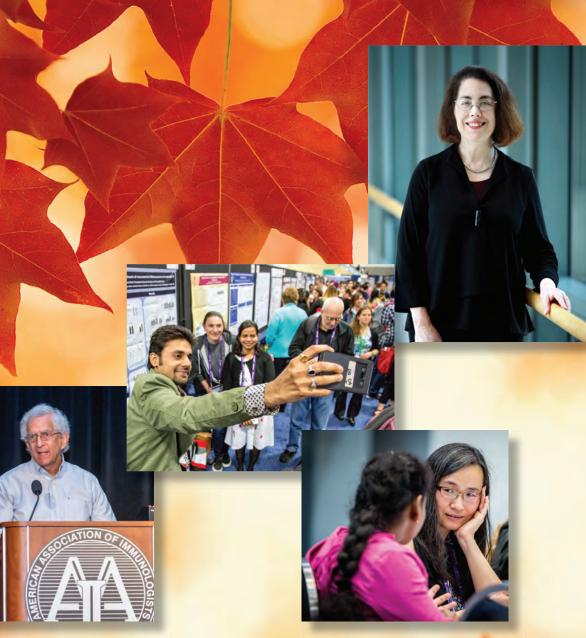


NOVEMBER 2017



Highlights of IMMUNOLOGY 2017

NOW OPEN FOR SUBMISSIONS! www.immunohorizons.org

An open access, fully peer-reviewed journal published by The American Association of Immunologists, Inc.



Editors-in-Chief

Leslie J. Berg
University of Massachusetts
Medical School

and

Michael S. Krangel

Duke University

Medical Center

The pace of progress in the field of immunology - in both basic research and successful therapies - is advancing as never before.

ImmunoHorizons will contribute to this progress by

- · Reducing the time needed to submit a manuscript
- Publishing research work using an open access model

ImmunoHorizons is a fully peer-reviewed journal committed to advancing the knowledge of immunology. All decisions are made by editors who are practicing scientists.





The American Association of Immunologists

1451 Rockville Pike, Suite 650 Rockville, MD 20852 Tel: 301-634-7178 Fax: 301-634-7887 E-mail: infoaai@aai.org www.aai.org

Member Services

Tel: 301-634-7195 E-mail: members@aai.org

> The Journal of Immunology and

ImmunoHorizons

Tel: 301-634-7197 Email: infoji@aai.org www.jimmunol.org Email: infoih@aai.org www.immunohorizons.org

Council

President

Wayne M. Yokoyama, M.D.

Vice President JoAnne L. Flynn, Ph.D.

Past President

Arlene H. Sharpe, M.D., Ph.D. **Secretary-Treasurer**

Edith M. Lord, Ph.D. Councillors

Jeremy M. Boss, Ph.D. Jenny P. Ting, Ph.D. Gary A. Koretzky, M.D., Ph.D. Mark M. Davis, Ph.D.

Executive Director M. Michele Hogan, Ph.D.

www.aai.org/ About/Offices-Staff



Features

- 8 President's Message: Wayne M. Yokoyama
- 26 2017 AAI Annual Meeting Highlights
- 37 Highlights of 2017 AAI Business Meeting
- History of Immunology in the Nation's Capital

Departments

- **Public Affairs**
- 12 Members in the News
 - **Belkaid, Locksley, Sprent** elected to the National Academy of Sciences
 - **Hood, Roizman** are National Academy of Sciences **Award Recipients**
 - Ahmed, Lanzavecchia are Robert Koch Award Co-recipients
 - **Allison, Chen, Freeman, Honjo, Sharpe** are Warren Alpert Prize Co-honorees
- 16 In Memoriam
 - Maria Estela Roux
 - 2016–2017 Deceased Members
- 18 Career Development
- 22 Outreach Update
- 42 Grants and Awards
- Meetings and Events



8 President's Message



26 2017 AAI Annual **Meeting Highlights**



40 History of Immunology in the Nation's Capital

Connect with AAI!

Have a story idea for a future issue of the AAI Newsletter? Send us an email! Interested in staying up with the latest on AAI? Keep in touch through our social media channels. Follow us on Twitter, "Like" us on Facebook, and keep abreast of daily developments in the world of immunology.

- @ImmunologyAAI
- @J_Immunol (The Journal of Immunology)
- @ImmunoHorizons (ImmunoHorizons)
- **II** @ImmunologyAAI
- AAINewsletter@aai.org (story ideas and comments about the AAI Newsletter)



House and Senate Appropriations Committees Approve Large Funding Increases for NIH; **Government to Operate Under Short-Term Continuing Resolution**

Congress failed to pass any of its annual appropriations bills before fiscal year (FY) 2018 began on October 1. As a result, Congress approved a Continuing Resolution (CR) in September to fund the federal government through December 8 at roughly last year's levels. The CR was part of a legislative package that also includes \$15 billion in hurricane and disaster relief and that suspends the federal debt ceiling until December 8.

Congress has, however, made some progress on its annual appropriations bills, including the Labor, Health and Human Services, Education, and Related Agencies (Labor-HHS) appropriations bill that funds NIH. The House Appropriations Committee acted first by approving a bill that includes a \$1.1 billion increase for NIH for FY 2018; the Senate Appropriations Committee subsequently approved a \$2 billion increase for the agency.

House Action

In July, the House Appropriations Committee passed an FY 2018 Labor-HHS appropriations bill that includes a \$1.1 billion funding increase for NIH. A nearly identical version of the bill was approved by the House Labor-HHS Appropriations Subcommittee six days earlier. If the bill, which was subsequently approved by the full House, is passed by the Senate and signed into law, it would provide NIH with a total budget of \$35.2 billion.

Although the House Labor-HHS bill passed with only Republican support, House Republicans rejected President Donald Trump's recommendation to cut the NIH budget by approximately \$7.4 billion (~21%). They also rejected several of his other proposals, including eliminating the Fogarty International Center at NIH (which instead receives a slight budget increase); moving the independent Agency for Healthcare Research and Quality into NIH; and lowering the current Executive Level II salary cap (\$187,000) to Executive Level V (\$151,700). In addition, they rejected a Trump proposal to cap the Facilities and Administrative (F&A) reimbursement rate at 10% by including language that prohibits NIH from using any funds "to develop or implement a modified approach" to awarding indirect costs.

Portions of the \$35.2 billion NIH budget would be allocated to specific programs, as follows:

- \$496 million would support 21st Century Cures Act initiatives, including the Beau Biden Cancer Moonshot; Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative; Precision Medicine Initiative; and a program on regenerative medicine research;
- a \$400 million increase for Alzheimer's disease research (for a total of \$1.8 billion):
- a \$30 million increase for research on antibioticresistant bacteria (for a total of \$493 million); and
- a \$40 million increase for the Institutional Development Award (IDeA) program, which is used to broaden the distribution of NIH funding across the country (for a total of \$374 million).

The bill also provides funding to several critically important public health agencies and programs. Although the bill includes a \$198 million cut to the Centers for Disease Control and Prevention (CDC), it increases funding for the Public Health and Social Services Emergency Fund (currently funded at ~\$1.5 billion) by \$221 million, of which \$178 million (a 247% increase) would be allocated to pandemic influenza preparedness.

The bill was drafted by House Labor-HHS Appropriations Subcommittee Chair Tom Cole (R-OK, 4th), who also played a key role in securing \$2 billion funding increases for NIH in both FY 2016 and FY 2017.

Senate Action

The Senate Appropriations Committee approved its Labor-HHS appropriations bill on September 7, just one day after a nearly identical bill was passed by the Senate Labor-HHS Appropriations Subcommittee. For the second year in a row, Subcommittee Chair Roy Blunt (R-MO) and Subcommittee Ranking Member Patty Murray (D-WA), corecipients of the 2017 AAI Public Service Award, produced a bipartisan bill that required significant compromise. And for the third year in a row, the bill includes a \$2 billion funding increase for NIH; if signed into law, this amount would increase the total NIH budget to \$36.1 billion.

Like the House bill, the Senate bill directs a large amount of funding to specific initiatives and other congressional priorities, including:

- \$496 million to support the 21st Century Cures Act initiatives (including the Beau Biden Cancer Moonshot);
- a \$414 million increase for Alzheimer's disease research (for a total of \$1.8 billion);

Call for 2018 Award Applications

Deadline: January 9, 2018

Applications are invited for the following AAI Travel Awards and Grants, which annually foster the promise and professional development of investigators of all career stages.

Lefrançois-BioLegend Memorial Award

Established to honor the memory of AAI member Dr. Leo Lefrançois, this award is intended to advance the career of a trainee who attends the AAI annual meeting and presents an outstanding abstract specifically in the area of mucosal immunology. The award recipient will receive a \$1,000 cash award and a certificate during an awards presentation program at the AAI annual meeting. This award is generously supported through a grant from BioLegend and donations from friends and colleagues of Dr. Lefrançois.

AAI Trainee Poster Awards

These awards provide up to \$300 travel reimbursement to AAI trainee members (students and postdoctoral fellows) whose first-author abstracts submitted to the AAI annual meeting are selected for poster sessions only and found to be exceptional by the AAI Abstract Programming Chairs. Selection is based on the originality and significance of the research being presented.

Pfizer-Showell Travel Award

This award recognizes the professional promise of an early career investigator (assistant professor or equivalent) by assisting the award recipient with travel to the AAI annual meeting. Selection is based on career progress and submission of an outstanding abstract selected for oral presentation in a block symposium at the meeting. The award recipient will be recognized and presented with a certificate at an awards presentation program at the AAI annual meeting. Support of up to \$1,500 will be provided for meeting registration and travel. This award is supported through an endowment from Henry J. Showell and Pfizer. Inc.

AAI-Thermo Fisher Trainee Achievement Awards

These awards recognize up to six promising trainees in the field of immunology. Selection is based on career promise and presentation of an outstanding first-author abstract selected for oral presentation in a block symposium. Awardees will receive a \$1,000 cash prize and reimbursement for meeting expenses. These awards are generously supported by Thermo Fisher Scientific.

AAI Early Career Faculty Travel Grants

These grants assist young investigators (assistant professor or equivalent) in attending the AAI annual meeting. Recipients will be reimbursed up to \$1,250 for registration and travel expenses.

Chambers-Thermo Fisher Scientific Memorial Award

Established to honor the memory of AAI member Dr. Cynthia Chambers, this award is intended to advance the career of an early career scientist who attends the AAI annual meeting and presents an outstanding abstract specifically in the area of cancer biology. The award recipient will receive a \$1,000 cash award and a certificate during an awards presentation program at the AAI annual meeting. This award is generously supported through a grant from Thermo Fisher Scientific.

Lustgarten-Thermo Fisher Scientific Memorial Award

Established to honor the memory of AAI member Dr. Joseph Lustgarten, this award is intended to advance the career of a mid-career scientist who attends the AAI annual meeting and presents an outstanding abstract specifically in the area of immune regulation. The award recipient will receive up to \$1,250 travel reimbursement and a certificate during an awards presentation program at the AAI annual meeting. *This award is generously supported through a grant from Thermo Fisher Scientific.*

AAI Trainee Abstract Awards

These awards provide up to \$500–750 travel reimbursement to AAI trainee members (students and postdoctoral fellows) whose first-author abstracts submitted to the AAI annual meeting are selected for presentation in block symposia.

AAI Undergraduate Faculty Travel Grants

These grants assist undergraduate faculty in attending the AAI annual meeting. Each grant will also support travel costs for an undergraduate student of the recipient's selection. A grant of up to \$1,250 is awarded to the undergraduate faculty member, and a grant of up to \$1,000 is awarded to the selected undergraduate student (registration for an undergraduate student is at a discounted rate of \$30).

AAI Laboratory Travel Grants

These grants assist mid-career and senior investigators in attending the AAI annual meeting. Applicants must hold an appointment of associate professor, full professor, or equivalent; have limited research funding; and be a first or last author on one or more abstracts submitted to the annual meeting. Each grant will provide two travel awards of up to \$1,250 each: one to the PI or laboratory director and another to a member of his or her lab, chosen by the PI or laboratory director. Recipients will be reimbursed for registration and travel expenses.

For complete AAI Travel Award and Grant application details, visit www.AAI.org/Awards.

The 2018 AAI Awards will be presented in conjunction with

IMMUNOLOGY 2018[™]

May 4-8, 2018 • Austin, Texas

Questions? Contact AAI at 301-634-7178 or awards@aai.org

PUBLIC AFFAIRS

- an additional \$140 million increase for the BRAIN Initiative (for a total of \$400 million);
- a \$50 million increase for research on antibioticresistant bacteria (for a total of \$513 million); and
- an \$11 million increase for the IDeA program (for a total of \$344 million).

