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www.jimmunol.org

97TH AAI ANNUAL MEETING
PROGRAM ISSUE

PROGRAM PREVIEW

IMMUNOLOGY 2010™

Important Links

Online Registration

www.IMMUNOLOGY2010.org/Registration.htm

Hotel Reservations

www.IMMUNOLOGY2010.org/Housing.htm

International Attendees

www.IMMUNOLOGY2010.org/Visa.htm

For program updates and complete meeting information, visit

www.IMMUNOLOGY2010.org



THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS | 97th ANNUAL MEETING
May 7–11, 2010 | Baltimore Convention Center | Baltimore, Maryland | www.immunology2010.org

PROGRAM PREVIEW

All activities for the meeting will be held at the Baltimore Convention Center (BCC) unless otherwise noted.

AAI PRESIDENT'S PROGRAM



AAI President's Address

FRIDAY, MAY 7 ■ 5:00 PM
BCC BALLROOM I & II

Betty A. Diamond, The Feinstein Institute for Medical Research, AAI President

Antibodies and the brain: lessons from lupus

Matthew D. Scharff, Albert Einstein College of Medicine, *Introduction*

Presentation of AAI Excellence in Mentoring Award

MONDAY, MAY 10 ■ 2:30 PM ■ BCC BALLROOM I & II

Chair: Betty A. Diamond, The Feinstein Institute for Medical Research, AAI President



AAI Excellence in Mentoring Award

Award Recipient: Jack L. Strominger
Harvard University

Hidde Ploegh, MIT, *Introduction*

The **AAI Excellence in Mentoring Award** recognizes an AAI member's exemplary career contributions to a future generation of scientists. The award will be presented prior to the start of the AAI President's Symposium.

AAI President's Symposium

Neural and Immune Interactions: A New Frontier

MONDAY, MAY 10 ■ 2:30 PM–4:30 PM ■ BCC BALLROOM I & II

Chair: Betty A. Diamond, The Feinstein Institute for Medical Research, AAI President



Kevin J. Tracey
The Feinstein Institute for Medical Research
Reflex control of immunity



Britta Engelhardt
University of Bern
How immune cells enter the central nervous system: anatomical pathways and molecular cues



Madeleine W. Cunningham
University of Oklahoma Health Sciences Center
Molecular mimicry in the immune system: effects on the brain



Lawrence Steinman
Stanford University
Biomarkers guide patient selection for targeting innate or adaptive immunity in multiple sclerosis

*See you in
Baltimore!*



Presentation of AAI Lifetime Achievement Award

SATURDAY, MAY 8 ■ 5:00 PM ■ BCC BALLROOM I & II

Chair: Betty A. Diamond, The Feinstein Institute for Medical Research, AAI President

Award Recipient: Susan L. Swain
Trudeau Institute



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. The award will be presented prior to the start of Alan Sher's AAI Distinguished Lecture.

AAI DISTINGUISHED LECTURES

Generously supported by eBioscience, Inc.



SATURDAY, MAY 8 ■ 5:00 PM
BCC BALLROOM I & II

Alan Sher
NIAID, NIH
Learning immunoregulation from parasites



SUNDAY, MAY 9 ■ 5:00 PM
BCC BALLROOM I & II

Pamela S. Ohashi
University of Toronto
Breaking T cell tolerance to tissue/tumor antigens: a perspective



MONDAY, MAY 10 ■ 5:00 PM
BCC BALLROOM I & II

Mitchell Kronenberg
La Jolla Institute for Allergy and Immunology
Natural killer T cells ignite the immune response to microbes by acting like innate immune cells

Dedicated to the memory of Eli Sercarz

SATURDAY, MAY 8 | 8:00 AM–11:30 AM

BCC BALLROOM I

Major Symposium A—Immunoinaging: Visualizing the Immune Response in Real-time by Multiphoton Microscopy*Chair:* **Michael D. Cahalan**, University of California, Irvine*Co-chair:* **Matthew F. Krummel**, University of California, San Francisco

- **Michael D. Cahalan**, University of California, Irvine
There and back again: immunoinaging in peripheral tissue and in lymphoid organs
- **Matthew F. Krummel**, University of California, San Francisco
Visualization of effective and defective antigen presentation in vivo
- **Ronald N. Germain**, NIAID, NIH, *Connecting the dots: dynamic in situ analysis of innate and adaptive immunity using intravital 2-photon microscopy*
- **Ellen A. Robey**, University of California, Berkeley, *Imaging of T cells and thymocytes in action using 2-photon microscopy*
- **Mark J. Miller**, Washington University School of Medicine
Regulation of leukocyte trafficking in mouse models of inflammation and infection
- **Thorsten R. Mempel**, Massachusetts General Hospital
T cell migration and function during an anti-tumor immune response

BCC BALLROOM II

Major Symposium B—Follicular Helper T Cells: Lineage and Function*Chair:* **Michael G. McHeyzer-Williams**, Scripps Research Institute*Co-chair:* **Carola G. Vinuesa**, Australian National University

- **Shane Crotty**, La Jolla Institute for Allergy and Immunology
Follicular helper CD4⁺ T cell differentiation and function
- **Markus Mohrs**, Trudeau Institute, *Tfh cells during helminth infections: helpers without borders*
- **Carola G. Vinuesa**, Australian National University
Unwanted Tfh cells
- **Sidonia Fagarasan**, RIKEN Research Center for Allergy and Immunology, *T cell-independent and T cell-dependent IgA synthesis in the gut*
- **Michael G. McHeyzer-Williams**, Scripps Research Institute
Effector and memory follicular helper T cell function in vivo

SUNDAY, MAY 9 | 8:00 AM–11:30 AM

BCC BALLROOM I

Major Symposium C—Regulation of Immunity by Transcriptional and Epigenetic Networks*Chair:* **Kenneth M. Murphy**, Washington University School of Medicine*Co-chair:* **Dan R. Littman**, New York University School of Medicine

- **Mark Schlissel**, University of California, Berkeley
Transcription factors and signaling pathways that regulate the V(D)J recombinase
- **Katia Georgopoulos**, Massachusetts General Hospital/Harvard Medical School, *Ikaros and the rise and fall of the immune system*
- **Tian Chi**, Yale University, *Two novel genetic approaches for studying epigenetic control in T cells*
- **Keji Zhao**, NHLBI, NIH, *Epigenetic regulation of T cell differentiation*
- **Diane J. Mathis**, Harvard Medical School, *The molecular mechanism of Aire*
- **Kenneth M. Murphy**, Washington University School of Medicine, *Immune lineage decisions regulated by atypical AP-1 factors*

BCC BALLROOM II

Major Symposium D—New Insights into Mast Cell Function*Generously supported by Kyowa Hakko Kirin California, Inc.**Chair:* **Stephen J. Galli**, Stanford University*Co-chair:* **Melissa A. Brown**, Northwestern University

- **Juan Rivera**, NIAMS, NIH, *Sphingosine kinases and sphingosine-1-phosphate in mast cell biology and function*
- **Toshiaki Kawakami**, La Jolla Institute for Allergy and Immunology, *PLC- β 3, a tumor suppressor, inhibits skin inflammation*
- **Soman N. Abraham**, Duke University Medical Center
Mast cell modulation of adaptive immune responses to pathogens
- **Jean S. Marshall**, Dalhousie University, *Mast cell responses to viral infection and Toll-like receptor-mediated activation*
- **Melissa A. Brown**, Northwestern University, *Roles of mast cells in autoimmunity*
- **Stephen J. Galli**, Stanford University, *Mast cells as negative regulators of innate and adaptive immune responses*



MONDAY, MAY 10 | 8:00 AM–11:30 AM

BCC BALLROOM I

Major Symposium E—Multi-scale Computational and Systems Approaches to Understanding Immunity

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

Co-chair: **Denise E. Kirschner**, University of Michigan Medical School

- **Ronald N. Germain**, NIAID, NIH, *Introduction*
- **Douglas A. Lauffenburger**, MIT, *Quantitative analysis of interleukin-7 receptor/ligand dynamics, signaling, and responses in naive T cells: combined experiment and modeling studies*
- **Martin Meier-Schellersheim**, NIAID, NIH, *Computational cell biology—from molecular interactions to cellular communication*
- **Byron Goldstein**, Los Alamos National Laboratory *From ligand-induced receptor aggregation to the aggregation of LAT: a systems biology approach to modeling FcεRI-mediated mast cell signaling*
- **Penelope A. Morel**, University of Pittsburgh, *Understanding local innate immune responses to pathogens*
- **Denise E. Kirschner**, University of Michigan Medical School *Multi-scale and multi-systems approaches toward understanding the immune response to Mycobacterium tuberculosis infection*
- **Christophe Benoist**, Harvard Medical School *The immunological genome project*

