



AAI

The American Association of Immunologists

NEWSLETTER

JULY/AUGUST 2012



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Cover Image:

Galacidalacidesoxiribunucleicacid

See page 3 for details.

2012 AAI Election Results

AAI congratulates the following members on their election to offices and committees for terms commencing July 1, 2012, and extends a sincere thanks to all candidates for their willingness to run and serve if elected.

President (2012–2013)

Gail A. Bishop, Ph.D.

Carver College of Medicine
Distinguished Professor of Microbiology
and Internal Medicine and Holden
Chair of Cancer Biology
University of Iowa

Vice-President (2012–2013)

Marc K. Jenkins, Ph.D.

Distinguished McKnight
University Professor
Center for Immunology and
Department of Microbiology
University of Minnesota Medical School

Secretary-Treasurer (2012–2015)

Mitchell Kronenberg, Ph.D.

President and Chief Scientific Officer
La Jolla Institute for Allergy
and Immunology

Councillor (2012–2016)

Wayne M. Yokoyama, M.D.

Investigator, Howard Hughes
Medical Institute
Levin Professor of Medicine and of
Pathology and Immunology
Washington University School of
Medicine

Awards Committee (2012–2015)

Cheong-Hee Chang, Ph.D.

Professor, Department of Microbiology
and Immunology
University of Michigan Medical School

Finance Committee (2012–2015)

Andrea J. Tenner, Ph.D.

Professor and Associate Dean
for Research
School of Biological Sciences
University of California, Irvine

Nominating Committee (2012–2013)

Pamela S. Ohashi, Ph.D., F.R.S.C., Chair

Senior Scientist and Director
Immune Therapy Program
Ontario Cancer Institute

Michael Croft, Ph.D.

Professor and Head, Division of
Immune Regulation
La Jolla Institute for Allergy
and Immunology

JoAnne L. Flynn, Ph.D.

Professor, Department of Microbiology
and Molecular Genetics
University of Pittsburgh School of Medicine

Richard M. Locksley, M.D.

Investigator, Howard Hughes
Medical Institute
Sandler Distinguished Professor
Departments of Medicine and
Microbiology and Immunology
University of California, San Francisco

Mark J. Shlomchik, M.D., Ph.D.

Professor of Laboratory Medicine
and Immunobiology
Yale School of Medicine

Program Committee (2012–2015)

Shane Crotty, Ph.D.

Associate Professor, Division of
Vaccine Discovery
La Jolla Institute for Allergy
and Immunology

Erika L. Pearce, Ph.D.

Assistant Professor, Department of
Pathology and Immunology
Washington University School of Medicine

Publications Committee (2012–2016)

Ann J. Feeney, Ph.D.

Professor, Department of Immunology and
Microbial Science
The Scripps Research Institute



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Council

President

Gail A. Bishop, Ph.D.

Vice President

Marc K. Jenkins, Ph.D.

Past President

Leslie J. Berg, Ph.D.

Secretary-Treasurer

Mitchell Kronenberg, Ph.D.

Councillors

Linda A. Sherman, Ph.D.
Dan R. Littman, M.D., Ph.D.
Arlene H. Sharpe, M.D., Ph.D.
Wayne M. Yokoyama, M.D.

Ex Officio Councillors

Jeremy M. Boss, Ph.D.
M. Michele Hogan, Ph.D.
Leo Lefrançois, Ph.D.
Paul E. Love, M.D., Ph.D.

Executive Director

M. Michele Hogan, Ph.D.

www.aai.org/

About/Departments-Staff

Thank you to all members who invested in their profession and demonstrated their commitment to the AAI mission by voting in the election this year.

FOCUS ON PUBLIC AFFAIRS

AAI Holds Special Session on NIH Peer Review

On May 5, 2012, the AAI Committee on Public Affairs hosted a special session, *NIH Peer Review: Understanding the New System*, at IMMUNOLOGY 2012™ in Boston. The session provided attendees with an insider view of the current state of peer review at NIH and a look at how the peer review system may evolve in the coming years.



NIH peer review session speakers Daniel Rotrosen, Richard Nakamura, Elizabeth Kovacs

The session, which was chaired by Derry Roopenian, Ph.D., chair of the AAI Committee on Public Affairs (CPA), featured three guest speakers: Richard Nakamura, Ph.D., acting director of the NIH Center for Scientific Review (CSR); Daniel Rotrosen, M.D., director of the Division of Allergy, Immunology, and Transplantation at the National Institute of Allergy and Infectious Diseases (NIAID); and Elizabeth Kovacs, Ph.D., chair of the AAI Subcommittee on Peer Review and Grant Submission.

Richard Nakamura's presentation focused on the role of CSR in NIH peer review. He explained that CSR receives all grant applications submitted to NIH but reviews only about 70 percent of those applications. The rest are reviewed by individual institutes and centers at NIH. He also talked about the challenge



of recruiting researchers to serve on study sections and discussed ways that CSR is making it easier for researchers to participate, including conducting more electronic reviews and holding one meeting a year on the West Coast.

Nakamura acknowledged the concerns he has heard from AAI and others about the elimination of the A2 application. He noted that CSR is continuing to discuss amended applications, including whether the A2 should be reinstated or whether all amended applications should be eliminated (i.e., accept only "new" applications).

Daniel Rotrosen described the role of NIAID in NIH peer review, including how program officers at NIH institutes can provide assistance to NIH grant applicants. Among other things, program officers can tell researchers more about the review of their original, unfunded application if they plan to revise and resubmit. Program officers also represent applicants before the NIAID Advisory Council.

Finally, Elizabeth Kovacs led a robust question-and-answer period, which featured much discussion about the A2 application. When asked about the 1–9 scoring system, Nakamura acknowledged that he has heard a number of concerns about this issue, and, when pressed about why CSR can't go back to a 1–50 scoring system, Nakamura said that CSR might have to consider returning to this scale.

Continued on next page

About the Cover: Also referred to as *Homage to Crick and Watson (Discoverers of DNA)*, the painting reflects Salvador Dalí's intense interest in science, beginning with Planck's quantum theory in 1940. By the early 1960s, Dalí was fascinated by genetics for the possibility of discovering an intelligent design at work in the universe. This canvas, painted early in his "Nuclear Mysticism" period (1962 to 1978), is the artist's tribute to Francis Crick and James D. Watson for discovering the double helix structure of deoxyribonucleic acid (DNA). The name of the painting incorporates a play on the names of the artist and his wife, Gala, whose back-turned figure displays prominently in the work.



Galacidalacidesoxiribunucleicacid
(1962–1963) Oil on canvas
120 x 161½ inches

© Salvador Dalí. Fundación Gala-Salvador Dalí, (Artist Rights Society), 2011

Collection of the Salvador Dalí Museum, Inc., St. Petersburg, FL, 2011.

AAI Research Advocacy Program Brings Five Key Advocacy Partners to IMMUNOLOGY 2012™

AAI hosted its third Research Advocacy Program (RAP) on May 7, 2012, at the IMMUNOLOGY 2012™ meeting in Boston. The RAP supports the attendance of policy leaders from relevant patient advocacy organizations and foundations at a special program, which provides them opportunity to learn about basic immunology, meet and hear from leading researchers, discuss policy issues of mutual concern, and develop relationships with AAI and each other.

This year, AAI was pleased to host representatives from the American Academy of Pediatrics; the Asthma and Allergy Foundation of America; The Lymphatic Research Foundation; the Society for Women's Health Research; and Zero—the Project to End Prostate Cancer.

The fact that this year's RAP participants had diverse advocacy goals and strategies allowed for an interesting discussion. The program featured presentations on basic immunology by members of the AAI CPA. The speakers (Clifford Harding, M.D., Ph.D., *Introduction to the Immune System*; Susanna Greer, Ph.D., *Overreactions of the Immune Response*; Lori Covey, Ph.D., *Harnessing the Immune System to Fight Cancer*; Elizabeth Kovacs, Ph.D., *Immunology Research: Challenges and Opportunities*) effectively communicated how the immune system relates to the diseases of concern to each of the participating organizations.



RAP participant Martha Nolan (left) speaking to meeting attendees about scientific and funding opportunities with the Society for Women's Health Research



RAP participant James Baumberger (right) speaking to meeting attendees interested in the pediatric research

A highlight of the program was its “Meet the Advocacy Partners” roundtable session, during which representatives from each of the participating groups were available to talk with meeting attendees about their organizations, including any research and funding opportunities that might be available.

Senate Committee Increases NIH Budget for FY 2013; House Operating Under Lower Spending Levels

The Senate Appropriations Committee approved its fiscal year (FY) 2013 appropriations (funding) bill for the Departments of Labor, Health and Human Services, Education, and Related Agencies (Labor-HHS) on June 14, 2012, by a vote of 16-14, on a party line vote (Democrats for, Republicans against). The bill includes \$30.723 billion for NIH, a \$100 million increase over last year's level, and \$100 million over President Obama's budget request (which would have flat-funded the agency). The Committee's vote follows action by the Senate Labor-HHS Appropriations Subcommittee, which approved a similar bill with the same overall NIH funding level.

The Senate Appropriations Committee bill earmarks much of the \$100 million increase by providing an additional \$56.5 million to the National Center for Advancing Translational Sciences (NCATS), for a total NCATS budget of \$631.3 million. The Cures Acceleration Network (CAN), a program within NCATS, would receive up to \$30 million of the \$56.5 million increase (for a total CAN budget of \$40 million, \$10 million below the president's requested level). The bill must still be considered by the full Senate, though no vote had been scheduled by press time.