Like the House, the Senate rejected Trump's proposals to cap F&A reimbursements at 10%, eliminate the Fogarty International Center, and lower the salary cap from Executive Level II to Executive Level V.

When Congress works toward a final Labor-HHS bill later this year, both bills will serve as important starting points for negotiating final budget amounts.

NIH Issues Policy on Next Generation Researchers Initiative

On August 31, NIH issued a notice (NOT-OD-17-101) containing policy details for the recently implemented Next Generation Researchers Initiative (NGRI). The NGRI, which was announced at the June 2017 meeting of the NIH Advisory Committee to the Director (ACD), is designed to provide support for meritorious early-stage and mid-career investigators and to address a directive within the 21st Century Cures Act. The policy requires NIH Institutes and Centers (ICs) to "prioritize awards that will fund Early Stage Investigators (ESIs) and Early Established Investigators (EEIs)." An ESI is defined as "a Program Director/Principal Investigator (PD/PI) who has completed their terminal research degree or end of post-graduate clinical training, whichever date is later, within the past 10 years and who has not previously competed successfully as PD/PI for a substantial NIH independent research award." An EEI, previously called a mid-career investigator, is defined as "a PD/PI who is within 10 years of receiving their first substantial, independent competing NIH R01-equivalent research award as an ESI" and will be prioritized if the investigator is at risk of losing all NIH funding or only has one active NIH award.

The goal of the newly released policy is to fund approximately 200 more ESI and 200 more EEI awards across NIH in FY 2017 than in FY 2016. Each IC must "develop evidence-based strategies to identify, grow, and retain ESIs and EEIs." The policy also indicates that the Office of the NIH Director will centrally track the status of ESIs and EEIs, including the NGRI's impact on enhancing the diversity of the scientific workforce. Details of the policy and information about the NGRI can be found at https://grants.nih.gov/ngri.htm.

In mid-August, NIH appointed a Working Group of the ACD to monitor the development, implementation, and evaluation of the NGRI. The Working Group consists of members at a variety of career stages and will report on its progress at public meetings of the ACD. The full roster and charge can be found at https://acd.od.nih.gov/working-groups/nextgen.html.

NIH launched the NGRI immediately after announcing that it was abandoning plans to implement the proposed Grant Support Index (GSI). After acknowledging that the community's concerns about the unintended consequences of the GSI were "valid," NIH announced and began immediate implementation of the NGRI, which NIH claims will support more early-stage and mid-career investigators than the GSI. AAI has been actively engaged on this topic (for details, see the June/July 2017 AAI Newsletter article, pages 11–13) and will continue to provide input as needed.

President Trump Appoints Leaders for NIH, CDC, FDA, and NCI

In early June, President Donald Trump announced that Francis Collins, M.D., Ph.D., will remain as NIH director. Collins, a physician-geneticist, was first appointed by President Barack Obama and has served as NIH director since 2009.

On July 7, Trump appointed Brenda Fitzgerald, M.D., to be the director of the Centers for Disease Control and Prevention (CDC). Fitzgerald, a board-certified obstetrician-gynecologist, served as the commissioner of the Georgia Department of Public Health from 2011 to 2017. She replaced acting CDC Director Anne Schuchat, M.D., and succeeded Tom Frieden, M.D., M.P.H., who had served as CDC director from 2009 until January 2017.

Trump's nomination of Scott Gottlieb, M.D., to be Commissioner of the Food and Drug Administration (FDA), was confirmed by the Senate in May. Gottlieb, who was a practicing physician and clinical assistant professor at New York University School of Medicine, previously served as the FDA Deputy Commissioner for Medical and Scientific Affairs and as a senior advisor to the FDA commissioner. Gottlieb replaced acting FDA Commissioner Stephen Ostroff, M.D., and succeeded Robert Califf, M.D., who had served as commissioner from February 2016 until January 2017.

Norman E. "Ned" Sharpless, M.D., who was appointed by Trump to be the Director of the National Cancer Institute (NCI), was sworn in on October 17. Before joining the NCI, Sharpless, who was a practicing oncologist and leader of a research laboratory studying the cell cycle in cancer and aging, was the director of the University of North Carolina (UNC) Lineberger Comprehensive Cancer Center and the Wellcome Distinguished Professor in Cancer Research at UNC. He replaced Douglas Lowy, M.D., who had served as acting NCI director since 2015.

6 AAI NEWSLETTER NOVEMBER 2017

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 2018–19 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/Introductory).



Apply today for this exciting professional development opportunity! Applications are due March 15, 2018.

Complete details and application forms can be found at:

www.aai.org/Education/Summer-Teachers Contact Courtney R. Pinard, Ph.D., with any questions: cpinard@aai.org or (301) 634-7826.



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/AAI-Summer-Research-Program-for-Teachers/Archive.aspx.

The American Association of Immunologists



1451 Rockville Pike Suite 650 Rockville, MD 20852 (301) 634-7178 www.aai.org

www.aai.org AAI NEWSLETTER 7





Wayne M. Yokoyama, M.D., AAI '84
AAI President, 2017–2018

Sam J. Levin and Audrey Loew Levin Professor of Medicine Professor of Medicine and of Pathology and Immunology Washington University School of Medicine

"The Times They Are A-Changin"—Bob Dylan, 1964

We live in unprecedented times. In an era of "fake news," the world order we knew in the not-so-distant past is being altered. Although change is not necessarily bad, much that has occurred recently seems ominous. In particular, the attack on science and attempts to distort scientific evidence should be of major concern to us as scientists, as physicians, ...as immunologists.

This is a time when we need to unite as members of AAI. We can do much more together than individually to resist the attack on science and to help show that science is about finding the truth and advancing the human condition for the benefit of all—now and in the future. To this end, I encourage you all to remind yourselves (or discover) what AAI does for us as immunologists and as members of the broader scientific community.

Briefly, as the world's largest professional society for immunologists, AAI advocates in Washington on behalf of science and all of us as researchers. It supports professional development and works to enhance diversity in the field. AAI successfully disseminates important scientific information at our annual meetings and through our journals. Each year, AAI introduces the excitement of immunology to scientists who attend our Introductory and Advanced Courses in Immunology and even to high school students through our High School Teachers Program. And AAI continues to develop new courses and programs to assist the field, such as the "AAI Course in Big Data Analysis in Immunology," which launched this year.

I want to highlight *The Journal of Immunology (The JI)*, the flagship journal of our society for over 100 years and the most highly cited journal in the field. Beyond publishing important research, it is the policy of *The JI* to peer review

virtually all submitted manuscripts, thereby providing a valuable educational service through feedback to authors at all career stages. Earlier this year, AAI launched a new peer-reviewed, open-access journal, *ImmunoHorizons*. I ask all of you to publish your papers in AAI journals, just as I have been doing, not only to help disseminatev timely scientific information but also to support AAI and its many invaluable programs.

Meanwhile, we are experiencing a time of great excitement with the successful application of immunology in the clinic. The unprecedented success of immunotherapy in treating cancers is the most recent and astounding-example of why it is crucial to understand how the immune system works in health and disease. From groundbreaking basic research on how T cells work and how cancer could exploit these pathways to evade the immune system to the translation of these concepts to the clinic, AAI members clearly played visionary and leading roles. And I believe that AAI itself, through its advocacy, programs, and support of its members, should receive some credit, at least in a small way, for these advances. We can look forward to future developments in immunology that will improve human health in areas as diverse as autoimmunity, infections, vaccines, and aging-among others-knowing that many of these advances will be made by AAI members with some help from AAI itself.

The continued success of AAI depends on dedicated member-volunteers, with support and direction from our terrific professional staff led by AAI Executive Director Michele Hogan. I hope more of you will find the time to help give back during these challenging times. Together, we can work diligently to fend off the attacks on science.

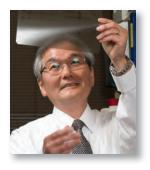
I am honored to be your president. Thank you all for your support of AAI, and I look forward to working with you this year.

Wayne M. Yokoyama, M.D., *AAI President*

WM Mokoyame

AAI NEWSLETTER NOVEMBER 2017

PRESIDENT'S PROFILE: WAYNE M. YOKOYAMA, M.D.



Wayne Yokoyama, elected to the AAI Council in 2012, commenced his leadership of AAI as the association's 101st president on July 1.

Dr. Yokoyama holds appointments as the Sam J. Levin and Audrey Loew Levin Professor of Medicine; professor

of medicine; and professor of pathology and immunology at Washington University School of Medicine (WUSM), where he also serves as director of the Medical Scientist Training Program.

Yokoyama is renowned for bringing the study of natural killer (NK) cells into the mainstream of immunology through the discovery of NK cell inhibitory receptors. This discovery revealed a mechanism by which NK cells could distinguish between target cells to be killed (which lack MHC I expression) and cells to be spared (cells which express MHC I). Yokoyama proceeded to identify and characterize many NK cell receptors and their ligands and investigate how NK cells act to protect the host against infections and malignancies. Yokoyama's research has also identified the process of NK cell "licensing," through which these cells become functionally competent, and has recently identified and characterized tissue-resident NK cells. In addition, the Yokoyama lab studies NK cell responses to tumors, rheumatoid arthritis, vasculitis, and infections with murine cytomegalovirus and cowpox virus. These studies have the ultimate goal of using the understanding of NK cell activity to develop effective NK cell-directed therapeutic interventions.

Yokoyama's extensive past service to AAI includes terms as chair of the AAI Awards Committee and as a member of the AAI Nominating Committee, AAI Program Committee, and AAI Clinical Immunology Committee. He is a multiyear faculty member for the AAI Advanced Course in Immunology and an ad hoc reviewer for *The Journal of Immunology (The JI)*, for which he served as an associate editor. In 2006, *The JI* selected Yokoyama's 1992 research paper—Karlhofer, F.M., Ribaudo, R.K., and Yokoyama, W.M. MHC class I alloantigen specificity of Ly-49+ IL-2-activated natural killer cells. Nature 1992; 358:66–70—for inclusion in its "Pillars in Immunology" series.

Yokoyama is an elected member of the Institute of Medicine (now National Academy of Medicine), National Academy of Sciences, American Academy of Arts and Sciences, Association of American Physicians, and American Society for Clinical Investigation, and an elected fellow of the American Association for the Advancement of Science and American Academy of Microbiology. His additional career honors include the following: Lee C. Howley Sr. Prize for Arthritis Scientific Research, National Arthritis Foundation; past president, Society for Natural Immunity; Meritorious Extension of Research in Time (MERIT) Award, NIAID, NIH; Novartis Prize for Basic Research in Immunology (awarded triennially at the International Congress of Immunology); Henry Christian Memorial Award for Excellence in Research, American Federation for Clinical Research (outstanding immunology/ rheumatology research abstract); Samuel R. Goldstein Leadership Award in Medical Student Education, WUSM; Carl and Gerty Cori Faculty Achievement Award, WUSM; student-selected Distinguished Service Teaching Awards (5), WUSM; elected faculty, Alpha Omega Alpha medical student honor society; Distinguished Alumni Award for Achievement, University of Iowa College of Medicine; Scholar of the Rosalind Russell Medical Research Center for Arthritis; Senior Staff Fellowship, NIAID, NIH; Medical Staff Fellowship, NIAID, NIH; Individual NIH National Research Service Award (NRSA); Veteran's Administration Associate Investigator Award; Arthritis Foundation Postdoctoral Fellowship; and Hawaii State Medical School Scholarship.

Yokoyama has served on multiple NIH scientific review boards, including the Board of Scientific Counselors, NCI; Board of Scientific Counselors, NIAID; National Advisory Allergy and Infectious Diseases Council, NIAID; Study Section Boundaries Team, Center for Scientific Review; and Director's Focus Group on Translational Research, DAIT, NIAID, NIH. He has held additional review panel appointments on behalf of the National Science Foundation; U.S. Department of Veterans Affairs; HHMI Investigator Competition; Arthritis Foundation; The Wellcome Trust; National Cancer Institute of Canada; Israel Science Foundation; Medical Research Council (UK); Science and Technology Center (Ukraine); Swiss National Science Foundation; Biotechnology and Biological Sciences Research Council (UK); Ireland-Northern Ireland

Continued, next page

PRESIDENT'S PROFILE

Co-operation Health Research Board; Ministere de la Recherche (France); Deutsche Forschungsgemeinschaft (Germany); Croatia-Israel Joint Research Program; Agency for Science, Technology, and Research's (A*STAR) Biomedical Research Council (Singapore); and Czech Science Foundation.

