



THE AMERICAN  
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IMMUNOLOGISTS

# AAI NEWSLETTER

MARCH 2024



# IMMUNOLOGY2024™

## PROGRAM PREVIEW

[IMMUNOLOGY2024.AAI.ORG](https://immunology2024.aai.org)

**FRIDAY, MAY 3 – TUESDAY, MAY 7, 2024**

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## AAI President's Invitation to IMMUNOLOGY2024™



**Dear Colleagues,**

It is with great pleasure that we extend an invitation to attend the 107<sup>th</sup> annual meeting of The American Association of Immunologists in Chicago, IL, May 3–7, 2024! In addition to top-notch scientific content and networking

opportunities, your presence is vital to our collective efforts in advancing the field of immunology. I'm pleased to share that, for the second year and in support of our commitment to equal access, AAI will offer free childcare services at IMMUNOLOGY2024™, allowing parents to fully participate.\* Read on to learn more about what you will find in Chicago!

Immunology stands at a crucial juncture in its evolution, and IMMUNOLOGY2024™ will showcase some of the most recent and remarkable advancements in the field. Major Symposia will delve into the latest research and technological innovations, focusing on multi-omic systems immunology; novel cancer immunotherapies; therapeutic strategies for chronic inflammatory and fibrotic diseases; the immunology of pregnancy; thymic selection, tolerance, and regeneration; immune responses to chronic infection; sub-cellular signaling; and B cell responses. In addition, more than 1,400 abstracts will be presented in block symposia and poster presentations across 23 categories spanning all areas of immunology. And new this year—16 trainee abstracts will be selected for presentation as part of Major Symposia, providing an opportunity to showcase the most exciting, groundbreaking science being done by the rising stars in the field.

The networking and career sessions offered at the AAI annual meeting are always unmatched, and this year is no exception. You can choose from multiple career-oriented sessions, including topics like turning a CV into a resume, careers beyond academia, and how NIH funding works. You can network at sessions, in the hallways, and in the exhibit hall, but perhaps no venue is better for networking than the social events that occur throughout the meeting. I personally always enjoy the welcome reception on the opening night as an opportunity to reconnect with colleagues and plan my week. For a full list of networking, career, and social events, go to [immunology2024.aai.org](https://immunology2024.aai.org) and [immunology2024.aai.org/register](https://immunology2024.aai.org/register).

The AAI annual meeting is an anchor for the community—providing a place for us to come together, connect, share new knowledge, establish and nurture collaborations, and more. IMMUNOLOGY2024™ represents even more than that; it is an opportunity for you to more deeply engage in a thriving, forward-looking organization as we cement our shared commitment to improving health and lives through immunology.

Immunology has emerged as a major player in addressing critical health issues. From infectious diseases to cancer and

autoimmune disorders to vaccination strategies, the impact of immunological research is felt worldwide. The field has seen groundbreaking progress in both basic understanding and translational research, including the success of cancer immunotherapy and the development of new vaccines. The May 2023 declaration by the World Health Organization heralding the end of the COVID-19 pandemic was a major milestone—one that would not have been possible without the collective efforts of our field. Yet our vigilance remains crucial, as COVID-19 and other viral infections still cause a rising number of hospitalizations and deaths. Challenges beyond the acute disease persist, with millions grappling with the effects of long COVID. This is a particular area of interest for me, and I will share some of what I have learned in my President's Address. But even beyond these more traditional areas, the immune system is now known to play a role in almost all modern diseases, including heart disease, metabolic diseases, chronic diseases, and neurodegenerative diseases. Now, more than ever, immunology can be an integrative force in marshalling a common approach and understanding of health and disease.

Against this backdrop, AAI has established a bold new strategic plan to guide our efforts in nurturing the immunology community, advancing and positioning the science of immunology, and raising public awareness of the field and its relevance. As part of our public outreach, in November 2023, AAI launched a public awareness campaign, Immunology Explained, to break down important immunological issues and relate them to topics of health and wellness. We have been overwhelmed and gratified by the robust response from AAI members who want to contribute to this work, and you will have the opportunity to learn more and get involved at the annual meeting. IMMUNOLOGY2024™ will also feature the session "Giving an Effective Media Interview," designed to teach immunologists how to confidently communicate with the press. We are also engaged in a branding refresh for the organization, rethinking the way we portray AAI and its value to the various audiences we need to reach with our important messages. You will hear more about these initiatives from AAI's CEO Loretta Doan in her opening remarks at IMMUNOLOGY2024™ and from me in my President's Address.

Thank you for being part of this extraordinary community and contributing your knowledge, expertise, and energy to our common purpose. We look forward to seeing you at an inspiring and productive IMMUNOLOGY2024™!

Best regards,

**Akiko Iwasaki, Ph.D.**  
AAI President

\*Limited availability; reservations required; no-show/cancellation fees apply.

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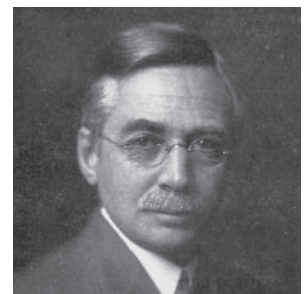
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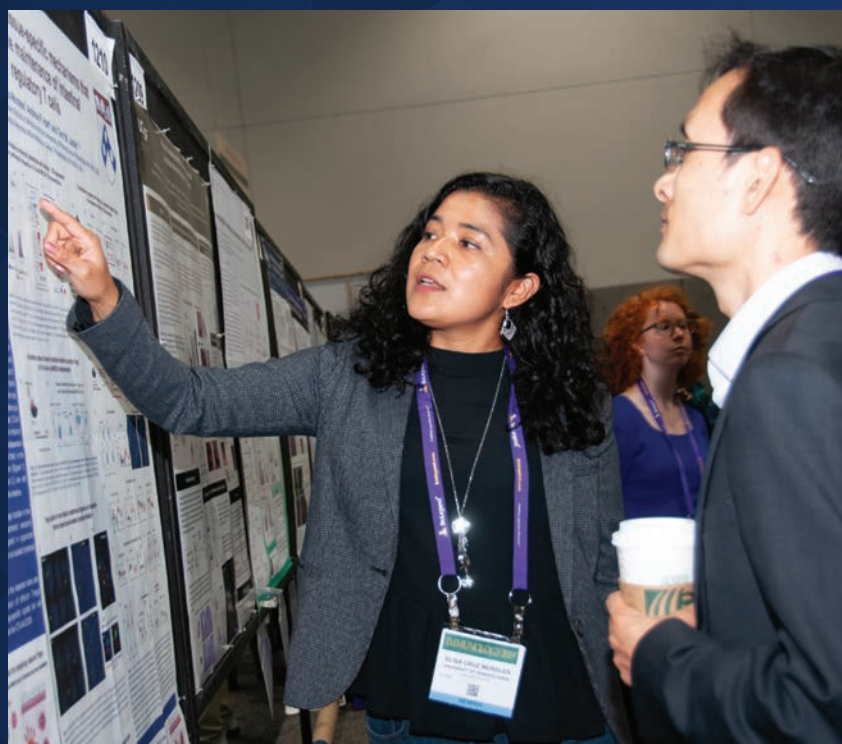
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- ◆ **Inform the public:** AAI's new website, [immunologyexplained.aai.org](http://immunologyexplained.aai.org), contains general information about immunology and its crucial link to all aspects of health. To learn how you can get involved, visit [www.aai.org/Champion](http://www.aai.org/Champion).



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## PROGRAM PREVIEW

All listings in the meeting program are subject to change. Visit [IMMUNOLOGY2024.aai.org](https://immunology2024.aai.org) for updates.

### AAI PRESIDENT'S PROGRAM

#### President's Address

**FRIDAY, MAY 3, 5:00 PM**

SKYLINE BALLROOM W375AB

#### *Learning Immunology from Viral Infections*

Presentation of AAI Lifetime Achievement Award and Acknowledgment of Distinguished Fellows of AAI Class of 2024

**Akiko Iwasaki**, HHMI, Yale Sch. of Med., USA, AAI President



**Akiko Iwasaki**

#### Introduction

**Ronald N. Germain**, NIAID, NIH, USA

#### President's Symposium

**MONDAY, MAY 6, 3:30 PM**

SKYLINE BALLROOM W375AB

#### *The Immune System in Tissue Homeostasis and Disease*

Presentation of AAI Excellence in Mentoring Award

#### Chair

**Akiko Iwasaki**, HHMI, Yale Sch. of Med., USA, AAI President



**Ronald N. Germain**

#### Speakers



**Yasmine Belkaid**

Institut Pasteur (Pasteur Inst., Paris), FRA

**Microbiome control of host immunity**



**Susan M. Kaech**

Salk Inst. for Bio. Sts., USA

**Fueling T cell fate decisions during infection**



**Marc K. Jenkins**

Univ. of Minnesota, USA

**How antigen-specific CD4<sup>+</sup> memory T cells form during infections**



**Diane J. Mathis**

Harvard Med. Sch., USA

**Treg control of tissue homeostasis**

## 2024 President's Symposium Preview

### *The Immune System in Tissue Homeostasis and Disease*



**Akiko Iwasaki**

As AAI President, one of my most interesting responsibilities has been to plan this year's President's Symposium. I very much wanted to delve into the dynamic and evolving landscape of immunology, where traditional boundaries become blurred and

new frontiers are being explored. I have invited four esteemed speakers to showcase groundbreaking advancements that address both fundamental aspects of basic immunology and the intriguing roles of the non-canonical immune system in host physiology.

From the symbiotic dance of the microbiome and virome that shape immune responses to integrated insights into the formation of immune memory, we will attempt to unravel the mysteries at the intersection of immunology and other biological disciplines. The symposium, and its speakers **Yasmine Belkaid**, Ph.D., (AAI '13), **Susan M. Kaech**, Ph.D. (AAI '04), **Marc K. Jenkins**, Ph.D., DFAAI, (AAI '88), and **Diane J. Mathis**, Ph.D. (AAI '99), will showcase:

◆ **Leadership in immunological exploration.**

Symposium speakers have led the way in exploring fundamental aspects of basic immunology and the newly discovered features of the immune system's roles in host defense and physiology.

◆ **Interdisciplinary intersections.**

The speakers will highlight the intersections of immunology with diverse fields of biology, including neuroscience and metabolism, which marks a departure from conventional silos and fosters a collaborative exploration of uncharted territories, such as:

◆ **Microbiome and virome dynamics.**

The coordinated and mutually beneficial interactions between the microbiome and virome shape intricate immune responses and maintain immunological balance in various tissues.

◆ **Formation of immune memory.**

An integrated exploration of the mechanisms underlying the formation of immune memory has shed light on the enduring nature of immune responses and their implications in defense against pathogens.

◆ **Neuro-immunological crossroads.**

The intersection between neuroscience and immunology has uncovered the complex communication pathways between immune cells and the nervous system, offering a new perspective on their interdependence.

◆ **Non-canonical functions of the immune system.**

Newly discovered roles of the immune system in supporting host physiology have unveiled novel functions that extend beyond conventional antimicrobial defense paradigms.

◆ **Metabolic insights in antitumor activities.**

Groundbreaking research has revealed the importance of the metabolic state of immune cells in antitumor activities, which offers new and distinct perspectives on harnessing the immune system in the fight against cancer.

### About the Symposium Speakers

**Yasmine Belkaid**, Ph.D. (AAI '13), began a six-year term as president of the Institut Pasteur in January 2024, becoming only the second female scientist to hold this post. She previously served as the director of the National Institutes of Health (NIH) Center for Human Immunology, and founder and director of the National Institute of Allergy and Infectious Diseases (NIAID) Microbiome Program at NIH (Bethesda, Maryland, United States). Within NIAID, she also developed the Department of Host Immunity and Microbiome.



Dr. Belkaid studies how commensal microbiota and pathogens interact with host barriers to result in inflammation or tolerance. The highly specialized environments of the skin and gut are in constant contact with both commensal bacteria and potential pathogenic threats, and aberrant over- or underactivation of the immune response at these sites could be life-threatening. Her laboratory studies this delicate dichotomy: immune tolerance of innocuous microbiota and robust and rapid response to pathogenic challenges.

Belkaid has received numerous awards, including several NIAID MERIT Awards, the Lurie Prize in Biomedical Sciences, and the AAI-Thermo Fisher Meritorious Career Award. She is an elected member of the American Academy of Arts and Sciences, the National Academy of Medicine, the Henry Kunkel Society, and the National Academy of Sciences. She is also an elected associate member of the European Molecular Biology Organization (EMBO), and fellow of the American Association for the Advancement of Science (AAAS).

**Susan M. Kaech**, Ph.D. (AAI '04), is a professor and the director of the NOMIS Center for Immunobiology and Microbial Pathogenesis at The Salk Institute for Biological Studies in La Jolla, CA, and holder of the NOMIS Chair.

Dr. Kaech has profoundly shaped our understanding of memory T cell development and its relevance in cancer immunology. Her research interests have long been centered on understanding immunological memory and the formation of long-lived memory T cells following viral infection and vaccination. She was the first to identify a small subset of IL-7R<sup>+</sup> “memory precursor cells” within effector CD8<sup>+</sup> T cell populations that seed the memory T cell pool, which broke open the discovery of many genetic and biochemical pathways that govern the differentiation of effector, memory, and exhausted T cells during immune responses. In particular, her lab paved the way for understanding the transcriptional regulation of effector and memory CD8<sup>+</sup> T cell development and how inflammation affects this

process during viral infection and in cancer. Kaech also helped establish the field of cancer immunometabolism by discovering metabolic relationships between immune and tumor cells and identifying several factors that regulate T cell metabolism and function in tumors, including diet. More recently, her lab uncovered a novel mechanism for regulating CD8<sup>+</sup> T cells in cancer and chronic viral infection via sympathetic nerve stress responses.

Kaech serves as a member of the AAI Council. She has received numerous awards and honors for her scientific career, including election to the American Academy of Arts and Sciences (AAAS), American Association for the Advancement of Science (AAAS), an HHMI Early Career Awardee, the U.S. Presidential Early Career Award for Scientists and Engineers, the Edward Mallinckrodt Jr. Foundation Award, and the Burroughs Wellcome Career Award in Biomedical Sciences.

**Marc K. Jenkins**, Ph.D., DFAAI, (AAI '88), is the Regents Professor and Distinguished McKnight University Professor in the Department of Microbiology and Immunology at the University of Minnesota. He is also the director of the University of Minnesota Center for Immunology.

