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NEWSLETTER

MARCH 2017



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THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS



AAI President's Message to Members on Issues of National Concern

February 1, 2017

Dear Fellow AAI Members:

Recent political events in the United States have caused distress to many of our members and have led some of our international members and colleagues to question the values of our great nation. This is deeply troubling to me as well: as your president, as a scientist, and as a U.S. citizen.

As you know, The American Association of Immunologists (AAI) is the nation's largest professional society of research scientists and physicians who are dedicated to advancing our understanding of the complexities of the immune system and applying these discoveries to the development of urgently needed treatments and cures. We welcome members of every race, religion, ethnicity, age, disability, gender, and sexual preference and orientation. We take great pride in our diversity and in our international members, with whom we collaborate and from whom we learn. We believe that every member is important and contributes to the accomplishment of our shared goals.

AAI opposes discrimination and any actions that would adversely impact the advancement of science or the fair and respectful treatment of scientists. Many of our members, both domestic and international, have expressed concern about the impact of the January 27, 2017, White House Executive Order (restricting visas and immigration) on foreign scientists' ability to conduct research or study in the United States, or to attend scientific meetings in the U.S. and abroad. To that end, AAI joined with more than 160 other professional scientific, engineering and education societies, associations, and universities in sending a letter to President Donald Trump opposing this Executive Order, which we believe will cause significant harm to international scientific collaboration and exchange.

Please know that, as your professional society, we value you and stand with you—and with our scientific colleagues around the world—at this challenging time.

Sincerely,

Arlene H. Sharpe, M.D., Ph.D.
President

To read the letter signed by AAI and more than 160 other institutions, please visit <http://bit.ly/2k9dHL6>

First Weeks of Trump Administration Include Flurry of Activity

Since the inauguration of Donald J. Trump as President on January 20, Trump, like all new presidents, has faced the daunting challenge of making more than 4,000 appointments, about 1,200 of which would require confirmation by the Senate. Even without much of his administration in place, Trump has wasted no time exercising his executive authority, issuing an Executive Order on inauguration day that would begin the process of dismantling President Obama's health care reform law. As of press time, and just about five weeks into his presidency, Trump had issued a total of 25 Executive Orders and Presidential Memoranda.

A number of Trump's appointees will play major roles in establishing federal policies that impact federal biomedical and scientific research. One key individual is Rep. Tom Price, who was confirmed as the Secretary of Health and Human Services by a Senate vote of 52–47 on February 10. Price, who is an orthopedic surgeon, served six terms in the House of Representatives, representing Georgia's 6th district. Before being confirmed by the full Senate, Price testified before both the Senate Finance Committee, which ultimately approved his nomination, and the Senate Health, Education, Labor and Pensions (HELP) Committee. During the Senate HELP Committee hearing, Price responded to a question from Senator Susan Collins (R-ME) regarding recent NIH funding increases, by calling NIH "a treasure for our country" and indicating that he "supported the increase." As secretary, Price will oversee important agencies, including NIH and the Centers for Disease Control and Prevention (CDC).

Primarily because of ethics concerns (for more information, see this recent article from CNN: <http://cnn.it/2knfu3I>), Price faced substantial opposition from Democrats, who attempted to block his Senate Finance Committee approval by boycotting the committee meeting called for the vote. Republicans countered by changing the committee rules, allowing them to advance Price's nomination with no Democrats present.

Trump asked Francis Collins, M.D., Ph.D., to stay on temporarily as director of NIH, an offer that Collins accepted. Although it is possible that Collins will be reappointed as the permanent NIH director, Trump is reportedly also considering several other individuals. Trump did not ask

CDC Director Tom Frieden, M.D., M.P.H., to remain. Former CDC Principal Deputy Director Anne Schuchat, M.D., is now serving as acting director.

AAI Council Advocates for Immunology, Biomedical Research Funding on Capitol Hill

The AAI Council visited Capitol Hill on December 8, 2016, to talk about the importance of immunology and the need to increase funding for NIH and biomedical research. Councillors participated in meetings with 21 congressional offices representing eight states.



L-R: Pamela Fink, Madeleine Pannell from the office of Sen. Patty Murray (D-WA), Jeremy Boss, and Jenny Ting



L-R: Gary Koretzky, Arlene Sharpe, and Edith Lord in front of the U.S. Capitol Building



L-R: Arlene Sharpe, Natalie McIntyre from the office of Senate Majority Leader Mitch McConnell (R-KY), Beth Garvy, and Gary Koretzky



L-R: Bethany Moore, Pamela Fink, JoAnne Flynn, and Kate Werley from the office of Rep. Mike Doyle (D-PA, 14th)

The AAI leaders were in Congress at a particularly interesting time, one day after the Senate approved the 21st Century Cures Act (see December 2016 *AAI Newsletter*, pp. 6–7) and the same day that the House voted to pass a second Continuing Resolution to fund the government (see December 2016 *AAI Newsletter*, p. 5). Members of Council delivered two key messages: 1) Congress should pass the fiscal year (FY) 2017 funding bills as soon as possible and include an increase of at least \$2 billion for NIH, and 2) AAI supports the increased NIH funding in the 21st Century Cures Act but believes it is critical that these new funds supplement, not supplant, regular NIH appropriations.

Participating in Capitol Hill Day were the following: President Arlene H. Sharpe, M.D., Ph.D.; Secretary-Treasurer Edith M. Lord, Ph.D.; Councillors JoAnne L. Flynn, Ph.D., Jeremy M. Boss, Ph.D., Jenny P. Ting, Ph.D., and Gary A. Koretzky, M.D., Ph.D.; ex officio Councillors Pamela J. Fink, Ph.D., and Bethany B. Moore, Ph.D.; and AAI Committee on Public Affairs Chair Beth A. Garvy, Ph.D. They were accompanied to Capitol Hill by AAI Director of Public Policy and Government Affairs Lauren G. Gross, J.D.

Trump Vaccine Comments Prompt Concern, Action

After a series of meetings and comments by then-candidate and now-President Donald Trump prompted concern among vaccine advocates, AAI joined with the American Academy of

Pediatrics and more than 350 other organizations in sending a letter (see <http://bit.ly/2k8DqYQ>) to President Trump to express support for the safety and use of vaccines. The community letter is consistent with a statement issued by AAI in March 2015, in which then-AAI Committee on Public Affairs Chair Clifford Harding, M.D., Ph.D., said that, “AAI strongly urges full adherence to recommended vaccination schedules and views vaccines as efficacious for individuals and crucial for public health” (see <http://bit.ly/2k8B9gr>).

AAI co-signed the community letter, which asserts that vaccines are “safe ... effective ... and save lives,” in response to several recent events, including a meeting held on January 12 by then-President-elect Trump with longtime vaccine skeptic Robert F. Kennedy, Jr. Kennedy, who describes himself as “pro-vaccine,” is the editor of a 2014 book entitled *Thimerosal: Let the Science Speak: The Evidence Supporting the Immediate Removal of Mercury – a Known Neurotoxin – from Vaccines*. Following the meeting, Kennedy reported that he had been asked to chair a “vaccine safety and scientific integrity” commission.

In an interview with *ScienceInsider* (see <http://bit.ly/2j5TzNz>), Kennedy indicated that Trump is “troubled by questions of the links between certain vaccines and the epidemic of neurodevelopmental disorders including autism.” Kennedy also said that the Centers for Disease Control and Prevention (CDC) would be a focus of the commission as he believes that the “[CDC] is the locus of most of the most serious problems with the vaccine program.” When asked if he has a background of scientific training, Kennedy said “I’m not a scientist. But I have an expertise, I would say, in reading science and spotting junk science because that’s what I do with most of my time.” At the conclusion of the interview, he did note that “nobody is trying to get rid of vaccines here. I just want safe vaccines.” When questioned about Trump’s meeting with Kennedy, Trump Strategic Communications Director Hope Hicks told *The New York Times* that he is “exploring the possibility of forming a committee on autism, which affects so many families . . .,” but had not yet made a final decision (see <http://nyti.ms/2m80rfk>).

Many AAI members and other scientists have expressed concern about the Kennedy meeting and about some of Trump’s previous statements and actions, including a 2014 tweet: “[h]ealthy young child goes to doctor, gets pumped with massive shot of many vaccines, doesn’t feel good and changes – AUTISM. Many such cases!” Trump has also met with several other known anti-vaccine activists, including disbarred physician Andrew Wakefield, who support the discredited link between vaccines and autism. During the campaign, Trump did offer some encouraging comments, including that “we should educate the public on the values of a comprehensive vaccination program. We have been successful with other public service programs and this seems to be of enough

importance that we should put resources against this task (see <http://bit.ly/2c8cK6u>).”

Although the president does not have direct control over vaccine schedules, which are set by the CDC Advisory Committee on Immunization Practices, or vaccine requirements for enrolling in school, which are determined at the state level, some of his appointees, including a CDC director, will have significant influence over the nation’s vaccine policy.

Most recently, a bipartisan group of congressional leaders, led by Senators Lamar Alexander (R-TN) and Patty Murray (D-WA), the Chairman and Ranking Member of the Senate Health, Education, Labor and Pensions Committee, sent a letter in support of vaccines to their congressional colleagues to “highlight the importance of immunizations (see <http://bit.ly/2lFk1yg>).”

NIH Proceeds with Postdoc Stipend Increase Despite Nationwide Injunction

A new overtime rule issued by the Department of Labor (DOL) that would have resulted in increased stipends for postdoctoral fellows and trainees has been blocked from going into effect. On November 22, 2016, a federal judge in Texas issued a nationwide preliminary injunction blocking the rule, which was scheduled to take effect on December 1. As the appeals process did not conclude before President Donald Trump’s inauguration on January 20, 2017, he now has the power to decide whether his administration will defend the overtime rule in court.

Following the injunction, Michael Lauer, M.D., NIH deputy director for extramural research, commented in his November 28 *Open Mike* blog that “NIH plans to proceed with the NRSA [National Research Service Award] stipend increases . . . for consistency with the DOL’s support for increased pay,” and also suggested that “institutions should consult their own counsel and/or Department of Labor office about the applicability of the overtime regulations and for information on overtime obligations.” As described in a recent *Nature* article entitled “Battle over US overtime pay rule leaves many postdocs in limbo,” some institutions are proceeding with the increase, some are no longer increasing the stipends, and some are letting individual investigators decide whether to increase pay.

The new NIH Year 0 NRSA stipend level is \$47,484, nearly \$4,000 above the stipend level for FY 2016 (see NIH Notice: NOT-OD-17-003). NRSA recipients with one or more years of experience received significant increases in their stipends in FY 2017. In a November 7, 2016, public notice, NIH provided guidance to institutions and individual fellows wishing to apply for one-time supplemental funding to account for the stipend increases (see NIH Notice: NOT-OD-17-002).

AAI Submits Comments to NIH on Potential Use of Preprints in NIH Applications

NIH released a request for information (RFI) regarding the inclusion of preprints and interim research products in NIH applications and reports. The purpose of this RFI was to determine “if interim research products can increase the rigor and impact of NIH funded research” and “to ensure that interim research products arising from NIH funds can be created and used with integrity.” AAI submitted comments to NIH on December 6, 2016 (see www.aai.org > Public Affairs > Letters and Comments).

The comments emphasize that AAI “does not believe that preprints should be cited in NIH grant applications because they are not peer-reviewed scientific documents and because they could undermine NIH efforts to increase rigor and reproducibility in science.” In addition, AAI describes additional drawbacks, including the potential for additional burden on reviewers and the undermining of application page limits. AAI acknowledges that including preprints could be helpful “for early stage investigator applicants who have a limited number of publications (in order to show progress and/or productivity).” AAI urges “full transparency” if NIH should decide to allow the inclusion of preprints in NIH applications: “when citing preprints (including on a CV), including preprints which already have a digital object identifier (DOI), the citation should clearly indicate that it is a preprint (and therefore, has not been peer-reviewed).”

New Database of U.S. Providers of Research Organisms

The Federation of American Societies for Experimental Biology (FASEB), of which AAI is a founding member, recently launched a tool to help researchers find U.S. suppliers of research organisms. This new “Database of US Providers of Research Organisms” (see <http://bit.ly/2ktpOU2>) allows investigators to search for stock centers, living collections, and commercial providers from more than 120 database listings from academic, nonprofit, government, and commercial sectors. Searches can be performed by the type of organism, including categories such as bacteria, invertebrates, plants, vertebrates, and viruses, and can be narrowed down further by genus and species.

J. R. Haywood, Ph.D., past FASEB president and chair of FASEB’s Shared Research Resources Subcommittee, explained that “this project puts information that has generally been inaccessible at the fingertips of the entire research community. Collections are a critical component of research infrastructure, and we hope this database will increase awareness.”

5 Members Receive Novartis Prizes for Immunology

Carl June, John Kappler, Philippa Marrack, Steven Rosenberg, and Harald von Boehmer were honored as 2016 Novartis Prize recipients at the 2016 International Congress of Immunology in Melbourne, Australia. Novartis honors are presented every three years in recognition of breakthrough contributions to the fields of basic and clinical immunology. Each Novartis award confers a prize of 100,000 Swiss francs and can be shared by up to three scientists. A sixth 2016 co-recipient was Zelig Eshhar.

Kappler, Marrack, and von Boehmer share the 2016 Novartis Prize for Basic Immunology for their work in demonstrating how the immune system is able to discriminate self from non-self through a process in the thymus, based on positive and negative selection via T cell receptor (TCR)-mediated recognition of peptide-MHC complexes.

June and Rosenberg are co-recipients of the 2016 Novartis Prize for Clinical Immunology for their work on the pre-clinical and clinical development and technological application of cellular immune therapy using chimeric antigen receptor-T cells (CAR T cells) for diseases such as cancer.

2016 Novartis Prize for Basic Immunology



John W. Kappler, Ph.D., AAI '74, is a Howard Hughes Medical Institute (HHMI) investigator, National Jewish Health, and distinguished professor at the University of Colorado Denver.

The lab of Dr. Kappler, in collaboration with Philippa Marrack, with whom he shares a lab group, was instrumental in not only identifying the TCR but also determined that T cells recognize peptide in the context of an MHC molecule. Today, the lab's recent efforts in structural biology continue to identify motifs and conformations that delineate TCR binding to MHC molecules and to characterize further the interactions of peptide:MHC in an effort to elucidate mechanisms of

autoimmunity. The lab group's autoimmunity studies have also investigated gender bias in the development of autoimmunity, identifying a subset of autoreactive B cells that is more prevalent in females with autoimmune disease.

A member of the National Academy of Sciences and National Academy of Medicine, Kappler—together with Marrack—was honored by AAI as co-recipient of the 1995 Behring-Heidelberger Award. He is a past AAI Distinguished Lecturer and past member and chair of the AAI Nominating Committee and served as a member of the AAI Publications Committee.

