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IMMUNOLOGY 2013™

PROGRAM PREVIEW

Celebrating 100 Years

The American Association of Immunologists
AAI Annual Meeting
May 3–7, 2013 | Honolulu, Hawaii

For program updates and complete meeting information, visit www.IMMUNOLOGY2013.org
In this, our centennial year, we look back and appreciate the incredible advances in the field since 1913. IMMUNOLOGY 2013™ will be the setting for a great celebration of our history. In addition to featuring the newest developments in the field, speakers in the scientific sessions at IMMUNOLOGY 2013™ will provide brief perspectives on the history of immunology. Many other activities will engage attendees actively in the AAI Centennial celebration. Be sure you are there to:

- Travel the Centennial Timeline spanning the exhibit hall floor, depicting important developments for AAI and immunology, science and technology, and U.S. and world history.
- Hear interviews of AAI Presidents in our media lounges.
- Take the Walk of Notables to learn about the many Nobel, Lasker, and other distinguished awardees in the rich AAI legacy.
- Visit the StoryBooth with friends, colleagues, or mentors to record your stories and become part of AAI history.
- Seize the VIP Photo Op to have your picture taken with preeminent immunologists in the VIP Lounge.
- And enjoy the special festivities and entertainment scheduled for the AAI Centennial at the Opening Night Welcome Reception and the Centennial Gala Luau.

Commemorative Literature. AAI staff historians and scientists are rigorously researching and archiving materials to preserve the proud heritage of the association, and the AAI Newsletter has featured a number of articles this past year recounting our history. Posted in the history section of the AAI website, www.aai.org/About/History, they include:

- Immunologists during the First World War: One Soldier-Scientist’s Experience
- The 1918–1919 Influenza Pandemic as covered in The Journal of Immunology
- The Founding of AAI
- The Science at the First AAI Annual Meeting
- Anna Wessels Williams, M.D.: Infectious Disease Pioneer and Public Health Advocate
- Elise Strang L’Esperance, M.D.: Pioneer in Cancer Prevention and Recipient of Lasker Award
- The Founding of The Journal of Immunology
- “Studies in Anaphylaxis”: The First Article in The Journal of Immunology
- Rebecca Lancefield, Ph.D. (AAI 1933; President 1961–62): PI in the Scotland Yard of Streptococcal Mysteries

AAI Website. The www.aai.org/About/History section of the AAI website, developed and launched in 2011 in anticipation of the AAI Centennial, will continually evolve as a living archive, adding resources produced for, during, and after the Hawaii celebration. Current and future resources, including oral history interviews of AAI presidents, profiles of AAI Nobel and Lasker recipients, AAI history articles (published in the AAI Newsletter), and an eBook of “Pillars” articles from The Journal of Immunology, will continue to chronicle the history of AAI and the role immunology has played in advancing biology and medicine.

Visit www.aai.org/About/History to enjoy the history of AAI
Katherine L. Knight Honored with AAI Lifetime Achievement Award

Katherine L. Knight, Ph.D., Loyola University Chicago, Stritch School of Medicine, has been named recipient of the 2013 AAI Lifetime Achievement Award in recognition of a career of extraordinary scientific accomplishment as well as outstanding leadership and service to AAI. This award is the highest honor bestowed by the AAI Council upon an AAI member.

Knight has been a leader in the field of B cell development. She is well known for her discoveries of molecular mechanisms that control rabbit antibody diversity and her generation of the first hybridoma for production of rabbit monoclonal antibodies. She has continued to be on the leading edge of research, with more recent work examining the role of the intestinal microbiota in regulating the development of gut-associated lymphoid tissues and the primary antibody repertoire; she has also investigated the mechanisms through which intestinal microbes can protect the host from infection.

Knight has been an AAI member since 1968. She was elected to AAI Council in 1991 and served as AAI President from 1996 to 1997. In addition to her service on the AAI Council, Knight has served as an associate editor for *The Journal of Immunology* and a member of the Awards, Education, Membership, and Nominating Committees. She has served AAI as its delegate to the International Union of Immunological Societies and its representative to the Federation of American Societies of Experimental Biology Board, serving on its Executive, Finance, and Public Affairs Committees.

After earning her Ph.D. in chemistry from Indiana University, Knight, in 1968, was appointed to the faculty of the University of Illinois Medical Center, where she rose to the rank of full professor in 1975. In 1989, she was recruited to Loyola University Chicago where she is now professor and chairperson of the Department of Microbiology and Immunology at the Stritch School of Medicine. In addition, she is a co-founder and co-director of the Infectious Disease and Immunology Institute at Loyola University Chicago.

Knight is an elected fellow of the American Association for the Advancement of Science and was honored as Senior Scientist of the Year by Loyola University Chicago in 2012.

She has been recognized for her scientific achievements through her numerous invited speaking engagements at meetings and universities in the U.S. and abroad, as well as her service on many scientific review boards, including NIH panels, institutional program review boards, and corporate advisory panels.

Dr. Knight has also received accolades for her teaching and mentoring. She has been named by her peers to serve currently as president of the American Association of Medical School Microbiology and Immunology Chairs (AMSMIC). She was honored as Graduate Faculty Member of the Year by Loyola University Chicago in 2004. She has spoken often on the subject of mentoring, including in her AAI President’s Address at the AAI annual meeting in 1997.

Dr. Knight’s career exemplifies the dedication to science and service honored by the AAI Lifetime Achievement Award.

The AAI Lifetime Achievement Award is given annually in recognition of distinguished scientific accomplishment and extraordinary service to AAI.

AAI Excellence in Mentoring Award Bestowed upon Suzanne Ostrand-Rosenberg

Suzanne Ostrand-Rosenberg, Ph.D., University of Maryland, Baltimore County (UMBC), is the recipient of the 2013 AAI Excellence in Mentoring Award in recognition of her contributions to a future generation of scientists.

Ostrand-Rosenberg has been a highly productive researcher in the field of tumor immunity. She has shown the contribution of CD4 T cells in mediating tumor rejection, the importance of peptide-MHC transfer from tumor cells to dendritic cells (termed “cross-dressing”) in antigen presentation, and the tumor-enhancing properties of myeloid-derived suppressor cells in the tumor microenvironment.

Ostrand-Rosenberg has trained over 100 students and fellows in her laboratory during the course of her career, totaling which includes mentoring postdoctoral fellows, Ph.D. students, M.S. students, and undergraduates. Most impressively, she has provided meaningful research opportunities for over 65 undergraduates, including many underrepresented minority students. She has been a steadfast supporter of the Meyerhoff Scholars Program, a program at UMBC which prepares underrepresented minority students to pursue a Ph.D. and career in scientific research. Ostrand-Rosenberg has mentored 23 Meyerhoff fellows in research in her laboratory since the program’s inception in 1988, and is the first honored to hold the position of Robert and Jane Meyerhoff Chair of Biochemistry in recognition of her efforts for the program. She has further impacted the lives of undergraduate minority students as a member of the steering committee and a research mentor for the MARC-U-STAR Program at UMBC, another program to support the advancement of underrepresented minority students in the sciences.

As a testament to the success of her mentoring, her undergraduate students have gone on to doctoral programs at Johns Hopkins University, New York University, Stanford University, and University of Pittsburgh, among other institutions, while her former Ph.D. students hold faculty and staff scientist positions at
prominent research institutions, including Cornell University, Johns Hopkins University, Medical University of South Carolina, Oregon State University, and the Dana-Farber Cancer Institute. In addition to the mentoring of students and fellows in her laboratory, Ostrand-Rosenberg has advised many more students on thesis committees, and she has acted as an informal mentor to new women faculty members.

“Dr. Ostrand-Rosenberg gives every person who comes through the lab her full attention, not only regarding their research, but also at a personal level,” says a former postdoctoral fellow, Pratima Sinha, assistant research scientist at UMBC. Sinha expounds, “Despite all of her other responsibilities, Dr. Ostrand-Rosenberg has a true open-door policy and can often be seen chatting with lab members about their families, helping her undergraduate students select their courses for the next semester, or discussing the always difficult decision of a future career step.”

A former graduate student in the Ostrand-Rosenberg laboratory, Brian P. Dolan, assistant professor at Oregon State University, recalls mentoring provided by Ostrand-Rosenberg when he was offered a faculty interview on short notice: “Unfortunately she was away at the time, but rather than say, ‘sorry, but I am sure you’ll be fine,’ she told me to call her. So, late at night, while she stared at her laptop and listened to me through the receiver, we went over my entire seminar. Three hours later, the talk was fantastically better, I had outlined all the questions I would likely be asked during the interview, and we had gone over all the qualities I needed to convey in the interview, not to mention the pitfalls to be avoided.”

It is fitting that Ostrand-Rosenberg be recognized for her remarkable record of mentorship with the 2013 AAI Excellence in Mentoring Award.

Ostrand-Rosenberg obtained her Ph.D. in immunology from the California Institute of Technology. Following a postdoctoral fellowship at Johns Hopkins University, she joined the faculty of the University of Maryland, Baltimore County, in 1977, where she rose through the ranks to become Professor of Biological Sciences in 1992 and Robert and Jane Meyerhoff Chair of Biochemistry in 2000.

Ostrand-Rosenberg is an appointed member of the National Cancer Institute Board of Scientific Counselors and the State of Maryland Human Stem Cell Commission, and an elected member of the Johns Hopkins University Society of Scholars. Among other prestigious honors she has received in recognition of her scientific accomplishment is the University System of Maryland Regents’ Award for Excellence in Research.

A member of AAI since 1979, Ostrand-Rosenberg currently serves as an abstract programming chair for the AAI annual meeting. She previously was an associate editor and a section editor for The Journal of Immunology.

The AAI Excellence in Mentoring Award is presented annually in recognition of exemplary career contributions to a future generation of scientists.

Barton F. Haynes Receives AAI-Steinman Award for Human Immunology Research

Barton F. Haynes, M.D., Duke University School of Medicine, has been selected to receive the 2013 AAI-Steinman Award for Human Immunology Research. This award is given in recognition of Haynes’s groundbreaking work in the fields of thymic transplantation and HIV vaccination.

Haynes’s early work in human thymic transplantation spanned fundamental investigation to clinical treatment, encompassing his basic work describing T cell development and thymic epithelial biology, his demonstration in SCID mice that transplanted human postnatal thymic epithelium could support stem cell maturation, and his collaboration on the first thymic transplants in patients with DiGeorge Syndrome. This demonstration that postnatal thymus transplants could promote T cell development has been hailed as a medical triumph. Prior to the thymic transplants, children with complete DiGeorge Syndrome died, while the majority of these children can now be successfully treated.

In the last 20 years, Haynes has been at the forefront of the field of HIV vaccine development. He was the first to show the polyreactive nature of HIV-1 neutralizing antibodies and the role of tolerance mechanisms in limiting their induction. His work has opened new avenues in vaccine development.

Haynes distinguished himself in his service as director from 2005-2012 of the Center for HIV/AIDS Vaccine Immunology (CHAVI), an NIH-funded international consortium of scientists. Anthony S. Fauci, NIAID Director, says, “…with the leadership of Haynes, the CHAVI has been an extraordinary force in directing the effort to develop an HIV vaccine…His work has led to new vaccine components for two new efficacy trials, one in Thailand and one in South Africa, each including Env designs from his laboratory.”

Haynes earned his M.D. from Baylor College of Medicine in 1973. Following his internship and residency at Duke University Medical Center, he served in positions as a clinical associate, medical officer, and senior investigator at the Laboratory of Clinical Investigation, NIAID, NIH. In 1980, he returned to Duke University Medical Center, where he now holds the positions of Frederic M. Hanes Professor of Medicine and Professor of Immunology. He also serves as director of the Duke Human Vaccine Institute and the NIH-funded Duke Center for HIV/AIDS Vaccine Immunology-Immunogen Discovery.

Haynes is a member of the Institute of Medicine, National Academy of Sciences, and a fellow of the Infectious Diseases Society of America, American College of Physicians, and American Academy of Arts and Sciences. Among his many awards are the Lee C. Howley Senior Prize for Arthritis Research from the National Arthritis Foundation, the Distinguished Investigator Award from the American College of Rheumatology, and the Alexander Fleming Award from the Infectious Disease Society of America.