Dr. Jenkins's research provided experimental evidence for T cell anergy and the two-signal model of T cell activation. His lab found that CD4<sup>+</sup> T cells required a second costimulatory signal from antigen presenting cells in addition to T cell receptor engagement to proliferate and avoid becoming unresponsive. This finding challenged the dogma that CD4<sup>+</sup> T cells only required T cell antigen receptor engagement for activation. In 1991 Jenkins and colleagues uncovered a second signal to antigen-specific human CD4<sup>+</sup> T cells was CD28 mediated. Further research elucidated the effects of CD28 blockade, an intervention that ultimately became an approved therapy for rheumatoid arthritis and graft rejection in humans. Jenkins has also made important discoveries about the anatomy of the CD4<sup>+</sup> T cell response, cell-mediated immunity, and B cell-T cell collaboration.

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Among his many honors, Jenkins received the AAI-Huang Foundation Meritorious Career Award, is an elected member of the National Academy of Sciences, and was elected as a Distinguished Fellow of AAI in 2019. Jenkins has also been recognized as an outstanding mentor; he has received the AAI Excellence in Mentoring Award and the Carol J. Bland Outstanding Faculty Mentor Award from the University of Minnesota Medical School.

An AAI member since 1988, Jenkins served on the AAI Council from 2008 to 2015 and was AAI President, 2013–2014.

**Diane J. Mathis**, Ph.D. (AAI '99), is a professor of Microbiology and Immunobiology at Harvard Medical School and holds the Morton Grove-Rasmussen chair of Immunohematology.

Dr. Mathis' research centers on T cell differentiation, immunological tolerance, and autoimmunity, translating findings from murine mechanistic studies to humans. Her lab studies the maturation and selection of the T cell repertoire in the thymus, and subsequent cellular and molecular influences on the type of T cell response in the periphery. Autoimmunity studies have explored the immunological mechanisms of type 1 diabetes, rheumatoid arthritis, and APECED, addressing the breakdown of both central and peripheral mechanisms of T cell tolerance. Current research foci include the Aire transcriptional regulatory molecule, thymic mimetic cells, neonatal tolerance, Foxp3-expressing regulatory T cells, tissue Tregs, organismal immunometabolism, and tissue repair.

Mathis is an elected member of the National Academy of Sciences, the German Academy, Leopoldina, and the American Academy of Arts and Sciences (AAAS).



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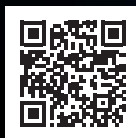
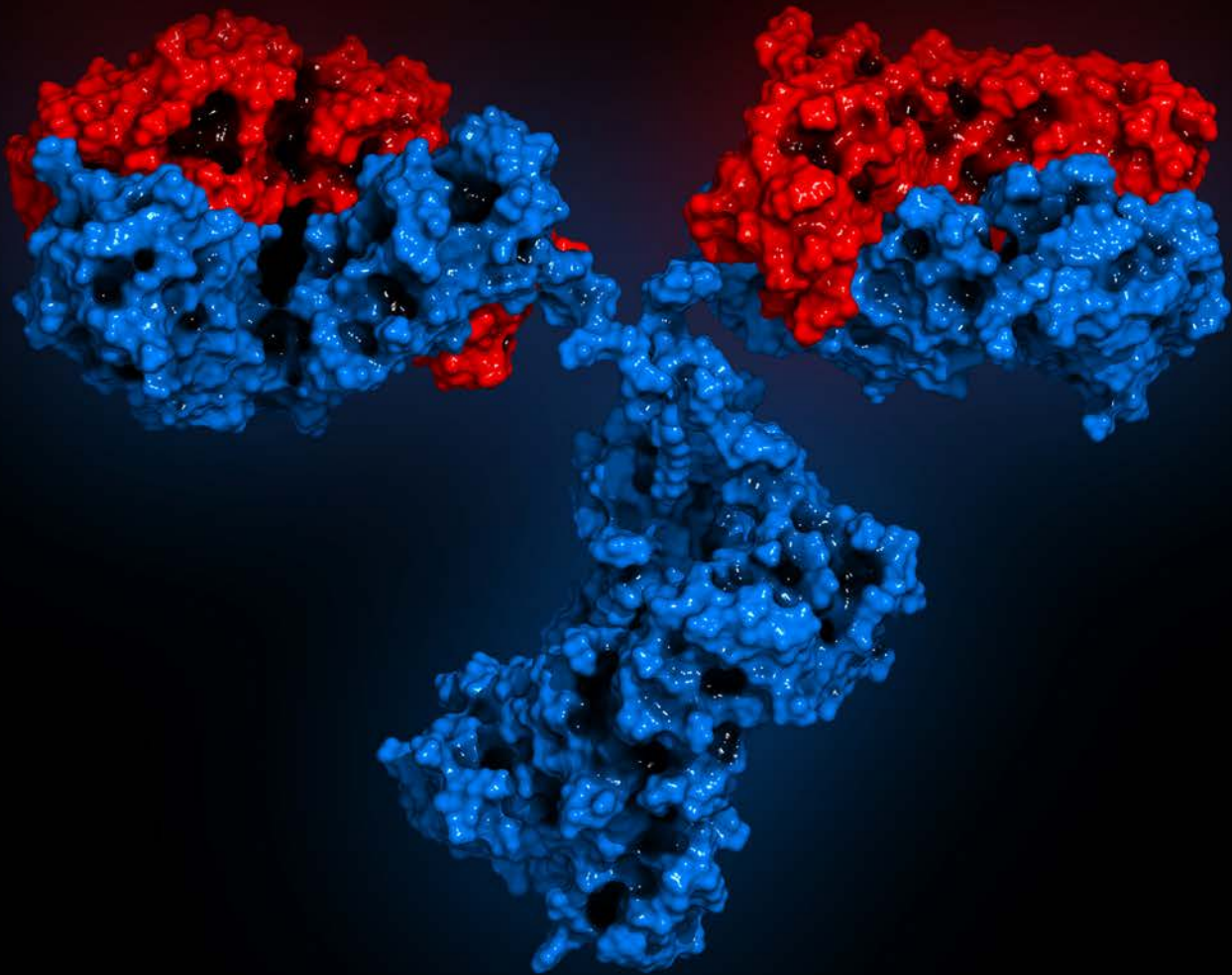
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## DISTINGUISHED FELLOWS OF AAI CLASS OF 2024

The American Association of Immunologists (AAI) proudly announces the **2024 class of Distinguished Fellows of AAI (DFAAI)**.

This program recognizes members for distinguished careers and outstanding scientific contributions, as well as service to AAI and the immunology community. It honors active, long-term members (25 or more years) who have demonstrated one or more of the following: excellence in research accomplishment in the field of immunology; exceptional leadership to the immunology community in academia, foundations, nonprofits, industry, or government, at a national or international level; and/or notable distinction as an educator. Election as a Distinguished Fellow occurs annually and is among the highest honors bestowed by AAI. Distinguished Fellows bear the designation "DFAAI." Including the class of 2024, 150 individuals have been recognized by this distinction.

### DFAAI 2024 honorees are:



**John P. Atkinson, M.D.,  
DFAAI (AAI '75)**

*Samuel B. Grant Professor of  
Medicine, Professor of Molecular  
Microbiology*

*Division of Rheumatology*

*Washington University School of Medicine, St. Louis*

[profiles.wustl.edu/en/persons/john-atkinson](https://profiles.wustl.edu/en/persons/john-atkinson)



**Bonnie B. Blomberg,  
Ph.D., DFAAI (AAI '82)**

*Professor*

*Department of Microbiology and  
Immunology*

*University of Miami Miller School of Medicine*

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**Prosper N. Boyaka,  
Ph.D., DFAAI (AAI '98)**

*Professor and Chair*

*Stanton Youngberg Professor*

*Department of Veterinary  
Biosciences*

*Ohio State University*

[vet.osu.edu/ProsperBoyaka](https://vet.osu.edu/ProsperBoyaka)



**Vivian Lam Braciale,  
Ph.D., DFAAI (AAI '82)**

*AAI Emeritus Member*

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**Michael B. Brenner,  
M.D., DFAAI (AAI '88)**

*Elizabeth Fay Brigham  
Professor of Medicine,  
Harvard Medical School*

*Director, Cell and Molecular Immunology, Division  
of Rheumatology, Inflammation, and Immunity*

*Director, Human Immunology Center and Single  
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**Randy R. Brutkiewicz,  
Ph.D., DFAAI (AAI '89)**

*Professor*

*Department of Microbiology  
and Immunology*

*Indiana University School of Medicine*

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*W. Harry Feinstone Department of Molecular  
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*Johns Hopkins Bloomberg School of Public Health,  
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## Hilde Cheroutre, Ph.D., DFAAI (AAI '98)

*Professor  
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## Chen Dong, Ph.D., DFAAI (AAI '97)

*Chair Professor and Vice  
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*Founding Dean and Director, Westlake University  
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## Michael A. Edidin, Ph.D., DFAAI (AAI '77)

*Professor Emeritus  
Department of Biology  
Johns Hopkins University*

[bio.jhu.edu/directory/michael-edidin](http://bio.jhu.edu/directory/michael-edidin)



## Patricia J. Gearhart, Ph.D., DFAAI (AAI '77)

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## David A. Hafler, M.D., DFAAI (AAI '84)

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*Chairman, Department of Neurology  
Yale School of Medicine*

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## John T. Harty, Ph.D., DFAAI (AAI '95)

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*Department of Pathology  
University of Iowa Carver College of Medicine*

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## Barton F. Haynes, M.D., DFAAI (AAI '80)

*Frederic M. Hanes Professor of  
Medicine and Immunology  
Director, Duke Human Vaccine  
Institute*

*Department of Medicine  
Duke University School of Medicine*

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**Christopher L. Karp, M.D., DFAAI (AAI '95)**

*Director, Discovery & Translational Sciences  
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**Gary A. Koretzky\*, M.D., Ph.D., DFAAI (AAI '92)**

*Director, Cornell Center for Immunology, Cornell University  
Professor of Medicine, Weill Cornell Medicine*

*Professor of Microbiology and Immunology, Cornell University College of Veterinary Medicine*

[vivo.weill.cornell.edu/display/cwid-gak2008](https://vivo.weill.cornell.edu/display/cwid-gak2008)



**Frances E. Lund, Ph.D., DFAAI (AAI '98)**

*Professor, Department of Microbiology  
Director, Heersink School of Medicine Immunology Institute*

*University of Alabama, Birmingham*

[scholars.uab.edu/2060-frances-lund](https://scholars.uab.edu/2060-frances-lund)



**Ellen R. Richie, Ph.D., DFAAI (AAI '74)**

*Professor  
Department of Epigenetics and Molecular Carcinogenesis*

*University of Texas MD Anderson Cancer Center*

[faculty.mdanderson.org/profiles/ellen\\_richie.html](https://faculty.mdanderson.org/profiles/ellen_richie.html)



**Mark J. Shlomchik, M.D., Ph.D., DFAAI (AAI '96)**

*UPMC Endowed and Distinguished Professor  
Department of Immunology*

*University of Pittsburgh School of Medicine*

[immunology.pitt.edu/person/mark-jay-shlomchik-md-phd](https://immunology.pitt.edu/person/mark-jay-shlomchik-md-phd)



**Joanne L. Viney, Ph.D., DFAAI (AAI '97)**

*Cofounder, President and Chief Executive Officer  
Seismic Therapeutic*

[seismictx.com/about/#team-1](https://seismictx.com/about/#team-1)



**Steven F. Ziegler, Ph.D., DFAAI (AAI '95)**

*Director of External Collaboration  
Member, Center for Fundamental Immunology*

*Benaroya Research Institute*

[benaroyaresearch.org/about-bri/faculty-scientific-staff/steven-ziegler](https://benaroyaresearch.org/about-bri/faculty-scientific-staff/steven-ziegler)



**Albert Zlotnik, Ph.D., DFAAI (AAI '85)**

*Professor Emeritus  
Department of Physiology and Biophysics*

*University of California, Irvine, School of Medicine*

[profiles.icts.uci.edu/albert.zlotnik](https://profiles.icts.uci.edu/albert.zlotnik)

\*AAI Past President

# Cytokines 2024

## KAI 2024

12<sup>th</sup> Annual Meeting of the International Cytokine & Interferon Society  
Joint with Korean Association of Immunologists International Meeting 2024

October 20 - 23, 2024 | COEX, Seoul, Korea

### Important Dates

<https://cytokines2024.org>



- ◆ Abstract Submission / Travel Award Application **by May 20, 2024**
- ◆ Early Registration **by Jul 31, 2024**
- ◆ Regular Registration **Aug 1 - Oct 7, 2024**

**ICIS**

International Cytokine &  
Interferon Society



Hosted by

**KAI 대한면역학회**  
KOREAN ASSOCIATION OF IMMUNOLOGISTS



## CAREER AWARDS

Each year, AAI recognizes its members' extraordinary professional achievements and career promise.

The following are the recipients of the 2024 Career Awards being presented at **IMMUNOLOGY2024™**.

### AAI Lifetime Achievement Award Presentation

**FRIDAY, MAY 3, 5:00 PM**

SKYLINE BALLROOM W375AB

This award recognizes a member for a remarkable career of scientific achievement and contributions to AAI and the field of immunology.

#### Chair

**Akiko Iwasaki**, HHMI, Yale Sch. of Med., USA,  
AAI President

Dr. Iwasaki will introduce the awardee and present the award immediately before the President's Address.



Presented to

**Gary A. Koretzky,**  
M.D., Ph.D., DFAAI  
(AAI '92)

Weill Cornell Med.,  
Cornell Univ., USA

Dr. Koretzky is honored in recognition of a career of extraordinary achievement in T cell signaling research and for contributions to AAI and fellow immunologists.

### AAI ASPIRE Awards Lectures

These awards recognize early career research accomplishments and professional promise in the field of immunology. The award lectures will precede a session of brief abstract presentations on related topics. Six awardees will be recognized throughout the meeting program, with two lectures featured each full day. The ASPIRE Awardees will be recognized and presented with their awards at the AAI Business Meeting, Sunday, May 5, 10:00 AM–11:30 AM.

