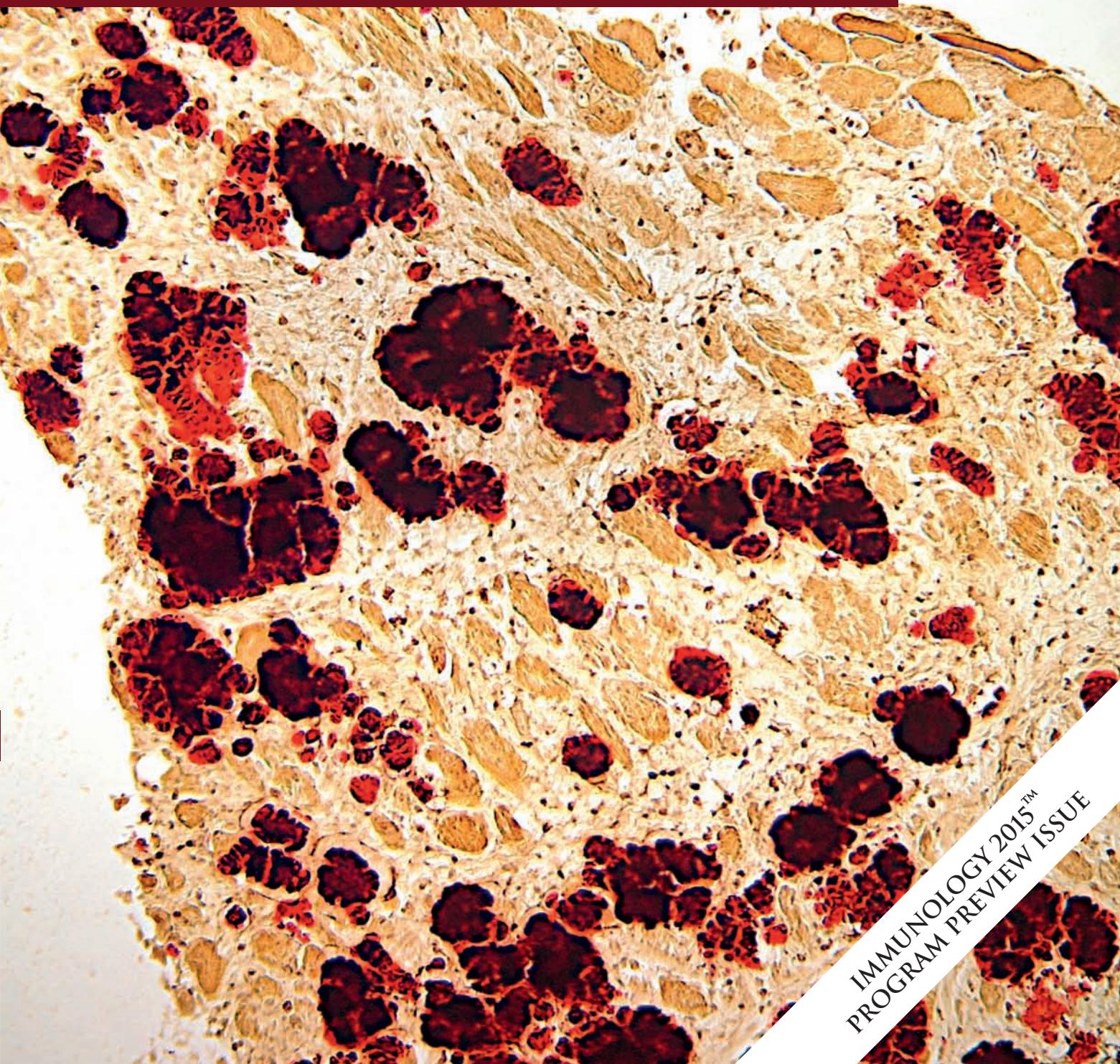




The Journal of Immunology

VOLUME 194, NUMBER 6 • MARCH 15, 2015 • WWW.JIMMUNOL.ORG



IMMUNOLOGY 2015™
PROGRAM REVIEW ISSUE

IMMUNOLOGY 2015™

PROGRAM PREVIEW



The American Association of Immunologists
AAI Annual Meeting
May 8–12, 2015 | New Orleans, LA
Ernest N. Morial Convention Center

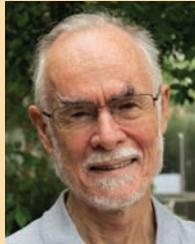


The American Association of Immunologists

Career Award Recipients for 2015

The American Association of Immunologists proudly announces the 2015 recipients of AAI awards for outstanding research and career achievements.

*The 2015 AAI award winners will be recognized at IMMUNOLOGY 2015™
May 8–12, New Orleans, Louisiana.*



AAI Lifetime Achievement Award

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

Jonathan Sprent, M.B.B.S., Ph.D.
Garvan Institute of Medical Research



AAI Distinguished Service Award

For outstanding service to AAI and the immunology community as member and Chair of the AAI Committee on Public Affairs, 2007–2014

Elizabeth J. Kovacs, Ph.D.
Loyola University Chicago Stritch School of Medicine

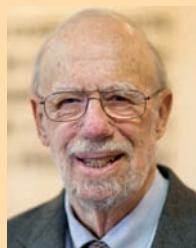
AAI-Steinman Award for Human Immunology Research



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

Mary Ellen Conley, M.D.
Rockefeller University

AAI-BioLegend Herzenberg Award



Matthew D. Scharff, M.D.
Albert Einstein College of Medicine

For outstanding research contributions to the field of immunology in the area of B cell biology

AAI-Thermo Fisher Meritorious Career Award



For outstanding research contributions to the field of immunology

Ronald N. Germain, M.D., Ph.D.
*National Institute of Allergy and Infectious Diseases,
National Institutes of Health*



AAI-BD Biosciences Investigator Award

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

Thirumala-Devi Kanneganti, Ph.D.
St. Jude Children's Research Hospital



AAI Excellence in Mentoring Award

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

Rafi Ahmed, Ph.D.
Emory University School of Medicine



IMMUNOLOGY 2015TM

AAI PRESIDENT'S PROGRAM

AAI President's Address

FRIDAY, MAY 8, 5:00 PM

Ernest N. Morial Convention Center, The Great Hall

Linda A. Sherman

Scripps Research Institute, AAI President

Using Autoimmunity to Inform Tumor Immunity

Steven J. Burakoff, The Tisch Cancer Institute

Introduction



Linda A. Sherman

AAI President's Symposium: *Partners in Crime and T Cell Sleuths*

MONDAY, MAY 11, 12:30 PM – 2:30 PM

The Great Hall

Chair:

Linda A. Sherman, Scripps Research Institute, AAI President

Speakers:

Matthew F. Mescher, University of Minnesota

Programming of naive CD8 T cells to develop function and memory

William R. Heath, University of Melbourne

Tissue-resident memory in viral and parasite immunity

Linda S. Wicker, University of Cambridge

From autoimmune disease genetics to immune-based therapies

Charles D. Surh, Academy of Immunology and Microbiology,
Institute for Basic Science, Pohang, Korea

*Regulation of immune homeostasis to commensal bacterial
and dietary antigens*



Matthew F.
Mescher



William R. Heath



Linda S. Wicker



Charles D. Surh

AAI President's Symposium



Linda A. Sherman
AAI President



When I first learned that my colleagues had honored me with the privilege of representing them on AAI Council and that one day I would become president of AAI, I thought about how lucky I was to have gone into research. Of course, luck played a part in my being accorded this honor, but a larger part was due to the patience of my mentors and the hard work and talent of the trainees I have had the privilege to mentor. And then there are the colleagues with whom I have collaborated over the years, each of whom greatly enriched the scope of my research, and, importantly, whom I treasure as dear friends.

This year's President's Symposium takes a slightly different direction from most. Rather than focusing on a single topic, I have focused on the research of several highly accomplished immunologists who also happen to have been my highly valued collaborators. If there is a scientific link in their research, it is that at some point in their careers, our research intersected. These are my close collaborators and friends—or, as I call them, my “partners in crime.” I apologize for such self-indulgence, but I considered this opportunity to bring together, in one session, colleagues whom I greatly admire and respect to be one of the great privileges associated with my tenure as president of AAI!

Matthew F. Mescher. When I went to Harvard Medical School to work as a postdoctoral fellow with Steve Burakoff and Baruj Benacerraf, I selected a project that was at the very heart of T cell biology and a great mystery at that time, the molecular basis for TCR recognition. We knew the MHC was important, but there was great debate about whether other molecules contributed as well. Matthew Mescher was a newly minted assistant professor who had come from Strominger's lab and wanted to address this question by

purifying MHC molecules. Together, we demonstrated that MHC molecules contained all the information required for induction of a secondary response by alloantigen-specific cytolytic T lymphocytes. Of course other information is required for naive T cell activation, such as costimulation as demonstrated by our past AAI president Marc Jenkins. Matt Mescher has been at the forefront of demonstrating the important role of yet a third signal, inflammatory cytokines, which we will hear about in this symposium.

William R. Heath. Years later at The Scripps Research Institute (TSRI), Bill Heath and I further demonstrated that allogeneic MHC molecules contained peptides that were also required for TCR recognition. Bill, who was a postdoctoral fellow at the time, then went on to a highly successful career in cellular immunology. Recently, he and his long-term collaborator Frank Carbone have turned their attention to the importance of tissue-resident T cells in defense against pathogens, a field they have helped to pioneer.

Linda S. Wicker. I first met Linda Wicker at a conference on diabetes when I talked about a new model my lab had developed for looking at the activation of islet antigen-specific CD8 T cells in draining lymph nodes of diabetes-prone NOD mice. Linda wrote the book on the genetic basis of the development of diabetes in NOD mice and wondered whether our model could be used to dissect the cellular consequences of the genetic polymorphisms that contributed to disease. This led to some of the most stimulating scientific conversations I have ever had and to a long-term collaboration. Her work on the genetics of type 1 diabetes and the immunological consequences in mice and humans has led to numerous breakthroughs in the field and, now, to an immunotherapeutic approach to the disease that we will hear about in this symposium.