His additional career appointments and honors include service on review panels for NIH and the Damon Runyon Foundation and receipt of the Wolf Prize in Medicine, Bonfils-Stanton Foundation Award in Science and Medicine, William B. Coley Award for Distinguished Research in Basic and Tumor Immunology, and National Jewish Medical and Research Center Lifetime Achievement Award. With Marrack, Kappler was co-recipient of the British Royal Society Wellcome Foundation Prize and Paul Ehrlich and Ludwig Darmstaedter Prize.

A chemistry graduate of Lehigh University, Kappler received his Ph.D. (biochemistry) from Brandeis University; completed postdoctoral fellowship training at the University of California, San Diego; and was appointed to the faculty of the University of Rochester. In 1979, Kappler joined the University of Colorado Denver, where he has served since 1993 as a distinguished professor. He is also a member of the Program in Structural Biology and Biophysics at the Barbara Davis Center for Childhood Diabetes.



Philippa Marrack, Ph.D., AAI '74, is an HHMI investigator at National Jewish Health and serves as distinguished professor of immunology and microbiology and as the Ida and Cecil Green Professor and chairman of the Department of Biomedical Research at the University of Colorado Denver.

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CAREER AWARD RECIPIENTS FOR 2017

The American Association of Immunologists proudly announces the 2017 recipients of AAI Awards for outstanding research and career achievements.

The 2017 AAI Award winners will be recognized at IMMUNOLOGY 2017™, May 12–16, Washington, D.C.

AAI Lifetime Achievement Award



Richard J. Hodes, M.D.
National Institute on Aging, National Institutes of Health

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

AAI Distinguished Service Award



Eugene M. Oltz, Ph.D.
Washington University School of Medicine

For outstanding service to AAI and the immunology community as member and chair of the AAI Publications Committee, 2012-2016

AAI Excellence in Mentoring Award



Lewis L. Lanier, Ph.D.
University of California, San Francisco

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

AAI-Steinman Award for Human Immunology Research



Jean-Laurent Casanova, M.D., Ph.D.
HHMI, The Rockefeller University

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

AAI-Thermo Fisher Meritorious Career Award



Yasmine Belkaid, Ph.D.
National Institute of Allergy and Infectious Diseases, National Institutes of Health

For outstanding research contributions to the field of immunology

AAI-BD Biosciences Investigator Award



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

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

AAI-BioLegend Herzenberg Award



Michel C. Nussenzweig, M.D., Ph.D.
HHMI, The Rockefeller University

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



Dr. Marrack's research focuses on the specificity, survival, and function of T cells. In collaboration with John Kappler, she was instrumental in characterizing the TCR and elucidating the mechanisms of bacterial superantigens. The joint Marrack and Kappler group's recent work has addressed the structural basis of T cell activation and the application of this knowledge in the study of diseases driven by T cell recognition of antigens. In addition, the group's studies of autoimmunity have led to the identification of a B cell subset that is present in elderly female, but not male, mice and in animals and humans with autoimmunity.

Marrack received AAI's Lifetime Achievement Award in 2003, having served as AAI president in the 2000–2001 term and as a member of the AAI Council from 1995 to 2002. In addition to her service on AAI Council, Marrack served on the AAI Nominating Committee (including as chair) and AAI Program Committee, as an AAI annual meeting abstract programming chair, and as an associate and section editor for *The Journal of Immunology (The JI)*. She is a past AAI Distinguished Lecturer and was AAI co-honoree with John Kappler in receiving the Behring-Heidelberger Award.

A member of the National Academy of Sciences, National Academy of Medicine, and The Royal Society, Marrack has served on numerous review panels on behalf of NIH and other national and international institutions. Her additional career honors include the L'Oreal UNESCO for Women in Science Award, Bonfils Stanton Award for Science, National Jewish Medical and Research Center Lifetime Achievement Award, and German Society for Immunology Avery-Landsteiner Prize. With Kappler, Marrack was co-recipient of the British Royal Society Wellcome Foundation Prize and Paul Ehrlich and Ludwig Darmstaedter Prize.

Marrack received her undergraduate (biochemistry) and Ph.D. (biological sciences) degrees from Cambridge University. She undertook postdoctoral training at Girton College (Cambridge); the Medical Research Council Laboratory of Molecular Biology (Cambridge); the University of California, San Diego; and the University of Rochester, where she was appointed assistant professor in 1975. In 1979, she joined the University of Colorado Denver faculty as an associate professor; she has been a full professor since 1985 and an HHMI investigator since 1986, and her additional university appointments have included service as head of the Division of Basic Immunology.



Harald von Boehmer, M.D., Ph.D., AAI (Hon.) '92, is a professor emeritus of the Dana-Farber Cancer Institute (DFCI) and Harvard Medical School (HMS).

Dr. von Boehmer has made significant contributions to the understanding of T cell differentiation. His early work focused on the recognition of peptide:MHC complexes by the TCR and the role this interaction plays in positive and negative selection of developing T cells. His lab also characterized the structure and function of the pre-TCR in developing T cells. Dr. von Boehmer's recent work focused on the generation and function of regulatory T cells and their role in the prevention of autoimmunity.

A past AAI Distinguished Lecturer, von Boehmer has also been a major symposium speaker on multiple occasions at the AAI annual meeting. His additional career honors include election to the German Academy of Sciences and Academia Europaea (London) and receipt of the Helmholtz International Fellow Award, Sherman Fairchild Foundation Award, NIH MERIT Award, Kurt A. Körber Prize for European Science, Paul Ehrlich and Ludwig Darmstaedter Prize, German Society for Immunology's Avery-Landsteiner-Prize, and Louis-Jeantet Prize for Medicine (received jointly with Nicole Le Douarin and Gottfried Schatz).

A native of Guben, Germany, von Boehmer received his M.D. from the Ludwig-Maximilian University and Ph.D. from the University of Melbourne. He was appointed a member of the Basel Institute for Immunology in 1973 and in 1996, became the director of Unité INSERM 373 at the René Descartes University in Paris. In 1999, von Boehmer joined the faculty at DFCI-HMS, where he served as chief of the Laboratory for Lymphocyte Biology in the DFCI Department of Cancer Immunology and AIDS and a faculty member of the HMS Department of Microbiology and Immunobiology. Currently, he is an adjunct professor at the University of Florida and visiting professor in the Institute for Immunology at the Ludwig-Maximilian University.

2016 Novartis Prize for Clinical Immunology



Carl H. June, M.D., AAI '87, is the Richard W. Vague Professor in Immunotherapy at the University of Pennsylvania's Perelman School of Medicine and investigator and program director of translational research at the Abramson Family Cancer Research Institute.

Dr. June, whose research is focused on the use of adoptive immunotherapy for cancer and HIV infection, demonstrated that the CD28 signaling pathway could induce T cell activation and proliferation independently of TCR signaling. His current studies use unique cell culture systems to generate CAR T cells to treat HIV and malignancies, such as chronic lymphocytic leukemia, B cell acute lymphoblastic leukemia, and solid pancreatic and brain tumors.

A member of the National Academy of Medicine, June was the 2014 recipient of the AAI-Steinman Award for Human Immunology Research. He has served as a major symposium chair and speaker on multiple occasions at the AAI annual meetings, as a member of the AAI Introductory Immunology Course faculty, and as an associate editor for *The JI*.

June's additional career honors include the Paul Ehrlich and Ludwig Darmstaedter Prize, Karl Landsteiner Memorial Award, Taubman Prize for Excellence in Translational Medical Science, Society for Immunotherapy of Cancer Richard V. Smalley Award, Bristol-Myers Squibb Freedom to Discover Award, Federal Laboratory Award for Excellence in Technology Transfer, Leukemia and Lymphoma Society of America Lifetime Achievement Award, and Office of Naval Research Dexter Conrad Award (the U.S. Navy's highest award for scientific achievement).

A biology graduate of the U.S. Naval Academy, June trained as a graduate research fellow in immunology and malaria at the World Health Organization before receiving his M.D. from Baylor College of Medicine. He completed his medical internship and residency at the National Naval Medical Center and served as a teaching fellow at the Uniformed Services University of the Health Sciences (USUHS). He then served as a postdoctoral fellow at the Fred Hutchinson Cancer Research Center before being appointed assistant professor at USUHS in 1986. He subsequently founded the Immune Cell Biology Program and led the Department of Immunology at the Naval

Medical Research Institute before being appointed full professor at USUHS in 1995. He has been a member of the University of Pennsylvania faculty since 1999.



Steven A. Rosenberg, M.D., Ph.D., AAI '72, is chief of surgery at the National Cancer Institute (NCI), NIH, where he serves as head of the Tumor Immunology Section at NCI's Center for Cancer Research. He is also professor of surgery at the USUHS and George Washington University (GWU) School of Medicine and Health Sciences.

Photo: The National Cancer Institute

Dr. Rosenberg is a physician scientist who pioneered the development of several types of immunotherapies for patients with advanced cancers, including treatment with high-dose IL-2 and T cell transfer immunotherapy. His lab pioneered the development of gene therapy and was the first to insert foreign genes successfully into humans. Rosenberg's recent work is aimed at identifying cancer antigens that are recognized by patients' lymphocytes and to identify antitumor TCRs that can be exploited for cell transfer immunotherapy.

A member of the National Academy of Medicine, Rosenberg has served as an associate editor for *The JI*. He has held numerous journal editorial board appointments as well as review panel appointments on behalf of NIH, the U.S. Food and Drug Administration, and other national and international bodies. His career honors include the American Cancer Society Medal of Honor for Basic Research, Keio Medical Science Prize, William B. Coley Award for Distinguished Research in Basic and Tumor Immunology, Betty Ford Lifetime Achievement Award of Distinction from the Susan B. Komen Foundation, and Samuel J. Heyman Service to America Medal as Federal Employee of the Year.

A native of New York City, Rosenberg received his B.A. degree and M.D. from the Johns Hopkins University and Ph.D. in biophysics from Harvard University. He completed his surgical internship and residency at the Peter Bent Brigham Hospital, Boston, and research fellowship in immunology with John David at HMS. He has held his current NCI appointment since 1974, USUHS appointment since 1979, and GWU appointment since 1988.

Nathan, O’Shea, Vilcek Receive Milstein Award Honors

Carl Nathan, John O’Shea, and Jan Vilcek have been honored as co-recipients of the 2016 Seymour and Vivian Milstein Award for Excellence in Cytokine and Interferon Research, for their achievements in translating basic research findings into clinical benefit for thousands of patients.

Presented by the International Cytokine and Interferon Society (ICIS), the Milstein Award recognizes biomedical research scientists who have made outstanding contributions to basic or applied cytokine and interferon research, including through seminal advancements that have enabled the successful treatment of disease or have the potential to lead to significant health benefits.

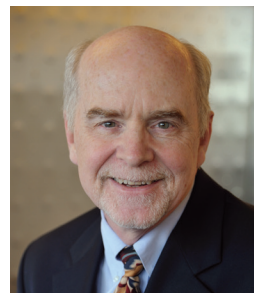


Carl F. Nathan, M.D., AAI '76, is the Rees Pritchett Professor and chairman of the Department of Microbiology and Immunology at Weill Cornell Medical College and co-chair of the Program in Immunology and Microbial Pathogenesis at Weill Graduate School of Medical Sciences.

Over the past four decades, Dr. Nathan has made numerous seminal discoveries relating to macrophage activation and mechanisms of induction and regulation of macrophage antimicrobial activity, especially involving inducible nitric oxide synthase. Current projects investigate macrophage interactions with *Mycobacterium tuberculosis*, including how this organism resists immune attack and development of both pathogen-directed and host-directed therapy for tuberculosis.

A past associate editor for *The JI*, Nathan has served on national review panels, including the National Institute of Allergy and Infectious Diseases Board of Scientific Counselors and National Institute of General Medical Sciences National Advisory Council, NIH, and Cancer Research Institute Scientific Advisory Board. His additional career honors include election to the National Academy of Medicine and the American Academy of Microbiology and receipt of the Ellison Medical Foundation Senior Scholar in Global Infectious Diseases award, Robert Koch Prize, Leukemia Society of America Scholar Award, Irma T. Hirschl Trust Research Career Award, Rita Allen Foundation Scholar Award, Society for Leukocyte Biology’s Maria T. Bonazinga Award, and the Surgical Infection Society’s Altmeier Lecturer Award.

An East Asian history graduate of Harvard University, Nathan received his M.D. (immunology concentration) from Harvard Medical School. He completed his medical internship and medical residency at Massachusetts General Hospital and later served as a clinical associate in the Immunology Branch at the National Cancer Institute (NCI), NIH. He subsequently served as a fellow in medical oncology at Yale-New Haven Hospital before joining the faculty of The Rockefeller University as assistant and, later, associate professor. He was appointed to the Cornell University faculty in 1986 as Stanton Griffis Distinguished Professor of Medicine.



John J. O’Shea, M.D., AAI '84, is the scientific director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), NIH.

Dr. O’Shea’s lab studies signal transduction pathways, particularly Jak/STAT pathways, that regulate cytokine signaling and the ways

these pathways affect differentiation and activation of helper T cells. O’Shea has analyzed how mutations in genes encoding Jak and STAT molecules contribute to disease, and his research on Jaks has yielded a number of patents that led to the development of immunomodulatory drugs that have the potential to treat a variety of diseases from cancer to autoimmunity.

An AAI Distinguished Lecturer in 2016, O’Shea has also served as a major symposium chair and speaker at the AAI annual meeting and is a past associate editor for *The JI*. A member of the National Academy of Medicine, he has served on numerous NIH and other national review panels and journal editorial boards. O’Shea’s additional career honors include the Ross Prize in Molecular Medicine, U.S. Public Health Service Physician Researcher of the Year Award, Paul Bunn Award in Infectious Disease, Lee C. Howley Prize in Arthritis Research, Irish Society for Immunology Public Lecture Award, NIH Director’s Award (three times), NIAMS Mentoring Award, and NIH “Make a Difference” Office of Equal Opportunity Award.

A Bronx native and graduate of St. Lawrence University, O’Shea received his M.D. from the University of Cincinnati and served as an intern and resident in internal medicine at the State University of New York Upstate Medical University. He received subspecialty training in allergy and immunology at NIH and additional postdoctoral training at the National Institute of Child Health and Human Development. In 1989, he established his own research group at the NCI. He moved

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IMMUNOLOGY 2017™

Annual Meeting of The American Association of Immunologists

May 12 - 16, 2017

Walter E. Washington Convention Center
Washington, D.C.