**SATURDAY, MAY 4, 12:45 PM**

ROOM W178



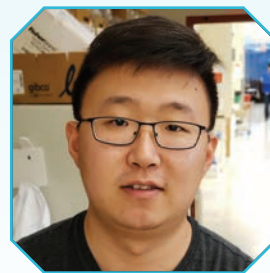
**Siyuan Ding, Ph.D.**  
(AAI '19)

Washington Univ.,  
St. Louis, USA

*SAMD9 is a novel pattern recognition receptor that recognizes cytosolic double-stranded DNA and RNA*

**SATURDAY, MAY 4, 12:45 PM**

ROOM W179



**Chaoran Li, Ph.D.**  
(AAI '19)

Emory Univ., USA

*Regulation of tissue Tregs at homeostasis and during obesity*

### AAI-BD Biosciences Investigator Award Presentation and Lecture

*Generously supported by BD Biosciences*

**SATURDAY, MAY 4, 1:15 PM**

SKYLINE BALLROOM W375D

This award recognizes an individual for noteworthy early career achievement in immunology research.



Presented to

**Gabriel D. Victora,**  
Ph.D. (AAI '15)

Rockefeller Univ., USA

*Clonal and cellular dynamics of the antibody response*

Dr. Victora is honored in recognition of outstanding research contributions in germinwal center biology and humoral immunity.

## AAI-BioLegend Herzenberg Award Presentation and Lecture

*Generously supported by BioLegend*

**SATURDAY, MAY 4, 2:15 PM**

SKYLINE BALLROOM W375C

This award recognizes an individual for outstanding contributions to the field of immunology in B cell biology.



Presented to

**John C. Cambier,  
Ph.D., DFAAI  
(AAI '78)**

*Univ. of Colorado Sch.  
of Med., USA*

*From conception to clinical  
target: the CD79 story*

Dr. Cambier is honored in recognition of exemplary research contributions that have been integral to understanding B cell receptor signaling and its modulation.

## AAI Lancefield Mid-Career Achievement Award Presentation and Lecture

*Sponsored by the AAI Committee on the Status of Women*

**SATURDAY, MAY 4, 4:30 PM**

SKYLINE BALLROOM W375C

This award recognizes a mid-career woman investigator for outstanding research and leadership.

**Chair**

**Julie M. Jameson**, *California State Univ., San Marcos, USA, AAI Committee on the Status of Women Chair*



Presented to

**Stephanie  
Eisenbarth, M.D.,  
Ph.D. (AAI '17)**

*Northwestern Univ.  
Feinberg Sch. of  
Med., USA*

*How the gut mucosa regulates the immune  
response to food allergens*

Dr. Eisenbarth is honored in recognition of her outstanding research on how innate immune activation regulates adaptive immunity and her exemplary commitment to teaching and service.

## AAI Distinguished Service Award Presentation

**SUNDAY, MAY 5, 10:00 AM**

ROOM W183AB

This award recognizes an AAI member for outstanding service to the AAI community and the field of immunology.

**Chair**

**Loretta L. Doan**, *AAI Chief Executive Officer*

AAI President Akiko Iwasaki will present the award during the AAI Business Meeting.



Presented to

**Eugene M. Oltz,  
Ph.D., DFAAI  
(AAI '95)**

*Ohio State Univ.  
Col. of Med., USA*

Dr. Oltz is recognized for outstanding service as editor-in-chief of *The Journal of Immunology*, 2018–2023.

## AAI ASPIRE Awards Presentations

**SUNDAY, MAY 5, 10:00 AM**

ROOM W183AB

These awards recognize early career research accomplishments and professional promise in the field of immunology.

## Chair

**Loretta L. Doan**, AAI Chief Executive Officer

AAI President Akiko Iwasaki will present these awards during the AAI Business Meeting.

## Presented to

### **Siyuan Ding, Ph.D. (AAI '19)**

Washington Univ., St. Louis, USA  
See award lecture on page 17.

### **Ruth A. Franklin, Ph.D. (AAI '20)**

Harvard Univ., USA  
See award lecture on page 19.

### **Weishan Huang, Ph.D. (AAI '17)**

Louisiana State Univ., USA  
See award lecture on on page 20.

### **Chaoran Li, Ph.D. (AAI '19)**

Emory Univ., USA  
See award lecture on on page 17.

### **David R. Martinez, Ph.D. (AAI '23)**

Yale Sch. of Med., USA  
See award lecture on on page 19.

### **Zhenyu Zhong, Ph.D. (AAI '19)**

Univ. of Texas Southwestern Med. Ctr., USA  
See award lecture on on page 20.

## SUNDAY, MAY 5, 12:45 PM

ROOM W178



### **David R. Martinez, Ph.D. (AAI '23)**

Yale Sch. of Med., USA  
*Immunologic approaches to emerging and re-emerging RNA viruses*

## SUNDAY, MAY 5, 12:45 PM

ROOM W179



### **Ruth A. Franklin, Ph.D. (AAI '20)**

Harvard Univ., USA

*Regulation of inflammatory responses by macrophages in the lung*

## AAI-Thermo Fisher Meritorious Career Award Presentation and Lecture

*Generously supported by Thermo Fisher Scientific*

## SUNDAY, MAY 5, 1:15 PM

SKYLINE BALLROOM W375D

This award recognizes a mid-career scientist for exceptional research contributions to the field of immunology.



## Presented to

### **Thirumala-Devi Kanneganti, Ph.D. (AAI '10)**

St. Jude Children's Res. Hosp., USA

*Molecular mechanisms of innate immunity and cell death in health and disease*

Dr. Kanneganti is honored in recognition of outstanding research contributions on inflammasome biology.

## AAI-Steinman Award for Human Immunology Research Presentation and Lecture

## SUNDAY, MAY 5, 2:15 PM

SKYLINE BALLROOM W375C

This award recognizes an individual for significant, sustained achievement in immunology research pertinent to human disease pathogenesis, prevention, or therapy.



**Presented to**  
**Jane H. Buckner,**  
**M.D. (AAI '09)**

*Benaroya Res. Inst., USA*

*Embracing complexity  
in human immunology:  
creating tools to dissect*

*the mechanisms underlying autoimmune diseases*

Dr. Buckner is honored in recognition of significant contributions to defining and characterizing the genetic basis of human autoimmunity.

**MONDAY, MAY 6, 12:45 PM**

ROOM W178



**Weishan Huang,**  
**Ph.D. (AAI '17)**

*LSU, USA*

*ITK signaling in CD8<sup>+</sup> T  
cell homeostasis*

**MONDAY, MAY 6, 12:45  
PM**

ROOM W179



**Zhenyu Zhong,**  
**Ph.D. (AAI '19)**

*Univ. of Texas Southwestern  
Med. Ctr., USA*

*Mitochondrial control of  
inflammation*

**AAI Vanguard Award Presentation  
and Lecture**

*Sponsored by the Minority Affairs Committee*

**MONDAY, MAY 6, 1:15 PM**

SKYLINE BALLROOM W375C

This award recognizes an underrepresented investigator's research achievement and exemplary career success.

**Chair**

**Luis J. Montaner,** *Wistar Inst., USA, AAI Minority Affairs Committee Chair*



**Presented to**  
**Tonya J. Webb,**  
**Ph.D. (AAI '10)**

*Univ. of Maryland Sch.  
of Med., USA*

*Modulating NKT cells for  
cancer immunotherapy*

Dr. Webb is honored in recognition of her significant contributions to the field of cancer immunotherapy and exemplary commitment to teaching and service.

**AAI Excellence in Mentoring  
Award Presentation**

**MONDAY, MAY 6, 3:30 PM**

SKYLINE BALLROOM W375AB

This award recognizes a member for exemplary career contributions to a future generation of scientists.

**Chair**

**Akiko Iwasaki,** *HHMI, Yale Sch. of Med., USA, AAI President*

Dr. Iwasaki, Dr. Gail A. Bishop, Univ. of Iowa, USA, and Dr. Jenny P.-Y. Ting, Univ. of North Carolina, Chapel Hill, USA, will introduce the awardee and present the award before the President's Symposium.



**Presented to**  
**Jeffrey A. Frelinger,**  
**Ph.D., DFAAI**  
**(AAI '76)**

*Univ. of Arizona, USA*

Dr. Frelinger is honored  
in recognition of

his dedication to the profession through the outstanding mentoring of more than 50 doctoral and postdoctoral trainees.



# IMMUNOLOGY2024™

FRIDAY, MAY 3 – TUESDAY, MAY 7, 2024 | CHICAGO, IL

## VISIT THE AAI JOBS BOARD

**A FREE RECRUITING SERVICE FOR IMMUNOLOGY2024™ REGISTRANTS AND EXHIBITORS.  
POST ONLINE AND MEET ON-SITE! [IMMUNOLOGY2024.AAI.ORG/JOBS-BOARD](https://immunology2024.aai.org/jobs-board)**

### For Job Seekers

**Whatever your career stage, use this career service to enhance your professional development.**

#### ◆ JOB POSTINGS

Review the online AAI Jobs Board to identify postings you wish to pursue. View new postings through April 19, 2024. Watch for additional on-site postings in the Exhibit Hall.

#### ◆ DIRECT ACCESS TO RECRUITERS

Job postings will include recruiters' email addresses so that you can contact them directly.

### For Employers

**Advertise your position on the virtual Jobs Board located on the IMMUNOLOGY2024™ website. Include a contact email to receive inquiries directly.**

#### ◆ ADVANCED POSTINGS

Postings are being accepted via a web submission form and will remain online until the end of the meeting. Employers must be registered participants or exhibitors of IMMUNOLOGY2024™ at the time of submission. **Advance postings must be submitted to AAI by April 19, 2024.**

#### ◆ ON-SITE POSTINGS

After **April 19, 2024**, employers may still advertise a job on the IMMUNOLOGY2024™ Jobs Board by visiting the AAI Office in the McCormick Place Convention Center between 9:00 AM and 5:00 PM. Ads submitted on-site will be posted on the Jobs Board in the Exhibit Hall.

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## DISTINGUISHED LECTURES



**SATURDAY, MAY 4, 6:00 PM – 6:45 PM**  
SKYLINE BALLROOM W375AB

**Christopher A. Hunter**

*Univ. of Pennsylvania Sch. of Vet. Med., USA*

***From parasites to mRNA vaccines:  
cytokine networks that dictate T cell tempo***



**SUNDAY, MAY 5, 6:00 PM – 6:45 PM**  
SKYLINE BALLROOM W375AB

**Marco Colonna**

*Washington Univ. Sch. of Med., St. Louis, USA*

***Innate receptors in neurodegeneration and cancer:  
TREM2 and beyond***



**MONDAY, MAY 6, 6:00 PM – 6:45 PM**  
SKYLINE BALLROOM W375AB

**Shannon J. Turley**

*Genentech, USA*

***Stromal regulation of immune homeostasis  
and inflammation***

For descriptions and details of all sessions, please visit [IMMUNOLOGY2024.aai.org](https://immunology2024.aai.org).

## MAJOR SYMPOSIA

SATURDAY, MAY 4, 8:00 AM – 11:30 AM

### MAJOR SYMPOSIUM A

***Incorporating Time and Space into Multi-omic Systems Immunology Analyses***

SKYLINE BALLROOM (W375C)

#### Chairs

**Ronald N. Germain**, NIAID, NIH, USA

**M. Virginia Pascual**, Weill Cornell Med., USA

#### Faculty Speakers

**Donna L. Farber**, Columbia Univ., USA

*Tissue and age determinants for human immune response*

**Ronald N. Germain**, NIAID, NIH, USA

*Probing immune system function in situ using multiplex 2D and 3D imaging and new analytical tools*

**Nir Hacohen**, Broad Inst., USA

*Organization of the immune response in tumors*

**M. Virginia Pascual**, Weill Cornell Med., USA

*Extra-follicular T and B cells in juvenile autoimmune disease*

**Karin Pelka**, Univ. of California, San Francisco; Gladstone Inst., USA

*Spatially organized immune hubs in colon cancer*

#### Trainee Speakers

**Zena Marie Del Mundo**, Univ. of California, Irvine, USA

*Unique populations of pituitary macrophages regulate reproductive hormone secretion*

**Sam M. Murray**, Univ. of Oxford, GBR

*Multi-omic immunophenotyping to identify predictors of mRNA vaccine responsiveness in immunocompromised individuals*

### MAJOR SYMPOSIUM B

***Recent Breakthroughs and Emerging Therapeutic Strategies for Chronic Inflammatory and Fibrotic Diseases***

SKYLINE BALLROOM (W375D)

#### Chairs

**Thomas A. Wynn**, Pfizer, USA

**Joanne L. Viney**, Seismic Therapeut., USA

#### Faculty Speakers

**Emma Guttman-Yassky**, Icahn Sch. of Med.,

Mount Sinai Med. Ctr., USA

*A translational approach to improve therapeutics in atopic dermatitis and beyond*

**Qizhi Tang**, Univ. of California, San Francisco, USA

*Engineering Next-Gen Tregs for type 1 diabetes*

**Joanne L. Viney**, Seismic Therapeut., USA

*The polypharmacology of Dual cell Bidirectional (DcB) agonist antibodies for treating autoimmunity*

**Shelia M. Violette**, Q32 Bio, USA

*Tissue targeted regulators of complement in disease: rationale and novel strategies*

**Thomas A. Wynn**, Pfizer, USA

*In pursuit of transformational efficacy for autoimmune, inflammatory, and fibrotic diseases with multi-functional therapeutics*

#### Trainee Speakers

**Diandra Ellis**, Tulane Univ., USA

*Chitinase 3-Like-1/BRP-39 regulates extracellular matrix remodeling during allergic fungal asthma*

**Tania Velez**, Univ. of Virginia, USA

*Expanded GATA3+ T regulatory cells fail to control germinal center responses during pulmonary fibrosis in humans and mice*



SUNDAY, MAY 5, 8:00 AM – 11:30 AM

## MAJOR SYMPOSIUM C

### *Unleashing Targets for Novel Cancer Immunotherapies: Beyond T Cell Checkpoints*

SKYLINE BALLROOM (W375C)

#### Chairs

**José R. Conejo-Garcia**, Duke Univ. Sch. of Med., USA

**Paulo C. Rodriguez**, Moffitt Cancer Ctr., USA

#### Faculty Speakers

**José R. Conejo-Garcia**, Duke Univ. Sch. of Med., USA  
*Harnessing coordinated humoral and cellular responses in human cancer*

**Tyler J. Curiel**, Dartmouth Col., USA  
*Cell-intrinsic PD-L1 signals as actionable cancer immunotherapy targets*

**Dmitry Gabrilovich**, AstraZeneca, USA  
*Myeloid cells in cancer: old challenges and new opportunities*

**Paulo C. Rodriguez**, Moffitt Cancer Ctr., USA  
*Strategies to restore protective immunity in cancer hosts by targeting Notch signaling*