Dr. Haynes has been an AAI member since 1980 and has served AAI as a section editor and an associate editor for The Journal of Immunology. The AAI-Steinman Award for Human Immunology Research is presented annually for significant, sustained achievement in immunology research pertinent to human disease pathogenesis, prevention, or therapy. The award, previously named the AAI Award for Human Immunology Research, was renamed in 2012 in honor of deceased AAI member and Nobel laureate Ralph M. Steinman (1943–2011).
AAI-Life Technologies Meritorious Career Award Conferred upon Jenny P-Y. Ting

Jenny P-Y. Ting, Ph.D., University of North Carolina at Chapel Hill, is being honored with the 2013 AAI-Life Technologies Meritorious Career Award for her seminal contributions to a number of research fields. Early in her career, she elucidated mechanisms of MHC class II gene transcription, with her characterization of the promoter for the HLA-DR gene, identification of the class II transactivator (CIITA), and description of the key role of CIITA in the transcriptional regulation of numerous proteins involved in MHC class II antigen presentation. Ting creatively expanded this initial focus on class II gene regulation into investigations in other areas. She demonstrated a role for class II expression in the central nervous system in neurodegenerative diseases and showed the beneficial effect of inflammatory mediators during remyelination.

Ting’s interest in CIITA also led to her discovery of the large NLR/CATERPILLAR gene family. Ting has since characterized the functions of many of the individual family members in, variably, apoptosis, antiviral immunity, inflammatory disease, and cancer. The NLR family is now a major focus of the field of innate immunity and has the potential to profoundly impact human health.

According to Bonnie N. Dittel, senior investigator at BloodCenter of Wisconsin, “Discoveries of this scale represent large conceptual leaps, and the impact will be long-lasting.”

Jenny maintains a remarkable breadth of interests while managing to explore each of them in depth,” says Laurie H. Glimcher, Stephen and Suzanne Weiss Dean at Cornell University. “I would note her especially for her creative abilities, her fearlessness in taking on new technologies and her versatility in moving between hardcore transcription and biochemistry, cellular immunology and animal models.”

Ting received her Ph.D. from Northwestern University in 1979 and continued her training with postdoctoral fellowships at the University of Southern California and Duke University. After a short appointment as a Research Assistant Professor at Duke University, she joined the faculty of the University of North Carolina at Chapel Hill in 1984. She currently holds the positions of William Rand Kenan Professor of Microbiology and Immunology, Co-Director of the Inflammatory Disease Institute, and Director of the Center for Translational Immunology.

Ting is a current member of the NIAID Council and has served on numerous study sections for the NIH, National Multiple Sclerosis Society, Burroughs Wellcome Trust, and others. She is the recipient of an NIH MERIT Award and has previously been recognized for her research accomplishments by the National Multiple Sclerosis Society and the American Society for Microbiology.

A member of AAI since 1997, Ting has served as a lecturer for the AAI Advanced Course, an associate editor and a section editor for The Journal of Immunology, and a member of the Publications Committee.

The AAI-Life Technologies Meritorious Career Award is given annually for outstanding research contributions to the field of immunology.

David Artis Presented with the AAI-BD Biosciences Investigator Award

David Artis, Ph.D., University of Pennsylvania, Perelman School of Medicine, was chosen to receive the 2013 AAI-BD Biosciences Investigator Award. Artis has made fundamental contributions to our understanding of host-microbial interactions at the body’s barrier surfaces. When most investigators were focused on cellular interactions between the innate and specific immune systems in instructing the immune response, he hypothesized that the interactions between microbes and the epithelium might be equally critical. This hypothesis was borne out in his and his colleagues’ demonstration that the NF B pathway functions cell-intrinsically in epithelial cells to regulate intestinal immune homeostasis. He subsequently showed the importance of epithelial-derived cytokines, including interleukin-25 and thymic stromal lymphopoietin, in mobilizing novel cell lineages to mediate type-2 immunity at the barrier interface.

In addition to showing the critical role of epithelial-immune cell interactions in achieving host defense and barrier homeostasis, Artis has identified ways in which commensal organisms directly shape innate immunity. His group has recently shown a role for commensal-derived signals in regulating allergic inflammation through effects on basophil development and establishing the activation threshold of innate antiviral immunity.

“As an early-career investigator, Artis has been extraordinarily productive and influential,” says Ruslan Medzhitov, David W. Wallace Professor of Immunobiology at Yale School of Medicine. Medzhitov further submits, “He is internationally recognized as one of the major figures in the field of mucosal immunology, and he has been the leading architect of the field of epithelial-immune cell interactions, placing him at the forefront of the early-career immunologists of the world today.”

Artis earned his Ph.D. in Immunology from Manchester University Medical School in the United Kingdom. In 1999, he moved to the University of Pennsylvania as a research fellow. Promoted to instructor in 2003 and assistant professor in 2005, he assumed his current position of associate professor in 2010.

Other prestigious awards and honors Artis has received in recognition of his scientific accomplishments include his selection as an Investigator in the Pathogenesis of Infectious Disease by the Burroughs Wellcome Fund and his receipt of The Lady Barbara Colyton Prize for Autoimmune Research from the University of Pennsylvania.

An AAI member since 1997, Artis has served as a lecturer at the AAI Introductory Course and a Major Symposium speaker at the AAI annual meeting.

The AAI-BD Biosciences Investigator Award is presented annually for outstanding, early-career research contributions to the field of immunology.
Prosper N. Boyaka, Ph.D.
The Ohio State University

Prosper N. Boyaka, AAI ’98, has provided vital leadership to AAI in his service on the AAI Minority Affairs Committee from 2006 to 2012. As chair of the committee from 2009 to 2012, Boyaka initiated multiple enhancements to the annual AAI Minority Affairs Committee Careers and Networking Roundtable at the AAI meeting. These included formalizing table leader briefing materials and the opening orientation for attendees, initiating post-event distribution of the attendee list to foster participants’ continuing networking and mentoring, and enhancing the annual survey of roundtable attendees to maximize the value of future events. He was also instrumental in expanding the AAI List of Minority Members, the online networking resource comprised of AAI minority members (regular and trainee) who volunteer to be listed and participate in mentoring and information sharing.

More recently, Boyaka initiated a collaborative effort by the AAI Minority Affairs Committee and the AAI Committee on Public Affairs (CPA) in response to a 2011 study documenting a racial disparity in the awarding of NIH grant funding. The effort resulted in the 2012 submission of AAI feedback to the NIH Director’s Diversity in the Biomedical Research Workforce working group. Based in part on AAI and broader biomedical research community feedback, NIH is implementing initiatives to increase diversity in the scientific workforce, including enhanced data collection to track outcomes, a new National Research Mentoring Network to connect young scientists with experienced mentors, and the NIH Building Infrastructure Leading to Diversity Consortium, to increase graduate training enrollment among college graduates from diverse backgrounds underrepresented in biomedical research.

Boyaka currently serves AAI as an abstract programming chair for the annual meeting, having previously served as an associate editor for The Journal of Immunology.

Boyaka received his Ph.D. from Université de Paris in 1994. He continued his training at the University of Alabama at Birmingham (UAB) as a postdoctoral fellow in the Immunobiology Vaccine Center. He remained at UAB as a research associate and then research assistant professor. In 2006, he moved to The Ohio State University, where he holds the appointment of professor in the Department of Veterinary Biosciences.

Derry C. Roopenian, Ph.D.
The Jackson Laboratory

Derry C. Roopenian, AAI ’90, has provided immeasurable service to AAI during his tenure on the AAI Committee on Public Affairs (CPA) from 2005 to 2012, serving the last year as chair. As a member of the CPA and chair of its relevant subcommittee, Roopenian was instrumental in the creation and implementation of the AAI Research Advocacy Program (RAP), an important program which enables policy leaders from relevant patient advocacy organizations to learn about basic immunology, meet leading researchers, connect with young investigators, and learn about public policy issues of concern to AAI. He also led CPA activities involving animals in research, including developing AAI comments on proposed revisions to the Guide for the Care and Use of Laboratory Animals and serving for six years as the AAI representative to the board of directors of AAALAC (the Association for Assessment and Accreditation of Laboratory Animal Care) International.

As committee Chair, Roopenian was a strong advocate for sustained and predictable NIH funding, and for articulating, particularly in Congressional testimony, the economic benefits of investing in biomedical research. He led the successful development of AAI comments on three separate NIH efforts: eliciting ideas about how to better manage NIH resources in fiscally challenging times; addressing issues involving the future research workforce and; in conjunction with the AAI Minority Affairs Committee, finding ways to increase diversity in the biomedical research workforce. Following its receipt of comments from AAI and others in the biomedical research community, NIH began implementing several new initiatives designed to address these matters.

Roopenian also presided over, and was a key participant in, the successful first year of the AAI Public Policy Fellows Program (PPPP), a program which provides postdoctoral fellows and other junior scientists with the opportunity to learn about and participate in the public policy and legislative activities of AAI.

Roopenian earned his Ph.D. from the University of Minnesota in 1984. Following postdoctoral fellowships at Harvard Medical School and the Dana Farber Cancer Institute, he joined the faculty of The Jackson Laboratory in 1985 and has risen through the ranks to his current appointment as professor.
AAI President’s Address
FRIDAY, MAY 3, 6:00 PM
KĀLĀKAU BALLROOM AB

Gail A. Bishop, University of Iowa; AAI President
The Many Faces of TRAF Molecules in Immune Regulation
Introduction: Jeffrey A. Frelinger, University of Arizona

AAI President’s Symposium
SUNDAY, MAY 5, 3:15 PM
KĀLĀKAU BALLROOM C

The TNF Receptor Superfamily in Immune Regulation and Disease
Chair: Gail A. Bishop, University of Iowa; AAI President
Speakers:

Michael Croft, La Jolla Institute for Allergy & Immunology
Immunoregulatory activity in the TNF family

Tania H. Watts, University of Toronto, The TNFR family member GITR: striking a chord in anti-viral immunity

Carl F. Ware, Sanford-Burnham Medical Research Institute
Bending LIGHT and cytokines

Linda C. Burks, Biogen Idec
The TWEAK/Fn14 pathway: a story from bench to bedside

MONDAY, MAY 6, 4:15 PM–6:15 PM
KĀLĀKAU BALLROOM AB

A Legacy of Excellence
Chairs:
M. Michele Hogan, AAI Executive Director
Leo Lefrançois, University of Connecticut Health Center
AAI Program Committee Chair

Four leaders in the field offer perspectives on defining issues and developments in immunology research.

Speakers:

Philippa Marrack
HHMI, National Jewish Health, The basics of immunology: where sho(c)ould we go next?

David Baltimore
California Institute of Technology, Viruses and immunity: the tension of desire

Roger M. Perlmutter
Santa Barbara, CA
Building better medicines: immunology research and biopharmaceuticals

Anthony S. Fauci
NIAD, NIH, Three decades of HIV/AIDS science and policy: a personal journey

Celebrating 100 Years
Specific recognition of antigens is a pivotal component of immunity. It is, therefore, understandable that immunology researchers have placed much emphasis upon studies of lymphocyte antigen receptors. However, many other important families of receptors make critical contributions to immune cell functions, both alone and in cooperation with antigen receptors. My own longstanding interest in B cell-T cell interactions induced me several decades ago to begin to study the CD40 receptor, which, in turn, drew me into a fascination with the large and diverse family to which it belongs, the Tumor Necrosis Factor Receptor (TNFR) superfamily. Various members of this superfamily are expressed on all mammalian cells as well as those of a number of lower organisms, but their functions are especially important to the immune system.

The President’s Symposium this year features immunologists who have made, and are continuing to make, important contributions to our understanding of how members of the TNFR superfamily regulate immune responses in normal immunity, pathologic responses in chronic inflammatory and autoimmune diseases, and malignancies. The findings of these scientists run the gamut from basic mechanistic investigations to their application to clinical problems.

Carl Ware is one of the pioneers in the study of members of the TNFR superfamily in immune function and has long served as a role model for me in his research. He has made a large number of important discoveries and is especially well-known for his work on understanding the mechanisms of function of lymphotoxin receptors and their Herpesvirus-encoded counterpart, HVEM. His studies have important implications for the understanding of not only normal immunity and formation of secondary lymphoid structures, but also autoimmune diseases and cancer.

The work of Tania Watts has been key in elucidating how TNFR superfamily members serve as co-regulators of the function of T cell antigen receptors. Her studies of 4-1BB and GITR in particular have made pivotal contributions to understanding the roles of these molecules in immune responses, with a recent focus on responses to infection.

Another key contributor to our understanding of how TNFR superfamily molecules regulate T cell functions is Michael Croft, who has provided important new insights into the functions of OX40, 4-1BB, and other receptors in regulating inflammatory reactions and immune responses to viruses.

Linda Burkly developed her distinguished career in the biotechnology industry, working on clinical translation of immune interventions involving various TNFR superfamily members. She has been a leader in the development of new therapies that target the TWEAK/Fn14 pathway in various chronic inflammatory conditions, successfully translating basic knowledge to clinical application.

