



# The Journal of Immunology

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IMMUNOLOGY 2014™  
PROGRAM REVIEW ISSUE

# IMMUNOLOGY 2014™

## PROGRAM PREVIEW



The American Association of Immunologists  
AAI Annual Meeting  
May 2–6, 2014 | Pittsburgh, Pennsylvania





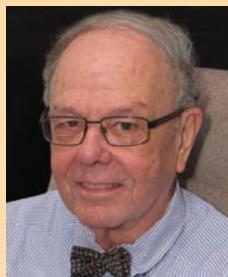
# The American Association of Immunologists

## Career Award Recipients for 2014

*The American Association of Immunologists proudly announces the 2014 recipients of AAI awards for outstanding research and career achievements.*

*The 2014 AAI Award winners will be recognized at IMMUNOLOGY 2014™  
May 2–6, Pittsburgh, Pennsylvania.*

### AAI Lifetime Achievement Award



*In recognition of a career of scientific achievement and contributions to AAI and fellow immunologists*

**Emil R. Unanue, M.D.**

*Washington University  
School of Medicine*

### AAI Excellence in Mentoring Award

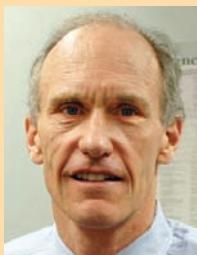


*In recognition of exemplary career contributions to a future generation of scientists*

**William E. Paul, M.D.**

*National Institute of Allergy  
and Infectious Diseases  
National Institutes of Health*

### AAI-Steinman Award for Human Immunology Research

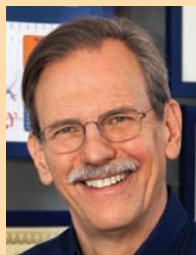


*For significant, sustained achievement in immunology research pertinent to human disease pathogenesis, prevention, or therapy*

**Carl H. June, M.D.**

*University of Pennsylvania  
Perelman School of Medicine*

### AAI-Life Technologies Meritorious Career Award



*For outstanding research contributions to the field of immunology*

**Timothy A. Springer, Ph.D.**

*Boston Children's Hospital  
Harvard Medical School*

### AAI-BD Biosciences Investigator Award



*For outstanding, early-career research contributions to the field of immunology*

**Katherine A. Fitzgerald, Ph.D.**

*University of Massachusetts  
Medical School*

### AAI Distinguished Service Award

*In recognition of distinguished scientific accomplishment and extraordinary service to AAI*



*For outstanding service to AAI and the immunology community as Editor-in-Chief of The Journal of Immunology, 2008–2013*

**Jeremy M. Boss, Ph.D.**  
*Emory University School of Medicine*



*For outstanding service to AAI and the immunology community as Chair of the AAI Program Committee, 2009–2012*

**Kristin A. Hogquist, Ph.D.**  
*University of Minnesota Center  
for Immunology*

# IMMUNOLOGY 2014™

The American Association of Immunologists

AAI Annual Meeting | May 2–6, 2014 | Pittsburgh, Pennsylvania

David L. Lawrence Convention Center

Visit [www.IMMUNOLOGY2014.org](http://www.IMMUNOLOGY2014.org) to view the full program



## AAI PRESIDENT'S PROGRAM

### AAI President's Address

FRIDAY, MAY 2, 5:00 PM – 6:00 PM

**Marc K. Jenkins**

University of Minnesota Medical School, AAI President

*The in vivo response of naïve CD4<sup>+</sup> T cells*

**Stephen D. Miller**

Northwestern University Feinberg School of Medicine

*Introduction*



Marc K. Jenkins

### AAI President's Symposium: Anatomy of the Immune Response

Dedicated to the Memory of our Colleague and Friend, *Leo Lefrançois, Jr., Ph.D.*

MONDAY, MAY 5, 12:30 PM – 2:30 PM

Spirit of Pittsburgh Ballroom

*Chair:*

**Marc K. Jenkins**, University of Minnesota Medical School, AAI President

*Speakers:*

**Ronald N. Germain**, NIAID, NIH

*Visualizing the dynamics and micro-anatomy of the immune system:  
how this complex machine really works*



Ronald N.  
Germain



Michel C.  
Nussenzweig

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

*Antibodies in HIV vaccine and therapy*



Ellen A. Robey



Jason G. Cyster

**Ellen A. Robey**, University of California, Berkeley

*Visualizing T cell selection in the thymus*

**Jason G. Cyster**, HHMI, University of California, San Francisco

*Deciphering the guidance cue code for B cell immunity*

## AAI President's Symposium

### *Anatomy of the Immune Response*



**Marc K. Jenkins**  
*AAI President*



**D**uring my postdoctoral years at the NIH as a self-respecting 96-well plate immunologist, I was amazed by the work of Ian MacLennan and Garnet Kelsoe, who were using immunohistology to study germinal centers. Their efforts convinced me that *in vivo* and, even better, *in situ* approaches were the best ways to study the immune response, especially if antigen-specific lymphocytes could be mapped onto the body's geography. Research in this area blossomed in the last two decades, revealing fundamental information about how lymphocytes enter, exit, and move within lymphoid organs and how antigen-specific T and B cells, and dendritic cells, initially find each other, become activated, enter germinal centers, and migrate to non-lymphoid organs during immune responses.

The President's Symposium this year features leaders who made many of the discoveries mentioned above.

**Ronald Germain** was one of the first to produce dynamic images of T cells interacting with antigen-bearing dendritic cells in lymph nodes. Imaging studies from his group have shown how T cells and dendritic cells sense chemokines to facilitate their interactions before and after foreign antigens enter the body. His recent work is producing insights into how effector T cells become activated in the non-lymphoid organs.

**Ellen Robey** used real-time two-photon microscopy to study the cellular dynamics of CD8<sup>+</sup> T cells and dendritic cells in lymph nodes. She revealed that T cells scan many dendritic cells in the absence of antigen but stop on antigen-bearing dendritic cells for hours. Her group has also characterized the dynamic interactions of thymocytes and thymic epithelial cells during positive and negative selection.

**Michel Nussenzweig** discovered that dendritic cells can induce tolerance and that self-reactive B cells are abundant in the repertoire. His work has also been essential to the current understanding of somatic mutation, class-switch combination, and formation of neutralizing antibodies to HIV. His dynamic imaging studies have identified many of the important events in affinity maturation in germinal centers.

**Jason Cyster** revealed the key role that S1PR plays in lymphocyte egress from lymphoid organs and how chemokines direct the migration and positioning of B cells in the body. He discovered that CXCR5 directs the migration of activated T cells to follicles, setting the stage for much later work on follicular helper T cell-B cell interactions.

Please join me at the IMMUNOLOGY 2014™ President's Symposium to see the latest discoveries by these outstanding investigators. The science should be enlightening and the presentations entertaining, with lots of colorful cells scurrying about. Someone bring the popcorn!

## AAI DISTINGUISHED LECTURERS

SATURDAY, MAY 3  
6:00 PM – 6:45 PM



**Kristin A. Hogquist**

University of Minnesota Center for  
Immunology  
*Self reactivity in T cell selection and  
homeostasis*

SUNDAY, MAY 4  
6:00 PM – 6:45 PM



**Ellen V. Rothenberg**

California Institute of Technology  
*Gene regulatory pathways to  
T cell identity*

MONDAY, MAY 5  
6:00 PM – 6:45 PM



**Mark J. Shlomchik**

University of Pittsburgh School of  
Medicine  
*NETworks in lupus: T-B or not T-B,  
DC is the question*

## AAI Lifetime Achievement Award Presentation

FRIDAY, MAY 2, 5:00 PM  
*Spirit of Pittsburgh Ballroom*

*Chair:*

Marc K. Jenkins, University of Minnesota Medical School  
AAI President



*Award Recipient:*

Emil R. Unanue, Washington University  
School of Medicine

AAI President Marc K. Jenkins will introduce the awardee and present the award prior to the start of the President's Address.

*The AAI Lifetime Achievement Award is the highest honor bestowed by the AAI Council upon an AAI member. This award recognizes a deserving member for a career of scientific achievement and for contributions to AAI and fellow immunologists.*

## AAI Excellence in Mentoring Award Presentation

MONDAY, MAY 5, 12:30 PM  
*Spirit of Pittsburgh Ballroom*

*Chair:*

Marc K. Jenkins, University of Minnesota Medical School  
AAI President



*Award Recipient:*

William E. Paul, NIAID, NIH

AAI President Marc K. Jenkins will introduce the awardee and present the award prior to the start of the President's Symposium.

*The AAI Excellence in Mentoring Award Award recognizes exemplary career contributions to a future generation of scientists.*



*Join us for the*

# IMMUNOLOGY 2014<sup>TM</sup>

## *Opening Night Welcome Reception*

*Generously Sponsored by eBioscience, An Affymetrix Company*



**David L. Lawrence Convention Center • Pittsburgh, Pennsylvania**

**Friday, May 2, 2014 • 6:00 PM – 8:00 PM**

Come directly from the President's Address to the Lawrence Center Terraces overlooking the Allegheny River and the Pittsburgh skyline. Enjoy drinks, hors d'oeuvres, and the Boilermaker Jazz Band as you visit with colleagues and plan your week.



Open to all IMMUNOLOGY 2014<sup>TM</sup> attendees. Meeting badge required for entrance. Attendees must be at least 21 years of age.

## AAI-BD Biosciences Investigator Award Presentation and Lecture

*Generously supported by BD Biosciences*

**SATURDAY, MAY 3, 4:00 PM – 5:00 PM**

*Spirit of Pittsburgh Ballroom*

*Chair:*

**Marc K. Jenkins**, University of Minnesota Medical School  
AAI President



*Award Recipient:*

**Katherine A. Fitzgerald**, University of Massachusetts Medical School

*Molecular basis of recognition and gene regulation in innate immunity*

AAI President Marc K. Jenkins and a representative of BD Biosciences will introduce the awardee and present the award immediately prior to Dr. Fitzgerald's lecture.

## AAI-Life Technologies Meritorious Career Award Presentation and Lecture

*Generously supported by Life Technologies Corporation*

**SUNDAY, MAY 4, 4:00 PM – 5:00 PM**

*Spirit of Pittsburgh Ballroom*

*Chair:*

**Marc K. Jenkins**, University of Minnesota Medical School  
AAI President



*Award Recipient:*

**Timothy A. Springer**, Boston Children's Hospital and Harvard Medical School

*Integrins, gliding adhesins, and malaria vaccines*

AAI President Marc K. Jenkins and a representative of Life Technologies Corporation will introduce the awardee and present the award immediately prior to Dr. Springer's lecture.