In addition to his service on behalf of *The JI*, Yokoyama holds or has held editorial board appointments for numerous scientific publications, including *Annual Review of Immunology, BioMed Central Biology Image Library, Current Opinion in Immunology, Immunity, Immunogenetics, Immunology and Cell Biology, International Immunology, Journal of Clinical Immunology, Nature Reviews Immunology, and <i>PLoS Pathogens*. He serves as a reviewer on behalf of many additional journals, including *Autoimmunity, Cellular Immunology, European Journal of Immunogenetics, Genes and Immunity, Immunology Today, Nature Immunology, New England Journal of Medicine, PLoS Genetics, Regional Immunology, and <i>Viral Immunology.*

Yokoyama is a biology graduate of the University of Rochester (New York), where he served as a student researcher in the laboratory of Parker Staples. He received his M.D. from the University of Hawaii, where he was a student researcher in the laboratory of Eugene Lance at the Cancer Center of Hawaii. Yokoyama completed postdoctoral training appointments as an intern (internal medicine), resident (internal medicine), and clinical fellow (rheumatology), all at the University of Iowa Hospitals (UIH) in Iowa City. He undertook additional postdoctoral training as a research fellow in the laboratory of Robert Ashman at UIH, and subsequently in the laboratory of Ethan Shevach at NIAID, NIH.

Yokoyama was appointed an assistant professor in residence at the University of California San Francisco School of Medicine in 1989. In 1992, he joined the Department of Medicine faculty of the Mount Sinai Medical Center as an associate professor, holding concurrent appointments as associate professor at the Brookdale Center for Molecular Biology, Mount Sinai School of Medicine (MSSM), and as a doctoral faculty member in the biomedical sciences Ph.D. program at the The City University of New York. He later held additional MSSM appointments as associate HHMI investigator and associate professor in the Department of Microbiology before joining the WUSM faculty as rheumatology division chief in the Department of Medicine in 1995. He was a Howard Hughes Medical Institute (HHMI) investigator from 1997 to 2017 (August).



Trainees—Build Your CV at IMMUNOLOGY 2018™

Submit an abstract to **IMMUNOLOGY 2018**™ to become eligible for one of the many awards offered to trainee members. Over 450 travel awards are offered annually! Also take advantage of the numerous career development sessions.

TRAVEL AWARDS AND GRANTS

(Available to AAI trainee members)

AAI-Thermo Fisher Trainee Achievement Awards Recognizing as many as six promising AAI trainees for

outstanding first-author abstracts selected for Block Symposia.

AAI Trainee Abstract Awards

Providing travel support to AAI trainees whose first-author abstracts are selected for presentation in Block Symposia.

Lefrançois-BioLegend Memorial Award

Advancing the career of an AAI trainee presenting an outstanding abstract specifically in the area of mucosal immunology.

AAI Trainee Poster Awards

Providing travel support to AAI trainees whose first author abstracts are selected for poster sessions only and found to be exceptional by the AAI Abstract Programming Chairs.

Join AAI and submit an abstract by January 9, 2018, to be eligible.

For complete AAI Travel Award and Grant application details, visit **www.AAI.org/Awards**.

For membership info, visit www.AAI.org/membership.

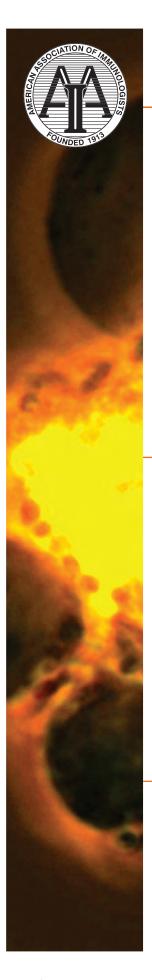
CAREER DEVELOPMENT SESSIONS

(Available to all meeting attendees)

Careers in Biotech Panel and Networking; Careers and Networking Roundtables; How to Convert your CV into a Resume; Interviewing for a Job; Secrets for a Successful Postdoctoral Fellowship

For up-to-date information regarding career development activities offered at IMMUNOLOGY 2018™, visit www.IMMUNOLOGY2018.org/scientific-program.

10 aai newsletter november 2017



AAI Courses in Immunology

2018 Introductory Course in Immunology

July 10–15, 2018

UCLA Luskin Conference Center, Los Angeles, California

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 10–12) is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background.

Part II (July 13–15) is a clinically oriented lecture series focusing on specialty areas.

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

2018 Advanced Course in Immunology

July 22-27, 2018

Seaport World Trade Center, Boston, Massachusetts

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 (301) 634-7178 or meetings@aai.org

www.aai.org AAI NEWSLETTER 11



Belkaid, Locksley, Sprent Elected to the National Academy of Sciences

The following AAI members were elected in 2017 as members of the National Academy of Sciences in recognition of their distinguished and continuing achievements in original research.



Yasmine Belkaid, Ph.D., AAI '13, Senior Investigator and Chief, Mucosal Immunology Section, Laboratory of Parasitic Diseases, NIAID, NIH

Yasmine Belkaid's laboratory focuses on a variety of aspects of barrier immunity. Her early work identified IL-10 and Tregs as

major determinants of microbial persistence in the tissues and later demonstrated that the gut was the primary site of peripheral induction of Tregs key to mucosal tolerance. In addition to exploring the long-term consequences of nutrient deprivation on tissue immunity, the lab also examines how infections can alter host immune homeostasis. More recently, Dr. Belkaid's lab has been working to understand the interactions between the microbiota and the immune system and has demonstrated that commensal bacteria in the gut are required for effective mucosal vaccines and that skin microbes can control skin immunity.

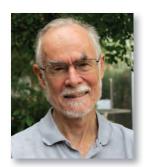
Belkaid was the 2017 recipient of the AAI-Thermo Fisher Meritorious Career Award and was elected this year as a member of the AAI Awards Committee. She has served on multiple occasions as an AAI major symposium chair and speaker at the AAI annual meeting and as a table leader at the meeting's Careers in Science Roundtable annually co-sponsored by the AAI Committee on the Status of Women and AAI Education Committee.



Richard M. Locksley, M.D., AAI '88, HHMI Investigator, Professor of Medicine and of Microbiology and Immunology, University of California, San Francisco

Richard Locksley's lab 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). 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 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.

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



Jonathan Sprent, M.D., Ph.D., AAI '80, Professor, Senior Principal Research Fellow, and Head, Cellular Immunity Laboratory, Garvan Institute of Medical Research

Jonathan Sprent's laboratory focuses on T cell differentiation and function. His early work

covered many aspects of T cell biology including T-B cell collaboration during antibody production, the role of T cells in graft-versus host disease after bone marrow transplantation, positive and negative selection during T cell differentiation, T cell survival and homeostasis of mature T cells. More recently, Dr. Sprent's lab has focused on cancer immunotherapy and how to make IL-2 therapy more effective in the setting of cancer and autoimmune disease.

Sprent is a past AAI president (1998-1999) who served on the AAI Council from 1993 to 2000. He was the 2015 recipient of the AAI Lifetime Achievement Award and is a past AAI Distinguished Lecturer and major symposium speaker at the AAI annual meeting. He also served as a member of the AAI Publications Committee, associate editor for The JI, AAI delegate to the International Union of Immunological Societies (IUIS), and member of the IUIS Council. His early paper on antigen-activated T cells has been re-published in *The Journal of Immunology* "Pillars of Immunology" section reserved for papers deemed "classics in the field."

12 AAI NEWSLETTER NOVEMBER 2017

Hood, Roizman are National Academy of Sciences Award Recipients

The following members are recipients of 2017 National Academy of Sciences awards for chemistry and microbiology, respectively.



Leroy E. Hood, M.D., Ph.D., AAI '69, President, Institute for Systems Biology

The 2017 NAS Award for Chemistry in Service to Society honors Leroy Hood's invention, commercialization, and development of multiple chemical tools that address biological

complexity, including the automated DNA sequencer that spearheaded the human genome project.

Lee Hood works to integrate biology, technology, and computation to create an approach to treat and prevent disease by identifying and therapeutically addressing disease-related perturbations in biological networks. Early in his career, Dr. Hood and his colleagues developed the DNA gene sequencer and synthesizer and the protein synthesizer and sequencer: four instruments that paved the way for the successful mapping of the human genome. The Hood laboratory is now working to develop computational tools to allow large-scale comparative analyses of human genomes, along with multiple other high throughput technologies aimed at effective P4 medicine.

Hood is a past AAI Distinguished Lecturer and served on the AAI Awards Committee and as AAI representative to the FASEB Conference Committee.



Bernard Roizman, Sc.D., AAI '59, Joseph Regenstein Distinguished Service Professor, University of Chicago

The 2017 Selman A. Waksman Award in Microbiology recognizes Bernard Roizman for his many, seminal contributions to understanding the mechanisms

by which herpes viruses replicate and cause disease.

Over the span of five decades, the work of Dr. Roizman has contributed to improving human health by understanding the biology of the herpes viruses. His early research first identified viral herpes genes and proteins, as well as the structure of viral DNA, and defined the principles of herpes gene regulation, all of which allowed him to construct the first recombinant virus specifically targeting malignant cells. His ongoing research led to the first engineered virus, which has been used to study and target tumors in humans.

Ahmed, Lanzavecchia are Robert Koch Award Co-recipients

The following AAI members are recipients of the \$120,000 Koch Award for 2017, in recognition of their pioneering research on immune system regulation and ground-breaking contributions to the development of new vaccines and immunotherapies.



Rafi Ahmed, Ph.D., AAI '84, Director, Emory Vaccine Center, Emory University

Rafi Ahmed's research efforts are directed toward understanding the mechanisms of immunological memory and using this knowledge to develop new and more effective vaccines for the prevention and

treatment of disease. His group identified the phenomenon of T cell exhaustion during chronic viral infection and has worked to elucidate the mechanisms of this dysfunction, including identifying the important role of the inhibitory receptor PD-1, in addition to undertaking studies aimed at developing strategies to restore function in exhausted T cells. In addition, Dr. Ahmed's laboratory studies the development and maintenance of humoral memory and the generation of neutralizing antibodies, working toward the development of cross-protective influenza vaccines.

Ahmed was a 2017 AAI President's Symposium speaker and recipient of the AAI Excellence in Mentoring Award in 2015. He is a past AAI Distinguished Lecturer and major symposium chair and speaker at the AAI annual meeting and has served as a member of the AAI Nominating Committee, instructor at the AAI Advanced Course in Immunology, and presenter of the 2012 Dan Campbell Memorial Lecture, which was sponsored by AAI at the Midwinter Conference of Immunologists.



Antonio Lanzavecchia, M.D., AAI (Hon) '00, Director, Immune Regulation, Institute for Research in Biomedicine, Università della Svizzera Italiana, Bellinzona, Switzerland

Antonio Lanzavecchia has made significant contributions to many areas of human immunology, especially antigen processing and

presentation and immunological memory. Dr. Lanzavecchia's work on memory led him to develop methods for isolating human monoclonal antibodies from memory B cells and plasma cells. He applied this groundbreaking work to the

Continued, next page

www.aai.org AAI NEWSLETTER 13

MEMBERS IN THE NEWS

development of antibodies for prophylaxis and treatment of infectious disease, and has used antibodies derived by this method to identify potential vaccine candidates.

Elected by the AAI Council to honorary AAI membership in 2000, Lanzavecchia is a past AAI Distinguished Lecturer and major symposium speaker at the AAI annual meeting.

Allison, Chen, Freeman, Honjo, Sharpe are Warren Alpert Foundation Prize Co-honorees

The following members are co-recipients of the 2017 Warren Alpert Foundation Prize, for their contributions to the preclinical foundation and development of immune checkpoint blockade, a novel form of cancer therapy that has transformed the landscape of cancer treatment.



James P. Allison, Ph.D., AAI '78, Professor and Chair, Department of Immunology, The University of Texas MD Anderson Cancer Center

Jim Allison has contributed a broad range of seminal work to the field, including determining the molecular immunology of T cell activation and the definition of signaling events that lead to

differentiation of naïve T cells and those that determine whether antigen receptor engagement will lead to functional activation or inactivation of T cells. An important part of this work, enhancing T cell responses by blocking the inhibitory receptor CTLA-4, has been applied to the development of new strategies for the treatment of autoimmune diseases and for immunotherapy of cancer; in particular, the CTLA-4-blocking drug ipilimumab has had unprecedented results in the treatment of metastatic melanoma. Dr. Allison's work has stimulated discovery of additional immune checkpoints and development of experimental drugs to block them, and the resulting clinical trials are demonstrating effectiveness against a variety of other cancers.

Allison is a past AAI president (2001–2002) who served on the AAI Council from 1996 to 2003. He was the 2011 recipient of the AAI Lifetime Achievement Award and received the AAI-Dana Foundation Award for Human Immunology Research in 2008. A past AAI Distinguished Lecturer, Allison has been a major symposium speaker and chair on multiple occasions, and served as an abstract programming chair, at the AAI annual meeting. He is also served as a member of the AAI Committee on Public Affairs, associate and section editor for *The JI*, and instructor at the AAI Advanced Course in Immunology.