BCC BALLROOM II

Major Symposium F—Innate Immunoregulation at Mucosal Interfaces

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

Co-chair: **Bana Jabri**, University of Chicago

- **Thaddeus S. Stappenbeck**, Washington University School of Medicine, *Autophagy, Paneth cells, and intestinal inflammation*
- **Richard S. Blumberg**, Brigham & Women's Hospital/Harvard Medical School, *ER stress and intestinal inflammation*
- **Andrew J. Macpherson**, University of Bern, *The continuum between adaptive and innate immunity in maintaining mutualism with commensal intestinal bacteria*
- **Bana Jabri**, University of Chicago, *TLR6 and immune regulation*
- **Christopher L. Karp**, Cincinnati Children's Hospital Research Foundation, *Immunobiology of a gene modifying lung disease in cystic fibrosis*
- **Averil Ma**, University of California, San Francisco *Regulation of NF-κB and NOD2 pathways in mucosal tissues*

TUESDAY, MAY 11 | 8:00 AM–11:30 AM

BCC BALLROOM I

Major Symposium G—Evolution of Immunocompetent Lymphocytes and Their Receptors

Chair: **Max D. Cooper**, Emory University

Co-chair: **Martin F. Flajnik**, University of Maryland at Baltimore

- **Ellen Hsu**, State University of New York, *The basis of allelic exclusion?*
- **Martin F. Flajnik**, University of Maryland at Baltimore *Immunoglobulins and gamma/delta T cell receptors: How do we decide?*
- **John P. Cannon**, University of South Florida, *Genetics, structure, and function of novel immune receptors*
- **Max D. Cooper**, Emory University, *Evolution of alternative adaptive immune systems*
- **Thomas Boehm**, Max-Planck-Institute of Immunobiology *Evolution of the thymus in vertebrates*
- **Roy A. Mariuzza**, University of Maryland Biotechnology Institute, *Structural insights into the evolution of adaptive immunity*

BCC BALLROOM II

Major Symposium H—Negative Regulatory Networks in Health and Disease

Chair: **Arlene H. Sharpe**, Harvard Medical School

Co-chair: **Dario A. A. Vignali**, St. Jude Children's Research Hospital

- **Arlene H. Sharpe**, Harvard Medical School, *Role of co-inhibitory pathways in regulating the balance between T cell activation and tolerance*
- **David G. Brooks**, UCLA, *Positive and negative regulation of immunity during viral persistence*
- **Dario A. A. Vignali**, St. Jude Children's Research Hospital *Dissecting regulatory T cell function*
- **Christopher A. Hunter**, University of Pennsylvania School of Veterinary Medicine, *Additional roles for IL-27 in immune regulation*
- **Jane Hoyt Buckner**, Benaroya Research Institute at Virginia Mason, *Mechanisms of impaired tolerance in type 1 diabetes*
- **Dmitry I. Gabrilovich**, H. Lee Moffitt Cancer Center and Research Institute, *Myeloid-derived suppressor cells as negative regulators of immune responses*



OPENING NIGHT WELCOME RECEPTION

Generously supported by eBioscience, Inc.

FRIDAY, MAY 7 ■ 6:15 PM–8:00 PM
BCC CHARLES STREET LOBBY AND MEZZANINE

Don't miss the **IMMUNOLOGY 2010™ Opening Night Welcome Reception** generously sponsored by **eBioscience**. Come directly from the President's Address into the grand foyer of the Baltimore Convention Center to enjoy drinks and hors d'oeuvres, catch up with colleagues, and relax from your travels. It will be our great pleasure, with the generous support of eBioscience, to welcome you to the 97th AAI Annual Meeting and wish you a productive week at IMMUNOLOGY 2010™.

AAI BLOCK PARTY "A NIGHT AT THE YARD"*

Generously supported by BioLegend

SUNDAY, MAY 9 ■ 7:00 PM–9:30 PM ■ ORIOLES PARK AT CAMDEN YARDS

Join us for this "Grand Slam" experience, supported by **BioLegend** at Camden Yards, home of the Baltimore Orioles! Camden Yards was built in the tradition of the magnificent big-league ballparks of the early 1900s but with 21st century state-of-the-art technology.

Bring your baseball caps, wear your jerseys, and come out to Eutaw Street at the entrance to Camden Yards for our "Night at the Yard" block party. Whether you choose just to take in the grandeur of the stadium and reminisce about baseball, or sing and dance along with the live band, this event is sure to be one for the memory books. Terrific ballpark food including hot dogs, BBQ sandwiches, Baltimore Italian sausages, and more will be served...and yes! peanuts and Cracker Jacks!

** In case of rain, the party will move inside to the Camden Yards Stadium Club Level to enjoy the VIP treatment for festivities and great views of the field below.*



YOUNG INVESTIGATORS PARTY (YIP!)

SATURDAY, MAY 8 ■ 9:00 PM–11:00 PM
RENAISSANCE BALTIMORE HARBORPLACE HOTEL, MARYLAND BALLROOM

Attention all graduate students and postdoctoral fellows! Join other young scientists for this hip networking event. You'll enjoy a relaxed but rockin' atmosphere to meet, network—and dance! Party includes snacks and beverages.

Note: Special event for Graduate Students and Postdoctoral Fellows. Badges checked at door. All guests must be 21 years of age.



SERVICE APPRECIATION RECEPTION

Generously supported by BioLegend

AAI is grateful to the many members who gave precious time over the past year to make AAI "tick." Their service included working on AAI committees, representing AAI in outside activities, reviewing abstracts or chairing sessions at the annual meeting, and serving as senior editors for *The Journal of Immunology*. A reception to say "thank you" is being held at the annual meeting. This reception is very generously sponsored by **BioLegend**.

The AAI Awards Program honors members across the career spectrum.
AAI awards are presented throughout the meeting in special sessions.

AAI-BD Biosciences Investigator Award Presentation and Lecture

Generously supported by BD Biosciences

SATURDAY, MAY 8 ■ 2:30 PM–3:30 PM ■ BCC BALLROOM I & II

Chair: **Betty A. Diamond**, The Feinstein Institute for Medical Research, AAI President



Award Recipient

Gregory M. Barton, University of California, Berkeley, *Regulation and function of the Toll-like receptor family*

AAI-Invitrogen Meritorious Career Award Presentation and Lecture

Generously supported by the Invitrogen Corporation

SATURDAY, MAY 8 ■ 3:30 PM–4:45 PM ■ BCC BALLROOM I & II

Chair: **Betty A. Diamond**, The Feinstein Institute for Medical Research, AAI President



Award Recipient

Dan R. Littman, HHMI, New York University School of Medicine, *Microbiota and transcriptional networks in inflammatory T cell differentiation*

AAI Award for Human Immunology Research Presentation and Lecture

SUNDAY, MAY 9 ■ 3:30 PM–4:45 PM ■ BCC BALLROOM I & II

Chair: **Betty A. Diamond**, The Feinstein Institute for Medical Research, AAI President



Award Recipient

Raif S. Geha, Children's Hospital Boston/Harvard Medical School, *Four decades of investigation in immunodeficiency and allergic diseases*

For complete information on all AAI Awards, please visit www.aai.org/Awards.

AAI Business Meeting and Awards Presentations

MONDAY, MAY 10 ■ 12:45 PM–2:15 PM ■ BCC ROOM 324

This session will include the annual report to AAI members on AAI and *The Journal of Immunology* business affairs and will feature special 2010 AAI awards presentations and acknowledgements. Lunch will be provided.

AAI Distinguished Service Award

For dedication and exemplary service to the AAI Minority Affairs Committee



Gerald Sonnenfeld
Binghamton University
State University of New York



Randy R. Brutkiewicz
Indiana University
School of Medicine

Cynthia Chambers Memorial–eBioscience Junior Faculty Award

Pfizer-Showell Travel Award

AAI-Invitrogen Trainee Achievement Awards

ADDITIONAL AWARDS AND GRANTS

to be given in conjunction with IMMUNOLOGY 2010™

AAI Trainee Abstract Awards

Awarded to AAI trainee members (students and postdoctoral fellows) whose first-author abstracts are selected for oral presentation in AAI Block Symposia.

Sponsored in part by BD Biosciences, Genentech, Imgenex

AAI Minority Scientist Travel Awards

Support the participation of under-represented minority scientists at the AAI Annual Meeting; funded by a grant from the National Institute of General Medical Sciences, NIH [FASEB MARC Program: T36-GM08059-27].

AAI Junior Faculty Travel Grants

Assist young investigators with travel to the AAI Annual Meeting. Selection based on career promise and submission of a first-author abstract to the Annual Meeting.