## AAI-Steinman Award for Human Immunology Research Presentation and Lecture

**MONDAY, MAY 5, 4:00 PM – 5:00 PM**

*Spirit of Pittsburgh Ballroom*

*Chair:*

**Marc K. Jenkins**, University of Minnesota Medical School  
AAI President



*Award Recipient:*

**Carl H. June**, University of Pennsylvania Perelman School of Medicine

*Adventures with CARs for cancer*

AAI President Marc K. Jenkins will introduce the awardee and present the award immediately prior to Dr. June's lecture.

## AAI BUSINESS MEETING & AWARDS PRESENTATIONS

**SATURDAY, MAY 3, 1:30 PM - 2:30 PM**

This session will include the annual report to AAI members on AAI and *The Journal of Immunology* business affairs and will feature special 2014 AAI award presentations and acknowledgments. Refreshments will be provided.

## AAI Distinguished Service Award Presentations

**SATURDAY, MAY 3, 1:30 PM – 2:30 PM**



**Kristin A. Hogquist**, University of Minnesota Center for Immunology

*For outstanding service to AAI and the immunology community as Chair of the AAI Program Committee, 2009–2012*



**Jeremy M. Boss**, Emory University School of Medicine

*For outstanding service to AAI and the immunology community as Editor-in-Chief of The Journal of Immunology, 2008–2013*

AAI annually provides travel awards and grants to recognize the promise and bolster the professional development of young investigators, trainees, and under-represented minority scientists and trainees. Travel award and grant presentations and acknowledgments will include:

### Presentations

- AAI-Life Technologies Trainee Achievement Awards
- Lefrançois-BioLegend Memorial Award
- Chambers-eBioscience Memorial Award
- Lustgarten-eBioscience Memorial Award
- Pfizer-Showell Travel Award
- AAI Early Career Faculty Travel Grants
- AAI Undergraduate Faculty Travel Grants
- AAI Laboratory Travel Grants

### Acknowledgements

- AAI Minority Scientist Travel Awards  
*Sponsored by FASEB MARC Program under a grant from NIGMS, NIH [FASEB MARC Program: T36-GM08059-31]*
- AAI Trainee Abstract Awards
- AAI Trainee Poster Awards

**SATURDAY, MAY 3, 8:00 AM – 11:30 AM*****Major Symposium A: Underlying Mechanisms of Autoimmunity*****Chairs:**

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

**Daniel B. Stetson**, University of Washington

**Speakers:**

**Daniel B. Stetson**, University of Washington  
*Endogenous retroelements and autoimmune disease*

**Virginia Pascual**, Baylor Institute for Immunology Research  
*Novel innate immunity pathways contribute to human lupus pathogenesis*

**Amit Bar-Or**, Montreal Neurological Institute, McGill University  
*B cell: T cell interactions in autoimmunity*

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

*Systemic autoimmune disease – Why TLR7?*

**Alexander V. Chervonsky**, University of Chicago  
*Microbial contribution to autoimmunity*

**Jayne Danska**, Hospital for Sick Children  
University of Toronto  
*Ménage à trois: genes, sex, and microbes in autoimmunity*

***Major Symposium B: Cytokines: In Sickness and in Health*****Chairs:**

**Sarah L. Gaffen**, University of Pittsburgh

**Achsah D. Keegan**, University of Maryland School of Medicine

**Speakers:**

**Georgia Perona-Wright**, University of British Columbia  
*The impact of indiscriminate cytokine signaling in infection*

**Achsah D. Keegan**, University of Maryland School of Medicine  
*Alternative activation of macrophages by IL-4 and IL-13: contribution to severity of allergic lung inflammation*

**Sharon S. Evans**, Roswell Park Cancer Institute  
*The two faces of IL-6 in the tumor microenvironment*

**Sandip K. Datta**, NIAID, NIH  
*Cytokine regulation of Staphylococcus aureus infections*

**Sarah L. Gaffen**, University of Pittsburgh  
*Straight from the mouse's mouth: IL-17 signaling and oral immunity to fungi*

**Jean-Laurent Casanova**, HHMI, Rockefeller University  
*Toward a genetic theory of childhood infectious diseases*

**SUNDAY, MAY 4, 8:00 AM – 11:30 AM*****Major Symposium C: The Female Reproductive Tract: From Infection to Pregnancy*****Chairs:**

**Adrian Erlebacher**, New York University School of Medicine

**Akiko Iwasaki**, Yale School of Medicine

**Speakers:**

**Michael N. Starnbach**, Harvard Medical School  
*Chlamydia trachomatis manipulates immunity in the genital tract*

**Ashley T. Haase**, University of Minnesota  
*Vaccine strategies to concentrate immune defenses at mucosal frontlines*

**Akiko Iwasaki**, Yale School of Medicine  
*Tissue-resident memory T cell protection against HSV-2*

**Sing Sing Way**, Cincinnati Children's Hospital  
*Immune pathogenesis of prenatal infection*

**Adrian Erlebacher**, New York University School of Medicine  
*Epigenetics of immune privilege in the pregnant uterus*

**Francesco Colucci\***, University of Cambridge  
*Maternal immune cells and fetal compatibility genes*

\*Supported by the British Society for Immunology

***Major Symposium D: Regulation of Gene Expression and Immunity*****Chairs:**

**Peter D. Katsikis**, Drexel University College of Medicine

**Carola G. Vinuesa**, Australian National University

**Speakers:**

**Peter D. Katsikis**, Drexel University College of Medicine  
*miRNA and CTL responses*

**Karla Kirkegaard**, Stanford University School of Medicine  
*Function of a long noncoding RNA in pathogen susceptibility and IFN-gamma synthesis*

**Rafael Casellas**, NIAMS, NIH  
*The nature of AID off-targeting activity*

**Alexander Tarakhovsky**, Rockefeller University  
*Epigenetic control of antiviral response*

**Martin Turner**, Babraham Institute  
*The regulation of lymphocyte development by RNA binding proteins*

**Carola G. Vinuesa**, Australian National University  
*miRNA-mediated control of Tfh cells and germinal center responses*

**MONDAY, MAY 5, 8:00 AM – 11:30 AM****Major Symposium E: Fueling Immunity: Metabolic Effects in and on the Immune System****Chairs:**

**Douglas R. Green**, St. Jude Children's Research Hospital  
**Barbara S. Nikolajczyk**, Boston University School of Medicine

**Speakers:**

**Douglas R. Green**, St. Jude Children's Research Hospital  
*Metabolic reprogramming in activated T cells*

**Steven J. Bensinger**, University of California, Los Angeles  
*SREBPs are required for metabolic reprogramming of effector T cells*

**Erika L. Pearce**, Washington University School of Medicine  
*Metabolic regulation of T cell function and fate*

**Barbara S. Nikolajczyk**, Boston University School of Medicine  
*Lymphocytes regulate inflammation in human type 2 diabetes*

**Vishwa Deep Dixit**, Yale School of Medicine  
*Immunometabolic control of age-related inflammation*

**Myriam Aouadi**, University of Massachusetts Medical School  
*Role of adipose tissue macrophages in the regulation of whole body metabolism*

**Major Symposium F: Progress and Challenges in Vaccines for the Major Killers: Malaria, Tuberculosis, and HIV/AIDS****Chairs:**

**John T. Harty**, University of Iowa  
**JoAnne L. Flynn**, University of Pittsburgh School of Medicine

**Speakers:**

**Robert A. Seder**, NIAID, NIH  
*Translational development of a malaria vaccine from bench to bedside: is it prime time for T cells?*

**John T. Harty**, University of Iowa  
*Breaking, making, and breaking immunity during malaria infection*

**Willem Hanekom**, University of Cape Town and Gates Foundation  
*Toward understanding vaccination-induced protection against tuberculosis*

**JoAnne L. Flynn**, University of Pittsburgh School of Medicine  
*Variability among and within hosts in tuberculosis*

**Pamela J. Bjorkman**, HHMI, California Institute of Technology  
*Engineering improved antibodies against HIV*

**Dan Barouch**, Beth Israel Deaconess Medical Center  
*Novel HIV vaccine strategies*

**TUESDAY, MAY 6, 8:00 AM – 11:30 AM****Major Symposium G: Deciphering the Roles for Innate Lymphoid Cells in Health and Disease****Chairs:**

**James P. Di Santo**, Institut Pasteur  
**Fumio Takei**, University of British Columbia

**Speakers:**

**James P. Di Santo**, Institut Pasteur  
*Transcriptional regulation of innate lymphoid cell differentiation*

**Nadine Cerf-Bensussan**, Institut IMAGINE and Université Paris Descartes-Sorbonne Paris Cité  
*Gut innate lymphoid cells and intestinal lymphomagenesis*

**Michael A. Caligiuri**, Ohio State University  
*Human NK cell development: sorting out the ILCs*

**Gregory F. Sonnenberg**, University of Pennsylvania  
*Innate lymphoid cell regulation of adaptive immunity and intestinal homeostasis*

**Bruce D. Levy**, Brigham & Women's Hospital and Harvard Medical School  
*Specialized pro-resolving mediators regulate innate lymphoid cells*

**Fumio Takei**, University of British Columbia  
*ILC2 and allergic lung inflammation*

**Major Symposium H: Macrophages and DCs in Vascular Inflammation****Chairs:**

**Klaus Ley**, La Jolla Institute for Allergy & Immunology  
**Eicke Latz**, University of Bonn and University of Massachusetts Medical School

**Speakers:**

**Eicke Latz**, University of Bonn and University of Massachusetts Medical School  
*Role of inflammasomes in vascular inflammation*

**David M. Mosser**, University of Maryland, College Park  
*The regulation of inflammation by macrophages*

**Filip K. Swirski**, Massachusetts General Hospital and Harvard Medical School  
*Monocyte flux and macrophage proliferation in atherosclerosis*

**Klaus Ley**, La Jolla Institute for Allergy & Immunology  
*Antigen presentation in the atherosclerotic aorta*

**Cornelia M. Weyand**, Stanford University School of Medicine  
*Dendritic cell function in large vessel vasculitis*

**Jacques F. Banchereau**, Jackson Laboratory for Genomic Medicine  
*Harnessing human dendritic cell subsets for next generation vaccines*

## AAI COMMITTEE ON PUBLIC AFFAIRS

### *Rock Talk-ing With Sally Rockey: The Issues, the Blog, and the Woman Behind It All*

SUNDAY, MAY 4, 12:30 PM – 2:00 PM

*Chair:*

Elizabeth J. Kovacs, Chair, AAI Committee on Public Affairs

*Speaker:*



Sally Rockey

Deputy Director for Extramural Research  
and Director, Office of Extramural  
Research, NIH

So you get the blog, and you read it, and you sometimes even comment. The issues raised are important and thought-provoking, and the questions asked can be provocative. But the person who writes this blog is also a senior leader at NIH who has influence over NIH policy, particularly, over many of the key issues that affect you. Who is she and what do you want her to know about you (an extramural researcher facing sequestration)? Come to this session to meet Sally Rockey, to learn about upcoming NIH plans for the extramural research community, and to get answers to the questions you've always wanted to ask.