Lieping Chen, M.D., Ph.D., AAI '92, United Technologies Corporation Professor in Cancer Research, Professor of Immunobiology / Dermatology / Medicine, Yale University

After observing that the enhancement of T cell costimulation could promote

tumor rejection, Lieping Chen went on to focus his career on the application of studies of costimulatory molecules to the development of immunotherapy. Dr. Chen's group demonstrated the therapeutic potential of 4-1BB antibodies in cancer, and his work studying the importance of the PD-1/PD-L1 pathway in mouse cancer models helped lay the foundation for the development of drugs and antibodies targeting these molecules, including the anti-PD-1 monoclonal antibody nivolumab for the treatment of patients with refractory solid tumors.

Chen was the 2016 recipient of the AAI-Steinman Award for Human Immunology Research and has served as an associate editor for *The JI*.



Gordon J. Freeman, Ph.D., AAI '01, Professor of Medicine, Dana-Farber Cancer Institute, Harvard Medical School

Gordon Freeman's work has contributed to defining the major costimulatory pathways that control the activation and inhibition of T cell responses,

including identifying the B7-1 and B7-2 ligands that bind CD28 and CTLA-4 on T cells and determining the identity and inhibitory functions of the PD-L1 and PD-L2 ligands for PD-1. The elucidation of these pathways has led to the development of strategies, including PD-1 blocking antibodies, aimed at manipulation of costimulation for the treatment of cancer and autoimmunity. In addition, Dr. Freeman's group has recently expanded the repertoire of T cell costimulatory pathways to include two novel members of the B7 family and is working on defining their roles in T cell activity.



Tasuku Honjo, M.D., Ph.D., AAI (Hon) '88, Professor of Immunology and Genomic Medicine, Kyoto University

Tasuku Honjo proposed the class-switch recombination (CSR) model of antibody diversification in 1978 and corroborated this model in subsequent studies,

including identification of activation-induced cytidine

14 AAI NEWSLETTER NOVEMBER 2017

deaminase, a protein that is essential for CSR and somatic hypermutation. In parallel with these studies, Dr. Honjo cloned molecules, including IL-4 and IL-5, which are vital for B cell activation, and PD-1, which negatively regulates self-tolerance of the immune system. As a direct result of his work, nivolumab, the humanized anti-PD-1 antibody, is now used as an effective immunotherapy to treat patients with multiple types of cancer.

Elected by the AAI Council to honorary AAI membership in 1988, Honjo is a past Distinguished Lecturer at the AAI annual meeting.



Arlene H. Sharpe, M.D., Ph.D., AAI '96, George Fabyan Professor of Comparative Pathology, Harvard Medical School

Arlene Sharpe's laboratory investigates T cell costimulatory and coinhibitory pathways and their immunoregulatory roles in controlling the balance between

T cell activation and tolerance, entering this field with the cloning of B7-2 and the definition of the inhibitory functions of CTLA-4. Studies of how coinhibitory receptor functions impact regulatory, effector, and memory T cells help Dr. Sharpe's group define unique and synergistic functions of

costimulatory and coinhibitory molecules during infection and during the induction and maintenance of tolerance; additionally, they are working to define the functions of the newly discovered T follicular regulatory cell (Tfr) subset in controlling B cell responses. Expanding on this work, Sharpe and her group examine how manipulation of T cell second signals may provide a means either to enhance immune responses (including translating fundamental understanding of T cell costimulation into new therapies for cancer) or terminate immune responses (to control autoimmune diseases or achieve tolerance in organ transplantation).

Sharpe served as AAI president for the 2016-2017 term and is a continuing AAI Council member, serving as past president in the final year of the Council term to which she was elected in 2011. She is a past AAI Distinguished Lecturer and has been a major symposium speaker and chair on multiple occasions at the AAI annual meeting. In addition to her service on AAI Council, Sharpe has been a member of the AAI Program Committee and the AAI Publications Committee.

This year's Warren Alpert Foundation Prize recipients were honored and spotlighted as featured speakers at the 28th Annual Warren Alpert Foundation Prize Symposium, "Immune Checkpoint Blockade and the Transformation of Cancer Therapy," on October 5 at Harvard Medical School in Boston.



www.aai.org AAI NEWSLETTER 15



Correction: An incorrect photo appeared in this In Memoriam in the printed version of the November 2017 AAI Newsletter. The correct image displays below. AAI sincerely apologizes for the error.



Maria Estela Roux, Ph.D., AAI '82

June 17, 1935-June 18, 2017

AAI extends condolences to the family, friends, and colleagues of Argentinian biochemist,

researcher, and educator Maria Estela Roux, an AAI member since 1982 and emeritus member since 2013, who died on June 18, 2017. The following tribute was authored by Everly Conway de Macario, Ph.D., AAI '77, University of Maryland professor. AAI gratefully acknowledges the submission.

Maria Estela Roux (Estela), who passed away on June 18, was a dedicated professor and scientist throughout her professional life. Born in Buenos Aires, Argentina, she earned degrees in pharmacy and biochemistry from Universidad Nacional de Buenos Aires (the prestigious UNBA, currently UBA) before obtaining her doctorate from the UNBA Facultad de Farmacia y Bioquímica in 1973.

From very early in her career, Estela possessed a deep interest in science and particularly in immunology, which complemented her broadly sophisticated education in other areas. She was endowed with an uncommon capacity to appreciate art in several of its forms and participate with authority in wide-ranging cultural activities. Her many outstanding qualities combined to make Estela a magnetic personality and natural leader among the many colleagues and students whose admiration and friendship she enjoyed.

A speaker of Spanish, French (the language of her parents), and English, Estela thrived intellectually in Argentina—as well as in France, England, and the United States, countries in which she studied and worked as the recipient of multiple fellowship awards. In Paris, Estela served at the Pasteur Institute and Hôpital Saint-Louis in the laboratory of Maxime Seligmann, a pioneer in studying primary immunodeficiency disorders. Later, Estela moved to London to work with Brigitte Askonas (AAI '77; d. 2013) at the National Institute for Medical Research (UK), where she gained expertise in the area of macrophages and antigen presentation and B cell physiology. Estela culminated her international tour of scientific interactions by serving at the New York University Medical Center as a fellow in the laboratory of Michael E. Lamm (AAI

'67), a leading authority on the mucosal immune system and the immunoglobulin IgA.

After returning to Argentina, Estela was very active as a scientist and teacher in La Cátedras de Biología Celular e Histología (1990–2001) and Fisiopatología (2001–2010), departments at her alma mater, UBA.

She was a founding member of the Sociedad Argentina de Inmunología and the Sociedad Argentina de Investigación Clínica. In addition to her membership in AAI, she was a member of the Society for Mucosal Immunology and the International Society of Developmental and Comparative Immunology. Her achievements were acknowledged by her peers in Argentina through appointment in 1982 as a CONICET (Consejo Nacional de Investigaciones Científicas y Técnicas) principal investigator and thereafter, as a CONICET career investigator, in recognition of her steady progress and contributions to academia and science. Her additional career honors included election to membership in the New York Academy of Sciences and appointment to the Groupe d'Étude et de Recherche sur la Malnutrition. Funders of her early-career fellowship awards included the Bovisio Foundation, Dorothy Lee Foundation, and Arthritis Foundation.

Estela's many contributions to science and society include her more than 120 original articles in refereed journals and over 200 presentations at scientific meetings, along with the mentoring of 13 doctoral candidates and participation as a doctoral thesis juror on behalf of over 30 others. In her later years, Estela pursued an expanding interest in the area of immunonutrition and, despite developing difficulties in walking, continued working in the laboratory and classroom until just days before her death.

With Estela's passing, the AAI and science in general lose an indefatigable explorer of nature who aimed at elucidating mechanisms of immunological processes and at finding solutions to diseases associated with immune system dysfunction. To the many in scientific circles and beyond whose lives she touched, Estela was a treasured and unforgettable friend.

She is survived by her sisters Teresa and Marta and their families, which include Estela's numerous and beloved nieces and nephews. She was remembered at a memorial ceremony in Buenos Aires on June 19.

16 AAI NEWSLETTER NOVEMBER 2017

2016-2017 Deceased Members

AAI extends condolences to the families, friends, and colleagues of the following members whose deaths were recorded since April 1 of last year.

Michael A. Beaven, Ph.D., AAI (Emer) '88

Bethesda, MD d. 4/8/2017

Henry N. Claman, M.D., AAI (Emer) '65

Aurora, CO d. 9/3/2016

James R. Dasch, Ph.D., AAI '84

Needham, MA d. 3/28/2017

Richard R. Hardy, Ph.D., AAI '96

Philadelphia, PA d. 5/29/2016

Arthur G. Johnson, Ph.D. (AAI '57)

Duluth, MN d. 1/8/2017

Georg Klein, M.D., AAI (Hon) '73

Stockholm, Sweden d. 12/10/2016

James J. Lee, Ph.D., AAI '02

Scottsdale, AZ d. 3/25/2017

Charles D. Mills, Ph.D., AAI '16

Marine on St. Croix, MN

d. 5/28/2017

Robert B. Nussenblatt, M.D., M.P.H., AAI '82

Bethesda, MD d. 4/17/2016

David D. Porter, M.D., AAI (Emer) '69

Santa Monica, CA d. 2/13/2017

Douglas D. Redelman, Ph.D., AAI '77

Reno, NV d. 2/7/2017

Maria Estela B. Roux, Ph.D., AAI (Emer) '82

Buenos Aires, Argentina

d. 6/18/2017

Daniel R. Salomon, M.D., AAI '11

La Jolla, CA d. 11/10/2016

Charles D. Surh, Ph.D., AAI '95

Pohang, South Korea d. 10/6/2017

Jon J. Van Rood, M.D., Ph.D., AAI (Hon) '79

Leiden, The Netherlands

d. 7/21/2017

Joy Ann Williams, Ph.D., AAI '14

Bethesda, MD d. 11/18/2016

Thomas M. Yankee, Pharm.D., Ph.D., AAI '05

Overland Park, KS d. 6/23/2017

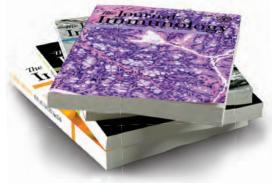
ImmunoCasts

The Journal of Immunology on your schedule!

ImmunoCasts feature audio interviews with the Pillars of Immunology commentary writers.

Authors of the Pillars of Immunology commentaries share personal insights into how the featured article(s) impacted their work.

Listen to the interviews during your commute, workout, or while on travel!



Download the mp3 file directly from: http://www.jimmunol.org/Immunocasts Also available free on iTunes.



www.aai.org AAI NEWSLETTER 17



AAI Congratulates Recipients of the 2017 Careers in Immunology Fellowships

AAI congratulates 26 members who were awarded AAI Careers in Immunology Fellowships in 2017. The program, launched in 2014, is the largest AAI career awards program, providing independent research scientists with fellowships that support one year of salary for a trainee (predoctoral or postdoctoral) in their labs.

To find out more about this program, visit www.aai.org/careers/fellowships/CIFP.