**Catherine J. Wu**, Dana Farber Cancer Inst., USA  
*Updates on personal cancer vaccines*

#### Trainee Speakers

**Sana Mir**, Univ. of Rochester Med. Ctr., USA  
*Universally conserved signals for CAR T cell migration to solid tumors*

**Yating Zheng**, Univ. of Michigan Med. Sch., USA  
*An engineered viral protein rewires signaling pathways to overcome T cell suppression*

## MAJOR SYMPOSIUM D

### *Great Expectations: Immunology of Pregnancy*

SKYLINE BALLROOM (W375D)

#### Chairs

**Sing Sing Y. Way**, Cincinnati Children's Hosp. Med. Ctr., USA

**Adrian Erlebacher**, Univ. of California, San Francisco, USA

#### Faculty Speakers

**Galit Alter**, Ragon Inst.; Moderna, USA  
*Decoding the rules of maternal-fetal antibody transfer*

**Anita Chong**, Univ. of Chicago, USA  
*Allogeneic conflict in pregnancy and transplantation*

**Carolyn Coyne**, Duke Sch. of Med., USA  
*Antimicrobial signaling at the maternal-fetal interface*

**Adrian Erlebacher**, Univ. of California, San Francisco, USA  
*Glycan regulation of fetomaternal tolerance*

**Sing Sing Y. Way**, Cincinnati Children's Hosp. Med. Ctr., USA  
*Immunology learned from mothers and babies*

#### Trainee Speakers

**Brittney Knott**, Univ. of Alabama, Birmingham, USA  
*Critical role of NFAT in tissue residency transcriptional programming of human uterine natural killer cells*

**Dustyn B. Levenson**, Washington Univ. Sch. of Med., St. Louis, USA  
*Mapping the cellular landscape of the maternal-fetal interface in women with preterm birth and chronic chorioamnionitis*

MONDAY, MAY 6, 8:00 AM – 11:30 AM

## MAJOR SYMPOSIUM E

*New Insights into Thymic Selection, Tolerance, and Regeneration*

SKYLINE BALLROOM (W375C)

### Chairs

**Kristin A. Hogquist**, Univ. of Minnesota Med. Sch., USA

**Adrian C. Hayday**, King's Col. London Faculty of Life Sci. & Med., GBR

### Faculty Speakers

**Jakub Abramson**, Weizmann Inst. of Sci., ISR  
*HECKing the sexual dimorphism of the immune response*

**Lauren I. R. Ehrlich**, Univ. of Texas, Austin, USA  
*Homeostasis and activation of heterogeneous thymic dendritic cells are differentially regulated by distinct thymocyte subsets*

**James M. Gardner**, Univ. of California, San Francisco, USA  
*Extrathymic Aire-expressing cells in immune homeostasis*

**Adrian C. Hayday**, King's Col. London Faculty of Life Sci. & Med., GBR  
*BTNL-dependent  $\gamma\delta$ T cell selection: from murine foetal thymus to human genetics*

**Kristin A. Hogquist**, Univ. of Minnesota, USA  
*Sterile interferons activate thymic APC to promote both diversity and tolerance*

### Trainee Speakers

**Alexandra M. Hoyt-Miggelbrink**, Duke Univ., USA  
*Developing thymocytes cue in unique subsets of neurons to support optimal thymic architecture*

**Sarah A. Wedemeyer**, UT Health San Antonio, USA  
*A dynamic paracrine FGF21-mTORC1/mTORC2 signaling axis regulates thymus function across the lifespan*

## MAJOR SYMPOSIUM F

*Immune Responses to Chronic Viral, Bacterial, Fungal, and Parasitic Infections*

SKYLINE BALLROOM (W375D)

### Chairs

**Christina L. Stallings**, Washington Univ. Sch. of Med., St. Louis, USA

**Paul G. Thomas**, St. Jude Children's Res. Hosp., USA

### Faculty Speakers

**Tracey J. Lamb**, Univ. of Utah, USA  
*Defining the characteristics of pathogenic CD8<sup>+</sup> T cells in malaria*

**Christina L. Stallings**, Washington Univ. Sch. of Med., St. Louis, USA  
*Contributions of innate immune responses to tuberculosis disease outcomes*

**Boris Striepen**, Univ. of Pennsylvania Sch. of Vet. Med., USA  
*The intestinal intracellular parasite *Cryptosporidium**

**Paul G. Thomas**, St. Jude Children's Res. Hosp., USA  
*Specificity matters: T cell responses to respiratory viral infections*

**Jakob von Moltke**, Univ. of Washington, USA  
*Crosstalk between memory Th2 cells and epithelial tuft cells regulates protective immunity to intestinal helminth infection*

### Trainee Speakers

**Rimjhim Agarwal**, La Jolla Inst. for Immunology, USA  
*Chikungunya-virus-specific CD4<sup>+</sup> T cells are associated with chronic chikungunya viral arthritic disease in humans*

**Sophie Sipprell**, Univ. of North Carolina, Charlotte, USA

*Substance P augments the production of neutrophil recruiting chemokines by *Staphylococcus aureus* challenged osteoclasts*

**TUESDAY, MAY 7, 8:00 AM – 11:30 AM**

## MAJOR SYMPOSIUM G

***Sub-cellular Compartment Signaling in the Regulation of Immune Responses***

SKYLINE BALLROOM (W375C)

### Chairs

**Erika L. Pearce**, Johns Hopkins Univ. Sch. of Med., USA

**Will Bailis**, Children's Hosp. of Philadelphia, USA

### Faculty Speakers

**Will Bailis**, Children's Hosp. of Philadelphia, USA  
***Coordinating T cell metabolic adaptation during nutrient stress***

**Jonathan R. Brestoff**, Washington Univ. Sch. of Med., St. Louis, USA

***Mitochondria transfer to macrophages in metabolic diseases***

**Navdeep S. Chandel**, Northwestern Univ., USA  
***Mitochondria as signaling organelles control immunity***

**Marcia C. Haigis**, Harvard Med. Sch., USA  
***Metabolites in the tumor microenvironment***

**Michael Karin**, Univ. of California, San Diego, USA  
***Mitochondrial DNA oxidation and autoimmunity***

### Trainee Speakers

**Cody Elkins**, Emory Univ. Sch. of Med., USA  
***Obesity disrupts cholesterol homeostasis to specifically impair TCR-driven ST2hi VAT Treg accumulation and insulin sensitivity***

**Ronal M. Peralta**, Univ. of Pittsburgh, USA  
***Dysfunction of exhausted T cells is enforced by MCT11-mediated lactate metabolism***

## MAJOR SYMPOSIUM H

***Context Is Everything—Extrafollicular B Cell Responses: the Good and the Bad***

SKYLINE BALLROOM (W375D)

### Chairs

**Frances E. Lund**, Univ. of Alabama, Birmingham, USA

**Nicole Baumgarth**, Johns Hopkins Univ. Bloomberg Sch. of Pub. Hlth., USA

### Faculty Speakers

**Nicole Baumgarth**, Johns Hopkins Univ. Bloomberg Sch. of Pub. Hlth., USA

***Extrafollicular B cell responses—when “extra” means “outside” not “superfluous”***

**Evelien M. Bunnik**, UTHealth San Antonio, USA  
***Atypical B cells in the immune response to malaria***

**Frances E. Lund**, Univ. of Alabama at Birmingham, USA

***T-bet programming of antigen experienced extrafollicular AND germinal center derived B cells—Roles for Type II IFN signaling in both cell fates***

**Ignacio Sanz**, Emory Univ. Sch. of Med., USA  
***Extrafollicular responses in protective and pathogenic responses***

**Mark J. Shlomchik**, Univ. of Pittsburgh Sch. of Med., USA

***Control of extrafollicular vs. germinal center responses in immunity and autoimmunity***

### Trainee Speakers

**Lindsay E. Bass**, Vanderbilt Univ., USA  
***The complex role of somatic hypermutation in supporting insulin recognition by B lymphocytes in at-risk type 1 diabetes participants***

**Jeongsoo Lee**, Korean Advanced Inst. of Sci. and Engineering (KAIST), KOR  
***SARS-CoV-2-specific atypical memory B cells induced by mRNA vaccine exhibit robust effector functions***

*All session information is subject to change.*

For descriptions and details of all sessions, please visit [IMMUNOLOGY2024.aai.org](https://immunology2024.aai.org).

## POSTER SESSIONS AND BLOCK SYMPOSIA

Abstracts of unpublished, original research are slated for presentation at IMMUNOLOGY2024™ during poster sessions and block symposia (*podium presentations of poster data*). All abstracts are reviewed by experts in their respective areas and scheduled for presentation in Poster Sessions. Additionally, outstanding abstracts are selected and scheduled for podium presentation in Block Symposia.

Poster Session presentations represent perhaps the most dynamic aspect of the AAI annual meetings. Take part in face-to-face discussions with abstract authors and learn about their most recent unpublished research. Poster Sessions will be held daily (*unopposed by any other session*) in the Exhibit Hall. More than 1,800 authors will be present at IMMUNOLOGY2024™ to discuss their most recent work, network with colleagues, and find the latest developments in their field.

### Daily Unopposed Poster Session Hours

**SATURDAY, MAY 4 – MONDAY, MAY 6**

11:30 PM – 12:45 PM (*odd numbered posterboards*)

**SATURDAY, MAY 4 – SUNDAY, MAY 5**

3:15 PM – 4:30 PM (*even numbered posterboards*)

**MONDAY, MAY 6**

2:15 PM – 3:30 PM (*even numbered posterboards*)



## EXHIBIT HALL

Leading scientific companies and organizations will showcase their products and services. Attendees will be able to visit booths, engage with exhibitors, and attend workshops. Plan which exhibits you wish to visit and learn more by viewing the interactive Exhibit Hall [here](#).

### Exhibit Hall Hours

**SATURDAY, MAY 4** 9:00 AM – 4:30 PM

**SUNDAY, MAY 5** 9:00 AM – 4:30 PM

**MONDAY, MAY 6** 9:00 AM – 4:00 PM

## EXHIBIT HALL PASSPORT PROGRAM

Returning this year is the “AAI Passport to Prizes Raffle” for attendees visiting the Exhibit Hall. Three lucky winners will receive a \$250 gift card! Entries must be received by Monday, May 6, at 2:15 PM. The drawing will be held during the Poster Sessions on Monday, May 6, from 2:15 PM – 3:30 PM. You can find your Passport in your meeting bag, or you may pick one up at the AAI Booth 725.

## EXHIBITOR WORKSHOPS

Be sure to take advantage of the knowledge-building opportunities presented in Exhibitor Workshops. Located on the Exhibit Floor, these workshops explore companies' latest technologies, products, and services through presentations, demonstrations, and discussions.

*Workshops are planned and conducted by exhibitors; the listing of these workshops does not constitute endorsement of any products or services by AAI.*



IMMUNOLOGY2024™

# GALA

**MONDAY, MAY 6 | 7:00 PM – 10:00 PM**

HISTORIC NAVY PIER IN THE AON GRAND BALLROOM  
600 E. GRAND AVENUE, CHICAGO, ILLINOIS

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THE 107<sup>TH</sup> ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

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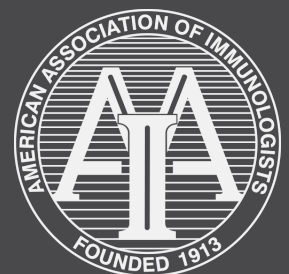
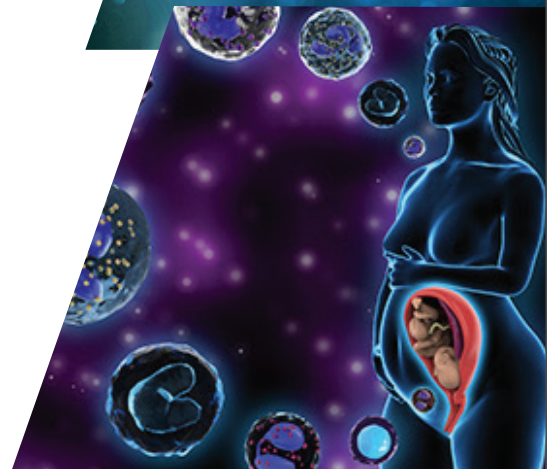
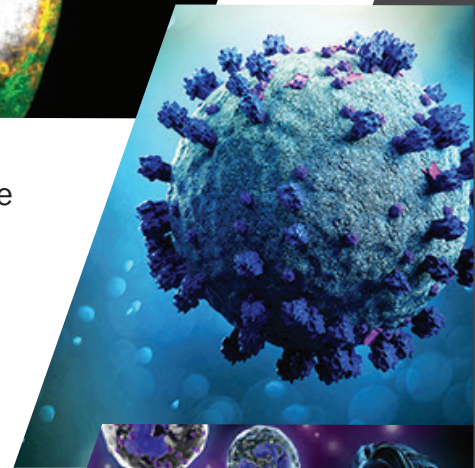
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## AAI Fall Council Meeting Features Strategic Planning Workshop, Conversation with New NIAID Director

The AAI Council convened over three days, November 16–18, 2023, for the group's annual fall meeting. The meeting focused on AAI strategic planning, evaluation of and action on AAI programs, activities, and budgets—including those of *The Journal of Immunology* (*The JI*) and *ImmunoHorizons*—and advancing AAI's ongoing public awareness initiatives. The Council was also able to meet, for the first time, with the new director of the National Institute of Allergy and Infectious Diseases (NIAID), Jeanne Marrazzo, M.D., M.P.H.

Council members along with guests, Committee on Public Affairs (CPA) Chair Gretchen Diehl, Ph.D. (AAI '14); *ImmunoHorizons* Editor-in-Chief Mark H. Kaplan, Ph.D. (AAI '98); and incoming editor-in-chief of *The JI* Gail A. Bishop, Ph.D., DFAAI (AAI '84) participated in the meeting.

The opening half of the Council meeting was dedicated to a strategic planning workshop that continued the work of Council and staff on developing AAI's first-ever strategic plan. Facilitated by a professional consultant, the workshop focused on the development of new AAI vision and mission statements reflecting strategic priorities identified by AAI members, leaders, and other immunology community stakeholders through an extensive summer survey and direct consultations with each of AAI's standing committees. Together with the new vision and mission statements, the workshop produced a strategic framework identifying specific goals and objectives associated with each of the strategic priority areas identified through the survey and consultations. This framework, to be unveiled at IMMUNOLOGY2024™, serves as the basis for the ongoing development and implementation of AAI's detailed strategic plan for guiding and evaluating the association's program and budget priorities and activities in 2024 and beyond.