## AAI CLINICAL IMMUNOLOGY COMMITTEE

### *Personalized Medicine from an Immunologist's Perspective*

SATURDAY, MAY 3, 3:45 PM – 5:45 PM

*Chairs:*

Robert L. Modlin, University of California, Los Angeles

Charles A. Dinarello, University of Colorado Denver

The integration of basic research and clinical knowledge has led to an ever-increasing repertoire of personalized strategies for the treatment and prevention of a variety of infectious and inflammatory diseases. A major focus of this session will be on systems medicine approaches to identify biomarkers and targets for both prevention and intervention in human disease.

*Speakers:*

Kenneth G. C. Smith, University of Cambridge

*Immune-mediated disease: the genomics of clinical outcome*

Charles A. Dinarello, University of Colorado Denver

*Blocking IL-1 in inherited rare diseases and in common diseases*

Denise E. Kirschner, University of Michigan Medical School

*A systems biology approach to understanding the immune response to Mycobacterium tuberculosis*

Bali Pulendran, Emory University Vaccine Research Center,

*Systems vaccinology: enabling rational vaccine design with systems biology*

[www.IMMUNOLOGY2014.org](http://www.IMMUNOLOGY2014.org)

## AAI EDUCATION COMMITTEE

### *AAI High School Teachers Summer Research Program Workshop: Lessons in Immunology*

SATURDAY, MAY 3, 8:00 AM – 10:00 AM

*Chair:*

Clinton B. Mathias, Western New England University

The AAI High School Teachers Summer Research Program brings the excitement of immunology directly to high school students through curricula developed by participating high school teachers. This program pairs high school science teachers with established AAI member immunologists who mentor them in their laboratories in a "hands-on" summer internship. The teachers develop a science project for the classroom based on their summer research experience. In this session, 2013-2014 participating high school teachers will present their experiences and projects.

*Speakers:*

Robert Aguilar, Western Reserve Academy, Hudson, Ohio

Andrea Cobb, Thomas Jefferson High School for Science and Technology, Alexandria, Virginia

Mark Trice, Frederick High School, Frederick, Maryland

Matthew S. Young, A&M Consolidated High School  
College Station, Texas

### *Careers in Biotech: Panel Discussion and Networking*

SATURDAY, MAY 3, 7:00 PM – 9:00 PM

*Chair:*

Nandita Bose, Biothera

Many opportunities exist in industry for a scientist with advanced degrees. There are positions in laboratory research, program management, business development, regulatory affairs and clinical trials oversight, medical liaison, and more. This panel features scientists employed in a variety of positions in industry, who will share their career paths and highlight the skills required to succeed in these careers. Following the panel discussion, enjoy casual conversation with the speakers and other industry connections at a networking reception.

*Panelists:*

Elizabeth L. Bachert, Senior Director, Worldwide Business Development, Pfizer

Jane Grogan, Senior Scientist, Genentech

James Huleatt, Deputy Director, Global Clinical Immunology  
Sanofi Pasteur

Thomas MacAllister, Chief Development Officer, Besins Healthcare

Jeffrey Rossio, Director, R&D, Immunoassay Development  
Life Technologies Corporation

## AAI EDUCATION COMMITTEE & AAI COMMITTEE ON THE STATUS OF WOMEN

### Careers in Science Roundtable

SUNDAY, MAY 4, 11:30 AM – 1:00 PM

#### Chair:

**Scheherazade Sadegh-Nasseri**, Johns Hopkins Medical Institute; Chair, AAI Committee on the Status of Women

Registration Fee: \$20 (Lunch included)

At this always popular session, you'll have the opportunity to meet with scientists at your own career stage and with more experienced scientists to explore specific career issues important to men and women in science today. Learn what others are thinking and gain insights into issues you are confronting in your own situation. New topics this year offer insights into NIH Study Sections and considerations for scientists in M.D.-Ph.D. careers. Choose from these and the other vital topics related to the environment you work in (academic research, biotech industry, governmental agencies, non-profits), the transitions from specific career stages, or issues in balancing career and family in any career path. Don't miss this great networking opportunity!

#### Discussion topics and table leaders:

##### Research Careers in Academia

- Graduate Student to Postdoc: finding a postdoc, interviewing  
*Table Leaders: Carol F. Webb*, Oklahoma Medical Research Foundation; *Michelle A. Parent*, University of Delaware
- Postdoc to PI: finding a position, interviewing, negotiating, lab start-up  
*Table Leaders: Deborah M. Brown*, University of Nebraska, Lincoln; *Shabaana A. Khader*, Washington University
- New PI: attracting students and postdocs, preparing for tenure  
*Table Leaders: Akiko Iwasaki*, HHMI, Yale School of Medicine; *Robin Stephens*, University of Texas Medical Branch
- Undergraduate Institutions:finding the balance in teaching, doing research  
*Table Leaders: Paula Lutz*, University of Wyoming; *Laurie Shornick*, St. Louis University



AAI Careers Roundtables present great opportunities to explore specific career issues important to men and women today.

#### • Mentoring Effectively

*Table Leaders: Gail A. Bishop*, University of Iowa; *Laura Haynes*, University of Connecticut Health Center; *Janice S. Blum*, Indiana University School of Medicine

#### How to Build a Network

*Table Leaders: Sarah L. Gaffen*, University of Pittsburgh; *Paula M. Oliver*, University of Pennsylvania

#### Career and Family: time management/family leave/professional couples

*Table Leaders: Susan Kovats*, Oklahoma Research Foundation; *Carolina B. Lopez*, University of Pennsylvania School of Veterinary Medicine; *Lisa K. Denzin*, Rutgers Robert Wood Johnson Medical School

#### Careers in Biotech and Industry: moving from academia to industry and vice versa

*Table Leaders: Jane Grogan*, Genentech; *Mandy J. McGeachy*, University of Pittsburgh; *Theresa Schaub*, eBioscience, an Affymetrix company

#### Research Careers at Governmental Agencies (FDA/NIH/USDA/CDC)

*Table Leaders: Carol H. Pontzer*, NCCAM, NIH; *David H. Margulies*, NIAID, NIH

#### NIH Study Section Insights

*Table Leaders: Scheherazade Sadegh-Nasseri*, Johns Hopkins Medical Institute; *Virginia Shapiro*, Mayo Clinic

#### The Physician Scientist: balancing clinical and research duties

*Table Leaders: Penelope A. Morel*, University of Pittsburgh; *Robert L. Ferris*, University of Pittsburgh

#### Research from the M.D., Ph.D. Perspective

*Table Leaders: Mary Beth Humphrey*, Oklahoma University Health Sciences Center; *Wayne M. Yokoyama*, HHMI, Washington University School of Medicine

#### Non-Research Careers for Scientists: careers in scientific journals, public policy, non-profits

*Table Leaders: Mary T. Litzinger*, American Association of Immunologists; *Elizabeth R. Walsh*, American Association of Immunologists (Two Ph.D. immunologists serving the AAI as manager of educational and career development programs, and science liaison, respectively)

## AAI MEMBERSHIP COMMITTEE

### New Member Reception

FRIDAY, MAY 2, 4:00 PM – 4:45 PM

*Chair:*

Judith A. Owen, Haverford College; Chair, AAI Membership Committee

AAI wishes to welcome new Regular and Associate members joining AAI for the first time. AAI President Marc Jenkins and other AAI leaders look forward to meeting you personally. Please join us with your invitation in hand for light refreshments and casual conversation.

*Event by invitation only.*

## AAI MINORITY AFFAIRS COMMITTEE

### Careers Roundtable and (NEW!) Speed Networking Session

SATURDAY, MAY 3, 11:45 AM – 2:15 PM

*Supported in part by a grant to the Federation of American Societies for Experimental Biology (FASEB) from the National Institute of General Medical Sciences (NIGMS), National Institutes of Health [FASEB MARC Program: T36-GM08059-31]*

*Chair:*

Adriana Larregina, University of Pittsburgh; Chair, AAI Minority Affairs Committee

Registration Fee: \$20 (Includes lunch; coffee/cookies during networking hour.)

Networking skills have never been more crucial to ensure success for early/mid-career scientists, including those traditionally under-represented in biomedical research. At the roundtable, take advantage of the opportunity to meet in small-group format with accomplished, senior immunologists to hear how they have handled the career challenges you now face and learn what they believe will work for you today. Then practice networking in a relaxed environment offering a structured networking exercise and personalized feedback on communicating your scientific interests/objectives most effectively.

**Roundtable discussion topics and table leaders:**

**Grad Student: finding a mentor; taking aim at postdoc training**  
*Table Leaders: Santiago Partida-Sanchez, Nationwide Children's Hospital; Eduardo Davila, University of Maryland Greenebaum Cancer Center*

**Postdoc: finding a mentor; taking aim at a faculty position**  
*Table Leader: Jose A. Guevara-Patino, Loyola University*

**Junior Faculty: preparing for promotion and tenure**  
*Table Leader: Adriana T. Larregina, University of Pittsburgh*

**Academia or Industry: how to decide (or switch sides)**  
*Table Leaders: Jonathan A. Deane, GNF/Novartis; Cherié L. Butts, Biogen Idec*

**Government Agency Careers: CDC, FDA, NIH**  
*Table Leader: Marta Catalfamo, NIAID, NIH*

**Non-Research Careers: science journalism, patent law, biomedical entrepreneurship**  
*Table Leader: TBA*

### Minority Affairs Committee Guest Lecture

MONDAY, MAY 5, 11:30 AM – 12:30 PM

*Supported in part by a grant to the Federation of American Societies for Experimental Biology (FASEB) from the National Institute of General Medical Sciences (NIGMS), National Institutes of Health [FASEB MARC Program: T36-GM08059-31]*

*Chair:*

Adriana Larregina, University of Pittsburgh; Chair, AAI Minority Affairs Committee

*Speaker:*



**Arturo Casadevall**, Albert Einstein College of Medicine, Yeshiva University  
*A new synthesis for antibody-mediated immunity*

## AAI PROGRAM COMMITTEE

### Back to School: A Review of Four Fast-Moving Fields

FRIDAY, MAY 2, 2:30 PM – 4:30 PM

*Chairs:*

David Masopust, University of Minnesota

Leslie J. Berg, University of Massachusetts Medical School

This workshop intends to bring a broad audience up-to-date on a few emerging or rapidly changing fields or areas of technological innovation. Expert lecturers will provide an overview of each trending topic with an emphasis on communicating big picture concepts.