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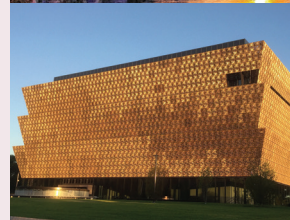
Postings will be accepted as of February 15 and will remain online until the end of the meeting. To post job listings in advance of the meeting, contact meetings@aai.org. Advance Postings must be submitted to AAI by May 3, 2017.

■ On-site Postings

After May 3, 2017, employers may still advertise a job on the **IMMUNOLOGY 2017™** Jobs Board by visiting the AAI Office in the Walter E. Washington Convention Center between 9:00 AM and 5:00 PM. Ads submitted on-site will be posted on the Jobs Board in the Exhibit Hall.

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to NIAMS in 1994 as chief of the Lymphocyte Cell Biology Section of the Arthritis and Rheumatism Branch. In 2002, he was appointed chief of the NIAMS Molecular Immunology and Inflammation Branch and, in 2005, became scientific director of the NIAMS Intramural Research Program. O'Shea has also served as acting director of the NIH Center for Regenerative Medicine.



Jan T. Vilcek, M.D., Ph.D., AAI '78, holds appointments as a research professor and professor emeritus of microbiology in the Department of Microbiology at the New York University (NYU) School of Medicine.

Over his long career, Dr. Vilcek's laboratory has produced many seminal studies, defining the mechanisms of cytokine actions, particularly of the interferons and TNF; and taking these molecules from basic molecular characterization to clinical application. Vilcek's work resulted in the development of the first therapeutically successful anti-TNF mAb, infliximab (Remicade), which has been used to treat numerous chronic inflammatory diseases.

Vilcek is a past AAI President's Symposium speaker and served as associate editor for *The JI*. In addition to serving on numerous national and international scientific review panels and journal editorial boards, he is a past president of the International Cytokine and Interferon Society. His additional career honors include the National Medal of Technology and Innovation (presented by President Obama); Charles University (Prague) Gold Medal; Hope Funds for Cancer Research Award for Excellence in Philanthropy; Edward H. Ahrens, Jr., Award for Patient Oriented Research; and U.S. Citizenship and Immigration Services Outstanding American by Choice Award.

Vilcek received his M.D. from Comenius University Medical School, Bratislava, Czechoslovakia, and Ph.D. from the Institute of Virology, Czechoslovak Academy of Sciences, Bratislava. During his Ph.D. training, he served as a fellow of the Czechoslovak Academy and as a research associate with its Institute of Virology; after earning his Ph.D., he served as its head of laboratory. In 1965, he was appointed an assistant professor of microbiology at NYU; he served as an associate professor and U.S. Public Health Service Career Development awardee from 1968 to 1973 and has been a full professor since 1973. He has held additional NYU appointments as director of the Microbiology Graduate Training Program and co-director of the Cancer Center Core Clinical Laboratory.

Laurie Glimcher Is Marion Spencer Fay Award Honoree



Laurie H. Glimcher, M.D., AAI '83, is the recipient of the 2016 Marion Spencer Fay Award, presented by the Institute for Women's Health and Leadership of Drexel University College of Medicine. The national award, which confers a \$10,000 honorarium, annually recognizes a woman physician and/or scientist who has made

an exceptionally significant contribution to health care as a practitioner, medical educator, administrator, and/or research scientist, while exhibiting distinction, innovation, and leadership.

Dr. Glimcher is the chief executive officer and president of the Dana-Farber Cancer Institute and the proposed Richard and Susan Smith Professor of Medicine at Harvard Medical School (HMS). Her lab defined the genetic basis of T helper cell phenotype by identifying the transcription factors responsible for regulating IL-4 and IFN- γ expression in T cells. Her work expanded to B cells, identifying transcription factors responsible for plasma cell differentiation. More recently, her laboratory has identified new proteins that control osteoblast and osteoclast commitment and activation, with significant implications for diseases of bone. Her lab has also proceeded to analyze the involvement of transcription factors, including T-bet and XBP-1 in cancer, HIV infection, and inflammatory responses.

Glimcher served as AAI president for the 2003–2004 term and as a member of the AAI Council from 1998 to 2005. She was the 2008 recipient of the AAI Excellence in Mentoring Award and the 2006 AAI-Huang Foundation Meritorious Career Award honoree. She is a past Distinguished Lecturer and major symposium chair and speaker at the AAI annual meeting. In addition to her service on AAI Council, she served on the AAI Awards Committee (including as chair), AAI Committee for Liaison with the NIH Division of Research Grants, and AAI Liaison Committee with Research Granting Agencies. Glimcher is also a past associate and section editor for *The JI*.

Her additional career honors and appointments include election to the National Academy of Medicine, National Academy of Sciences, and American Academy of Arts and Sciences; service on multiple NIH and other national

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Summer Opportunity for High School Science Teachers

AAI HIGH SCHOOL TEACHERS SUMMER RESEARCH PROGRAM IN IMMUNOLOGY

Looking for creative ways to bring the excitement of discovery to your classroom? Participate in the 2017–18 American Association of Immunologists (AAI) High School Teachers Summer Research Program. You'll enjoy hands-on experience in cutting-edge research, using the latest tools and techniques. And you'll take home a number of new lab exercises for use in your classes.

This national program supports high-school science teachers' participation in a 4–6 week summer research experience in the laboratories of AAI members. If you are selected,

- AAI will locate an AAI member in your area to serve as your mentor for the summer.
- You will receive a stipend for working in the laboratory of your AAI mentor.
- An educational consultant will assist you with the development of an innovative curriculum to be shared nationally.
- You will be supported to attend a national professional meeting to present your experiences, and
- Prior to starting in the lab, you will be supported in attending the 3-day AAI Introductory Course in Immunology, Part I, held in July in Los Angeles, California. There, you'll learn the basic principles of the discipline. (www.aai.org/Education/Courses/Intro/index.html).



Apply today for this exciting professional development opportunity! Applications are due March 15, 2017.

Complete details and application forms can be found at:

www.aai.org/Education/Summer_Teachers/index.html

Contact **Mary T. Litzinger, Ph.D.**, with any questions: mlitzinger@aai.org or 301.634.7820.



AAI is a professional association dedicated to advancing the discipline of immunology and representing the interests of scientists engaged in research in the field. AAI sponsors the High School Teachers Summer Research Program in Immunology in an effort to cultivate the next generation of talented investigators and enhance public understanding of the critical nature of basic research to human health.

Curricula from past program participants are available to other teachers through an archive maintained on the AAI web site.

Find ideas for incorporating the excitement of immunology into your classroom!

Recent topics include:

- *A Bioinformatics Approach to Systemic Lupus Erythematosus and Autoimmunity*
- *Exploring the Link Between Regulatory T Cells and Tumor Growth: A Lesson in the Immune System and Cancer*
- *How Can Students Combine Computational Biology Tools with a Laboratory Model to Analyze Changes in the Human Gut Microbiome?*
- *Vaccines and Herd Immunity*

Take advantage of this free educational resource! To view the complete teaching material archive, visit www.aai.org/Education/Summer_Teachers/Archive.html.

The American Association of Immunologists



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www.aai.org

and international review panels and editorial boards; founder of the Primary Caregivers Technical Assistance Program at NIH; recipient of the L'Oreal-UNESCO Award for Women in Science and Cancer Research Institute's William B. Coley Award; and service on the boards of Bristol-Myers Squibb Pharmaceutical Corporation and Waters Corporation.

A biology graduate of Radcliffe College, Glimcher received her M.D. from HMS, where she completed her medical residency and postdoctoral fellowships in rheumatology and immunology. She also served as an immunology research associate at the National Institute for Allergy and Infectious Diseases, NIH, before being appointed an assistant professor of medicine at HMS in 1983. She subsequently attained associate and then full professor appointments at HMS and the Harvard School of Public Health. In 2012, she became the Stephen and Suzanne Weiss Dean and Professor of Medicine of Weill Cornell Medical College and Provost for Medical Affairs of Cornell University. Her current appointments include service as president of Dana-Farber/Partners Cancer Care, principal investigator of Dana-Farber/Harvard Cancer Center, and trustee of Dana-Farber/Boston Children's Hospital Cancer Care.

Richard Locksley Is Inaugural William Paul Memorial Award Recipient



Richard M. Locksley, M.D., AAI '88, has been honored as the first recipient of the ICIS BioLegend William Paul Award, presented by the International Cytokine and Interferon Society. Given in recognition of an investigator who has made significant, career-long contributions to cytokine and interferon research, the honor

confers a \$2,500 prize and crystalline award depicting the 3-D structure of IL-4, the cytokine most associated with Dr. Paul's research.

Dr. Locksley is a Howard Hughes Medical Institute (HHMI) investigator and professor of medicine and of microbiology and immunology at the University of California, San Francisco (UCSF). The Locksley lab currently focuses on the cellular and molecular origins of allergic immunity by elucidating the signals that mediate survival, activation, and proliferation of type 2 innate lymphoid cells (ILC2s). Current projects in the lab include investigation of functional interactions between ILC2s and other cells, specifically eosinophils and Tregs, including the effects of these interactions on the homeostasis of adipose

tissue. Additional studies in his lab focus on how chitin—a widely prevalent biopolymer associated with fungi, insects, and helminth eggs—induces the influx of innate cells into the lung in the context of allergy.

Locksley was the 2003 recipient of the AAI Distinguished Service Award for his service as a member and chair of the AAI Program Committee. He is a past AAI Distinguished Lecturer and has served as a major symposium chair and speaker on multiple occasions at the AAI annual meeting. He has also served as a member and chair of the AAI Nominating Committee, member of the AAI Clinical Immunology Committee, associate and section editor for *The JI*, and AAI Advanced Immunology Course instructor.

A fellow of the American Academy of Arts and Sciences and member of the American Society for Clinical Investigation, Locksley has served as an NIH study section member and chair and on multiple other national and international review panels and editorial boards. His additional career honors and appointments include the NIH MERIT Award, American Society of Tropical Medicine and Hygiene's Bailey K. Ashford Medal, Ellison Medical Foundation Senior Scholar in Global Infectious Diseases, and Sandler Distinguished Professorship.

A biochemistry graduate of Harvard University, Locksley received his M.D. from the University of Rochester. After completing his residency at UCSF, he trained in infectious diseases at the University of Washington. From 1986 to 2003, he served as chief of the Division of Infectious Diseases at UCSF Medical Center. He has been an HHMI investigator since 1997 and has led UCSF's Sandler Asthma Basic Research Center since 2003.

You, too, can be a Member in the News

AAI welcomes the opportunity to promote the career achievements and professional honors attained by AAI member scientists. This not only serves to inspire scientists at every career stage but also informs the readership of the *AAI Newsletter* of immunology's vital and widening role in scientific discovery and transformative medicine.

If you know of an AAI colleague that has received noteworthy scientific or service (or both) recognition, please let us know by emailing AAINewsletter@aai.org.

When emailing, please provide a link to the website of the honoring institution along with any additional information.

Thank you!

Howard Young Is ICIS Honorary Lifetime Membership Awardee



Howard A. Young, Ph.D., AAI '90, is the 2016 recipient of the 2016 ICIS Honorary Lifetime Membership Award from the International Cytokine and Interferon Society (ICIS). The award annually honors an ICIS member's substantive career contributions to basic, clinical,

or applied research in the cytokine, chemokine, and/or interferon (IFN) fields. Elected by a vote of the ICIS Council, honorees are invited speakers at the ICIS annual meeting in connection with the honor.

Dr. Young is a senior investigator at the Center for Cancer Research, National Cancer Institute (NCI), NIH. His lab focuses on how disruption of the control of IFN- γ gene expression during development and maturation of the immune system can impact the host inflammatory response and the development of autoimmune disease and cancer. Additionally, Young and his lab colleagues have done work investigating whether intestinal mucosal exposure to antigens coating probiotic bacteria can result in a protective host immune response to these antigens.

A fellow of the American Academy of Microbiology, Young is a past associate editor for *The JI*. His additional career honors and appointments include service as president of the International Society for Interferon and Cytokine Research; immunology division chair for the American Society for Microbiology; member of numerous NIH and other national and international review panels and editorial boards; and receipt of the NIH Director's Award for Mentoring (twice), NIH Technology Transfer Award (multiple), and American Society for Public Administration–National Academy of Public Administration National Public Service Award.

A graduate of the University of Massachusetts, Young holds master's and Ph.D. degrees in microbiology from the University of Washington. Following postdoctoral research as an American Cancer Society fellow at the NCI, Young joined the NCI Laboratory of Tumor Virus Genetics as a staff fellow in 1977. He held subsequent appointments at the Frederick, MD, Cancer Research Center and Bethesda Research Laboratories, Gaithersburg, MD, before serving as a member of the Laboratory of Molecular Immunoregulation at NCI Frederick from 1983 to 1989. He joined the Center for Cancer Research's Laboratory of Experimental Immunology in 1989, serving as a section head and later as deputy chief of the lab from 2006 to 2015. He has been a senior investigator since 2015.

GRIP

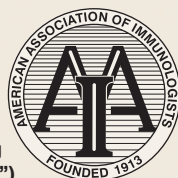
Grant Review for Immunologists Program

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

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

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

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



Program details at aai.org/Education/GRIP

Joy Ann Williams, Ph.D., AAI '14 | June 13, 1961–November 18, 2016



AAI offers condolences to the family, friends, and colleagues of National Cancer Institute (NCI) Staff Scientist Joy Ann Williams, Ph.D., who died on November 18, 2016, at the age of 55 after a four-year battle with ovarian cancer. An AAI member since 2014, Dr. Williams was a frequent attendee of the AAI annual

meeting, most recently in 2015. In announcing her death to colleagues, National Institute on Aging Director Richard J. Hodes (AAI '75) shared the following tribute, reflecting his remembrances and those of Dr. Williams' family. AAI gratefully acknowledges the family and Dr. Hodes for this submission.

I am sorry to share with you the news that Joy Williams died on Friday night, November 18, 2016, after her time with us as a valued friend and colleague, and after a courageous battle with cancer.

Joy was gifted and talented across many dimensions. Born in Arlington, Virginia, she grew up in Arlington and Alexandria, Virginia, where she graduated from T. C. Williams High School. She obtained bachelor's degrees in biology and piano performance from the Oberlin College and Conservatory.

Joy pursued her interest in science at the University of Maryland, where she earned her master's (molecular biology) and Ph.D. (immunology) degrees, the latter in 1998. As a graduate student, she worked at NCI as a pre-doctoral Intramural Research Training Award fellow in the Lab of Genetics under Mike Potter, then as a biologist in the same lab under her graduate mentor Emily Shacter, and later in the FDA's Center for Biologics Evaluation and Research on the NIH campus. It was during this time in her life that Joy met her future husband Todd Smyth.