Charles D. Surh. Charlie Surh started as a postdoctoral fellow at TSRI with Jon Sprent and advanced through the ranks to become professor. Their talent and ingenuity in the areas of thymic development, tolerance, and homeostasis is legendary. Recently, Charlie's research on homeostasis led him to South Korea, where he was provided an opportunity to set up his own institute to study the role of gut antigens in lymphocyte homeostasis and development of the immune system. He has the only mouse colony in the world that has not only germ-free, but also antigen-free mice. This work has provided a window into the fundamental role of antigen in the development of the immune system, a role we will hear about in this symposium.

AAI DISTINGUISHED LECTURERS

SATURDAY, MAY 9
6:00 PM, THE GREAT HALL



Dennis R. Burton

Scripps Research Institute

Broadly neutralizing antibodies evolved to counter the structure and variability of HIV and provide a basis for vaccine design

SUNDAY, MAY 10
6:00 PM, THE GREAT HALL



Christine A. Biron

Brown University

Fuzzy borders in innate and adaptive immunity: experience conditions NK and CD8 T cell responses during viral infection

MONDAY, MAY 11
6:00 PM, THE GREAT HALL



Albert S. Bendelac

University of Chicago

Innate and innate-like lymphocytes

AAI BUSINESS MEETING & AWARDS PRESENTATIONS

SATURDAY, MAY 9, 1:00 PM - 2:30 PM

AAI reports on the "state of the association" to its members at every AAI annual meeting. Members will hear from the Executive Director, the Secretary-Treasurer, the Editor-in-Chief of *The Journal of Immunology (The JI)*, and the Chair of the Committee on Public Affairs on the financial standing of AAI, the status of *The JI*, important public policy issues, and other items of interest for the membership. Special 2015 AAI awards will also be presented during this session.

AAI Distinguished Service Award Presentation



SATURDAY, MAY 9, 1:00 PM

Elizabeth J. Kovacs, Loyola University Chicago Stritch School of Medicine

For outstanding service to AAI and the immunology community as member and Chair of the AAI Committee on Public Affairs, 2007–2014

AAI annually provides more than 700 AAI meeting Travel Awards and Grants to recognize the promise and bolster the professional development of investigators of all career stages, including underrepresented scientists and trainees. Travel award and grant presentations and acknowledgments will include:

Presentations

- AAI-Thermo Fisher Trainee Achievement Awards
- Chambers-eBioscience Memorial Award
- Lefrançois-BioLegend Memorial Award
- Lustgarten-eBioscience Memorial Award
- Pfizer-Showell Travel Award

Acknowledgments

- AAI Early Career Faculty Travel Grants
Supported in part by BD Biosciences
- AAI Laboratory Travel Grants
Supported in part by BD Biosciences
- AAI Underrepresented Scientist Travel Awards
Sponsored by FASEB MARC Program under a grant from NIGMS, NIH [FASEB MARC Program: T36-GM08059-32]
- AAI Undergraduate Faculty Travel Grants
- AAI Trainee Abstract Awards
Supported in part by BD Biosciences
- AAI Trainee Poster Awards



CARNIVAL NIGHT IN NOLA



Join us for the
IMMUNOLOGY 2015TM
Opening Night Welcome Reception

Generously Sponsored by eBioscience, An Affymetrix Company

Great Hall Lobby – Ernest N. Morial Convention Center • Friday, May 8, 2015 • 6:00 PM – 8:00 PM

At the close of the President's Address, follow the parade into the Great Hall Lobby to sample the many flavors of New Orleans cuisine, catch up with old friends, mingle with revelers "borrowed" from Mardi Gras—and try the Cajun two-step to the celebrated Dwayne Dopsie & Zydeco Hellraisers band.

Open to all IMMUNOLOGY 2015TM attendees. Meeting badge required for entry. Attendees must be at least 21 years of age.

AAI Lifetime Achievement Award Presentation**FRIDAY, MAY 8, 5:00 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Jonathan Sprent**, Garvan Institute of Medical Research

AAI President Linda A. Sherman 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-BD Biosciences Investigator Award Presentation and Lecture*Generously supported by BD Biosciences***SATURDAY, MAY 9, 4:30 PM – 5:30 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Thirumala-Devi Kanneganti**, St. Jude Children's Research Hospital*Regulators of inflammatory responses*

AAI President Linda A. Sherman and BD Biosciences Vice President of Market Development Robert Balderas will introduce the awardee and present the award immediately prior to Dr. Kanneganti's lecture.

The AAI-BD Biosciences Investigator Award recognizes an early-career investigator who has made outstanding contributions to the field of immunology.

AAI-BioLegend Herzenberg Award Presentation*Generously supported by BioLegend***SATURDAY, MAY 9, 6:00 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Matthew D. Scharff**, Albert Einstein College of Medicine

AAI President Linda A. Sherman and Leonore A. Herzenberg, Professor (Research) of Genetics, Stanford School of Medicine, will introduce the awardee and present the award prior to the start of Saturday's Distinguished Lecture.

The AAI-BioLegend Herzenberg Award, named in honor of Leonard Herzenberg, recognizes outstanding research contributions to the field of immunology in the area of B cell biology.

AAI-Steinman Award for Human Immunology Research Presentation and Lecture**SUNDAY, MAY 10, 4:30 PM – 5:30 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Mary Ellen Conley**, Rockefeller University
Patients with defects in B cell development

AAI President Linda A. Sherman will introduce the awardee and present the award immediately prior to Dr. Conley's lecture.

The AAI-Steinman Award for Human Immunology Research, named in honor of Ralph Steinman, recognizes an individual who has made significant contributions to the understanding of immune processes underlying human disease pathogenesis, prevention, or therapy.

AAI Excellence in Mentoring Award Presentation**MONDAY, MAY 11, 12:30 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Rafi Ahmed**, Emory University School of Medicine

AAI President Linda A. Sherman will introduce the awardee and present the award prior to the start of the President's Symposium.

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

AAI-Thermo Fisher Meritorious Career Award Presentation and Lecture*Generously supported by Thermo Fisher Scientific***MONDAY, MAY 11, 4:30 PM – 5:30 PM***The Great Hall***Chair:****Linda A. Sherman**, Scripps Research Institute, AAI President**Award Recipient:****Ronald N. Germain**, National Institute of Allergy and Infectious Diseases, National Institutes of Health
Developing a quantitative spatiotemporal understanding of immunity using imaging and systems biology

AAI President Linda A. Sherman and a representative of Thermo Fisher Scientific will introduce the awardee and present the award immediately prior to Dr. Germain's lecture.

The AAI-Thermo Fisher Meritorious Career Award recognizes a mid-career scientist for outstanding research contributions to the field of immunology.

SATURDAY, MAY 9, 8:00 AM – 11:30 AM

Major Symposium A: Realizing the Potential of Cancer Immunotherapy

Chairs:

Jedd D. Wolchok, Memorial Sloan Kettering Cancer Center

Padmanee Sharma, University of Texas MD Anderson Cancer Center

Speakers:

Jedd D. Wolchok, Memorial Sloan Kettering Cancer Center
Combined checkpoint blockade

Padmanee Sharma, University of Texas MD Anderson Cancer Center

Immune checkpoint therapies: clinical success and next steps

Holbrook Kohrt, Stanford Cancer Institute

Combination monoclonal antibody therapy: dual tumor and immune targeting

Suzanne L. Topalian, Johns Hopkins University School of Medicine
PD-1 pathway blockade in cancer therapy: new frontiers

Pramod K. Srivastava, University of Connecticut School of Medicine

What does a host-protective tumor-specific neo-antigen look like?

Steven A. Rosenberg, NCI, NIH

The curative potential of T cell transfer immunotherapy for human cancer

Major Symposium B: The Microbiota in Immunity and Inflammation

Chairs:

Wendy S. Garrett, Harvard School of Public Health

Yasmine Belkaid, NIAID, NIH

Speakers:

Yasmine Belkaid, NIAID, NIH
From mutualism to parasitism: context and consequences

Wendy S. Garrett, Harvard School of Public Health
The gut microbiome in colitis and colorectal cancer

Eric G. Pamer, Memorial Sloan Kettering Cancer Center
Microbiota-mediated defense against intestinal infections

Ami S. Bhatt, Stanford University

Exploring the composition of the human superorganism: the microbiome in an immunocompromised host

Bana Jabri, University of Chicago

Harnessing the interplay between commensals and pathogens in septic shock

Thaddeus S. Stappenbeck, Washington University School of Medicine

Commensal-host interactions in the intestine and their relationship to disease pathogenesis

SUNDAY, MAY 10, 8:00 AM – 11:30 AM

Major Symposium C: Looking Within: Mechanisms of Cytosolic Immune Surveillance

Chairs:

Russell E. Vance, HHMI, University of California, Berkeley

Zhijian 'James' Chen, HHMI, University of Texas Southwestern Medical Center

Speakers:

Russell E. Vance, HHMI, University of California, Berkeley
Mechanisms and consequences of inflammasome activation

Michaela U. Gack, Harvard Medical School

RIG-I-like receptor regulation in virus infection and immunity

Edward A. Miao, University of North Carolina at Chapel Hill
Inflammasomes in host defense

Sunny Shin, University of Pennsylvania Perelman School of Medicine

Overcoming pathogen-encoded virulence activities to initiate innate immune defense

Zhijian 'James' Chen, HHMI, University of Texas Southwestern Medical Center

Innate immune sensing and signaling of cytosolic DNA

Thomas F. Gajewski, University of Chicago

Innate immune sensing of tumors via the host STING pathway

Major Symposium D: Lymphatics and Stroma: Key Players in the Specialized Lymphoid Organ Niche

Chairs:

Gwendalyn J. Randolph, Washington University School of Medicine

Shannon J. Turley, Genentech

Speakers:

Gwendalyn J. Randolph, Washington University School of Medicine
Lymphatics in inflammatory disease

Laura Santambrogio, Albert Einstein College of Medicine
Lymph formation, circulation, and immunological role

Reinhold Förster, Hannover Medical School

Lymph node homing of immune cells via afferent lymphatics

Troy D. Randall, University of Alabama at Birmingham

Paradoxical role of the omentum in immunity to peritoneal tumors

Shannon J. Turley, Genentech

Regulation of leukocyte function and territoriality by fibroblastic reticular cells

Biju Parekkadan, Harvard Medical School

Lymph node cell therapy

MONDAY, MAY 11, 8:00 AM – 11:30 AM***Major Symposium E: Roots and Mechanisms of Human Autoimmunity*****Chairs:**