Please plan to join me at the IMMUNOLOGY 2013™ President’s Symposium to hear how understanding the roles of TNFR superfamily receptors enhances our knowledge of the mechanisms of immune responses and how this knowledge can be applied to clinical problems.
AAI DISTINGUISHED LECTURES

SATURDAY, MAY 4, 5:15 PM
KĀLAKAUA BALLROOM AB
Ruslan Medzhitov, HHMI
Yale School of Medicine
Inflammation in health and disease

SUNDAY, MAY 5, 5:15 PM
KĀLAKAUA BALLROOM AB
Jenny P-Y. Ting, University of North Carolina at Chapel Hill
The broad impact of NLRs on immunity and beyond

MONDAY, MAY 6, 3:15 PM
KĀLAKAUA BALLROOM AB
Stephen M. Hedrick, University of California, San Diego
The unique habitat of human beings and how this impacts our understanding of persistent infections, epidemics, and the evolution of memory

AAI EXCELLENCE IN MENTORING AWARD PRESENTATION

SATURDAY, MAY 4, 5:15 PM, KĀLAKAUA BALLROOM AB
Chair: Gail A. Bishop, University of Iowa; AAI President
Award Recipient: Suzanne Ostrand-Rosenberg, Ph.D., University of Maryland, Baltimore County
Introduction: Pratinia Sinha, University of Maryland, Baltimore County

The AAI Excellence in Mentoring Award recognizes exemplary career contributions to a future generation of scientists. The award will be presented prior to the start of Saturday’s AAI Distinguished Lecture.

AAI LIFETIME ACHIEVEMENT AWARD

SUNDAY, MAY 5, 3:15 PM, KĀLAKAUA BALLROOM C
Chair: Gail A. Bishop, University of Iowa, AAI President
Award Recipient: Katherine L. Knight, Ph.D., Loyola University Chicago, Stritch School of Medicine
Introduction: Gail A. Bishop, University of Iowa; AAI President

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 the AAI President’s Symposium.

GRIP
Grant Review for Immunologists Program

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

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

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

Program details at www.aai.org/GRIP_rd.htm
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IMMUNOLOGY 2013™ Gala
AAI Centennial Celebration Luau
at the Hilton Hawaiian Village, Great Lawn

MONDAY, MAY 6  ■  6:30 PM–9:00 PM

President’s Service
Appreciation Reception

SUNDAY, MAY 5  ■  7:00 PM–8:30 PM
By invitation only

Meeting Lanyards

Celebrating
100 Years

The American Association of Immunologists
May 3–7, 2013 ■ Honolulu, Hawaii ■ Hawaii Convention Center
You are cordially invited to attend the

**Gala AAI Centennial Celebration Luau**

For a sumptuous Polynesian buffet, music, and dance, and a magnificent fireworks display!

**Monday, May 6, 6:30 PM–9:00 PM**
Hilton Hawaiian Village, Great Lawn

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Meeting badge or ticket required for entrance.
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IMMUNOLOGY 2013™
Opening Night Welcome Reception

FRIDAY, MAY 3 ■ 7:00 PM–9:00 PM

Chambers-eBioscience Memorial Award

Lustgarten-eBioscience Memorial Award

Meeting Bags

The American Association of Immunologists
May 3–7, 2013 ■ Honolulu, Hawaii ■ Hawaii Convention Center
Join us for the

IMMUNOLOGY 2013™

Opening Night Welcome Reception

Hawaii Convention Center Rooftop Garden • Friday, May 3, 2013 • 7:00pm–9:00pm

Come directly from the President’s Address to view the spectacular setting, visit with colleagues, and enjoy drinks and hors d’oeuvres as you plan your week.

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Open to all IMMUNOLOGY 2013™ attendees and ticketed guest! Meeting badge or ticket required for entrance.
SATURDAY, MAY 4, 8:00 AM - 11:30 AM

Major Symposium A: Tissue-Resident Lymphocytes
Generously sponsored by Kyowa Hakko Kirin California, Inc.
KĀLAKUA BALLROOM B

Chairs:
Francis R. Carbone, University of Melbourne
Wendy L. Havran, Scripps Research Institute

Speakers:
Francis R. Carbone, University of Melbourne
Tissue-resident memory T cell involvement in local immune protection
Wendy L. Havran, Scripps Research Institute
Crosstalk between epidermal-resident γδ T cells and epithelial cells
Adrian C. Hayday, King's College London and London Research Institute of Cancer Research UK
Beneficial autoimmunity: the responses and regulation of intraepithelial T cells
Leo Lefrançois, University of Connecticut Health Center
Cooperation between TCRαβ and TCRγδ T cells provides protective intestinal immunity
David Masopust, University of Minnesota
Resident memory CD8 T cell function in mucosal tissues
Hilde Cheroutre, La Jolla Institute for Allergy & Immunology
CD4 CTL: a major new player in health and disease

Major Symposium B: Antigen Receptor Signaling: Triggering Eruptions on Quiescent Cell Surfaces
KĀLAKUA BALLROOM A

Chairs:
Susan K. Pierce, NIAID, NIH
Arthur Weiss, HHMI, University of California, San Francisco

Speakers:
Susan K. Pierce, NIAID, NIH
The initiation of B cell receptor signaling
Facundo Batista, Cancer Research UK London Research Institute
Dynamic imaging of lymphocyte activation: from single molecule to living tissue
Louis M. Staudt, NCI, NIH
Pathological B cell receptor signaling in lymphoid malignancies
Arup K. Chakraborty, Massachusetts Institute of Technology
Early events in TCR signaling at the membrane
Takashi Saito, RIKEN Research Center for Allergy and Immunology, Yokohama, Japan
Dynamic regulation and modulation of T cell activation
Arthur Weiss, HHMI, University of California, San Francisco
Regulating tyrosine phosphorylation pathways controlled by antigen receptors

SUNDAY, MAY 5, 8:00 AM - 11:30 AM

Major Symposium C: CD4 T Cell Commitment and Plasticity: Fundamental Processes and Translational Applications
KĀLAKUA BALLROOM B

Chairs:
William E. Paul, NIAID, NIH
Anuradha Ray, University of Pittsburgh School of Medicine

Speakers:
William E. Paul, NIAID, NIH
The CD4 T cell differentiation system
John J. O'Shea, NIAMS, NIH
Transcriptional and epigenetic control of helper cell specification
K. Mark Ansel, University of California, San Francisco
MicroRNA regulation of helper T cell responses
Shimon Sakaguchi, Immunology Frontier Research Center, Osaka University
Epigenetics and plasticity of regulatory T cells
Megan K. Levings, University of British Columbia
CD4 T cell plasticity in health and chronic skin disease
Anuradha Ray, University of Pittsburgh School of Medicine
Challenges to Treg commitment influencing disease susceptibility

Major Symposium D: Innate Immune Surveillance of Cellular Stress and Injury
KĀLAKUA BALLROOM A

Chairs:
Kenneth L. Rock, University of Massachusetts Medical School
Julie Magarian Blander, Mount Sinai School of Medicine

Speakers:
Julie Magarian Blander, Mount Sinai School of Medicine
Introduction
Kenneth L. Rock, University of Massachusetts Medical School
Inflammasome-dependent and independent pathways of sterile inflammation
Guido Kroemer, University of Paris Descartes
Immunogenic cell death and its perception by innate immune effectors
Tiffany Horng, Harvard School of Public Health
Mitochondria, stress responses, and inflammation
Kodi S. Ravichandran, University of Virginia
Metabolic connections during apoptotic cell clearance
Kevin J. Tracey, Feinstein Institute for Medical Research
Neural arcs that control HMGB1, sterile inflammation, and innate immunity
Thirumala-Devi Kanneganti, St. Jude Children's Research Hospital
Mediators of inflammatory responses
MONDAY, MAY 6, 8:00 AM - 11:30 AM

Major Symposium E: The Battle Within: Viral and Intracellular Bacterial Pathogenesis
KĀLAKAUA BALLROOM B

Chairs:
Bruce D. Walker, Ragon Institute of MGH, MIT, and Harvard
Denise M. Monack, Stanford University

Speakers:
Denise M. Monack, Stanford University
The tug-of-war between intracellular Salmonella and the macrophage
Mary O’Riordan, University of Michigan Medical School
Dealing with stress: mobilization of antimicrobial defenses through engagement of ER stress circuits
Gregory M. Barton, University of California, Berkeley
Microbes and innate immunity
Bruce D. Walker, Ragon Institute of MGH, MIT, and Harvard
T cell control of HIV
Sara Cherry, University of Pennsylvania, Perelman School of Medicine
Using RNAi screening to identify cell-intrinsic innate immune pathways
Herbert W. Virgin, Washington University School of Medicine
The virome in health and disease

Major Symposium F: Therapy of Human Autoimmune and Inflammatory Diseases: Emerging Concepts
KĀLAKAUA BALLROOM A

Chairs:
Andrew C. Chan, Genentech, Inc.
Anne Davidson, Feinstein Institute for Medical Research

Speakers:
Anne Davidson, Feinstein Institute for Medical Research
The predictive value of SLE animal models: the story of belimumab
Brian L. Kotzin, Amgen, Inc.
Development of new therapeutics for inflammatory diseases
Jeffrey A. Bluestone, University of California, San Francisco
Bringing Tregs to the clinic in autoimmunity and transplantation
Tamiko R. Katsumoto, University of California, San Francisco
The tyrosine phosphatase CD148 reveals a role for Src family kinases in asthma and pulmonary fibrosis
Judy H. Cho, Yale University
Do patterns of genetic associations predict therapeutic responses across immune-mediated diseases?
Andrew C. Chan, Genentech, Inc.
Personalizing medicine to meet the challenges of drug discovery and development

TUESDAY, MAY 7, 8:30 AM – 11:30 AM

Major Symposium G: Understanding Interactions between the Immune System and Cancer: The Road to Immunotherapy
KĀLAKAUA BALLROOM B

Chairs:
José R. Conejo-Garcia, Wistar Institute
Olivera J. Finn, University of Pittsburgh School of Medicine

Speakers:
José R. Conejo-Garcia, Wistar Institute
Polymorphisms in pattern recognition receptors modulate antitumor immunity and alter malignant progression
David G. DeNardo, Washington University School of Medicine
Targeting tumor infiltrating macrophages decreases pancreatic tumor-initiating cells and improves chemotherapeutic response
Randolph J. Noelle, Geisel School of Medicine at Dartmouth and King's College London
Liberating the immune system by interrupting VISTA function
Ronald Levy, Stanford University School of Medicine
Monoclonal antibodies for the treatment of cancer: targeting the tumor and the immune system
Crystal L. Mackall, NCI, NIH
Emerging immunotherapies for pediatric cancer
Olivera J. Finn, University of Pittsburgh School of Medicine
Immunosurveillance and immunoprevention of non-viral cancers

Major Symposium H: TGF-ß: Master Regulator of Immunity
KĀLAKAUA BALLROOM A

Chairs:
Ming Li, Memorial Sloan-Kettering Cancer Center
Elina Zuniga, University of California, San Diego

Speakers:
Ming Li, Memorial Sloan-Kettering Cancer Center
TGF-ß control of immune homeostasis
Adam Lacy-Hulbert, Massachusetts General Hospital/Harvard Medical School
Regulation of TGF-ß activation by DCs in immunity
Michael J. Bevan, HHMI, University of Washington
Controlling T cell responses against self
Alexander Y. Rudensky, HHMI, Memorial Sloan-Kettering Cancer Center
Regulatory T cells and TGF-ß
Paula M. Oliver, University of Pennsylvania
Ubiquitin regulation of iTreg differentiation
Elina Zuniga, University of California, San Diego
Immunoregulation during chronic viral infection
AAI-Steinman Award for Human Immunology Research Presentation and Lecture

SATURDAY, MAY 4, 2:15 PM – 3:15 PM
KĀLAKAU BALLROOM C
Chair: Gail A. Bishop, University of Iowa; AAI President
Award Recipient:
Barton F. Haynes, M.D., Duke University School of Medicine
The path to development of an HIV-1 vaccine
AAI President Gail A. Bishop will introduce the awardee and present the award immediately prior to Dr. Haynes's lecture.

AAI-BD Biosciences Investigator Award Presentation and Lecture

Generously sponsored by BD Biosciences, Inc.

SATURDAY, MAY 4, 4:00 PM – 5:00 PM
KĀLAKAU BALLROOM C
Chair: Gail A. Bishop, University of Iowa; AAI President
Award Recipient:
David Artis, Ph.D., University of Pennsylvania, Perelman School of Medicine
Regulation of innate and adaptive immunity at barrier surfaces
AAI President Gail A. Bishop and BD Biosciences Vice President of Biological Sciences Robert Balderas will introduce the awardee and present the award immediately prior to Dr. Artis's lecture.