Discussion during the balance of the Council meeting focused on AAI membership trends; association finances and investments; the AAI journals; AAI public affairs activities; the AAI annual meeting and summer courses; AAI awards; and AAI communications activities, including new and continuing initiatives to bolster public awareness of immunology's broad contributions to preventing and

treating disease and improving human health. Presentations included updates by Dr. Iwasaki on her recent and ongoing initiatives as AAI president; reports from Dr. Campbell (on AAI journals activities), Dr. Nagler (on the developing scientific program for IMMUNOLOGY2024™), Dr. Oltz (on *Ji* activities), Dr. Diehl (on public affairs activities), Dr. Kaplan (on *IH* activities), and Dr. Bishop (on priorities and planned initiatives of *The JI* under her journal editorship commencing in January).

The Council also appreciated having the opportunity to talk with NIAID Director Marrazzo and members of her senior staff, including NIAID Deputy Director Hugh Auchincloss, M.D., DFAAI (AAI '83), NIAID Division of Allergy, Immunology, and Transplantation (DAIT) Director Dan Rotrosen, M.D. (AAI '03), and NIAID Policy, Planning, and Evaluation Branch Chief Johanna Schneider, Ph.D. The sixth person to serve as NIAID director and the first woman to head the institute, Dr. Marrazzo is a physician-scientist internationally recognized for her research and education efforts on sexually transmitted infections, especially as they affect women's health. She was appointed NIAID director in September 2023 as successor to longtime director Anthony S. Fauci, M.D., DFAAI (AAI '73).

Dr. Marrazzo provided Council with a detailed briefing on her priorities and those of NIAID, including in connection with overseeing the institute's \$6.3 billion annual budget and its robust support for research funding across its various grant mechanisms. She highlighted ongoing initiatives to enhance diversity, especially in the context of addressing scientific workforce and pipeline challenges; updating the NIAID strategic plan; supporting funding for immunology and other priorities; developing and implementing changes to the grant review process aimed at reducing bias; and completing the reorganization of immunology study sections along basic versus applied research lines.

Discussion also focused on ways that NIAID and AAI can work together to advance immunology, including highlighting the value of NIAID-funded scientists' research, progress in COVID-19 and other vaccines, and the need for long COVID research; identifying new opportunities



AAI Council members, guests, and staff pictured at the Fall 2023 Council Meeting (from left): Catherine Wattenberg, Gale Guerrieri, Susan Medick, Johanna Schneider, Loretta Doan, Hugh Auchincloss, Steve Jameson, Dan Rotrosen, Joan Goverman, Uli von Andrian, Jeanne Marrazzo, Mark Davis, Akiko Iwasaki, Jake Schumacher, Sue Kaech, Maria-Luisa Alegre, Gene Oltz, Cathy Nagler, Michael Cuddy, Gretchen Diehl, Lauren Gross, Gwen Fortune-Blakely, and Mary Litzinger

to engage with lawmakers and initiate new partnerships to expand AAI’s impact in advocating for broad scientific research funding and support; confronting today’s scientific workforce challenges, in part by identifying and diversifying resources to increase support for underfunded postdoctoral researcher salaries; and continuing to serve as credible sources of accurate scientific information for the public and for like-minded voices in the media committed to countering the impact of misinformation.

Following her presentation and discussion, Dr. Marrazzo joined Dr. Iwasaki and all present in saluting Dr. Auchincloss, who is retiring from NIAID in March 2024, for his long and extraordinary service to NIAID, AAI, and the field, including as former interim NIAID director, former member and chair of the AAI CPA, and 2015 recipient of the AAI Public Affairs Recognition Award.

The next meeting of the AAI Council will be held in conjunction with *IMMUNOLOGY2024™*, the 107<sup>th</sup> AAI Annual Meeting taking place from May 3–7 in Chicago, IL.

gives immunologists a forum to publish their incremental work—insightful and potentially impactful stepping stones that add to the greater knowledge and benefit other researchers!

[www.immunohorizons.org](http://www.immunohorizons.org)

## Another Short-Term Funding Patch Enacted to Extend Federal Government Funding

In mid-January, Congress approved, and President Biden signed into law, the third continuing resolution (CR) of fiscal year (FY) 2024, which funds some federal government agencies and programs through March 1 and others through March 8. The Labor, Health and Human Services, Education, and Related Agencies appropriations bill, which funds the National Institutes of Health (NIH), is among those extended through March 8. NIH will remain flat-funded at its FY 2023 funding level of ~\$47.5 billion until a full-year FY 2024 appropriations bill is enacted.

While much work remains to be done, significant progress has been made on the FY 2024 appropriations bills in recent months. On January 7, Congressional leaders, including Senate Majority Leader Chuck Schumer (D-NY) and House Speaker Mike Johnson (R-LA, 4<sup>th</sup>), announced that they had agreed to a bipartisan funding framework that sets FY 2024 defense funding at \$886 billion (about 3% above the FY 2023 level) and FY 2024 nondefense funding at \$773 billion (roughly equal to the FY 2023 level). This funding was subsequently divided between the 12 appropriations subcommittees, another critical step in the annual appropriations process.

Significant barriers remain to completing the FY 2024 appropriations bill, including disputes over policy provisions related to abortion and immigration, among others. As a result, it is likely that a 4<sup>th</sup> CR will be needed to extend government funding again. In the absence of another CR, a full or partial federal government shutdown could occur.

## AAI Hosts Webinar on Funding Opportunities at ARPA-H—Free Recording Available Now!

AAI hosted a webinar in November on the Advanced Research Projects Agency for Health (ARPA-H) entitled, “ARPA-H: Funding Opportunities for Immunologists.” The event was chaired and moderated by CPA member Cwherié Butts, Ph.D. (AAI ’01), and featured remarks by two distinguished speakers: Susan Monarez, Ph.D., Deputy Director of ARPA-H and Paul de Figueiredo, Ph.D. (AAI ’18), NextGen Precision Health Endowed Professor of Molecular Microbiology & Immunology at the University of Missouri.

Dr. Monarez provided a broad overview of ARPA-H, covering topics such as the types of funding mechanisms used, how the review process works, and how to become either a Program Manager or a performer (a member of a team funded by ARPA-H). Dr. de Figueiredo, one of the very first ARPA-H awardees, talked about his personal experiences applying



Dr. Butts (top left), Dr. de Figueiredo (top right), and Dr. Monarez (bottom)

for funding from ARPA-H and the Defense Advanced Research Projects Agency, and some of the lessons he has learned along the way.

If you are interested in learning more about ARPA-H, including advice on developing a successful funding proposal, you can access the full webinar here: <https://bit.ly/3wgBJi6>.

## Dr. W. Kimryn Rathmell Begins Tenure as NCI Director



Dr. W. Kimryn Rathmell  
Source: Vanderbilt University Medical Center

On December 18, W. Kimryn Rathmell, M.D., Ph.D. (AAI ’23), was sworn in as the 17<sup>th</sup> Director of the National Cancer Institute (NCI) about one month after President Biden announced his intent to appoint her to the position. AAI President Akiko Iwasaki, Ph.D. (AAI ’00), sent a letter of congratulations to Dr. Rathmell on behalf of AAI shortly after she began her tenure at NCI. Dr. Rathmell is a physician-scientist internationally

known for her translational research in kidney cancer and comes to NCI from Vanderbilt University Medical Center, where she served as the Hugh Jackson Morgan Chair in Medicine, Chair of the Department of Medicine, and Physician-in-Chief. She has been deeply involved in the NIH Cancer Genome Atlas, served on the NCI Board of Scientific Directors, and is a member of the National Academy of Medicine.

After receiving her Ph.D. in Biophysics and M.D. from Stanford, Dr. Rathmell attended the University of Pennsylvania for an internal medicine residency, where she also became a Fellow in Medical Oncology and a postdoctoral researcher. She completed her postdoctoral training at the University of North Carolina at Chapel Hill and earned a master’s in management of healthcare at Vanderbilt’s Owen Graduate School of Management.

Dr. Rathmell is the second woman to lead the agency, replacing Monica Bertagnolli, M.D., who recently assumed her new post as NIH Director. Dr. Rathmell takes over amidst a reinvigoration of President Biden's Cancer Moonshot, a main goal of which is to reduce the cancer death rate by 50% by 2047.

### NIH Advisory Committee to the Director Presents Final Report and Recommendations on Re-envisioning the Postdoctoral Experience

The December NIH Advisory Committee to the Director (ACD) meeting featured a presentation by the ACD Working Group on Re-envisioning NIH-Supported Postdoctoral Training, which released its highly anticipated final report and recommendations (<https://bit.ly/49rKOTx>). Formed in 2022, this Working Group (WG) was charged with evaluating the perceived shortage of postdoctoral candidates in the U.S., analyzing the factors influencing this issue, and recommending actions NIH could take to enhance support and retention of academic postdocs.

The WG sought community input through a wide range of mechanisms, including hosting listening sessions and issuing a Request for Information (RFI) that resulted in more than 3,000 responses, including detailed comments *submitted by AAI* last April. AAI further explored this topic at IMMUNOLOGY2023™ at a session entitled, “My Lab is Recruiting Postdocs: Policy Approaches to Address the Needs of Today's Biomedical Research Workforce.”

In its final report, the WG concluded that insufficient compensation is the number one reason that Ph.D. candidates seek employment other than an academic postdoctoral position. Therefore, the first recommendation from the WG is to increase the NIH NRSA postdoctoral stipend to a minimum of \$70,000 in 2024 and provide annual inflation-adjusted increases. Furthermore, the group proposes that NIH should require institutions to provide employee-level benefits for all NIH-supported postdocs and limit the number of years postdocs can be supported by NIH funds to five years.

Without additional and dedicated funding, the WG recognizes that implementation of the stipend increase is likely to result in a smaller NRSA-funded postdoctoral pool. All six recommendations can be viewed in the final report, and more information regarding the listening sessions, RFI, and WG presentations can be found here: <https://www.acd.od.nih.gov/working-groups/postdocs.html>.

At press time, NIH Director Monica Bertagnolli, M.D. has not yet formally accepted the WG's recommendations or developed a corresponding implementation plan.

### NIH Director Accepts Recommendations from the NIH Advisory Committee to the Director on Novel Alternative Methods

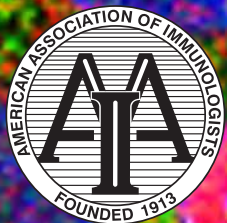
In 2022, the NIH Advisory Committee to the Director (ACD) established a Working Group (WG) charged with analyzing the current landscape of novel alternative methods (NAMs) being developed and used in biomedical research, the strengths and weaknesses of NAMs, and the areas in which NAMs may show the most benefit and promise for augmenting, reducing, or replacing traditional animal models.

At the December 14, 2023, ACD meeting, the WG issued their final report and recommendations to the NIH Director (<https://bit.ly/48am29w>). In the report, the ACD emphasizes the importance of interdisciplinary collaboration, interoperable and reliable datasets, coordinated infrastructure, and effective technology dissemination in creating an integrated NAM ecosystem. The report recommends that NIH:

- “Prioritize the development and use of combinatorial NAMs
- Establish resources, infrastructure, and collaborations to promote the use of interoperable, reliable, and well curated/high quality datasets produced from research using NAMs
- Promote effective dissemination and interconnection of NAM technologies
- Invest in comprehensive training to bolster continuous advances in development and use of NAMs
- Facilitate multidisciplinary teams with expertise across technologies and the lifecycle of NAM development and use
- Promote social responsibility in both the creation and deployment of NAMs across the research lifecycle
- Support and maintain coordinated infrastructure to catalyze effective and responsible NAM development and use”

On February 1, NIH Director Monica Bertagnolli formally announced (<https://bit.ly/3SPFFiu>) that “NIH accepts these recommendations and is committed to continuing its investment in building a robust suite of tools for researchers to study human biology and disease.”

Dr. Bertagnolli stated that efforts to implement the recommendations are already underway with the concept approval of a Common Fund research program called Complement Animal Research in Experimentation (Complement-ARIE). This program aims to “accelerate the development, standardization, validation, and use of new methods and approaches that will more accurately model human biology and can complement, or in some cases, replace traditional models.” More information can be found here: <https://commonfund.nih.gov/complementarie>.



# 2024 INTRODUCTORY COURSE IN IMMUNOLOGY

July 9 – 14, 2024 | UCLA Luskin Conference Center | Los Angeles, California

Director: **Helen S. Goodridge, Ph.D.**  
Cedars-Sinai Medical Center

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This comprehensive 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. After the presentation of basic principles, clinically oriented lectures will incorporate these concepts.

## Faculty

**Helen S. Goodridge**, Cedars-Sinai Medical Center  
*Introduction to the Immune System*

**Timothy E. O'Sullivan**, University of California,  
Los Angeles

*Innate Immunity: Cells and Functions*

**Viviana P. Ferreira**, University of Toledo College  
of Medicine and Life Sciences  
*The Complement System*

**Helen S. Goodridge**, Cedars-Sinai Medical Center  
*Pattern Recognition Receptors*

**Lisa K. Denzin**, Child Health Institute of New Jersey,  
Rutgers

*Antigen Processing and Presentation*

**Juliana Idoyaga**, Stanford University  
*Dendritic Cells: The Bridge Between Innate and  
Adaptive Immunity*

**Shiv Pillai**, Ragon Institute of MGH, MIT and Harvard  
*B Cell Development and Maturation*

**Juan Carlos Zúñiga-Pflücker**, University of Toronto  
and Sunnybrook Research Institute  
*T Cell Development*

**John T. Chang**, University of California, San Diego  
*Effector T Cell Differentiation and Response*

**Shane Crotty**, La Jolla Institute for Immunology  
*B Cell Activation and Humoral Immunity*

**Alex Ritter**, Altos Labs  
*Orchestrating the Immune Response*

**Daniela Weiskopf**, La Jolla Institute for Immunology  
*Immunity to Viruses*

**Manuela Raffatellu**, University of California,  
San Diego

*Immunity to Bacterial Pathogens*

**Qizhi Tang**, University of California, San Francisco  
*T Cell Tolerance*

**Craig M. Walsh**, University of California, Irvine  
*Autoimmunity*

**Jakob von Moltke**, University of Washington  
*Type 2 Immunity*

**Prosper N. Boyaka**, The Ohio State University  
*Mucosal Immunology*

**Jonathan S. Maltzman**, Stanford University  
*Solid Organ Transplantation*

**John R. Lukens**, University of Virginia  
*Neuroimmunology*

**Stephen Shiao**, Cedars-Sinai Medical Center  
*Tumor Immunology*

**Susan Kovats**, Oklahoma Medical Research Foundation  
*Sex Differences in Immune Responses*

**Martin Prlic**, Fred Hutchinson Cancer Research Center  
*Immunologic Memory*

**Stephen De Rosa**, Fred Hutchinson Cancer  
Research Center  
*Vaccination*

**Manish J. Butte**, University of California, Los Angeles  
*Primary Immunodeficiency Disorders*

**Sarah L. Gaffen**, University of Pittsburgh  
*Immunotherapeutics Targeting Cytokines*

**Andrew C. Chan**, Genentech, Inc.  
*Bench to Bedside to Bench: Current Issues  
in Immunology*

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For complete course details and registration,  
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For assistance, contact (301) 634-7178 or [meetings@aai.org](mailto:meetings@aai.org).