Sponsored in part by BD Biosciences, BioLegend

AAI CLINICAL IMMUNOLOGY COMMITTEE

The Secret Life of B's: The Genesis, Regulation, and Potential of Bregs

FRIDAY, MAY 7 ■ 2:00 PM–4:00 PM ■ BCC ROOM 310

Chair: Kevan Herold, Yale University

Co-chair: Cathryn Nagler, University of Chicago

- **Thomas F. Tedder**, Duke University Medical Center, *Mouse and human regulatory B10 cell development and function*
- **Bonnie N. Dittel**, BloodCenter of Wisconsin, *Do B cells regulate the regulators?*
- **Atsushi Mizoguchi**, Massachusetts General Hospital, *Inducible Bregs modulate intestinal inflammation*
- **Eric Meffre**, Yale University School of Medicine, *Human B cell tolerance checkpoints in health and disease*

Although regulatory T cells have received much of the “press” in immune regulation, recent data have demonstrated that regulatory B cells also exist and are important for proper control of immunity. Come to this session to learn the latest progress in understanding the regulation of B cells, how they in turn regulate immune responses, and their potential clinical roles in autoimmune and inflammatory diseases.

Unraveling Chronic Inflammatory Lung Disease: Mucosal Immunity Gone Bad?

MONDAY, MAY 10 ■ 12:30 PM–2:30 PM ■ BCC ROOM 310

Chair: Jay K. Kolls, Louisiana State University Health Sciences Center

Co-chair: Kathleen E. Sullivan, Children's Hospital Philadelphia

- **Jack A. Elias**, Yale University School of Medicine, *Chitinases and chitinase-like proteins in lung injury and inflammation*
- **Andrew P. Fontenot**, University of Colorado Denver, *Th17 cells and hypersensitivity pneumonitis*
- **Anuradha Ray**, University of Pittsburgh, *The hygiene hypothesis revisited: innate regulation of effector arm in allergic asthma*
- **Robert Palermo**, University of Washington, Seattle, *Functional genomics investigations of H1N1 influenza pathogenesis*

The lung is a site constantly at risk for the development of inflammatory diseases ranging from allergic asthma to infectious disease such as H1N1-mediated “swine flu.” This session will address the wide range of potential clinical disturbances of lung immune homeostasis and ways order can be restored to this vital organ.

AAI COMMITTEE ON PUBLIC AFFAIRS

Big Funding + Big Opportunities = Big Science? NIH Priorities in the Post-Stimulus Era

SATURDAY, MAY 8 ■ 12:30 PM–2:30 PM ■ BCC ROOM 316-317

Chair: John R. Schreiber, Tufts University School of Medicine
Chair, AAI Committee on Public Affairs

- **Anthony S. Fauci**, Director, National Institute of Allergy and Infectious Diseases
- **Richard J. Hodes**, Director, National Institute on Aging
- **Stephen I. Katz**, Director, National Institute of Arthritis and Musculoskeletal and Skin Diseases
- **John E. Niederhuber**, Director, National Cancer Institute



Dr. Fauci



Dr. Hodes



Dr. Katz



Dr. Niederhuber

With \$10 billion in stimulus funding, a new Director, and the possibility of the largest budget in its history, NIH has an unprecedented opportunity to shape the future of the biomedical research enterprise. How this plays out will affect every researcher, every lab, and every student who aspires to a research career. Will it be Big Science? Fewer RO1s? More clinical, translational, or comparative effectiveness research? This session is your chance to hear directly from four key NIH Institute Directors, all of whom are directly involved in the planning and implementation of NIH and Institute priorities. A question and answer period will follow the presentations.

Protecting Animal Research in the Face of Legislation, Extremists, and Public Ambivalence

SUNDAY, MAY 9 ■ 12:30 PM–2:00 PM ■ BCC ROOM 314

Chair: John R. Schreiber, Tufts University School of Medicine
Chair, AAI Committee on Public Affairs

- **Frankie Trull**, President, National Association for Biomedical Research and Foundation for Biomedical Research
- **Drew Ptasienki**, Unit Chief, Domestic Terrorism Operations Unit, Federal Bureau of Investigation

Scientists who use animals in their research are faced with myriad challenges, ranging from the mundane (administrative burden) to the menacing (animal rights extremists). This session will explore legislative and legal challenges to the use of animals in research and provide invaluable advice about how researchers can protect themselves and their labs from animal rights extremists.

AAI EDUCATION COMMITTEE

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

SATURDAY, MAY 8 ■ 9:00 AM–12:00 NOON ■ BCC ROOM 324

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

The AAI High School Teachers Summer Research Program brings the excitement of immunology directly to high school students through curricula developed by participating science 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, the 2009-2010 participating high school teachers will present their experiences and projects.

The Balancing Act: Teaching and Research at Undergraduate Institutions

SUNDAY, MAY 9 ■ 11:30 AM–1:30 PM ■ BCC ROOM 324

Chair: **Sharon A. Stranford**, Mount Holyoke College
Co-chair: **Jennifer A. Punt**, Haverford College

A panel of outstanding immunologists who teach and conduct research at premier undergraduate colleges will share their experience and advice in doing both.

- **Sharon A. Stranford**, Mount Holyoke College, *Money and time: funding your research and balancing it with your job*
- **Richard A. Goldsby**, Amherst College, *Preparing for and finding a job*
- **Jennifer A. Punt**, Haverford College, *Innovative models for laboratory teaching*
- **Devavani Chatterjea**, Macalester College, *Engaging with the material: teaching reading, writing, and questioning skills*

AAI EDUCATION COMMITTEE AND COMMITTEE ON THE STATUS OF WOMEN

Careers in Science: Lecture and Roundtable

SUNDAY, MAY 9 ■ 1:30 PM–3:30 PM ■ BCC BALLROOM III



Dr. Nancy

Chair: **Bonnie N. Dittel**, BloodCenter of Wisconsin
Chair, AAI CSOW

Keynote Speaker: **Carol A. Nancy**, Co-Founder
and Chief Executive Officer, Sequella, Inc.

In today's economic environment, many scientists are wondering about employment prospects inside and out of the research lab. Perhaps you are even wondering what transferable skills you've developed as a scientist and what careers they may enable you to pursue? Attend this session to learn about career options and successful paths to each. The keynote speaker is scientist and entrepreneur Carol Nancy.

She will share lessons learned along the path of her research career in government and industry. Following her presentation, roundtable discussions led by experienced scientists will focus on specific career issues and options important to men and women in science today.

Round Table Discussion Topics:

- Academic Research Careers
- Building Effective Mentoring Programs and Networks
- Career and Family: time management/family leave/professional couples
- Careers in Biotech and Industry
- Careers at Governmental Agencies (CDC/FDA/NIH)
- Career Decisions after Tenure
- Changing Careers: moving from academia to industry or vice versa
- Graduate Student to Postdoc: finding a postdoc, interviewing
- New PI: attracting students and postdocs, preparing for tenure
- Non-Research Careers: patent law, science policy, science writing, science administration, or other unique careers that utilize your training
- Postdoc to PI: finding a position, interviewing, negotiating, lab start-up
- Time Management
- Translational Research: how to balance clinical work and research
- Undergraduate Institutions: teaching, doing research

Registration required: \$15 includes dessert buffet and coffee.

AAI MINORITY AFFAIRS COMMITTEE

Careers and Networking Roundtable

SATURDAY, MAY 8 ■ 11:00 AM–12:30 PM ■ BCC BALLROOM III

Chair: **Prosper N. Boyaka**, The Ohio State University
Chair, AAI Minority Affairs Committee

Don't miss this opportunity to meet one-on-one with accomplished, senior minority immunologists to hear how they have handled the career challenges you now face. Learn what they believe will work for you today. Topics to be discussed:

- 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
- Alternative Careers: Science journalism, patent law

Registration, \$15 fee required; box lunch included.

AAI COMMITTEE-SPONSORED SESSIONS

Minority Affairs Committee Guest Lecture

Generously supported through a grant from the
National Institute of General Medical Sciences, NIH
[FASEB MARC Program: T36-GM08059-27]

MONDAY, MAY 10 ■ 11:30 AM–12:30 PM ■ BCC ROOM 309



Dr. Zlotnik

Chair: **Prosper N. Boyaka**, The Ohio State University; Chair, AAI Minority Affairs Committee

Albert Zlotnik, University of California, Irvine
An evolutionary view of chemokines

AAI PUBLICATIONS COMMITTEE

Successfully Navigating Manuscript Preparation and Peer Review

Generously supported by Immunology Science Editors

SUNDAY, MAY 9 ■ 12:45 PM–2:45 PM ■ BCC ROOM 315

Chair: **Robert D. Schreiber**, Washington University School of Medicine; Chair, AAI Publications Committee

Your data may be good and your findings may be significant, but your manuscript will navigate peer review only as well as you present your findings. Learn from presentations made by expert scientists and editors about good practices in data presentation and manuscript preparation. Learn, too, how to understand what reviewers are (and aren't) saying and how to respond to their comments. Ample time will be allowed for questions and answers at the end of the session.