AAI-Life Technologies Meritorious Career Award Presentation and Distinguished Lecture

Generously sponsored by Life Technologies Corporation

SUNDAY, MAY 5, 5:15 PM – 6:00 PM
KĀLAKAU BALLROOM AB
Chair: Gail A. Bishop, University of Iowa; AAI President
Award Recipient:
Jenny P-Y. Ting, Ph.D., University of North Carolina at Chapel Hill
The broad impact of NLRs on immunity and beyond
AAI President Gail A. Bishop and a representative of Life Technologies Corporation will introduce the awardee and present the award immediately prior to Dr. Ting's lecture.

AAI Business Meeting and Award Presentations

MONDAY, MAY 6, 1:00 PM – 2:30 PM
ROOM 318B
This session will include the annual report to AAI members on AAI and The Journal of Immunology business affairs and will feature special 2013 AAI award presentations and acknowledgments. Refreshments will be provided.

AAI Distinguished Service Award Recipients

Prosper N. Boyaka, Ph.D.
Ohio State University
For outstanding service to AAI and the immunology community as member and chair of the AAI Minority Affairs Committee, 2006–2012

Derry C. Roopenian, Ph.D.
Jackson Laboratory
For outstanding service to AAI and the immunology community as member and chair of the AAI Committee on Public Affairs, 2005–2012

AAI annually provides travel awards and grants to recognize the promise and bolster the professional development of young investigators, trainees, and under-represented minority scientists and trainees.

AAI-Life Technologies Trainee Achievement Awards
Chambers-eBioscience Memorial Award
Lustgarten-eBioscience Memorial Award
Pfizer-Showell Travel Award
AAI Early Career Faculty Travel Grants
Sponsored in part by BD Biosciences
AAI Undergraduate Faculty Travel Grants
AAI Laboratory Travel Grants
Sponsored in part by BD Biosciences
AAI Minority Scientist Travel Awards
Sponsored by FASEB MARC Program under a grant from NIGMS, NIH [FASEB MARC Program: T36-GM08059-30]
AAI Trainee Abstract Awards
Sponsored in part by BD Biosciences
AAI Trainee Poster Awards

For information on all AAI Awards, visit www.aai.org/Awards
**IMMUNOLOGY 2013™ OPENING NIGHT WELCOME RECEPTION**

Generously sponsored by eBioscience, An Affymetrix Company

**FRIDAY, MAY 3, 7:00 PM – 9:00 PM**
**ROOFTOP GARDEN, HAWAII CONVENTION CENTER**

The Opening Night Welcome Reception opens the historic AAI Centennial Celebration! Come directly from the President’s Address to the stunning Rooftop Garden of the Hawaii Convention Center to reunite with friends, make new acquaintances, enjoy the spectacular beauty of Hawaii, and plan your week.

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**PRESIDENT’S SERVICE APPRECIATION RECEPTION**

Generously sponsored by BioLegend

**SUNDAY, MAY 5**

7:00 PM – 8:30 PM

At this important event, AAI leadership honors the association’s dedicated member volunteers—the committee members, editors, mentors, instructors, and others—who work on the membership’s behalf throughout the year by giving generously of their time in support of the AAI mission. **Open to 2012–2013 AAI volunteers, by invitation only.**

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**AAI NEW MEMBER BREAKFAST**

**SATURDAY, MAY 4, 6:45 AM – 7:30 AM**

AAI wishes to welcome new Regular and Trainee members joining AAI for the first time. AAI President Gail Bishop and other AAI leaders look forward to meeting you personally. Please join us for light refreshments and casual conversation. **Event by invitation only.**

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**IMMUNOLOGY 2013™ GALA AAI CENTENNIAL CELEBRATION LUAU**

Generously sponsored by BioLegend

**MONDAY, MAY 6, 6:30 PM – 9:00 PM**
**HILTON HAWAIIAN VILLAGE, GREAT LAWN**

The IMMUNOLOGY 2013™ Gala will be an enchanting evening honoring the 100th anniversary of AAI. You’ll revel in the splendor and soft breezes of the lagoon setting while feasting sumptuously on our Polynesian luau buffet. Your options during the evening can include learning how to make leis, weave palms, and, of course, hula. Festivities will also include the “Escape to Paradise” program, featuring vibrant Hawaiian singers and colorfully costumed dancers whose precision movements portray the proud history of the Hawaiian people. Capping this most memorable evening will be a magnificent display of fireworks across the evening sky. **Meeting badge required for entry. Tickets required for guests.**
The Importance of Communicating Science in an Era of Doubters and Deniers

Chair:
Elizabeth J. Kovacs, Loyola University Chicago; Chair, AAI Committee on Public Affairs

Speakers:
Joe Palca
Science Correspondent, NPR
Will you listen to me if I pay you $1,000?

Olivera (Olja) J. Finn
University of Pittsburgh School of Medicine
Do scientists misunderstand the public?
Rules of engagement

As scientists, we conduct research not simply for the thrill of discovery but in the fervent hope that our findings will one day improve human and/or animal health. But our work—and the entire scientific enterprise—depends on the federal funding that flows from taxpayer dollars. And many taxpayers do not understand what we do, while others doubt fundamental scientific theories. We must communicate better what we do, what it means, and why it matters to the public. In this session, NPR Science Correspondent Joe Palca and Olja Finn, former AAI president, will share their views on, and experiences with, communicating science and discuss the challenges of bringing important scientific information to lay audiences. Attendees will have the opportunity to ask questions.

Immunotherapy: Past, Present, and Future

Chairs:
Robert L. Modlin, UCLA
Anna Karolina Palucka, Baylor Institute for Immunology Research and Mount Sinai School of Medicine

Speakers:
Robert L. Modlin, UCLA, The history of adjuvants
Anna Karolina Palucka, Baylor Institute for Immunology Research and Mount Sinai School of Medicine
Reprogramming the immune system via dendritic cells
Lawrence Steinman, Stanford University
Antigen-specific therapy for autoimmune disease: experience in humans
Marsha Wills-Karp, Johns Hopkins Bloomberg School of Public Health
Use of biologics in the treatment of asthma
Thomas A. Waldmann, NCI, NIH
The roles of IL-2 and IL-15 in the life and death of lymphocytes: implications for immunotherapy

A major goal of immunology research is to develop new strategies to prevent and treat disease. This session will focus on advances in immunotherapy with relevance to infectious, autoimmune, neoplastic, and allergic disease.

Careers in Biotech: Panel Discussion and Networking

Chair:
Steven M. Varga, University of Iowa

Panelists:
Kerry A. Casey, Scientist I, MedImmune
Michael P. Crowley, Director, Business Development, Genentech, Inc.
Jonathan A. Deane, Research Investigator II, Genomics Institute of the Novartis Research Foundation
Joanne L. Viney, Vice President, Immunology Research, Biogen Idec

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

AAI Education Committee & AAI Committee on the Status of Women

Careers in Science Roundtable
SUNDAY, MAY 5, 1:00 PM – 2:00 PM

Chair:
Scheherazade Sadegh-Nasseri, Johns Hopkins University School of Medicine; Chair, AAI Committee on the Status of Women

Registration Fee: $20 (Lunch included)

At this always-popular session, you will have the opportunity to meet with scientists at your own career stage and with more experienced scientists. Students are invited to participate in this program 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. Choose from topics related to the environment in which you work (academic research, biotech industry, governmental agencies), the transitions between specific career stages, or issues in balancing career and family in any career path. Don’t miss this great networking opportunity!

Discussion topics and table leaders:

- Research Careers in Academia
  - Graduate Student to Postdoc: finding a postdoc, interviewing
    Table Leaders: Michele M. Kosiewicz, University of Louisville; Michelle A. Parent, University of Delaware
  - Postdoc to PI: finding a position, interviewing, negotiating, lab start-up
    Table Leaders: Carolina B. Lopez, University of Pennsylvania School of Veterinary Medicine; Shabana A. Khader, Children’s Hospital of Pittsburgh, UPMC
  - New PI: attracting students and postdocs, preparing for tenure
    Table Leader: Nilabh Shastri, University of California, Berkeley
  - So I Won’t Get Tenure: now what?
    Table Leader: Virginia Shapiro, Mayo Clinic
  - Undergraduate Institutions: finding the balance in teaching, doing research
    Table Leaders: James E. Riggs, Rider University; Devavani Chatterjea, Macalaster College

- Mentoring Effectively
  - Table Leaders: Janice S. Blum, Indiana University School of Medicine; Dorina Avram, Albany Medical College

- Networking Skills
  - Table Leader: Donna L. Farber, Columbia University Medical Center

- Career and Family: time management, family leave, professional couples
  - Table Leaders: Scheherazade Sadegh-Nasseri, Johns Hopkins University School of Medicine; Susan Kovats, Oklahoma Medical Research Foundation

- Careers in Biotech and Industry: moving from academia to industry and visa versa
  - Table Leader: Mary E. Kein, Genentech

- Careers at Governmental Agencies (FDA/NIH/USDA/CDC)
  - Table Leaders: Carol H. Pontzer, NCCAM, NIH; A. Andrew Hurwitz, NCI, NIH

- Non-research Careers: focus for 2013, science writing
  - Table Leaders: Jamie D. K. Wilson, Nature Immunology; Kaylene J. Kenyon, The Journal of Immunology

- The Physician Scientist: balancing clinical and research duties
  - Table Leader: Marcus R. Clark, University of Chicago

AAI Membership Committee

New Member Breakfast
SATURDAY, MAY 4, 6:45 AM – 7:25 AM

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

AAI Minority Affairs Committee

Careers and Networking Roundtable
SATURDAY, MAY 4, 1:00 PM – 2:30 PM

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

Registration Fee: $20 (Lunch included)

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!

Discussion topics and table leaders:

- Grad Student: finding a mentor; taking aim at postdoc training
  - Table Leaders: Gregory B. Carey, University of Maryland, Baltimore; Santiago Partida-Sanchez, Nationwide Children’s Hospital

- Postdoc: finding a mentor; taking aim at a faculty position
  - Table Leaders: José Conejo-Garcia, Wistar Institute; José A. Guevara-Patino, Loyola University Chicago; Margaret S. Bynoe, Cornell University

- Junior Faculty: preparing for promotion and tenure
  - Table Leaders: Adriana T. Larregina, University of Pittsburgh; Esteban Celis, Moffitt Cancer Center, University of South Florida

- Academia or Industry: how to decide (or switch sides)
  - Table Leader: Jonathan A. Deane, Genomics Institute of the Novartis Research Foundation

- Government Agency Careers: CDC, FDA, NIH
  - Table Leader: Cherie L. Butts, Biogen Idec

- Non-research Careers: science journalism, non-profits, patent law, biomedical entrepreneurship
  - Table Leader: John Emrich, AAI

AAI Minority Affairs Committee Guest Lecture
MONDAY, MAY 6, 2:00 PM – 3:00 PM

Generously supported through a grant to the Federation of American Societies for Experimental Biology (FASEB) from the National Institute of General Medical Sciences, NIH [FASEB MARC Program: T36-GM08059-30]

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

Speaker:
Esteban Celis, Moffitt Cancer Center, University of South Florida
The long road to effective peptide vaccines for cancer: learning from infectious diseases and autoimmunity
AAI COMMITTEE-SPONSORED SESSIONS

AAI Publications Committee Symposium

Editor's Choice: The JI 2012
SATURDAY, MAY 4, 1:00 PM – 3:00 PM

Chair:
Jeremy M. Boss, Emory University; Editor-in-Chief, The Journal of Immunology

Speakers:
Mark H. Kaplan, Indiana University School of Medicine
Transcriptional regulation in Th9 cells

Jane H. Buckner, Benaroya Research Institute at Virginia Mason
Genetic variants associated with autoimmunity result in altered B cell homeostasis and function

Hirohito Kita, Mayo Clinic Rochester
Innate type 2 lymphoid cells in immunity and allergic airway inflammation

Emily Corse, MD Anderson Cancer Center
Expression of Helios in peripherally induced Foxp3+ regulatory T cells

This symposium will feature speakers whose work, published in The Journal of Immunology in 2012, was selected by the editors as outstanding reports of general interest to the immunology community. The authors will give a brief overview of the published results and then bring the audience up to date on research carried out on these topics since the articles appeared.