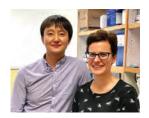
The 26 investigators and their trainees chosen to receive the 2017 Careers in Immunology Fellowships are the following:



Irving C. Allen, Ph.D. (AAI '12) **Assistant Professor** Veronica Ringel-Scaia (AAI '16) **Graduate Student** Virginia Tech

Project: Identification of novel mechanisms regulated by NLR family members that maintain immune system homeostasis in the gut





Gretchen Diehl, Ph.D. (AAI '14) **Assistant Professor** Myunghoo Kim, Ph.D. (AAI '17)

Postdoctoral Fellow Baylor College of Medicine

Project: Impact of individual members of the microbiota on host immunity against intestinal pathogens



Hamid Boulares, Ph.D. (AAI '06) **Professor**

Mohamed Ghonim, Ph.D. (AAI '16) **Postdoctoral Fellow**

Louisiana State University Health Science Center

Project: Unprecedented DNA repair-independent function for DNA-dependent protein kinase (DNA-PK) in asthma



Bruce A. Cairns, M.D. (AAI '01) **Professor**

Wesley Stepp, Ph.D. (AAI '17) **Postdoctoral Fellow**

University of North Carolina School of Medicine

Project: Rapid blood-based assay for immune suppression after burn injury



Alexander Dent, Ph.D. (AAI '98) **Professor**

Markus Xie (AAI '16) **Graduate Student**

Indiana University School of Medicine

Project: Control of Bcl6 Expression in T cells by metabolic sensors



Loren D. Erickson, Ph.D. (AAI '06) **Associate Professor**

Timothy Rosean, Ph.D. (AAI '15) **Postdoctoral Fellow**

University of Virginia

Project: Role of distinct plasma cell subsets in murine lupus



Abdeliah S. Gounni, Ph.D. (AAI '07) **Professor**

Ifeoma Okwor, Ph.D. (AAI '17)

Postdoctoral Fellow

University of Manitoba, Faculty of Medicine

Project: The mechanisms governing Semaphorin 3e/ PlexinD1 function in airway allergic inflammation and remodeling



Jessica A. Hamerman, Ph.D. (AAI '05) **Associate Member**

Holly Akilesh, Ph.D. (AAI '14) **Postdoctoral Fellow**

Benaroya Research Institute **Project:** Investigation of the role of IL-6 in TLR-driven macrophage activation syndrome

AAI NEWSLETTER NOVEMBER 2017



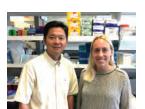
Pamela A. Hankey-Giblin, Ph.D. (AAI '10)
Professor
Adwitia Dey (AAI '14)
Graduate Student
Pennsylvania State University
Project: Elucidation of the underlying role of Ron receptor tyrosine kinase in CNS inflammation



Xin M. Luo, Ph.D. (AAI '11)
Assistant Professor
Qinghui Mu (AAI '13)
Graduate Student
College of Veterinary Medicine,
Virginia Tech
Project: Maternal microbiota

educates neonatal IgA response

Gerald P. Morris, M.D., Ph.D.



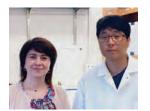
Jiu Jiang, Ph.D. (AAI '13)
Associate Professor
Diana Norden, Ph.D. (AAI '17)
Postdoctoral Fellow
Drexel University
Project: SCI-induced deficits in

memory CD8 T cell response to

virus infection



(AAI '08)
Assistant Professor
Amritha Balakrishnan (AAI '17)
Graduate Student
University of California San Diego
Project: Definition of the
relationship between thymic
selection and antigenic reactivity
of dual TCR T cells



Yasmina Laouar, Ph.D. (AAI '09)
Associate Professor
Youngsoon Jang, Ph.D. (AAI '17)
Postdoctoral Fellow
University of Michigan
Project: Establishment of the
role of NCR1 in uncoupling NK
cell functions: interferon
response versus cytotoxicity



Dane Parker, Ph.D. (AAI '11)
Assistant Professor
Silvia Pires, Ph.D. (AAI '16)
Postdoctoral Fellow
Columbia University
Project: Effect of type III
interferons on innate immunity
to Staphylococcus aureus

Santiago Partida-Sanchez, Ph.D.



Yuan Liu, M.D., Ph.D. (AAI '06)
Professor
Zhen Bian, Ph.D. (AAI '12)
Postdoctoral Fellow
Georgia State University
Project: Mechanisms that
dynamically regulate neutrophil
(PMN) response and myeloid
compartment reprogramming
during chronic inflammation



(AAI '01)
Associate Professor
Ruiz Rosado Juan de Dios, Ph.D.
(AAI '16)
Postdoctoral Fellow
Nationwide Children's Hospital
Project: The role of inflammatory
and regulatory monocytes in E.
coli-induced acute pyelonephritis



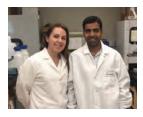
Ulrike M. Lorenz, Ph.D. (AAI '04)
Associate Professor
Mahmut Parlak, Ph.D. (AAI '17)
Postdoctoral Fellow
University of Virginia
Project: Inducible and reversible in vivo protein degradation—
attempting a new approach for modulating immune responses



Gabriel Rabinovich, Ph.D. (AAI '03)
Principal Investigator
Santiago Mendez Huergo, Ph.D. (AAI '17)
Postdoctoral Fellow
Instituto de Biología y Medicina
Experimental (IBYME/CONICET)
Project: Differential
glycosylation controls T cell fate:
underlying mechanisms and
implications for the design of
a novel therapeutic strategy in
autoimmune diseases

Continued, next page

CAREER DEVELOPMENT



Assistant Professor
Mohammed Amir Ph.D. (AAI '17)
Postdoctoral Fellow
The Scripps Research Institute
Project: REV-ERB-mediated
regulation of circadian
inflammatory responses in
dendritic cells

Laura A. Solt, Ph.D. (AAI '13)

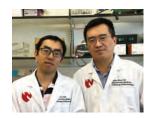


(AAI '12)
Associate Professor
Xiaoguang Wang, Ph.D. (AAI '17)
Postdoctoral Fellow
University of Colorado Anschutz
Medical Campus
Project: Elucidation of
mechanisms of immune evasion
in head and neck cancers

Jing H. Wang, M.D., Ph.D.



John Stambas, Ph.D. (AAI '09)
Associate Professor
Daniel Dlugolenski, Ph.D.
(AAI '16)
Postdoctoral Fellow
Deakin University
Project: Cytokine-inducible
SH2-containing protein (CISH):
a biological universal remote for
CD8+ T cell regulation



Haitao Wen, Ph.D. (AAI '13)
Assistant Professor
Xinghui Li, Ph.D. (AAI '17)
Postdoctoral Fellow
University of Nebraska Medical
Center
Project: Role of glucose
metabolism in microbial sepsis

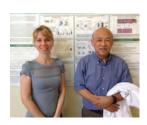


Robin Stephens, Ph.D.
(AAI '10)
Associate Professor
Samad Ibitokou, Ph.D. (AAI '16)
Postdoctoral Fellow
University of Texas Medical
Branch
Project: Mechanisms of T
cell-dependent loss of

protection in malaria



Jixin Zhong, M.D., Ph.D.
(AAI '15)
Assistant Professor
Lihua Duan, M.D. (AAI '17)
Postdoctoral Fellow
Case Western Reserve University
Project: Regulatory role of DPP4ADA interaction in metabolic
inflammation and diabetes



Dongming Su, Ph.D. (AAI '15)
Professor
Olga Sizova (AAI '16)
Graduate Student
University of North Texas Health
Science Center
Project: Pro-inflammatory
condition-induced tumor
dormancy in a pre-metastatic
reservoir: thymus

The AAI Careers in Immunology Fellowship Program was launched in 2014 to assist talented principal investigators with limited funding by providing trainee salary support. Through the end of 2016, AAI has dedicated \$4.6 million in funding for the program, in support of 131 fellowships.



Fengyi Wan, Ph.D. (AAI '11)
Assistant Professor
Dongqing Xu, Ph.D. (AAI '17)
Postdoctoral Fellow
Johns Hopkins University
Project: Novel role of
RNA-binding protein in T cell
responses and autoimmune
neuroinflammation

The American Association of Immunologists annually honors the research achievements and professional promise of over 1,000 scientists through fellowships, career awards, and travel grants. To learn about all AAI awards and grants, visit www.aai.org/Awards.

20 aai newsletter november 2017

2017 Summer Cycle Travel for Techniques Award Recipients Announced

Five members were selected as recipients of the AAI Travel for Techniques Award for the summer 2017 application cycle. 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 winter cycle of the program starting December 15.

The 2017 Summer Cycle Travel for Techniques Award recipients are:



Kymberly M. Gowdy, Ph.D. (AAI '14)
Assistant Professor
East Carolina University

Dr. Gowdy visited Dr. Nichole Reisdorph's laboratory at University of Colorado Denver to learn how to

detect specialized pro-resolving lipid mediators in lung tissue after environmental exposures.



Sonya M. MacParland, Ph.D. (AAI '17)

Assistant Professor University of Toronto, University Health Network

Agata Bartczak (AAI '16), a postdoctoral fellow in Dr. MacParland's laboratory, visited

Dr. Nick Crispe's (AAI '89) laboratory at the University of Washington in Seattle to learn the culture of viable precision-cut liver slices and to establish models that more fully replicate the 3-dimensional structures to treat liver disease.



Penelope A. Morel, M.D. (AAI '93)

Professor of Immunology University of Pittsburgh

Dr. Morel visited the laboratory of Dr. Omar Dushek (AAI '09) at the University of Oxford to learn the

technique of tethered enzymatic surface plasmon (SPR) to measure the kinetics of binding phosphatases, such as SHP-1, to phosphorylated peptides. This technique will further her studies on the role of TCR signal strength in the differentiation of T regulatory cells and other T cell subsets.



Marko Z. Radic, Ph.D. (AAI '93)

Associate Professor University of Tennessee, Memphis

Indira Neeli (AAI '17), a research associate in the laboratory of Dr. Radic, visited the laboratory of

Dr. Caroline Jones (AAI '12) at the Virginia Polytechnic Institute and University in Blacksburg, Virginia. Dr. Neeli studied the chemotaxis of human and mouse neutrophils in response to inflammatory stimuli on precision-fabricated microfluidic devices to quantify real-time, single-cell migration. These measurements allow for a precise definition of gene expression and protein function that direct neutrophil migration in inflammation.



Melanie R. Rutkowski, Ph.D. (AAI '16)

Assistant Professor University of Virginia

Claire Rosean (AAI '15), a research student in the laboratory of Dr. Rutkowski, visited the laboratory

of Dr. Alex Shalek at the Massachusetts Institute of Technology to learn how to utilize Seq-Well for single-cell RNA sequencing. This technique will help to characterize the transcriptional features of immune populations within the breast tumor microenvironment that are associated with early metastatic disease.

www.aai.org AAI NEWSLETTER 21

OUTREACH UPDATE

AAI Outreach Program Update

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 seventh year, provided sponsorship at four recent meetings: Woods Hole Immunoparasitology Meeting (WHIP), American Physician Scientists Association (APSA) Annual Meeting, Immunology LA, and Southeastern Immunology Symposium (SIS).

Woods Hole Immunoparasitology Meeting (WHIP)

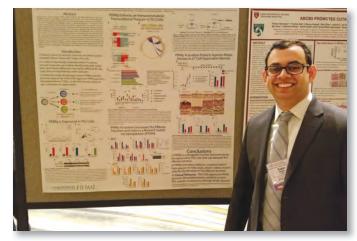
WHIP hosted 94 attendees at its 21st conference in Woods Hole, Massachusetts, from April 2 to 5. The meeting was organized by Felix Yarovinsky (AAI '08) and Tracey Lamb (AAI '09) and featured keynote speakers, Rick Maizels (AAI '01), Steve Jameson (AAI '96), and Brian Evavold (AAI '94). For the third year, AAI supported 10 Young Investigator Awards, including six awards for the best oral presentation, one award for the best "poster pitch" short presentation, and three awards for the best poster. The awardees for the best oral presentations were Alessandra Araujo (University of Rochester Medical Center), Nelson Glennie (University of Pennsylvania), Li-Yin Hung (University of Pennsylvania), Sam Kurup (University of Iowa), Kate Still (University of Virginia), and Lauren Webb (Cornell University). Loc Le (Biomedical Research Institute) was awarded the best poster pitch. The awardees for the best poster presentation were Gavin Meehan (University of Glasgow), Catherine Sharpe (University of Manchester), and Sonakshi Bhattacharjee (Technische Universität München).



WHIP organizers with AAI Young Investigator poster award winners (L-R) Felix Yarovinsky (organizer), Loc Le, Tracey Lamb (co-organizer), Catherine Sharpe, Gavin Meehan, and Sonakshi Bhattacharjee

American Physician Scientists Association (APSA)

APSA hosted its 131st annual meeting, held April 21–23 at the Fairmont Chicago Millennium Park in Chicago, Illinois. The meeting was organized, in part, by Alexander Adami (AAI '12) and Karen Doersch (AAI '15). The meeting drew 362 attendees. For the fourth consecutive year, AAI provided support for five Young Investigator Awards. The awardees include Joshua Alinger (Washington University School of Medicine in St. Louis), Sagar Bapat (University of California San Diego/Salk Institute), Elizabeth Farris Langley (Medical University of South Carolina), Tyler McCaw (University of Alabama, Birmingham), and Swapneel Patek (Washington University School of Medicine in St. Louis).



AAI Young Investigator Award recipient at APSA: Sagar Bapat





Being a part of AAI enables you to take an active role in helping to shape the future of immunology and attain your professional goals. You'll stand with members representing immunological research concerns on Capitol Hill. Plus, you gain access to:

- The best and brightest minds today.
- The world's largest annual all-immunology meeting.
- The Journal of Immunology, the pre-eminent peer-reviewed journal in the field.
- \bullet Many occasions and opportunities to present your research.
- Awards/fellowships/grants to support talented scientists in every career stage.

To renew your AAI membership and its contributions to your professional life, call 301.634.7195 or visit www.aai.org today.