The year after earning her Ph.D., Joy joined my lab in the Experimental Immunology Branch of the NCI's Center for Cancer Research as a post-doctoral fellow, where she spent four successful years before accepting a position as an FDA regulatory/research scientist on the NIH campus. In 2006, Joy's love of basic research—and our good fortune—brought her back to my lab as a staff scientist.

Joy had an intense and infectious love of science. She brought intellect and commitment to her work, and was a successful and productive scientist. In Joy's most recent research, she advanced our understanding of the biology of thymic development and the cross-talk between thymic epithelium and the developing T cell repertoire. Her acknowledged expertise in this research area, both intellectual and technical, made her a resource at NIH as well as to the international immunology community, and she generously helped those who approached her. This generosity and sincere interest in helping others were constants in Joy's life. Joy was a consummate teacher and mentor. In her years at NIH, she taught courses through the Federation of American Societies for Experimental Biology and at the University of Maryland. Over her years in the lab, post-bacs, postdocs, and colleagues had the good fortune of knowing Joy's extraordinary ability to teach and inspire via her unique perspectives and sense of humor.

Joy's love of music also continued throughout her life, marked by performances on piano, on flute, and a bit less professionally on accordion.

Working with all of you as her friends and colleagues was an important source of gratification for Joy always, and was a particular comfort in the difficult recent years, which Joy referred to as "my ultimate scientific experiment." Joy was a unique and exceptional person, and we miss her deeply.

Along with her husband Todd and their three beloved dogs, Joy Williams' survivors include her parents Harrison Brownell Williams and Ann Peterson Williams, sister Julie Arrighetti, brother-in-law Craig Arrighetti, and nephew Nicholas Arrighetti.

Gifts in memory of Joy may be directed to support ovarian cancer research at the Johns Hopkins Kimmel Cancer Center. Please make checks payable to Johns Hopkins University. Gifts may be mailed—with a memo indicating that the gift is in memory of Joy Ann Williams, to the Johns Hopkins Kimmel Cancer Center, P.O. Box 17029, Baltimore, MD 21297-1029—or made online at <https://secure.jhu.edu/form/kimmel>.



Important Dates for Two AAI Awards Programs

AAI Programs to Benefit Your Lab's Current or Future Research

AAI Careers in Immunology Fellowship

KEY DATES	APPLICATIONS OPEN	APPLICATIONS CLOSE
	JANUARY 15	MARCH 16

These fellowships provide AAI member PIs with one year of salary support for a graduate student or postdoctoral fellow in their labs. Member PIs in good standing with less than \$250,000 (excluding PI's salary) in annual direct costs are eligible to apply.

Selection is based on the potential of the trainee, merit of the project, quality of the training environment, and financial need.

Direct inquiries to fellowships@aai.org.

AAI Travel for Techniques Award Program

AWARDS CYCLE	APPLICATIONS OPEN	APPLICATIONS CLOSE
WINTER	DECEMBER 15	FEBRUARY 15
SPRING	APRIL 15	JUNE 15
FALL	AUGUST 15	OCTOBER 15

The Travel for Techniques Award is given to member PIs, reimbursing up to \$1,500 in expenses for travel to learn a new technique. Member PIs in good standing with less than \$250,000 (excluding PI's salary) in annual direct costs are eligible to apply.

Direct inquiries to awards@aai.org.

These two exciting awards programs were launched by the American Association of Immunologists in 2014, adding significantly to its already robust support for scientists through fellowships, career awards, and travel grants. For more information, visit www.aai.org/awards.

Extending AAI Support for Young Investigators across the Country



CIC award winners (top row, L-R) Kelsey Haist, Kristen Shotts Schroeder, Widian Jubair, Timothy Wiles; (bottom row, L-R) Robin Lindsay, Ameet Mishra, Brian Niemeyer, and Allison Sang

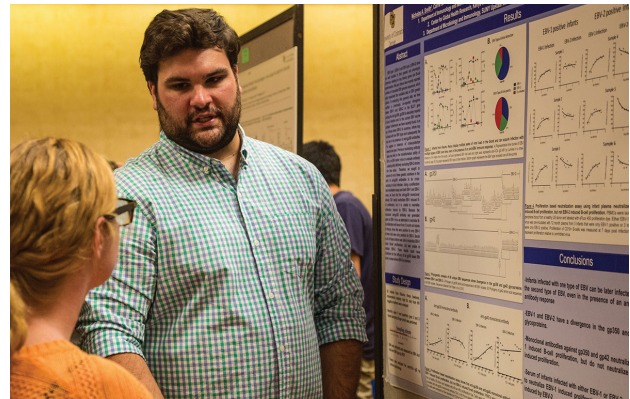
The AAI Outreach Program provides career development opportunities for young investigators by supporting oral and poster presentation awards at member-organized immunology meetings throughout the United States. The program, now in its sixth year, provided sponsorships at four recent meetings: the Colorado Immunology Conference, Great Lakes Transplant Immunology Forum, La Jolla Immunology Conference, and New England Immunology Conference.

Colorado Immunology Conference (CIC)

The CIC hosted its 17th annual meeting, held August 31–September 2, 2016, in Steamboat Springs, Colorado. The meeting was organized in part by Laurel Lenz (AAI '05) and featured a keynote lecture given by University of Alabama at Birmingham professor Frances Lund (AAI '98), entitled “Shaping of B cell fate decisions by T-box family transcription factors—impact on autoimmunity.”

For the sixth consecutive year, AAI provided support for eight Young Investigator Awards. The CIC organizing committee selected the AAI award recipients, all studying at the University of Colorado Denver School of Medicine, from among the abstract authors. The honorees for oral

presentations were Brian Niemeyer, Allison Sang, Kristin Shotts Schroeder, and Timothy (Aaron) Wiles (also with the Barbara Davis Center for Childhood Diabetes). The awardees for poster presentations were Kelsey Haist, Widian Jubair, Robin Lindsay (also with National Jewish Health), and Ameet Mishra.



Nick Smith (graduate student, UC Denver School of Medicine) answering questions during his CIC poster presentation

Great Lakes Transplant Immunology Forum (GLTIF)

The GLTIF hosted its 17th annual forum, held October 10–11, 2016, at Northwestern University in Chicago. This forum was the idea of the late Charley Orosz (AAI '84). As an accomplished transplantation immunologist, he had wanted to develop an annual meeting for transplant immunologists within the Midwest to discuss their latest ideas and refine them. Since the first meeting in 2000, it has been held every year and includes investigators from the Midwest and beyond, as some have moved to new institutions. This year's meeting spanned basic and clinical transplantation immunology. Organized by Marisa Alegre (AAI '97), Anita Chong (AAI '90), Xunrong Luo (AAI '12), David Perkins (AAI '14), Rebecca Shilling (AAI '11), and Zheng Jenny Zhang (AAI '03), the meeting drew 70 participants. The forum featured the 10th annual Charles Orosz Keynote Lecture given by Columbia University Professor of Surgical Sciences Donna Farber (AAI '95), which was entitled, “Human immune responses in tissues and circulation.”



L-R, GLTIF organizers David Perkins and Rebecca Shilling with awardees James Young, Vrushali Agashe, Amin Afrazi, and Christine McIntosh (not pictured: Asha Rani)

AAI sponsored five Young Investigator Awards for the best poster presentations. AAI awardees included Amin Afrazi (University of Wisconsin), Vrushali Agashe (University of Wisconsin), Christine McIntosh (University of Chicago), Asha Rani (University of Illinois, Chicago), and James Young (University of Chicago). Everyone enjoyed their time in Chicago and looks forward to next year's meeting hosted by Will Burlingham (AAI '86) at the University of Wisconsin at Madison.

La Jolla Immunology Conference (LJIC)

The Salk Institute hosted 438 attendees for the LJIC, which took place October 11–13, 2016, in La Jolla, California. The meeting was organized in part by Hilde Cheroutre (AAI '98), Björn F. Lillemeier, Karsten Sauer (AAI '01), Stephen Schoenberger (AAI '05), and Elina Zuniga (AAI '09), and included sessions ranging from metabolism and microbiota to immunotherapy and cancer immunity. Arlene Sharpe (AAI '96; Harvard University) and Thomas Gajewski (AAI '96; University of Chicago) delivered the keynote addresses. Sharpe's lecture was entitled, "Lose your (co)inhibitors: The PD-1 pathway from discovery to translation." In his keynote lecture, Gajewski discussed tumor-intrinsic oncogene pathways mediating immunotherapy resistance.

As it has since 2011, AAI sponsored Young Investigator Awards at LJIC. This year, five oral presentations and 10 poster presentation awards were given. The oral presentation awardees were Florent Carrette (Sanford Burnham Prebys Medical Discovery Institute), Alicia Gonzalez-Martin (The Scripps Research Institute), Zinaida Polonskaya (The Scripps Research Institute), Roberto Tinoco (Sanford Burnham Prebys Medical Discovery Institute), and Christella Widjaja (University of California, San Diego). The poster presentation awardees were Janilyn Arsenio (University of California, San Diego), Honyin Chiu (University of California, Irvine), Catherine Crosby (La Jolla Institute for Allergy and Immunology), Yasamine Ghorbanian (University of California, Irvine), Yeara Jo (University of California, San Diego), Zachary Katz (Salk Institute), Laura McIntyre (University of California, Irvine), Araceli Perez-Lopez (University of California, Irvine), Ellen Wehrens (University of California, San Diego), and Bingfei Yu (University of California, San Diego).

New England Immunology Conference (NEIC)

The 40th Annual NEIC was held October 15–16, 2016, at the Marine Biological Laboratory in Woods Hole, Massachusetts. The conference was organized by Mark Exley (AAI '02) and Thorsten Mempel (AAI '07) and drew 125 scientists. The broad-ranging program included sessions on T cell migration and function, myeloid cells, and anti-tumor immunity.

For the sixth year, AAI sponsored awards given at the conference. AAI Young Investigator Awards were presented to four postdoctoral and student winners: Ishita Banerjee (University of Connecticut School of Medicine), Anna Gil (University of Massachusetts), Xing Liu (Boston Children's Hospital/Harvard Medical School), and Alexandria Wells (University of Massachusetts).



NEIC organizers Mark Exley (far left) and Thorsten Mempel (far right) with awardees (L-R) Xing Liu, Ishita Banerjee, Anna Gil, Alexandria Wells, Semir Beyaz, Basak Cicek, Alexandra-Chloe Villani, and Vinidhra Mani

Continued, next page

GTLIF (Continued)

AAI also sponsored the Janeway Awards, named in honor of the late Charles A. Janeway (AAI '74), AAI president, 1997-1998. These were awarded to Semir Beyaz (University of Connecticut School of Medicine), Basak Cicek (University of Connecticut School of Medicine), Vinidhra Mani (Massachusetts General Hospital/Harvard Medical School), and Alexandra-Chloe Villani (Broad Institute/Massachusetts Institute of Technology).

AAI Outreach at ABRCMS 2016 Recognizes, Supports Outstanding Trainee Presenters in Immunology

Outreach to early-career trainees, including college students involved in immunology research, was the focus of AAI participation at the 2016 Annual Biomedical Research Conference for Minority Students (ABRCMS) in Tampa, Florida, November 9–12.



Recipients of AAI-sponsored immunology presentation awards at ABRCMS 2016 – front row (L-R): Ayooluwa O. Douglas, Heather Green, Mayra Gonzalez-Torres, Amber Gomez, Elizabeth Okafor; back row (L-R): Jessica-Sophie Horoschak, Joselyn Knowling, and Estera Maxim

Building on a successful outreach effort at ABRCMS 2015 in Seattle, Washington, AAI participation in 2016 included new support to benefit trainee presenters in immunology. This support entailed sponsoring the meeting's presentation awards for immunology and recognizing the top two immunology presenters with the newly established AAI Young Scholars Travel Award to support their participation at the 2017 AAI annual meeting in Washington, D.C.

Approximately 2,500 scientific attendees, predominantly undergraduate and post-baccalaureate students, as well as graduate students and postdoctoral trainees, participate annually at ABRCMS, which is designed to foster minority students' pursuit of advanced training in the biomedical sciences and related fields. Attendees in 2016



AAI booth visitors gathering information on attending IMMUNOLOGY 2017™ in Washington, D.C.

presented abstracts in 12 scientific disciplines, including immunology, cell biology, microbiology, developmental biology, and cancer biology.

AAI outreach was led by AAI Minority Affairs Committee (MAC) Chair Cherié L. Butts. "It was a delight to return to ABRCMS in 2016 as an ambassador for AAI and to participate, along with fellow AAI MAC member Robert Binder, as co-chair of immunology presentations," she said. "I am proud to convey AAI support of immunology presentation awards at ABRCMS and the additional opportunity for students to experience IMMUNOLOGY 2017™. This support recognizes talented young immunologists while broadening their understanding of the vital role professional societies play in the careers of new and established investigators."

Avery August (AAI '99), who serves as chair of the ABRCMS Steering Committee, lauded the support of AAI for ABRCMS attendees. "I was thrilled when AAI agreed to support immunology presentation awards at ABRCMS. It is a great opportunity for the students to be recognized and rewarded for their hard work and for AAI to support future immunology researchers. It is very gratifying, as a long-time AAI member, seeing the association build on its efforts to reach out and cultivate future members of all backgrounds."

The following students involved in immunology research were recipients of \$250 presentation awards sponsored by AAI, conferred during the ABRCMS 2016 awards banquet on November 12th:

- Ayooluwa O. Douglas, senior, Duke University
- Amber Gomez, senior, Arizona State University
- Mayra Gonzalez-Torres, senior, University of Puerto Rico, Ponce

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AAI Courses in Immunology

2017 Introductory Course in Immunology

July 11–16, 2017

UCLA Luskin Conference Center, Los Angeles, California

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

University of Toronto and Sunnybrook Research Institute

This comprehensive two-part course, taught by leading experts, provides an in-depth 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 11–13)** is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. **Part II (July 14–16)** is a clinically oriented lecture series focusing on specialty areas. Parts I and II may be taken independently at the discretion of the student.

2017 Advanced Course in Immunology

July 23–28, 2017

Seaport World Trade Center, Boston, Massachusetts

Director: **Ulrich H. von Andrian, M.D., Ph.D.**

Harvard Medical School and Ragon Institute at MGH, MIT and Harvard

Established in 1966, this intensive course is directed toward advanced trainees and scientists who wish to expand or update their understanding of the field. World-renowned immunologists 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 basic principles of immunology and laboratory techniques.

For more information visit

www.aai.org/Education/Courses

Please direct inquiries to meetings@aai.org or 301-634-7178.