*Speakers:*

**David A. Largaespada**, University of Minnesota  
*Engineering cells using transposons and site-specific endonucleases*

**Richard M. Locksley**, HHMI, University of California San Francisco  
*Innate lymphoid cells*

**Katherine A. Fitzgerald**, University of Massachusetts Medical School  
*Long non-coding RNA: new players in gene regulation and host defense*

**Kenneth M. Murphy**, HHMI, Washington University School of Medicine  
*Dendritic cell development and subset function*

## AAI PUBLICATIONS COMMITTEE

### *Publishing Your Scientific Work: Tips on Writing, Responding to Reviewers, and Avoiding Ethical Pitfalls*

SUNDAY, MAY 4, 12:30 PM – 2:00 PM

#### Chairs:

Eugene M. Oltz, Washington University School of Medicine

Pamela J. Fink, University of Washington School of Medicine  
Editor-in-Chief, *The Journal of Immunology*

Your data may be good and your findings may be significant, but your manuscript will navigate peer review more smoothly if you present your findings well. What steps can an author take to improve data presentation? What is considered an inappropriate, even unethical, presentation of data? What will make the manuscript easier for the reviewer to read and evaluate? How can the author best respond to reviewers? With ample time for questions and answers at the end of the session, experienced editors will address these and other questions about scientific publishing in this session sponsored by the AAI Publications Committee.

#### Speakers:

Eugene M. Oltz, Washington University School of Medicine  
*Writing a scientific manuscript: How should I tell my story and to whom should I tell it?*

Kristin A. Hogquist, University of Minnesota  
*Responding to reviewers: What you want to say and what you should say*

Pamela J. Fink, University of Washington School of Medicine  
Editor-in-Chief, *The Journal of Immunology*  
*If it feels wrong, it probably is*



## AAI VETERINARY IMMUNOLOGY COMMITTEE & AMERICAN ASSOCIATION OF VETERINARY IMMUNOLOGISTS (AAVI) JOINT SYMPOSIUM

### *Vaccines for the Modern Era: Implications for Human and Animal Health*

SATURDAY, MAY 3, 12:30 PM – 2:30 PM

#### Chairs:

Laurel J. Gershwin, University of California, Davis

Carol G. Chitko-McKown, Genetics, Breeding, and Animal Health Research Unit, ARS, USDA

This symposium will feature topics on both human and veterinary vaccines, with emphasis on new technologies and new information for more appropriate targeting of the immune response to achieve protective immunity. Advances in understanding immune responses to veterinary and human pathogens and applications of that information to vaccine design illustrate a commonality that supports the current “one health” concept in medicine.

#### Speakers:

Mark K. Slifka, Oregon Health and Science University  
*Hydrogen peroxide-based vaccines: a new approach to an old problem*

Tilahun Yilma, University of California, Davis  
*Strategies for enhancing the safety and efficacy of recombinant vaccines*

Ronald D. Schultz, University of Wisconsin  
*Immunologic memory: what to expect from different types of vaccines!*

Anna P. Durbin, Johns Hopkins Bloomberg School of Public Health  
*Dengue vaccines: from animal models to human challenge*

## CENTENNIAL TIMELINE – 3RD FLOOR CORRIDOR

#### Back by Popular Demand!

Travel the AAI Centennial Timeline spanning the 3rd floor corridor. The Centennial Timeline depicts important developments for AAI and immunology, science and technology, and U.S. and world history. Even if you viewed this structure in Hawaii at the AAI meeting, you'll find worlds more to explore in this chronicle of the great legacy informing your work today.

#### Also on Display:

- Profiles of AAI Nobel laureates and Lasker Award recipients
- AAI StoryBooth, featuring attendees' favorite immunology career recollections (Record your own while you are there!)

## NIH INSTITUTE-SPONSORED SYMPOSIA

### National Institute of Allergy and Infectious Diseases (NIAID) Symposium: *Lymphatic Function and the Immune Response to Microbial or Viral Infection*

SUNDAY, MAY 4, 3:45 PM – 5:45 PM

#### *Chairs:*

**Michael C. Carroll**, Children's Hospital and Harvard Medical School

**Lara R. Miller**, NIAID, NIH

#### *Speakers:*

**Melody A. Swartz**, Ecole Polytechnique Federale de Lausanne  
*Immunoregulatory roles of lymphatic endothelial cells*

**Michael C. Carroll**, Children's Hospital and Harvard Medical School

*Nodal regulation of humoral immunity to influenza infection by lymphangiogenesis*

**David C. Zawieja**, Texas A&M Health Science Center  
*Altered lymphatic function in response to inflammation/peritonitis*

**Nancy H. Ruddle**, Yale University  
*Lymphatics in chronic inflammation*

### National Institute of Allergy and Infectious Diseases (NIAID) Workshop: *Scavenger Receptor Biology and Nomenclature*

SUNDAY, MAY 4, 12:30 PM – 2:30 PM

#### *Chairs:*

**Mercy PrabhuDas**, NIAID, NIH

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

This workshop will serve as a follow-up to a meeting held in November 2012 in Bethesda, Maryland, at which experts in the field came together to establish guidelines and recommendations for standardizing the nomenclature for scavenger receptors (SRs) and to consider strategies for dealing with future discoveries of SRs. The goal of this workshop is to communicate these recommendations and guidelines, which will be published in *The Journal of Immunology* prior to IMMUNOLOGY 2014™, to the wider scientific community, to provide a forum for discussion, and to gather feedback for adopting the recommended nomenclature in the future.

The session will consist of one hour of scientific talks followed by a panel discussion, which will culminate with a vote from the floor to arrive at a decision regarding the proposed recommendations.

#### *Schedule:*

**Monty Krieger**, Massachusetts Institute of Technology  
*The initial molecular identification and characterization of scavenger receptors*

**Dawn M. E. Bowdish**, McMaster University  
*Scavenger receptors in host defense against infectious disease*

**Joseph El Khoury**, Massachusetts General Hospital and Harvard Medical School  
*Scavenger receptors and the neuroimmune system*

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

#### *Panel Discussion followed by vote*

**Monty Krieger**, Massachusetts Institute of Technology

**Samuel C. Silverstein**, Columbia University

**Dawn M. E. Bowdish**, McMaster University

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

**Xiang-Yang Wang**, Virginia Commonwealth University

### National Institute on Aging (NIA) Symposium: *B Cell Regulation of Immunity in Old Age*

SUNDAY, MAY 4, 3:45 PM – 5:45 PM

#### *Chairs:*

**Rebecca A. Fuldner**, NIA, NIH

**Michael P. Cancro**, University of Pennsylvania School of Medicine

#### *Speakers:*

**Richard L. Riley**, University of Miami  
*Mechanisms and outcomes of reduced B lymphopoiesis in old age*

**Michael P. Cancro**, University of Pennsylvania School of Medicine  
*Affinity, effectors, and memory: independent variables in humoral immunosenescence*

**Laura Haynes**, University of Connecticut Health Center  
*Protective humoral immunity and Tfh function decline with age*

**M. A. Julie Westerink**, University of Toledo Health Science Center  
*Age-related immune response to pneumococcal polysaccharide vaccination*

### National Institute of Environmental Health Sciences (NIEHS) Symposium: *Gene Environment Interactions in the Etiology of Asthma*

SUNDAY, MAY 4, 12:30 PM – 2:30 PM

#### *Chairs:*

**Michael C. Humble**, NIEHS, NIH

**Donald N. Cook**, NIEHS, NIH

#### *Speakers:*

**Donald N. Cook**, NIEHS, NIH  
*Finding the molecular links between house dust and asthma*

**Stephanie A. Cormier**, University of Tennessee Health Science Center  
*Exposure to combustion-derived particulate matter enhances influenza severity in infants*

**John W. Hollingsworth**, Duke University  
*Molecular mechanisms involved in lung airway and immune responses to ozone*

**Lester Kobzik**, Harvard School of Public Health  
*Prenatal programming of asthma susceptibility by environmental stressors*

## GUEST SOCIETY SYMPOSIA

### American Association of Pharmaceutical Scientists (AAPS) Symposium: *Immunogenicity of Biotherapeutics: Predicting Potential Contributors and Mechanisms*

SUNDAY, MAY 4, 8:00 AM – 10:00 AM

**Chairs:**

Arunan Kaliyaperumal, Amgen, Inc.

Bonnie Rup, Pfizer

**Speakers:**

Terry Goletz, Amgen, Inc.

*Applications and approaches for immune monitoring in clinical drug development*

Jack Ragheb, FDA

*Novel in vivo approaches for the study of immune responses*

Genhong Cheng, University of California, Los Angeles

*Inflammatory responses to PAMPs, DAMPs, and protein aggregates*

Scheherazade Sadegh-Nasseri, Johns Hopkins School of Medicine

*Use of the immune system's bare essentials for identification of T cell targets*

### American Association of Veterinary Immunologists (AAVI) and AAI Veterinary Immunology Committee Joint Symposium: *Vaccines for the Modern Era: Implications for Human and Animal Health*

SATURDAY, MAY 3, 12:30 PM – 2:30 PM

**Chairs:**

Laurel J. Gershwin, University of California, Davis

Carol G. Chitko-McKown, Genetics, Breeding, and Animal Health Research Unit, ARS, USDA

**Speakers:**

Mark K. Slifka, Oregon Health and Science University  
*Hydrogen peroxide-based vaccines: a new approach to an old problem*

Tilahun Yilma, University of California, Davis

*Strategies for enhancing the safety and efficacy of recombinant vaccines*

Ronald D. Schultz, University of Wisconsin

*Immunologic memory: what to expect from different types of vaccines*

Anna P. Durbin, Johns Hopkins Bloomberg School of Public Health

*Dengue vaccines: from animal models to human challenge*

### American Society for Blood and Marrow Transplantation (ASBMT) Symposium: *Exploiting Immune Responses to Cytomegalovirus Infection after Transplantation*

SATURDAY, MAY 3, 10:15 AM – 12:15 PM

**Chairs:**

Jeffrey S. Miller, University of Minnesota

Helen E. Heslop, Baylor College of Medicine

**Speakers:**

Jeffrey S. Miller, University of Minnesota

*Human NK cell memory responses shaped by CMV reactivation*

William J. Murphy, University of California, Davis School of Medicine

*Differential effects of murine NK cell licensing in mediating MCMV resistance and modulating T cell responses*

Helen E. Heslop, Baylor College of Medicine

*Targeting CMV with multivirus-specific or third party CTLs*

Karl Peggs, University College London Cancer Institute  
*CMV-specific T cell therapies: from proof of concept to standard of care?*

### American Society of Transplantation (AST) Symposium: *New Paradigms in T Cell Biology and Transplant Immunity*

MONDAY, MAY 5, 10:15 AM – 12:15 PM

**Chairs:**

Mandy L. Ford, Emory University

Heth R. Turnquist, University of Pittsburgh School of Medicine

**Speakers:**

Fadi G. Lakkis, University of Pittsburgh School of Medicine  
*Migration of effector and memory T cells into the transplant*

Jordan S. Pober, Yale University

*Endothelial cells as antigen presenting cells and regulators of effector T cell transplant infiltration*

Qizhi Tang, University of California, San Francisco

*Therapeutic applications of Tregs in transplantation*

Daniel J. Campbell, Benaroya Research Institute  
*Roles for Th1 and Th2 "master regulator" transcription factors in regulatory T cells*



Visit the History Lounges (Floor 3) for the *Immunology in Popular Culture* exhibit, featuring AAI members' science depicted in general media and society. Also, learn the history of distinguished Pittsburgh leaders in science.