## MEMBERS IN THE NEWS

### Goldrath Receives 2023 Frederick W. Alt Award



**Ananda Goldrath, Ph.D. (AAI '05)**, received the 2023 Frederick W. Alt Award. This award was created to recognize the outstanding success in academia or industry for research that has had a major impact in the field of immunology.

**Dr. Goldrath** is the executive vice president and director of the Allen Institute for Immunology. Her research focuses on the molecular and cellular processes governing memory T cell differentiation. Her lab identifies key genes and signaling pathways that drive or suppress specific T cell subsets, investigates metabolic reprogramming during differentiation, and analyzes factors influencing tissue residency and survival. For more information about her work, visit [alleninstitute.org/person/ananda-goldrath](https://alleninstitute.org/person/ananda-goldrath).

Read the full announcement at [cancerresearch.org/frederick-w-alt-award](https://cancerresearch.org/frederick-w-alt-award).

### Schreiber Receives 2023 Richard V. Smalley Memorial Award



**Robert D. Schreiber, Ph.D., DFAAI, FAACR (AAI '76)**, received the 2023 Richard V. Smalley Memorial Award. This award recognizes those who have significantly contributed to advancing cancer immunotherapy research.

**Dr. Schreiber** is the Andrew M. and Jane M. Bursky Distinguished Professor in the Department of Pathology and Immunology and director of the Bursky Center for Human Immunology and Immunotherapy Programs at the Washington University School of Medicine. He is recognized for his remarkable research findings at the Siteman Cancer Center that have led to an improved understanding of immune surveillance in cancer pathogenesis, including the definition of the physiologic roles and mechanisms of action of Type I interferon and interferon gamma in cancer-associated immune responses, and for establishing the concept of "immunoediting" that has since fueled the development of cancer immunotherapeutics. For more information about his research, visit [pathology.wustl.edu/people/robert-schreiber-phd](https://pathology.wustl.edu/people/robert-schreiber-phd).

Read the full announcement at [sitcancer.org/aboutsitc/awards/schreiber-award](https://sitcancer.org/aboutsitc/awards/schreiber-award).

### Maus, Shirwan, Weidanz Named National Academy of Inventors Fellows

**Haval Shirwan, Ph.D. (AAI '92), Marcela Maus, M.D., Ph.D. (AAI '16), and Jon Weidanz, M.P.H., Ph.D. (AAI '21)** were named National Academy of Inventors Fellow. This program highlights academic inventors who have demonstrated a prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development and the welfare of society.



**Dr. Shirwan** is a professor of pediatrics and molecular microbiology and immunology at the University of Missouri School of Medicine and the director of the division of pediatric research and associate director of immunomodulation and regenerative medicine at MU Health Care's Ellis Fischel Cancer Center. His research goals are to develop safe and practical immunomodulatory approaches with applications to transplantation, autoimmunity, and cancer immunoprevention and immunotherapy. For more information about his research, visit [medicine.missouri.edu/faculty/haval-shirwan-phd](https://medicine.missouri.edu/faculty/haval-shirwan-phd).



**Dr. Maus** is an associate professor of medicine at Harvard Medical School and director of the Cellular Immunotherapy Program at Massachusetts General Hospital. Her research goals are to improve CAR T cell therapy, aiming for greater effectiveness in eliminating cancer cells and minimizing treatment-related toxicities. This involves conducting translational studies in the laboratory, applying the discovered insights to patients in clinical settings, and analyzing patient responses to CAR T cell treatment through correlative studies. To learn more about her lab, visit [mauslab.com](https://mauslab.com).



**Dr. Weidanz** is the Associate Vice President for Research, Professor with tenure, College of Nursing and Health Innovation and College of Engineering, and a member of the Multi-Professional Center for Health Informatics at the University of Texas at Arlington. His research aims to understand molecular and cellular mechanisms in immune responses to natural and therapeutically induced cancers, particularly focusing on CD8<sup>+</sup> T cells and Natural Killer cells. The laboratory, dedicated for over two decades, identifies

tumor-specific peptides presented by human leukocyte antigen (HLA) for potential immunotherapeutic targets. To learn more about his lab, visit [michi.uta.edu/weidanz-lab](http://michi.uta.edu/weidanz-lab).

Read the full announcement at [academyofinventors.org/nai-announces-2023-class-of-fellows](http://academyofinventors.org/nai-announces-2023-class-of-fellows).

## Allison Inducted into National Inventors Hall of Fame



**James Allison, Ph.D., DFAAI (AAI '76)**, was inducted into the National Inventors Hall of Fame. This honor recognizes the enduring legacies of exceptional U.S. patent holders who have improved our society not only by developing inventions but also by creating and shaping industries.

**Dr. Allison** is Regental Professor and Chair of the Department of Immunology, the Olga Keith Wiess Distinguished University Chair for Cancer Research, Director of the Parker Institute for Cancer Research, Executive Director of the Immunotherapy Platform, and Director of the James P. Allison Institute at MD Anderson Cancer Center. Allison is renowned for his fundamental discoveries in T cell biology and his invention of ipilimumab, the first immune checkpoint inhibitor to treat cancer. In 2018, Allison was jointly awarded the Nobel Prize in Physiology or Medicine with Dr. Tasuku Honjo (AAI '88) for their discovery of cancer therapy by inhibition of negative immune regulation. For more information about his research, visit [mdanderson.org/research/departments-labs-institutes/labs/allison-laboratory.html](http://mdanderson.org/research/departments-labs-institutes/labs/allison-laboratory.html).

Read the full announcement at [invent.org/inductees/new-inductees](http://invent.org/inductees/new-inductees).

## Rosenberg Receives AACR Award for Lifetime Achievement in Cancer Research



**Steven A. Rosenberg, M.D., Ph.D. (AAI '79)**, received the American Association for Cancer Research Award for Lifetime Achievement. This award honors individuals with lifetime contributions to cancer research through groundbreaking discoveries or sustained impact, demonstrating a lifelong dedication to fighting the disease.

**Dr. Rosenberg** is chief of the *surgery branch* at the National Cancer Institute Center for Cancer Research. He is a pioneer in immunotherapy for advanced cancer, particularly in using cell transfer techniques like TIL and gene therapy. His work has led to significant remissions in patients with solid cancers. He is currently researching immune responses, focusing on identifying unique cancer antigens and T-cell receptors for new immunotherapies. For more information about his work, visit [ccr.cancer.gov/staff-directory/steven-a-rosenberg?cid=eb\\_govdel](http://ccr.cancer.gov/staff-directory/steven-a-rosenberg?cid=eb_govdel).

Read the full announcement at [aacr.org/about-the-aacr/newsroom/news-releases/steven-a-rosenberg-md-phd-faacr-honored-with-2024-aacr-award-for-lifetime-achievement-in-cancer-research](http://aacr.org/about-the-aacr/newsroom/news-releases/steven-a-rosenberg-md-phd-faacr-honored-with-2024-aacr-award-for-lifetime-achievement-in-cancer-research).

## Otero and Siyuan Ding Receive Michelson Prizes: Next Generation Grants

**Claire Otero, Ph.D., (AAI '21) and Siyuan Ding, Ph.D. (AAI '19)** received the 2024 Michelson Prizes Next Generation Grants. This grant program supports promising researchers who are applying disruptive concepts and inventive processes to advance human immunology, vaccine discovery, and immunotherapy research for major global diseases.



**Dr. Ding** is an assistant professor at the Washington University School of Medicine. His lab studies enteric virus-host interactions, investigating the interface of rotavirus and SARS-CoV-2 replication and pathogenesis, host mucosal immune responses, and intestinal epithelial cell biology.

For more information about his research, visit [sdinglab.wustl.edu](http://sdinglab.wustl.edu).

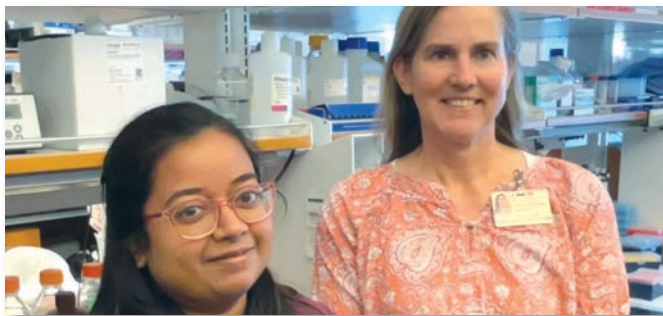


**Dr. Otero** is a postdoctoral associate in the Permar Lab at the Weil Cornell School of Medicine. Her research focuses on vaccine development to prevent congenital cytomegalovirus through targeting key viral immune evasion mechanisms. To learn more about her, visit [visitpermarlabwcm.org/claire-otero](http://visitpermarlabwcm.org/claire-otero).

Read the full announcement at [michelsonmedicalresearch.org/michelson-prizes-next-generation](http://michelsonmedicalresearch.org/michelson-prizes-next-generation).

## AAI Recognizes Careers in Immunology Fellows

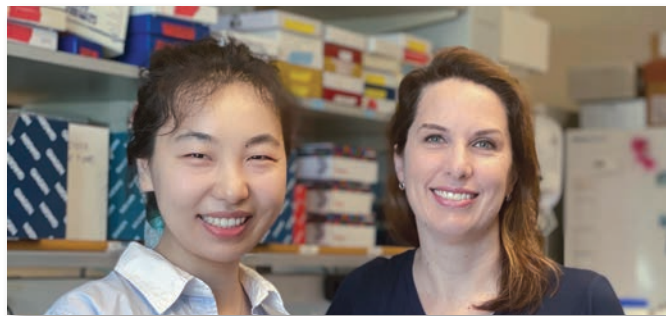
The AAI Careers in Immunology Fellowship Program supports the career development of young scientists by providing eligible PIs with one year of salary support for a trainee in their labs.



Gupta and Cassel

**Suzanne Cassel, M.D. (AAI '21)**  
Associate Professor

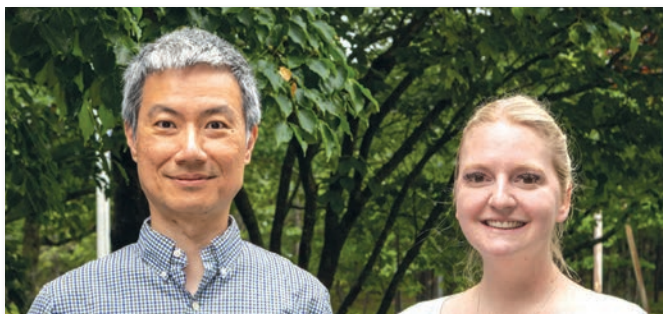
**Suman Gupta, Ph.D. (AAI '21)**  
Postdoctoral Fellow  
*Cedars-Sinai Medical Center*



Fu and Divito

**Sherrie J. Divito, M.D., Ph.D. (AAI '17)**  
Assistant Professor

**Xiaopeng Fu, Ph.D. (AAI '22)**  
Postdoctoral Fellow  
*Brigham and Women's Hospital*



Chang and Mayberry

**Chih-Hao Chang, Ph.D. (AAI '13)**  
Assistant Professor

**Colleen L. Mayberry, Ph.D. (AAI '23)**  
Postdoctoral Fellow  
*The Jackson Laboratory*



Espino and Armina-Rodriguez

**Ana M. Espino, Ph.D. (AAI '15)**  
Professor

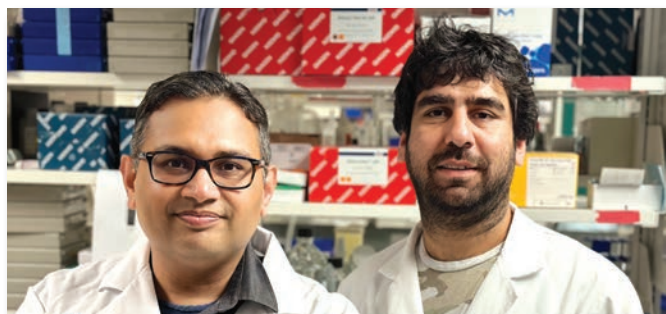
**Albersy Armina-Rodriguez (AAI '21)**  
Graduate Student  
*University of Puerto Rico School of Medicine*



Kailasan Vanaja and Ricci de Azevedo

**Sivapriya Kailasan Vanaja, D.V.M., Ph.D. (AAI '16)**  
Assistant Professor

**Rafael Ricci de Azevedo, Ph.D. (AAI '23)**  
Postdoctoral Fellow  
*UConn Health School of Medicine*



Muthukrishnan and Meghwani

**Gowrishankar Muthukrishnan, Ph.D. (AAI '20)**  
Assistant Professor

**Himanshu Meghwani, M.B.B.S., Ph.D. (AAI '23)**  
Postdoctoral Fellow  
*University of Rochester Medical Center*





**Kovats and Williams**

**Susan E. Kovats, Ph.D. (AAI '98)**  
Member

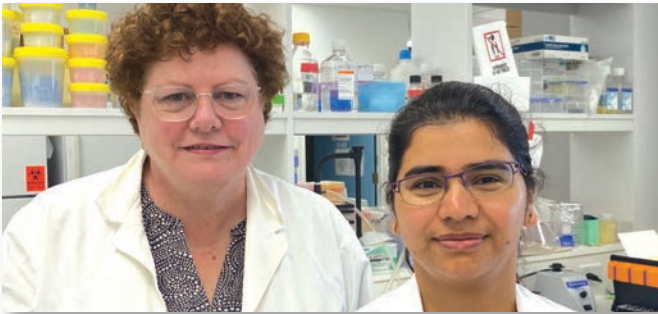
**Abigael Williams (AAI '21)**  
Graduate Student  
*Oklahoma Medical Research Foundation*