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

Natural Animal Models of Human Disease
MONDAY, MAY 6, 1:00 PM – 3:00 PM

Chairs:
Simon M. Barratt-Boyes, University of Pittsburgh; Chair, AAI Veterinary Immunology Committee
Susan D. Eicher, Livestock Behavior Research Unit, ARS, USDA

Speakers:
Wendy C. Brown, Washington State University College of Veterinary Medicine
Dysregulated T cell responses induced by a persistent bacterial pathogen of cattle

Guido Silvestri, Yerkes National Primate Research Center, Emory University School of Medicine
Understanding AIDS by studying natural SIV infections

Daniel R. Perez, University of Maryland, College Park
Of men, pigs, birds, and...flu

Carol Reinero, University of Missouri College of Veterinary Medicine
What spontaneous and experimental feline asthma can teach us about human asthma

Traditional rodent models often do not recapitulate human disease, and performing research directly in humans presents its own set of practical limitations and ethical concerns. Research in nonhuman primates and domestic animal species fills this void and has provided major advances in our understanding of diseases of both humans and animals. This symposium will illustrate the value of a range of natural animal models of human infectious and immunologic diseases.
**National Institute of Allergy and Infectious Diseases (NIAID) Symposium**

**Current Progress: Development and Maintenance of Long-Lived Plasma Cells**

**SUNDAY, MAY 5, 1:00 PM – 3:00 PM**

**Chairs:**
Stacy E. Ferguson, NIAID, NIH
Michael G. McHeyzer-Williams, Scripps Research Institute

**Speakers:**
Christopher C. Goodnow, Australia National University
IgD, anergy, and the germinal center versus plasma cell decision
Michael G. McHeyzer-Williams, Scripps Research Institute
Programming effective plasma cell responses
David M. Allman, University of Pennsylvania
Role of short-lived bone marrow plasma cells in long-lived immunity
Jan Erikson, Wistar Institute
Plasma cell induction following respiratory tract infection
Discussion with all participants, Discussion of gaps in understanding plasma cell biology

**National Institute of Environmental Health Sciences (NIEHS) Symposium**

**Impact of Environmental Exposures on Immune Function**

**SATURDAY, MAY 4, 1:00 PM – 3:00 PM**

**Chairs:**
Michael C. Humble, NIEHS, NIH
Prakash Nagarkatti, University of South Carolina at Columbia

**Speakers:**
Scott W. Burchiel, University of New Mexico Health Sciences Center
Immunosuppression associated with the combined exposure to polycyclic aromatic hydrocarbons (PAHs) and arsenite
Mitzi Nagarkatti, University of South Carolina at Columbia
TCDD: an environmental toxicant reveals novel pathways of immune regulation
Guido Silvestri, Yerkes National Primate Research Center, Emory University School of Medicine
Understanding AIDS by studying natural SIV infections
Guido Silvestri, Yerkes National Primate Research Center, Emory University School of Medicine
Understanding AIDS by studying natural SIV infections
Daniel R. Perez, University of Maryland, College Park
Of men, pigs, birds, and...flu
Carol Reiner, University of Missouri College of Veterinary Medicine
What spontaneous and experimental feline asthma can teach us about human asthma

**National Institute on Aging (NIA) Symposium**

**Aging, Cancer, and Immunosenescence**

**MONDAY, MAY 6, 9:45 AM – 11:45 AM**

**Chairs:**
Rebecca A. Fuldner, NIA, NIH
Graham Pawelec, University of Tübingen

**Speakers:**
Graham Pawelec, University of Tübingen
Is there an “Immune Risk Profile” in cancer and aging?
Judith Campisi, Buck Institute for Research on Aging
Inflammation caused by senescent cells: a link between age-related cancer and degeneration?
Tyler J. Curiel, University of Texas Health Science Center, San Antonio
Tailoring age-optimized cancer immunotherapy: early insights
Marcel R. M. van den Brink, Memorial Sloan-Kettering Cancer Center and Weill Medical College of Cornell University
Strategies to reverse thymic involution

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

**Natural Animal Models of Human Disease**

**MONDAY, MAY 6, 1:00 PM – 3:00 PM**

**Chairs:**
Simon M. Barratt-Boyes, University of Pittsburgh; Chair, AAVI Veterinary Immunology Committee
Susan D. Eicher, Livestock Behavior Research Unit, ARS, USDA

**Speakers:**
Wendy C. Brown, Washington State University College of Veterinary Medicine
Dysregulated T cell responses induced by a persistent bacterial pathogen of cattle
Guido Silvestri, Yerkes National Primate Research Center, Emory University School of Medicine
Understanding AIDS by studying natural SIV infections
Daniel R. Perez, University of Maryland, College Park
Of men, pigs, birds, and...flu
Carol Reiner, University of Missouri College of Veterinary Medicine
What spontaneous and experimental feline asthma can teach us about human asthma
**American Society of Transplantation (AST) Symposium**

**Achieving and Detecting Tolerance in Transplant Patients**

**SUNDAY, MAY 5, 1:00 PM – 3:00 PM**

**Chairs:**
- Jonathan S. Maltzman, University of Pennsylvania
- Mandy L. Ford, Emory University

**Speakers:**
- Bruce R. Blazar, University of Minnesota
  - Regulatory T cell therapy in clinical bone marrow transplantation
- Sandy Feng, University of California, San Francisco
  - Withdrawal of immunosuppression from the operationally tolerant patient
- Joseph R. Leventhal, Northwestern University
  - Inducing tolerance in mismatched kidney transplant recipients
- Kenneth A. Newell, Emory University School of Medicine
  - Identifying tolerance signatures in kidney transplant recipients

**Australasian Society for Immunology (ASI) Symposium**

**Lymphocyte Differentiation following Immunization**

**SUNDAY, MAY 5, 1:00 PM – 3:00 PM**

**Chairs:**
- Meredith O’Keefe, Burnet Institute
- John Stambas, Deakin University

**Speakers:**
- Scott N. Mueller, University of Melbourne
  - Dynamic intravital imaging of tissue-resident memory T cells during immunosurveillance and recall responses
- Kim L. Good-Jacobson, Walter & Eliza Hall Institute
  - c-Myb is required for plasma cell migration to the bone marrow during an immune response
- Jonathan M. Coquet, Flanders Institute, Ghent
  - The CD27 and CD70 costimulatory pathway inhibits effector function of Th17 cells and attenuates associated autoimmunity
- Susan Johnson, University of Geneva
  - Functionally "exhausted" CD8+ T cell populations help resolve chronic viral infection
- Stephanie Gras, Monash University
  - Structural basis of viral escape in influenza

**Canadian Society for Immunology (CSI) Symposium**

**Cytokine Regulation of Immunity**

**SUNDAY, MAY 5, 9:45 AM – 11:45 AM**

**Chairs:**
- Ninan Abraham, University of British Columbia
- Nathalie Labrecque, Université de Montréal

**Speakers:**
- Ninan Abraham, University of British Columbia
  - Immune regulation by the IL-7-related cytokines
- Valérie Abadie, Sainte-Justine Hospital Research Centre
  - Impact of IL-15 dysregulation on celiac disease pathogenesis
- Georgia Perona-Wright, University of British Columbia
  - Cytokine versus receptor in the control of cytokine signaling
- Christopher J. Paige, Ontario Cancer Institute
  - IL-12 conducts an anti-cancer quartet
- Nathalie Labrecque, Université de Montréal
  - Circadian regulation of cytokine production by T cells

**Chinese Society of Immunology (ChSI) Symposium**

**Molecular Regulation of Innate Response and Inflammation**

**SATURDAY, MAY 4, 3:15 PM – 5:15 PM**

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

**Speakers:**
- Xuetao Cao, Chinese Academy of Medical Sciences, Beijing
  - Regulation of innate signaling in immunity and inflammation
- Zhengfan Jiang, Peking University
  - Regulation of virus-induced innate immunity
- Youcun Qian, Institute of Health Sciences, Chinese Academy of Sciences, and Shanghai Jiaotong University School of Medicine
  - IL-17 family cytokines and inflammation
- Wenwei Tu, University of Hong Kong
  - Gammadelta T cells: unpolished sword in human antiviral immunity
- Jiyan Zhang, Chinese Academy of Military Medical Sciences
  - RACK1 in cytokine production and inflammation

**German Society for Immunology (DGfI) Symposium**

**Innate Lymphocytes in Health and Disease**

**SUNDAY, MAY 5, 3:15 PM – 5:15 PM**

**Chairs:**
- Hans-Martin Jäck, University of Erlangen
- Andreas Radbruch, Rheumatism Research Center (DRFZ), Berlin

**Speakers:**
- Andreas Diefenbach, University of Freiburg
  - Transcriptional control of innate lymphocyte fate decision
- Barbara Rehermann, NIDDK, NIH
  - Natural killer cells in hepatitis C virus infection
- Immo Prinz, Medical University Hannover
  - Immune regulation by interleukin-17-producing γδ T cells
- Dieter Kabelitz, University of Kiel
  - Plasticity of human Vγ9Vδ2 T cells
International Cytokine and Interferon Society (ICIS) Symposium

Interferons and Innate Immunity
TUESDAY, MAY 7, 9:45 AM – 11:45 AM

Chairs:
- Eleanor N. Fish, University Health Network and University of Toronto
- Bryan R. G. Williams, Monash Institute of Medical Research

Speakers:
- Eleanor N. Fish, University Health Network and University of Toronto
  Type I IFNs: master regulators of the immune response to virus infection
- Meredith O’Keeffe, Burnet Institute
  The role of IFN-λ in dendritic cell activation
- Iain L. Campbell, University of Sydney
  Type I IFN signaling in the host response to virus infection
- Hilario Ramos, University of Washington
  The convergence of IL-1 and type I IFN signaling in antiviral immunity
- Bryan R. G. Williams, Monash Institute of Medical Research
  Regulation of IFN and cytokine signaling and action of PLZF
- Dane Parker, Columbia University Medical Center
  Type I IFNs and Staphylococcus aureus
- Laurel L. Lenz, National Jewish Health and University of Colorado Denver
  Regulation of myeloid cell responsiveness to IFN-γ by type I IFNs

Japanese Society for Immunology (JSI) Symposium

Molecular Basis of Chronic Inflammation
SUNDAY, MAY 5, 3:15 – 5:15 PM

Chairs:
- Takashi Saito, RIKEN Center for Allergy and Immunology
- Toshinori Nakayama, Chiba University

Speakers:
- Kensuke Miyake, University of Tokyo
  TLR logistics by Unc93B1 as a mechanism regulating autoimmunity
- Akira Shibuya, University of Tsukuba
  Inhibitory immunoreceptors in inflammatory diseases
- Kiyoshi Takeda, Osaka University
  Regulation of gut homeostasis by innate immunity
- Toshinori Nakayama, Chiba University
  Generation and maintenance of pathogenic memory CD4 T cells

Korean Association of Immunologists (KAI) Symposium

Regulatory Mechanism of Immune Homeostasis
MONDAY, MAY 6, 9:45 AM – 11:45 AM

Chairs:
- Myung-Shik Lee, Samsung Medical Center
- Eun Sook Hwang, Ewha Womans University

Speakers:
- Myung-Shik Lee, Samsung Medical Center
  Autophagy, inflammation, and metabolism
- Eun-Kyeong Jo, Chungnam National University School of Medicine
  Autophagy and innate immunity in mycobacterial infection
- Chang-Duk Jun, Gwangju Institute of Science and Technology (GIST)
  IGSF4/CADM1 regulates both T cell activation and homing
- Eun Sook Hwang, Ewha Womans University
  Crucial roles of Lysine 313 of T-box in T-bet
- Sin-Hyeog Im, Gwangju Institute of Science and Technology (GIST)
  Role of NFAT1 transcription factor in experimental myasthenia gravis

Mexican Society for Immunology (MSI) Symposium

Development of Novel Adjuvants and Immunomodulators
SUNDAY, MAY 5, 3:15 PM – 5:15 PM

Chairs:
- Constantino López-Macías, National Medical Centre “Siglo XXI,” Mexican Social Security Institute
- Laura Bonifaz, National Medical Centre “Siglo XXI,” Mexican Social Security Institute

Speakers:
- Laura Bonifaz, National Medical Centre “Siglo XXI,” Mexican Social Security Institute
  Skin immunization using the cholera toxin as adjuvant
- Gladys Fragoso, National Autonomous University of Mexico
  The cysticeri-derived peptide GK1 is able to modulate the immune response: considerations of its adjuvant properties for vaccine development
- Ignacio Terrazas, National Autonomous University of Mexico
  Regulation of inflammatory diseases by cestode antigens: multiple receptors and a possible common pathway
- Mayra Pérez, National School of Biological Sciences, National Polytechnic Institute (Mexico)
  Present and future of immunomodulatory peptides obtained from dialyzable leukocyte extracts
- Constantino López-Macías, National Medical Centre “Siglo XXI,” Mexican Social Security Institute
  Use of Salmonella porins as novel adjuvants for vaccine development
**Society for Glycobiology (SFG) Symposium**

**Glycan Recognition in Regulation of Innate and Adaptive Immunity**

*SUNDAY, MAY 5, 9:45 AM – 11:45 AM*

**Chair:** James C. Paulson, Scripps Research Institute

**Speakers:**
- Dennis R. Burton, Scripps Research Institute
- Gabriel A. Rabinovich, Institute of Biology and Experimental Medicine (IBYME-CONICET)
- Yvette van Kooyk, Vrije Universiteit Medical Center Amsterdam
- Matthew S. Macauley, Scripps Research Institute
- Jeffrey V. Ravetch, Rockefeller University