- **Paul E. Love**, NICHD, NIH, *A picture paints a thousand words—preparing manuscript figures*
- **Cathryn Nagler**, University of Chicago, *Telling the rest of the story—preparing manuscript text*
- **Michael S. Krangel**, Duke University, *Transcending that fight or flight reflex—understanding and responding to reviewer comments*
- **Jeremy M. Boss**, Emory University School of Medicine, *What's wrong here?—ethical considerations in manuscript preparation*

AAI VETERINARY IMMUNOLOGY COMMITTEE

jointly sponsored with the

AMERICAN ASSOCIATION OF VETERINARY IMMUNOLOGISTS (AAVI)

Immunology of Emerging Infectious Diseases

MONDAY, MAY 10 ■ 2:45 PM–4:45 PM ■ BCC ROOM 327-328

Chair: **Simon M. Barratt-Boyes**, University of Pittsburgh

Co-chair: **Douglas D. Bannerman**, Department of Veterans Affairs

- **Michael S. Diamond**, Washington University, *Novel mechanisms of innate immune control and evasion of West Nile Virus*
- **Linda J. Saif**, Ohio State University, *Respiratory viral co-infections and corticosteroids alter immune responses and enhance pneumonia in a porcine respiratory coronavirus model in pigs: lessons for SARS*
- **Christopher M. Walker**, The Research Institute at Nationwide Children's Hospital, *Cellular immunity to the hepatitis C virus: can a failed response be rescued?*
- **Adolfo García-Sastre**, Mount Sinai School of Medicine, *Evasion of immunity by new H1N1 pandemic influenza viruses*

Research in non-human, non-mouse species can provide important insights into human immunity. This is especially important when a pathogen evolves the ability to move between species and establishes disease in humans. In this session, veterinary immunologists will present the latest research into such zoonotic diseases as West Nile Virus and swine flu.

NATIONAL CANCER INSTITUTE (NCI)

Tumors and Inflammatory Cells: Coconspirators or Adversaries

MONDAY, MAY 10 ■ 2:45 PM–4:45 PM ■ BCC ROOM 308

Chair: **James J. Lee**, Mayo Clinic Arizona

Co-chair: **Susan A. McCarthy**, NCI, NIH

- **Mary M. Zutter**, Vanderbilt University School of Medicine
 $\alpha_2\beta_1$ integrins in squamous cell carcinoma: inflammation and lymphangiogenesis
- **Michael T. Lotze**, University of Pittsburgh, *Metabolism, inflammation, and cancer: role(s) of damage-associated molecular pattern molecules*
- **Hans Schreiber**, University of Chicago, *Inflammation and stroma as tumor promoters in cancer induction*
- **Klaus Ley**, La Jolla Institute for Allergy and Immunology
Neutrophil recruitment to sites of inflammation
- **James J. Lee**, Mayo Clinic Arizona, *The role(s) of eosinophils in cancer: pro-tumorigenic, anti-tumorigenic, or simply innocent bystanders?*

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES (NIAID)

Immunology of Malaria in the 21st Century: Questions and Solutions

MONDAY, MAY 10 ■ 12:30 PM–2:30 PM ■ BCC ROOM 327-328

Chairs: **Alison Deckhut Augustine**, DAIT, NIAID, NIH

Lee F. Hall, DMID, NIAID, NIH

- **James W. Kazura**, Case Western Reserve University
Exposure and age-related heterogeneity of naturally acquired immunity to human Plasmodium falciparum infection
- **Myriam Arévalo-Herrera**, Instituto de Inmunología de la Universidad del Valle, *Plasmodium vivax malaria: studies on transmission-blocking immunity in search for vaccine for human use*
- **Eleanor M. Riley**, London School of Hygiene and Tropical Medicine, *Long-lived antibody and B cell memory responses to the human malaria parasites, Plasmodium falciparum and Plasmodium vivax*
- **Douglas T. Golenbock**, University of Massachusetts Medical School, *Recognition of DNA by the innate immune system causes inflammation during malaria*

Harnessing B Cells to Combat HIV

MONDAY, MAY 10 ■ 2:45 PM–4:45 PM ■ BCC ROOM 309

Chairs: **Stacy Ferguson**, DAIT, NIAID, NIH

Alan Embry, DAIDS, NIAID, NIH

Moderator: **Georgia D. Tomaras**, Duke University Medical Center

- **James E. Crowe, Jr.**, Vanderbilt University Medical Center
Molecular diversity in HIV-specific human B cell repertoires
- **Andrea Cerutti**, Mount Sinai School of Medicine
HIV infection and immunoglobulin class switching
- **Robert T. Woodland**, University of Massachusetts Medical Center, *Humanized mice as a research tool for HIV vaccine development*
- **Garnett Kelsoe**, Duke University Medical Center, *Increasing immunogenicity of HIV MPER antigens by breaking tolerance*

NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES (NIAMS)

Innate Immunity: Biology and Implications in Disease

SATURDAY, MAY 8 ■ 8:00 AM–10:00 AM ■ BCC ROOM 307

Chair: **Robert H. Carter**, NIAMS, NIH

Co-chair: **Marie Mancini**, NIAMS, NIH

- **Ann Marshak-Rothstein**, University of Massachusetts Medical Center, *Tolling down the road to SLE*
- **Donald Y. M. Leung**, National Jewish Health, *Role of barrier in the skin's innate immune response*
- **Thirumala-Devi Kanneganti**, St Jude Children's Research Hospital, *NLR inflammasomes in innate immunity, inflammation, and host defense*
- **Daniel L. Kastner**, NIAMS, NIH, *Horror autoinflammaticus: the expanding spectrum of systemic autoinflammatory disease*

NATIONAL INSTITUTE ON AGING (NIA)

T Cell Dysfunction with Aging

MONDAY, MAY 10 ■ 10:15 AM–12:15 PM ■ BCC ROOM 307

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

Co-chair: **Nan-ping Weng**, NIA, NIH

- **Susan L. Swain**, Trudeau Institute, *With age, increased naïve CD4 T cell lifespan, caused by reduced expression of Bim, is necessary for development of functional defects*
- **Nan-ping Weng**, NIA, NIH, *Probing the in vivo changes of human immune system with age: a 5-year study of the old participants from the Baltimore Longitudinal Study on Aging (BLSA)*
- **Jörg J. Goronzy**, Stanford University, *T cell signaling in aging—in favor of phosphatase activity*
- **Claire A. Chougnet**, Cincinnati Children's Hospital
Accumulation of regulatory T cells and age-related immunosuppression

GUEST SOCIETY SYMPOSIA

American Association of Veterinary Immunologists (AAVI) and AAI Veterinary Immunology Committee Joint Symposium

Immunology of Emerging Infectious Diseases

MONDAY, MAY 10 ■ 2:45 PM–4:45 PM ■ BCC ROOM 327-328

Chair: **Simon M. Barratt-Boyes**, University of Pittsburgh

Co-chair: **Douglas D. Bannerman**, Department of Veterans Affairs

- **Michael S. Diamond**, Washington University, *Novel mechanisms of innate immune control and evasion of West Nile Virus*
- **Linda J. Saif**, Ohio State University, *Respiratory viral co-infections and corticosteroids alter immune responses and enhance pneumonia in a porcine respiratory coronavirus model in pigs: lessons for SARS*
- **Christopher M. Walker**, The Research Institute at Nationwide Children's Hospital, *Cellular immunity to the hepatitis C virus: can a failed response be rescued?*
- **Adolfo García-Sastre**, Mount Sinai School of Medicine, *Evasion of immunity by new H1N1 pandemic influenza viruses*

American Society for Blood and Marrow Transplantation (ASBMT) Symposium

Factors Affecting the Nature of the Alloresponse in Graft-versus-Host Disease

SUNDAY, MAY 9 ■ 10:15 AM–12:15 PM ■ BCC ROOM 327-328

Chair: **William J. Murphy**, University of California, Davis

Co-chair: **Pavan R. Reddy**, University of Michigan

- **Pavan R. Reddy**, University of Michigan, *Induction of GVHD*
- **Warren D. Shlomchik**, Yale University School of Medicine, *Antigen presentation in GVHD*
- **William J. Murphy**, University of California, Davis, *Diverse role of cytokines in GVHD*
- **Thea M. Friedman**, Hackensack University Medical Center, *Vbeta spectratype analysis-guided selection of GVHD-reactive T cells in allogeneic BMT*

American Society of Hematology (ASH) Symposium

Stem Cell Biology, the Niche and Hematopoietic Cell Engraftment

MONDAY, MAY 10 ■ 8:00 AM–10:00 AM ■ BCC ROOM 316–317

Chair: **Hal E. Broxmeyer**, Indiana University School of Medicine

Co-chair: **David T. Scadden**, Harvard Stem Cell Institute

- **Irving L. Weissman**, Stanford University, *Stem cell biology and characterization*

- **Hiromitsu Nakauchi**, University of Tokyo, *Hematopoietic stem cell signature*
- **David T. Scadden**, Harvard Stem Cell Institute, *Hematopoietic stem cell niche*
- **George Q. Daley**, Brigham and Women's Hospital, Harvard Stem Cell Institute, *iPS cells and reprogramming*
- **Hal E. Broxmeyer**, Indiana University School of Medicine, *Enhancing engraftment/recovery of hematopoietic stem cells*