OUTREACH UPDATE

ABRCMS (Continued)

- Heather Green, senior, University of Nevada, Reno
- Jessica-Sophie Horoschak, junior, University of Massachusetts, Amherst
- Joselyn Knowling, junior, Louisiana State University
- Estera Maxim, sophomore, Georgia State University
- Elizabeth C. Okafor, senior, University of Missouri, Columbia



AAI MAC member Floyd Wormley (right) speaking with ABRCMS attendees at the AAI booth

In addition, the top two immunology presentation awardees received special AAI recognition as inaugural recipients of the AAI Young Scholars Travel Award. Proposed by the MAC in early 2016, the award was established by AAI to provide the best immunology presenters at ABRCMS with travel support to attend the AAI annual meeting. In tandem with travel support and the opportunity to present an abstract, the Young Scholars awardees will receive mentoring from MAC members, participate in the MAC Careers Roundtable/Speed Networking Session, and attend the MAC-sponsored AAI Vanguard Lecture during the 2017 AAI meeting.

AAI congratulates Amber Gomez, a senior at Arizona State University, and Elizabeth Okafor, a senior at the University of Missouri, Columbia, as the recipients of AAI Young Scholars Travel Awards to attend IMMUNOLOGY 2017™ in Washington, D.C.

Ms. Gomez anticipates graduating in May 2017 with B.S. degrees in biological sciences and biochemistry and a minor in family and human development. Her ABRCMS abstract was titled, “DNA Nanostructure as a Targeted Delivery Therapeutic.”

Ms. Okafor anticipates graduating in May 2017 with a B.S. degree in biological sciences and a B.A. degree in Romance languages (French emphasis). Her abstract was titled “Reduced Inflammatory Response in Children with *Plasmodium falciparum* Asymptomatic Parasitemia in a Low Transmission Area.”

In acknowledging their AAI awards, Gomez and Okafor credited the support of others who have helped advance their academic and research careers to date. Ms. Gomez cited her mentors, Dr. Yung Chang and Dr. Xiaowei Liu, and the opportunity to participate as a trainee in the NIH-funded Initiative for Maximizing Student Development Program.

Ms. Okafor noted that “several mentors have played a huge part in my progress as a scientist—in particular my research mentors Dr. Chandy John from Indiana University and Dr. Walter Gassmann from the University of Missouri. Their continuous support and encouragement during my undergraduate education have helped me engage in research and progress toward achieving my career goal of becoming a physician-scientist.”

Collaborating in the AAI outreach effort at ABRCMS 2016 were:

- MAC Chair Cherie L. Butts, AAI '10, associate director of program leadership at Biogen
- MAC member Robert J. Binder, AAI '02, associate professor at the University of Pittsburgh
- MAC member Floyd L. Wormley, Jr., AAI '12, professor and associate dean at the University of Texas at San Antonio
- AAI Membership Committee member Bolaji Thomas, AAI '06, associate professor at the Rochester Institute of Technology



AAI Young Scholars Travel Award recipients Amber Gomez (second from left) and Elizabeth Okafor (second from right) with AAI member co-presenters (L-R) Avery August, Cherié Butts, and Robert Binder

- Jennifer Woods, AAI membership manager
- Michael Cuddy, AAI staff liaison to the MAC

AAI representatives engaged attendees in discussions about their research and the many career-enhancing activities available to established and aspiring immunologists through AAI. Particular attention focused on opportunities for attending and presenting at the AAI meeting, qualifying for travel awards to the meeting and AAI courses, free meeting registration for undergraduates, and eligibility for undergraduates being taught by an AAI member professor to qualify for an Undergraduate Faculty Travel Grant to the annual meeting. Also highlighted were AAI MAC activities to foster scientists' career development, including the MAC-sponsored sessions at the annual meeting and the AAI minority member network that facilitates mentoring opportunities and fosters broader participation in professional service activities.

Building on a successful outreach effort at ABRCMS 2015, AAI participation in 2016 included new support to benefit trainee presenters in immunology.

The following AAI members also participated as immunology abstract judges and/or faculty mentors at ABRCMS 2016:

- Marisela D. Agudelo, AAI ' 14, Florida International University
- Tesfaye Belay, AAI ' 16, Bluefield State College
- William H. Carr, AAI ' 07, Medgar Evers College City University of New York
- Benjamin K. Chen, AAI ' 11, Icahn School of Medicine at Mount Sinai
- Benjamin L. Clarke, AAI ' 04, University of Minnesota
- Jennifer T. Grier, AAI ' 16, Linfield College
- Alison J. Johnson, AAI ' 13, Albert Einstein College of Medicine
- Harlan Jones, AAI ' 14, University of North Texas
- Robin G. Lorenz, AAI ' 96, University of Alabama at Birmingham
- Manoj K. Mishra, AAI ' 10, Alabama State University
- Mari L. Shinohara, AAI ' 10, Duke University School of Medicine

ABRCMS 2017 will be held November 1–4 in Phoenix, Arizona.

2016 Fall-Cycle Travel for Techniques Award

One AAI member was selected as a recipient of the Travel for Techniques Award for the fall application cycle (deadline: October 15, 2016). The program reimburses up to \$1,500 in travel expenses for a member PI or designated lab member to travel to another laboratory to learn a technique or method that might benefit his or her current or future research goals. Proposals are considered on a rolling basis, with application deadlines in February, June, and October.

AAI will invite applications for the summer cycle of the program starting April 15, 2017.

2016 Fall Travel for Techniques Award Recipient



Kathryn M. Dupnik, M.D.
(AAI '15)

Assistant Professor of Medicine
Weill Cornell Medical College

Dr. Dupnik will visit Dr. Richard Truman's laboratory at the National Hansen's Disease Research Program in Baton Rouge, Louisiana, to learn

about best laboratory practice for *Mycobacterium leprae*-infected mice. Dr. Dupnik will use these skills to introduce animal work with *M. leprae* at her institution and also develop a model for the induction of pathologic immune reactions during infection.

AAI Welcomes New Members

AAI is very pleased to welcome all new members who joined AAI during the 2016 membership year.

Listed below are the 487 new regular and associate members who were added in 2016. Also added in 2016 were 842 new trainee members. To view the list online, visit www.aai.org/Membership/newmemberlist.pdf.

Please welcome the new members you know and make a point of introducing yourself to those whom you haven't met.

New members listed below appear in alphabetical order by state and city (U.S.) and by country (International).