# IMMUNOLOGY 2014™ GALA

You are invited to attend  
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AAI attendees all share a commitment to innovation and discovery.

At the Heinz History Center, our Gala attendees will be treated not only to a taste of Pittsburgh at a festive reception but also to exhibits and stories of breakthroughs and achievements that originated in Pittsburgh and Western Pennsylvania. From Jonas Salk's discovery of the polio vaccine and the invention of the Big Mac, to the rise of new jazz styles and the nation's first superhighway, guests will experience what made this region a cradle of world-changing ideas.

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**Canadian Society for Immunology (CSI)**  
**Symposium: Transcriptional Regulation of Hematopoiesis**

SATURDAY, MAY 3, 10:15 AM – 12:15 PM

*Chairs:*

Michele K. Anderson, Sunnybrook Research Institute, Toronto  
 Rodney P. DeKoter, Western University, London, Ontario

*Speakers:*

R. Keith Humphries, Terry Fox Laboratory, Vancouver  
*The good and bad side of transcription factors in hematopoiesis: Meis1 as a case study*

Trang Hoang, IRIC, Montreal  
*Oncogenic transcription factors, from hematopoietic stem cells to acute leukemias*

Rodney P. DeKoter, Western University, London, Ontario  
*Complementary roles of PU.1 and Spi-B at the pro-B to pre-B cell transition*

Michele K. Anderson, Sunnybrook Research Institute, Toronto  
*Regulation of gamma-delta T cell development and programming by HEB transcription factors*

Juan Carlos Zúñiga-Pflücker, Sunnybrook Research Institute, Toronto  
*Requirements for GATA-3 at the initiation of the T-lineage development program in response to Notch signals*

**Chinese Society of Immunology (ChSI)**  
**Symposium: Cancer Immunotherapy Targeting Chronic Inflammation and Immunosuppression**

SUNDAY, MAY 4, 10:15 AM – 12:15 PM

*Chairs:*

Xuetao Cao, Chinese Academy of Medical Sciences, Beijing  
 Olivera J. Finn, University of Pittsburgh School of Medicine

*Speakers:*

Xuetao Cao, Chinese Academy of Medical Sciences, Beijing  
*Overview of tumor immunology and immunotherapy in China*

Limin Zheng, Sun Yat-sen University, Guangzhou  
*Macrophage plasticity in distinct microenvironments of human tumor*

Xiyun Yan, Institute of Biophysics, Chinese Academy of Sciences, Beijing  
*Targeting CD146 for cancer immunotherapy*

Bo Huang, Chinese Academy of Medical Sciences, Beijing  
*Macroparticles in cancer immunotherapy*

Taoyong Chen, National Key Laboratory of Medical Immunology and Institute of Immunology, Second Military Medical University, Shanghai  
*New adjuvant and delivery system in cancer immunotherapy*

**German Society for Immunology (DGfI)**  
**Symposium: Thymic Development and Tolerance**

MONDAY, MAY 5, 3:45 PM – 5:45 PM

*Chairs:*

Jürgen Wienands, University of Göttingen

Dieter Kabelitz, University of Kiel

Cartsen Watzl, Leibniz Research Center, Dortmund

*Speakers:*

Hans-Martin Jäck, University of Erlangen  
*Immunology in Germany*

Thomas Boehm, MPI for Immunobiology and Epigenetics, Freiburg  
*Evolution of the thymus*

Ludger Klein, University of Munich  
*Functional adaptation of thymic stromal cells for tolerance induction*

Bruno Kyewski, German Cancer Research Institute (DKFZ), Heidelberg  
*Generating intra-thymic self-antigen diversity for central tolerance*

Vera Martins, University of Ulm  
*Cell competition in T cell progenitors*

Hans-Reimer Rodewald, German Cancer Research Institute (DKFZ), Heidelberg  
*Thymus as a source of T cell leukemia*

**International Complement Society (ICS)**  
**Symposium: Frontiers in Complement Research: Immunity, Autoimmunity, and Cellular Homeostasis**

SUNDAY, MAY 4, 10:15 AM – 12:15 PM

*Chairs:*

V. Michael Holers, University of Colorado School of Medicine, Denver

Viviana Ferreira, University of Toledo

*Speakers:*

Wenchoao Song, University of Pennsylvania Perelman School of Medicine  
*Complement, inflammation, and the synergistic intersection of innate immune pathways*

Marina Botto, Imperial College London  
*Complement in humoral immunity and autoimmunity*

Piet Gros, Utrecht University, *Elucidating mechanisms of complement function from structural biology*

Daniel Ricklin, University of Pennsylvania Perelman School of Medicine  
*Regulation of cellular proliferation by complement: roles in cancer and transplantation biology*

Andrea J. Tenner, University of California, Irvine  
*Novel functions of complement proteins and pathway activation in neurological disorders*

**Japanese Society for Immunology (JSI)**  
**Symposium: Highlights of Immunology in Japan: JSI Awardees Symposium**

MONDAY, MAY 5, 3:45 PM – 5:45 PM

*Chairs:*

Ichiro Taniuchi, RIKEN Center for Integrative Medical Sciences  
 Yasunobu Miyake, Kyushu University

*Speakers:*

Ichiro Taniuchi, RIKEN Center for Integrative Medical Sciences  
*Transcriptional control of helper/cytotoxic lineage choice in the thymus*

Takashi Sekiya, Keio University  
*Roles of the nuclear orphan receptor Nr4a in CD4<sup>+</sup> T cell development and functions*

Keiji Hirota, Osaka University  
*T cell-dependent IgA responses by plastic Th17 cells*

Yasunobu Miyake, Kyushu University  
*Mycobacterial recognition by C-type lectin receptors*

Hideyuki Yanai, University of Tokyo  
*Role of HMGB1 in inflammatory diseases and nucleic acid-mediated immune responses*

**Korean Association of Immunologists (KAI) and Association of Korean Immunologists in America (AKIA) Symposium: Regulation of Host Immunity by Immune Cell Receptors and Effectors**

SATURDAY, MAY 3, 3:45 PM – 5:45 PM

*Chairs:*

Charles D. Surh, Institute for Basic Science, Korea  
 Mi-La Cho, Catholic University of Korea

*Speakers:*

Jae U. Jung, University of Southern California  
*Host and pathogen standoff: host intracellular pattern recognition receptors vs. viral immune modulators*

Yong-Soo Bae, Sungkyunkwan University  
*Positive and negative regulatory factors epigenetically expressed during dendritic cell development control the immunogenicity of dendritic cells*

Sungjin Kim, Michigan State University  
*Memory-like NK cells with potent Fc receptor function and broad-spectrum antiviral activity*

Mi-La Cho, Catholic University of Korea  
*STAT3 licenses AP-1 family to drive Th17 cell differentiation in autoimmune diseases*

Hyun Park, NCI, NIH  
*IL-7 receptor as a new target for immune intervention in inflammation and autoimmunity*

**Society for Immunotherapy of Cancer (SITC)**  
**Symposium: Cancer Immunology and Immunotherapy: From Basic Science to Clinical Application**

MONDAY, MAY 5, 12:30 PM – 2:30 PM

*Chairs:*

Thomas F. Gajewski, University of Chicago  
 Lisa H. Butterfield, University of Pittsburgh Cancer Institute

*Speakers:*

Robert H. Vonderheide, University of Pennsylvania  
*Novel mechanisms of anti-CD40 activity*

Nicholas P. Restifo, NCI, NIH  
*Adoptive T cell therapy: from biology to practice*

Suzanne L. Topalian, Johns Hopkins University  
*Targeting the PD-L1/PD-1 axis for cancer immunotherapy*

F. Stephen Hodin, Jr., Dana-Farber Cancer Institute  
*Anti-CTLA-4 mAb: new directions and combinations*

**Society of Mucosal Immunology (SMI)**  
**Symposium: The Leo Lefrançois Memorial Symposium on T Cell Memory and Protection from Infection**

MONDAY, MAY 5, 10:15 AM – 12:15 PM

*Chairs:*

Joanne L. Viney, Biogen Idec  
 Stephen M. Hedrick, University of California, San Diego

*Speakers:*

David Masopust, University of Minnesota  
*The study of memory T cells that reside within the respiratory, intestinal, and reproductive mucosa*

Vaiva Vezytis, University of Minnesota  
*Induction and maintenance of tolerance to intestinal proteins*

Kimberly D. Klonowski, University of Georgia  
*Environmental cues regulating memory CD8<sup>+</sup> T cell immunity in the respiratory tract*

Kamal M. Khanna, University of Connecticut Health Center  
*Imaging the onset of primary and secondary immune responses to viral and bacterial infection*

Kimberly S. Schluns, University of Texas MD Anderson Cancer Center  
*Regulation of IL-15 by inflammatory signals*

Michael J. Bevan, University of Washington  
*In honor of Leo Lefrançois: advances in our understanding of T cell memory and protection from infection*

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**Society for Natural Immunity (SNI) Symposium:  
*Current Developments in NK Cell Research***

SATURDAY, MAY 3, 12:30 PM – 2:30 PM

*Chairs:*

Hans-Gustaf Ljunggren, Karolinska Institutet

Chiara Romagnani, German Rheumatism Research Center

*Speakers:*

Chiara Romagnani, German Rheumatism Research Center  
*Phenotypic and functional characterization of human NK cell subsets*

André Veillette, Institut de Recherches Cliniques De Montréal  
*Regulation of NK cell activation by SAP family adaptors and SLAM family receptors*

Yenan T. Bryceson, Karolinska Institutet and University of Bergen  
*CMV drives methylation-dependent epigenetic reprogramming of NK cells*

Taku Kambayashi, University of Pennsylvania  
*Proximal signaling events that dictate NK cell tolerance and education*

Monika Braun, Karolinska Institutet  
*Mechanisms of NK cell activation following human hantavirus infection*

**The Obesity Society (TOS) Symposium: *Unresolved, Chronic Inflammation as a Mediator of Diverse Disease Risks in Insulin-Resistant Obesity***

SATURDAY, MAY 3, 12:30 PM – 2:30 PM

*Chairs:*

Gerald V. Denis, Boston University School of Medicine

Jennifer Snyder-Cappione, Boston University Medical Center

*Speakers:*

Irving L. M. H. Aye, University of Texas Health Science Center San Antonio

*Maternal obesity, placental inflammation, and fetal growth*

Clara Westwell-Roper, University of British Columbia  
*Aggregation of islet amyloid polypeptide as a trigger for islet inflammation in type 2 diabetes*

Harold S. Sacks, VA Greater Los Angeles Healthcare System  
*Epicardial adipose tissue as a putative contributor to coronary atherogenesis*

Suneil Koliwad, University of California, San Francisco

*Microglia as fatty acid sensors in the control of hypothalamic inflammation and metabolic function*



# AAI Courses in Immunology

## 2014 Introductory Course in Immunology

July 12–17, 2014

Long Beach Convention Center, Long Beach, California

**Director: Juan Carlos Zúñiga-Pflücker, Ph.D.**

*University of Toronto and Sunnybrook Research Institute*

## 2014 Advanced Course in Immunology

July 27–August 1, 2014

Seaport World Trade Center, Boston, Massachusetts

**Director: Leslie J. Berg, Ph.D.**

*University of Massachusetts Medical School*

For more information visit [www.aai.org/Education/Courses](http://www.aai.org/Education/Courses)

Please direct inquiries to [meetings@aai.org](mailto:meetings@aai.org) or 301-634-7178.