**Society for Immunotherapy of Cancer (SITC) Symposium**

**Cancer Immunotherapy 2013: Overcoming Barriers to Adaptive Immunity**

*SATURDAY, MAY 4, 9:45 AM – 11:45 AM*

**Chairs:**
- Thomas F. Gajewski, University of Chicago
- Francesco M. Marincola, NIH

**Speakers:**
- Robert D. Schreiber, Washington University School of Medicine
- Nicholas P. Restifo, NCI, NIH
- Philip D. Greenberg, University of Washington
- Thomas F. Gajewski, University of Chicago
- Julie R. Brahmer, Johns Hopkins University School of Medicine

**Society for Natural Immunity (SNI) Symposium**

**Natural Killer Cells: Evolution, Development, Differentiation, Function, and Clinical Use**

*SATURDAY, MAY 4, 1:00 PM – 3:00 PM*

**Chairs:**
- Hans-Gustaf Ljunggren, Karolinska Institute
- Sarah Cooley, University of Minnesota

**Speakers:**
- Peter Parham, Stanford University School of Medicine
- Ashley Moffett, University of Cambridge
- Karl-Johan Malmberg, Karolinska Institute
- Sarah Cooley, University of Minnesota

**Society of Mucosal Immunology (SMI) Symposium**

**Innate Immunity at Mucosal Surfaces**

*Partially supported by Mucosal Immunology Studies Team (MIST)*

*MONDAY, MAY 6, 1:00 PM – 3:00 PM*

**Chairs:**
- Ifor Williams, Emory University
- Joanne Viney, Biogen Idec

**Speakers:**
- Marco Colonna, Washington University School of Medicine
- Hiroshi Ohno, RIKEN Research Center for Allergy and Immunology
- Yasmine Belkaid, NIAID, NIH
- Charles L. Bevins, University of California, Davis

**The Obesity Society (TOS) Symposium**

**Immunometabolism: The Role of the Immune System in Obesity and Type 2 Diabetes**

*SATURDAY, MAY 4, 9:45 AM – 11:45 AM*

**Chairs:**
- Barbara S. Nikolajczyk, Boston University School of Medicine
- Gerald V. Denis, Boston University School of Medicine

**Speakers:**
- Carey N. Lumeng, University of Michigan
- Alyssa Hasty, Vanderbilt University
- Barbara S. Nikolajczyk, Boston University School of Medicine
- Gerald V. Denis, Boston University School of Medicine
- Bonnie B. Blomberg, University of Miami Miller School of Medicine
CAREER DEVELOPMENT PROGRAMS

Through workshops, roundtables, and one-on-one counseling, IMMUNOLOGY 2013™ provides critical career development programs. Career sessions and services this year include:

- Careers in Biotech: Panel Discussion and Networking
- Careers in Science Networking Roundtables (2)
- How to Convert Your CV into a Resumé (followed by one-on-one counseling)
- Interviewing for a Job
- Secrets for a Successful Postdoctoral Fellowship
- Online and onsite Jobs Board free to meeting registrants and exhibitors

Careers in Biotech:
Panel Discussion and Networking
SATURDAY, MAY 4, 6:30 PM – 8:00 PM
Chair:
Steven M. Varga, University of Iowa
Panelists:
Kerry A. Casey, Scientist I, MedImmune
Michael P. Crowley, Director, Business Development, Genentech, Inc.
Jonathan A. Deane, Research Investigator II, Genomics Institute of the Novartis Research Foundation
Joanne L. Viney, Vice President, Immunology Research, Biogen Idec

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

Networking Roundtables

Careers and Networking Roundtable
Sponsored by the AAI Minority Affairs Committee
SATURDAY, MAY 4, 1:00 PM – 2:30 PM
Chair:
Adriana T. Larrejina, University of Pittsburgh; Chair, AAI Minority Affairs Committee

Registration Fee: $20 (Lunch included)

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.

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

Table leaders: see AAI Committee-sponsored Sessions

Careers in Science Roundtable
Sponsored by the AAI Education Committee & AAI Committee on the Status of Women
SUNDAY, MAY 5, 1:00 PM – 2:00 PM
Chair:
Scheherazade Sadegh-Nasser, Johns Hopkins University School of Medicine; Chair, AAI Committee on the Status of Women

Registration Fee: $20 (Lunch included)

At this always-popular session, you’ll have the opportunity to meet with scientists at your own career stage and with more experienced scientists to explore specific career issues important to men and women in science today. Learn what others are thinking and gain insights into issues you are confronting in your own situation. Choose from topics related to the environment in which you work (academic research, biotech industry, governmental agencies), the transitions between specific career stages, or issues in balancing career and family in any career path. Don’t miss this great networking opportunity!

Discussion topics:
- Research Careers in Academia
  - Graduate Student to Postdoc: finding a postdoc, interviewing
  - Postdoc to PI: finding a position, interviewing, negotiating, lab start-up
  - New PI: attracting students and postdocs, preparing for tenure
  - So I Won’t Get Tenure: now what?
  - Undergraduate Institutions: finding the balance in teaching, doing research
- Mentoring Effectively
- Networking Skills
- Career and Family: time management, family leave, professional couples
- Careers in Biotech and Industry: moving from academia to industry and vice versa;
- Careers at Governmental Agencies (FDA/NIH/USDA/CDC)
- Non-research Careers: focus for 2013, science writing
- The Physician Scientist: balancing clinical and research duties

Table leaders: see AAI Committee-sponsored Sessions

How to Convert Your CV into a Resumé
SATURDAY, MAY 4, 10:30 AM – 11:30 AM
Speaker:
Derek Haseltine, Director, Career Services, George Washington University

For anyone seeking a job outside of academe, how you present yourself on paper is critical. A well-prepared résumé can make all the difference in securing 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 to make a good impression. In this special career development session, attendees will be instructed in how to transform their CVs into professional résumés. Small breakout sessions for individual consulting will follow from 1 PM to 3 PM. Bring your CV!
CAREER DEVELOPMENT PROGRAMS

Interviewing for a Job
SUNDAY, MAY 5, 8:00 AM – 9:00 AM
Speaker:
Derek Haseltine, Director, Career Services, George Washington University
This session will be focused on tips and techniques to help you successfully navigate the interview process. Emphasis will be on how you can present yourself in the best possible light. You will also learn how to respond to unexpected questions. This session is open to anyone but is especially intended for student and postdoctoral attendees.

Secrets for a Successful Postdoctoral Fellowship
SUNDAY, MAY 5, 10:00 AM – 11:30 AM
Speaker:
Bill Lindstaedt, Director, Office of Career and Professional Development, University of California, San Francisco
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.
POSTERS

The most interactive part of the meeting!
Discuss data and research issues firsthand with authors at the Poster Sessions. Posters will be displayed Saturday through Monday in the Hawaii Convention Center Kamehameha II & III Exhibit Halls from 9:30 AM to 3:30 PM.

- Dedicated Daily Poster Presentations from 11:45 AM to 1:00 PM!
  No concurrent symposia, presentations, or other sessions will be held during the poster presentations at this time.
- Accepted posters may be displayed for the duration of the meeting! Authors are encouraged to leave their posters up throughout IMMUNOLOGY 2013™.


EXHIBITOR WORKSHOPS

Take advantage of the opportunity provided by the Exhibitor Workshops to explore exhibitors’ latest technologies, products, and services. Workshops are planned and conducted by exhibitors; the listing of these workshops does not constitute endorsement of any products or services by AAI.

PROMOTIONAL VIDEOS

Be sure to catch the promotional videos of exhibitors’ new products. Videos will be run on video monitors located throughout the convention center.

Promotional videos are planned and created by exhibitors; the listing of these videos does not constitute endorsement of any products or services by AAI.

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 6, at 11:00 AM!
You’ll find your Passport in your meeting bag or you may pick one up at the AAI.
Saturday, May 4

7:30 AM – 9:30 AM  
Innate Immunity and Viral Vaccines  
Myeloid Cells in Anti-microbial Defense  
Regulation of T Cells in Autoimmunity  
Restoring Immunocompetence in the Tumor Microenvironment  
Toll-like Receptor Regulation  
Veterinary and Comparative Immunology

9:45 AM – 11:45 AM  
Antigen Processing and Presentation: Molecular Insights  
Cellular and Molecular Biology of the Innate Immune Response  
Costimulatory Pathways in Immunity and Tolerance  
Innate Control of Microbial Disease  
Interplay of Virus and Immune Effectors: Part 1  
T Cell Development and Maturation

1:00 PM – 3:00 PM  
Immune Regulation in Allergic Disease and Impact of Pathogens  
Immunotherapy and Vaccines: Infectious Diseases 1  
Pathogen-mediated Regulation of Immunity  
Technological Innovations in Immunology 1  
Therapeutic Approaches to Autoimmunity: Targeting Cytokines and Immune Regulators

3:15 PM – 5:15 PM  
Generation of Effector and Memory CD8 T Cells  
Germinal Centers and Tfh Cells in Autoimmunity  
Homeostasis and Aging of Lymphocytes  
Immunoregulatory Mechanisms  
Immunotherapy and Vaccines: Infectious Diseases 2  
Lymphocyte Adhesion: To Adhere or Not to Adhere

Sunday, May 5

7:30 AM – 9:30 AM  
Cancer Immunobiology  
Cytokine Signaling and Mechanisms  
Dynamics of T Cell and NK Cell Activation/Contraction during Viral Infection: Part 1  
HSCs and B Cell Development  
Human Immunodeficiencies and Genetics  
Immunosuppression by Myeloid and Dendritic Cells  
Immunotherapy and Vaccines: Infectious Diseases 3  
Therapeutic Approaches to Autoimmunity: Pharmacologic Interventions and their Mechanisms

9:45 AM – 11:45 AM  
Generation, Selection, and Function of B Cells  
Immunotherapy and Vaccines: Adoptive Transfer Approaches  
Innate Immunity and Autoimmunity 1  
Regulation of Immunity by the Host and Co-infections  
Respiratory Viruses and the Immune System: Part 1  
Therapeutic Approaches to Autoimmunity: Targeting APC and Costimulation

1:00 PM – 3:00 PM  
Dendritic Cell Vaccines  
Immunotherapy and Vaccines: Basic Science  
Innate Defense Mechanisms  
Lymphocytes and Lymphoid Cells in Innate Immunity  
Microbiota and Mucosal Homeostasis

Monday, May 6

7:30 AM – 9:30 AM  
Cytokines in Cancer, Transplantation, and Autoimmunity  
Generation and Death of Effector, Memory, and Regulatory CD4 T Cells 1  
Innate Cytokines and Mediators in Promotion of Allergic Inflammation  
New Mechanisms of Pattern Recognition and Signaling  
Regulation of T Cell Effector Mechanisms: Relevance to Disease  
T Cell Subsets in Autoimmunity

9:45 AM – 11:45 AM  
Antigen Processing and Presentation: Understanding the Immune Response  
Crosstalk in Innate Immune Regulation  
Immunosuppression in the Tumor Microenvironment  
Inflammatory Cytokines and Chemokines  
Mast Cells in Allergic Inflammation  
Regulation of Lymphoid Function

1:00 PM – 3:00 PM  
Developments in Immunotherapy  
Dynamics of T cell Activation/Contraction during Viral Infection: Part 2  
Human Immunity in Cancer, Infection, and Inflammation  
Lymphocyte Trafficking to Paths Less Traveled  
Therapeutic Approaches to Autoimmunity: Targeting T cells and Tregs  
Transplantation and Alloimmunity

Tuesday, May 7

7:30 AM – 9:30 AM  
Antigen Processing and Presentation: Cellular Insights  
Mechanisms of T, NK, and NKT Lymphocyte Differentiation and Repertoire Selection  
Pathogens and Host Defense  
Regional and Systemic Innate Immune Responses  
Regulatory Mechanisms in Immune Cells  
Technological Innovations in Immunology 2

9:45 AM – 11:45 AM  
Control of Immune Effector Cells in Mucosal Tissues  
Generation and Death of Effector, Memory, and Regulatory CD4 T Cells 2  
Genetic Susceptibility to Autoimmunity  
HIV, AIDS, and the Immune System  
NK, NKT, and γδ T Cell Development  
T Cells and Microbes

12:00 PM – 2:00 PM  
Innate Immunity and Autoimmunity 2  
Models of Allergic Disease  
Respiratory Viruses and the Immune System: Part 2  
The Induction and Resolution of Inflammation in Epithelial Tissues  
Treg Cell Stability and Plasticity  
Tumor Microenvironment Modulation
AAI POSTER SESSIONS

The most interactive part of the meeting! Discuss data and research issues firsthand with authors at the Poster Sessions.