Eric Meffre, Yale University

Jane Hoyt Buckner, Benaroya Research Institute at Virginia Mason

Speakers:

Eric Meffre, Yale University

Defects in early B cell tolerance checkpoints are common to autoimmune diseases

Jane Hoyt Buckner, Benaroya Research Institute at Virginia Mason
Mapping the immune pathways that drive T1D development

Megan Sykes, Columbia University

New approaches to understanding human allo- and autoimmune responses

Erik J. Peterson, University of Minnesota

PTPN22 promotes interferogenic signaling in myeloid cells

Edward K. Wakeland, University of Texas Southwestern Medical Center

A genomic analysis of systemic autoimmunity

Judith A. James, Oklahoma Medical Research Foundation, University of Oklahoma Health Sciences Center

Roles for impaired immune regulation in transition from preclinical autoimmunity to clinical lupus

Major Symposium F: Networking through Mobile Cells and Synaptic Interfaces**Chairs:**

Michael L. Dustin, University of Oxford

Janis K. Burkhardt, Children's Hospital of Philadelphia and University of Pennsylvania

Speakers:

Michael L. Dustin, University of Oxford

Novel signals in the immunological synapse

Janis K. Burkhardt, Children's Hospital of Philadelphia and University of Pennsylvania

Cytoskeletal control of integrin activation at the immunological synapse

Morgan Huse, Memorial Sloan Kettering Cancer Center
Lipid-based patterning of the immunological synapse

Clotilde Théry, INSERM U932/Institut Curie

Exosomes and other extracellular vesicles in communication between tumors and the immune system

Anna Huttenlocher, University of Wisconsin

Imaging inflammation: implications to human disease

Thorsten R. Mempel, Massachusetts General Hospital/Harvard Medical School

Immune cell communication in the tumor environment

TUESDAY, MAY 12, 8:00 AM – 11:30 AM***Major Symposium G: Regulating Immunity: Tregs and Beyond*****Chairs:**

Steven F. Ziegler, Benaroya Research Institute at Virginia Mason

Claudia Mauri, University College London

Speakers:

Andrea Cerutti, Mount Sinai School of Medicine

IgD: an ancestral regulator of Th2 immune responses

Claudia Mauri, University College London

Microbiota, regulatory B cells, and arthritis: insight into a new mechanism of regulation

Jennifer L. Gommerman, University of Toronto

Befuddled B cells and EAE pathogenesis

Mitchell Kronenberg, La Jolla Institute for Allergy & Immunology

Natural killer T cells: one specificity, but different functions

Liang Zhou, Northwestern University

Regulation of Tregs in the mucosal tissues

Steven F. Ziegler, Benaroya Research Institute at Virginia Mason

Development and function of regulatory T cells

Major Symposium H: Mechanisms of Host Immunity: Insights from Eukaryotic Pathogens**Chairs:**

William C. Gause, New Jersey Medical School, Rutgers, The State University of New Jersey

De'Broski R. Herbert, University of California, San Francisco

Speakers:

De'Broski R. Herbert, University of California, San Francisco

The helminthic harangue on immunity and repair

Amariliz Rivera, New Jersey Medical School, Rutgers, The State University of New Jersey

Inflammatory monocytes orchestrate innate antifungal immunity in the lung

William C. Gause, New Jersey Medical School, Rutgers, The State University of New Jersey

Helminths, wound healing, and worm expulsion

Padraic Fallon, Trinity College Dublin

Helminth activation of innate and adaptive immunity to achieve chronic infections

P'ng Loke, New York University School of Medicine

Alternatively activated macrophages derived from monocytes and tissue-resident macrophages during helminth infections

Edward J. Pearce, Washington University School of Medicine

The metabolic regulation of alternative macrophage activation

AAI COMMITTEE – SPONSORED SESSIONS

AAI CLINICAL IMMUNOLOGY COMMITTEE

Translational Research Towards Awakening the Immune System in Human Disease

MONDAY, MAY 11, 3:45 PM – 5:45 PM

Chairs:

Robert L. Modlin, University of California, Los Angeles
AAI Clinical Immunology Committee Chair

Angela Colmone, *Science Translational Medicine*, AAAS

Speakers:

Alan Sher, NIAID, NIH

A host-directed therapy for TB infection that targets innate cytokines

Hana Golding, CBER, FDA

Novel methods for measuring antibody affinity, epitope diversity, and cross-reactivity in human vaccine trials

Drew M. Pardoll, Johns Hopkins School of Medicine
Therapeutic manipulation of the microenvironment of cancer

Jeffrey A. Bluestone, University of California, San Francisco
Rebalancing the immune system through Treg biology

Angela Colmone, *Science Translational Medicine*, AAAS
Translational immunology research: into the future

Advances in translational immunology research have led to new approaches to awaken the immune system in the battle against infection, cancer, and autoimmune disease. This session will include discussion of present approaches and future directions that will be valuable to immunologists interested in translational research.

AAI COMMITTEE ON PUBLIC AFFAIRS

Funding for Immunology Research: Non-Federal Opportunities and NIAID Program Update

SUNDAY, MAY 10, 10:15 AM – 12:15 PM

Chair:

Clifford V. Harding, Case Western Reserve University
AAI Committee on Public Affairs Chair

Speakers:

William Chambers, National Vice President, Extramural Research, American Cancer Society
The role of charitable and patient advocacy organizations in funding biomedical research

Gwen Nguyen, Cause Director, Indiegogo
How crowdfunding can support biomedical research

Session description continues in column 2

Daniel Rotrosen, Director, Division of Allergy, Immunology and Transplantation, NIAID

Recent trends in NIAID-funded, investigator-initiated immunology research

Bruce Walker, Director, Ragon Institute of MGH, MIT and Harvard; Professor, Harvard University; and Investigator, Howard Hughes Medical Institute

The role of philanthropy in supporting biomedical research

NIH has long been one of the major sources of funding for immunologists and other biomedical researchers. In recent years, funding constraints have lowered NIH paylines and reduced success rates, jeopardizing the research and careers of many productive and successful scientists. This session will explore some of the alternatives to NIH funding, including patient advocacy organizations, philanthropists, and crowdfunding. In addition, the session will include an update on immunology research supported by the National Institute of Allergy and Infectious Diseases. Attendees will have ample opportunity to ask questions.



AAI EDUCATION COMMITTEE

Careers in Biotech: Panel Discussion and Networking

SATURDAY, MAY 9, 7:00 PM – 9:00 PM

Chair:

Nandita Bose, Biothera

Panelists:

Jason Fontenot, Principal Scientist, Immunology, Biogen Idec

Brian Johnson, Director, Market Development & Product Management, Thermo Fisher Scientific

Andy I. Kokaji, Senior Scientist, STEMCELL Technologies, Inc.

Isharat Yusuf, Research Investigator II, Genomics Institute of the Novartis Research Foundation

Many opportunities exist in industry for scientists with advanced degrees. There are positions in laboratory research, program management, business development, regulatory affairs, clinical trials oversight, medical liaison, and more. This panel features scientists employed in a variety of positions in industry discussing their career paths and the skills required for success in each. Following the panel discussion, enjoy casual conversation with the speakers and other scientists from industry at a networking reception.

AAI EDUCATION COMMITTEE & AAI COMMITTEE ON THE STATUS OF WOMEN

Careers in Science Roundtable

SATURDAY, MAY 9, 11:30 AM – 1:00 PM

Chair:

Virginia Shapiro, Mayo Clinic; AAI Committee on the Status of Women Chair

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. Recently added topics 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 between specific career stages, or issues in balancing career and family in any career path. Don't miss this great networking opportunity!

Registration Fee: \$20 (Lunch included)

Discussion topics and table leaders:

Research Careers in Academia

- Graduate Student to Postdoc: finding a postdoc, interviewing

Table Leaders: Louise M. D'Cruz, University of Pittsburgh

Michelle A. Parent, University of Delaware

Gwendalyn J. Randolph, Washington University School of Medicine

- Postdoc to PI: finding a position, interviewing, negotiating, lab start-up

Table Leaders: Deborah M. Brown, University of Nebraska, Lincoln; *Lisa H. Butterfield*, University of Pittsburgh

Lauren A. Zenewicz, University of Oklahoma Health Sciences Center

- New PI: attracting students and postdocs, preparing for tenure

Table Leaders: Robin Stephens, University of Texas Medical Branch; *Emma H. Wilson*, University of California, Riverside

- Undergraduate Institutions: finding the balance in teaching, doing research

Table Leaders: Laurie P. Shornick, St. Louis University

- Mentoring Effectively

Table Leaders: Elizabeth E. Brown, University of Alabama, Birmingham; *Federica Sallusto*, Institute for Research in Biomedicine, Bellinzona, Switzerland

How to Build a Network

Table Leaders: Gail A. Bishop, University of Iowa

Dawn Jelley-Gibbs, Taconic Bioscience

Madeleine W. Cunningham, University of Oklahoma Health Sciences Center



Attendees networking during careers roundtable break

The Two Body Problem: dual career couples

Table Leaders: Susan Kovats, Oklahoma Medical Research Foundation; *Sunny Shin*, University of Pennsylvania School of Medicine

Balancing Parenthood and Career

Table Leaders: Shabaana Khader, Washington University School of Medicine; *Carolina Lopez*, University of Pennsylvania School of Veterinary Medicine

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

Table Leaders: Renold Capocasale, Flowmetric, Inc
Pooja Jain, Drexel University College of Medicine

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

Table Leaders: Yasmine Belkaid, NIAID, NIH
Avinash Bhandoola, NCI, NIH

NIH Study Section Insights

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

Negotiating an Academic Position

Table Leaders: Sarah L. Gaffen, University of Pittsburgh
Paula M. Lutz, University of Wyoming

The Physician Scientist: balancing clinical and research duties

Table Leaders: David D. Chaplin, University of Alabama, Birmingham; *Jonathan Maltzman*, University of Pennsylvania; *Penelope A. Morel*, University of Pittsburgh

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

Table Leaders: Robin G. Lorenz, University of Alabama, Birmingham; *Wayne M. Yokoyama*, Washington University School of Medicine

Non-Research Careers for Scientists: careers in scientific journals, program administration, non-profits, industry