The relevant committees in the House of Representatives have not yet considered a Labor-HHS bill for FY 2013. Any such bill will have to comply with spending levels previously adopted as a Budget Resolution by the House Budget Committee and agreed to by the full House on March 29, 2012. The House Budget Resolution caps FY 2013 discretionary spending at \$1.028 trillion, \$19 billion below the level agreed upon in last year's Budget Control Act (debt-ceiling agreement).

Although the House Budget Resolution does not specify how the cuts would be allocated, White House Office of Management and Budget Acting Director Jeffrey Zients has said that the House cuts (\$897 billion over 10 years), if distributed equally across the budget, would greatly harm science. According to Zients, "[i]nvestments in science, medical research, space, and technology would be cut by more than \$100 billion over the next decade. The number of new grants from NIH for promising research projects would shrink by more than 1,600 in 2014 and by over 16,000 over a decade, potentially curtailing or slowing research to fight Alzheimer's disease, cancer, and AIDS."

After the Senate and House each finalize their own bills, a compromise bill will have to be approved by both chambers before the bill can become law.

FASEB Celebrates Its Centennial on Capitol Hill

The Federation of American Societies for Experimental Biology (FASEB), of which AAI is a charter member, celebrated its 100th anniversary on May 16, 2012, with a day of advocacy on Capitol Hill, followed by a centennial reception. The FASEB reception was co-hosted by the National Institute of General Medical Sciences (NIGMS), which is celebrating its 50th anniversary.

The FASEB celebration included significant participation by AAI members. AAI members visiting Capitol Hill included Fred Finkelman, M.D. (AAI '76), and three former chairs of the AAI CPA: William Green, Ph.D. (AAI '80); Ellen Kraig, Ph.D. (AAI '84); and John Schreiber, M.D., M.P.H. (AAI '91). AAI Director of Public Policy and Government Affairs Lauren Gross, J.D., served as a staff leader for six of the participating scientists.

The day culminated with a reception featuring six guest speakers, including NIH Director Francis Collins, M.D., Ph.D., and three Nobel laureates. Senator Bob Casey (D-PA) and Representative Chris Van Hollen (D-8th, MD) also spoke, thanking FASEB and NIGMS for all they have done to advance biomedical research.

NCATS Forms New Partnership with Industry

The newly established NIH National Center for Advancing Translational Sciences (NCATS) has announced a partnership with Pfizer Inc., AstraZeneca, and Eli Lilly to facilitate the availability to NIH-funded researchers of pre-existing molecular compounds that could potentially be repurposed to create new treatments for patients. The three industry partners will initially provide more than 20 compounds for the program.

The "NIH-Industry Pilot Program: Discovering New Therapeutic Uses for Existing Molecules" will "match discontinued proprietary drug candidates (compounds and biologics) from pharmaceutical companies with the best ideas from the biomedical research community for new therapeutic uses." Although these compounds have already cleared many steps in the development process, including human testing, they have been difficult for researchers to access in the past. In fiscal year 2013, NIH plans to provide up to \$20 million to support cooperative research grants under this program. If this pilot program is successful, NIH hopes to expand it to include additional industry partners and more compounds.

Via a May Request for Information, NIH sought input on how NCATS can most effectively partner with the private sector in this effort. The RFI included seven questions, including queries related to patent and regulatory rights and how success of the program should be measured.

Does Your Degree Matter in Obtaining NIH Funding?

Scientists with a Ph.D. are funded at a slightly lower rate than those with either an M.D. or an M.D.-Ph.D., according to recently released data by Sally Rockey, Ph.D., NIH Deputy Director for Extramural Research.

Continued on next page

Rockey analyzed NIH data from 1998 to 2011 to determine if obtaining a certain degree increases one's chances of getting NIH funding and if those with certain degrees fare better at specific types of institutions. The NIH data show that M.D. scientists are funded at a slightly higher rate than Ph.D. scientists. For example, in 2011, the funding rate for M.D. scientists was 26.3 percent, and the funding rate for Ph.D. scientists was 23.9 percent. Researchers with both an M.D. and a Ph.D. fared even better, with a funding rate of 27.1 percent in 2011. According to Rockey, this trend has been largely consistent over the last 14 years.

When broken down by institution, the NIH data show a similar slight advantage for those with an M.D. or M.D. and Ph.D. at higher education institutions and independent hospitals, though Ph.D. scientists hold a notable funding-rate advantage at research institutes. Further, medical schools, which as a group receive the highest percentage of NIH funding, have nearly equal funding rates for M.D. and Ph.D. scientists.

New Federal Government Policy on Dual Use Research

On March 29, the NIH Office of Biotechnology Activities released a new government-wide policy on "dual use research of concern" (DURC), defined by the National Science Advisory Board for Biosecurity as "research that, based on current understanding, can be reasonably anticipated to provide knowledge, products, or technologies that could be directly misapplied by others to pose a threat to public health or safety, agricultural crops and other plants, animals, the environment or materiel." The policy adds a new hurdle for scientists whose funding proposals include the most dangerous pathogens and toxins.

The new policy, entitled "United States Government Policy for Oversight of Life Sciences Dual Use Research of Concern," requires federal agencies to screen all funding proposals to identify current and proposed research that uses (or would use) 15 of the most dangerous biological select agents or toxins.

Agencies must determine the risks and benefits of that research and use the information gathered to develop risk-mitigation measures. The new rules apply only to unclassified research.

The policy is intended both to mitigate potential risks and to help the federal government "collect information needed to inform the development of an updated policy, as needed, for the oversight of DURC."

Although some are concerned that the new policy is too ambiguous and could slow research, NIAID Director Anthony Fauci, M.D., said in a recent article in *Science* (DOI:10.1126/science.336.6077.21) that he thinks the policy will affect a minimal number of research studies each year. NIAID has just announced that it has "placed new terms of award on a very small number of grants and contracts that may have dual use concerns. Those terms require an institution to assess the dual use implications of its research and send us a risk mitigation plan. They also ask investigators to share manuscripts with their program officers or contracting officer's representatives before submitting to a journal."

NIH Director Collins Appears on *The Colbert Report*

Earlier this spring, NIH Director Francis Collins, M.D., Ph.D., appeared on Comedy Central's program *The Colbert Report*. Host Stephen Colbert discussed with Collins the upcoming HBO series on obesity, *The Weight of the Nation*. HBO produced the series in collaboration with the Institute of Medicine, NIH, the Centers for Disease Control and Prevention, the Michael & Susan Dell Foundation, and Kaiser Permanente.

To view Dr. Collins' appearance, please visit www.colbertnation.com/the-colbert-report-videos/414123/may-10-2012/francis-collins. You can also watch *The Weight of the Nation* by visiting <http://theweightofthenation.hbo.com/films/main-films/Consequences>.



2012 Advanced Course in Immunology

July 29–August 3, 2012 • Seaport World Trade Center, Boston, Massachusetts

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

AAI Educational Programs Manager: Mary T. Litzinger, Ph.D.

Don't miss the premier course in immunology for research scientists!

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

Faculty

Marc K. Jenkins, *Center for Immunology,
University of Minnesota Medical School*
Anatomy of the Immune Response

Christine A. Biron, *Brown University*
Innate Immunity

Wayne M. Yokoyama, *Washington University
School of Medicine*
*NK Cells—Their Receptors and Function
in Health and Disease*

Shannon J. Turley, *Dana Farber Cancer
Institute, Harvard Medical School*
Dendritic Cells

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

Shiv Pillai, *Massachusetts General Hospital
Cancer Center, Harvard Medical School*
B Cell Development

Ellen A. Robey, *University of California, Berkeley*
T Cell Development

Ulrich H. von Andrian, *Harvard
Medical School*
Lymphocyte Trafficking

Kenneth L. Rock, *University
of Massachusetts Medical Center*
MHC-Restricted Antigen Presentation to T Cells

Susan M. Kaech, *Yale University*
Lymphocyte Memory

Arthur Weiss, *University of California,
San Francisco*

Signaling from Antigen Receptors

Charlotte S. Kaetzel, *University of Kentucky
College of Medicine*
Mucosal Immunity

JoAnne L. Flynn, *University of Pittsburgh
School of Medicine*
Immune Response to Pathogens

Pamela S. Ohashi, *Ontario Cancer Institute,
University of Toronto*
Tolerance

Betty A. Diamond, *The Feinstein Institute
for Medical Research*
Autoimmunity

Robert Schreiber, *Washington University
School of Medicine*
Tumor Immunology

Raif Geha, *Children's Hospital Boston,
Harvard Medical School*
Immunodeficiencies

Mary Collins, *Pfizer (ret.)*
Immunotherapeutics

Dan H. Barouch, *Beth Israel Deaconess
Medical Center, Harvard Medical School*
Vaccines

Also included will be lectures on *Mediators
of Inflammation* and *Asthma and Allergy*.

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

For assistance, contact (301) 634-7178 or meetings@aai.org.

Overseas applicants are advised to apply early for visas; for details, visit www.aai.org/Education/Courses/Visa.html. Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit <http://marc.faseb.org>.

Members in the News

AAI Members Elected to National Academy

Four AAI members are among 83 scientists elected earlier this year as members or foreign associates of the National Academy of Sciences (NAS) in recognition of their distinguished and continuing achievements in original research.

AAI members elected this year to the NAS, the elite corps of researchers representing the country's and world's leading scientific institutions, include Harris Lewin, Yasuko Rikihisa, Alexander Rudensky, and Shimon Sakaguchi. Profiled below, they will be inducted during the academy's 150th annual meeting next April in Washington, DC.

