhD, National Institutes of Health	
5:30 pm - 6:15 pm	<b>Keynote Address</b> - Chair: Mathias von Herrath, MD, La Jolla Institute for Allergy and Immunology Engineering T Cells for Cancer and HIV - Carl June, MD, University of Pennsylvania	<b>Chicago VI/VII</b>

6:15 pm - 7:30 pm	<b>Exhibits &amp; Poster Session</b> (authors present)	<b>River Exhibition Hall B</b>
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### Saturday, June 28th

7:30 am - 8:30 am	<b>Coffee Break</b>	<b>Chicago Ballroom Promenade</b>
8:00 am - 9:30 am	<b>Checkpoint Control in Disease: Deviating Immune Responses as Therapy</b> - Chair: Garry Fathman, MD, Stanford University	<b>Chicago VI/VII</b>
8:00 am - 8:30 am	Immune Modulation Therapy Takes on Tumor Microenvironment - Lieping Chen, MD, PhD, Yale University School of Medicine	
8:30 am - 9:00 am	Regulating Exhausted T Cell Responses - John Wherry, PhD, University of Pennsylvania	
9:00 am - 9:30 am	Blockade of Immune Inhibitory Pathways as a Cancer Therapeutic - Tom Gajewski, MD, PhD, University of Chicago Medicine	
9:30 am - 10:00 am	<b>Coffee Break</b>	<b>Chicago Ballroom Promenade</b>
10:00 am - 11:30 am	<b>Biomarkers for Immune Diseases and Transplant Tolerance</b> - Chair: Jerry Nepom, MD, PhD, Benaroya Research Institute	<b>Chicago VI/VII</b>
10:00 am - 10:30 am	The Molecular Diagnosis of Rejection: Emergence of the Molecular Microscope - Philip Halloran, MD, PhD, OC, University of Alberta	
10:30 am - 11:00 am	Immune Monitoring and Stratification in Type 1 Diabetes Therapeutic Trials - Mark Peakman, MD, PhD, King's College London	
11:00 am - 11:30 am	Monitoring the Allograft in the 21 Century - Mannikam Suthanthiran, MD, Weill Cornell Medical College	