**Philpott and Yadav**

**Dana J. Philpott, Ph.D. (AAI '11)**  
Professor

**Jitender Yadav, Ph.D. (AAI '23)**  
Postdoctoral Fellow  
*University of Toronto, CAN*



**Marshall and Nanjundappa**

**Jean S. Marshall, Ph.D. (AAI '95)**  
Professor

**Roopa Nanjundappa, Ph.D. (AAI '22)**  
Postdoctoral Fellow  
*Dalhousie University Faculty of Medicine, CAN*



**Rattan and Udumula**

**Ramandeep Rattan, Ph.D. (AAI '18)**  
Senior Scientist

**Mary Priyanka Udumula, Ph.D. (AAI '21)**  
Postdoctoral Fellow  
*Henry Ford Health System and Wayne State University*



**Larson and Solheim**

**Joyce Solheim, Ph.D. (AAI '95)**  
Professor

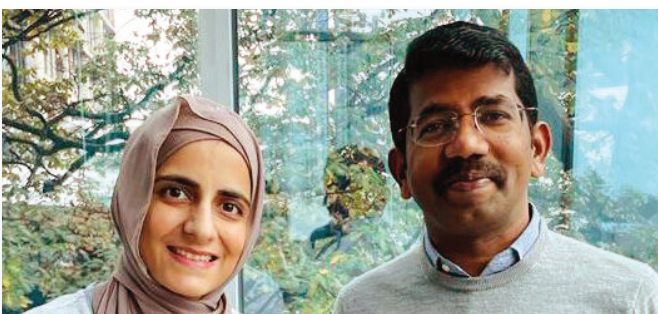
**Alaina C. Larson (AAI '22)**  
Graduate Student  
*University of Nebraska Medical Center*



**Weinkopff and Fry**

**Tiffany Weinkopff, Ph.D. (AAI '23)**  
Assistant Professor

**Lucy Fry (AAI '22)**  
Graduate Student  
*University of Arkansas for Medical Sciences*



**Hussain and Vasanthakumar**

**Ajithkumar Vasanthakumar, Ph.D. (AAI '23)**  
Laboratory Head

**Tabinda Hussain, Ph.D. (AAI '23)**  
Postdoctoral Fellow  
*Olivia Newton-John Cancer Research Institute, AUS*



# EDITOR-IN-CHIEF

## *ImmunoHorizons*

**The American Association of Immunologists**  
seeks applicants for the position of  
**Editor-in-Chief for *ImmunoHorizons***

### **Description**

*ImmunoHorizons (IH)* is a scholarly, peer-reviewed journal owned and published by The American Association of Immunologists (AAI) – a non-profit, professional association representing almost 8,000 scientists worldwide dedicated to the field of immunology. First published in 2017, *ImmunoHorizons* is fully open-access and online only.

The term of service for this position is from January 1, 2025, to December 31, 2029. To ensure a smooth transition of responsibilities, the new EIC and editorial board will overlap with the outgoing team beginning in November 2024. A stipend will be provided.

### **Main Responsibilities and Activities**

#### **Strategic Vision**

**Editor-in-Chief (EIC)** of *ImmunoHorizons* is a unique opportunity to shape the publication's future directly, ensuring that *IH* grows into an essential resource within the immunological community. AAI seeks a passionate candidate dedicated to advancing the association's mission and championing the vital role of immunology in driving progress to improve human health. The winning candidate will be a visionary who embraces the ongoing changes in scholarly publishing. Working with extensive resources, tools, and support, the new EIC will develop innovative solutions to grow submissions and readership exponentially. As leader of the editorial team, the EIC will determine the journal's scope and editorial direction while ensuring the publication of high-quality original research and exciting commentaries authored by established and emerging leaders in the field.

#### **Leadership**

The successful candidate will recommend a board of dynamic and diverse Senior Editors for appointment. Driven by a solid foundation in peer review and a commitment to scientific excellence, the EIC will oversee the peer-review process and editorial conduct. Applicants will lead by example and must be willing to address conflict head-on and address allegations of author misconduct in accordance with AAI policies.

#### **Activities**

The EIC will make the final decisions on all submissions. The EIC will report to the AAI Publications Committee and the AAI Council and, with the support of the AAI Publications staff, will provide regular updates to key stakeholders regarding journal performance. The winning candidate will also provide regular performance feedback to editorial board members, further ensuring the integrity of the peer-review process. The EIC serves as the face of the journal, and the successful candidate will actively recruit high-quality submissions.

### **Requirements**

Applications are invited from AAI members in good standing who have an accomplished scientific career, appropriate editorial experience, strong leadership qualities, and a vision for the future of *IH*. A history of reviewing for and publishing in AAI journals is required. Service as a Section Editor or Deputy Editor for *The Journal of Immunology* or Senior Editor for *IH* is a plus.

### **How to Apply**

Interested individuals are invited to submit an application package that includes a *curriculum vitae*, a succinct letter of interest and qualifications, a statement on the possible conceptual direction of *ImmunoHorizons* in its pursuit of scientific excellence, and innovations that may be considered. Applications will be accepted through March 31, 2024. Please e-mail materials to [EICsearch@aai.org](mailto:EICsearch@aai.org). *EOE*



## AAI Outreach Program Update

The AAI Outreach Program provides career development opportunities for young investigators by supporting podium and poster presentation awards at member-organized immunology meetings throughout the United States and internationally. The program most recently provided sponsorship at the conferences highlighted in this section.

### Joint Meeting of the French and German Societies of Immunology

The Joint Annual Meeting of the French and German Societies of Immunology was held on September 26–29, 2023, in Strasbourg, France. AAI supported 10 Young Investigator Awards at the meeting for podium presentations.

The awardees were:

- Marianne Burbage, graduate student, Institut Curie, FRA
- Laure Delage, Ph.D., postdoctoral fellow, Sanofi, FRA
- Lukas Ehlen, graduate student, Charité Hospital, DEU
- Guillaume Hoeffel, Ph.D., postdoctoral fellow, Centre d'Immunologie Marseille, FRA
- Ikram Mezghiche, graduate student, Institut Pasteur, FRA
- Ulrich Pannicke, graduate student, University of Ulm, DEU
- Mathilde Pohin, Ph.D., postdoctoral fellow, Kennedy Institute of Rheumatology, University of Oxford, GBR
- Laura Schlautmann, graduate student, University of Bonn, DEU
- Chiara Taroni, Ph.D., postdoctoral fellow, Institut de Génétique, Biologie Cellulaire et Moléculaire, FRA
- Sylvia Vuillier, graduate student, Institut Toulousain des Maladies Infectieuses et Inflammatoires, FRA

### Upstate New York Immunology Conference

The 25<sup>th</sup> Annual Upstate New York Immunology Conference (NYIC) was held on October 16–19, 2023, in Cooperstown, NY. AAI supported 10 Young Investigator Awards at the NYIC meeting for podium presentations.

The awardees were:

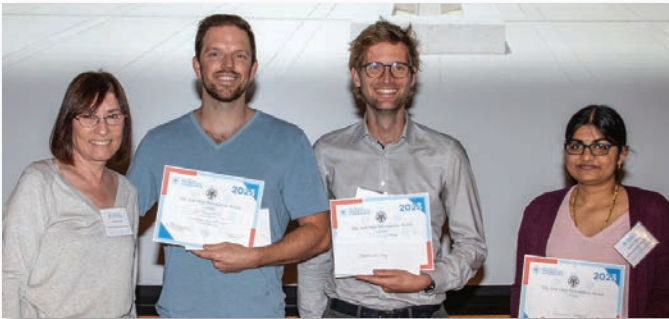
- Amber Bahr (AAI '22), graduate student, Albany Medical College
- Rachel A. Grazda (AAI '23), graduate student, Albany Medical College
- Gary Hannon, Ph.D., postdoctoral fellow, University of Rochester
- Zachary T. Hilt, Ph.D., postdoctoral fellow, Cornell University
- E. Evonne Jean, graduate student, University of Pennsylvania
- Maggie L. Lesch (AAI '23), graduate student, University of Rochester
- Marlena R. Merling, graduate student, The Ohio State University
- Brian G. Morreale (AAI '23), graduate student, Roswell Park
- Katya McDonald, graduate student, University of Rochester
- Achamaporn Punnantinont (AAI '21), graduate student, University at Buffalo



AAI Young Investigator Awardees at the Joint Annual Meeting of the French and German Societies of Immunology, pictured with other meeting awardees



AAI Young Investigator Awardees at the Upstate New York Immunology Conference (from left) Marlena Merling, Brian Morreale, Gary Hannon, Katya McDonald, Rachel Grazda, Amber Bahr, Maggie Lesch, Achamaporn Punnanitnont, E. Evonne Jean, and Zachary Hilt



Pictured at the La Jolla Immunology Conference with Linda Sherman (Director of LJIC Board), AAI Young Investigator Awardees (from left) Kellen Cavagnero, Maximilian Heeg, and Sirimuvva Tadepalli

### La Jolla Immunology Conference

The 2023 La Jolla Immunology Conference (LJIC) was held on October 17–19, 2023, in La Jolla, CA. AAI supported 24 Young Investigator Awards at the LJIC meeting for podium and poster presentations.

The awardees for podium presentations were:

- Kellen Cavagnero, graduate student, University of California, San Diego
- Maximilian Heeg, Ph.D., postdoctoral fellow, University of California, San Diego
- Boyoung Shin, Ph.D., postdoctoral fellow, California Institute of Technology
- Sirimuvva Tadepalli, Ph.D., research scientist, Stanford University School of Medicine

The awardees for poster presentations were:

- Gabriel Antonio Ascui-Gac (AAI '21), graduate student, La Jolla Institute for Immunology
- Rimjhim Agarwal (AAI '23), graduate student, La Jolla Institute for Immunology
- Adriana Vasquez Ayala, research technician, University of California, San Diego
- Amir Ferry, graduate student, University of California, San Diego
- Giovanni Galletti, Ph.D., postdoctoral fellow, University of California, San Diego
- Lizmarie Garcia-Rivera, graduate student, University of California, San Diego
- Trevor T. Greene, Ph.D., assistant project scientist, University of California, San Diego
- Sara Herrera de la Mata (AAI '21), graduate student, La Jolla Institute for Immunology
- Katelynn Kazane (AAI '23), graduate student, University of California, San Diego
- Lara Labarta-Bajo, Ph.D., postdoctoral fellow, Salk Institute for Biological Studies
- Yingcong Li, Ph.D., postdoctoral fellow, La Jolla Institute for Immunology
- Elena YH Lin, graduate student, University of California, San Diego



Pictured with Linda Sherman (Director of LJIC Board) at the La Jolla Immunology Conference, AAI Young Investigator Awardees (from left) Adam Sobel, Adriana Vasquez Ayala, Elena YH Lin, Gabriel Antonio Ascui-Gac, Trevor T. Greene, Katelynn Kazane, Lara Labarta-Bajo, Rimjhim Agarwal, Tom Mann, and Ziyue Zhang



Pictured with Linda Sherman (Director of LJIC Board) at the La Jolla Immunology Conference, AAI Young Investigator Awardees (from left) Alexander Monell, Giovanni Galletti, Kennedy Takehara, Lizmarie Garcia-Rivera, Marvic Carrillo Terrazas, Nicolas Thiault, Rasika Patkar, Sara Herrera de la Mata, and Yingcong Li

- Tom Mann, Ph.D. (AAI '19), research associate, Salk Institute for Biological Studies
- Alexander Monell, graduate student, University of California, San Diego
- Rasika Patkar (AAI '23), graduate student, University of California, San Diego
- Adam Sobel, graduate student, Scripps Research Institute
- Kennedy Takehara, graduate student, University of California, San Diego
- Nicolas Thiault, Ph.D., postdoctoral fellow, La Jolla Institute for Immunology
- Marvic Carrillo Terrazas, graduate student, University of California, San Diego
- Ziyue Zhang, graduate student, University of California, San Diego
- Gregory Cohen, research technologist, Johns Hopkins University
- Samarth Durgam, Ph.D. (AAI '22), postdoctoral fellow, University of Chicago
- Juliana Schneider-Powell, Ph.D. (AAI '23), postdoctoral fellow, University of Pittsburgh

### Human & Translational Immunology Conference

The 3<sup>rd</sup> Annual Human & Translational Immunology Conference was held on October 23–28, 2023 in Rhodes Island, Greece. AAI supported five Young Investigator Awards at the conference for podium presentations.

The awardees were:

- Zoe Magill, graduate student, Monash University, AUS
- Julia M. Davis-Porada (AAI '23), graduate student, Columbia University Vagelos College of Physicians and Surgeons
- Daryl Geers, graduate student, Erasmus University Medical Center, NLD
- Audrey Merienne, graduate student, Immunologie et Nouveaux Concepts en Immunothérapie, FRA
- Gwenann Cadiou, graduate student, Immunologie et Nouveaux Concepts en Immunothérapie, FRA



AAI Young Investigator Awardees at the 22<sup>nd</sup> Annual Great Lakes Transplant Immunology Forum (from left) Giorgio Raimondi (GLTIF organizer), Kassandra Barron, Juliana Schneider-Powell, and Samarth Durgam

### Great Lakes Transplant Immunology Forum

The 22<sup>nd</sup> Annual Great Lakes Transplant Immunology Forum (GLTIF) was held on October 23–24, 2023 in Baltimore, MD. AAI supported four Young Investigator Awards at the GLTIF meeting for poster presentations.

The awardees were:

- Kassandra Barron, graduate student, University of Pittsburgh



Pictured at the 3<sup>rd</sup> Annual Human & Translational Immunology Conference with conference organizers (at left) Ken Ishii and Peter Katsikis, AAI Young Investigator Awardees (from left) Julia Davis-Porada, Zoe Magill, Daryl Geers, Gwenann Cadiou, and Audrey Merienne



Pictured at the 20<sup>th</sup> Annual FASEB Science Research Conference on The Molecular Mechanisms of Immune Cell Development and Function, meeting co-organizer Virginia Shapiro (at left) with AAI Young Investigator Awardees (from left) Rachel Brown, Mayassa Bou-Dargham, Ruifeng Sun, Ellen Drake, and Tom Sidwell

## FASEB Science Research Conference on The Molecular Mechanisms of Immune Cell Development and Function

The 20<sup>th</sup> Annual FASEB Science Research Conference (SRC) on The Molecular Mechanisms of Immune Cell Development and Function was held on November 5-9, 2023 in Sacramento, CA. AAI supported five Young Investigators Awards at the conference for podium presentations.