Table Leaders: Peggy Just, eBioscience, an Affymetrix Company; *Jennifer H. Meyers*, The American Association of Immunologists and *The Journal of Immunology*
Kristen Porter, NIAID, NIH

AAI COMMITTEE – SPONSORED SESSIONS

AAI MINORITY AFFAIRS COMMITTEE

Careers Roundtable and Speed Networking Session

SATURDAY, MAY 9, 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-GM08059-32]

Chair:

Cherié L. Butts, Biogen Idec; AAI Minority Affairs Committee Chair

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

Discussion topics and table leaders:

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

Postdoc: finding a mentor; taking aim at a faculty position
Table Leaders: Robert J. Binder, University of Pittsburgh
De'Broski R. Herbert, University of California, San Francisco
Joseph Larkin, University of Florida

Junior Faculty: preparing for promotion and tenure
Table Leaders: Avery August, Cornell University College of Veterinary Medicine; Arturo Casadevall, Albert Einstein College of Medicine; Prosper Boyaka, Ohio State University

Academia or Industry: how to decide (or switch sides)
Table Leaders: Jonathan A. Deane, GNF/Novartis
Karel Otero Gutierrez, Biogen Idec

Government Agency Careers: CDC, FDA, NIH
Table Leaders: Marta Catalfamo, NIAID, NIH; Charles Egwuagu, NEI, NIH; Alison Mawle, Centers for Disease Control and Prevention

Non-Research Careers (e.g., entrepreneurship, law/policy)
Table Leaders: James. W. Lillard, Morehouse School of Medicine and JYANT Technologies, Inc. (President/CEO);
Jaconda Wagner, Wagner Law LLC (intellectual property attorney)

AAI Vanguard Lecture

MONDAY, MAY 11, 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-GM08059-32]

Chair:

Cherié L. Butts, Biogen Idec; AAI Minority Affairs Committee Chair

Speaker:



Gabriel Núñez, University of Michigan
Linking pathogen virulence, immunity, and the microbiota

Since 2003, the AAI meeting has featured a scientific lecture presented by an AAI member who is an underrepresented minority investigator. Selected for their achievements in the field of immunology, presenters are among the most prominent investigators in the field and models of successful career development.

AAI PROGRAM COMMITTEE

AAI Program Committee Workshop: Back to School: A Review of Four Fast-Moving Fields

FRIDAY, MAY 8, 2:30 PM – 4:30 PM

Chairs:

Wendy L. Havran, Scripps Research Institute; AAI Program Committee Chair

Maria-Luisa Alegre, University of Chicago

Speakers:

Jian Han, HudsonAlpha Institute for Biotechnology
NextGen sequencing of immune repertoire: technology, applications, and challenges

Russell G. Jones, McGill University
Metabolomics in immunity

Melody A. Swartz, University of Chicago
Immunoregulatory roles of lymphatic endothelium and their transport functions

Kevin J. Tracey, The Feinstein Institute for Medical Research
Evolutionary integration of neural and immune pathogen sensing and response

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.

AAI PUBLICATIONS COMMITTEE***Publishing Scientific Articles: Advice and Admonition***

SUNDAY, MAY 10, 12:30 PM – 2:00 PM

Chairs:

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

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

Speakers:

Eugene M. Oltz, Washington University School of Medicine
Composing a masterpiece: make your data sing

Robert L. Fairchild, Cleveland Clinic

*My most excellent paper was returned with serious reviewer issues:
what do I do now?*

Pamela J. Fink, University of Washington School of Medicine
How to stay on the right side of the ethics divide

In this session, experienced editors will provide valuable insights in understanding the process of preparing a manuscript and responding to reviewers' comments. Panelists will address questions such as: When writing a manuscript, what steps can an author take to enhance its impact on editors, reviewers, and, if accepted for publication, on readers? What are recommended practices for responding to reviewers' comments? How can authors enhance the presentation of data in figures? In addition, the Editor-in-Chief of *The Journal of Immunology* will speak on how to avoid possible ethical missteps in scientific publishing.

**AAI VETERINARY IMMUNOLOGY COMMITTEE*****AAI Veterinary Immunology Committee & American Association of Veterinary Immunologists (AAVI) Joint Symposium—Vaccines for the Modern Era: Implications for Human and Animal Health II***

SATURDAY, MAY 9, 12:30 PM – 2:30 PM

Chairs:

Laurel J. Gershwin, University of California, Davis; AAI Veterinary Immunology Committee Chair

Crystal Loving, National Animal Disease Center, ARS, USDA
American Association of Veterinary Immunologists President

Speakers:

W. Ray Waters, National Animal Disease Center, ARS, USDA
Vaccine approaches for bovine tuberculosis: correlates of protection and relevance to human tuberculosis

Volker Gerdts, Vaccine and Infectious Disease Organization-InterVac,
University of Saskatchewan

*Large animal models for human vaccine research: pertussis, RSV,
and others*

Barney S. Graham, Vaccine Research Center, NIAID, NIH
Structure-guided development of an RSV vaccine

Crystal Loving, National Animal Disease Center, ARS, USDA
Provocation versus protection: immune responses and differential outcomes following influenza virus vaccination and challenge in pigs

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.



NIH INSTITUTE-SPONSORED SYMPOSIA

NIH INSTITUTE-SPONSORED SYMPOSIA

National Cancer Institute (NCI) and Radiation Research Society (RRS) Symposium: *Symbiosis of Radiation and Immunology: Basic and Translational Impact*

MONDAY, MAY 11, 8:00 AM – 10:00 AM

Chairs:

Mansoor Ahmed, NCI, NIH

Chandan Guha, Albert Einstein College of Medicine

Speakers:

Mansoor Ahmed, NCI, NIH

Opening/meeting interaction

Gayle E. Woloschak, Northwestern University

Introduction: Information on Radiation Research Society (RRS)

Ralph R. Weichselbaum, University of Chicago Medicine

Basic radiation biology: fatal attraction for immunologists

Yang-Xin Fu, University of Chicago

Immunologist's experiences of collaborating with the field of radiation biology

Chandan Guha, Albert Einstein College of Medicine

Opportunities for immunology in clinical radiotherapy

Lisa M. Coussens, Oregon Health & Science University

Tumor immune microenvironment

National Institute of Allergy and Infectious Diseases (NIAID) Symposium: *Hitting the Mother Lode: Mining the Data Fields*

SATURDAY, MAY 9, 12:30 PM – 2:30 PM

Chairs:

Alison Deckhut Augustine, NIAID, NIH

Ashley Xia, NIAID, NIH

Speakers:

Atul J. Butte, Stanford University

Translating a trillion points of data into therapies, diagnostics, and new insights into disease

Steven H. Kleinstein, Yale University

The transcriptional response to influenza infection and vaccination

Anjana Rao, La Jolla Institute for Allergy and Immunology

Genomics approaches to understanding immune function

Martin S. Zand, University of Rochester

Start making sense: visualization and modeling of high-dimensional data

National Institute of Allergy and Infectious Diseases (NIAID) Workshop: *Inflammation as an Immunological Determinant of HIV Transmission*

SUNDAY, MAY 10, 12:30 PM – 2:30 PM

Organizers:

Anjali Singh, NIAID, NIH

Alan Schultz, NIAID, NIH

Chairs:

Jonathan A. Harton, Albany Medical Center

Jim A. Turpin, NIAID, NIH

Panelists:

Michael R. Betts, University of Pennsylvania

Daniel C. Douek, NIAID, NIH

Mimi Ghosh, George Washington University

Ashley T. Haase, University of Minnesota

Eric Hunter, Emory University

David Masopust, University of Minnesota

Christopher J. Miller, University of California, Davis

Kristen A. Porter, NIAID, NIH

Barbara L. Shacklett, University of California, Davis

The objective of this panel discussion is to probe the relationship between inflammation and susceptibility to HIV infection and to identify novel avenues for HIV prevention, targeting mucosal microenvironment inflammation to limit HIV target cell availability. The panel will highlight recent findings and research gaps to address the key questions and challenges.



**National Institute on Aging (NIA) Symposium:
*Rejuvenating the Aged Immune System: New
Directions for Targeting Interventions***

SATURDAY, MAY 9, 3:45 PM – 5:45 PM

Chairs:

Janko Nikolich-Zugich, University of Arizona College of Medicine
Rebecca A. Fuldner, NIA, NIH

Speakers:

Nancy R. Manley, University of Georgia
Too much is not enough: Foxn1 and the maintenance of the postnatal thymus

Jorg J. Goronzy, Stanford University
miRNA regulation of T cell responses in older individuals

Janko Nikolich-Zugich, University of Arizona College of Medicine
Age-related changes in metabolic programming and trafficking of T cells: lessons from parabiosis

Donna M. Murasko, Drexel University
Enhanced IgG response to influenza vaccine in aged mice with a novel adjuvant, rOv-ASP-1

National Institute of Environmental Health Sciences (NIEHS) Symposium: Developmental Exposures and Their Effects on Immune System Function

SUNDAY, MAY 10, 12:30 PM – 2:30 PM

Chairs:

Michael C. Humble, NIEHS, NIH
B. Paige Lawrence, University of Rochester

Speakers:

John B. Barnett, West Virginia University
Long-term changes in the immune system due to prenatal cadmium exposure

B. Paige Lawrence, University of Rochester
The environmental legacy of pollutants: linking developmental exposures to perturbations in antiviral immune responses

Kari C. Nadeau, Stanford University
Mechanistic approaches to epigenetics and toxicant exposures

Judith T. Zelikoff, New York University School of Medicine
Maternal inhalation of ambient particulate matter causes alterations in immune profiles and anti-tumor mechanisms in juvenile murine offspring

GUEST SOCIETY SYMPOSIA

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

SATURDAY, MAY 9, 12:30 PM – 2:30 PM

Chairs:

Laurel J. Gershwin, University of California, Davis
Crystal Loving, National Animal Disease Center, ARS, USDA

Speakers:

W. Ray Waters, National Animal Disease Center, ARS, USDA
Vaccine approaches for bovine tuberculosis: correlates of protection and relevance to human tuberculosis

Volker Gerdts, Vaccine and Infectious Disease Organization-InterVac, University of Saskatchewan
Large animal models for human vaccine research: pertussis, RSV, and others