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Saturday, May 4

Antigen Processing and Presentation: Molecular Insights
Autoantibodies and Autoantigens
Autoimmune and Inflammatory Disease Pathogenesis
B Cell Signaling and Tolerance Regulation
Cancer Vaccines
Cytokine Regulation of Cancer, Autoimmunity, and Transplantation
Dendritic Cell Vaccines
Developments in Immunotherapy
Dynamics of T Cell Activation/Contraction during Viral Infection: Part 2
Generation and Death of Effector, Memory, and Regulatory CD8 T Cells
Genetics of Autoimmunity
Hematopoiesis and Immune System Development
Immunosuppression in the Tumor Microenvironment
Immunotherapy and Vaccines: Infectious Diseases
Innate Immune Responses to Viruses
Infectious Disorders and Vaccination
Innate Immune Response to Bacteria and Parasites
Leukocyte Trafficking
Mast Cells in Allergic Inflammation
Mechanisms of T, NK, and NKT Lymphocyte Differentiation and Repertoire Selection
Microbiota and Mucosal Homeostasis
Models of Allergic Disease
Molecular Mechanisms of Leukocyte Activation in Innate Immune Responses
Regulation of Lymphoid Function
Regulation of T Cell Effector Mechanisms
Respiratory Viruses and the Immune System: Part 1
Therapeutic Approaches to Autoimmunity: APCs and Tolerance
Therapeutic Approaches to Autoimmunity: Pharmacologic Interventions
Transplantation and Alloimmunity

Sunday, May 5

Antigen Processing and Presentation: Cellular Insights
Antigen Processing and Presentation: Understanding the Immune Response
Cellular and Molecular Biology of the Innate Immune Response
Costimulatory Pathways in Innate and Tolerance
Cytokines and Cellular Interactions

Cytokines and Chemokines in Inflammation and Immunity
Cytosolic Sensing and Inflammation
Generation of Effector and Memory CD8 T Cells
HIV, AIDS, and the Immune System
Homeostasis and Aging of Lymphocytes
Immune Regulation in Allergic Disease and Impact of Pathogens
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Leukocyte Adhesion
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T Cells and Microbes
Technological Innovations in Immunology 1
The Induction and Resolution of Inflammation in Epithelial Tissues
Therapeutic Approaches to Autoimmunity: Tackling Oxidative Stress, Vitamins, and Biochemistry
TLR Signaling and Function
Treg Cell Stability and Plasticity
Tumor Microenvironment Modulation
Veterinary and Comparative Immunology

Monday, May 6

Cancer Immunobiology
Control of Immune Effector Cells in Mucosal Tissues
Cytokines and Cellular Networks in Autoimmunity
Dynamics of T Cell and NK Cell Activation/Contraction during Viral Infection: Part 1
Generation, Selection, and Function of B Cells
Genetics and Immune-mediated Diseases
Immunotherapy and Vaccines: Adoptive Transfer Approaches
Immunotherapy and Vaccines: Basic Science
Immunotherapy and Vaccines: Infectious Diseases
Inflammation and Disease
Innate Cytokines and Mediators in Promotion of Allergic Inflammation

Interplay of Virus and Immune Effectors: Part 1
Lymphocytes and Lymphoid Cells in Innate Immunity
Mechanisms of Cytokine Regulation and Signaling
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Respiratory Viruses and the Immune System: Part 2
T and B Cell Receptor Signaling
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Technological Innovations in Immunology 2
Th17/IL-17 Cytokine Axis
Therapeutic Approaches to Autoimmunity: Targeting Costimulation
Therapeutic Approaches to Autoimmunity: Targeting Cytokines
Late Breaking Antigen Processing and Presentation
Late Breaking Basic Autoimmunity
Late Breaking Cellular Adhesion, Migration, and Inflammation
Late Breaking Cytokines and Chemokines and Their Receptors
Late Breaking Hematopoiesis and Immune System Development
Late Breaking Immediate Hypersensitivity, Asthma, and Allergic Responses
Late Breaking Immune Mechanisms of Human Disease
Late Breaking Immune System Regulation I
Late Breaking Immune System Regulation II
Late Breaking Immunotherapy and Vaccines
Late Breaking Innate Immune Responses and Host Defense: Cellular Mechanisms
Late Breaking Innate Immune Responses and Host Defense: Molecular Mechanisms
Late Breaking Lymphocyte Differentiation and Peripheral Maintenance
Late Breaking Microbial, Parasitic, and Fungal Immunology
Late Breaking Mucosal and Regional Immunology
Late Breaking Technological Innovations in Immunology
Late Breaking Therapeutic Approaches to Autoimmunity
Late Breaking Transplantation Immunology
Late Breaking Tumor Immunology
Late Breaking Veterinary and Comparative Immunology
Late Breaking Viral Immunology
# IMMUNOLOGY 2013™

AAI gratefully acknowledges the efforts of the Program Committee and AAI Abstract Programming Chairs for IMMUNOLOGY 2013™

## 2012–2013 AAI PROGRAM COMMITTEE

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<th>Institution</th>
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<td>University of Connecticut Health Center</td>
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## AAI ABSTRACT PROGRAMMING CHAIRS

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<th>ANTIGEN PROCESSING AND PRESENTATION</th>
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<tr>
<td>Marlene Bouvier</td>
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<td>Jeffrey C. Rathmell</td>
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<td>Margaret S. Bynoe</td>
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2013 Introductory Course in Immunology
July 13–18, 2013 • The University of Pennsylvania, Philadelphia, Pennsylvania
Director: Michael P. Cancro, Ph.D., University of Pennsylvania, Perelman School of Medicine
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 (July 13–15) is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. Part II (July 16–18) 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
Christopher A. Hunter, University of Pennsylvania School of Veterinary Medicine
Introduction to the Immune System
Kathleen E. Sullivan, Children’s Hospital of Philadelphia
Innate Immunity: Introduction to the Cells
Oriol J. Sunyer, University of Pennsylvania School of Veterinary Medicine
Complement
Igor E. Brodsky, University of Pennsylvania School of Veterinary Medicine
Innate Immunity: Introduction to Pattern Recognition and Intracellular Signaling
Jennifer A. Punt, Haverford College
Introduction to Adaptive Immunity
Terri M. Laufer, University of Pennsylvania, Perelman School of Medicine
MHC Restriction and Thymic Selection
Laurence C. Eisenlohr, Jefferson Medical College
Antigen Processing and Presentation
Edward M. Behrens, Children’s Hospital of Philadelphia
Dendritic Cells: The Bridge Between Innate and Adaptive Immunity
Jonathan D. Powell, Johns Hopkins University School of Medicine
Effector T Cell Differentiation and Response
Michael P. Cancro, University of Pennsylvania, Perelman School of Medicine
B Cell Activation and Humoral Immunity
Gary A. Koretzky, University of Pennsylvania, Perelman School of Medicine
Signaling in the Immune System
Andrew D. Luster, Massachusetts General Hospital
Trafficig of Immune Cells
Ethan M. Shevach, NIAID, NIH
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Cathryn Nagler, University of Chicago
Mucosal Immunology
David Artis, University of Pennsylvania, Perelman School of Medicine
Type 2 Immunity and Parasite Infections
Christopher A. Hunter, University of Pennsylvania School of Veterinary Medicine
Cytokines
Jonathan S. Maltzman, University of Pennsylvania, Perelman School of Medicine
Solid Organ Transplantation
Robert H. Vonderheide, University of Pennsylvania, Perelman School of Medicine
Tumor Immunology
Sunny Shin, University of Pennsylvania, Perelman School of Medicine
Immunity to Bacterial Pathogens
Carolina B. Lopez, University of Pennsylvania School of Veterinary Medicine
Immunity to Viruses
E. John Wherry, University of Pennsylvania, Perelman School of Medicine
Immunologic Memory
David B. Weiner, University of Pennsylvania, Perelman School of Medicine
Vaccination
Vijay K. Kuchroo, Brigham & Women’s Hospital, Harvard Medical School
Autoimmunity
Michael J. Lenardo, NIAID, NIH
Genetic Approaches to Immune-Mediated Diseases
Andrew C. Chan, Genentech, Inc.
Bench to Bedside to Bench: Current Issues in Immunology

For complete course details and registration, visit:
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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 http://marc.faseb.org.
2013 Advanced Course in Immunology
July 28–August 2, 2013 • Seaport World Trade Center, Boston, Massachusetts
Course 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
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
Shannon J. Turley, Dana Farber Cancer Institute, Harvard Medical School
Dendritic Cells
Frederick W. Alt, Children's Hospital Boston, Harvard Medical School
The Generation and Modification of Lymphocyte Antigen Receptor Genes
Shiv Pillai, Massachusetts General Hospital Cancer Center, Harvard Medical School
B Cell Development
Avinash Bhandoola, University of Pennsylvania, Perelman School of Medicine
T Cell Development
Thorsten R. Mempel, Massachusetts General Hospital, Harvard Medical School
Lymphocyte Trafficking
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
Brian A. Cobb, Case Western Reserve University
School of Medicine
Glycoimmunology
Charlotte S. Kaetzel, University of Kentucky College of Medicine
Mucosal Immunity
David M. Center, Boston University School of Medicine
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- **Job Postings.** Review the online AAI Jobs Board to identify postings you wish to pursue. (View new Advance Postings through April 22. Watch for On-site Postings displayed online or on paper in the AAI Booth!)

- **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 2013™ website. By including a contact email, you will receive inquiries directly.

- **Advance Postings.** Postings will be accepted as of February 1, 2013, and will remain online until the end of the meeting. To post job listings in advance of the meeting, contact meetings@aai.org. Advance Postings must be submitted to AAI by April 22, 2013.

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Reprinted from the AAI Newsletter, November 2009–May 2010
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(Schedule as of February 25, 2013)

SATURDAY, MAY 4

Longitudinal Study on Phenotypic Changes of Cryopreserved Murine T Cells Using BD FACSVerse™ System
BD Biosciences
10:00 AM – 11:00 AM  EXHIBITOR WORKSHOP ROOM 1
Presenter: Yibing Wang, Systems Validation Specialist
The elucidation of questions on whether the phenotypic lymphocytes can be equally cryopreserved following analysis by flow cytometry has been limited by the instrument-related variations over time. The BD FACSVerse™ system is a high-performance flow cytometer designed to address the need for instrument standardization. In this tutorial, we will present a workflow of using BD FACSVerse™ system in conducting a longitudinal study to demonstrate utilizing the build-in standardization capability of the system. Impact of cryopreservation on phenotypically different murine lymphocyte populations will be discussed.

A Novel RNA ISH Assay for Flow Cytometry
eBioscience, An Affymetrix Company
10:00 AM – 11:00 AM  EXHIBITOR WORKSHOP ROOM 2
Presenter: Sue Reynolds, Application Scientist
Designed for the detection of up to three RNA transcripts using flow cytometry, QuantiGene® Flow RNA Assay is an in situ hybridization assay that offers robust detection of RNA in individual cells and retains compatibility with antibody surface staining for simultaneous detection of protein. Incorporating dual oligonucleotide probe design with branched DNA signal amplification, this novel chemistry provides unique transcript expression in specific cell populations to develop biosignature profiles highly applicable in studying immune response.

Randox BIOCHIPS – Next Generation Microarrays
Randox Laboratories, Ltd.
11:00 AM 12:00 PM  EXHIBITOR WORKSHOP ROOM 1
Presenter: Nooshin Tabatabaei-Zavareh, Ph.D.
In this seminar, learn how to isolate mouse cells in as little as 15 minutes using Randox’s next-generation EasySep™ mouse cell isolation kits. This fast, easy and column-free immunomagnetic cell isolation system yields untouched, highly purified, functional and viable cells. Workshop highlights include an introduction to our Streptavidin RapidSphere™ technology as well as data on several new kits for the isolation of B cells, T cells, CD4+, CD8+, naïve CD4+ and naïve CD8+ T cells.

EVOS® FL Auto Cell Imaging System: The Power of Automation with the Simplicity of EVOS
Life Technologies, Inc.
11:00 AM – 12:00 PM  EXHIBITOR WORKSHOP ROOM 2
Presenter: Christopher Freson, MBA —TSS Manager
By removing the complexities of fluorescence microscopy, the affordable, intuitive EVOS® cell imaging systems have revolutionized the way researchers use fluorescence microscopy to image cells. The latest addition to the EVOS® line, the EVOS® FL Auto brings the simplicity of EVOS to an automated imaging platform capable of plate scanning, image stitching, and time lapse imaging with a simple touch of the monitor. This workshop will show you how simple and affordable it is to bring automated cell imaging to your lab with the EVOS® FL Auto Cell Imaging System.