Harris A. Lewin, Ph.D., AAI '89

University of California, Davis (UC Davis)
Vice Chancellor of Research; Distinguished Professor,
Department of Evolution and Ecology



Harris Lewin

As vice chancellor for research since 2011, Harris Lewin oversees the UC Davis Office of Research, organizing and promoting research on campus, managing grant applications, and overseeing intellectual property, technology transfer, and efforts to translate UC Davis discoveries into new companies and products.

Holder of the Robert and Rosabel Osborne Endowed Chair in the Department of Evolution and Ecology, Lewin is also a member of the UC Davis Genome Center, where he and his laboratory colleagues continue his research on genome evolution.

Lewin studies mammalian comparative and functional genomics, addressing the evolution of mammalian genomes and the role of chromosome rearrangements in adaptation, speciation, and the origins of cancer. His work has led to the discovery of a gene responsible for susceptibility to bovine leukemia virus infection and to the development of high-density comparative maps for the cattle and human genomes, as well as novel software for in silico gene mapping using the human genome as a template. Additionally, his group produced the first large-scale cDNA microarray and oligoarray for functional genomics of ruminants. These tools have been used to study mammary gland development and involution,

the genomic effects of nuclear transfer cloning, and the effects of maternal diet on gene expression during the periparturient period.

Lewin is a past member of the AAI Veterinary Immunology Committee and ad hoc reviewer for *The Journal of Immunology*. He is a founding co-editor of *Annual Reviews of Animal and Veterinary Biosciences* and serves as an associate editor for *Animal Biotechnology*, section editor for the *Encyclopedia of Genetics, Genomics, Proteomics and Bioinformatics*, and on the editorial boards of *Physiological Genomics* and *Annual Reviews of Genomics and Human Genetics*. His additional career appointments and honors include: the Wolf Prize in Agriculture (co-recipient, for work on genetics, genomics, and disease resistance in cattle); elected fellow, American Association for the Advancement of Science; elected foreign member, the Royal Swedish Academy of Agriculture and Forestry; chair, scientific advisory board, GenoMar AS (a Norwegian aquaculture and biotechnology company); founder and science advisory board member, Pyxis Genomics; member, American Association of Veterinary Immunologists Nominating Committee; elected member, Standing Committee on the Genetic Basis of Immune Responsiveness, International Society for Animal Genetics; review panel member, U.S. Department of Agriculture (USDA) Competitive Grants Program (Growth and Development Section); member, National Animal Genome Research Program Database Committee; peer review panel member, USDA/Cooperative State Research Service National Research Initiative Competitive Grants Program (Animal Molecular Genetics and Gene Mapping); external reviewer, Institute for Animal Health, Biotechnology and Biological Research Council (UK); chair, USDA Committee on Animal Genome Database System; advisory board member (Biosciences Division), Argonne National Laboratory; and program committee member, 2010 Biotechnology Industry Organization.

An animal sciences graduate of Cornell University, where he earned a master's degree in animal breeding and genetics, Lewin received his Ph.D. in immunology from UC Davis. Before his return to UC Davis last year, Lewin spent 27 years at the University of Illinois (UI) at Urbana-Champaign, where he served most recently as the E.W. and J.M. Gutsell Endowed Professor of Immunogenetics in the Department of Animal Sciences and as a member of the Center for Advanced Study.

Lewin began his UI faculty career as an assistant professor in 1984; he was promoted to associate professor in 1989 and to full professor in 1994. He also served as director of the university's Biotechnology Center, founding director of the W. M. Keck Center for Comparative and Functional Genomics, and founding director of the Institute for Genomic Biology. He held additional appointments at UI's National Center for Supercomputing Applications and at the university's Microelectronics Laboratory and Micro and Nanotechnology Laboratory.

Yasuko Rikihisa, Ph.D., AAI '04

**The Ohio State University (OSU)
Professor, Department of Veterinary Biosciences,
College of Veterinary Medicine**



Yasuko Rikihisa

At OSU, Yasuko Rikihisa is a member of the Center for Clinical and Translational Science, the Center for Microbial Interface Biology, the Public Health Preparedness for Infectious Diseases Program, and the Molecular Genetics, Cell Biology, and Developmental Biology Program.

She studies intracellular bacteria of the Rickettsiales order, from characterization of the bacteria themselves to the mechanisms of their transmission to the development of diagnostic products. She has especially focused on *Ehrlichia* and *Anaplasma*, which can be transferred to farm animals, companion animals, and humans via tick bites. Her analysis of immunodominant antigens of the bacteria causing canine ehrlichiosis has resulted in a commercial diagnostic test now used annually for parasite screenings of dogs, and additional products to screen for anaplasmosis in dogs are in development. Rikihisa's lab also has developed animal models of human and canine ehrlichiosis and Potomac horse fever and is currently working on a large genomics project to comprehensively understand the molecular pathogenesis of ehrlichiosis.

Rikihisa is an associate editor for *Frontiers in Cellular and Infection Microbiology*, a member of the *mBio* Board of Editors, and an ad hoc member of the National Institutes of Health (NIH) study section and NIH special emphasis panel on bacterial pathogenesis. Her past service appointments include: member, NIH study sections

(bacteriology and mycology; microbiology and infectious diseases); member, USDA grant review panel; president, vice president, American Society for Rickettsiology; and member, Grayson-Jockey Club Research Advisory Committee.

Rikihisa's career honors include: Innovator of the Year Award, OSU; elected fellow, American Academy of Microbiology; elected fellow, The American Association for the Advancement of Science; David White Research Award, OSU; Teaching Excellence Award for Graduate Education, OSU; Emerging and Reemerging Infectious Diseases Award, Human Frontier Science Program, Strasbourg, France; Distinguished Scholar Award, OSU; Pfizer Animal Health Award for Research Excellence, OSU; Smith Kline Beecham Award for Research Excellence, OSU; Charles C. Capen Teaching Excellence Award; Japan Society for Promotion of Science Award; World Bank Higher Education XVII Award, Midwestern Universities Consortium for International Activities; and Teaching Excellence Award, Virginia Polytechnic Institute and State University (Virginia Tech). She holds nine U.S. and four foreign patents.

Rikihisa received her M.S. and Ph.D. degrees from the University of Tokyo and served as a postdoctoral fellow at Harvard Medical School. She held appointments as assistant and, later, associate professor at the Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech, where she also served as director of the institution's electron microscope facility. She joined the OSU faculty as associate professor in 1986.

Alexander Y. Rudensky, Ph.D., AAI '94

**Memorial Sloan-Kettering Cancer Center (MSKCC)
HHMI Investigator and Professor, Department of
Immunology**



Alexander Rudensky

Alexander Rudensky is known for his work on regulatory T cells (Tregs), including the molecular and cellular mechanisms governing their differentiation and function and the roles these cells play in the control of autoimmunity, tumor immunity, and immunity to infections. His group is particularly interested in understanding the role of the transcription factor forkhead box p3 (Foxp3) in establishing

Continued on next page

Members in the News *(continued)*

and maintaining immune homeostasis, as well as the plasticity of Treg transcriptional and functional programs and the molecular mechanisms of Treg lineage stability. The overarching goal of the group's work is to understand the molecular mechanisms governing the differentiation and function of CD4+ T cells and their role in immunity and tolerance.

Rudensky is a past AAI Distinguished Lecturer and recipient of the AAI-PharMingen Investigator Award. He served on the AAI Awards Committee from 2006 to 2009 and is a past Major Symposium chair and speaker at the AAI annual meeting.

Rudensky has held review and advisory panel appointments with NIH (immunobiology study section), National Cancer Institute, Wellcome Trust, Michigan Life Sciences Corridor, the Cancer Research Institute, EU SYBILLA Consortium, Damon Runyan Cancer Research Fellowship Program, and the international program committee for the 15th International Immunology Congress (Rome, Italy). He is an editorial board member or reviewer for *International Immunology*, *Cell*, *Journal of Immunological Methods*, *Journal of Experimental Medicine*, *Immunity*, *Current Immunology Review*, *Proceedings of the National Academy of Sciences USA*, and *Current Opinion in Immunology*. He is a past member of the *Journal of Experimental Medicine* editorial advisory board and *European Journal of Immunology* executive committee. Rudensky's additional career honors include the NIH MERIT Award, Sandler Senior Investigator Award, Searle Scholar Award, Julius Stone Award, and numerous invited lectureships at institutions throughout the United States and in England, Finland, Sweden, Russia, Italy, Israel, Taiwan, and China.

A biochemistry graduate of the Second Moscow State Medical Institute, Rudensky received his Ph.D. in immunology from the Gabrichevsky Institute for Epidemiology and Microbiology, Moscow. He undertook postdoctoral training in the Charles Janeway lab at Yale School of Medicine, where he subsequently served as an associate research scientist. He later held successive appointments as assistant, associate, and full professor at the University of Washington and served as an adjunct professor at the A. N. Belozersky Institute of Physico-Chemical Biology, Moscow State University, Russia. He has been an HHMI investigator since 1998, having been an assistant investigator since 1993. Appointed an MSKCC member in 2008, Rudensky assumed concurrent professor appointments with the Gerstner Sloan-Kettering Graduate School and Weill Cornell Graduate

School of Medical Sciences of Cornell University. He is a Tri-Institutional Professor at MSKCC, the Rockefeller University, and Cornell University.