OUTREACH UPDATE

Immunology LA

Immunology LA hosted its 7th annual forum, held Friday, June 9, at the Skirball Cultural Center in Los Angeles, California. The meeting was organized, in part, by Diane Da Silva (AAI '13), Helen Goodridge (AAI '09), Caroline Jefferies, and Gislaine Martins (AAI '08) and featured a keynote lecture given by David Underhill (AAI '05), a professor from Cedars-Sinai Medical Center, entitled "Commensal Fungi in Health and Disease." The meeting drew 170 attendees. For the fourth consecutive year, AAI has sponsored five Young Investigator Awards, including three oral presentations and two posters. The honorees for the oral presentations were Jun Ma (University of California, San Francisco), Jennifer Oyler-Yaniv (University of California, Los Angeles), and Jennifer Rohrs (University of Southern California). The honorees for the poster presentations were Simon Mitchell (University of California, Los Angeles) and Joseph Skeate (University of Southern California).



At Immunology LA, AAI Young Investigator Award recipients (L-R) Jun Ma, Jennifer Rohrs, Joseph Skeate, and Simon Mitchell

Southeastern Immunology Symposium (SIS)

Southeastern Immunology Symposium hosted its 6th annual forum, held Saturday June 17 to Sunday June 18 at Vanderbilt University in Nashville, Tennessee. The symposium was organized by Jeffrey Rathmell (AAI '04), Luc Van Kaer (AAI '97), and Sebastian Joyce (AAI '15), and featured three keynote lectures. Washington University Professor Gwendalyn Randolph (AAI '01) discussed "The Macrophage, Lymphatic, and Lipoprotein Triad in Chronic Inflammatory Disease." Pamela Ohashi (AAI '95), a professor at Princess Margaret Cancer Centre, presented "New Insights into CD8-Positive T Cell Function and Regulation." The third lecture, given by Stanford University Professor Mark Davis (AAI '88), was entitled "Standing on the Shoulders of Mice: New Approaches to Human Immunology."

For the fourth year, AAI has sponsored fourteen Young Investigator Awards. The honorees for the oral presentations were Sumedha Roy (Duke University); Matthew Stier and Lindsay Nyhoff (Vanderbilt University); and Rebecca Crepeau (Emory University). The honorees for the poster presentations were Boyoung Shin, Selene Meza-Perez, Kristen M. Reeder, Jeffery R. Singer, and Ashley E. Landuyt (University of Alabama at Birmingham); Madeline J. Price, Paul Dunbar, and Robert Haines (Emory University); and Gabriela Andrejeva and Marc O. Johnson (Vanderbilt University).



SIS recipients of AAI Young Investigator Awards – front row (L-R) Kristen Reeder, Sumedha Roy, Rebecca Crepeau, Boyoung Shin, Selene Meza-Perez, Gabriela Andrejeva; middle row (L-R) Sebastian Joyce (co-organizer), Jeffrey Singer, Matthew Stier, Lindsay Nyhoff, Madeline Price, Paul Dunbar, Robert Haines, and co-organizers Luc Van Kaer and Jeffrey Rathmell; back row: Marc Johnson

24 AAI NEWSLETTER NOVEMBER 2017

The Career Advisory Board

A RESOURCE FOR SENIOR POSTDOCS AND EARLY-CAREER FACULTY

Building networks
Serving on NIH study sections

mentor Timing for first grant submission







landling personnel issues

Have you just started your first lab? Trying to juggle research, teaching, and service? Are you facing new and puzzling issues that an established scientist can answer?

The Career Advisory Board (CAB) is a referral service that matches senior postdocs (start of fourth year and beyond) and early-career Pls who submit requests for guidance on specific career issues with more senior scientists with experience and insights in those areas. The program is not meant to replace the mentoring programs at a scientist's home institution, but rather to serve as a resource for senior postdocs and early-career Pls to obtain advice on a specific question from established investigators outside of their home institutions—often through a single phone call.



ELIGIBILITY: The CAB is open to all senior postdocs (start of fourth year and beyond) and early-faculty AAI members.

APPLY HERE: http://aai.org/CAB

Selected Topics

Balancing family and work

Timing for first grant submission

Recruiting

Handling personnel issues

Managing a lab

Finding a mentor

Building networks

Preparing for leadership

Balancing service obligations

Teaching

Serving on NIH study sections

www.aai.org AAI NEWSLETTER 25

IMMUNOLOGY 2017

2017 AAI Annual Meeting Highlights

May 12-16, 2017 | Washington, DC

rawing attendees from 48 countries, IMMUNOLOGY 2017[™] attracted record attendance of over 4,200 participants to Washington, DC, May 12-16. The meeting featured leading-edge immunology presented in more than 245 sessions spotlighting more than 850 AAI and guest society members and close to 1,900 poster presenters. Attendees took advantage of numerous career sessions and networking opportunities, including the high-energy social events, and more than 700 attendees received AAI career or travel awards! With the meeting presenting a special opportunity for access to Capitol Hill lawmakers, nearly 100 attendees extended their stay and scheduled visits with their Congressional delegations to advocate for biomedical research and the National Institutes of Health.















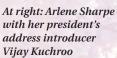


Presidents Program

AAI President's Address



Above: AAI President Arlene Sharpe presenting the meeting's opening address





AAI President's Symposium



Arlene Sharpe flanked by president's symposium speakers (L-R) Rafi Ahmed, Suzanne Topalian, Ana Anderson, and Dario Vignali

AAI Distinguished Lectures



Lecturer Giorgio Trinchieri



Lecturer Ellen Robey with Arlene Sharpe



Lecturer Gabriel Núñez (middle) with Arlene Sharpe and Program Chair Wendy Havran



IMMUNOLOGY 2017

AAI Honors for Career Achievement

AAI Lifetime Achievement Award



Lifetime Achievement honoree Richard Hodes with Arlene Sharpe

AAI Excellence in Mentoring Award



Awardee Lewis Lanier (3rd from left) with introducer Joseph Sun (4th from left) and other Lanier mentees, past and present

AAI-BioLegend Herzenberg Award



Awardee Michel Nussenzweig (middle) with Ar<mark>l</mark>ene Sharpe and BioLegend founder Gene Lay

AAI-BD Biosciences Investigator Award



Awardee Jonathan Kagan (middle) with Arlene Sharpe and BD Biosciences' Robert Balderas

AAI Distinguished Service Award



Awardee Gene Oltz with Michele Hogan

AAI-Thermo Fisher Meritorious Career Award



Awardee Yasmine Belkaid (middle) with Arlene Sharpe and Thermo Fisher's Christoph Hergersberg

AAI-Steinman Award for Human Immunology Research



Awardee Jean-Laurent Casanova with Arlene Sharpe

New Member Reception

At this annual event, members of the AAI Council, AAI Membership Committee, other AAI committee chairs, and staff welcomed first-time regular, associate, and postdoc members who joined since the previous year's meeting. The 132 new members in attendance represented the 835 regular, associate, and postdoc members (and additional 265 graduate student members) who joined AAI for 2017.







Opening Night Welcome Reception













IMMUNOLOGY 2017

Exhibit Hall

The IMMUNOLOGY $2017^{\text{\tiny M}}$ exhibit hall featured booths representing 130 companies and organizations presenting the latest in research tools and resources, with exhibitor workshops offered daily. Anchoring the hall were attendees' daily poster presentations and the AAI booth, which provided a gathering hub for AAI members and committees and highlighted the newly introduced AAI online journal, *ImmunoHorizons*.



Poster Sessions

Scientific presentations at IMMUNOLOGY 2017[™] featured immunologists at every career stage and included poster presentations by nearly 1,900 scientists and trainees, reflecting a more than 9 percent jump in abstract submissions over 2016.







AAI Professional Development Awards

Chambers-Thermo Fisher Scientific Memorial Award



Awardee Erica Stone (middle) with Michele Hogan and Thermo Fisher's Christoph Hergersberg

Lefrançois-BioLegend Memorial Award



Awardee Kathryn Knoop (right) with BioLegend founder Gene Lay

Lustgarten-Thermo Fisher Scientific Memorial Award



Awardee Jing H. Wang (middle) with Michele Hogan and Thermo Fisher's Christoph Hergersberg

AAI-Thermo Fisher Scientific Trainee Achievement Awards



(L-R) Kelsey Voss, Semir Beyaz, Hadi Maazi, Michele Hogan, Rajendra Karki, Christoph Hergersberg, Michael Constantinides, and Oscar Aguilar

AAI Young Scholars Travel Awards



With AAI mentors Avery August (far left) and Cherié Butts (far right), awardees (L–R) Amber Gomez and Elizabeth Okafor

FASEB MARC Mentored Presenter Travel Awards



Front row (L-R): Awardees Maria Gracia García Mendoza, Melina Chavarria, Carlos Alvarez, Melissa Marie Walker, Manish Kumar Saraf, Sophina Horne Taitano, Patrick Kwadwo Nuro-Gyina, Garvin Dodard, Michael Hyde, Jessica Elmore, and Ryan Pachucki

Back row (L-R): Awardee Junji Xing; mentee Amber Gomez; awardee Nicholas Koylass; mentee Elizabeth Okafor; AAI mentors Luis Sanchez-Perez, Jonathan Deane, Claudia Jakubzick, Cherié Butts, Tyler Curiel, Mireia Guerau-de-Arellano, Floyd Wormley; awardees Busola Okunnu, Esther Salinas; mentor Robert Binder; and awardee Francisco Gomez-Rivera (missing: awardee Larisa Kamga)

IMMUNOLOGY 2017

AAI Committee-Sponsored and Career Sessions

AAI Committee on Public Affairs Session: Biomedical Research Priorities in the New Administration and Congress



Session panelists (L-R) David Chaplin and Wayne Yokoyama

AAI Minority Affairs Committee — Vanguard Lecture



Vanguard Lecturer Tyler Curiel

AAI Education Committee and Committee on the Status of Women Careers in Science Roundtable





AAI Minority Affairs Committee (MAC) Careers Roundtable and Speed Networking Session





2017 AAI Annual Meeting Highlights

IMMUNOLOGY 2017TM attendees took advantage of scientific and career-development sessions presented by multiple AAI committees, including the Clinical Immunology, Education, Membership, Minority Affairs, Public Affairs, Publications, Status of Women, and Veterinary Immunology committees. The meeting also featured sessions organized by multiple NIH institutes and guest societies (including six from outside the U.S.) and workshops on topics including NIH grant review, careers in biotech, immunology teaching strategies, secrets for a successful postdoctoral fellowship, international opportunities in immunology, and career-building skills and resources.

One-on-One Career Counseling





Immunology Teaching Interest Group



Jobs Board for Employers, Job Seekers



International Opportunities in Science





Above left: with session chair Courtney Pinard (3rd from right), session panelists Chen Dong, Betty Wu-Hsieh, John Connolly, Hans-Martin Jäck, Maziar Divangahi, and Adrian Hayday. Above right: session panelists Betty Wu-Hsieh, Hans Martin Jäck respond to questions from attendees.

IMMUNOLOGY 2017

AAI Service Appreciation Reception - Willard Intercontinental Hotel, Sponsored by BioLegend



2017 AAI Annual Meeting Highlights

AAI Gala - Newseum, Sponsored by BioLegend

Attendees at this year's AAI Gala celebrated the freedom of science in style at the Newseum, the world-famous museum of news and journalism in Washington, D.C. Revelers enjoyed the tastes of Wolfgang Puck, took to the main hall dance floor, and visited the museum's powerful exhibits documenting the stories and images behind the most dramatic headlines of yesterday and today.





IMMUNOLOGY 2017

AAI Business Meeting



AAI Secretary-Treasurer and Finance Committee Chair Edith Lord



The Journal of Immunology Editor-in-Chief Pamela Fink



AAI Executive Director Michele Hogan













2016-2017 AAI Council



See you in Austin, Texas!
Visit www.IMMUNOLOGY2018.org

Highlights of 2017 AAI Business Meeting

The annual AAI Business Meeting and Awards Presentation convened this year during IMMUNOLOGY 2017^{TM} , May 12–16, in Washington, D.C. At this business session, held Saturday, May 13, from 1:00 to 2:30 PM in Room 204B of the Walter E. Washington Convention Center, AAI leaders and staff presented the annual report on the association and *The Journal of Immunology (The JI)*. The session also featured certain 2017 award presentations and acknowledgments.

AAI Executive Director M. Michele Hogan called the meeting to order at 1:00 PM, welcoming all present and thanking the hundreds of member volunteers.

Hogan asked all in attendance to observe a moment of silence in memory of members whose deaths had occurred or become known during the previous year.