Financial support for underrepresented minority scientists is available through the FASEB MARC Program.

Visit: <http://marc.faseb.org>.

## CAREER DEVELOPMENT SESSIONS

Through workshops, roundtables, networking opportunities, and one-on-one counseling, IMMUNOLOGY 2014™ provides critical career development programs.

Career sessions and services this year include:

- Careers in Biotech: Panel Discussion and Networking
- Careers in Science and Networking Roundtables (2)
- How to Convert Your CV into a Resumé (followed by one-on-one counseling)
- Interviewing for a Job
- Publishing Your Scientific Work: Tips on Writing, Responding to Reviewers, and Avoiding Ethical Pitfalls
- Secrets for a Successful Postdoctoral Fellowship
- Online and on-site Jobs Board, free to meeting registrants and exhibitors
- New Member Reception (By invitation)

### **Publishing Your Scientific Work: Tips on Writing, Responding to Reviewers, and Avoiding Ethical Pitfalls**

Sponsored by the AAI Publications Committee

SUNDAY, MAY 4, 12:30 PM – 2:00 PM

**Chairs:**

Eugene M. Oltz, Washington University School of Medicine  
Chair, AAI Publications Committee

Pamela J. Fink, University of Washington School of Medicine  
Editor-in-Chief, *The Journal of Immunology*

Your data may be good and your findings may be significant, but your manuscript will navigate peer review more smoothly if you present your findings well. What steps can an author take to improve data presentation? What is considered an inappropriate, even unethical, presentation of data? What will make the manuscript easier for the reviewer to read and evaluate? How can the author best respond to reviewers? With ample time for questions and answers at the end of the session, experienced editors will address these and other questions about scientific publishing in this session sponsored by the AAI Publications Committee.

**Speakers:**

Eugene M. Oltz, Washington University School of Medicine  
Chair, AAI Publications Committee

*Writing a scientific manuscript: How should I tell my story and to whom should I tell it?*

Kristin A. Hogquist, University of Minnesota  
*Responding to reviewers: What you want to say and what you should say*

Pamela J. Fink, University of Washington School of Medicine  
Editor-in-Chief, *The Journal of Immunology*  
*If it feels wrong, it probably is*

### **Careers in Science Roundtable**

Sponsored by the AAI Education Committee & AAI Committee on the Status of Women

SUNDAY, MAY 4, 11:30 AM – 1:00 PM

**Chair:**

Scheherazade Sadegh-Nasseri, Johns Hopkins Medical Institute  
Chair, AAI Committee on the Status of Women

**Registration Fee: \$20** (Lunch included)

At this always popular session, you'll have the opportunity to meet with scientists at your own career stage and with more experienced scientists to explore specific career issues important to men and women in science today. Learn what others are thinking and gain insights into issues you are confronting in your own situation. New topics this year offer insights into NIH Study Sections and considerations for scientists in M.D.-Ph.D. careers. Choose from these and the other vital topics related to the environment you work in (academic research, biotech industry, governmental agencies, non-profits), the transitions from specific career stages, or issues in balancing career and family in any career path. Don't miss this great networking opportunity!

**Discussion topics:**

- Research Careers in Academia
  - Graduate Student to Postdoc: finding a postdoc, interviewing
  - Postdoc to PI: finding a position, interviewing, negotiating, lab start-up
  - New PI: attracting students and postdocs, preparing for tenure
  - Undergraduate Institutions: finding the balance in teaching, doing research
  - Mentoring Effectively
- How to Build a Network
- Career and Family: time management/family leave/professional couples
- Careers in Biotech and Industry: moving from academia to industry and vice versa
- Research Careers at Governmental Agencies (FDA/NIH/USDA/CDC)
- NIH Study Section Insights
- The Physician Scientist: balancing clinical and research duties
- Research from the M.D., Ph.D. Perspective
- Non-Research Careers for Scientists: careers in scientific journals, public policy, non-profits

**Table leaders: see AAI Committee-sponsored Sessions**

## **Careers Roundtable and (NEW!) Speed Networking Session**

Sponsored by the AAI Minority Affairs Committee

SATURDAY, MAY 3, 11:45 AM – 2:15 PM

*Chair:*

**Adriana Larregina**, University of Pittsburgh; Chair, AAI Minority Affairs Committee

**Registration Fee: \$20** (Includes lunch; coffee/cookies during networking hour.)

Networking skills have never been more crucial to ensure success for early/mid-career scientists, including those traditionally under-represented in biomedical research. At the roundtable, take advantage of the opportunity to meet in small-group format with accomplished, senior immunologists to hear how they have handled the career challenges you now face and learn what they believe will work for you today. Then practice networking in a relaxed environment offering a structured networking exercise and personalized feedback on communicating your scientific interests/objectives most effectively.

*Discussion topics:*

- Grad Student: finding a mentor; taking aim at postdoc training
- Postdoc: finding a mentor; taking aim at a faculty position
- Junior Faculty: preparing for promotion and tenure
- Academia or Industry: how to decide (or switch sides)
- Government Agency Careers: CDC, FDA, NIH
- Non-Research Careers: science journalism, patent law, biomedical entrepreneurship

*Table leaders: see AAI Committee-sponsored Sessions*

## **How to Convert Your CV into a Resumé**

SATURDAY, MAY 3, 11:00 AM – 12:00 PM

*Chair:*

**Mary Litzinger**, AAI

*Speaker:*

**Derek Haseltine**, Director, Career Services, George Washington University



For anyone seeking a job outside of academe, how you present yourself on paper is critical. A well-prepared resumé can make all the difference in securing that interview. The focus of this session will be on the important elements of a resumé,

the differences between a resumé and the standard academic curriculum vitae, and the information needed to make a good impression. In this special career development session, attendees will be instructed in how to transform their CVs into professional resumés.

Small breakout sessions for individual consulting will follow from 12:30 PM to 2:30 PM. Bring your CV!

## **Careers in Biotech: Panel Discussion and Networking**

SATURDAY, MAY 3, 7:00 PM – 9:00 PM

*Chair:*

**Nandita Bose**, Biothera

*Panelists:*

**Elizabeth L. Bachert**, Senior Director, Worldwide Business Development, Pfizer

**Jane Grogan**, Senior Scientist, Genentech

**James Huleatt**, Deputy Director, Global Clinical Immunology Sanofi Pasteur

**Thomas MacAllister**, Chief Development Officer Besins Healthcare

**Jeffrey Rossio**, Director, R&D, Immunoassay Development Life Technologies Corporation

Many opportunities exist in industry for a scientist with advanced degrees. There are positions in laboratory research, program management, business development, regulatory affairs and clinical trials oversight, medical liaison, and more. This panel features scientists employed in a variety of positions in industry who will share their career paths and highlight the skills required to succeed in these careers. Following the panel discussion, enjoy casual conversation with the speakers and other industry connections at a networking reception.

## **Secrets for a Successful Postdoctoral Fellowship**

SUNDAY, MAY 4, 1:00 PM – 2:00 PM

*Chair:*

**Mary Litzinger**, AAI

*Speakers:*

**Darlene F. Zellers**, Director, Office of Academic Career Development, Health Sciences, University of Pittsburgh

**Steven K. Wendell**, Assistant Director, Postdoctoral Development Office of Academic Career Development, Health Sciences University of Pittsburgh

A postdoctoral fellowship is the time to develop research skills you will need to succeed as an independent scientist. It is, however, just as important to realize that you need to prepare for a career path at the same time. This session will highlight ways of getting the most out of your postdoctoral fellowship, relating successfully with your mentor, and understanding how to use the resources available to you to ensure that your training prepares you adequately for a seamless transition into the next phase of your career.



**Interviewing for a Job**

SUNDAY, MAY 4, 10:00 AM – 11:00 AM

**Chair:**

Mary Litzinger, AAI

**Speaker:**

Derek Haseltine, Director, Career Services, George Washington University

This session will be focused on tips and techniques to help you successfully navigate the interview process. Emphasis will be on how you can present yourself in the best possible light. You will also learn how to respond to unexpected questions. This session is open to anyone but is especially intended for student and postdoctoral attendees.

**AAI STORYBOOTH**

VISIT THE STORYBOOTH (ROOM 332) WITH FRIENDS, COLLEAGUES, OR MENTORS TO RECORD YOUR STORIES AND BECOME PART OF AAI HISTORY.

**New Member Reception**

Sponsored by the AAI Membership Committee

FRIDAY, MAY 2, 4:00 PM – 4:45 PM

**Chair:**

Judith Owen, Haverford College; Chair, AAI Membership Committee

AAI wishes to welcome new Regular and Associate members joining AAI for the first time. AAI President Marc Jenkins and other AAI leaders look forward to meeting you personally. Please join us with your invitation in hand for light refreshments and casual conversation. *Event by invitation only.*



# IMMUNOLOGY 2014™

Annual Meeting of The American Association of Immunologists

May 2–6, 2014 | David L. Lawrence Convention Center | Pittsburgh, Pennsylvania

## Jobs Board

*A Free Recruiting Service for Registrants and Exhibitors*  
Post Online and Meet Onsite

AAI is offering career services to both job seekers and employers through a Jobs Board free to meeting registrants and exhibitors at [www.immunology2014.org/Attendees/jobsboard.html](http://www.immunology2014.org/Attendees/jobsboard.html).

**Job Seekers!** Whatever your career stage, use this career service at IMMUNOLOGY 2014™ to enhance your professional development!

- **Job Postings.** Review the online AAI Jobs Board to identify postings you wish to pursue. (View new Advance Postings through April 23. Watch for On-site Postings, online or on paper in the Exhibit Hall!)

- **Direct Access to Recruiters.** Job postings will include recruiters' e-mail addresses so that you can contact them directly.

**Employers!** Advertise your position on a virtual Jobs Board located on the IMMUNOLOGY 2014™ website. By including a contact email, you will receive inquiries directly.