American Society of Transplantation (AST) Symposium

Impact of T and B Lymphocyte Memory in Transplantation

SATURDAY, MAY 8 ■ 12:30 PM–2:30 PM ■ BCC ROOM 308

Chair: **Ronald G. Gill**, Alberta Diabetes Institute

Co-chair: **Robert L. Fairchild**, Cleveland Clinic Foundation

- **Marc K. Jenkins**, University of Minnesota, *Monitoring immune responses in vivo*
- **Anita S.F. Chong**, University of Chicago, *Memory B cells as barriers to transplant outcomes*
- **Mandy L. Ford**, Emory University, *Memory T cells as barriers to transplant outcomes*
- **Xian C. Li**, Beth Israel Deaconess Medical Center/Harvard Medical School, *Targeting memory T cells in transplantation*

Association of Medical Laboratory Immunologists (AMLI) Symposium

Progress toward Induction of Antigen-Specific Tolerance in Autoimmune Disease

SUNDAY, MAY 9 ■ 2:45 PM–4:45 PM ■ BCC ROOM 307

Chair: **John Schmitz**, University of North Carolina, Chapel Hill

Co-chair: **Barbara Detrick**, Johns Hopkins University

- **Stephen D. Miller**, Northwestern University, *An antigen-specific tolerance approach for the therapy of autoimmune disease and tissue transplantation*
- **Roland M. Tisch**, University of North Carolina, Chapel Hill, *The use of soluble MHC-peptide dimers to suppress beta cell autoimmunity*
- **David S. Bradley**, University of North Dakota, *An alternative therapy for autoimmune diseases: the potential of an immature dendritic cell vaccine for spontaneous polyarthritis*
- **Robert B. Nussenblatt**, NEI, NIH, *Oral tolerance and ocular inflammatory disease*

Australasian Society for Immunology (ASI) Symposium Dendritic Cell Specializations from Bench to Bedside

SUNDAY, MAY 9 ■ 12:30 PM–2:30 PM ■ BCC ROOM 307

Chair: **Derek N. J. Hart**, Mater Medical Research Institute

- **William R. Heath**, University of Melbourne, *DC response to pathogens*
- **Kristen J. Radford**, Mater Medical Research Institute *Human blood DC subsets and function*
- **Bruce W. S. Robinson**, Sir Charles Gairdner Hospital *DC subsets and cross presentation in cancer*
- **Jose A. Villadangos**, Walter and Eliza Hall Institute of Medical Research, *Antigen presentation specializations in the DC network*
- **Li Wu**, Walter and Eliza Hall Institute of Medical Research *Transcription factor PU.1 controls DC development through the dose-dependent regulation of Flt3*

British Society for Immunology (BSI) Symposium Immunosurveillance

SUNDAY, MAY 9 ■ 8:00 AM–10:00 AM ■ BCC ROOM 307

Chair: **Tracy Hussell**, Imperial College London

Co-chair: **Arne N. Akbar**, University College London

- **Tracy Hussell**, Imperial College London, *Regulation of immune surveillance in the lung*
- **Eyal Raz**, University of California, San Diego, *Th17: canonical and non-canonical differentiation pathways*
- **Arne N. Akbar**, University College London, *Decreased cutaneous immunosurveillance after antigenic challenge during aging*
- **Andrew L. Mellor**, Medical College of Georgia Immunotherapy Center, *Enhancing immunosurveillance in chronic inflammatory diseases by manipulating IDO*

Canadian Society for Immunology (CSI) Symposium Genetic Susceptibility to Immunodeficiencies and Autoimmunity

MONDAY, MAY 10 ■ 10:15 AM–12:15 PM ■ BCC ROOM 310

Chair: **André Veillette**, Clinical Research Institute of Montreal

- **André Veillette**, Clinical Research Institute of Montreal *Immune regulation by SAP, a molecule mutated in X-linked lymphoproliferative disease*
- **Jennifer L. Cannons**, NHGRI, NIH, *Lymphocyte adhesion: lessons from X-linked lymphoproliferative disease*
- **Philippe Poussier**, Sunnybrook Health Sciences Centre Research Institute, University of Toronto, *Immunogenetics of type 1 diabetes in the BB rat*
- **Jayne S. Danska**, Hospital for Sick Children, University of Toronto, *Unraveling complex disease: genetic and immunological analysis of type 1 diabetes*
- **Pere Santamaria**, Julia McFarlane Diabetes Research Centre, University of Calgary, *IL-2 and regulatory T cells in autoimmunity*

Chinese Society of Immunology (ChSI) Symposium Linking Innate and Adaptive Immunity

SUNDAY, MAY 9 ■ 10:15 AM–12:15 PM ■ BCC ROOM 325-326

Chair: **Xuetao Cao**, Second Military Medical University, Shanghai

Co-chair: **Olivera (Olja) J. Finn**, University of Pittsburgh School of Medicine

- **Limin Zheng**, Sun Yat-Sen University, *Activated monocytes in peritumor stroma promote disease progression by fostering immune privilege and Th17 cell expansion*
- **Zhihai Qin**, Center for Infection and Immunity, Chinese Academy of Sciences, Beijing, *IFN- γ controls Th17-mediated immunopathology during mouse hepatitis virus infection*
- **Yu Zhang**, Peking University Health Science Center, *Thymic microenvironment and T lymphopoiesis*
- **Changyou Wu**, Sun Yat-Sen University, *Human memory IL-22-producing CD4⁺ T cells specific for Candida albicans*
- **Xuetao Cao**, Second Military Medical University, Shanghai *Regulation of memory T cell generation by innate cells*

International Society of Developmental and Comparative Immunology (ISDCI) Symposium

Novel Strategies of Non-Self Recognition by Invertebrate and Non-Mammalian Vertebrate Model Species

MONDAY, MAY 10 ■ 12:30 PM–2:30 PM ■ BCC ROOM 325-326

Chair: **J. Oriol Sunyer**, University of Pennsylvania

- **Jacques Robert**, University of Rochester Medical Center *Comparative and evolutionary study of tumor immunity in the non-mammalian xenopus model*
- **Eva Bengtén**, University of Mississippi Medical Center *Insights into teleost IgD function*
- **J. Oriol Sunyer**, University of Pennsylvania, *Convergent evolution of mucosal immunoglobulins of fish and mammals*
- **Brantley R. Herrin**, Emory University, *Antigen recognition by lamprey variable lymphocyte receptors*
- **L. Courtney Smith**, George Washington University, *Highly variable immune-response proteins (185/333) from the sea urchin*

International Society for Interferon and Cytokine Research (ISICR) Symposium

Immunobiology of IL-10 Family Members

MONDAY, MAY 10 ■ 10:15 AM–12:15 PM ■ BCC ROOM 308

Chair: **Grant Gallagher**, HUMIGEN, the Institute for Genetic Immunology

Co-chair: **Reen Wu**, University of California, Davis

- **Reen Wu**, University of California, Davis, *Regulation of airway mucosal immunity by IL-19*
- **Kerstin Wolk**, University Hospital Charite, *IL-20 and IL-22: biology and role in disease*
- **Elizabeth A. Grimm**, University of Texas, MD Anderson Cancer Center, *IL-24, an IL-10 family cytokine with immunostimulatory and tumor suppressor functions*
- **Grant Gallagher**, HUMIGEN, the Institute for Genetic Immunology, *Regulation of interferon lambda-1 (IL-29) in airway epithelium*

International Society of Neuroimmunology (ISNI) Symposium

RNA Regulation in Neuroimmunology

SUNDAY, MAY 9 ■ 12:30 PM–2:30 PM ■ BCC ROOM 308

Chair: **Caroline C. Whitacre**, Ohio State University

- **Alexander Y. Rudensky**, Memorial Sloan-Kettering Cancer Center, *MicroRNAs in regulatory T cell homeostasis and function*
- **Brigit Alette de Jong**, Stanford University, *MicroRNA-based network and pathway analysis in multiple sclerosis lesions and experimental autoimmune encephalomyelitis*
- **Kristen Smith**, Ohio State University, *MicroRNAs: modulators of T cell effector function in EAE and MS*
- **Amy E. Lovett-Racke**, Ohio State University, *Identifying microRNA differentially expressed in T cells of MS patients*

Japanese Society for Immunology (JSI) Symposium

Positive and Negative Regulation in the Immune Response

SATURDAY, MAY 8 ■ 10:15 AM–12:15 PM ■ BCC ROOM 308

Chair: **Alan Sher**, NIAID, NIH

Co-chair: **Shizuo Akira**, Osaka University

- **Shizuo Akira**, Osaka University, *Negative regulators in innate immune responses*
- **Toshio Hirano**, Osaka University, *Regulation of immune response by cytokine and zinc signaling*
- **Hajime Karasuyama**, Tokyo Medical and Dental University, *Novel roles for basophils in immune and allergic responses*
- **Shimon Sakaguchi**, Kyoto University, *T cell signaling, regulatory T cells, and self-tolerance*