Shimon Sakaguchi, M.D., Ph.D., AAI '90

Osaka University Immunology Frontier Research Center Professor and Chair, Department of Experimental Immunology



Shimon Sakaguchi

Shimon Sakaguchi is credited with the discovery of Tregs and much of the subsequent return to popularity of suppressor cells in immunological research. His lab has shown that these naturally occurring CD4+CD25+ Tregs are actively engaged in controlling a variety of physiological and pathological immune responses, including autoimmunity, allergy, transplantation tolerance, and tumor immunity. His

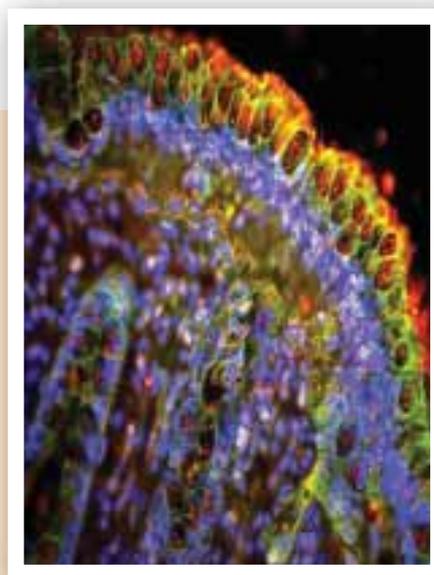
work addresses the molecular and cellular basis of Treg development and function, particularly the involvement of the transcription factor Foxp3, and seeks ways to exploit these cells' activity to control immune responses in clinical settings. In addition, Sakaguchi's group has developed a mouse model of spontaneous autoimmune arthritis resulting from a mutation in the T cell signaling molecule ζ -chain-associated protein kinase 70 (ZAP70), which results in changes in thymic selection. The group hopes that analysis of this model will facilitate an understanding of how genetic, environmental, and immunological factors act together to induce the development of T cell-mediated autoimmune disease in humans.

Sakaguchi is a past Major Symposium speaker at the AAI annual meeting and past associate editor for *The Journal of Immunology*. Other journals for which Sakaguchi has provided editorial service include *Science*, *Journal of Experimental Medicine*, *Immunity*, *International Immunology*, *Immunological Reviews*, *Human Immunology*, *Journal of Experimental Pathology*, *Cancer Immunity*, and *eLife*. His career honors include: The Japan Academy Award; Asahi Prize; the Medal with Purple Ribbon from the Emperor (Japan); Keio Medical Science Prize; Commendation for Science and Technology, Minister of Education, Culture, Sports, Science and Technology, Japan; Takamine Memorial Sankyo Award; Takeda Medical Award; Cancer Research Institute's William B. Coley Award for Basic Immunology and Tumor Immunology; Mochida Science Award 2003; and Lucille P. Markey Scholar Award in Biomedical Science.

Sakaguchi received his M.D. from Kyoto University, Japan, and trained as a pathology resident at Kyoto University Medical School (KUMS), visiting investigator at the Laboratory of Experimental Pathology, Aichi Cancer Center Research Institute (Nagoya), and senior research fellow at KUMS' Institute for Immunology. He subsequently obtained his Ph.D. from Kyoto University, focusing on experimental autoimmune disease research. He completed postdoctoral fellowships in immunology/infectious diseases and in biophysics at Johns Hopkins University and served as a visiting scientist in immunology and rheumatology at Stanford University. He was appointed assistant professor in the Immunology Department at the Scripps Research Institute in 1989.

In 1992, Sakaguchi returned to Japan as a Japan Science and Technology Agency investigator at RIKEN Institute (Tsukuba) and later headed the Immunopathology Department at Tokyo Metropolitan Institute of Gerontology. From 1999 to 2011, he served as professor and chair of the Experimental Pathology Department at Kyoto University's Institute for Frontier Medical Sciences; from 2007 to 2011, he served as the institute's director. In 2011, Sakaguchi assumed his current appointment as a professor in the Department of Experimental Immunology, Immunology Frontier Research Center, Osaka University.

The National Academy of Sciences is a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare. It was established in 1863 by a congressional act of incorporation signed by Abraham Lincoln, to serve as an official adviser to the federal government on matters of science or technology. NAS members are selected in recognition of their distinguished and continuing achievements in original research in science and engineering. Additional information about the Academy and its members is available online at www.NASonline.org.



AAI Entry is Among First FASEB Bio-Art Competition Winners

An AAI-submitted image took honors in the first annual FASEB Bio-Art competition. The image, one used on the March 1, 2010, cover of *The Journal of Immunology (The JI)*, was selected as one of the 10 winning entries in the FASEB contest. Viewed in conjunction with the supporting nontechnical statement, the submission was deemed by judges to be “both visually arresting and [to] clearly communicate a cutting edge biomedical science concept” to general audiences.

The image is of tissue from a colon biopsy stained for Sigirr and other cellular components. Accompanying the image is text explaining that therapeutic targeting of Sigirr could be useful in the treatment of inflammatory bowel disease or other inflammatory disorders of the gastrointestinal tract.

The JI covers are selected from among articles published in each issue. The article yielding the winning image from *The JI* was by AAI members Xiaoxia Li (AAI '09) and Bruce A. Vallance (AAI '10) and their co-authors Mohammed Khan, Theodore S. Steiner, Ho Pan Sham, Kirk S. Bergstrom, Jingtian T. Huang, Kiran Assi, Bill Salh, and Isabella T. Tai.

To view the winning images, visit www.faseb.org/Scientific-Image-Competition/Winners.aspx.

Contest-winning images were displayed before members of Congress at FASEB's centennial celebration on May 16 and will be featured on the NIH website and main campus.

The 1918–1919 Influenza Pandemic as Covered in *The Journal of Immunology* from 1919 to 1921

The deadly 1918–1919 influenza pandemic generated an impressive body of immunological research into the cause and prevention of the disease, and that urgency is reflected in the many articles on influenza published in *The Journal of Immunology* from 1919 to 1921. Because bacteria had been shown to be causative of other infectious diseases, including typhoid fever and diphtheria, and viruses were not yet understood as more than filter-passing agents, most scientists of the time believed the cause of influenza to be bacterial. German physician Richard Pfeiffer had isolated bacteria from influenza patients during the previous pandemic of 1892 and believed that these bacteria were the cause of influenza; the bacteria had come to be known as Pfeiffer's bacillus or *Bacillus influenzae* or *B. influenzae* (now *Haemophilus influenzae*). By the time of the 1918 pandemic, many scientists had embraced Pfeiffer's hypothesis, and researchers were attempting to establish the etiological significance of *B. influenzae* to the disease by examining cases from the unfolding influenza pandemic.

Immunologists cultured and isolated bacteria from patient samples, including throat swabs, sputum samples, pleural effusions, and lung exudates, with mixed results. In 1919, C. Roos from the Mulford Biological Laboratories in Glenolden, Pa., reported that a collective review of all influenza samples analyzed by the laboratory beginning with the epidemic of 1915–1916 identified *B. influenzae* in “50 to 90 per cent of the cases.”¹ In September and October of 1918, Roos specifically examined 33 specimens from cases of clinical influenza characterized by a sharp onset and isolated *B. influenzae* from 27 (82 percent), although streptococci and pneumococci were also commonly present, being found in 25 (76 percent) and 20 (61 percent) of the specimens, respectively. Although *B. influenzae* could not be reproducibly isolated from all cases of influenza examined, Roos and others placed little significance on the



Demonstration at the Red Cross Emergency Ambulance Station in Washington, D.C., during the influenza pandemic of 1918, c. 1918, Library of Congress, Prints & Photographs Division

negative findings, ascribing them to improper specimen collection or culture technique.² Nevertheless, the inconsistent presence of *B. influenzae* in patient samples, its presence in healthy individuals, and the isolation of other types of bacteria from influenza patients cast doubt on the theory that Pfeiffer's bacillus was the cause of influenza.

William H. Park (AAI 1916, president 1918), laboratory director, New York City Board of Health, Division of Pathology, Bacteriology, and Disinfection, contended that, to establish etiological significance, it was not sufficient merely to establish the presence of Pfeiffer's bacillus in all (or nearly all) cases of the influenza but that it was also necessary to show that the same strain or type was present in all cases. Under the direction of Park, Eugenia Valentine (AAI 1920) and Georgia M. Cooper (AAI 1920) injected rabbits with cultures of *B. influenzae* and tested each antiserum against the same (homologous) culture and against other cultures of *B. influenzae* isolated from the lung, larynx, or trachea of influenza patients.³ They were surprised to find a multiplicity of strains and could conclude only that “*B. influenzae* is not the primary etiological agent in epidemic influenza.” The lack of a “hypothetical pandemic strain” was later confirmed by similar methods by other investigators, including Arthur F. Coca (AAI 1916, secretary-treasurer 1918–1945, editor-in-chief 1920–1948) and Margaret F. Kelley of New York Hospital and Cornell University.⁴ Other papers, however, presented contradictory findings. In one such paper, F. M. Huntoon (AAI 1918) and S. Hannum demonstrated that antiserum protected mice from heterologous strains of *B. influenzae*.⁵ So it was that, long after the pandemic subsided, uncertainty remained about whether this microorganism was the primary cause of influenza or whether it was a secondary opportunistic invader.