Barney S. Graham, Vaccine Research Center, NIAID, NIH
Structure-guided development of an RSV vaccine

Crystal Loving, National Animal Disease Center, ARS, USDA
Provocation versus protection: immune responses and differential outcomes following influenza virus vaccination and challenge in pigs

American Society for Reproductive Immunology (ASRI) Symposium: Innate Immunity in Pregnancy

SATURDAY, MAY 9, 10:15 AM – 12:15 PM

Chairs:

Vikki M. Abrahams, Yale School of Medicine
Mukesh K. Jaiswal, Rosalind Franklin University of Medicine and Science

Speakers:

Emmet Hirsch, NorthShore University Health System
Autophagy in preterm labor

Vikki M. Abrahams, Yale School of Medicine
Mechanisms of placental inflammation in obstetric antiphospholipid syndrome

Mukesh K. Jaiswal, Rosalind Franklin University of Medicine and Science
IL-22 prevents lipopolysaccharide-induced preterm labor in mice

Gil Mor, Yale School of Medicine
Role of placenta type I interferon on polymicrobial infection-induced preterm birth

THE SUGAR MILL
1021 CONVENTION CENTER BLVD
GENEROUSLY SPONSORED BY BIOLEGEND

IMMUNOLOGY 2015™
GALA
LAGNIAPPE* ON THE LEVEE
THE TASTES & TUNES
OF NEW ORLEANS
FEATURING
THE 14-PIECE SWINGAROUX BAND

You'll enjoy sampling the
ambience and cuisines
of three distinctive New
Orleans neighborhoods—
the Vieux Carré,
the Garden District, and
Cajun Bayou Country

05.11.15
7:00 PM – 9:30 PM

Open to all IMMUNOLOGY 2015™ attendees.
Come as you are, directly from the Convention Center.
Attendees must be at least 21 years of age. Meeting badge required.

* Lagniappe: a Creole expression pronounced [lay-nee-ap] and meaning "a little something extra"

**American Society of Transplantation (AST)
Symposium: *T Cell Trafficking during
Alloimmunity and Tolerance***

SATURDAY, MAY 9, 12:30 PM – 2:30 PM

Chairs:

Mandy L. Ford, Emory University

Maria-Luisa Alegre, University of Chicago

Speakers:

Donna L. Farber, Columbia University Medical Center
*Tissue-resident human memory T cells in transplantation
and immunity*

Kimberly D. Klonowski, University of Georgia
*IL-15-mediated control of memory T cell glycosylation
and trafficking*

Daniel Kreisel, Washington University School of Medicine
Tolerogenic role of central memory T cells in lung transplantation

Bryna Burrell, Immune Tolerance Network
Laminins affect T cell trafficking and allograft fate

**Canadian Society for Immunology (CSI)
Symposium: *T Lymphocyte Regulation and
Differentiation during Infection***

MONDAY, MAY 11, 8:00 AM – 10:00 AM

Chairs:

Irah L. King, McGill University

Jude E. Uzonna, University of Manitoba

Speakers:

Jun Wang, Dalhousie University
*Diverse immune mechanisms for shaping anti-Chlamydia CD4
T cell responses*

Simona Stäger, INRS-Institut Armand Frappier
*The role of inflammation in regulating the development of T cell
responses during leishmaniasis*

Irah L. King, McGill University
*The role of integrins in T follicular helper cell maintenance
following helminth infection*

S. M. Mansour Haeryfar, University of Western Ontario
Invariant T cell responses to bacterial superantigens

Jude E. Uzonna, University of Manitoba
*MHC class II-restricted innate-like double negative T cells display
memory characteristics and contribute to optimal anti-
Leishmania immunity*

**Chinese Society of Immunology (ChSI)
Symposium: *Differentiation and Regulation
of Lymphocytes***

SATURDAY, MAY 9, 8:00 AM – 10:00 AM

Chairs:

Zhigang Tian, University of Science and Technology of China

Olivera J. Finn, University of Pittsburgh School of Medicine

Speakers:

Zhigang Tian, University of Science and Technology of China
Development and differentiation of liver-resident NK cells

Bing Sun, Institute Pasteur of Shanghai, Chinese Academy
of Sciences
*Extracellular Matrix Protein 1 plays a critical role in driving Th2
cell migration and controlling Th17 cell differentiation*

Liwei Lu, University of Hong Kong
Regulatory B cells in autoimmunity

Hai Qi, Tsinghua University
Follicular T helper cells and germinal center reaction

Zhongjun Dong, Tsinghua University
Metabolic regulation of NK cell development and activation

**German Society for Immunology (DGfI)
Symposium: *Control of Treg/Th17 Differentiation***

MONDAY, MAY 11, 3:45 PM – 5:45 PM

Chairs:

Hans-Martin Jäck, University of Erlangen

Dieter Kabelitz, University of Kiel

Carsten Watzl, Leibniz Research Center, Dortmund

Speakers:

Jürgen Wienands, University of Göttingen
Immunology in Germany

Tim Sparwasser, University of Hannover
Metabolic influences that regulate CD4 T cell function

Vigo Heissmeyer, University of Munich
Post-transcriptional control of Th17 differentiation

Petra Hoffmann, University of Regensburg
Impact of Treg cell plasticity on adoptive cell therapies

Jochen Hühn, Helmholtz Society, Braunschweig
Epigenetic control of regulatory T cell development

Michael Lohoff, University of Marburg
*The role of interferon regulatory factors for T cell subset
differentiation*

GUEST SOCIETY SYMPOSIA

International Complement Society (ICS) Symposium: *Key Roles of Complement in Adaptive Immunity, Pathogen Responses, and Human Disease*

SUNDAY, MAY 10, 10:15 AM – 12:15 PM

Chairs:

Andrea J. Tenner, University of California, Irvine

Joshua M. Thurman, University of Colorado School of Medicine

Speakers:

Claudia Kemper, King's College London

Regulation of T lymphocyte programming by autocrine complement

Brian Geisbrecht, Kansas State University

Utilization of complement evasion strategies by pathogens

Susan Lea, University of Oxford

Illuminating mechanisms of complement-pathogen interactions from structural biology

V. Michael Holers, University of Colorado School of Medicine

Targeting complement and its activation mechanisms: successful interventions in human disease and new strategies going forward

International Cytokine and Interferon Society (ICIS) Symposium: *Innate and Adaptive Immune Recognition*

SATURDAY, MAY 9, 3:45 PM – 5:45 PM

Chairs:

Richard A. Flavell, HHMI, Yale School of Medicine

Sarah L. Gaffen, University of Pittsburgh

Speakers:

Luke A. J. O'Neill, Trinity College Dublin

Metabolic reprogramming in innate immunity

Federica Sallusto, Institute for Research in Biomedicine

Polarized T cell responses to pathogens and vaccines

Andrew N. McKenzie, Cambridge Immunology Network

Type-2 innate lymphoid cells at the interface with adaptive immunity

Curt M. Horvath, Northwestern University

Regulation of viral RNA recognition, innate immune signaling, and antiviral gene expression



Japanese Society for Immunology (JSI) Symposium: *Development and Function of Immune Cells: Symposium by JSI Awardees*

SATURDAY, MAY 9, 12:30 PM – 2:30 PM

Chairs:

Toshinori Nakayama, Chiba University

Ryoji Yagi, Chiba University

Speakers:

Yosuke Kurashima, University of Tokyo

Analysis of a mast cell-suppressive milieu on the body surface for the prevention and treatment of inflammatory diseases

Satoshi Nishimura, Jichi Medical University

Immune cell activation in obese adipose tissue: visualization by two photon microscopy

Yoshiki Omatsu, Kyoto University

Molecular mechanism of formation of bone marrow niche for hematopoietic stem/progenitor cells and immune cells

Takashi Satoh, Osaka University

The physiological role and differentiation mechanism of disorder-specific M2 macrophages

Ryoji Yagi, Chiba University

Role of the transcription factor GATA3 in helper T cell and innate lymphoid cell development

Toshinori Nakayama, Chiba University

Pathogenic memory Th2 cells in airway inflammation

Korean Association of Immunologists (KAI) and Association of Korean Immunologists in America (AKIA) Symposium: *Cellular and Molecular Factors that Control Immunity*

MONDAY, MAY 11, 10:15 AM – 12:15 PM

Chairs:

Booki Min, Cleveland Clinic Foundation

Chong-Kil Lee, Chungbuk National University

Speakers:

Woong-Kyung Suh, Clinical Research Institute of Montreal

Dissection of inducible costimulator (ICOS) signaling components in follicular helper T cell and Th17 responses

Eun Young Choi, Seoul National University

CD8 T cells can generate memory cells without CD4 help when antigen is cleared early enough

Sang-Moo Kang, Georgia State University

Roles of innate and adaptive immune components in inducing protective immune responses to influenza vaccination

Myoung Ho Jang, Institute for Basic Science, Pohang
Eosinophils regulate inflammation in the gut

**The American Association of Immunologists thanks the following sponsors for
their generous support of IMMUNOLOGY 2015™**

AAI Annual Meeting | May 8–12, 2015 | New Orleans, Louisiana

Thank you to our Premier Sponsors

PLATINUM SPONSORS



IMMUNOLOGY 2015™ Gala
Service Appreciation Reception
Lefrançois-BioLegend Memorial Award
AAI-BioLegend Herzenberg Award
Meeting Lanyards



Opening Night Welcome Reception
Chambers-eBioscience Memorial Award
Lustgarten-eBioscience Memorial Award
Meeting Bags
Program Support

GOLD SPONSOR



FASEB
Federation of American Societies
for Experimental Biology

MARC: Maximizing Access to Research Careers
AAI Underrepresented Scientist Travel Awards
Support for AAI Vanguard Lecture
Program Support

SILVER SPONSORS



AAI-BD Biosciences
Investigator Award
AAI Early Career Faculty
Travel Grants
AAI Trainee Abstract Awards
AAI Laboratory Travel Grants



AAI-Thermo Fisher
Meritorious Career Award
AAI-Thermo Fisher Trainee
Achievement Awards