Singaporean Society for Immunology (SSI) Symposium

Immune Recognition and Cellular Communication

SATURDAY, MAY 8 ■ 10:15 AM–12:15 PM ■ BCC ROOM 325-326

Chair: **David Michael Kemeny**, National University of Singapore

Co-chair: **S. K. Alex Law**, Nanyang Technological University

- **S. K. Alex Law**, Nanyang Technological University, *Lessons from leukocyte adhesion deficiency (LAD)-1*
- **Stephan Gasser**, National University of Singapore, *DNA damage response: a novel innate immune recognition system?*
- **Paul A. MacAry**, National University of Singapore, *The generation, characterization, and application of a TCR-like monoclonal antibody*
- **Christiane Ruedl**, Nanyang Technological University, *GM-CSF is the major CD8⁺ T cell-derived licensing factor for dendritic cell maturation and survival*

Sociedad Mexicana de Inmunología (SMI) Symposium

From Mice to Men: Immunology Research in Mexico

TUESDAY, MAY 11 ■ 10:15 AM–12:15 PM ■ BCC ROOM 314

Chairs: **Leopoldo Santos-Argumedo**, CINVESTAV-IPN, Mexico City; **Fernando Esquivel-Guadarrama**, Universidad Autónoma del Estado de Morelos, Cuernavaca

- **Leopoldo Santos-Argumedo**, CINVESTAV-IPN, *Primary human immunodeficiencies*
- **Fernando Esquivel-Guadarrama**, Universidad Autónoma del Estado de Morelos, *Analysis of the response of intestinal dendritic cells in rotavirus infection in a mouse model*
- **Iris Estrada**, Escuela Nacional de Ciencias Biológicas-IPN, *Neutrophil extracellular traps induced by Mycobacteria tuberculosis*
- **Rosana Pelayo**, Oncology Hospital, National Medical Center, IMSS, *Early precursor cells in childhood acute lymphoblastic leukemia*

Society for Leukocyte Biology (SLB) Symposium

Immunobiology of Innate Immune Signaling

SATURDAY, MAY 8 ■ 2:45 PM–4:45 PM ■ BCC ROOM 309

Chair: **Christopher L. Karp**, Cincinnati Children's Hospital Medical Center

Co-chair: **Sanna Goyert**, City University of New York

- **Bruce Beutler**, Scripps Research Institute, *Genetic approaches to innate immunity*
- **Julie Magarian Blander**, Mount Sinai School of Medicine, *PRRs and antigen presentation*
- **Peter J. Murray**, St. Jude Children's Research Hospital, *Signaling to arginine metabolism in intracellular pathogenesis*
- **Katherine A. Fitzgerald**, University of Massachusetts Medical School, *Immunobiology of DNA sensing pathways*

Society for Natural Immunity (SNI) Symposium

The Many Sides of the Natural Killer Cell Response

SATURDAY, MAY 8 ■ 2:45 PM–4:45 PM ■ BCC ROOM 307

Chairs: **John E. Coligan**, NIAID, NIH; **David H. Margulies**, NIAID, NIH

- **David H. Raulet**, University of California, Berkeley, *Activating and inhibitory receptors in the tuning of NK cell responsiveness*
- **Daniel M. Davis**, Imperial College London, *Nanotubes and synapses in NK cell recognition*
- **David H. Margulies**, NIAID, NIH, *Viral immunoevasion of the NK cell response: a structural perspective*
- **Katharine Hsu**, Memorial Sloan-Kettering Cancer Center, *The role of KIR genes and NK cell recognition in hematopoietic stem cell transplantation*



CAREER DEVELOPMENT SESSIONS

Crafting a Successful Grant

Generously supported in part by BD Biosciences

FRIDAY, MAY 7 ■ 12:00 PM–4:00 PM ■ BCC ROOM 314

Instructor: Donna Vogel, Director, Professional Development Office, Johns Hopkins Medical Institutions

Funded investigators are made—not born. Knowing how to construct an outstanding application and good writing skills are necessary to compete successfully for grants. There is, however, more to a winning application than good writing; strategy is critical! Optimize both your content and strategy by attending this half-day course taught by Donna Vogel, Director, Professional Development Office at Johns Hopkins. The course will focus on how to write and structure a grant for clarity and reviewer comprehension. The NIH grant review process—including recent changes—will also be discussed.

The instructor will cover:

- Title, Specific Aims, and Abstract
- Research Strategy (significance... innovation... approach... preliminary studies)
- Peer Review and Re-submission

All who are interested in applying for research funding—investigators, postdoctoral fellows, and graduate students—will benefit from this session. The \$110 registration will include a boxed lunch and refreshment breaks.

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

SATURDAY, MAY 8 ■ 9:00 AM–12:00 NOON ■ BCC ROOM 324

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

Sponsored by the AAI Education Committee

Session Details: See AAI Committee-sponsored sessions.

Careers and Networking Roundtable

SATURDAY, MAY 8 ■ 11:00 AM–12:30 PM ■ BCC BALLROOM III

Chair: Prosper N. Boyaka, The Ohio State University; Chair, AAI Minority Affairs Committee

Sponsored by the AAI Minority Affairs Committee

Session Details: See AAI Committee-sponsored sessions.

Interviewing for a Job

SUNDAY, MAY 9 ■ 9:00 AM–10:00 AM ■ BCC ROOM 324

Chair: Kira Gantt, The American Association of Immunologists

Speaker: Lori Conlan, Director of NIH Office of Postdoctoral Services

This session will focus on tips and techniques for successfully navigating 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 intended for all student and postdoctoral attendees.

Secrets for a Successful Postdoctoral Fellowship

SUNDAY, MAY 9 ■ 11:30 AM–12:30 PM ■ BCC ROOM 315

Chair: Kira Gantt, The American Association of Immunologists

Speaker: Lori Conlan, Director of NIH Office of Postdoctoral Services

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.

The Balancing Act: Teaching and Research at Undergraduate Institutions

SUNDAY, MAY 9 ■ 11:30 AM–1:30 PM ■ BCC ROOM 324

Chair: Sharon A. Stranford, Mount Holyoke College

Co-chair: Jennifer A. Punt, Haverford College

Sponsored by the AAI Education Committee

Session Details: See AAI Committee-sponsored sessions.

Successfully Navigating Manuscript Preparation and Peer Review

Generously supported by Immunology Science Editors

SUNDAY, MAY 9 ■ 12:45 PM–2:45 PM ■ BCC ROOM 315

Chair: Robert D. Schreiber, Washington University School of Medicine; Chair, AAI Publications Committee

Sponsored by the AAI Publications Committee

Session Details: See AAI Committee-sponsored sessions.

Careers in Science: Lecture and Roundtable

SUNDAY, MAY 9 ■ 1:30 PM–3:30 PM ■ BCC BALLROOM III

Chair: Bonnie N. Dittel, BloodCenter of Wisconsin; Chair, AAI CSOW

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

Session Details: See AAI Committee-sponsored sessions.

How to Convert Your CV into a Résumé

MONDAY MAY 10 ■ 11:30 AM–12:30 PM ■ BCC ROOM 329

Chair: Kira Gantt, The American Association of Immunologists

Instructor: Derek Haseltine, Assistant Director, Professional Development Office, Johns Hopkins Medical Institutions

For anyone seeking a job outside of academe, presenting yourself well on paper is critical. A well prepared résumé can make all the difference in whether you secure that interview. The focus of this session will be on the important elements of a résumé, the differences between a résumé and the standard academic curriculum vitae, and the information needed for a good impression. In this special career development session, attendees will be instructed in how to take their CVs and transform them into professional résumés. Small breakout sessions for individual consulting will follow from 12:30 PM– 2:30 PM. Bring your CV!

Submitted abstracts are programmed into oral or poster sessions; oral sessions are called Block Symposia. Each abstract selected for a Block Symposium will also be presented in a Poster Session. The following Block Symposia will be presented at IMMUNOLOGY 2010™.