Despite the uncertainty surrounding the cause of influenza, the lethality of the 1918 outbreak lent particular urgency to the question of prevention, and a number of investigators worked to develop a vaccine against the disease. During the height of an influenza epidemic occurring in New Orleans in the fall of 1918, Charles W. Duval and William H. Harris of Tulane University vaccinated approximately five thousand individuals with a chloroform-killed *B. influenzae* preparation.⁶ They reported that only 3.3 percent of those vaccinated developed influenza, compared with 41 percent of the unvaccinated control group. Duval and Harris concluded that, although the number of vaccinated persons was few, the results were “interesting and significant from the standpoint of prophylaxis.” In New York City, Park, in collaboration with other members of an influenza commission and the workers of the New York City Department of Health, undertook a comprehensive study of acute respiratory infections—



Street car conductor in Seattle not allowing passengers aboard without a mask, c. 1918, National Archives at College Park, College Park, MD

work that was funded through a grant from the Metropolitan Life Insurance Company. The first issue of *The Journal of Immunology* from 1921 (vol. 6, no. 1) was dedicated exclusively to this topic and the resulting series of papers.⁷ As part of this series, Park and his colleagues tested combined vaccines made from *B. influenzae* and strains of streptococcus, pneumococcus, and staphylococcus on 1,536 employees of the Metropolitan Life Insurance Company.⁸ Their results were somewhat less striking than the findings of Duval and Harris, as they found no difference in respiratory disease overall (including influenza) between the inoculated and control groups. However, it was noted that the vaccinated group showed the “beneficial influence” of a lower incidence of pneumonia.

The cause of influenza would not be definitively resolved until the 1930s, with the isolation of swine influenza virus by Shope⁹ and the subsequent isolation of human influenza virus by Smith, Andrewes, and Laidlaw.¹⁰ Whereas Pfeiffer’s hypothesis regarding the bacterial cause of influenza was ultimately proven incorrect, it was generally agreed then, as now, that most of the deaths from the 1918–1919 influenza pandemic were due to secondary bacterial infections¹¹—and that some of the early vaccines could have, in fact, prevented the rate of bacterial pneumonia and death from the disease.¹²

Modern influenza research continues to be presented in *The Journal of Immunology* nearly one century after these early papers appeared in the wake of the 1918 pandemic. Topics of research include the role of innate immune defenses in protection, the specificity of the T cell memory response, and mechanisms for improving vaccination, among others. Contemporary papers examine the immune response to recent strains, including swine-origin H1N1 influenza virus, the cause of the 2009 pandemic, and highly pathogenic avian H5N1 influenza viruses, speculated to be the possible source of a new pandemic. Much research remains to be done to fully staunch infection and death from seasonal outbreaks and future pandemics of the disease, but, if recent research is a fair indicator of future initiatives, immunology as a field will yield key findings for understanding influenza and limiting the menace it poses to public health.

¹ C. Roos, “Notes on the Bacteriology, and on the Selective Action of *B. influenzae* Pfeiffer,” *The Journal of Immunology* vol 4 (1919): 189–201.

² For instance, Roos pointed out that *B. influenzae* is “seldom found in the specimens of nasal secretions.” He further noted that he, as a frequent sufferer of common colds, “has been able to demonstrate this fact repeatedly on himself.”

³ Eugenia Valentine and Georgia M. Cooper, “On the Existence of a Multiplicity of Races of *B. influenzae* As Determined by Agglutination and Agglutinin Absorption,” *The Journal of Immunology* vol 4 (1919): 359–379.

⁴ A.F. Coca and M.F. Kelley, “A Serological Study of the Bacillus of Pfeiffer,” *The Journal of Immunology* vol 6 (1921): 87–101.

⁵ E.M. Huntoon and S. Hannum, “The Role of *Bacillus influenzae* in Clinical Influenza,” *The Journal of Immunology* vol 4 (1919): 167–187.

⁶ C.W. Duval and W.H. Harris, “The Antigenic Property of the Pfeiffer Bacillus As Related to Its Value in the Prophylaxis of Epidemic Influenza,” *The Journal of Immunology* vol 4 (1919): 317–330.

⁷ W.H. Park, A.W. Williams, and C. Krumwiede, “Microbial Studies on Acute Respiratory Infection with Especial Consideration of Immunological Types,” *The Journal of Immunology* vol 6 (1921): 1–4. For more on Anna W. Williams, see “Anna Wessels Williams, M.D.: Infectious Disease Pioneer and Public Health Advocate,” *AAI Newsletter*, March/April 2012, pp. 50–51.

⁸ A.I. Von Sholly and W.H. Park, “VII. Report on the Prophylactic Vaccination of 1536 Persons Against Acute Respiratory Diseases, 1919–1920,” *The Journal of Immunology* vol 6 (1921): 103–115.

⁹ R. Shope, “Swine Influenza. III. Filtration Experiments and Etiology,” *The Journal of Experimental Medicine* vol 54 (1931): 373–385.

¹⁰ W. Smith, C. Andrewes, and P. Laidlaw, “A Virus Obtained from Influenza Patients,” *Lancet* vol 2 (1933): 66–68.

¹¹ D.M. Morens, J.K. Taubenberger, and A.S. Fauci, “Predominant Role of Bacterial Pneumonia as a Cause of Death in Pandemic Influenza: Implications for Pandemic Influenza Preparedness,” *The Journal of Infectious Diseases* vol 198 (2008): 962–970.

¹² Y. Chien, K.P. Klugman, and D.M. Morens, “Efficacy of Whole-Cell Killed Bacterial Vaccines in Preventing Pneumonia and Death during the 1918 Influenza Pandemic,” *The Journal of Infectious Diseases* vol 202 (2010): 1639–1648.

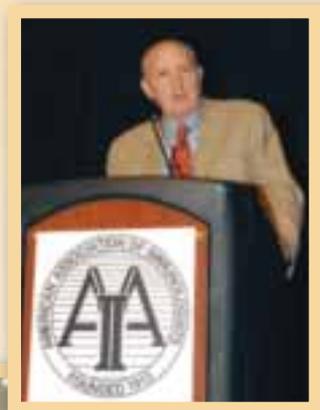
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Setting the high mark for AAI annual meeting attendance since 2000, IMMUNOLOGY 2012™ attracted more than 3,700 registrants.

IMMUNOLOGY 2012™ featured over 700 speakers in 116 sessions. Nearly 1,800 posters were displayed and discussed during dedicated poster hour sessions throughout the week.

The 455 AAI awards presented in connection with the meeting honored scientific achievement and career contributions to the field, recognized service to AAI, and fostered the career development of early- and mid-career scientists. Support included travel awards for all trainee members whose first-author abstracts were selected for oral presentation.

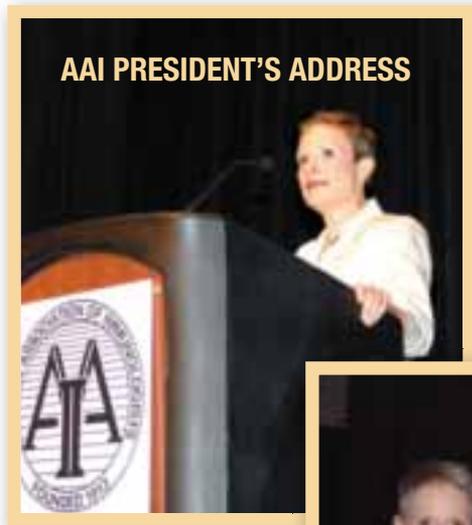


Career-development workshops and networking events addressed the variety, rewards, and challenges of science career options in and beyond research. The exhibit floor was comprised of 129 exhibitors offering a full slate of exhibitor workshops and product showcases. And the lineup of IMMUNOLOGY 2012™ social events again distinguished the AAI annual meeting as the year's premier gathering and networking event for immunologists and trainees worldwide.

To review the program presented at IMMUNOLOGY 2012™, visit www.IMMUNOLOGY2012.org.

BOSTON

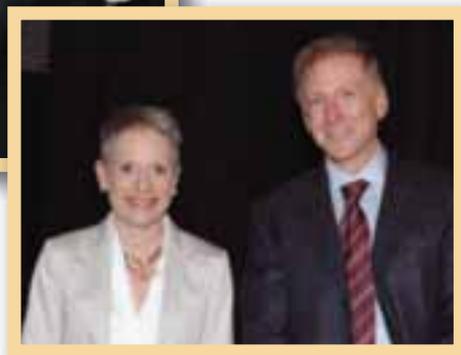
AAI President's Program



AAI President Leslie Berg delivering 2012 AAI President's Address



Lawrence Samelson, Amy Andreotti, Leslie Berg, Pamela Schwartzberg, Mark Davis



Leslie Berg with her President's Address introducer, U Mass colleague Ken Rock



Leslie Berg with President's Address attendees

AAI Distinguished Lectures



AAI Program Chair Kristin Hogquist, lecturer Vijay Kuchroo, Leslie Berg



Kristin Hogquist, lecturer David Raulet, Leslie Berg



Lecturer Anne O'Garra, Kristin Hogquist

IMMUNOLOGY 2012™

AAI Honors for Career Achievement



Leslie Berg with awardee Art Weiss



Leslie Berg, awardee Max Cooper, Paul Kincade

AAI Scientific, Service Recognition Awards

AAI-Life Technologies Meritorious Career Award Presentation & Lecture



Life Technologies' Jeff Rossio, AAI Executive Director Michele Hogan, awardee Peter Cresswell, Leslie Berg

AAI-BD Biosciences Investigator Award Presentation & Lecture



Leslie Berg, awardee Shane Crotty, BD Bioscience's Robert Balderas, Michele Hogan