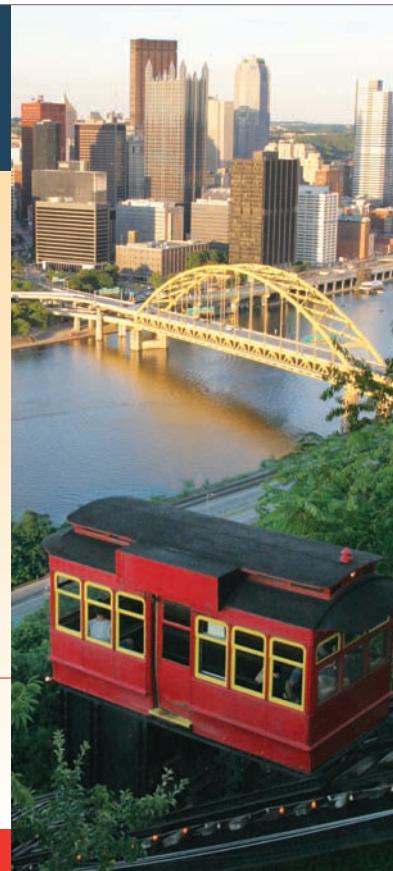
- **Advance Postings.** Postings will be accepted as of February 1, 2014, and will remain online until the end of the meeting. To post job listings in advance of the meeting, contact [meetings@aai.org](mailto:meetings@aai.org). Advance Postings must be submitted to AAI by April 23, 2014.

**On-site Postings.** After April 23, 2014, employers wishing to advertise a job on the IMMUNOLOGY 2014™ website may still do so by visiting the AAI Office in the David L. Lawrence Convention Center between 9:00 AM and 5:00 PM. You may also post a paper announcement on the bulletin board in the Exhibit Hall.

**Save Thousands of Dollars in Recruiting Expenses.** Take advantage of this complimentary hiring opportunity at IMMUNOLOGY 2014™. To register for the meeting, visit [www.immunology2014.org/Registration/attendee.html](http://www.immunology2014.org/Registration/attendee.html).

The American Association of Immunologists, Inc.  
9650 Rockville Pike  
Bethesda, Maryland 20814  
Phone: (301) 634-7178  
Fax: (301) 634-7887  
Email: [info@aai.org](mailto:info@aai.org)

[www.IMMUNOLOGY2014.org](http://www.IMMUNOLOGY2014.org)



## BLOCK SYMPOSIA

Selected abstracts are programmed into oral sessions called Block Symposia. Each Block Symposium comprises up to eight selected abstracts. Approximately 75 Block Symposia are programmed for this annual meeting.



## POSTERS

The most interactive part of the meeting!

Discuss data and research issues firsthand with authors at the Poster Sessions. Posters will be displayed on the one day they are specifically assigned, Saturday through Monday, in the David L. Lawrence Convention Center Exhibit Halls.

**DEDICATED DAILY POSTER PRESENTATION TIME  
FROM 2:30 PM – 3:45 PM**

No concurrent symposia, presentations, or other sessions will be held during the designated poster presentation time.

## EXHIBITOR WORKSHOPS

Be sure to take advantage of the knowledge-building opportunities presented in Exhibitor Workshops. Located on the Exhibit Floor, these workshops explore companies' latest technologies, products, and services through demonstrations and discussions.

*Workshops are planned and conducted by exhibitors; the listing of these workshops does not constitute endorsement of any products or services by AAI.*



## EXHIBITOR HALL PASSPORT PROGRAM

**FILL OUT YOUR EXHIBIT HALL PASSPORT  
FOR A CHANCE TO WIN ONE OF THREE \$250  
AMERICAN EXPRESS GIFT CARDS!**

The drawing will be held during the Poster Presentations on Monday, May 5, from 2:30 PM – 3:45 PM. You'll find your Passport in your meeting bag or you may pick one up at the AAI Booth.





**The American Association of Immunologists**  
Gratefully Acknowledges the Generous Sponsorship of



for the  
**IMMUNOLOGY 2014™**  
**Opening Night Welcome Reception**  
FRIDAY, MAY 2 • 6:00 PM – 8:00 PM

**Chambers-eBioscience Memorial Award**

**Lustgarten-eBioscience Memorial Award**

**Meeting Bags**

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**IMMUNOLOGY 2014™**

May 2 – 6 , 2014 • Pittsburgh, Pennsylvania • David L. Lawrence Convention Center

## SOCIAL EVENTS

### New Member Reception (*By invitation only*)

*Sponsored by the AAI Membership Committee*

FRIDAY, MAY 2, 4:00 PM – 4:45 PM (BADGE AND INVITATION REQUIRED)

AAI wishes to welcome new Regular and Associate members joining AAI for the first time. AAI President Marc Jenkins and other AAI leaders look forward to meeting you personally. Please join us with your invitation in hand for light refreshments and casual conversation.

### IMMUNOLOGY 2014™ Opening Night Welcome Reception

*Reception generously sponsored by eBioscience, an Affymetrix company*

FRIDAY, MAY 2, 6:00 PM – 8:00 PM

NORTH AND SOUTH GARDEN TERRACES  
DAVID L. LAWRENCE CONVENTION CENTER



Come directly from the President's Address to the Opening Night Welcome Reception on the convention center terraces overlooking the Allegheny River and the Pittsburgh skyline. Seek out old friends and make new acquaintances with hors d'oeuvres, drinks, and music recalling the rich jazz legacy of Pittsburgh. The reception is generously supported by eBioscience to welcome you and wish you a pleasurable, productive week.

### 25th Anniversary of AAI Public Affairs, featuring The Capitol Steps

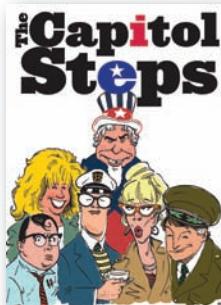
SATURDAY, MAY 3, 7:00 PM – 9:00 PM

ROOM 413/414/415

DAVID L. LAWRENCE CONVENTION CENTER

Join us for a riotously entertaining musical performance by the political satire group, **The Capitol Steps**, preceded by a reception celebrating the 25th anniversary of the AAI Public Affairs Program. Help AAI honor current and past members of the Committee on Public Affairs and attend the uproariously funny performance by the group who "put the MOCK in democracy." This once-in-a-quarter-century event is open to all attendees, but space is limited and tickets are required (Tickets available when registering for the meeting).

\$35 for Attendees and \$50 for Guests.



### *The Journal of Immunology (The JI) Editorial Board Dinner and Meeting (By invitation only)*

*Generously sponsored by Dartmouth Journal Services*

SATURDAY, MAY 3, 7:00 PM – 10:00 PM

This working dinner is held each year at the annual meeting to provide the Editorial Board members the valuable opportunity to meet in person to discuss items of interest and concern about *The JI*.

### President's Service Appreciation Reception (*By invitation only*)

*Generously sponsored by BioLegend*

SUNDAY, MAY 4, 7:30 PM – 9:30 PM

At this important event, AAI leadership honors the association's dedicated member volunteers—the committee members, editors, mentors, instructors, and others—who work on the membership's behalf throughout the year by giving generously of their time in support of the AAI mission. Open to 2013-2014 AAI volunteers.

### IMMUNOLOGY 2014™ Gala

*Generously sponsored by BioLegend*

MONDAY, MAY 5, 7:00 PM – 9:30 PM

THE SENATOR JOHN HEINZ HISTORY CENTER



At the Heinz History Center, you will be treated not only to a Taste of Pittsburgh at a festive reception but also to an immersion in stories of world-altering innovations tracing their origins to the Pittsburgh and Western Pennsylvania region—among them, Jonas Salk's polio vaccine; George Westinghouse's alternating current; new jazz styles (Bill Strayhorn, George Benson, et al.); the Ferris Wheel; the first wire-cabled suspension bridge; the first commercial radio station; the Big Mac; Klondike bars; and much more. You'll enjoy music, drinks, and hors d'oeuvres as you explore the exhibits throughout the century-old Chautauqua Lake Ice Company Building, an exhibit in itself.



**The American Association of Immunologists**  
Gratefully Acknowledges the Generous Sponsorship of



for the  
**IMMUNOLOGY 2014™ GALA**  
MONDAY, MAY 5 • 7:00 PM – 9:30 PM

**Lefrançois-BioLegend Memorial Award**

**President's Service  
Appreciation Reception**  
SUNDAY, MAY 4 • 7:30 PM – 9:30 PM

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**IMMUNOLOGY 2014™**

May 2 – 6 , 2014 • Pittsburgh, Pennsylvania • David L. Lawrence Convention Center

## 2013–2014 AAI PROGRAM COMMITTEE

*AAI gratefully acknowledges the efforts of the Program Committee for IMMUNOLOGY 2014™.*

**Leslie J. Berg, Chair**  
University of Massachusetts Medical School  
  
**Maria-Luisa Alegre**  
University of Chicago  
  
**Gregory M. Barton**  
University of California, Berkeley  
  
**Marlene Bouvier**  
University of Illinois at Chicago College of Medicine

**Shane Crotty**  
La Jolla Institute for Allergy and Immunology  
  
**James E. Crowe, Jr.**  
Vanderbilt University Medical Center  
  
**Daniel H. Kaplan**  
University of Minnesota  
  
**Frances E. Lund**  
University of Alabama at Birmingham

**J. Rodrigo Mora**  
Janssen Research & Development LLC, Pharmaceutical Companies of Johnson & Johnson  
  
**Erika L. Pearce**  
Washington University School of Medicine  
  
**Mercedes Rincón**  
University of Vermont  
  
**Barbara J. Vilen**  
University of North Carolina at Chapel Hill

## AAI ABSTRACT PROGRAMMING CHAIRS

*AAI gratefully acknowledges the efforts of the Abstract Programming Chairs for IMMUNOLOGY 2014™.*