Hogan reported robust attendance for IMMUNOLOGY 2017TM, citing 4,245 registrants from 46 countries, 2,015 abstract submissions, and 526 exhibitors. She described the rich menu of scientific sessions, lectures, social events, and career development resources available for attendees. Nineteen guest societies participated in this year's meeting. Hogan acknowledged the many contributions of the sponsors of the 2017 meeting. Premier sponsors of IMMUNOLOGY 2017[™] included BioLegend, Thermo Fisher Scientific, FASEB MARC, NanoString, STEMCELL Technologies, BD Biosciences, Bio-Rad, Essen Bioscience, Genentech, Miltenyi Biotec, Sheridan, Sony, AllCells, Beckman Coulter Life Sciences, Bio X Cell, GenScript USA, PeproTech, StudyLog, and Taconic.

Hogan provided information about the 2017 AAI Summer Courses, including the new AAI Course in Big Data Analysis in Immunology, which will be held September 6–9 at Johns Hopkins University's Montgomery County Campus in Rockville, Maryland.

Hogan reviewed current membership demographics by category and geography. AAI has set a new record for 2016 with 7,909 total memberships (regular, trainee, emeritus, and associate member scientists). Based on scientists' residency, AAI membership remains nearly 80 percent domestic (United States) and just over 20 percent international.

AAI Awards Programs. AAI has supported 590 young investigators with travel grants and awards since the program's founding in 2011. For IMMUNOLOGY 2017TM, AAI awarded more than \$600,000 in awards, including 370 AAI Trainee Abstract Awards, 80 AAI Trainee Poster Awards,

106 Laboratory Travel Grants, 84 Early Career Faculty Travel Grants, 45 Undergraduate Faculty Travel Grants, and 17 FASEB DREAM Mentored Poster/Platform Presenter Travel Awards. In total, 718 AAI members received awards at IMMUNOLOGY 2017TM.

The largest AAI awards program, Careers in Immunology Fellowship, providing PIs with salary support for trainee lab members, supported 96 PIs/trainees in 2016 for \$1.7 million. AAI received 68 applications for the 2017 fellowships. Hogan said that recipients would be announced soon after the annual meeting. As part of the AAI Travel for Techniques Program, which reimburses travel expenses of up to \$1,500 for a PI to visit another lab to learn a technique, six awardees were selected in 2016, and six awardees were selected in 2017, with two cycles remaining for the year.

Hogan reported that the AAI Outreach Program continues to provide robust support for member-organized regional immunology meetings, supporting 14 domestic immunology meetings in 2016 alone. AAI also supports members' participation in international meetings. Hogan noted that AAI spent over \$500,000 for member travel awards for the 2016 International Congress of Immunology (ICI) in Melbourne, Australia, in August. Overall, AAI honored more than 1,000 members over the last year, with over \$3 million for career awards, fellowships, and travel awards.

AAI Committee on Public Affairs (CPA) Chair Beth Garvy provided a brief summary of AAI public affairs activities.

Garvy reviewed the CPA roster, mission, and advocacy priorities. She reported that AAI had supported the April 22 March for Science via FASEB's partnership and provided march information/suggested sign text on the AAI website and on social media. She reviewed appointments made to date by President Donald Trump, including Representative Tom Price (R-6th, GA) as secretary of Health and Human Services and Francis Collins, who was retained temporarily as National Institutes of Health (NIH) director. [N.B.: The retention of Dr. Collins as NIH director was made permanent on June 6, 2017.] Garvy also reported on Trump's Executive Order (EO) restricting visas and immigration, and the related statement issued by AAI President Arlene Sharpe reaffirming AAI values in response to AAI members' concerns about the impact of the EO on scientists and international scientific collaborations.

Garvy provided an overview of the NIH budget. NIH received a \$2 billion increase in fiscal year (FY) 2017, bringing the total NIH budget to approximately \$34.1 billion. For FY 2018, President Trump's initial ("skinny")

IMMUNOLOGY 2017

2017 AAI Business Meeting (cont'd)

budget recommends cutting the NIH budget by \$5.8 billion [ed. note: his full budget proposal, released after the AAI Business Meeting, recommends cutting the NIH budget by \$7.2 billion]. AAI issued a statement on March 24 expressing strong opposition to any NIH cuts. Garvy reported that AAI submitted congressional testimony to the House Labor, Health and Human Services, Education, and Related Agencies Appropriations Subcommittee, which funds NIH, recommending an appropriation of "at least \$35 billion" for NIH for FY 2018.

Garvy shared information about the 21st Century Cures Act, which reauthorizes NIH for three years and creates an "NIH Innovation Account" that authorizes \$4.8 billion in new funding for several NIH initiatives, including the Beau Biden Cancer Moonshot, over 10 years. During FY 2017, Congress provided \$352 million to NIH through this account. Before the bill's passage in late 2016, AAI sent a letter supporting its NIH provisions.

Garvy also highlighted several AAI public affairs programs and activities, including the AAI Public Policy Fellows Program (PPFP) and the AAI Public Service Award (PSA). AAI recently completed the sixth year of the PPFP, a program designed to engage junior scientists in the public policy efforts of the organization. In March, AAI held its sixth annual PPFP Capitol Hill Day, providing fellows with the opportunity to meet with two or three members of their congressional delegations and to participate in approximately seven meetings throughout the course of the day. Garvy recognized and congratulated the fellows selected to participate in the seventh year of the PPFP, which began on May 1, 2017. She also formally announced that Senators Roy Blunt (R-MO) and Patty Murray (D-WA) will receive the 2017 AAI PSA, which is given to "individuals who have made outstanding contributions to the advocacy and support of basic biomedical and immunologic research."

Garvy promoted the IMMUNOLOGY 2017™ CPA policy session on "Biomedical Research Priorities in the New Administration and Congress," announcing that the session would feature a "town hall" style meeting on the Trump budget and on the recent NIH proposal for a grant support index.

Finally, Garvy reported that ~120 AAI members signed up to go to Capitol Hill on Tuesday, May 16, to advocate for increased funding for NIH. The groups were led by 29 experienced volunteers and staff, including current and former Council and CPA members and former PPFPs.

AAI Secretary-Treasurer Edith Lord provided an overview of the finances of AAI and *The JI*. Lord reported that AAI is

on good financial footing. Operating revenues continued to exceed expenses in 2016. Lord reviewed AAI 2016 revenues by category, noting that the largest sources of gross revenue were *The JI* (62 percent), followed by the annual meeting (23 percent). Expenses were similar to those in previous years. The largest categories for 2016 expenses by activity were *The JI* (34 percent of AAI-budgeted resources), second only to AAI education and awards programs (28 percent). The net assets of AAI are steadily increasing by approximately \$2 million per year. The Careers in Immunology Fellowship program awarded \$1.6 million in funds in 2016. In 2009, AAI added the Abstract Trainee Awards and has grown its awards programs ever since, up to under \$3 million in 2016. The 2016 awards include over \$500,000 for member travel awards for ICI.

Pamela J. Fink, editor-in-chief (EIC) of The JI, reported on operations and initiatives for the journal. Fink recognized the members of the AAI Publications Committee, thanked outgoing section editors, and acknowledged new editors, who would begin their service on July 1, 2017. Fink reported publishing data, noting that the impact factor of The JI has fallen to 4.759 from 4.985 in 2015. The current cited half-life of The JI is 9.1 years, which is one of the longest in the field. Fink reviewed graphs showing the numbers of full-length and cutting-edge manuscripts submitted and published from 1994 to 2016. Fink noted that 1,938 manuscripts were submitted in 2016, and 2,644 reviewers were used. The number of both submissions and reviewers is lower than previous years, but the journal quality is improving. For example, the average time from manuscript submission to initial decision remains stable; the average time in 2016 to decision was 30 days for full-length manuscripts and 16 days for cutting-edge manuscripts. Fink urged the audience to continue to publish in The JI.

Fink encouraged all present to attend the Saturday, May 13, Publications Committee-sponsored session, "Publish or Perish? Pearls and Perils in Writing and Reviewing Scientific Manuscripts," for guidance on presenting data most effectively, responding to reviewer comments, and staying on the right side of the ethics divide.

Leslie J. Berg, joint EIC of *ImmunoHorizons (IH)*, reported that *IH* was launched on January 24, 2017, and she recognized the four senior editors. Berg outlined the two paths to publication in the new journal: *de novo* submission or through transfer of *The JI*-rejected manuscripts that are scientifically sound and communicate important information. Berg highlighted the short editorial published in January in *IH* that introduces the new journal. The editorial was written by Berg and the other joint EIC, Michael Krangel.

The following awards were presented, with Hogan presiding:

Distinguished Service Award to Eugene M. Oltz, Ph.D., Washington Univ. Sch. of Med. in St. Louis, for outstanding service to AAI and the immunology community as member and chair of the AAI Publications Committee, 2012–2016

Lustgarten-Thermo Fisher Scientific Memorial Award to Jing H. Wang, M.D., Ph.D., associate professor, Univ. of Colorado Anschutz Med. Campus

Chambers-Thermo Fisher Scientific Memorial Award to Erica L. Stone, Ph.D., assistant professor, Wistar Inst.

Lefrançois-BioLegend Memorial Award to Kathryn A. Knoop, Ph.D., postdoctoral fellow, Washington Univ. in St. Louis

AAI-Thermo Fisher Scientific Trainee Achievement Awards

- Oscar A. Aguilar, graduate student, Univ. of Toronto, Sunnybrook Research Inst.
- Semir Beyaz, graduate student, Harvard Med. Sch.
- Michael G. Constantinides, Ph.D., postdoctoral fellow, NIAID, NIH
- Rajendra Karki, Ph.D., postdoctoral fellow, St. Jude Children's Res. Hosp.
- Hadi Maazi, D.V.M., Ph.D., postdoctoral fellow, Univ. of Southern California
- Kelsey Voss, graduate student, Uniformed Serv. Univ. of the Hlth. Sci.

The meeting was adjourned by Executive Director Hogan at 2:10 PM.



www.aai.org AAI NEWSLETTER 39



History of Immunology in the Nation's Capital



Institutions



USPHS Hygienic Laboratory, ca. 1920s National Library of Medicine

A t the beginning of the 20th century, immunology research institutions in the Washington, DC, area were overwhelmingly government laboratories, including the Walter Reed General Hospital, U.S. Army Medical School [now Walter Reed Army Institute of Research (WRAIR)], and the U.S. Public Health Service Hygienic Laboratory—now the National Institutes of Health (NIH).



Aerial view of the Clinical Center, NIH, 2014 NIH

Today the region is home to world-renowned public and private research institutions, an expanding biotechnology corridor, and a growing number of scientific societies, foundations, and other non-profits. The IMMUNOLOGY 2017™ exhibit explored the region's immunology-related institutions through a brief history of the NIH, mapping of AAI member institutions, and a spotlight on the area's biotech industry and diverse non-profit community.

AAI Annual Meetings

Washington, DC, has been home to the AAI annual meeting 10 times. The city was host to the second annual meeting, which took place on May 10, 1915, at the Willard Hotel, and featured a program of 19 original scientific papers. The recently completed IMMUNOLOGY 2017™ meeting stretched over five days at the Washington Convention Center and included over 125 scientific sessions and three days of poster presentations.

AAI Members

AAI welcomed its first Washington, DC, members in 1916, and witnessed membership growth throughout the metropolitan area over the next eight decades. The region has been a stronghold of AAI membership representing all career stages, from early-career trainees to established investigators and emeritus members.

The strength and diversity of clinical and basic research in the area led some AAI members to make the region home for their entire careers. Of those, four have been AAI members for 50 or more years: Samuel B. Formal (Walter Reed Army Medical Center and WRAIR), Joseph A. Bellanti (Georgetown University Medical Center), Rose G. Mage (NIH), and Abner Louis Notkins (NIH).

AAI members in the region have received some of the highest honors in the field. They include a Nobel Laureate—Baruj Benacerraf (NIAID)—and eight Lasker Award recipients—Anthony S. Fauci (NIAID), Jules Freund (NIAID), Maurice R. Hilleman (WRAIR), Michael Potter (NCI), John B. Robbins (NICHD, FDA, and NIH), Albert B. Sabin (FIC†), Rachel Schneerson (NICHD, FDA, and NIH), and Joseph E. Smadel (WRAIR and NIH).

NIH Leadership

The history of AAI members serving as NIH institute and center directors dates from the late nineteenth-century. The eleven past directors have included three at the Hygienic Laboratory, the first director of the NIH, multiple directors of NIAID and NCI, and Ruth L. Kirschstein, who was the director of NIGMS and later the acting director of both the NIH and NCCIH.

Today, three current NIH directors are AAI members: Anthony S. Fauci (NIAID), Richard Hodes (NIA), and Stephen I. Katz (NIAMS).