BRONZE SPONSOR



Program Support

SUSTAINING SPONSOR



Program Support

SUPPORTING SPONSORS



Lead Sponsor of Mobile App



The JI Editorial Board Dinner
and Meeting

CONTRIBUTING SPONSOR



Program Support

OTHER SUPPORT

HENRY J. SHOWELL

Pfizer-Showell Travel Award

GUEST SOCIETY SYMPOSIA

Radiation Research Society (RRS) and National Cancer Institute (NCI) Symposium: *Symbiosis of Radiation and Immunology: Basic and Translational Impact*

MONDAY, MAY 11, 8:00 AM – 10:00 AM

Chairs:

Mansoor Ahmed, NCI, NIH

Chandan Guha, Albert Einstein College of Medicine

Speakers:

Mansoor Ahmed, NCI, NIH

Opening/meeting interaction

Gayle E. Woloschak, Northwestern University

Introduction: Information on Radiation Research Society (RRS)

Ralph R. Weichselbaum, University of Chicago Medicine

Basic radiation biology: fatal attraction for immunologists

Yang-Xin Fu, University of Chicago

Immunologist's experiences of collaborating with the field of radiation biology

Chandan Guha, Albert Einstein College of Medicine

Opportunities for immunology in clinical radiotherapy

Lisa M. Coussens, Oregon Health & Science University

Tumor immune microenvironment

Society for Glycobiology (SfG) Symposium: *Glycans and Immunity*

MONDAY, MAY 10, 12:30 PM – 2:30 PM

Chairs:

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

James P. Paulson, Scripps Research Institute

Speakers:

Robert M. Anthony, Massachusetts General Hospital
Glycoregulation of immunoglobulins

Charles J. Dimitroff, Brigham and Women's Hospital
Galectin-1 binding glycans play a pleiotropic role in melanoma development

Eugene C. Butcher, Stanford School of Medicine
Carbohydrate addressins for lymphocyte homing

Paula A. Videira, NOVA Medical School
Immunomodulation of dendritic cells: cracking the role of sialic acid-containing sugars

Vijay K. Kuchroo, Brigham and Women's Hospital
Tim-3 and Galectin-9: regulators of effector and Treg cells

Society for Immunotherapy of Cancer (SITC) Symposium: *Immune Biomarkers in Cancer*

SUNDAY, MAY 10, 8:00 AM – 10:00 AM

Chairs:

Lisa H. Butterfield, University of Pittsburgh

Augusto C. Ochoa, Louisiana State University Health Sciences Center

Speakers:

Augusto C. Ochoa, Louisiana State University Health Sciences Center

Metabolism in the immune response to cancer

Giorgio Trinchieri, NCI, NIH

Omics platforms and systems biology in biomarker identification

Holden T. Maecker, Stanford University Medical Center

High dimensional cellular and proteomic profiling approaches

Lisa H. Butterfield, University of Pittsburgh

Immune biomarkers in clinical trials

Society for Leukocyte Biology (SLB) Symposium: *Society for Leukocyte Biology: The Next Generation*

MONDAY, MAY 11, 10:15 AM – 12:15 PM

Chairs:

Louis B. Justement, University of Alabama at Birmingham

Silvia M. Uriarte, University of Louisville

Speakers:

Joshua J. Obar, Montana State University

Leukotriene and IL-1alpha-mediated orchestration of the antifungal leukocyte response to Aspergillus fumigatus

I. Coy Allen, Virginia Polytechnic Institute and State University
Evaluating NLR modulation of canonical and non-canonical NF- κ B signaling in IBD

Laura M. Sly, University of British Columbia

Harnessing macrophage phenotype for anti-inflammatory therapy

Madhavi J. Rane, University of Louisville

Baclofen, a GABA_BR agonist, ameliorates immune-complex-mediated acute lung injury by modulating pro-inflammatory mediators

Ilhem Messaoudi Powers, University of California, Riverside

Dose-dependent modulation of immune response to vaccination by alcohol

Silvia M. Uriarte, University of Louisville

Neutrophils and oral pathogens: opposing forces in the dysbiosis battle

Society of Mucosal Immunology (SMI) Symposium: *Unique Lymphocyte Populations at Mucosal Surfaces*

SUNDAY, MAY 10, 10:15 AM – 12:15 PM

Chairs:

Timothy L. Denning, Georgia State University

Marielle C. Gold, Oregon Health & Science University

Speakers:

Ivaylo I. Ivanov, Columbia University

Control of mucosal Th17 cell homeostasis

Florence Lambolez, La Jolla Institute for Allergy and Immunology

DN TCR β^+ IEL: mix and match MHC reactivities

Richard S. Blumberg, Harvard Medical School

NKT cells orchestrate critical barrier protective functions in mucosal tissues

Marielle C. Gold, Oregon Health & Science University

Human pathogen-reactive MAIT cells

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

SATURDAY, MAY 9, 10:15 AM – 12:15 PM

Chairs:

Christine A. Biron, Brown University

Eric O. Long, NIAID, NIH

Speakers:

Eric O. Long, NIAID, NIH

Negative signaling by NK cell inhibitory receptors

Sungjin Kim, Michigan State University

Antibody-dependent memory-like NK cells

Joseph C. Sun, Memorial Sloan Kettering Cancer Center

Novel role for RAG in NK cells

David K. Finlay, Trinity College Dublin

Metabolic regulation of NK cell responses

Emily M. Mace, Baylor College of Medicine

The structure and function of the NK cell developmental synapse

The Obesity Society (TOS) Symposium: *Immunometabolism of Aging*

SUNDAY, MAY 10, 10:15 AM – 12:15 PM

Chairs:

Barbara S. Nikolajczyk, Boston University School of Medicine

Gerald V. Denis, Boston University School of Medicine

Speakers:

Derek M. Huffman, Albert Einstein College of Medicine

Obesity, aging, and the intestinal stem cell niche

Daniela Frasca, University of Miami

Obesity, aging, and antibody responses

Nathan K. LeBrasseur, Mayo Clinic

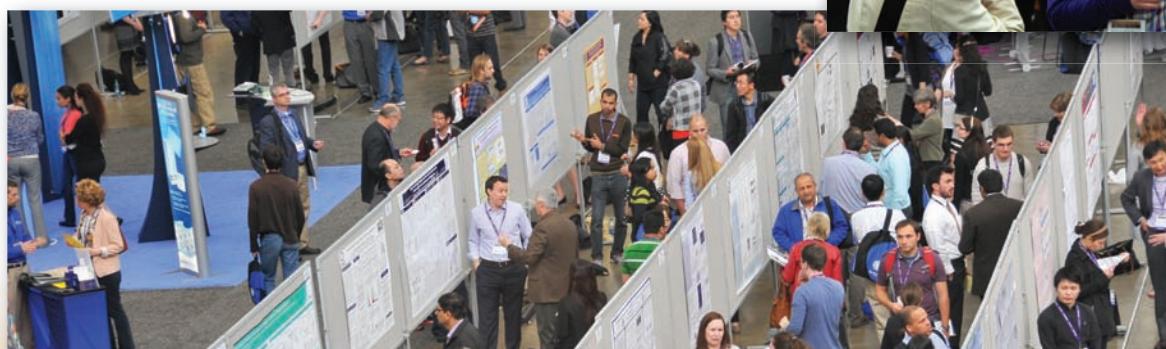
Cellular senescence: at the crossroads of aging, obesity, and exercise

Shai Shen-Orr, Technion-Israeli Institute of Technology

Cellular immune response to chronic inflammation

Simin N. Meydani, Tufts University

Caloric restriction and immune function in aging humans



CAREER DEVELOPMENT SESSIONS

CAREER DEVELOPMENT SESSIONS

Through workshops, roundtables, and one-on-one counseling, IMMUNOLOGY 2015™ provides critical career development programs.

Career sessions and services this year include:

- NIH Grants Workshop
- Careers in Biotech: Panel Discussion and Networking
- Careers and Networking Roundtables (2)
- How to Convert Your CV into a Resumé (followed by one-on-one consulting)
- Interviewing for a Job
- Secrets for a Successful Postdoctoral Fellowship

AAI is also offering an online and onsite Jobs Board free to meeting registrants and exhibitors.

NIH Grant Seminar Workshop: Demystifying the Application and Review Process

SATURDAY, MAY 9, 8:00 AM – 10:00 AM

Chairs:

Tina McIntyre, Scientific Review Officer, Innate Immunity and Inflammation Study Section, Immunology Integrated Review Group, Center for Scientific Review, NIH

Alison Deckhut-Augustine, Section Chief, Immunoregulation Section, Basic Immunology Branch, Division of Allergy, Immunology, and Transplantation, NIAID, NIH

Speakers:

Betty Hayden, Scientific Review Officer, Cellular and Molecular Immunology B Study Section, Immunology Integrated Review Group, Center for Scientific Review, NIH

Nancy Vazquez-Maldonado, Scientific Review Officer, Immunology Review Branch, NIAID, NIH

Lakshmi Ramachandra, Scientific Review Officer, Immunology Review Branch, NIAID, NIH

This workshop will provide participants with an overview of NIH grant application, review, and management. Emphasis will be given to identification of the most appropriate funding agency, how to make an application “reviewer friendly,” and other strategies that contribute to applications that succeed in obtaining research funding. The workshop will also provide information on how to understand the peer review system, which is essential to competing successfully for funding, with a focus on recent changes to the review process. NIH review, grants management, and program staff will provide a broad array of expertise and encourage questions from seminar participants. This workshop is open to anyone but is especially intended for new faculty members, young investigators, and advanced postdoctoral fellows.

Careers in Science Roundtable

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

SATURDAY, MAY 9, 11:30 AM – 1:00 PM

Chair:

Virginia Shapiro, Mayo Clinic; AAI Committee on the Status of Women Chair

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. Recently added topics 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 between specific career stages, or issues in balancing career and family in any career path. Don't miss this great networking opportunity! *Registration Fee: \$20 (Lunch included.)*

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
- The Two Body Problem: dual career couples
- Balancing Parenthood and Career
- Careers in Biotech and Industry: moving from academia to industry and vice versa
- Careers at Governmental Agencies (FDA/NIH/USDA/CDC)
- NIH Study Section Insights
- Negotiating an Academic Position
- 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, program administration, non-profits, industry

Table Leaders: See AAI Committee-sponsored Sessions

Careers Roundtable and Speed Networking Session

Sponsored by the AAI Minority Affairs Committee

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-GM08059-32]

SATURDAY, MAY 9, 11:45 AM – 2:15 PM

Chair:

Cherié L. Butts, Biogen Idec; AAI Minority Affairs Committee Chair

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

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 (e.g., entrepreneurship, law/policy)

Table Leaders: See AAI Committee-sponsored Sessions

GRIP

Grant Review for Immunologists Program

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

The AAI Grant Review for Immunologists Program (GRIP) offers new principal investigators (PIs) access to established PIs for guidance in preparing grant proposals as they embark on their independent careers. Early-career PIs (assistant professors or equivalents) are invited to submit their grants' "Specific Aims" pages to the GRIP coordinator who, with the assistance of a small volunteer subcommittee, will attempt to match each topic of the proposal with the research experience of an established PI. Matches will be made as quickly as possible to allow participants to meet upcoming NIH grant deadlines. Participation is open only to AAI regular members and is strictly voluntary. The program is not intended to supplant internal mentoring programs at applicants' institutions.