AAI Award for Human Immunology Research Presentation & Lecture



Leslie Berg, awardee John Atkinson

AAI DISTINGUISHED SERVICE AWARD RECIPIENTS



Brian Cobb



William Green



John Schreiber

AAI Professional Development Awards

Pfizer-Showell Award



Michele Hogan, awardee Joseph C. Sun, Leslie Berg

Lustgarten-eBioscience Memorial Award



eBioscience's Tony Ward, awardee Lihua Chen, Leslie Berg

Chambers-eBioscience Memorial Award



Tony Ward, awardee Rajesh K. Sharma

AAI-Life Technologies Trainee Achievement Awards



AAI-Life Technologies Trainee Achievement Award recipients Burton Barnett, Rebecca Mathew, Jakob von Moltke, Caroline Padro, Jarish Cohen, Chao Ma

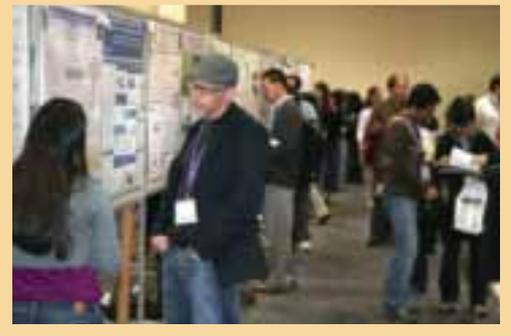


Pictured with Michele Hogan (front row, third from right), twelve winners of AAI Early Career Faculty, Undergraduate Faculty, and Laboratory Travel Grants – front row (L-R): Emiko Mizoguchi, Mahyar Nouri-Shirazi, Yong Liang Zhang, Pornpimon Angkasekwinai, Lisa Ryan, Kara Lukin and (back row) Damian Turner, Greg Swan, Sophia Sarafova, Nathalie Scholler, Susan Jarvi, Roza Nurieva



IMMUNOLOGY 2012™

AAI Poster Sessions



AAI Career Development Sessions

AAI Education Committee & AAI Committee on the Status of Women— Careers in Science Lecture & Roundtable



AAI Committee on the Status of Women member Janis Burkhardt serving as discussion co-leader at the New PI: Attracting Students and Postdocs, Preparing for Tenure table

Olja Finn delivering keynote address, "Make an effort! A path to a rewarding life in science" (at right) and joining the Research Careers in Academia table discussion (below)



AAI Career Development Sessions

(Continued)

AAI Minority Affairs Committee Careers and Networking Roundtable



Above left: MAC Roundtable attendees discussing career issues; above right: MAC table leader Charles Egwuagu, who also delivered the AAI Minority Affairs Committee Guest Lecture (Regulation of autoreactive lymphocytes that mediate CNS autoimmune diseases)



Attendees at the sold out Careers in Biotech Panel Discussion and Networking Reception



Instructor Derek Haseltine providing individual counseling following the How to Convert Your CV into a Resumé careers session



Careers in Biotech session panelists Andy Kokaji, Art Tzianabos, Olivia Schneider, Chris Schwab



Attendees at the Secrets to a Successful Postdoc workshop

IMMUNOLOGY 2012™

Social Events

NEW MEMBER RECEPTION

Sponsored by AAI Membership Committee



AAI Secretary-Treasurer Mitch Kronenberg helping welcome guests at the reception for new AAI members

PRESIDENT'S SERVICE APPRECIATION RECEPTION

Sponsored by BioLegend



Leslie Berg thanking AAI volunteers, including members of Council and committees, abstract programming chairs, The JI editors and reviewers, AAI course instructors, and others

At right, BioLegend founder Gene Lay (right) with colleague Craig Monell; below, Michele Hogan, Gerry Sonnenfeld, Olja Finn



OPENING NIGHT RECEPTION

Sponsored by eBioscience



Jugglers (above), twirlers (right), and attendees enjoying the festive atmosphere at the reception kicking off IMMUNOLOGY 2012™



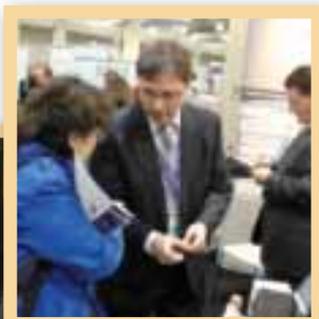
AAI GALA—CASINO NIGHT IN THE BACK BAY

Sponsored by BioLegend

BioLegend founder Gene Lay and a door prize winner (inset) pictured at the Casino Night in the Back Bay event



Exhibit Hall



AAI COUNCIL MEETING



AAI Council members Kristin Hogquist, Jerry Boss, Michele Hogan, Jeff Frelinger, Leslie Berg, Marc Jenkins, Gail Bishop, Mitch Kronenberg, Arlene Sharpe



See you next year!

Celebrating
100 Years

IMMUNOLOGY 2013™

Meeting Dates: May 3 – 7, 2013

Exhibit Dates: May 4 – 6, 2013

**Hawaii Convention Center
Honolulu, Hawaii**



Michele Hogan with representatives of the Visitors & Convention Bureau of Hawaii, site of IMMUNOLOGY 2013™ and the AAI Centennial celebration

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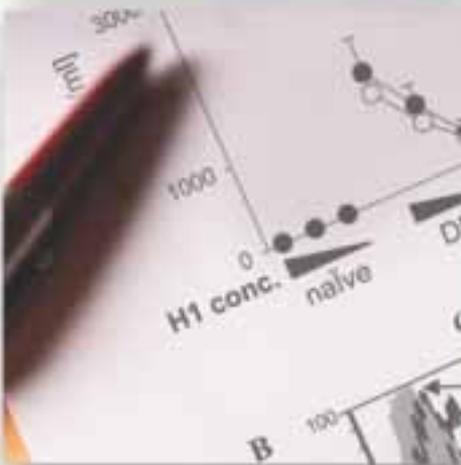
- Support for AAI Trainee Abstract Awards

Mickie and Leon Berg, Eric Berg

- Meeting Support in Honor of AAI President Leslie J. Berg

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<http://www.aai.org>

Scientific Publishing



Dos and Don'ts **for Authors and Reviewers**

*Collected articles based upon presentations given
at a special session of the AAI Publications Committee
at IMMUNOLOGY 2009™ in Seattle, Washington*

May 10, 2009

Reprinted from the AAI Newsletter, November 2009–May 2010



GRANT AND AWARD DEADLINES

July 31—American Association for the Advancement of Science (AAAS) Mentor Awards

Description

The two categories of the AAAS Mentor Awards (Lifetime Mentor Award and Mentor Award) both honor individuals who, during their careers, demonstrate extraordinary leadership to increase the participation of underrepresented groups in science and engineering fields and careers. These groups include: women of all racial or ethnic groups; African American, Native American, and Hispanic men; and people with disabilities.

Prize/Award

A prize of \$5,000 is awarded to the Lifetime Mentor Award recipient, who will have served in the role of mentor for 25 or more years. A prize of \$5,000 is awarded to the Mentor Award recipient, who will have served in the role of mentor for less than 25 years.

Eligibility

The award is open to all, regardless of nationality or citizenship. Nominees must be living at the time of their nomination.

Nomination

Nominations are accepted by e-mail submission and must be received by July 31.

Details: www.aaas.org/aboutaaas/awards/mentor

Contact: gboulin@aaas.org or ygeorge@aaas.org

July 31—The Wiley Prize in Biomedical Sciences

Description

The Wiley Prize in Biomedical Sciences is intended to recognize breakthrough studies in pure or applied life science research that are distinguished by excellence and originality and impact on our understanding of biological systems and processes. The award may recognize a specific contribution or series of contributions that demonstrate the nominee's significant leadership in the development of research concepts or their clinical application. Particular emphasis will be placed on research that champions novel approaches and challenges accepted thinking in the biomedical sciences.

Prize/Award

Presented annually, this international award consists of a \$35,000 prize and a luncheon in honor of the recipient. The recipient delivers an honorary lecture as part of The Rockefeller University Lecture Series.

Eligibility

The Wiley Foundation invites and encourages the nomination of exceptional scientists or research teams whose research has set the standard for excellence. International nominations are encouraged.

Nomination

Nominations, which should be submitted by someone other than the nominee, are accepted by mail or e-mail submission and must be received by July 31.

Details: www.wiley.com/WileyCDA/Section/id-390111.html

Contact: prizesubmissions@wiley.com

August 1—AAAS Kavli Science Journalism Awards

Description

The AAAS Kavli Science Journalism Awards represent the pinnacle of achievement for professional journalists in the science writing field. Since 1945, the awards have recognized outstanding reporting for a general audience and honored individuals (rather than institutions, publishers, or employers) for their coverage of the sciences, engineering, and mathematics.

Prize/Award

The award for each category is \$3,000 and includes reimbursement for AAAS annual meeting travel and hotel expenses to attend the prize presentation.

Eligibility

Winning journalists are those who have helped foster the public's understanding and appreciation of science. Journalists and their entries are selected based on scientific accuracy, initiative, originality, clarity of interpretation, and value in fostering public understanding of science.

Nomination

Nominations are accepted by mail and must be received by August 1.

Details: www.aaas.org/aboutaaas/awards/sja/

Contact: (202) 326-6440

Continued on next page

GRANT AND AWARD DEADLINES

August 1—American College of Rheumatology Research and Education Foundation (REF) Awards and Grants Program

Description

This program exists to train and develop rheumatologists and rheumatology health professionals and nurture novel research ideas for the future. The awards are designed to identify the best scientists in each niche of rheumatology, foster their ideas, and prepare them for larger awards and grants from other institutions to sustain their long-term careers as rheumatologists and rheumatology health professionals.