### Antigen Processing and Presentation

**Malini Raghavan**  
University of Michigan Medical School  
  
**Scheherazade Sadegh-Nasseri**  
Johns Hopkins School of Medicine

### Basic Autoimmunity

**Jeffrey C. Rathmell**  
Duke University  
  
**Barbara J. Vilen**  
University of North Carolina at Chapel Hill

### Cellular Adhesion, Migration, and Inflammation

**Margaret S. Bynoe**  
Cornell University  
  
**Yoji Shimizu**  
University of Minnesota Medical School

### Cytokines and Chemokines and Their Receptors

**Ninan Abraham**  
University of British Columbia  
  
**Sarah L. Gaffen**  
University of Pittsburgh

### Hematopoiesis and Immune System Development

**Michael A. Farrar**  
University of Minnesota  
  
**Virginia M. Shapiro**  
Mayo Clinic

### Immediate Hypersensitivity, Asthma, and Allergic Responses

**Paul J. Bryce**  
Northwestern University Feinberg School of Medicine  
  
**Toshiaki Kawakami**  
La Jolla Institute for Allergy and Immunology

### Immune Mechanisms of Human Disease

**Clara Abraham**  
Yale University  
  
**Marcus R. Clark**  
University of Chicago

### Immune System Regulation: Cellular Mechanisms

**Daniel J. Campbell**  
Benaroya Research Institute  
  
**Jennifer L. Gommerman**  
University of Toronto

### Immune System Regulation: Molecular Mechanisms

**Rachel M. Gerstein**  
University of Massachusetts Medical School  
  
**Mark H. Kaplan**  
Indiana University School of Medicine

### Innate Immune Responses and Host Defense: Cellular Mechanisms

**Judith Hellman**  
University of California, San Francisco  
  
**Paige Lacy**  
University of Alberta

### Innate Immune Responses and Host Defense: Molecular Mechanisms

**Lee-Ann H. Allen**  
University of Iowa  
  
**Denise M. Monack**  
Stanford University

### Lymphocyte Differentiation and Peripheral Maintenance

**Nicole Baumgarth**  
University of California, Davis  
  
**Charles D. Surh**  
Pohang University of Science and Technology

### Microbial, Parasitic, and Fungal Immunology

**Andrea M. Cooper**  
Trudeau Institute, Inc.  
  
**George S. Yap**  
Rutgers New Jersey Medical School

### Mucosal and Regional Immunology

**Peter B. Ernst**  
University of California, San Diego  
  
**Dana J. Philpott**  
University of Toronto

### Therapeutic Approaches to Autoimmunity

**Nitin Karandikar**  
University of Iowa  
  
**Michael K. Racke**  
Ohio State University Medical Center

### Transplantation Immunology

**Donna L. Farber**  
Columbia University Medical Center  
  
**Pavan Reddy**  
University of Michigan Medical Center

### Tumor Immunology

**José R. Conejo-Garcia**  
The Wistar Institute  
  
**Weiping Zou**  
University of Michigan

### Vaccines and Immunotherapy

**Lisa H. Butterfield**  
University of Pittsburgh  
  
**Herman F. Staats**  
Duke University Medical Center

### Veterinary and Comparative Immunology

**Cynthia L. Baldwin**  
University of Massachusetts  
  
**Jeffrey A. Yoder**  
North Carolina State University

### Viral Immunology

**Julia L. Hurwitz**  
St. Jude Children's Research Hospital  
  
**Steven M. Varga**  
University of Iowa



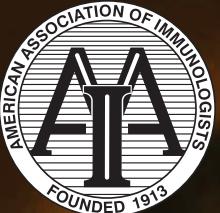
# We're Moving...

## The AAI Introductory Course in Immunology



*Will be held in beautiful*  
Long Beach, California  
July 12–17, 2014  
Long Beach Convention Center

—Details to come—



# 2014 Introductory Course in Immunology

July 12–17, 2014 • Long Beach Convention Center, Long Beach, California

Director: Juan Carlos Zuñiga-Pflücker, Ph.D.

University of Toronto and Sunnybrook Research Institute

## Don't miss the most comprehensive introduction to immunology available!

This intensive two-part course, taught by world-renowned immunologists, provides a comprehensive overview of the basics of immunology. This course is for students new to the discipline or those seeking more information to complement general biology or science training. **Part I (July 12–14)** is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. **Part II (July 15–17)** is a clinically oriented lecture series focusing on specialty areas.

Parts I and II may be taken independently at the discretion of the student.

## Faculty

Juan Carlos Zuñiga-Pflücker, *University of Toronto and Sunnybrook Research Institute*

### *Introduction to the Immune System*

Lewis L. Lanier, *University of California, San Francisco*  
*Innate Immunity: Introduction to the Cells*

Andrea J. Tenner, *University of California, Irvine*  
*Complement*

Gregory M. Barton, *University of California, Berkeley*  
*Innate Immunity: Introduction to Pattern Recognition and Intracellular Signaling*

Wendy L. Havran, *The Scripps Research Institute*  
*Introduction to Adaptive Immunity*

Juan Carlos Zuñiga-Pflücker, *University of Toronto and Sunnybrook Research Institute*  
*MHC Restriction and Thymic Selection*

Nilabh Shastri, *University of California, Berkeley*  
*Antigen Processing and Presentation*

A. Karolina Palucka, *Baylor Institute for Immunology Research*

### *Dendritic Cells: The Bridge Between Innate and Adaptive Immunity*

Shane Crotty, *La Jolla Institute for Allergy and Immunology*  
*B Cell Activation and Humoral Immunity*

Arthur Weiss, *University of California, San Francisco*  
*Signaling in the Immune System*

Alessandro Sette, *La Jolla Institute for Allergy and Immunology*

### *Putting the Pieces Back Together: Epitopes, Cell Responses, and Diseases*

Ninan Abraham, *University of British Columbia*  
*Cytokines*

Megan K. Leving, *University of British Columbia*  
*T and B Cell Tolerance*

Olivia M. Martinez, *Stanford University School of Medicine*  
*Transplantation*

Hilde Cheroutre, *La Jolla Institute for Allergy and Immunology*  
*Mucosal Immunology*

Linda A. Sherman, *The Scripps Research Institute*  
*Tumor Immunology*

Robert L. Modlin, *University of California, Los Angeles, David Geffen School of Medicine*  
*Immunity to Bacterial Pathogens*

Elina Zuniga, *University of California, San Diego*  
*Immunity to Viruses*

Stephen P. Schoenberger, *La Jolla Institute for Allergy and Immunology*  
*Immunologic Memory*

Jennifer M. Puck, *University of California, San Francisco*  
*Genetic Approaches to Immune-Mediated Diseases*

Andrew C. Chan, *Genentech, Inc.*  
*Bench to Bedside to Bench: Current Issues in Immunology*

Also included will be lectures on:

*Effector T Cell Differentiation and Response, Autoimmunity, Type 2 Immunity, and Vaccination*

For complete course details and registration, visit: [www.aai.org/Education/Courses](http://www.aai.org/Education/Courses)

For assistance, contact (301) 634-7178 or [meetings@aai.org](mailto:meetings@aai.org). Overseas applicants are advised to apply early for visas; for details, visit [www.aai.org/Education/Courses/Visa.html](http://www.aai.org/Education/Courses/Visa.html).

Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit [www.faseb.org/MARC-and-Professional-Development](http://www.faseb.org/MARC-and-Professional-Development).



# 2014 Advanced Course in Immunology

July 27–August 1, 2014 • Seaport World Trade Center, Boston, Massachusetts

Director: Leslie J. Berg, Ph.D.

University of Massachusetts Medical School

## Don't miss the premier course in immunology for research scientists!

This intensive course is directed toward advanced trainees and scientists who wish to expand or update their understanding of the field. Leading experts will present recent advances in the biology of the immune system and address its role in health and disease. This is not an introductory course; attendees will need to have a firm understanding of the principles of immunology.

### Faculty

**Marc K. Jenkins**, *Center for Immunology, University of Minnesota Medical School*

*Anatomy of the Immune Response*

**Jonathan C. Kagan**, *Children's Hospital Boston, Harvard Medical School*

*Innate Immunity: Pattern Recognition and Anti-microbial Mechanisms*

**Katherine A. Fitzgerald**, *University of Massachusetts Medical School*

*Innate Immunity: Gene Regulation*

**Albert S. Bendelac**, *University of Chicago*

*Innate Immunity: Cellular Mechanisms*

**Wayne M. Yokoyama**, *Washington University School of Medicine*

*NK Cells —Their Receptors and Function in Health and Disease*

**Elizabeth J. Kovacs**, *Loyola University Chicago Health Sciences Campus*

*Molecular and Cellular Mediators of Inflammation*

**Shannon J. Turley**, *Dana Farber Cancer Institute, Harvard Medical School*

*Dendritic Cells*

**Eugene M. Oltz**, *Washington University School of Medicine*

*The Generation and Modification of Lymphocyte Antigen Receptor Genes*

**Shiv Pillai**, *Massachusetts General Hospital Cancer Center, Harvard Medical School*

*B Cell Development*

**Avinash Bhandoola**, *University of Pennsylvania, Perelman School of Medicine*

*T Cell Development*

**Kenneth L. Rock**, *University of Massachusetts Medical School*

*MHC-Restricted Antigen Presentation to T Cells*

**Leslie J. Berg**, *University of Massachusetts Medical School*

*Signaling from Antigen Receptors*

**Susan M. Kaech**, *Yale School of Medicine*

*Lymphocyte Memory*

**Brian A. Cobb**, *Case Western Reserve University School of Medicine*

*Glycoimmunology*

**Richard S. Blumberg**, *Brigham & Women's Hospital, Harvard Medical School*

*Mucosal Immunity*

**Joanne L. Flynn**, *University of Pittsburgh School of Medicine*

*Immune Response to Pathogens*

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

*B Cell Tolerance and Autoimmunity*

**Vijay K. Kuchroo**, *Brigham & Women's Hospital, Harvard Medical School*

*T Cell Tolerance and Autoimmunity*

TBA

*Tumor Immunology*

**Joanne L. Viney**, *Biogen Idec Immunotherapeutics*

**Dennis W. Metzger**, *Albany Medical College*

*Vaccines*

For complete course details and registration, visit: [www.aai.org/Education/Courses](http://www.aai.org/Education/Courses)

For assistance, contact (301) 634-7178 or [meetings@aai.org](mailto:meetings@aai.org). Overseas applicants are advised to apply early for visas; for details, visit [www.aai.org/Education/Courses/Visa.html](http://www.aai.org/Education/Courses/Visa.html).

Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit [www.faseb.org/MARC-and-Professional-Development](http://www.faseb.org/MARC-and-Professional-Development).

# GRIP

## Grant Review for Immunologists Program

**Get a GRIP: An AAI program designed to help new investigators prepare their NIH grant proposals**

AAI is pleased to offer a program to match new PIs with established PIs who have significant, successful grant writing careers. The Grant Review for Immunologists Program (GRIP) invites new PIs to submit an outline or NIH-style abstract to the GRIP coordinator who, with the assistance of a small volunteer subcommittee, will attempt to match the topic of the proposal with the research experience of an established PI. Matches will be made as quickly as possible to allow new PIs to meet upcoming NIH grant deadlines. Participation is open only to AAI members and is strictly voluntary. The program is not intended to supplant internal mentoring programs.

GRIP is now accepting both new PI and established PI participants. Please send your CV and a brief description of either your potential research project (new PIs) or grant reviewing experience (established PIs) to [infoaaai@aai.org](mailto:infoaaai@aai.org) (please write "GRIP" in the subject line).



Program details at [www.aai.org/GRIP\\_rd.htm](http://www.aai.org/GRIP_rd.htm)

## AAI Public Affairs ONLINE

### Visit us to

- Learn about NIH funding
- Keep current on key policy issues
- Discover how you can help AAI in its advocacy initiatives

Go to [www.aai.org](http://www.aai.org)  
and click on  
Public Affairs.