Anthony S. Fauci NIAID, NIH



Richard J. Hodes NIA, NIH



Stephen I. Katz NIAMS, NIH

External Forces

As the center of the nation's government, Washington, DC, is also the hub of federal scientific funding and of social and political advocacy for research.

The most important piece of biomedical funding is the NIH budget, which received its first line item in the federal budget in 1938—\$464,000. The dramatic increase in the NIH budget following World War II marked a time of rapid expansion in the number of institutions carrying out basic and clinical immunology research as well as in the growth in AAI membership in the area. Although the NIH budget continued to increase throughout the twentieth century, including the doubling (1998–2003), the past decade has seen a degree of uncertainty in the funding landscape never before experienced by researchers.



30,000 letters at the White House containing 10¢ contributions to combat polio, 1938 Library of Congress



March for Science, 2017 AAI

The city has been a focal point for many social movements. From Congressional hearings, to mailing of dimes to the White House for polio research to AIDS activism and creation of the iconic AIDS quilt to more recent rallies and protests supporting scientific funding and research, advocacy for research and patients has been a small but important movement that has taken place in the region.

For over 100 years, the greater Washington, DC, area has been a primary contributor to AAI and the immunology community. Today, it is home to an increasingly diverse array of public and private immunology-related research institutions and nonprofits, thousands of researchers, and leaders in the scientific community-not to mention the headquarters of AAI and many other scientific societies. As the focal point of federal biomedical research, funding, policy, and activism, the nation's capital in 2017 offered AAI meeting attendees

a vivid reminder of its unique and enduring relevance to our field and to the future of scientific advancement.

† FIC—Fogarty International Center, NIH



December 1

Rheumatology Research Foundation Future Physician Scientist Award

- Prize/Award: Pre-doctoral scholar award of \$30,000 per year for two years to support emerging physician scientists with an interest in basic/translational investigative careers in rheumatology
- Eligibility: Students in combined M.D./Ph.D. or D.O./Ph.D. programs who demonstrate outstanding potential and significant commitment to a career in rheumatology research and who are citizens or non-citizen nationals of the United States, holders of a permanent resident card, or otherwise meet qualifying criteria under program guidelines (see program details link below)
- Details: https://www.rheumresearch.org/preceptorships#RFPSA
- Contact: (404) 365-1373; Foundation@rheumatology.org

December 1

Thomas E. Starzl Postdoctoral Fellowship in Transplantation Biology

- Prize/Award: Mentored fellowship award offering NIHrecommended level stipend plus fringe benefits in support of postdoctoral fellows with a clear commitment to transplantation research
- Eligibility: Holders of an M.D., Ph.D., or equivalent degree who will have completed not more than three years of postdoctoral research at the time of award activation (July 1, 2018) and who demonstrate the potential to conduct transplant-related research of high merit while developing into successful independent investigators
- Details: http://www.stiresearch.health.pitt.edu/resources/ fellowshipsgrants
- Contact: stiresearch@pitt.edu

January 9

2018 AAI Travel Awards and Grants

- Prize/Award: Awards in 10 categories recognizing the promise and bolstering the professional development of investigators of all career stages through support for travel to the AAI annual meeting
- Eligibility: AAI members in good standing who meet specific conditions for each award
- Details: http://www.aai.org/Awards/Travel
- Contact: AAI: (301) 634-7178; awards@aai.org

January 23 (Application period opens December 12)

2018-19 AAI Public Policy Fellows Program

- Prize/Award: Up to 10 fellowships providing eligible early-career scientists the opportunity to learn about, and participate in, the public policy and legislative activities of AAI; includes a trip to Washington, D.C., to visit Capitol Hill
- Eligibility: AAI members who are postdoctoral fellows or junior scientists committed to a career in biomedical research
- **Details:** http://www.aai.org/Public-Affairs/PPFP
- Contact: (301) 634-7178; jschumacher@aai.org

February 15

AAI Travel for Techniques Awards

- Prize/Award: Up to \$1,500 in reimbursable expenses to support travel to another laboratory to learn a particular technique relevant to the applicant's research but inaccessible at local institutions
- Eligibility: Qualifying AAI regular and associate members in good standing seeking to expand their skills to benefit their research
- Details: www.aai.org/awards
- **Contact:** (301) 634-7178; awards@aai.org

March 1

FASEB Excellence in Science Award

- Prize/Award: In recognition of outstanding achievement by women in biological science, a \$10,000 unrestricted research grant, presentation of the award lecture at the annual meeting of a FASEB member society, travel to/from the meeting, hotel expenses, complimentary meeting registration, and a plaque signifying the honor
- Eligibility: Women members of a FASEB member society who have accomplished scientific work of lasting impact and have contributed substantially to training the next generation of scientists; nominators must likewise be members of a FASEB society
- Details: http://www.faseb.org/About-FASEB/Awards/ Excellence-in-Science-Award.aspx
- Contact: yseger@faseb.org

An exciting new collection available from The Journal of Immunology

The Macro Influence of the Microbiome

A PDF of the collection from volume 198, issue 2 of *The JI* is available at: http://www.jimmunol.org/briefreviews

This series of Brief Reviews highlights the influence of the gut microbiome on:

Neonatal Immunity
Inflammatory Diseases
Metabolites
Food Allergy
Type I Diabetes
Autoimmunity in the CNS
HIV Infection





Mark Your Calendar for These Important Dates!

2017

November 17-20, 2017

Autumn Immunology Conference (AIC) 2017 JW Marriott, Chicago, IL http://www.autumnimmunology.org/

2018

February 12-15, 2018

American Association for Cancer Research Special Conference on Immunobiology of Primary and Metastatic CNS Cancer: Multidisciplinary Science to Advance Cancer Immunotherapy

Hard Rock Hotel, San Diego, CA http://www.aacr.org/Meetings/Pages/ MeetingDetail.aspx?EventItemID=129#. WV0HTE11u71

March 2-5, 2018

American Academy of Allergy, Asthma and Immunology/World Allergy Organization Joint Congress WAC 2018

Orlando, FL

http://www.worldallergy.org/meetings

March 19-22, 2018

5th Meeting of Regulating with RNA in Bacteria & Archaea

Sevilla, Spain

http://www.rna-meeting.com/

April 15–18, 2018

22nd Annual Wood's Hole Immunoparasitology (WHIP) Meeting Marine Biological Laboratory, Wood's Hole, MA

Marine Biological Laboratory, Woods Hole, MA https://mbl-web.ungerboeck.com/wri/wri_p1_display.aspx?oc=10&cc=WHIP-HOME16

April 21-25, 2018

Experimental Biology

San Diego, CA

http://experimentalbiology.org

May 4-8, 2018

IMMUNOLOGY 2018TM

AAI Annual Meeting

Austin Convention Center, Austin, TX http://www.IMMUNOLOGY2018.org



May 28-June 1, 2018

Society for Natural Immunity 17th Meeting San Antonio, TX www.NK2018.org

June 2-5, 2018

Neutrophil 2018 International Symposium Hotel Château Laurier, Québec City, Canada www.theneutrophil.com

June 10-14, 2018

15th International Symposium on Dendritic Cells

Aachen, Germany

http://www.dc-2018.com/

June 17-21, 2018

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

Santa Fe, NM

http://www.isdci.org/17257/Congress

July 10-15, 2018

AAI Introductory Course in Immunology

UCLA Luskin Conference Center,

Los Angeles, CA

http://www.aai.org/Education/Courses/ Introductory

July 22-27, 2018

AAI Advanced Course in Immunology

UCLA Luskin Conference Center,

Los Angeles, CA

http://www.aai.org/Education/Courses/Advanced

September 2-5, 2018

5th European Congress of Immunology (ECI)—Triennial European Federation of Immunological Societies (EFIS) Joint Meeting Amsterdam RAI Exhibition and Convention Centre, Amsterdam, The Netherlands https://www.eci2018.org/home/

September 16-20, 2018

 ${\bf 27th\,International\,Complement\,Workshop}\\ {\bf Santa\,Fe,\,NM}$

https://www.regonline.com/ICW2018

October 14-16, 2018

SLB/IEIIS 2018: Myeloid Cells: Development, Environment and Inflammation

The Sheraton Grand at Wild Horse Pass,

https://slb.memberclicks.net/2018-meeting

November 16-19, 2018

Autumn Immunology Conference (AIC) 2018 Chicago Marriott Downtown, Chicago, IL http://www.autumnimmunology.org/

2019

May 9-13, 2019

IMMUNOLOGY 2019TM

AAI Annual Meeting

San Diego, CA

www.aai.org/Meetings/Future-AAI-

Annual-Meetings

October 3-6, 2019

16th International Workshop on Langerhans Cells

Langernans Cens

Mainz, Germany www.lc2019.de

2020

May 8-12, 2020

IMMUNOLOGY 2020TM

AAI Annual Meeting

Honolulu, HI

www.aai.org/Meetings/Future-AAI-Annual-Meetings



Comprehensive • Authoritative • Foundational

The largest and oldest journal in the field offers unparalleled reporting of major advances in immunology research. Fully peer-reviewed by working scientists, reports are rapidly published and broadly cited.

Comprehensive

- Your "first stop" for major advances
- No triage! Every manuscript is peer-reviewed
- Fair, in-depth evaluation of each manuscript
- Submission to first decision: 29 days
- Average time to online publication:
 4 weeks
- 4th most frequently used journal for NIH-supported publications⁵

Authoritative

- Cited more than any other immunology journal¹
- 5-year Impact Factor of 5.287, top 18% of immunology journals¹
- Ranked #1 for Eigenfactor² among immunology journals¹
- Google Scholar h5-index is 107, 6th in the Immunology category³
- The Scimago H-index is 311, equal third amongst 200 Immunology and Microbiology journals.⁴

Foundational

- At 9.1 years¹, the cited half-life is one of the longest in the field!
- Committed to rigorously performed research that moves the field forward
- Over 1.8 million page views and 395,000 PDF downloads per month

The Journal of Immunology (The JI) is owned and published by The American Association of Immunologists, Inc., a non-profit association founded in 1913 that is dedicated to advancing the careers of scientists and promoting the field of immunological research.

- 1. 2015 Journal Citation Reports
- Eigenfactor is a "metric that uses citing journal data from the entire Journal Citation Report file to
 reflect the prestige and citation influence of a journal by considering scholarly literature as a network of
 journal-to-journal relationships". http://thomsonreuters.com/content/dam/openweb/documents/pdf/
 scholarly-scientific-research/fact-sheet/esi-jcr-brochure.pdf, accessed 12/23/15
- 3. https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=med_immunology, accessed 12/21/15
- 4. http://www.scimagojr.com/journalrank.php?area=2400&country=US&order=h&ord=desc, accessed 7/11/16
- 5. http://nexus.od.nih.gov/all/2016/03/02/nih-publication-impact-a-first-look/, accessed 3/2/16





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 15

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

than \$250,000 (excluding PI's salary) in annual direct costs

APPLICATIONS CLOSE

WINTER SPRING DECEMBER 15 APRIL 15 FEBRUARY 15
JUNE 15
OCTOBER 15

FALL AUGUST 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

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.

IMMUNOLOGY 2018tm

THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS



AUSTIN CONVENTION CENTER AUSTIN, TX MAY 4-8, 2018

www.IMMUNOLOGY2018.org

THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

1451 Rockville Pike, Suite 650, Rockville, MD 20852

$IMMUNOLOGY 2018 \begin{tabular}{ll} \hline \mbox{The american association of immunologists} \\ \mbox{may 4-8, 2018} \begin{tabular}{ll} \hline \mbox{AAI ANNUAL MEETING} \begin{tabular}{ll} \hline \mbox{AUSTIN. TX} \\ \hline \mbox{TX} \\ \mbox{$



IMMUNOLOGY 2018[™] attendees receive deep discounts on hotels in the official AAI room block. Reserve yours now at IMMUNOLOGY2018.org. Book now, pay later!

JOIN US IN AUSTIN FOR...

- GREAT SCIENCE
- NETWORKING WITH COLLEAGUES FROM AROUND THE WORLD
- THE LATEST INNOVATIONS **IN TECHNOLOGY**
- EVENTS, TEXAS STYLE!

Learn more at www.IMMUNOLOGY2018.org

ABSTRACT SUBMISSION

Abstract Submission Opens Abstract Submission Closes

REGISTRATION

Registration Opens Early Registration Discount Ends

AWARDS

Travel Award & Grant Applications Open Travel Award & Grant Applications Due

HOUSING

Housing Reservations Discounted Hotel Rates End November 28, 2017 January 9, 2018

December 11, 2017 March 23, 2018

November 28, 2017 January 9, 2018

Now Open! April 11, 2018