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Fiechtner, Justus: Questcor Pharmaceuticals <sup>6</sup>	Leonardi, Craig: 3M Pharmaceuticals <sup>1</sup> , Abbott Laboratories <sup>1</sup> , Abbvie <sup>1</sup> , Allergan <sup>1</sup> , Altana <sup>1</sup> , Amgen <sup>1</sup> , Astellas Pharma <sup>1</sup> , Bristol-Myers Squibb <sup>1</sup> , Centocor <sup>1</sup> , CombinatoRx <sup>1</sup> , Galderma Laboratories <sup>1</sup> , Genentech <sup>1</sup> , Janssen <sup>1</sup> , Novartis Pharma <sup>1</sup> , RTL <sup>1</sup> , Schering-Plough Corporation <sup>1</sup> , Vitae Pharmaceuticals <sup>1</sup>	Weidanz, Debra: Resonant Sensors <sup>4</sup>
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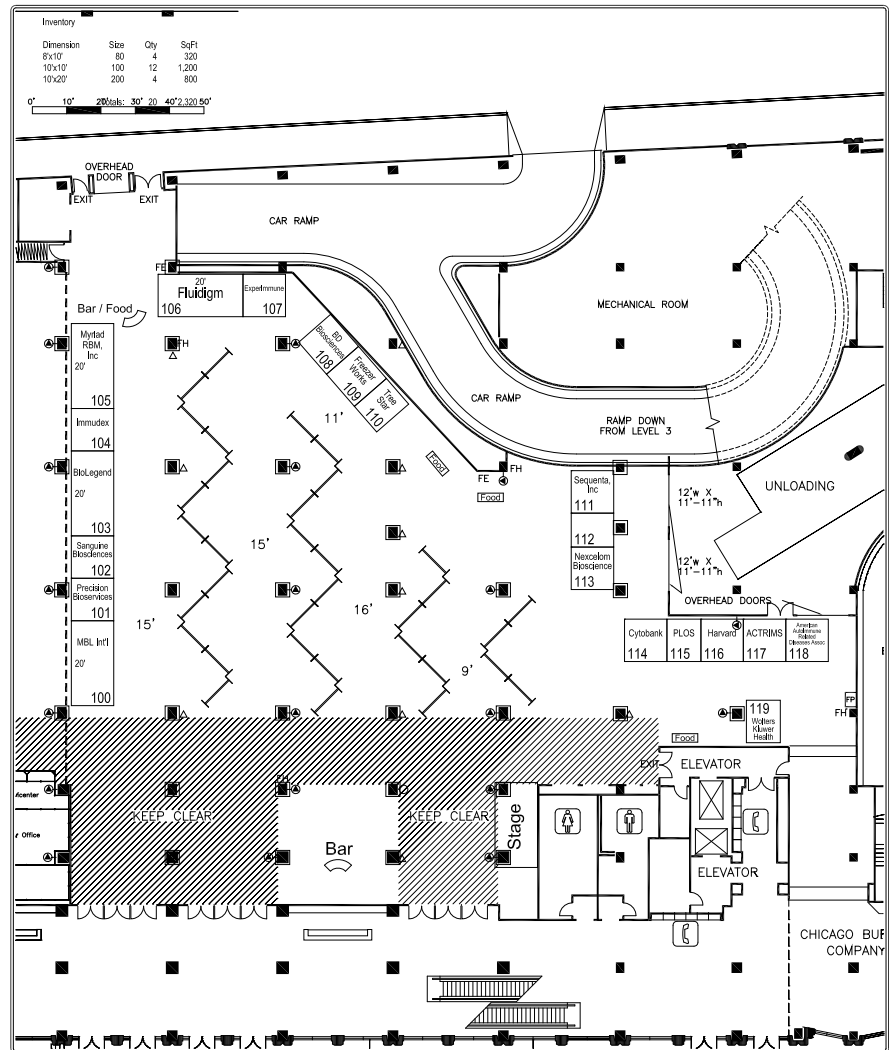
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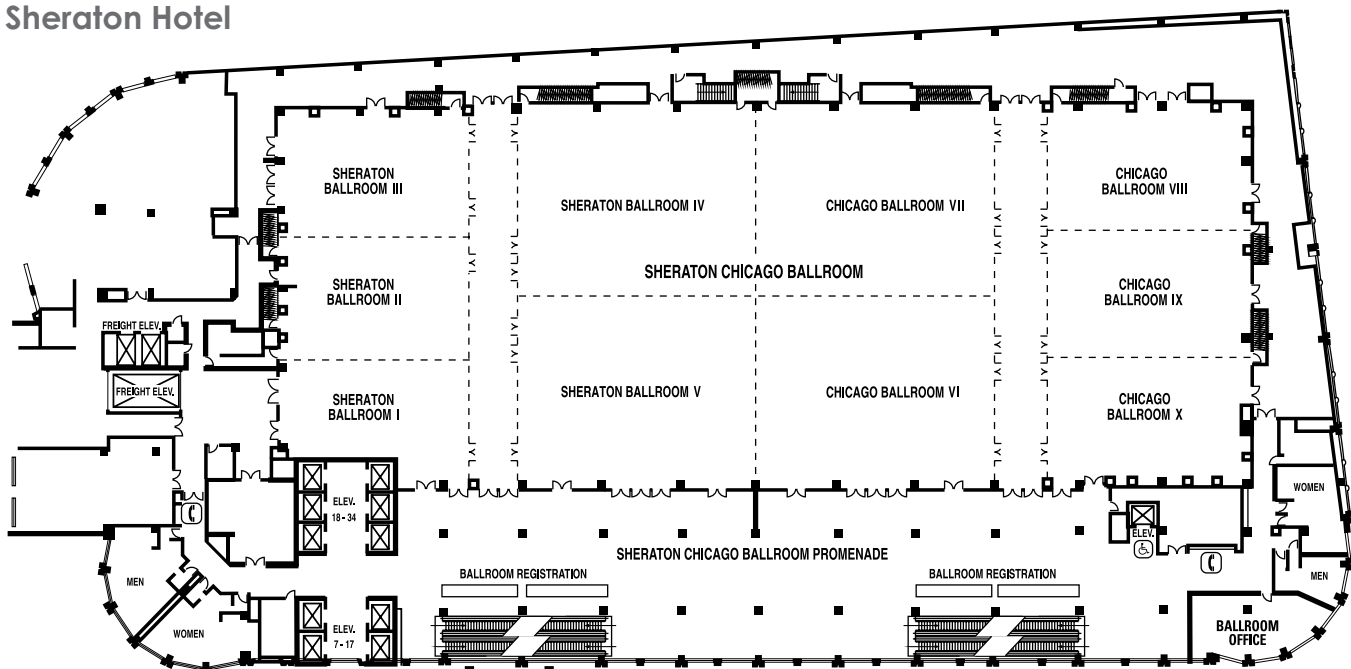
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## Exhibitor Listing and Floor Plans