REGULAR

UNITED STATES

ALABAMA

Rajatava Basu, Ph.D.
Birmingham, AL

Amit Gaggar, M.D., Ph.D.
Birmingham, AL

Liz A. Worthey, Ph.D.
Huntsville, AL

ARIZONA

Qiang Liu, M.D., Ph.D.
Phoenix, AZ

Nicole Behrens, Ph.D.
Tucson, AZ

Randy J. Horwitz, M.D., Ph.D.
Tucson, AZ

Hsin-Jung Wu, Ph.D.
Tucson, AZ

ARKANSAS

Lin-Xi Li, Ph.D.
Little Rock, AR

CALIFORNIA

Angela Haczk, M.D., Ph.D.
Davis, CA

Mingfeng Zhang, Ph.D.
Duarte, CA

Gundula E. Min-Oo, Ph.D.
Foster City, CA

Charitha Madiraju, Ph.D.
Fullerton, CA

H. Komori, Ph.D.
La Jolla, CA

Cherie T. Ng, M.P.H., Ph.D.
La Jolla, CA

Sonia Sharma, Ph.D.
La Jolla, CA

Ty Troutman, Ph.D.
La Jolla, CA

Aaron J. Tyznik, Ph.D.
La Jolla, CA

Pandurangan Vijayanand, M.D., Ph.D.
La Jolla, CA

Gerhard Wingender, Ph.D.
La Jolla, CA

Dina R. Weilhammer, Ph.D.
Livermore, CA

Suzanne Devkota, Ph.D.
Los Angeles, CA

Marta Epeldegui, Ph.D.
Los Angeles, CA

Alexander Hoffmann, Ph.D.
Los Angeles, CA

Javier Ibarrodo, Ph.D.
Los Angeles, CA

Zhang-Xu Liu, M.D., Ph.D.
Los Angeles, CA

Roberto Spreafico, Ph.D.
Los Angeles, CA

Xiangshu Wen, M.D., Ph.D.
Los Angeles, CA

Lili Yang, Ph.D.
Los Angeles, CA

Taewoong Choi, M.D.
Menlo Park, CA

Niranjana A. Nagarajan, Ph.D.
Oakland, CA

Chen Dong, Ph.D.
Palo Alto, CA

Haejung Won, Ph.D.
Pasadena, CA

Greg Brennan, D.V.M., Ph.D.
Pomona, CA

Douglas Durrant, Ph.D.
Pomona, CA

Michael P. Cooke, Ph.D.
San Diego, CA

David Gasper, D.V.M., Ph.D.
San Diego, CA

Ian R. Hardy, Ph.D.
San Diego, CA

Donnienne Leung, Ph.D.
San Diego, CA

Christian J. Maine, Ph.D.
San Diego, CA

Stefanie J. Mandl, Ph.D.
San Diego, CA

Joy A. Phillips, Ph.D.
San Diego, CA

Joan M. Robbins, Ph.D.
San Diego, CA

Brian Sullivan, Ph.D.
San Diego, CA

Yanying Fan, Ph.D.
San Francisco, CA

Antony Symons, Ph.D.
San Francisco, CA

Eileen McMahon McQuade, Ph.D.
Santa Barbara, CA

Vishva M. Dixit, M.D.
South San Francisco, CA

Charlene Liao, Ph.D.
South San Francisco, CA

Rajita Pappu, Ph.D.
South San Francisco, CA

Yueh-Hsiu Chien, Ph.D.
Stanford, CA

Brice Gaudilliere, M.D., Ph.D.
Stanford, CA

Toshinobu Nishimura, Ph.D.
Stanford, CA

Rodolfo D. Vicetti Miguel, M.D.
Stanford, CA

Heng Zhao, Ph.D.
Stanford, CA

COLORADO

Thomas Morrison, Ph.D.
Aurora, CO

CONNECTICUT

Hector Aguila, Ph.D.
Farmington, CT

Sivapriya Kailasan Vanaja, D.V.M., Ph.D.
Farmington, CT

Kepeng Wang, Ph.D.
Farmington, CT

Te-Chia Wu, Ph.D.
Farmington, CT

Udeme D. Ekong, M.B.B.S.
New Haven, CT

John D. MacMicking, Ph.D.
New Haven, CT

Fabio R. Santori, Ph.D.
New Haven, CT

Christian Wolff, M.D., Ph.D.
New Haven, CT

DISTRICT OF COLUMBIA

Imtiaz Khan, Ph.D.
Washington, DC

Magali Moretto, Ph.D.
Washington, DC

L. Smith, Ph.D.
Washington, DC

FLORIDA

Brad E. Hoffman, Ph.D.
Gainesville, FL

Robert L. Whitener, IV, Ph.D.
Gainesville, FL

James Wynn, M.D.
Gainesville, FL

Jinhee Hyun, Ph.D.
Miami, FL

Justine Tigno-Aranjuez, Ph.D.
Orlando, FL

GEORGIA

Samuel Amoah, Ph.D.
Atlanta, GA

Ramireddy Bommireddy, Ph.D.
Atlanta, GA

Sabyasachi Das, Ph.D.
Atlanta, GA

Christopher Scharer, Ph.D.
Atlanta, GA

Young-Jin Seo, Ph.D.
Atlanta, GA

Vijayakumar Velu, Ph.D.
Atlanta, GA

Xiaoling Wang, M.D., Ph.D.
Augusta, GA

Zhihong Yuan, Ph.D.
Decatur, GA

Heather M. Kling, Ph.D.
Saint Marys, GA

HAWAII

Mukesh Kumar, D.V.M., Ph.D.
Honolulu, HI

ILLINOIS

Michael D. Carrithers, M.D., Ph.D.
Chicago, IL

Isabelle G. De Plaen, M.D.
Chicago, IL

Deepak Shukla, Ph.D.
Chicago, IL

Muthusamy Thiruppathi, Ph.D.
Chicago, IL

Theresa L. Walunas, Ph.D.
Chicago, IL

Dan Xu, Ph.D.
Chicago, IL

Isabelle Le Poole, Ph.D.
Maywood, IL

Andrew J. Steelman, Ph.D.
Urbana, IL

INDIANA

Jianguang Du, Ph.D.
Indianapolis, IN

Su Huang, M.D., Ph.D.
Indianapolis, IN

Payal Mehta, Ph.D.
Indianapolis, IN

Matthew Olson, Ph.D.
Indianapolis, IN

Zheng-Yu Wang, M.D., Ph.D.
Indianapolis, IN

IOWA

Laura C. Miller, Ph.D.
Ames, IA

Christy Petersen, D.V.M., Ph.D.
Iowa City, IA

Jian Zheng, Ph.D.
Iowa City, IA

KENTUCKY

Daniel E. Cramer, Ph.D.
Louisville, KY

Kavitha Yaddanapudi, Ph.D.
Louisville, KY

LOUISIANA

Deepak Kaushal, Ph.D.
Covington, LA

C. Verret, Ph.D.
New Orleans, LA

MARYLAND

Lucio Gama, Ph.D.
Baltimore, MD

Huifen Li, Ph.D.
Baltimore, MD

Gregory Szeto, Ph.D.
Baltimore, MD

Stasya Zaring, Ph.D.
Baltimore, MD

Jixin Zhong, M.D., Ph.D.
Baltimore, MD

Emilia Alina Barbu, Ph.D.
Baltimore, MD

Raphaela Goldbach-Mansky, M.D., M.P.H.
Bethesda, MD

Annie W. Lau-Kilby, Ph.D.
Bethesda, MD

Allison Malloy, M.D.
Bethesda, MD

Katrin D. Mayer-Barber, Ph.D.
Bethesda, MD

Ian Myles, M.D.
Bethesda, MD

Keisuke Nagao, M.D., Ph.D.
Bethesda, MD

Diego A. Vargas-Inchaustegui, Ph.D.
Bethesda, MD

Hua Wang, M.D., Ph.D.
Bethesda, MD

Masashi Watanabe, Ph.D.
Bethesda, MD

Xiaoming Zhou, Ph.D.
Bethesda, MD

Bonita Mokoli, Ph.D.
Fort Washington, MD

Christopher L. Cooper, Ph.D.
Frederick, MD

Jean Manirarora, D.V.M., Ph.D.
Frederick, MD

Mohammad Alam, Ph.D.
Laurel, MD

Ellen C. Fox, Ph.D.
Rockville, MD

Gil Katz, Ph.D.
Rockville, MD

Yuxing Li, Ph.D.
Rockville, MD

Richard M. Simon, D.Sc.
Rockville, MD

Huifang Li, Ph.D.
Silver Spring, MD

Steven C. Wood, Ph.D.
Silver Spring, MD

MASSACHUSETTS

Dingding An, Ph.D.
Boston, MA

Lora G. Bankova, M.D.
Boston, MA

Olga Barreiro, Ph.D.
Boston, MA

Steven R. Barthel, Ph.D.
Boston, MA

Oliver T. Burton, Ph.D.
Boston, MA

Ben A. Croker, Ph.D.
Boston, MA

Marcelo Freire, D.D.S., Ph.D.
Boston, MA

Nitya Jain, Ph.D.
Boston, MA

Lydia Lynch, Ph.D.
Boston, MA

Michael A. Pazos, Ph.D.
Boston, MA

Pablo A. Penaloza-MacMaster, Ph.D.
Boston, MA

Joselyn Rojas, M.D.
Boston, MA

Abel Suarez Fueyo, Ph.D.
Boston, MA

Neil Surana, M.D., Ph.D.
Boston, MA

Chao Wang, Ph.D.
Boston, MA

Erica G. Weinstein, Ph.D.
Boston, MA

Gilles Besin, Ph.D.
Cambridge, MA

Rodolfo Chaparro, Ph.D.
Cambridge, MA

Jonathan A. Hill, Ph.D.
Cambridge, MA

Johanna K. Kaufmann, Ph.D.
Cambridge, MA

Daniel Lingwood, Ph.D.
Cambridge, MA

Mariane B. Melo, Ph.D.
Cambridge, MA

Srinika Ranasinghe, Ph.D.
Cambridge, MA

Maneesh Singh, Ph.D.
Cambridge, MA

Gabriel D. Victora, Ph.D.
Cambridge, MA

Jin Mo Park, Ph.D.
Cambridge, MA

Thomas J. Schuetz, M.D., Ph.D.
Framingham, MA

Benjamin Wolf, Ph.D.
Jamaica Plain, MA

Amanda Flies, Ph.D.
Newburyport, MA

Pragya Rampuria, Ph.D.
Watertown, MA

Kristen N. Willems, Ph.D.
Weston, MA

Andrea Reboldi, Ph.D.
Worcester, MA

MICHIGAN

William F. Carson, IV, Ph.D.
Ann Arbor, MI

Kaushik Choudhuri, M.B.B.S., Ph.D.
Ann Arbor, MI

Irina Grigorova, Ph.D.
Ann Arbor, MI

Antonia P. Popova, M.D.
Ann Arbor, MI

Catherine Ptaschinski, Ph.D.
Ann Arbor, MI

Rupali Das, Ph.D.
East Lansing, MI

Hariharan Subramanian, Ph.D.
East Lansing, MI

Kefei Yu, Ph.D.
East Lansing, MI

Larry Peters, Jr., Ph.D.
Grand Rapids, MI

Tim Bauler, Ph.D.
Kalamazoo, MI

MINNESOTA

Tanya S. Freedman, Ph.D.
Minneapolis, MN

Anne Frosch, M.D.
Minneapolis, MN

Roland Ruscher, Ph.D.
Minneapolis, MN

Patricio Escalante, M.D.
Rochester, MN

MISSISSIPPI

Fengwei Bai, Ph.D.
Hattiesburg, MS

Lora Petrie-Hanson, Ph.D.
Mississippi State, MS

MISSOURI

Patrick L. Collins, Ph.D.
Saint Louis, MO

Anja G. Fuchs, Ph.D.
Saint Louis, MO

Amelia Pinto, Ph.D.
Saint Louis, MO

Christopher R. Lupfer, Ph.D.
Springfield, MO

Daniel Hawiger, M.D., Ph.D.
Saint Louis, MO

Haina Shin, Ph.D.
Saint Louis, MO

Bernd H. Zinselmeyer, Ph.D.
Saint Louis, MO

MONTANA

Sonja M. Best, Ph.D.
Hamilton, MT

Virginia P. Kocieda, Ph.D.
Libby, MT

Andrij Holian, Ph.D.
Missoula, MT

Alyson J. Smith, Ph.D.
Missoula, MT

NEBRASKA

Richard E. Goodman, Ph.D.
Lincoln, NE

Jeffrey Price, Ph.D.
Lincoln, NE

Mariluz Arainga, D.V.M., Ph.D.
Omaha, NE

Xian-Ming Chen, M.D.
Omaha, NE

Christine Cutucache, Ph.D.
Omaha, NE

Jacob A. Siedlik, Ph.D.
Omaha, NE

HEW HAMPSHIRE

Margaret E. Ackerman, Ph.D.
Hanover, NH

Sara L. Colpitts, Ph.D.
Hanover, NH

NEW JERSEY

Natacha Steinckwich-Besancon, Ph.D.
Eastampton, NJ

Colleen J. Winstead, Ph.D.
Montclair, NJ

Brandon D. Coder, Ph.D.
Princeton, NJ

Eun Mi Hur, Ph.D.
Summit, NJ

NEW MEXICO

Wojciech J. Ornatowski, Ph.D.
Albuquerque, NM

Fares Qeadan, Ph.D.
Albuquerque, NM

Timothy W. Shipley, Ph.D.
Las Cruces, NM

NEW YORK

Magdia De Jesus, Ph.D.
Albany, NY

Yoichi Furuya, Ph.D.
Albany, NY

Cristina Clement, Ph.D.
Bronx, NY

Tatyana Gavrilova, M.D.
Bronx, NY

William H. Carr, D.V.M., Ph.D.
Brooklyn, NY

Melissa Garcia-Sherman, Ph.D.
Brooklyn, NY

Caleph B. Wilson, Ph.D.
Brooklyn, NY

Joseph J. Barbi, Ph.D.
Brooklyn, NY

Craig M. Brackett, Ph.D.
Brooklyn, NY

Jason Muhitch, Ph.D.
Brooklyn, NY

Elizabeth A. Wohlfert, Ph.D.
Buffalo, NY

Armin Alaadini, Ph.D.
New York, NY

Stylianous Bournazos, Ph.D.
New York, NY

Ken Cadwell, Ph.D.
New York, NY

Juan Cubillos-Ruiz, Ph.D.
New York, NY

David J. DiLillo, Ph.D.
New York, NY

Meike Dittmann, Ph.D.
New York, NY

F. Geissmann, M.D., Ph.D.
New York, NY

Katharine Hsu, M.D., Ph.D.
New York, NY

Yen-Michael S. Hsu, M.D., Ph.D.
New York, NY

Ulf Klein, Ph.D.
New York, NY

Boris Reizis, Ph.D.
New York, NY

Xiuyan Wang, Ph.D.
New York, NY

Lan Zhou, M.D., Ph.D.
New York, NY

Kyun Do Kim, Ph.D.
Rochester, NY

Gillian M. Schiralli Lester, Ph.D.
Rochester, NY

Naveen Surendran, D.V.M., Ph.D.
Rochester, NY

Atsuo Kuki, Ph.D.
Saranac Lake, NY

Continued, next page

AAI Welcomes New Members (Continued)

Christine A. King, Ph.D.
Syracuse, NY

Asiel Benitez, Ph.D.
Tarrytown, NY

Aynur Hermann, Ph.D.
Tarrytown, NY

NORTH CAROLINA

Amy Hinkelman, Ph.D.
Buies Creek, NC

Haitao Guo, Ph.D.
Chapel Hill, NC

SunAh Kang, Ph.D.
Chapel Hill, NC

Ye Qian, Ph.D.
Chapel Hill, NC

Todd Bradley, Ph.D.
Durham, NC

Maria Ciofani, Ph.D.
Durham, NC

Adam Kennedy, Ph.D.
Durham, NC

Jim Aloor, Ph.D.
Greenville, NC

Liyang Lei, M.D., Ph.D.
Kannapolis, NC

NORTH DAKOTA

Rongpeng Li, Ph.D.
Grand Forks, ND

Atul Sharma, Ph.D.
Grand Forks, ND

OHIO

Khalid Kalim, Ph.D.
Cincinnati, OH

Jeong-Su Do, Ph.D.
Cleveland, OH

Wendy A. Goodman, Ph.D.
Cleveland, OH

Basma Mersal, Ph.D.
Cleveland, OH

Mitchell A. Olman, M.D.
Cleveland, OH

Joan-Miquel Balada-Llasat, Ph.D., Pharm.D.
Cleveland, OH

Thomas L. Cherpes, D.V.M., M.D.
Columbus, OH

Aharon G. Freud, M.D., Ph.D.
Columbus, OH

Latha Ganesan, Ph.D.
Columbus, OH

Zhiwei Hu, M.D., Ph.D.
Columbus, OH

Benjamin T. Kopp, M.D.
Columbus, OH

Randall Worth, Ph.D.
Toledo, OH

OKLAHOMA

Robert C. Axtell, Ph.D.
Oklahoma City, OK

Darren J. Lee, Ph.D.
Oklahoma City, OK

Swapan Nath, Ph.D.
Oklahoma City, OK

Shitao Li, Ph.D.
Stillwater, OK

Kyeorda L. Kemp, Ph.D.
Tahlequah, OK

OREGON

Albanus O. Moguche, Ph.D.
Eugene, OR

Alejandro Alice, Ph.D.
Portland, OR

Thomas Duhon, Ph.D.
Portland, OR

Ann Hill, Ph.D.
Portland, OR

Susan E. Murray, Ph.D.
Portland, OR

Sivaraman Prakasam, D.D.S., Ph.D.
Portland, OR

PENNSYLVANIA

Colleen M. Davenport, Ph.D.
Downingtown, PA

Stephen G. Emerson, M.D., Ph.D.
Haverford, PA

Hamid Bassiri, M.D., Ph.D.
Philadelphia, PA

Mariana Bernui, Ph.D.
Philadelphia, PA

Alison J. Carey, M.D.
Philadelphia, PA

Sonya L. Cyr, Ph.D.
Philadelphia, PA

Vinit Kumar, Ph.D.
Philadelphia, PA

Tonika Lam, Ph.D.
Philadelphia, PA

Uma Sriram, Ph.D.
Philadelphia, PA

Maria Steblyanko, Ph.D.
Philadelphia, PA

J. Oriol Sunyer, Ph.D.
Philadelphia, PA

Cagla Tukul, Ph.D.
Philadelphia, PA

Moses T. Bility, Ph.D.
Pittsburgh, PA

Yong Fan, Ph.D.
Pittsburgh, PA

Julien Fourcade, Ph.D., Pharm.D.
Pittsburgh, PA

Tatiana M. Garcia-Bates, Ph.D.
Pittsburgh, PA

Arundhati Ghosh, Ph.D.
Pittsburgh, PA

Timothy W. Hand, Ph.D.
Pittsburgh, PA

Muhamuda Kader, Ph.D.
Pittsburgh, PA

Kevin P. Mollen, M.D.
Pittsburgh, PA

Kevin M. Nickerson, Ph.D.
Pittsburgh, PA

Amanda C. Poholek, Ph.D.
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Update on Gender Equity in Immunology, 2001 to 2016

Virginia Smith Shapiro,^{*} Susan Kovats,[†] Michelle A. Parent,[‡] Sarah L. Gaffen,[§] Catherine C. Hedrick,^{||} Pooja Jain,^{||} Lisa K. Denzin,[#] Malini Raghavan,^{**} and Robin Stephens^{††}

In 2001, The American Association of Immunologists Committee on the Status of Women conducted a survey examining the percentage of women faculty members within immunology departments or women in immunology graduate programs across 27 institutions in the United States, comparing it to the percentage of women receiving a Ph.D. Here, we examine the representation of women across these same 27 immunology departments and programs to examine changes in gender equity over the last 15 years. *The Journal of Immunology*, 2016, 197: 3751–3753.

In 2001, The American Association of Immunologists (AAI) Committee on the Status of Women conducted a survey examining the percentage of women faculty members within immunology departments or women in immunology graduate programs across 27 institutions in the United States, comparing it to the percentage of women receiving a Ph.D. This information was first published in the August 2001 *AAI Newsletter* (1), and was subsequently reported in a *Commentary in Nature Immunology* (2). Although 48.1% (357/742) of immunology graduate students in 2001 were women, they accounted for just 21.4% of immunology faculty members (178/830). The representation of women varied greatly among institutions, with three institutions having just one woman in their immunology faculty, whereas four other institutions had 30% women or more. At the time, this discrepancy between the number of women receiving their doctorate and the representation of women faculty members in our field was documented to make the community aware of this issue of gender equity, with hopes of initiating productive discussions. Many articles have been published highlighting the challenges and difficulties that women faculty members face in academia, along with possible reasons for the unequal representation of women in faculty positions (3–15).

As a follow up to the initial survey, the AAI Committee on the Status of Women examined the same 27 programs to determine whether advances had been made in the representation

of women faculty members in the intervening 15 years. In particular, the committee sought to confirm whether the women who comprised approximately half of the graduate students in immunology in 2001 had progressed over the 15 years to complete their doctorates and postdoctoral fellowships, and remain in academia to obtain employment as either assistant or associate professors. Surveys were sent to faculty members at each of the 27 programs or departments in the 2001 analysis. Of the 27 departments contacted, 25 departments and programs returned the surveys. For the two programs that did not return the surveys, information regarding the number and rank of women faculty members was obtained from publicly available information published on their institutions' websites. In addition to the data collected in the original survey concerning the number and percentage of women faculty members in the immunology departments or programs, the current survey also broke down the representation of women and men in an assistant professor (nontenured but tenure track), associate professor (tenured or tenure track) or professor (tenured, tenure track) position as well as research or adjunct faculties at any stage (nontenure track). The committee assessed the representation of women faculty members in leadership positions by examining whether the current department or program chair was female, and whether the program or department had ever had a female chair. Information was also requested on the gender of current graduate students and postdoctoral fellows. The data are summarized in Table I.

In 2001, the aggregate percentage of women faculty members in these immunology departments or programs was 21.4%, with a median percentile per program or department of 21.9% and a median of five women faculty represented in the immunology department or program. In 2016, the percentage of women in these same 27 institutions rose to 29.1% (280/961) with medians of 28.8% and nine women faculty members per program or department. These results are shown as a scatter plot in Figure 1. The changes in the numbers and percentages of women at each institution between 2001 and 2016 were statistically significant. Interestingly, in 2016, women comprised 39.6% (74/187) of

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Abbreviation used in this article: AAI, The American Association of Immunologists.