Isolation of Mouse Immune Cells in as Little as 15 Minutes
STEMCELL Technologies, Inc.
12:00 PM – 1:00 PM  EXHIBITOR WORKSHOP ROOM 1
Presenter: Nooshin Tabatabaei-Zavareh, Ph.D.
In this seminar, learn how to isolate mouse cells in as little as 15 minutes using STEMCELL Technologies’ next-generation EasySep™ mouse cell isolation kits. This fast, easy and column-free immunomagnetic cell isolation system yields untouched, highly purified, functional and viable cells. Workshop highlights include an introduction to our Streptavidin RapidSphere™ technology as well as data on several new kits for the isolation of B cells, T cells, CD4+, CD8+, naïve CD4+ and naïve CD8+ T cells.

Measuring Immunological Synapse and Actin Organization Using the FlowSight Imaging Flow Cytometer
EMD Millipore
1:00 PM – 2:00 PM  EXHIBITOR WORKSHOP ROOM 1
Presenter: Haley Pugsley, Ph.D., Amnis , a division of EMD Millipore
Sustained adhesion of T cells to APCs and formation of the immunological synapse after T cell receptor stimulation are required for the antigen-specific response. Immunological synapses are often rare and therefore difficult to analyze by traditional microscopy methods. We employed the Amnis® FlowSight® imaging flow cytometer to collect imagery of large numbers of cells to assess the percentage of T cells involved in an organized immunological synapse. Using this method we demonstrate the image-based parameters used to assess the frequency of conjugates with an organized immunological synapse in an objective and statistically significant manner.
Modulating In Vivo T-cell Activation: 15 Color Immunophenotyping, Cytokine Analysis, & Cellular Redistribution
BioLegend
1:00 PM – 2:00 PM EXHIBITOR WORKSHOP ROOM 2
Presenters: Kelly Lundsten, Miguel Tam, Naomi Urbina, Jeanette Ampudia, John Ransom

Understanding the mechanisms for modulating t-cell and dendritic cell activation is important in our attempt to control key aspects of immune regulation. In this application, modulation of T cell-specific activation was achieved in vivo in a murine model through the injection of anti-CD3 low endotoxin azide free (LEAF) antibody with or without LEAF purified anti-PD-1H/VISTA co-injected. Using a 15 color flow cytometric assay and ELISA, the kinetics of activation were monitored through multiple cell surface markers, cytokine production and changes in cellular distribution in tissue were compared. We demonstrate that anti-PD-1H antibody administration successfully modulates CD3-induced T cell activation.

High-Throughput Sequencing of T Cell and B Cell Receptors Using immunoSEQ
Adaptive Bio Technologies Corporation
2:00 PM – 3:00 PM EXHIBITOR WORKSHOP ROOM 1
Presenters: Catherine M. Sanders, Senior Research Scientist

Adaptive Biotechnologies’ commercial product, immunoSEQ (www.immunoseq.com), combines the capabilities of a proprietary multiplex PCR methodology with ultra-high-throughput sequencing to provide exceptionally deep access to T cell and B cell receptor repertoires. This unprecedented capability is complemented by powerful analytical software tools that facilitate analysis, visualization, comparison and reporting of TCR or BCR sequence data. This technology is applicable in various fields including autoimmunity, infectious disease, vaccine development, allergy, oncology, drug development, and transplantation. Come learn how immune profiling can be applied to your research.

iRepertoire
2:00 – 3:00 PM EXHIBITOR WORKSHOP ROOM 2
Presenter: Jian Han, Ph.D.

Learn how to perform immune repertoire amplification using a proprietary multiplex PCR method! Our streamlined process is inclusive, semi-quantitative, and easy to use. From a typical blood sample, you will obtain 100,000–300,000 unique CDR3 sequences. Amplified libraries are pooled and submitted for NGS by powerful analytical software tools that facilitate analysis, visualization, comparison and reporting of TCR or BCR sequence data. This unprecedented capability is complemented by powerful analytical software tools that facilitate analysis, visualization, comparison and reporting of TCR or BCR sequence data. This technology is applicable in various fields including autoimmunity, infectious disease, vaccine development, allergy, oncology, drug development, and transplantation. Come learn how immune profiling can be applied to your research.

Incorporating Brilliant Violet Dyes into Multicolor Flow Cytometry Panels
BD Biosciences
10:00 AM – 11:00 AM EXHIBITOR WORKSHOP ROOM 1
Presenter: Maria C. Jaines, Senior Staff Scientist

Careful antibody panel design is a mandatory step for successful polychromatic flow cytometry. Factors to consider include instrument performance, level of antigen expression, fluorochrome brightness and spillover. Until recently the limited availability of bright fluorochromes created a challenge when designing panels aimed at identifying several low expressed antigens simultaneously. The development of the Brilliant Violet polymer dyes opens a new era in flow cytometry due to their considerable brightness as compared to conventional dyes, allowing for easier design and implementation of 10–12 color panels. Moreover, because of the brightness of these fluoros, the resolution of dim markers can be greatly improved allowing the development of high sensitivity immunophenotyping.

The Immune Epitope Database and Analysis Resource: Introduction and New Feature Highlights
Immune Epitope Database and Analysis Resource (IEDB)
10:00 AM – 11:00 AM EXHIBITOR WORKSHOP ROOM 2
Presenter: Kerrie Vaughan, Ph.D.

The Immune Epitope Database and Analysis Resource (IEDB) is a free online resource supported by NIAID. The IEDB contains data related to antibody and T cell epitopes for humans, non-human primates, rodents, and other animal species. Curation of peptidic and non-peptidic epitope data relating to all infectious diseases, allergens, autoimmunity diseases, and transplant/alloantigens is current and constantly being updated. The IEDB contains data derived from over 14,500 references. The IEDB also hosts tools to analyze data and predict T cell and antibody epitopes. The workshop will present an introduction to the website’s features and highlights of the latest IEDB release.

Randox BIOCHIPS — Next Generation Microarrays
Randox Laboratories, Ltd.
11:00 AM – 12:00 PM EXHIBITOR WORKSHOP ROOM 1
Presenter: Rajneesh Mathur, National Manager — US, MSc. Endocrinology, MBA

Biochip Arrays offers innovative multiplexing of patient samples using 96mm solid phase chips. Contrary to all the other Multiplex or ELISA methods — “Biochips do not require samples to be run in replicates”. Extensive off-the-shelf and custom panels are available to cover Cytokines, Adhesion Molecules and various other Biomarkers.

Advanced Technology for Improving the Development of Monoclonal Antibodies and DNA Vaccine Delivery
BTX Harvard Apparatus
11:00 AM – 12:00 PM EXHIBITOR WORKSHOP ROOM 2
Presenter: Robin Butler, Business Development Manager

BTX advanced technologies effectively improve monoclonal antibody production by 10-fold compared to traditional methods and increase DNA vaccine uptake and gene expression for overall improved immune responses in vivo.
Additional assays also allow for obtaining information on activation of CD4 T cells, CD8 T cells or B cells in whole blood or PBMC samples. Those assays developed for the identification and enumeration of antibodies with or without LEAF purified anti-PD-1H/VISTA co-injected with or without LEAF purified anti-PD-1H/VISTA co-injected. We used the Amnis® ImageStreamMark II imaging flow cytometer to collect large and statistically significant populations of images of synapse complexes. We evaluated the specific location of the adhesion and signaling molecules LFA-1 and Lck within the immunological synapse complex in T cells when presented with SEB, as well as T-cell activation via measurement of nuclear localization of NFkB in the T-cell.

Modulating In Vivo T-cell Activation: 15 Color Immunophenotyping, Cytokine Analysis, & Cellular Redistribution
BioLegend
1:00 PM – 2:00 PM EXHIBITOR WORKSHOP ROOM 2
Presenters: Kelly Lundsten, Miguel Tam, Naomi Urbina, Jeanette Ampudia, John Ransom
Understanding the mechanisms for modulating T cell activation and inhibiting activated dendritic cell migration is important in our attempt to control key aspects of T cell regulation, from how to most effectively combat immune response dysregulation to the suppression of transplant rejection. The efficacy of models for T cell activation and suppression can vary in vivo vs. in vitro. Modulation of T cell-specific activation was achieved in vivo in a murine model through the injection of anti-CD3 low endotoxin azide free (LEAF) antibody with or without LEAF purified anti-PD-1H/VISTA co-injected. Using a 15 color flow cytometric assay, the kinetics of activation were monitored through multiple cell surface markers, and changes in cellular distribution were compared.

Novel Benchtop Solutions for Immunology: The Muse™ Cell Analyzer
EMD Millipore
2:00 PM – 3:00 PM EXHIBITOR WORKSHOP ROOM 1
Presenter: Kamala Tyagarajan, Ph.D., Senior R&D Manager
The Muse™ Cell Analyzer is an innovative, ultra compact, affordable cell analyzer that can rapidly provide quantitative cellular data using a guided touchscreen interface along with simple, easy-to-use protocols. This workshop will focus on the Muse™ Cell Analyzer assays designed for immunology research applications, including those assays developed for the identification and enumeration of CD4 T cells, CD8 T cells or B cells in whole blood or PBMC samples. Additional assays also allow for obtaining information on activation status of lymphocytes based on CD69 or CD25 expression levels. Cell health assays on the platform permit the easy characterization and enumeration of PBMC or whole blood samples.

Transcriptome or Proteome? Analyze It All
eBioscience, An Affymetrix Company
2:00 PM – 3:00 PM EXHIBITOR WORKSHOP ROOM 2
Presenter: Sue Reynolds, Application Scientist
Measurement of transcriptional and protein expression levels in tissues, cells or sub-cellular compartments is limited by the inability to simultaneously correlate these levels in a complex population within the native context of a cell. Multi-dimensional assessment of active transcriptional and protein states, in combination with surface markers and other flow cytometric detectable parameters (e.g. cytokines), provides a functional assessment on a single cell level leading to unique cellular biosignatures with utility in addressing disease progression.

MONDAY, MAY 6, 2013

Of Mice, Men, and Microbiota and Case Studies of Emerging Humanized Mouse Models in Oncology Drug Discovery
Taconic
10:00 AM – 11:00 AM EXHIBITOR WORKSHOP ROOM 1
Presenters: Tamara Goode, Ph.D., Associate Director, Veterinary Sciences and Dawn Jelley-Gibbs, Ph.D.
Part 1: Of Mice, Men, and Microbiota: Gut Flora in Discovery and Preclinical Case Studies. The impact of health status and gut flora on immune response, including emerging microbes of interest such as segmented filamentous bacteria and the overall impact of gut flora on immune response. Part 2: Case Studies of Emerging Humanized Mouse Models in Oncology Drug Discovery. The presentation will focus on case studies utilizing the CIEA NOG mouse to establish patient-derived cancer models, as well as study-ready mice reconstituted with a human immune system for applications in oncology drug discovery.

Protein Purification and Immunoprecipitation in a Pipette Tip
RAININ Instrument, LLC
11:00 AM – 12:00 PM EXHIBITOR WORKSHOP ROOM 1
Presenters: Suparna Mundodi, Ph. D, Global Product Manager
Molecular characterization of the immune response and how this process is implemented requires the purification of native proteins and antibodies. There are numerous purification methods to isolate proteins of interest, but these methods usually require multiple steps to attain the level of purity required for most studies. The Rainin PureSpeed Protein Purification System utilizes pipette tips containing purification resin at their distal end interfaced with an E4 XLS pipette to simplify enrichment procedures for virtually all proteins. The E4 XLS pipette, when set up within a 96-deepwell plate, is able to carry out semi-automated purification of antibodies and other native or recombinant proteins.
Registration—No increases from 2012
AAI prides itself on keeping registration prices low! Members can attend for as little as $280!
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AAI Centennial Meeting

IMMUNOLOGY 2014™
May 2–6
Pittsburgh, Pennsylvania

IMMUNOLOGY 2015™
May 8–12
New Orleans, Louisiana

Annual Meeting of The American Association of Immunologists
May 3 - 7, 2013 | Hawaii Convention Center | Honolulu, Hawaii

Hawaii Tourism Authority (HTA)/Tori Johnson
AAI Courses in Immunology

2013 Introductory Course in Immunology
July 13–18, 2013
The University of Pennsylvania, Philadelphia, Pennsylvania

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

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 13–15) is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. Part II (July 16–18) is a clinically oriented lecture series. Parts I and II may be taken independently at the discretion of the student.

2013 Advanced Course in Immunology
July 28–August 2, 2013
Seaport World Trade Center, Boston, Massachusetts

Director: Leslie J. Berg, Ph.D.
University of Massachusetts Medical School

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

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.
Grant Review for Immunologists Program

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

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

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

Program details at www.aai.org/GRIP_rd.htm

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