Organization	Booth
MBL International	100
Precision Bioservices	101
Sanguine Biosciences	102
BioLegend	103
Immudex	104
Myriad RBM, Inc.	105
Fluidigm	106
Experimmune	107
BD Biosciences	108
Freezer Works	109
Tree Star	110
Sequentia, Inc.	111
Beckman Coulter	112
Nexcelom Bioscience	113
Cytobank	114
PLOS	115
Harvard	116
ACTRIMS	117
American Autoimmune Related Diseases Association	118
Wolters Kluwer Health	119

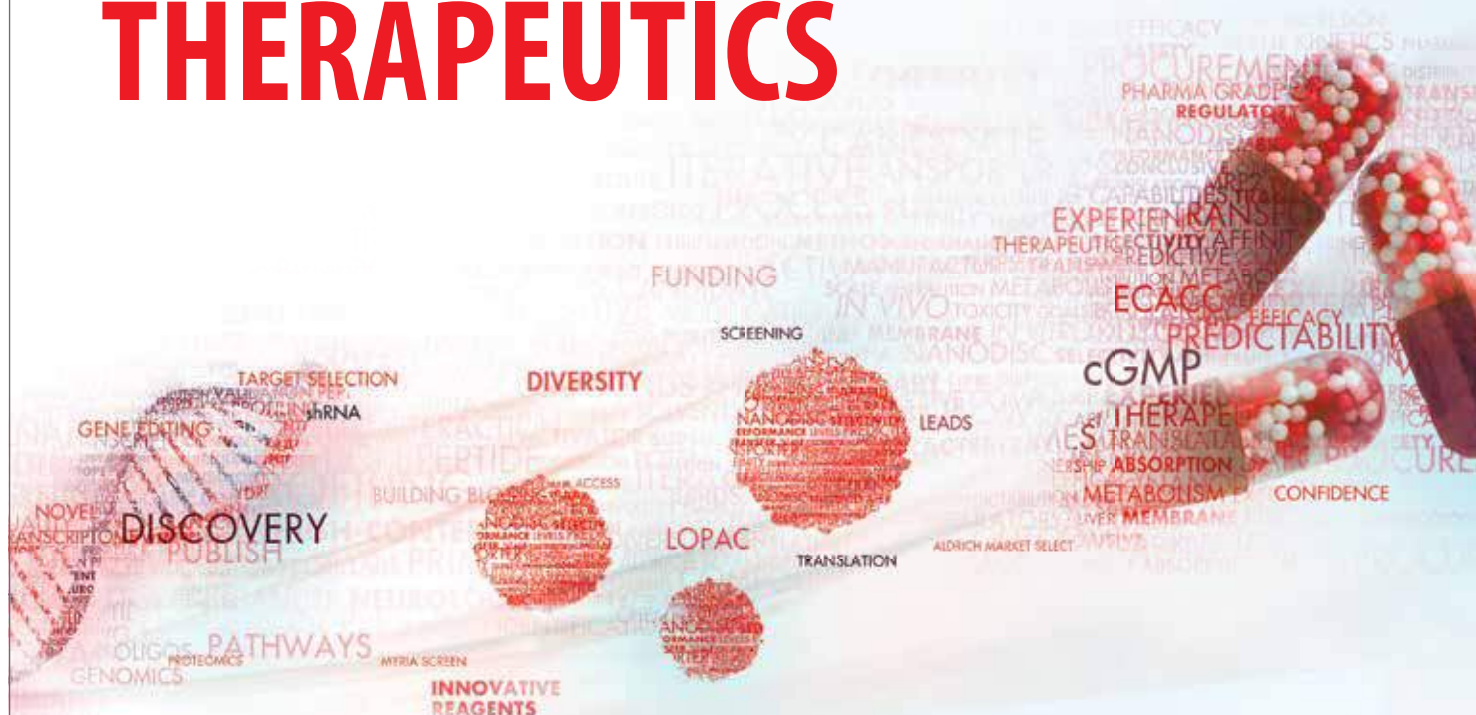


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