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Table I. Summary of the data on the representation of women in immunology

	Total Faculty	Assistant Professor	Associate Professor	Professor	Nontenure Track	Postdoctoral Fellow	Graduate Student
2001	178/830 (21.4%)	ND	ND	ND	ND	ND	357/742 (48.1%)
2016	280/961 (29.1%)	74/187 (39.6%)	61/192 (31.8%)	94/422 (22.3%)	51/137 (37.2%)	376/768 (49%)	384/760 (50.5%)

The aggregate data on the representation of women in immunology from the surveys conducted in 2001 and 2016 are shown in the table.

tenure-track assistant professors, 31.8% (61/192) of tenured associate professors, and 22.3% (94/422) of tenured professors. We did not find that women were disproportionately over-represented in nontenure track (research track or adjunct) positions, compared with tenure-track assistant professor positions. Women comprised 37.2% (51/137) of the non-tenure-track pool, compared with 39.6% (74/187) of the tenure-track assistant professor pool. As in 2001, when women comprised 48.1% (357/742) of immunology graduate students, women in 2016 comprised 50.5% (384/760) of graduate students. Although we

do not have any data from 2001 regarding the representation of women among postdoctoral fellows, in 2016 49% (376/768) of postdoctoral fellows were women. Therefore, at least in immunology, we did not detect a “leaky pipeline” in the transition from graduate student to postdoctoral fellow. Rather, women became underrepresented among immunology faculty members starting at the assistant professor stage (39.6%), with continued decline in representation moving up to the associate professor (31.8%) and professor (22.3%) ranks. The leaky pipeline becomes more of a factor, in academia at least, the higher one climbs in the academic ranks, for the underrepresentation of women is even more pronounced in leadership positions. Only 3 out of the 25 (12%) responding departments or programs currently had a woman serving as chair. In total, 16 of 25 of these departments or programs had never had a woman serve as chair.

One striking difference between the results of the two surveys arose from this analysis. In 2001, out of 830 faculty members at 27 institutions, 178 were women. In 2016, these same institutions increased the number of total faculty members to 961, of which 280 were women. The net result is that over the last 15 years, a total of 131 additional faculty positions were added to these 27 institutions. If we simply compare the changes in total faculty members from 2001 to 2016, 29 men were added to the immunology faculties whereas 102 women were added. This is probably an underestimate of total hires, as replacement recruitment (retirement followed by a replacement) are not reflected in this analysis. Only the net increase in faculty members was measured over the 15 years. These changes are deemed likely to result from concerted departmental efforts to enhance gender equity.

Even as the AAI Committee on the Status of Women is encouraged by the changes, we recognize there is some distance to be covered before full gender equity is achieved in all faculty ranks and leadership roles. We look with great interest at the prospect of measuring further positive changes over the next 15 years. Meanwhile, the AAI Committee on the Status of Women is committed to fostering awareness of the challenges for women in academic research and to initiatives leading to equal treatment of all professional immunologists on the basis of merit.

Disclosures

The authors have no financial conflicts of interest.

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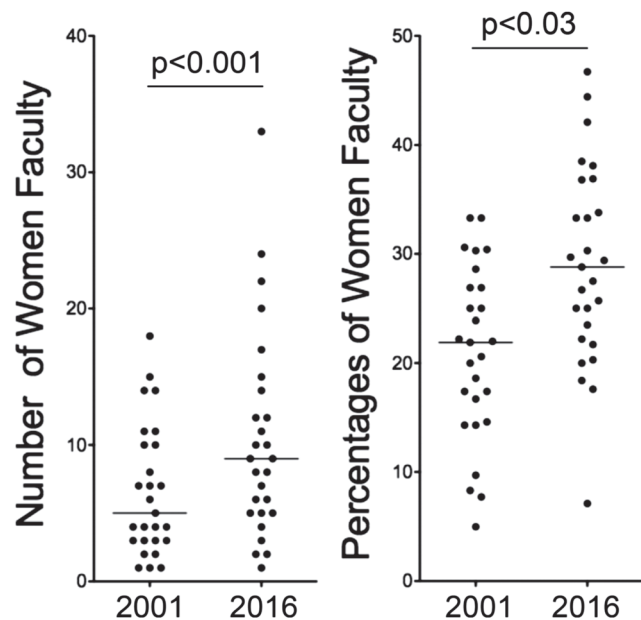


FIGURE 1. Comparison of the number and percentage of women faculty members, 2001–2016. The absolute number or percentages of women faculty members across 27 institutions were analyzed, and each number or percentage from a single institution is represented with a dot. The line represents the median in each group. Differences between the groups were analyzed by two-way ANOVA using GraphPad Prism and found to be statistically significant as denoted in the figure. The programs and departments compared in 2001–2016 are as follows: Scripps Department of Immunology, University of Washington Department of Immunology, Baylor College of Medicine Department of Immunology, Mayo Clinic Department of Immunology, University of Toronto Department of Immunology, University of Colorado Health Science Center Department of Immunology, Duke University Department of Immunology, Yale University Section of Immunobiology, University of Texas Southwestern Center for Immunology, University of Minnesota Center for Immunology, Washington University in St. Louis Center for Immunology, University of Chicago Committee on Immunology, University of Pennsylvania Graduate Group in Immunology, MD Anderson Cancer Center Graduate Group in Immunology, University of California at Berkeley Division of Immunology, and the Immunology Programs at the University of Texas Health Science Center, Cornell University, University of Pittsburgh, University of Iowa, University of Virginia, Emory University, Harvard University, Memorial Sloan-Kettering Institute, Dartmouth Medical School, LaJolla Institute of Allergy and Immunology, Boston University and Stanford University.

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The AAI Committee on the Status of Women (CSOW): Focusing on the Careers of Women in Immunology

While women have been members of AAI since its founding (Amelia Gates, M.D., and Myrtle Smith, M.D., were charter members in 1913), they represented less than 10 percent of membership until 1958. There wasn't an official group that focused on supporting women immunologists, and addressing career issues unique to them, in the association's first 57 years. In 1970, the AAI Council approved the formation of a five-member Committee on Women's Status. The first committee was chaired by Helene C. Rauch, M.D., Stanford University (AAI '67), and included two other women, Justine S. Garvey, Ph.D., California Institute of Technology (AAI '56) and G. Jeanette Thorbecke, M.D., Ph.D., New York University School of Medicine (AAI '61, president 1989–90).

In 1974, the committee grew to eight members to become the Committee on the Status of Women and Minority Groups. In 1976, the committee was comprised entirely of

women. In 1978, this committee split in two, becoming the Minority Affairs Committee (MAC) and CSOW. The mission of the CSOW was to enhance career opportunities and advance the involvement and recognition of women immunologists within the scientific community.



G. Jeanette Thorbecke
AAI President, 1989-90

In 1992, the CSOW created a forum for discussion about the challenges of being a woman in science by sponsoring its first symposium at the AAI annual meeting held in Anaheim, CA. This "How Far Can Women Succeed in Science?" symposium¹ featured three scientists:

- Susan Leeman, Ph.D., professor, Boston University School of Medicine, *Thoughts Concerning Women in Science*
- Florence P. Haseltine, M.D., Ph.D., director of population research, National Institute of Child Health and Human Development, NIH, *Paying Attention to the Unwritten Rules*
- Phyllis Moen, Ph.D., professor of human development/family studies and sociology, Cornell University, *Women as a Human Resource in Science*

In addition to the committee's interest in career development for women in science, the CSOW has promoted scientific discussion about diseases affecting women. At the 1993 annual meeting in Denver, CO, the CSOW hosted United States Surgeon General M. Jocelyn Elders, M.D, for a keynote lecture on women's health issues. Elders' keynote was followed by a symposium entitled "Modern Women, Modern Plagues: Looking Towards the 21st Century," which featured scientific talks of "three diseases of particular importance to women," identified as systemic lupus erythematosus, heterosexual AIDS, and breast cancer.²

The CSOW also highlighted these issues, as well as accomplishments of women immunologists, through a semi-regular feature in the *AAI Newsletter*, "XX-IMMUNO-NOTES-XX." This feature, which premiered in the September 1993 issue and continued until 2003, sought to "inform all scientists in our organization about the contributions and activities of female Immunologists."³

The committee found that, although 48.1% of immunology graduate students in 2001 were women, they accounted for just 21.4% of immunology faculty members. In 2016, the percentage of women in immunology faculty positions at these institutions had risen to 29.1% while the representation of women among immunology graduate students held relatively steady at 50.5%.

In 2001, the CSOW conducted a survey examining the percentage of women faculty members within immunology departments or women in immunology graduate programs across 27 institutions in the United States, comparing it to the percentage of women receiving a Ph.D. The committee found that, although 48.1% of immunology graduate students in 2001 were women, they accounted for just 21.4% of immunology faculty members.⁴ The CSOW published these findings in the August 2001 *AAI Newsletter*. A follow-up survey (reprinted on pages 30–33) was conducted in 2016 by the current committee to examine changes in gender equity

over the last 15 years across these same 27 immunology departments and programs. In brief, in 2016, the percentage of women in immunology faculty positions at these institutions had risen to 29.1% while the representation of women among immunology graduate students held relatively steady at 50.5%.⁵

At IMMUNOLOGY 2003™ in Denver, CO, the CSOW hosted a “Careers Lunch,” to “provide an opportunity for aspiring scientists to meet in small groups with leading scientists from academia, industry, and government, to discuss career-related topics.”⁶ The “Careers Lunch” evolved into a co-hosted (with the AAI Education Committee) “Careers in Science Roundtable”, and has been a popular activity at the meeting ever since. This unique career session features a “table leader” expert in a certain topic who answers questions and discusses their topic with up to 8 table participants. Open to graduate students, postdoctoral fellows, and junior faculty, this annual event draws many early-career scientists who are interested in speaking with more experienced scientists on topics related to the work environment (academic research, biotech industry, governmental agencies, non-profits), the transitions from specific career stages, issues in balancing career and family in any career path, and more.

Among its most recent career-development services, in 2013, the CSOW established the Career Advisory Board, which provides early-career scientists and senior postdoctoral fellows an opportunity to obtain guidance from more senior PIs having insight and experience with specific issues.⁷ An online matching process will link the requester with an experienced scientist. Topics include recruiting, grant writing, building networks, balancing family and work, and more. The committee also works to enhance opportunities for women to be selected as speakers and/or chairs at professional meetings and seminar series, or to serve as reviewers, editors, board members, consultants, or in other professional capacities. The CSOW has compiled a Women AAI Member Speaker list of AAI women members who work in immunological research or fulfill leadership roles in non-research careers related to the field.

These CSOW activities have helped to enhance the recognition of women scientists through symposia and presentations, career advice, and surveys assessing the status of women in the field.



Images from the Careers in Science Roundtable at the AAI annual meeting

References

1. “Highlights of the 1992 AAI Special Symposium: How Far Can Women Succeed in Science?” *AAI Newsletter*, Summer 1992, 8.
2. “XX-IMMUNO-NOTES-XX: Introduction,” *AAI Newsletter*, September 1993, 6.
3. *Ibid.*
4. AAI Committee on the Status of Women, “XX-IMMUNO-NOTES-XX: Women in Graduate School vs. the Faculty Ranks,” *AAI Newsletter* August 2001, 5–6.
5. Virginia Smith Shapiro et al., “Update on Gender Equity in Immunology, 2001 to 2016,” *The Journal of Immunology* 197, no. 10 (2016): 3751–53.
6. Nancy Hosken, “XX-IMMUNO-NOTES-XX,” *AAI Newsletter*, October–November 2002, 15.
7. For more information on the Career Advisory Board, please visit <http://aai.org/CAB.html>.



A NEW JOURNAL FOR YOUR SCIENCE

Presenting *ImmunoHorizons*, the new online, open access journal from AAI

By Leslie Berg and Michael Krangel, Co-Editors-in-Chief, *ImmunoHorizons*

We are excited to introduce to you *ImmunoHorizons*, a new journal published by The American Association of Immunologists (AAI). *ImmunoHorizons* is an online, open access journal for publication of primary research articles that advance knowledge in basic and translational immunology.

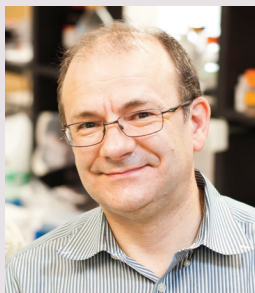


The overall mission of *ImmunoHorizons* is to highlight studies performed with rigorous methodology that result in robust conclusions of interest to immunologists. One opportunity offered by *ImmunoHorizons* is that authors do not have to wait to have complete mechanistic or functional characterization to publish. For example, we envision publishing studies that describe novel cell types; present large, descriptive datasets; outline novel methods, assays, or computational tools; or provide initial characterizations of unique reagents, including mouse strains, clones, and antibodies, even if biological insights have not been fully realized.

Many of us have experienced the disappointment of completing a carefully designed research study that yielded conclusive and informative results, only to find that the results do not fit a particular journal's definition of "significance" or "novelty." For exactly these cases, we now offer *ImmunoHorizons* as an ideal option to publish your research.

To help us in this mission, we have recruited four outstanding senior editors, each specializing in a major area of immunology research. Mark Kaplan, from Indiana University School of Medicine, will oversee articles focused on adaptive immunity; Robert Modlin, from the David Geffen School of Medicine at UCLA, will handle articles about infectious disease; Luc Van Kaer, from Vanderbilt University School of Medicine, will be responsible for articles regarding innate immunity; and Cathryn Nagler, from the University of Chicago, will oversee articles on clinical and translational immunology. To assist the senior editors, we have also recruited a panel of associate editors whose collective expertise encompasses a broad range of subdisciplines in immunology.

Two independent tracks are available for submission of research articles to *ImmunoHorizons*. One track will be for high-quality manuscripts that were not



Clockwise from top left: *ImmunoHorizons* senior editors Robert Modlin, Mark Kaplan, Cathryn Nagler, Luc Van Kaer

accepted for publication in *The Journal of Immunology (The JI)*, not because of the value of the science but rather, because they were too descriptive or did not provide a complete mechanism. Upon recommendation of *The JI* deputy editor and approval of the authors, these manuscripts will be transferred "as is" from *The JI* to *ImmunoHorizons*, along with all of the accompanying reviews and editorial evaluations. These manuscripts will be evaluated for publication by the co-editors-in-chief of *ImmunoHorizons*, with input from the four senior editors. The goal is to publish articles rapidly that need only modest revision and no additional

rounds of peer review. The other track will be for new submissions made directly to *ImmunoHorizons*. These manuscripts will be sent to two practicing scientists for a thorough peer review.

In an age of ever-expanding options for publication of research, why choose *ImmunoHorizons*? We believe it is of significant value that works of interest to immunologists be published collectively in journals devoted to, and read by, immunologists rather than being scattered among myriad publications. Moreover, as an AAI journal, authors can have complete confidence in a fair editorial process, as generations of immunologists have experienced with *The JI*.