FRIDAY, MAY 7

2:00 PM – 4:00 PM

Cytokine Regulation in Immune Cells

ROOM 318-320

Effector Cells of Allergic Disease

ROOM 308

Host Defense: Innate Immune Mechanisms and Protective Immunity

ROOM 307

T Cell Development and Thymic Architecture

ROOM 321-323

SATURDAY, MAY 8

8:00 AM – 10:00 AM

Cytokines in Inflammatory Responses

ROOM 309

Molecular Mechanisms of Antigen Processing and Presentation

ROOM 318-320

Mucosal Immunity in Host Defense and Autoimmunity

ROOM 316-317

Tumor Immune Response

ROOM 308

10:15 AM – 12:15 PM

CD8 T Cell Memory and Plasma Cell Responses

ROOM 307

Epigenetic Regulation in B and T Lymphocytes

ROOM 318-320

Immune Regulation in Allergy

ROOM 321-323

Tumor Immune Escape

ROOM 309

1:45 PM – 3:45 PM

Autoimmunity: Effector Cells and Mechanisms of Tissue Damage

ROOM 321-323

Immunity to Influenza Virus Infections

ROOM 310

Regulation of B Cells and Antibody Responses

ROOM 318-320

Tfh, Th9, and Th2 Differentiation

ROOM 327-328

SUNDAY, MAY 9

8:00 AM – 10:00 AM

Chemokines and Their Receptors in Health and Disease

ROOM 318-320

Innate and Adaptive Immunity in Aquatic Animal Models

ROOM 325-326

iTreg, Th17, and CD4 CTL Differentiation

ROOM 316-317

New Therapeutic Targets in Autoimmunity

ROOM 310

Regulation of Adaptive Immunity during Microbial Infection

ROOM 309

10:15 AM – 12:15 PM

Cancer Immunotherapy

ROOM 316-317

Host Defense: Innate Immune Receptors and Signal Transduction

ROOM 309

Immunomodulatory Cytokines

ROOM 321-323

Leukocyte Activation, Adhesion, and Recruitment

ROOM 318-320

Regulation of Autoimmune Responses I

ROOM 310

1:45 PM – 3:45 PM

Costimulation of T Cell Responses

ROOM 310

Immunity, Immunization, and Inflammasomes in Comparative Animal Species

ROOM 325-326

Immunological Impacts of Antigen Processing and Presentation

ROOM 318-320

Transplantation Immunology

ROOM 321-323

MONDAY, MAY 10

8:00 AM – 10:00 AM

Inflammatory Cytokines

ROOM 310

Myeloid, NK, and DC Development

ROOM 318-320

Novel Therapeutic Approaches in Models of Allergy

ROOM 321-323

T Cell Signaling

ROOM 309

10:15 AM – 12:15 PM

Control and Development of Treg

ROOM 316-317

Immune Responses to Viral Infection

ROOM 321-323

Lymphocyte / APC Migration Mechanisms

ROOM 318-320

Transcriptional and Post-transcriptional Regulation of Cytokine and Cytokine Receptor Expression

ROOM 327-328

1:45 PM – 3:45 PM

CD4 T Cell Memory and TCR Repertoire

ROOM 321-323

Host Defense: Innate Immune Cells and Protective Immunity

ROOM 316-317

Regulation of Dendritic Cells and Myeloid Suppressor Cells

ROOM 307

TUESDAY, MAY 11

8:00 AM – 10:00 AM

Hematopoiesis and B Cell Development in Mouse and Man

ROOM 321-323

Molecular Regulation of Inflammatory Diseases

ROOM 310

Technological Innovations in Immunology

ROOM 314

Regulation of Autoimmune Responses II

ROOM 307

10:15 AM – 12:15 PM

Initiation of Autoimmunity: Environmental Triggers

ROOM 310

Mechanisms of Disease in Experimental Models of Allergy

ROOM 321-323

Cellular Mechanisms of Immunity

ROOM 308

Immune System Regulation

ROOM 307

Innate and Adaptive Immunity to Infection

ROOM 309



**The American Association of Immunologists
proudly announces the 2010 recipients of AAI Awards for outstanding research
and career achievements. The 2010 AAI Award winners will be recognized
at the 97th AAI Annual Meeting, IMMUNOLOGY 2010™**



AAI LIFETIME ACHIEVEMENT AWARD

In recognition of distinguished scientific accomplishment and extraordinary service to AAI

Susan L. Swain, Ph.D.

The Trudeau Institute

Dr. Swain's distinguished career exemplifies the dedication to science and service that the AAI Lifetime Achievement Award honors. She has dedicated her scientific career to elucidating the mechanisms of immune recognition, viral immunity, and aging while also providing tireless service to her colleagues and community. Dr. Swain served as President of The Trudeau Institute from 1996 to 2007. Under her leadership, The Trudeau Institute gained international recognition as a leading research center. An AAI member since 1977, she has served on numerous AAI committees. She was elected to the AAI Council in 1999 and served as President and Past President, 2004–2006. Dr. Swain has served the immunology community as a reviewer, Section Editor and Deputy Editor for The Journal of Immunology. Dr. Swain is a scientist scholar who has used her experience and accomplishments to lead the field.



The AAI Lifetime Achievement Award is the highest honor bestowed by the AAI Council upon an AAI member. The award will be presented by AAI President Betty Diamond on Saturday, May 8, prior to the start of the Distinguished Lecture.

AAI EXCELLENCE IN MENTORING AWARD

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

Jack L. Strominger, M.D.

Dana-Farber Cancer Institute
Harvard Medical School

Dr. Strominger is renowned in the research community for his scientific accomplishments, but an equally enduring legacy is the cadre of trainees he has mentored. Dr. Strominger has trained over 150 scientists, many of whom are among today's leading immunologists. His rigorous scientific standards—coupled with allowing his trainees exceptional freedom—created an extraordinary environment for producing successful scientists who are now, in turn, mentoring the next generation.



AAI-INVITROGEN MERITORIOUS CAREER AWARD

For outstanding research contributions to the field of immunology

Dan R. Littman, M.D., Ph.D.

HHMI, New York University School of Medicine

Without Dr. Littman's work, the field of immunology would look very different. During his postdoctoral fellowship, his work was instrumental in the cloning of CD4 and CD8. In the laboratory of Art Weiss, he conducted research that led to identification of $\gamma\delta$ T cells. He continued a career that has included elucidating the intricacies of the CD4 and CD8 T cell lineage determination in the thymus, identifying the receptors HIV uses to enter T cells and macrophages, describing the function of PKC θ in T cell activation, and more recently identifying ROR γ t as a master regulator of TH17 development. Dr. Littman has identified and defined critical areas of immunology that have been major advances in the field.





The American Association of Immunologists

AAI AWARD FOR HUMAN IMMUNOLOGY RESEARCH

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

Raif S. Geha, M.D.

Children's Hospital Boston
Harvard Medical School

This award recognizes Dr. Geha for his pioneering research on primary immunodeficiencies, as well as his keen diagnostic abilities. Dr. Geha identified that CD40 ligation is necessary to cause isotype switching in human B cells and, following this finding, discovered that defective CD40 ligation is the cause of X-linked Hyper IgM Syndrome. His laboratory also identified some of the key underlying genetics of Wiskott Aldrich Syndrome. Additionally, he developed the first model of atopic dermatitis in mice, described SLP-76 deficiency as a cause of severe combined immunodeficiency in mice, and identified mutations in the TACI gene as being responsible for causing common variable immunodeficiency and IgA deficiency. Dr. Geha's contributions have been critically important in elucidating mechanisms of immune deficiency and advancing therapies.



AAI DISTINGUISHED SERVICE AWARD

For dedication and exemplary service to the AAI Minority Affairs Committee

Gerald Sonnenfeld, Ph.D.

Binghamton University
State University of New York

Randy R. Brutkiewicz, Ph.D.

Indiana University School of Medicine

AAI is honoring Drs. Sonnenfeld and Brutkiewicz for their exemplary leadership of the AAI Minority Affairs Committee, 2002–2005 and 2005–2009, respectively. As chair in 2002, Dr. Sonnenfeld energized the committee and established new programs for the AAI. Committee member Dr. Brutkiewicz then took up the charge as chair after Dr. Sonnenfeld's term ended and continued advancing the committee's deep commitment to increasing the diversity of scientists in the field of immunology. For their leadership and service to the AAI community and the scientific field at large, AAI is pleased to present them with the 2010 Distinguished Service Award.



Dr. Sonnenfeld



Dr. Brutkiewicz

AAI-BD BIOSCIENCES INVESTIGATOR AWARD

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



Dr. Gregory M. Barton, Ph.D.

University of California, Berkeley

Dr. Barton has defined major areas of innate immunity, specifically in Toll-like receptor signaling. He has developed new and innovative techniques, such as retroviral transduction of siRNA, that may well revolutionize the experimental methods used in immunology. Dr. Barton's ability to integrate diverse ideas and experimental approaches to answer fundamental questions promises to enrich the field of immunology.



The American Association of Immunologists

2010 TRAINEE AND JUNIOR FACULTY AWARDS

PFIZER-SHOWELL TRAVEL AWARD

To recognize the professional promise of an early-career investigator

2010 RECIPIENT

Roza I. Nurieva, Ph.D.

Assistant Professor

University of Texas MD Anderson Cancer Center

CYNTHIA CHAMBERS MEMORIAL-eBIOSCIENCE JUNIOR FACULTY AWARD

*To advance the careers of junior scientists who attend the
AAI Annual Meeting for the purpose of presenting immunology research
specifically in the area of cancer biology*

2010 RECIPIENT

Paul A. Antony, M.D.