Prize/Award

The program offers research and education opportunities for clinicians, students, health professionals, researchers, and academic institutions. Grants of one-, two-, and three-year funding range in amounts by program from \$50,000 to \$375,000 annually.

Eligibility

Eligibility extends variously by award program to fellows and early- to mid-career physicians and health professionals.

Application

All applications must be submitted online and are due by 5:00 PM Eastern Daylight Time on August 1. The online Call for Applications brochure* provides information on each award and grant opportunity, with applications available online via the individual award pages.

*www.rheumatology.org/ref/awards/REF_CFA_Brochure.pdf#toolbar=1

Details: www.rheumatology.org/REF/awards/index.asp

Contact: (404) 633-3777; ref@rheumatology.org

August 14—The Vilcek Prize for Creative Promise in Biomedical Science

Description

The Vilcek Foundation awards the Creative Promise Prize in Biomedical Science to recognize foreign-born scientists who, early in their careers, have demonstrated exceptional achievement in biomedical science.

Prize/Award

Recipients each receive \$35,000 and a commemorative plaque, presented at the foundation's annual awards dinner held in early spring in New York City.

Eligibility

Three prizes will be awarded to young biomedical scientists who demonstrate outstanding early achievement through work in basic, applied, and/or translational biomedical science. To be eligible, an applicant must: have been born outside of the United States, on or after January 1, 1974; be a naturalized U.S. citizen or permanent resident (green card holder); have earned a doctoral degree (M.D., Ph.D., or equivalent); intend to pursue a professional career in the United States; and hold a full-time position in an academic or other institution at the level of assistant or associate professor, research scientist, or equivalent.

Application

Applications are accessed, completed, and submitted via the online Vilcek Foundation application system and must be received by August 14.

Details: www.vilcek.org/prizes/creative-promise/index.html

Contact: (212) 472-2500; info@vilcek.org

August 15—AAAS Award for Public Engagement with Science

Description

Established in 1987 as the AAAS Award for Public Understanding of Science and Technology, this award is given annually to scientists or engineers who, while working in their fields, make outstanding contributions to the popularization of science.

Prize/Award

The recipient receives a monetary prize of \$5,000, a commemorative plaque, and reimbursement for AAAS annual meeting registration, travel, and hotel expenses to attend the prize presentation.

Eligibility

Eligible individuals include scientists and engineers (individual or a small group) from all disciplines, including social and behavioral sciences and biomedical fields, who have contributed substantially to the public's engagement with science or technology. Only materials produced for general audiences, as opposed to professional or trade audiences, will be considered. Types of activities to be considered include books, magazines, and newspaper articles; broadcasting; lecturing; museum presentation and exhibit design; and other public-outreach activities, whether local, national, or international.

GRANT AND AWARD DEADLINES *(continued)*

Nominators are encouraged to identify candidates whose contributions reach broad audiences that include women, minorities, persons with disabilities, and senior citizens.

Nomination

Nominations are accepted by mail or e-mail and must be submitted by August 15.

Details: www.aaas.org/aboutaaas/awards/public/

Contact: raculver@aaas.org

August 15—Foundation for the National Institutes of Health (FNIH) Lurie Prize in the Biomedical Sciences

Description

In 2013, the FNIH will present the first Lurie Prize, an annual award recognizing outstanding achievement by a promising young scientist in biomedical research.

Prize/Award

The prize amount is \$100,000, to be used as the awardee chooses. The award will be presented in the spring of 2013 in Washington, DC.

Eligibility

Any outstanding young biomedical investigator who will not have passed his/her 52nd birthday on April 12, 2013, is eligible to be nominated.

Nomination

Nominations must be submitted via the Lurie Prize online nomination site by 1:00 PM Eastern Daylight Time on August 15. Self-nominations are not accepted. A member of any accredited educational and/or scientific institution may submit a nomination, without limit on the number of nominations that may derive from a single nominator or institution.

Details: www.fnih.org/content/lurie-prize-biomedical-sciences

Contact: lurieprizeinfo@fnih.org

September 1—AAAS Award for Science Diplomacy

Description

Formerly known as the AAAS Award for International Scientific Cooperation, this award recognizes scientists and engineers who contribute valuable time away from the established career paths of research, teaching, and publishing to foster activities and develop programs that address key science questions and build important societal links. Specifically,

this award honors an individual or a limited number of individuals working together in the scientific or engineering community for making an outstanding contribution to furthering science diplomacy.

Prize/Award

The awardee receives a prize of \$5,000, a commemorative plaque, and AAAS annual meeting registration, housing, and travel to attend the prize presentation.

Eligibility

The award is open to all, regardless of nationality or citizenship. Nominees must be living at the time of their nomination. Any individual or small group in the scientific and engineering community that has contributed to the role of science cooperation in building stronger links between and among societies is eligible for this award.

Nomination

Nominations are accepted by mail or fax and must be received by September 1.

Details: www.aaas.org/aboutaaas/awards/int/

Contact: lstroud@aaas.org

September 1—AAAS Philip Hauge Abelson Award

Description

This award is presented annually either to a public servant, in recognition of sustained exceptional contributions to advancing science, or to a scientist whose career has been distinguished both for scientific achievement and for other notable services to the scientific community.

Prize/Award

The awardee receives a prize of \$5,000, a commemorative plaque, and AAAS annual meeting registration, housing, and travel to attend the prize presentation.

Eligibility

Any public servant or scientist embodying the criteria in the above award description is eligible to be nominated.

Nomination

Nominations are accepted by mail, fax, or e-mail and must be received by September 1.

Details: www.aaas.org/aboutaaas/awards/abelson/

Contact: (202) 326-6600; snelson@aaas.org

Continued on next page

GRANT AND AWARD DEADLINES

September 1—AAAS Award for Scientific Freedom and Responsibility

Description

This award is presented annually to honor scientists and engineers whose exemplary actions have served to foster scientific freedom and responsibility. Specifically, it recognizes those who have acted to protect the public's health, safety, or welfare; focused public attention on important potential impacts of science and technology on society by their responsible participation in public policy debates; or established important precedents in carrying out the social responsibilities or in defending the professional freedom of scientists and engineers.

Prize/Award

The awardee receives a prize of \$5,000, a commemorative plaque, and AAAS annual meeting registration, housing, and travel to attend the prize presentation.

Eligibility

The award is open to all, regardless of nationality or citizenship, and seeks to inspire the next generation of scientists and engineers as they begin their careers.

Nomination

Nominations may be submitted by mail, fax, or e-mail and must be received by September 1.

Details: www.aaas.org/aboutaaas/awards/freedom/

Contact: (202) 326-6794; drunkle@aaas.org

September 4—Burroughs Wellcome Fund Career Awards at the Scientific Interface

Description

These awards provide funding to bridge advanced postdoctoral training and the first three years of faculty service. They are intended to foster the early career development of researchers who have transitioned or are transitioning from undergraduate and/or graduate work in the physical/mathematical/computational sciences or engineering into postdoctoral work in the biological sciences and who are dedicated to pursuing a career in academic research.

Prize/Award

The awards provide \$500,000 over five years to support up to two years of advanced postdoctoral training and the first three years of a faculty appointment.

Eligibility

These awards are open to U.S. and Canadian citizens or permanent residents as well as to U.S. temporary residents. Eligible candidates may self-nominate by submitting a preproposal application. An online eligibility quiz screens prospective applicants and serves as a portal to the online application for those eligible to proceed.

Application

Only electronic applications are accepted. The preproposal application deadline is 4:00 PM Eastern Daylight Time on September 4. (The subsequent, invited application deadline is 4:00 PM Eastern Standard Time on January 10, 2013.)

Details: www.bwfund.org/pages/558/Career-Awards-at-the-Scientific-Interface/

Contact: (919) 991-5116; dvought@bwfund.org

AAI Newsletter: Members in the News—Submissions Invited

AAI welcomes the opportunity to highlight the career achievements and professional honors attained by AAI member scientists. Such publicity not only serves to inspire colleagues but also informs the broader public of immunology's vital and widening role in scientific discovery and transformative medicine.

Help AAI share news of your or another member's noteworthy scientific and/or service recognition or career appointment by contacting mwcuddy@aai.org. Thank you!

Meetings and Events Calendar

Mark Your Calendar for These Important Dates!