To apply, please send your CV and the grant's "Specific Aims" page to infoaai@aai.org. (please write "GRIP" in the subject line)

To volunteer as a mentor, please send your CV and a brief description of your grant-reviewing experience to infoaai@aai.org. (subject line "GRIP")



Program details at aai.org/Education/GRIP

CAREER DEVELOPMENT SESSIONS

Careers in Biotech: Panel Discussion and Networking

Sponsored by the AAI Education Committee

SATURDAY, MAY 9, 7:00 PM – 9:00 PM

Chair:

Nandita Bose, Biothera

Panelists:

Jason Fontenot, Principal Scientist, Immunology, Biogen Idec

Brian Johnson, Director, Market Development & Product Management, Thermo Fisher Scientific

Andy I. Kokaji, Senior Scientist, STEMCELL Technologies, Inc.

Isharat Yusuf, Research Investigator II, Genomics Institute of the Novartis Research Foundation

Many opportunities exist in industry for scientists with advanced degrees. There are positions in laboratory research, program management, business development, regulatory affairs, clinical trials oversight, medical liaison, and more. This panel features scientists employed in a variety of positions in industry discussing their career paths and the skills required for success in each. Following the panel discussion, enjoy casual conversation with the speakers and other scientists from industry at a networking reception.

How to Convert Your CV into a Resumé

SUNDAY, MAY 10, 9:00 AM – 10:00 AM

Speaker:

Derek Haseltine, Director, Career Services, College of Professional Studies, 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 10:30 AM to 12:30 PM. Bring your CV!

Secrets for a Successful Postdoctoral Fellowship

MONDAY, MAY 11, 11:00 AM – 12:00 PM

Speaker:

James Gould, Director, Office for Postdoctoral Fellows, Harvard Medical School

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

MONDAY, MAY 11, 1:30 PM – 2:30 PM

Speaker:

Derek Haseltine, Director, Career Services, College of Professional Studies, 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 students and postdoctoral attendees.



CV to resumé workshop presenter Derek Haseltine (R) provides one-on-one counseling



IMMUNOLOGY 2015™

Annual Meeting of The American Association of Immunologists

May 8–12, 2015 | Ernest N. Morial Convention Center | New Orleans, Louisiana

Jobs Board

*A Free Recruiting Service for Registrants
and Exhibitors*

Post Online and Meet On-site

AAI is offering career services to both job seekers and employers through a Jobs Board free to meeting registrants and exhibitors at www.immunology2015.org/jobs-board/index.html.

Job Seekers! Whatever your career stage, use this career service at IMMUNOLOGY 2015™ 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 29. 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 2015™ website. By including a contact email, you will receive inquiries directly.

- **Advance Postings.** Postings will be accepted as of February 2, 2015, and will remain online until the end of the meeting. To post job listings in advance of the meeting, contact meetings@aaiv.org. Advance Postings must be submitted to AAI by April 29, 2015.
- **On-site Postings.** After April 29, 2015, employers wishing to advertise a job on the IMMUNOLOGY 2015™ website may still do so by visiting the AAI Office in the Ernest N. Morial 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 2015™. To register for the meeting, visit www.immunology2015.org/registration.

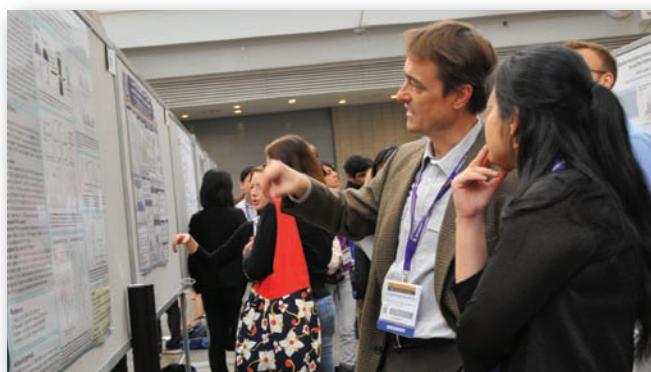


The American Association of Immunologists, Inc.
9650 Rockville Pike | Bethesda, Maryland 20814
Phone: (301) 634-7178 | Fax: (301) 634-7887
Email: infoaaiv@aaiv.org | Web: www.aaiv.org

POSTER SESSIONS & BLOCK SYMPOSIA

POSTER SESSIONS & BLOCK SYMPOSIA

Abstracts of unpublished, original research are presented during Poster Sessions and Block Symposia (oral presentations of poster data). This is perhaps the most dynamic aspect of the AAI annual meeting. Take part in face-to-face discussions with abstract authors and learn about their most recent, unpublished research. Poster Sessions will be held daily (unopposed by any other sessions) in the Exhibit Hall from 2:30 PM – 3:45 PM.



EXHIBITOR HALL PASSPORT PROGRAM

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

Entries must be received by Monday, May 11, at 2:00 PM. The drawing will be held during the Poster Presentations on Monday, May 11 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.

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 those workshops does not constitute endorsement of any products or services by AAI.



AAI Courses in Immunology

2015 Introductory Course in Immunology

July 14–19, 2015 • Long Beach Convention Center, Long Beach, California

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

University of Toronto and Sunnybrook Research Institute

2015 Advanced Course in Immunology

August 2–7, 2015 • 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
Please direct inquiries to meetings@aai.org or 301-634-7178.

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

Visit: www.faseb.org/MARC.



The American Association of Immunologists
Gratefully Acknowledges the Generous Sponsorship of



for the
IMMUNOLOGY 2015™
Opening Night Welcome Reception
FRIDAY, MAY 8 • 6:00 PM – 8:00 PM

Chambers-eBioscience Memorial Award

Lustgarten-eBioscience Memorial Award

Meeting Bags

Program Support

IMMUNOLOGY 2015™

May 8 – 12 , 2015 • New Orleans, Louisiana • Ernest N. Morial Convention Center

SOCIAL EVENTS

New Member Reception (*By invitation only*)

Sponsored by the AAI Membership Committee

FRIDAY, MAY 8, 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 Linda Sherman and other AAI leaders look forward to meeting you personally. Please join us with your invitation in hand for light refreshments and casual conversation.

Opening Night Reception: Carnival Night in NOLA

Generously sponsored by eBioscience, an Affymetrix company

FRIDAY, MAY 8, 6:00 PM – 8:00 PM

GREAT HALL LOBBY –

ERNEST N. MORIAL CONVENTION CENTER

900 CONVENTION CENTER BLVD.



As you exit the President's Address, you'll be greeted by a traditional southern Louisiana band in the Great Hall Lobby for the Opening Night Welcome Reception. There you'll sample the many flavors of New Orleans cuisine, mingle with old friends and revelers "borrowed" from Mardi Gras, and enjoy trying out your Cajun two-step to the celebrated Dwayne Dopsie & Zydeco Hellraisers band.

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

Generously sponsored by Dartmouth Journal Services

SATURDAY, MAY 9, 7:00 PM – 10:00 PM

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

Service Appreciation Reception (*By invitation only*)

Generously sponsored by BioLegend

SUNDAY, MAY 10, 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 by invitation to 2014-2015 AAI volunteers.

IMMUNOLOGY 2015™ Gala: Lagniappe* on the Levee—The Tastes & Tunes of New Orleans

Generously sponsored by BioLegend

MONDAY, MAY 11, 7:00 PM – 9:30 PM

THE SUGAR MILL

1021 CONVENTION CENTER BLVD.



Pause during your week of intense science to enjoy an evening with friends and colleagues at the AAI Gala: Lagniappe on the Levee—The Tastes and Tunes of New Orleans. At this festive event to be held at the historic Sugar Mill directly across from the Convention Center, you'll enjoy sampling the ambience and cuisines of three distinctive New Orleans neighborhoods—the Vieux Carré, the Garden District, and Cajun Bayou Country. You'll also be treated to the tunes of the 14-piece Swingaroux Band performing the many different genres of Louisiana music. And when you aren't dancing, you'll find lagniappe in novelty entertainment.

**Lagniappe: a Creole expression pronounced [lay-nee-ap] and meaning "a little something extra"*





The American Association of Immunologists

Gratefully Acknowledges the Generous Sponsorship of



for the
IMMUNOLOGY 2015™ GALA
MONDAY, MAY 11 • 7:00 PM – 9:30 PM

Service Appreciation Reception

Lefrançois-BioLegend Memorial Award

AAI-BioLegend Herzenberg Award

Meeting Lanyards

IMMUNOLOGY 2015™

May 8 – 12 , 2015 • New Orleans, Louisiana • Ernest N. Morial Convention Center

2014–2015 AAI PROGRAM COMMITTEE

AAI gratefully acknowledges the efforts of the Program Committee for IMMUNOLOGY 2015™.

Wendy L. Havran, Chair
The Scripps Research Institute

Maria-Luisa Alegre
University of Chicago

Marlene Bouvier
University of Illinois at Chicago

Daniel J. Campbell
Benaroya Research Institute

Shane Crotty
La Jolla Institute for Allergy
and Immunology

James E. Crowe, Jr.
Vanderbilt University Medical Center

Jennifer L. Gommerman
University of Toronto

Daniel H. Kaplan
University of Minnesota

Paul Kubes
University of Calgary

Frances E. Lund
University of Alabama at Birmingham

David W. Pascual
University of Florida

Erika L. Pearce
Washington University School of Medicine

AAI ABSTRACT PROGRAMMING CHAIRS

AAI gratefully acknowledges the efforts of the Abstract Programming Chairs for IMMUNOLOGY 2015™.