Assistant Professor

University of Maryland School of Medicine

AAI-INVITROGEN TRAINEE ACHIEVEMENT AWARDS

To recognize promising trainees in the field of immunology

2010 RECIPIENTS

John S. Cho, Ph.D.

Postdoctoral Fellow

University of California, Los Angeles

Lauren W. Collison, Ph.D.

Postdoctoral Fellow

St. Jude Children's Research Hospital

Selene Nuñez-Cruz, Ph.D.

Postdoctoral Fellow

University of Pennsylvania

Rebecca C. Obeng

Graduate Student

University of Virginia

Kari A. Shirey, Ph.D.

Postdoctoral Fellow

University of Maryland School of Medicine

R. Patrick Weitzel

Graduate Student

Case Western Reserve University
School of Medicine

AAI gratefully acknowledges the efforts of the AAI Program Committee and the Abstract Programming Chairs for IMMUNOLOGY 2010™



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IMMUNOLOGY 2010™ BALTIMORE

97th Annual Meeting

The American Association of Immunologists

May 7 - 11, 2010 — Baltimore Convention Center

Hiring Opportunities at IMMUNOLOGY 2010™

Are You Recruiting Talented Immunologists?

Take advantage of the unparalleled opportunity to recruit from over 3,000 immunologists at all career stages in one place! AAI is offering career services to both job seekers and employers through a Jobs Board and Interview Service **free** to meeting registrants and exhibitors (www.immunology2010.org/CareerResources.htm).

Job Postings. Advertise your position on a virtual **Jobs Board** located on the IMMUNOLOGY 2010™ website. By including a contact email, you will receive inquiries directly.

- **Advance Postings.** Postings will be **accepted as of February 1 and will remain online until the end of the meeting.** To post job listings in advance of the meeting, contact Kira Gantt, Ph.D., Manager of Education and Career Programs, at kgantt@aai.org. Advance postings must be submitted to AAI by **May 4, 2010.**
- **Onsite Postings.** After May 4, 2010, employers wishing to advertise a job on the IMMUNOLOGY 2010™ website may still do so by visiting the AAI Office in Room 301 of the Baltimore Convention Center between 9:00 AM and 5:00 PM. You may also post a paper announcement on the bulletin board at the AAI Booth in the Exhibit Hall.

Interview Space. Private interview space will be available onsite to employers between 9:00 AM and 5:00 PM, Saturday, May 8 - Monday, May 10. Space will be allocated in one-hour blocks with a limit of two hours per employer. Employers are responsible for contacting applicants and making appointments.

- **Advance Reservations.** To sign up for space prior to the meeting, contact Kira Gantt, Ph.D., at kgantt@aai.org.
- **Onsite Reservations.** The AAI Office staff will take reservations onsite on a space-available basis.

Take advantage of this hiring opportunity at IMMUNOLOGY 2010™. To register for the meeting, visit www.immunology2010.org/Registration.htm.



The American Association of Immunologists, Inc.

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SUNDAY, MAY 9 ■ 7:00 PM–9:30 PM

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The American Association of Immunologists *2010 Introductory Course in Immunology*

June 26 - July 1, 2010

The University of Pennsylvania, Philadelphia, PA

Course Director: Terri M. Laufer, M.D., University of Pennsylvania School of Medicine

Course Co-Director: Christopher A. Hunter, Ph.D., University of Pennsylvania
School of Veterinary Medicine

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 (June 26 - 28)** is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. **Part II (June 29 - July 1)** 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

- **Terri M. Laufer**, University of Pennsylvania School of Medicine
Welcome and Introduction to the Immune System
- **Sara Cherry**, University of Pennsylvania School of Medicine
Introduction to Innate Immunity
- **Judith A. Owen**, Haverford College
Introduction to Adaptive Immunity
- **David M. Allman**, University of Pennsylvania School of Medicine
Clonal Selection and V(D)J Recombination (B Cell Centric)
- **David M. Allman**, University of Pennsylvania School of Medicine
B Cell Activation and Memory Formation
- **Terri M. Laufer**, University of Pennsylvania School of Medicine
MHC Restriction and Thymic Selection
- **Laurence C. Eisenlohr**, Jefferson Medical College
Antigen Processing and Presentation
- **Julie Magarian Blander**, Mount Sinai School of Medicine
Dendritic Cells: The Bridge Between Innate and Adaptive Immunity
- **Gary A. Koretzky**, University of Pennsylvania School of Medicine
Signaling in the Immune System
- **Christopher A. Hunter**, University of Pennsylvania School of Veterinary Medicine
Cytokines
- **Michael P. Cancro**, University of Pennsylvania School of Medicine
Lymphocyte Homeostasis
- **Ronald N. Germain**, NIAID, NIH
Dynamic Intravital Imaging of the Immune System - Replacing Cartoons with Movies of the Real Thing
- **Andrew J. Caton**, The Wistar Institute
T and B Cell Tolerance
- **Juan J. Lafaille**, New York University School of Medicine
Autoimmunity
- **David Artis**, University of Pennsylvania School of Veterinary Medicine
Mucosal Immunology
- **Achsah D. Keegan**, University of Maryland School of Medicine
Type 2 Immune Responses and Asthma
- **Robert H. Vonderheide**, University of Pennsylvania School of Medicine
Tumor Immunology
- **Padmini Salgame**, University of Medicine and Dentistry of New Jersey
Immunity to Bacterial Pathogens
- **E. John Wherry**, The Wistar Institute
Immunologic Memory to Intracellular Pathogens
- **Phillip A. Scott**, University of Pennsylvania School of Veterinary Medicine
Immunity to Eukaryotic Parasites
- **David B. Weiner**, University of Pennsylvania School of Medicine
Immunizations
- **Wayne W. Hancock**, Children's Hospital of Philadelphia
Transplantation
- **Donata Vercelli**, University of Arizona College of Medicine
Genetic Approaches to Immune-Mediated Diseases
- **Jordan S. Orange**, Children's Hospital of Philadelphia
Primary Immunodeficiencies
- **Susan B. Dillon**, Centocor, Inc.
Immunotherapies: From Lab to Clinic

- For complete course details and registration, visit www.aai.org/Courses.htm.
- For assistance, contact Kira Gantt at kgantt@aai.org or call (301) 634-7818.
 - Overseas applicants are advised to apply early for visas; for details, visit www.aai.org/Courses/visainformation.htm.
- Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit <http://marc.faseb.org/>.



The American Association of Immunologists *2010 Advanced Course in Immunology*

July 25 - 30, 2010

The University of Minnesota, Minneapolis, MN

Course Director: Yoji Shimizu, Ph.D., University of Minnesota Center for Immunology
Course Co-Director: Stephen C. Jameson, Ph.D., University of Minnesota Center for Immunology

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

- **Yoji Shimizu**, University of Minnesota Center for Immunology
Welcome and Overview of the Course
- **Marc K. Jenkins**, University of Minnesota Center for Immunology
Anatomy of the Immune System
- **Stefanie N. Vogel**, University of Maryland, Baltimore
Innate Immunity
- **Jeffrey S. Miller**, University of Minnesota Center for Immunology
NK Cells in Innate Immune Defense
- **Andrea J. Tenner**, University of California, Irvine
The Complement Cascade
- **Gwendalyn J. Randolph**, Mount Sinai School of Medicine
Integration of Innate and Adaptive Immunity: The DC
- **Barry P. Sleckman**, Washington University School of Medicine
The Generation and Modification of Lymphocyte Antigen Receptor Genes
- **Michael A. Farrar**, University of Minnesota Center for Immunology
B Cell Development
- **Kristin A. Hogquist**, University of Minnesota Center for Immunology
T Cell Development
- **David Masopust**, University of Minnesota Center for Immunology
Mucosal Immunity
- **Andrea J. Sant**, University of Rochester Medical Center
MHC-Restricted Antigen Presentation to T Cells
- **Stephen C. Jameson**, University of Minnesota Center for Immunology
Lymphocyte Memory
- **Christopher A. Hunter**, University of Pennsylvania School of Veterinary Medicine
Immune Response to Pathogens
- **Yoji Shimizu**, University of Minnesota Center for Immunology
Trafficking
- **Bryce A. Binstadt**, University of Minnesota Center for Immunology
T Cell Tolerance and Autoimmunity
- **Mark J. Shlomchik**, Yale University School of Medicine
B Cell Tolerance and Autoimmunity
- **Daniel D. Billadeau**, Mayo Clinic College of Medicine
Immune Receptor Signaling
- **Anita S. Chong**, University of Chicago
Immunobiology of Transplantation
- **Hirohito Kita**, Mayo Clinic College of Medicine
Asthma and Allergy
- **Matthew F. Mescher**, University of Minnesota Center for Immunology
Tumor Immunology
- **Joanne L. Viney**, Amgen, Inc.
Immunotherapeutics

• For complete course details and registration, visit www.aai.org/Courses.htm.

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