ImmunoHorizons, like *The JI*, will be professionally managed by AAI, a non-profit, professional association dedicated to the field and the scientists who define it. Highly experienced AAI staff will assist authors and the editorial board as we establish this new forum for immunology information.

We are pleased to provide an online, open access journal that is exclusively devoted to publishing research in immunology, and we look forward to seeing your exciting research articles coming across our desks!

Find out more by visiting www.immunohorizons.org.

Continued, next page

Meet the Co-Editors-in-Chief of *ImmunoHorizons*

Leslie J. Berg, Ph.D.



Leslie Berg, an AAI member since 1994, is a Professor of Pathology at the University of Massachusetts (UMass) Medical School.

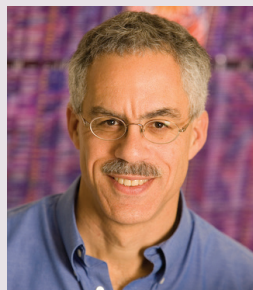
Dr. Berg was president of AAI from 2011 to 2012 and a member of the AAI Council from 2006 to 2013. A past associate and section editor for *The JI*, she also

served as chair of the AAI Program Committee, member and chair of the AAI Education Committee, and director of both the AAI Introductory and Advanced Courses in Immunology.

In 2006, Berg was awarded the AAI Distinguished Service Award for her service as AAI Program Chair. In 2001, she was the recipient of the AAI-PharMingen Investigator Award (now AAI-BD Biosciences Investigator Award). Berg's additional career honors include multiple UMass awards for achievement in research, excellence in medical education, and outstanding mentoring in the research setting. She has served on multiple NIH study sections and other review panels and held editorial board appointments on behalf of *Cellular Immunology*, *Frontiers in Immunology*, *Immunity*, *Immunological Reviews*, *Immunology Letters*, *Signal Transduction – Receptors, Mediators and Genes*, and *Trends in Immunology* (previously *Immunology Today*).

A biology graduate of Harvard University, Berg received her Ph.D. in molecular biology from the University of California, Berkeley, and completed her postdoctoral training at the Stanford University School of Medicine. From 1990 to 1997, she served as an assistant and then associate professor in the Department of Molecular and Cellular Biology at Harvard University. She joined the UMass faculty in 1998 as an associate professor of pathology and co-director of the Transgenic and Knockout Animal Core Facility and was appointed a full professor in 2001. Her additional UMass appointments have included service as vice chair, chair, and graduate director of the Immunology-Virology Program.

Michael S. Krangel, Ph.D.



Michael Krangel, an AAI member since 1990, is the Mary Bernheim Professor of Immunology and chair of the Department of Immunology at Duke University Medical Center.

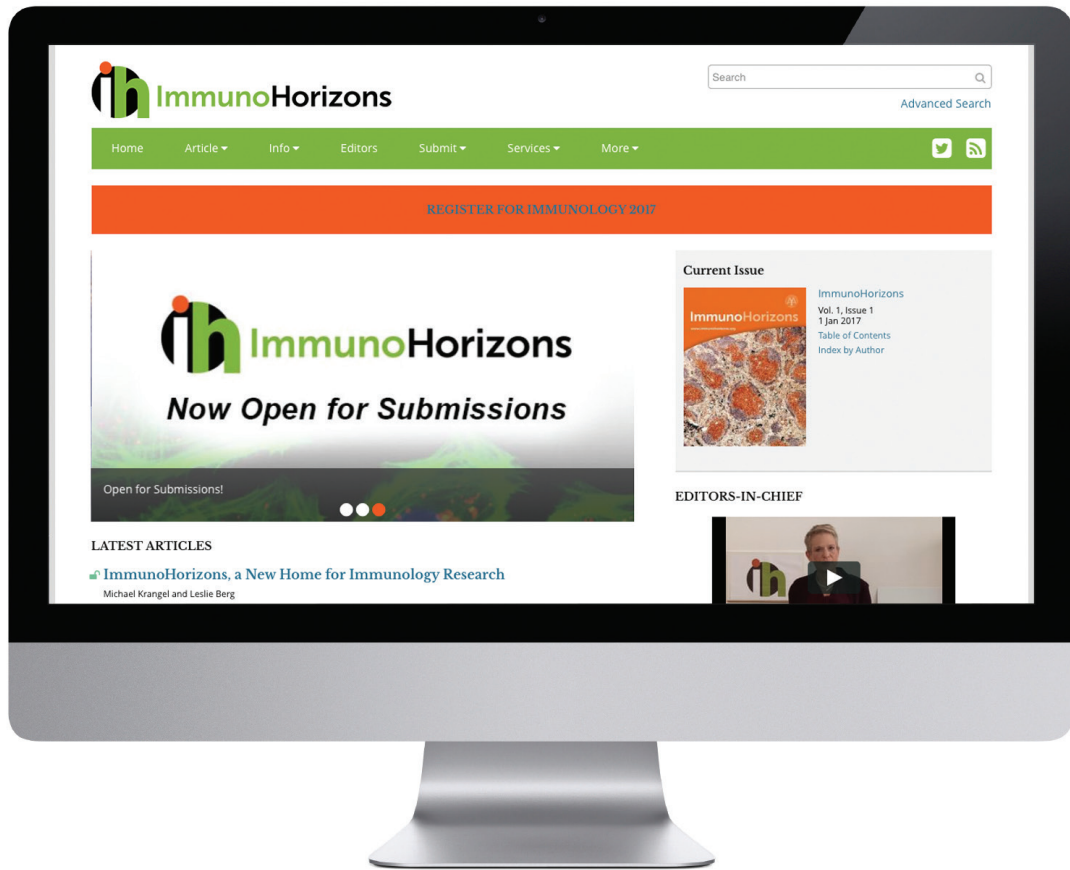
Dr. Krangel served *The JI* as an associate and deputy editor. On multiple occasions, he also served as a major symposium

chair and speaker, and block symposium chair, at the AAI annual meeting.

Krangel's additional career appointments and honors include service on multiple NIH study sections and other review panels, editorial service on behalf of the *Journal of Experimental Medicine*, election as an American Association for the Advancement of Science fellow, member of the Henry Kunkel Society, recipient of the NIH MERIT Award and American Cancer Society Faculty Research Award, and 5th Annual Southeastern Immunology Symposium organizer.

A New York City native and biochemistry graduate (with high honors) of the State University of New York, Stony Brook, Krangel received his Ph.D. in biochemistry and molecular biology from Harvard University. Following postdoctoral training at the Cold Spring Harbor Laboratory, he served as a pathology instructor at Harvard Medical School and the Dana Farber Cancer Institute. Krangel was named an assistant professor of pathology at Harvard and Dana Farber in 1986 and appointed to Harvard's Board of Tutors in Biochemical Sciences in 1988. In 1990, he was named an associate professor of microbiology and immunology at the Duke University Medical Center, where he has served as a full professor of immunology since 2003 and as chair of the Department of Immunology since 2010. His additional Duke appointments have included service as director of immunology graduate studies.





Submit Your Science to *ImmunoHorizons*

ImmunoHorizons is a fully peer-reviewed, open access, online-only journal committed to advancing the knowledge of immunology. All editorial decisions are made by practicing scientists.

Criteria for publication include rigorous methodology and robust conclusions that advance the field and are of broad interest to the immunology community. *ImmunoHorizons* will consider observations of interest even if complete mechanistic or functional characterization cannot yet be provided. *ImmunoHorizons* will also consider for publication novel methods, assays, or computational tools, as well as initial characterizations of novel reagents, including mouse strains, clones, and antibodies, even if biological insights have not yet been fully realized. Large, descriptive data sets that are of interest to the field will also be considered.

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2. Editor assigns reviewers to the manuscript.
3. Reviewers review the manuscript.
4. Editor makes a final decision, to be sent to the author.

For more information and to view videos from the *ImmunoHorizons* Co-Editors-in-Chief, please visit www.immunohorizons.org.



GRANTS AND AWARDS

March 7

Keio Medical Science Prize 2017

- **Prize/Award:** Two prizes of 10 million yen each, accompanied by a certificate of merit and award medal, in recognition of outstanding and creative achievements in medical and life sciences research contributing to scientific developments in clinical medicine
- **Eligibility:** Individual investigators of any nationality who are active in, and expected to make future contributions to, their field of clinical medical research, which may include research pertaining to development of drugs and medical devices
- **Details:** <http://www.ms-fund.keio.ac.jp/prize/index.html>
- **Contact:** +81-3-5363-3609; k-nomination@adst.keio.ac.jp

March 15

AAI Careers in Immunology Fellowships

- **Prize/Award:** Multiple awards in support of the laboratories of AAI member principal investigators (PIs), each providing one year's salary for a graduate student or postdoctoral fellow working in the PI's lab
- **Eligibility:** Any AAI member principal investigator with less than \$250,000 (excluding PI salary) in annual direct costs who seeks salary support for an AAI member trainee working in the PI's lab
- **Details:** <http://www.aai.org/Awards/CIIF.html>
- **Contact:** AAI: fellowships@aai.org

March 15

Burroughs Wellcome Fund Innovation in Regulatory Science Award

- **Prize/Award:** To stimulate research in regulatory science, awards of up to \$500,000 over five years to academic investigators developing new methodologies or innovative approaches in regulatory science that offer the promise of ultimately informing the decisions of the FDA and other regulatory bodies
- **Eligibility:** U.S. and Canadian citizens or permanent residents with doctoral degrees who hold a faculty or adjunct faculty appointment at a non-profit, degree-granting institution in the United States or Canada
- **Details:** <http://www.bwfund.org/grant-programs/regulatory-science/innovation-regulatory-science>
- **Contact:** (919) 991-5100; rustykelley@bwfund.org or ttaylor@bwfund.org

April 3

CRI Irvington Postdoctoral Fellowships

- **Prize/Award:** Fellowships of up to \$175,500 over three years to fund and train young immunologists/cancer immunologists at leading universities and research centers
- **Eligibility:** Applicants working in areas directly related to cancer immunology, who, at the time of award activation, have a doctoral degree but less than five years of relevant postdoctoral experience (medical residency years excepted); an eligible project must fall into the broad field of immunology and show relevance to solving the cancer problem
- **Details:** <http://www.cancerresearch.org/grants-programs/grants-fellowships/cri-irvington-postdoctoral-fellowships>
- **Contact:** (212) 688-7515; grants@cancerresearch.org

April 15

NIAID Primary Caregiver Technical Assistance Supplements

- **Prize/Award:** Grants to support postdoctoral research scientists taking care of a child or sick family member; each grant provides funds for an NIAID grantee to hire and cover salary and fringe benefits for a mid-to-senior-level technician to fill in when the caregiver needs to be away from the lab
- **Eligibility:** Principal investigators with at least two years of NIAID support remaining who seek supplemental funding to assist a postdoctoral researcher in need of primary caregiver technical support; the postdoctoral researcher must have at least one full year's experience at an NIAID-funded laboratory and be a primary caregiver for a child or ailing relative
- **Details:** <https://www.niaid.nih.gov/grants-contracts/research-supplements#A4>
- **Contact:** Raushanah Newman: (240) 669-2925; AITrainingHelpDesk@niaid.nih.gov

May 1

Thomas E. Starzl Prize in Surgery and Immunology

- **Prize/Award:** A crystal award, honorarium of \$10,000, and travel to the University of Pittsburgh to receive the award and present the award lecture
- **Eligibility:** Outstanding national or international leaders in the field of organ transplantation who have made significant contributions to transplantation and immunology research
- **Details:** <https://stiresearch-health.secure.pitt.edu/node/427>
- **Contact:** (412) 383-8884; starzlprize@upmc.edu

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MEETINGS AND EVENTS

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2017

March 9–11, 2017

4th International Congress on Controversies in Rheumatology and Autoimmunity

Bologna, Italy
<http://cora2017.kenes.com/>

March 26–29, 2017

LUPUS2017: 12th International Congress on SLE and 7th Asian Congress on Autoimmunity

Melbourne, Australia
<http://lupus2017.org/>

April 2–5, 2017

21st Annual Woods Hole Immunoparasitology Meeting

Marine Biological Laboratory
Woods Hole, MA
<https://immunoparasitology.org/>

April 7–10, 2017

30th Annual Canadian Society of Immunology Spring Meeting

The Banff Centre
Banff, Alberta, Canada
<https://www.csi-sci.ca/scientificmeeting.aspx>

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Washington, DC
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July 11–16, 2017

AAI Introductory Course in Immunology

UCLA Luskin Conference Center
Los Angeles, CA
<http://www.aai.org/Education/Courses>

July 23–28, 2017

AAI Advanced Course in Immunology

Seaport World Trade Center
Boston, MA
<http://www.aai.org/Education/Courses>

September 8–12, 2017

16th European Meeting on Complement in Human Disease

Copenhagen, Denmark
<http://emchd2017.dk/>

September 11–14, 2017

European Society for Immunodeficiencies (ESID) 2017 Meeting

Edinburgh, UK
<http://esid2017.kenes.com/>

October 23 - 26, 2017

20th Annual Upstate New York Immunology Conference

The Sagamore Resort and Conference Center,
Bolton Landing, NY
<http://www.amc.edu/NYIC/>

October 26–30, 2017

American College of Allergy, Asthma & Immunology Annual Scientific Meeting

Boston, MA
<http://annualmeeting.acaai.org/>

November 17–20, 2017

Autumn Immunology Conference (AIC) 2017

JW Marriott
Chicago, IL
<http://www.autumnimmunology.org/>

2018

March 2–5, 2018

World Allergy Organization Meeting 2018

Orlando, FL
<http://www.worldallergy.org/meetings>

May 4–8, 2018

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Austin, TX
http://www.aai.org/Meetings/Future_Meeting.html

June 17–21, 2018

ISDCI 2018: 14th International Society of Developmental and Comparative Immunology (ISDCI) Congress

Santa Fe, NM
<http://www.isdci.org/17257/Congress>

September 12–15, 2018

European Congress of Immunology (ECI)

Istanbul, Turkey
<https://www.efis.org/immunology-meetings/european-congress-of-immunology-eci/about/index.html?nav=true>

September 16–20, 2018

27th International Complement Workshop

Santa Fe, New Mexico
<https://www.regonline.com/ICW2018>

November 16–19, 2018

Autumn Immunology Conference (AIC) 2018

Chicago Marriott Downtown, Chicago, IL
<http://www.autumnimmunology.org/>

2019

April 25–30, 2019

ICI2019: 17th International Congress of Immunology

Beijing, China
<http://landing.iuis2019.org>

May 9–13, 2019

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San Diego, CA
http://www.aai.org/Meetings/Future_Meeting.html

2020

May 8–12, 2020

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2019

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