2012

July 19–23, 2012

Society for Developmental Biology
71st Annual Meeting
Montreal, Canada
www.sdbonline.org/2012Mtg.htm

July 21–25, 2012

The American Society for Virology 31st
Annual Scientific Meeting
University of Wisconsin–Madison, Madison,
Wisconsin
www.asv.org

July 22–28, 2012

20th Annual International Conference on
Composites or Nano Engineering
Beijing, China
www.icce-nano.org

July 29–August 3, 2012

AAI Advanced Course in Immunology
Boston, Massachusetts
[http://aai.org/Education/Courses/
Advanced/index.html](http://aai.org/Education/Courses/Advanced/index.html)

August 19 – 21, 2012

Cell Symposia on Human Immunity
Sheraton Lisboa, Lisbon, Portugal
www.cell-symposia-human-immunity.com

September 4–9, 2012

Frontiers in Lipid Biology
Banff, Alberta, Canada
[www.asbmb.org/ASBMBMeetings/
SpecialSymposia/symposia.aspx?mid=23](http://www.asbmb.org/ASBMBMeetings/SpecialSymposia/symposia.aspx?mid=23)

September 5–8, 2012

European Congress of Immunology 2012
Glasgow, Scotland
<http://eci-glasgow2012.com>

September 11–15, 2012

10th Joint ICS/ISICR Meeting—Cytokines:
From Basic Biology to Clinical Application
Geneva Switzerland
www.cytokines2012.com

September 12–14, 2012

Colorado Immunology Conference
Vail, Colorado

September 25–28, 2012

Alternatives to Antibiotics (ATA)
Paris, France
www.alternativestoantibiotics.org

October 3–6, 2012

Biennial Meeting of the European Society
for Immunodeficiencies (ESID 2012)
Florence, Italy
www2.kenes.com/esid2012/Pages/Home.aspx

October 4–8, 2012

Transcriptional Regulation: Chromatin
and RNA Polymerase II
Snowbird, Utah
[www.asbmb.org/ASBMBMeetings/
SpecialSymposia/symposia.aspx?mid=24](http://www.asbmb.org/ASBMBMeetings/SpecialSymposia/symposia.aspx?mid=24)

October 9–11, 2012

La Jolla Immunology Conference
La Jolla, California

October 11–14, 2012

Post Translational Modifications:
Detection and Physiological Role
Tahoe City, California
[www.asbmb.org/ASBMBMeetings/
SpecialSymposia/symposia.aspx?mid=25](http://www.asbmb.org/ASBMBMeetings/SpecialSymposia/symposia.aspx?mid=25)

October 12–16, 2012

ASBMR 34th Annual Meeting
Minneapolis, Minnesota
www.asbmr.org

October 21–24, 2012

14th Annual Upstate New York
Immunology Conference
Bolton Landing, New York
www.amc.edu/NYIC/index.html

October 27–28, 2012

New England Immunology Conference
Woods Hole, Massachusetts
<http://neic.uchc.edu>

October 28–30, 2012

45th Annual Meeting of the Society for
Leukocyte Biology, “Inflammation in
Innate Immunity and Adaptive Immune
Mechanisms”
Grand Wailea, Maui, Hawaii
www.leukocytebiology.org

November 4–9, 2012

ThymUS 2012 International Conference
Sunny Isles Beach, Florida
www.thymus-conference.org

November 6–10, 2012

American Society of Human Genetics
San Francisco, California
Contact: paulinem@ashg.org

November 11–15, 2012

American Society of Tropical Medicine
and Hygiene (ASTMH) 61st Annual
Meeting
Atlanta, Georgia
www.astmh.org/Home.htm

November 16–19, 2012

AIC 2012: 41st Annual Autumn
Immunology Conference
Chicago, Illinois
<http://autumnimmunology.org>

November 28–December 1, 2012

6th Asian Congress of Pediatric Infectious
Diseases (ACPID 2012)
Colombo, Sri Lanka
www.acpid2012.org

December 2–4, 2012

2012 CRWAD Meeting: Conference of
Research Workers in Animal Diseases/
American Association of Veterinary
Immunologists
Chicago, Illinois
www.cvmbs.colostate.edu/mip/crwad

December 15–19, 2012

2012 American Society for Cell Biology
Annual Meeting
San Francisco, California
Regular Abstract Submission Deadline for
Minisymposium talk: July 30, 2012
www.ascb.org

2013

January 13–18, 2013

Immunology of Fungal Infections
Gordon Research Conference
Galveston, Texas
www.grc.org/programs.aspx?year=2013&program=fungal

January 20–25, 2013

The 2nd NIF (Network of Immunology Frontiers) Winter School on Advanced Immunology
Singapore Country Club, Singapore
<http://ifrec-sign-winterschool.org>

January 26–29, 2013

52nd Midwinter Conference of Immunologists
Pacific Grove, California
www.midwconimmunol.org

February 13–17, 2013

52013 BMT Tandem Meeting
Salt Lake City, Utah
www.cibmtr.org/Meetings/Tandem/index.html

April 5–8, 2013

Canadian Society for Immunology
26th Annual Spring Meeting
TELUS Whistler Conference Centre
Whistler, British Columbia, Canada
www.csi-sci.ca

April 20–24, 2013

Experimental Biology (EB) (APS, ASBMB, ASPET, ASIP, ASN, AAA)
Boston, Massachusetts
Contact: eb@faseb.org

May 3–7, 2013

IMMUNOLOGY 2013™, AAI Annual Meeting and AAI Centennial Celebration
Honolulu, Hawaii
www.immunology2013.org

May 18–21, 2013

2013 American Transplant Congress (AST)
Seattle, Washington
www.atcmeeting.org

May 19–23, 2013

CYTO 2013 (International Society for Advancement of Cytometry)
San Diego, California
Contact: rjaseb@faseb.org

July 7–10, 2013

14th International TNF Conference
Loews Le Concorde
Quebec City, Quebec, Canada
www.tnf2013.com

July 20–24, 2013

The American Society for Virology
32nd Annual Scientific Meeting
Pennsylvania State University
State College, Pennsylvania
www.asv.org

August 22–27, 2013

15th International Congress of Immunology
Milan, Italy
www.ici2013.org

October 4–8, 2013

ASBMR 35th Annual Meeting
Baltimore, Maryland
www.asbmr.org

October 10–13, 2013

13th International Workshop on Langerhans Cells
Royal Tropical Institute
Amsterdam, The Netherlands
www.lc2013.nl

2014

February 19–23, 2014

2014 BMT Tandem Meeting
Orlando, Florida
www.cibmtr.org/Meetings/Tandem/index.html

April 26–30, 2014

Experimental Biology (EB) (APS, ASPET, ASIP, ASN, AAA, ASBMB)
San Diego, California
Contact: eb@faseb.org

May 2–6, 2014

IMMUNOLOGY 2014™, AAI Annual Meeting
Pittsburgh, Pennsylvania
http://aai.org/Meetings/Future_Meeting.html

May 17–21, 2014

CYTO 2014 (International Society for Advancement of Cytometry)
Ft. Lauderdale, Florida
Contact: rjaseb@faseb.org

June 21–25, 2014

The American Society for Virology
33rd Annual Scientific Meeting
Colorado State University
Fort Collins, Colorado
www.asv.org

September 12–16, 2014

ASBMR 36th Annual Meeting
Houston, Texas
www.asbmr.org

2015

February 11–15, 2015

2015 BMT Tandem Meeting
San Diego, CA
www.cibmtr.org/Meetings/Tandem/index.html

March 28 – April 1, 2015

Experimental Biology (EB) (APS, ASPET, ASIP, ASN, AAA, ASBMB)
Boston, Massachusetts
Contact: eb@faseb.org

May 8–12, 2015

IMMUNOLOGY 2015™, AAI Annual Meeting
New Orleans, Louisiana
http://aai.org/Meetings/Future_Meeting.html

July 11–15, 2015

The American Society for Virology
34rd Annual Scientific Meeting
The University of Western Ontario
London, Ontario, Canada
www.asv.org

October 9–13, 2015

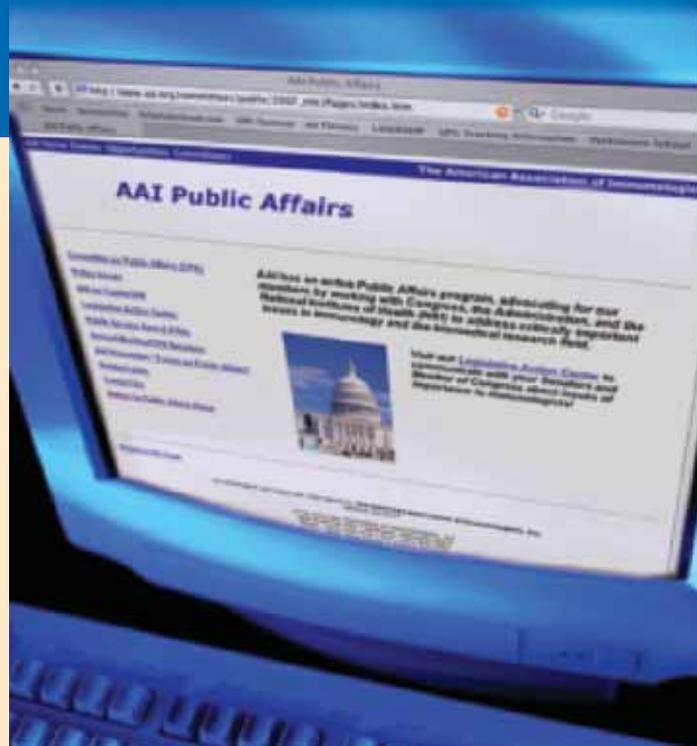
ASBMR 37th Annual Meeting
Seattle, Washington
www.asbmr.org

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Public Affairs.



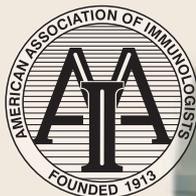
GRIP

Grant Review for Immunologists Program

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

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

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



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

IMMUNOLOGY 2013™

THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

Celebrating *100 Years*



Save the Date!



AAI Annual Meeting
May 3–7, 2013 | Honolulu, Hawaii
www.IMMUNOLOGY2013.org

Future AAI Annual Meetings

Mark Your Calendar for the Premier Annual Immunology Event!

2013



Hawaii Tourism Authority (HTA)/Tor Johnson

IMMUNOLOGY 2013™
May 3–7
Honolulu, Hawaii
AAI Centennial Meeting

2014



IMMUNOLOGY 2014™
May 2–6
Pittsburgh, Pennsylvania

2015



IMMUNOLOGY 2015™
May 8–12
New Orleans, Louisiana