Antigen Processing and Presentation

Malini Raghavan
University of Michigan
Medical School

**Scheherazade
Sadegh-Nasseri**
Johns Hopkins School
of Medicine

Basic Autoimmunity

Laura Mandik-Nayak
Lankenau Institute for
Medical Research

Chandra Mohan
University of Houston

Cellular Adhesion, Migration, and Inflammation

Margaret S. Byrnes
Cornell University
College of Veterinary Medicine

Yoji Shimizu
University of Minnesota
Medical School

Cytokines and Chemokines and Their Receptors

Ninan Abraham
University of British Columbia

Mandy J. McGeachy
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 Response Regulation: Cellular Mechanisms

Andrew L. Mellor
Georgia Regents University

Thomas C. Mitchell
University of Louisville
School of Medicine

Immune Response 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

Gregory M. Barton
University of California,
Berkeley

Denise M. Monack
Stanford University

Lymphocyte Differentiation and Peripheral Maintenance

Nicole Baumgarth
University of California, Davis

Ross M. Kedl
University of Colorado,
Denver

Microbial, Parasitic, and Fungal Immunology

George S. Deepe
University of Cincinnati
College of Medicine

Joanne Turner
Ohio State University

Mucosal and Regional Immunology

Peter B. Ernst
University of California,
San Diego

Dana J. Philpott
University of Toronto

Therapeutic Approaches to Autoimmunity

Jennifer H. Anolik
University of Rochester
Medical Center

Olaf Stüve
University of Texas
Southwestern Medical Center

Transplantation Immunology

Donna L. Farber
Columbia University
Medical Center

Pavan Reddy
University of Michigan
Medical Center

Tumor Immunology

Chrystal M. Paulos
Hollings Cancer Center
MUSC

Weiping Zou
University of Michigan

Vaccines and Immunotherapy

Lisa H. Butterfield
University of Pittsburgh

Kohtaro Fujihashi
University of Alabama at
Birmingham

Veterinary and Comparative Immunology

Cynthia L. Baldwin
University of Massachusetts

Jeffrey A. Yoder
College of Veterinary Medicine
North Carolina State
University

Viral Immunology

Julia L. Hurwitz
St. Jude Children's
Research Hospital

Steven M. Varga
University of Iowa



2015 Introductory Course in Immunology

July 14–19, 2015 • 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 14–16)** is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. **Part II (July 17–19)** 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

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

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

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

David Nemazee, The Scripps Research Institute
B Cell Development and Maturation

Shannon J. Turley, Genentech, Inc.
*Dendritic Cells: The Bridge Between Innate
and Adaptive Immunity*

Michael Croft, La Jolla Institute for Allergy
and Immunology
Effector T Cell Differentiation and Response

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

Stephen M. Hedrick, University of California, San Diego
Immune Homeostasis in Infection and Disease

Ninan Abraham, University of British Columbia
Cytokines

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

Olivia M. Martinez, Stanford University School
of Medicine
Transplantation

Peter B. Ernst, University of California, San Diego
Mucosal Immunology

Steven F. Ziegler, Benaroya Research Institute
Type 2 Immunity

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

Michael J. Bevan, University of Washington
Immunologic Memory

Nicole Frahm, Fred Hutchinson Cancer Research Center
Vaccination

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

Also included will be lectures on:

*Innate Immunity: Introduction to Pattern
Recognition and Intracellular Signaling,
Immunity to Viruses, Autoimmunity,
and Genetic Approaches to Immune-Mediated
Diseases*

For complete course details and registration, visit: www.aai.org/Education/Courses

For assistance, contact (301) 634-7178 or meetings@aaiv.org. Overseas applicants are advised to apply early for visas; for details, visit 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.



2015 Advanced Course in Immunology

August 2–7, 2015 • 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*

Bruce Horwitz, *Brigham & Women's
Hospital, Harvard 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*

Michael C. Carroll, *Immune Disease Institute
Harvard Medical School
Molecular and Cellular Mediators of Inflammation*

Brian T. Edelson, *Washington University School
of Medicine
Dendritic Cells*

Eugene M. Oltz, *Washington University School
of Medicine
The Generation and Modification of Lymphocyte
Antigen Receptor Genes*

Kay L. Medina, *Mayo Clinic
B Cell Development*

Avinash Bhandoola, *NCI, NIH
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*

Joshy Jacob, *Emory University School of Medicine
B Cell Memory*

Arup K. Chakraborty, *Massachusetts Institute
of Technology
Computational Modeling of Immunological
Processes*

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

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

Joel D. Ernst, *New York University School of Medicine
Immune Response to Pathogens*

Lisa H. Butterfield, *University of Pittsburgh
Tumor Immunology*

Joanne L. Viney, *Biogen Idec
Immunotherapeutics*

Also included will be lectures on:
*T Cell Memory, Tolerance
and Autoimmunity, and Vaccines*

For complete course details and registration, visit: www.aai.org/Education/Courses

For assistance, contact (301) 634-7178 or meetings@aai.org. Overseas applicants are advised to apply early for visas; for details, visit 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.

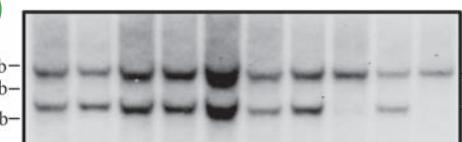
Digital Image Dos and Don'ts



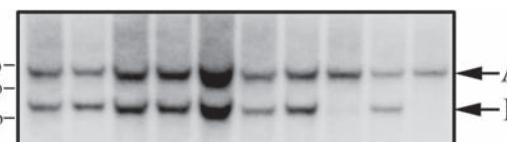
Before preparing manuscript figures, please read the Information for Authors at
<http://www.jimmunol.org/site/misc/authorinstructions.xhtml#mspreparation>

1. Do not erase any part of the image, including the background.

YES

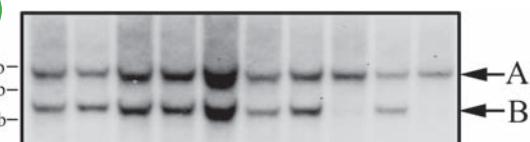


NO

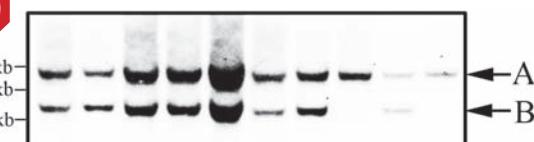


2. Do not use excessive contrast that removes background.

YES

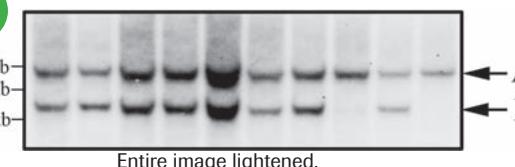


NO

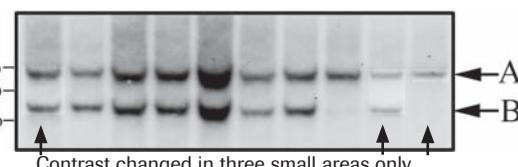


3. Make any adjustments to brightness or contrast equally across the entire image.

YES



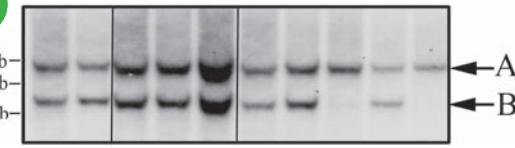
NO



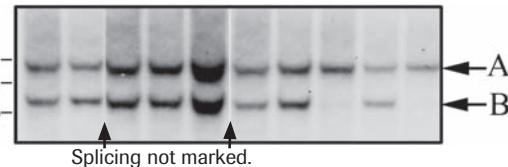
4. Indicate any splicing of data from a single experiment by contrasting (black or white) lines; state the manipulation in the legend.

Images from different experiments should not be spliced to form a new single image.

YES

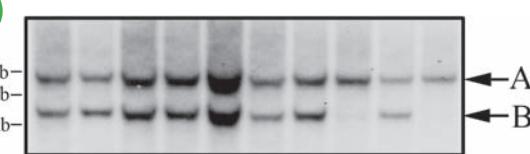


NO



5. Crop gels and blots conservatively, retaining important bands.

YES



NO



- All images submitted to *The Journal of Immunology* must accurately represent the original data.
- Original data (digital files, autoradiographs, films, etc.) for all experiments should be fully annotated, secured, and retrievable for up to 10 years.
- The original image file (raw data file) should be kept in an unprocessed and non-compressed file format.
- Figures that are compiled into multi-figure panels should be kept individually.

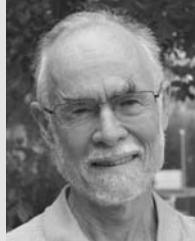


The American Association of Immunologists

Career Award Recipients for 2015

The American Association of Immunologists proudly announces the 2015 recipients of AAI awards for outstanding research and career achievements.

*The 2015 AAI award winners will be recognized at IMMUNOLOGY 2015™
May 8–12, New Orleans, Louisiana.*



AAI Lifetime Achievement Award

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

Jonathan Sprent, M.B.B.S., Ph.D.
Garvan Institute of Medical Research



AAI Distinguished Service Award

For outstanding service to AAI and the immunology community as member and Chair of the AAI Committee on Public Affairs, 2007–2014

Elizabeth J. Kovacs, Ph.D.
Loyola University Chicago Stritch School of Medicine

AAI-Steinman Award for Human Immunology Research



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

Mary Ellen Conley, M.D.
Rockefeller University

AAI-BioLegend Herzenberg Award



For outstanding research contributions to the field of immunology in the area of B cell biology

Matthew D. Scharff, M.D.
Albert Einstein College of Medicine

AAI-Thermo Fisher Meritorious Career Award



For outstanding research contributions to the field of immunology

Ronald N. Germain, M.D., Ph.D.
*National Institute of Allergy and Infectious Diseases,
National Institutes of Health*

AAI-BD Biosciences Investigator Award

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



Thirumala-Devi Kanneganti, Ph.D.
St. Jude Children's Research Hospital



AAI Excellence in Mentoring Award

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

Rafi Ahmed, Ph.D.
Emory University School of Medicine