The awardees were:

- Mayassa Bou-Dargham, Ph.D., postdoctoral fellow, University of Pennsylvania
- Rachel Brown, graduate student, The Ohio State University
- Ellen Drake (AAI '23), graduate student, University of Illinois, Chicago
- Tom Sidwell, Ph.D., postdoctoral fellow, California Institute of Technology
- Ruifeng Sun (AAI '22), graduate student, Yale University

## Autumn Immunology Conference

The 51<sup>st</sup> Annual Autumn Immunology Conference (AIC) was held on November 17-20, 2023 in Chicago, IL.

AAI participated as an exhibitor and sponsored the Undergraduate Careers in Immunology Workshop and the Meet the Speakers event. Additionally, AAI supported 21 Young Investigator Awards for graduate students and 5 Undergraduate Awards.

The AAI Young Investigator Awardees were:

- Brendan Berg, University of Chicago
- Catarina Bittencourt, Iowa State University
- Nicholas Bockenstedt (AAI '23), Iowa State University
- Joshua Brand, University of Wisconsin, Madison
- Abigail Cheever, Brigham Young University
- Emily Ebert, St Louis University
- Jonah Elliff, University of Iowa
- Janna Heide, University of Chicago
- Stuti Khadka, West Virginia University
- Shравan Kumar Kannan (AAI '22), University of Iowa
- Elianna Lai and Suzi Kim, Carnegie Mellon University
- Jorge Gomez Medellin, University of Chicago
- Madison Mix (AAI '22), University of Iowa
- Taylen Nappi, University of Iowa
- Rim Noufal, Loyola University Chicago Stritch School of Medicine
- Komal Patel, The Ohio State University
- Andrew Simonson, University of Pittsburgh School of Medicine
- Tiffany Shi, Cincinnati Children's Hospital Medical Center
- Melissa Skibba, University of Wisconsin, Madison
- Bruna Tatematsu (AAI '23), Loyola University
- Nathaniel Wright, University of Chicago



AAI Young Investigator Awardees at the 51<sup>st</sup> Annual Autumn Immunology Conference (AIC), pictured with AAI staff

The AAI Undergraduate Awardees were:

- Myra Guo, The Ohio State University
- Ali Ishaq, University of Wisconsin
- Hrishi Kousik, Washington University
- Davis Verhoeven, Iowa State University
- Melody Zhang, Saint Louis University



AAI Undergraduate Awardees at the 51<sup>st</sup> Annual Autumn Immunology Conference (AIC) (from left) Ali Ishaq, Hrishi Kousik, Davis Verhoeven, Melody Zhang, and Myra Guo

## Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) 2023

For the eighth year in succession, AAI provided support for early career trainees in immunology, including recognition of outstanding student presenters of immunology abstracts at the Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) 2023. AAI support for ABRCMS 2023, held in Phoenix, AZ, from November 15–18, was coordinated by AAI Minority Affairs Committee (MAC) Chair Luis Montaner, D.V.M., Ph.D. (AAI '97). Annual AAI support for the ABRCMS meeting is provided through the AAI Outreach Program.

Presented by the American Society for Microbiology (ASM) since 2001 and chaired since 2015 by Avery August (AAI '99; member of AAI Council since 2021), the annual ABRCMS meeting fosters minority students' pursuit of advanced training in the biomedical sciences and related fields. The 2023 meeting drew over 3,600 scientific attendees, including nearly 3,000 undergraduate, postbaccalaureate, and community college students and 700 graduate students and postdoctoral trainees. Attendees participate in poster and podium presentations in 12 scientific disciplines, including immunology, cell biology, microbiology, developmental biology, and cancer biology.

This year, AAI returned as co-sponsor of the ABRCMS immunology presentation awards, with primary sponsorship of the awards provided by ASM. The awards, supported by AAI since 2016, are given to selected undergraduate, postbaccalaureate, and community college student presenters in immunology. Twenty-two students at ABRCMS 2023 were selected for immunology presentation awards co-sponsored by AAI.

### Oral Presenters

- Gabriella Santos, Undergraduate Senior, Florida International University
- Yeongseo Son, Undergraduate Junior, University of Georgia

### Postbaccalaureate Presenters

- Achalefac Akem, Albert Einstein College of Medicine
- Zoe Drigot, University of Colorado School of Medicine
- Rodrigo Galicia Pereyra, Yale University
- Lethan Hampton, MD Anderson Cancer Center
- Jeremy Libang, UCSF
- Brooke Linden, University of Colorado—Anschutz Medical Campus

### Undergraduate Senior Presenters

- Brianna Smith, Duke University
- Kaitlyn Lewars, Duke University
- Tioluwanimi Adesanya, Vanderbilt University
- Rosmery Rosario Cueto, Ana G. Mendez University, Carolina Campus
- Diomarys Garcia-Cardona, University of Puerto Rico at Cayey
- Joaquin Parrilla-Garcia, University of Puerto Rico—Mayaguez

### Undergraduate Junior Presenters

- Abdul-Jalil Dania, Washington University in St. Louis
- Ndongwa Pemba, Agnes Scott College
- Grace Ford, Georgia State University
- Heaven Brandt, University of West Florida
- Meriem Boukaabar, University of Pittsburgh

### Undergraduate Sophomore Presenters

- Anisa Siddikova, CUNY Hunter College
- Alisha Mason, Johns Hopkins University
- Hannah Bhattacharya, Vanderbilt University



At ABRCMS 2023, recipients of Immunology Presentation Awards co-sponsored by ASM and AAI pictured with ABRCMS meeting chair Avery August, Ph.D. (far right) and immunology abstracts chair Cherié Butts (far left)

## AAI Young Scholars Travel Awards

Additionally, three of these immunology presentation awardees have also received special recognition as recipients of the AAI Young Scholars Awards for 2024. Established in 2016, the AAI Young Scholars Award was initiated by the AAI MAC to provide selected student immunology presenters at ABRCMS with support to attend the AAI annual meeting.

In addition to receiving meeting travel awards to attend IMMUNOLOGY2024™, this year's Young Scholars Awardees will receive dedicated mentoring from MAC members in connection with awardees' attendance at the MAC Careers Roundtables, MAC Social Hour networking reception, MAC-sponsored AAI Vanguard Award Lecture, and through mentors' feedback on awardee abstract presentations.

AAI congratulates the following recipients of the 2024 AAI Young Scholars Awards.



**Gabriella Santos**  
**Florida International University (FIU)**

Ms. Gabriella Santos is a pre-med undergraduate senior pursuing dual B.S. degrees in Biology (Biological Sciences track) and Natural and Applied Sciences. She anticipates graduating in May 2024.

Her research experience includes a year-long lab project on Parkinson's Disease and the gut microbiome in the Human Molecular Genetics Department, Herbert Wertheim College of Medicine, FIU, where she initiated a protocol to develop an in vitro human gut microbiome, learned basic bioinformatics and bacteria culturing skills, and submitted a project white paper on hospital-acquired infections with a focus on *Pseudomonas aeruginosa*.

"I am very grateful to Dr. Charles Dimitroff, principal investigator (PI), and Lee Seng Lau, Ph.D. candidate, for their influential guidance and for showing me the beauty of conducting research in translational medicine, cancer biology, and immunology. I also gratefully acknowledge the rest of the members of the Translational Glycobiology Institute at FIU (including PIs, postdocs, M.D./Ph.D. graduates, Ph.D. students, and undergraduates) for their warm collaborations and the positive environment to which they welcome me with every day."



**Anisa Siddikova**  
**CUNY Hunter College**

Ms. Anisa Siddikova is an undergraduate sophomore majoring in biology with a minor in Chinese; she anticipates graduating in June 2026. Her research background includes current training at

Weill Cornell Medicine in the laboratory of Dr. Melody Zeng, exploring how respiratory syncytial virus infection alters the gut immune response to commensal bacteria. Previous

research experiences at NYU Langone Health include work in the laboratory of Dr. Evgeny Nudler on optimizing a colony PCR protocol of *B. subtilis* and designing/conducting luciferase reporter assays to study gene expression and promoter activity of riboswitches to different media; and in the laboratory of Dr. Shruti Naik on a project assessing antimicrobial activity of HIF1 $\alpha$  activator on *S. aureus*.

"I am immensely grateful for my PI, Dr. Melody Zeng, and mentor, Dr. Julia Brown, whose patient mentorship, guidance, and unwavering support has been invaluable to my growth and development."



**Yeongseo Son**  
**University of Georgia (UGA)**

Ms. Yeongseo Son is an undergraduate junior pursuing dual degrees—B.S., biochemistry and molecular biology; B.A., anthropology (with a certificate in immunology). She anticipates graduating

in May 2025. Her research background includes work on projects involving inhibiting neutrophil elastase activity in cystic fibrosis airway samples (mentor: Dr. Balazs Rada, UGA Department of Infectious Diseases); and developing a better model of alveologenesis and characterizing infant lung injury (mentor: Dr. Jennifer Sucre, Vanderbilt University Medical Center Department of Pediatrics). Previous lab experiences focused on imaging and determining the clonal raider ant's tracheal system (mentor: Dr. Waring Buck Tribble, John Harvard Distinguished Science Fellows Program, Harvard University); and examining mindsets of STEM students with learning disabilities (mentor: Dr. Stephen Podowitz-Thomas, Thomas Jefferson University Department of Chemistry).

"Since my first semester of college, Dr. Balázs Rada has unconditionally supported my journey as a biomedical researcher. Providing constant feedback on my experiments, meeting with me about my career aspirations in immunology, and believing in my abilities as a scientist, Dr. Rada has played a pivotal role in shaping my growth and confidence in the field."

At ABRCMS 2023, the following AAI members served as returning chair and vice chair (respectively) of immunology presentations:

- **Cherie Butts, Ph.D.** (AAI '10), medical director, Therapeutics Development Unit, Biogen (*past AAI MAC member and chair; current member, AAI Committee on Public Affairs*)
- **Harlan Jones, Ph.D.** (AAI '16), associate professor, University of North Texas Health Science Center (*current AAI MAC member*)

AAI looks forward to supporting attendees at the ABRCMS 2024 meeting, to be held November 13–16, 2024, in Pittsburgh, PA.



## IUIS 2023

Immunologists from over 100 countries gathered at the International Union of Immunological Societies (IUIS) 2023 Congress, held November 27–December 2 in Cape Town, South Africa.

IUIS President Miriam Merad (AAI '22), professor and director at the Mount Sinai Icahn School of Medicine, was among the organizers welcoming attendees to Cape Town in the opening ceremony. The opening ceremony addressed immunology breakthroughs, collaboration, the legacy of Nelson Mandela, and the ending of conflicts to focus on real threats that humanity faces, such as emerging pathogens. It also featured local music, to the delight of participants.

The IUIS 2023 scientific program featured 500 oral presentations and 145 scientific sessions. AAI was pleased to sponsor a keynote address by Rafi Ahmed, Ph.D., DFAAI (AAI '84), professor and director, Emory University School of Medicine, on “CD8 T Cell Responses during Chronic Infection and Cancer: Implications for Immunotherapy.” AAI also sponsored a symposium which was chaired by AAI Past President Mark M. Davis, Ph.D. (AAI '88), HHMI, Stanford University School of Medicine, and featured translational immunology advances by Alessandro Sette, Ph.D. (AAI '89), La Jolla Institute for Immunology; Zhijian ‘James’ Chen, HHMI, University of Texas Southwestern Medical Center; and Taia T. Wang, M.D., Ph.D. (AAI '22), Stanford University School of Medicine. Sette presented on “Study of adaptive responses to SARS-CoV-2, coronaviruses and MPOX virus”; Chen on “Igniting an immune response with cGAS—from human to bacteria”; and Wang on “Regulation of lung inflammation by antibody glycosylation.”

AAI was pleased to provide \$160,000 for awards and grants to support talented scientists in attending the IUIS 2023 Congress. AAI supported 20 scientists with IUIS-AAI Travel Grants for Immunologists from Developing Countries. AAI also awarded 48 members with AAI Travel Grants for IUIS 2023:

1. Jessy Alexander, Ph.D. (AAI '20), Research Professor, University at Buffalo, USA
2. Pornpimon Angkasekwinai, Ph.D. (AAI '11), Associate Professor, Thammasat University, THA
3. Artem Barski, Ph.D. (AAI '12), Associate Professor, Cincinnati Children's Hospital, University of Cincinnati, USA
4. Tesfaye Belay, Ph.D. (AAI '16), Professor, Bluefield State University, USA
5. Ramireddy Bommireddy, Ph.D. (AAI '16), Instructor, Emory University, USA
6. Louis-Marie Charbonnier, Ph.D. (AAI '16), Assistant Professor, Boston Children's Hospital, USA
7. Kang Chen, Ph.D. (AAI '07), Associate Professor, Wayne State University, USA
8. Matthew Cheung (AAI '21), Graduate Student, University of Alabama at Birmingham School of Medicine, USA
9. Bogoljub Ciric, Ph.D. (AAI '06), Associate Professor, Thomas Jefferson University, USA
10. Shaodong Dai, Ph.D. (AAI '18), Associate Professor, University of Colorado Denver, USA
11. Meihong Deng, M.D. (AAI '15), Associate Professor, Feinstein Institutes for Medical Research, USA
12. Shokrollah Elahi, M.D., Ph.D. (AAI '16), Professor, University of Alberta, CAN
13. Nadeem Fazal, M.D., Ph.D. (AAI '09), Full Professor, Chicago State University, USA
14. Michael L. Freeman, Ph.D. (AAI '14), Assistant Professor, Case Western Reserve University, USA



## OUTREACH

15. Hai Huang, M.D. (AAI '15), Associate Professor, Feinstein Institutes for Medical Research, USA
16. Vandana Kalia, Ph.D. (AAI '22), Assistant Professor, University of Washington School of Medicine, USA
17. Elizabeth Kolawole, Ph.D. (AAI '21), Research Assistant Professor, University of Utah, USA
18. Pawan Kumar, Ph.D. (AAI '15), Assistant Professor, Stony Brook University, USA
19. Girdhari Lal, Ph.D. (AAI '11), Scientist 'F', National Centre for Cell Science, IND
20. Dhafer Laouini, Ph.D. (AAI '00), Senior Biologist, Institut Pasteur de Tunis, TUN
21. Fathia Mami-Chouaib, Ph.D. (AAI '02), Research Director, INSERM, FRA
22. Jennifer Manilay, Ph.D. (AAI '06), Professor, University of California, Merced, USA
23. Adrienn Markovics, M.D., Ph.D. (AAI '18), Assistant Professor, Rush University Medical Center, USA
24. Sarah Michalets (AAI '22), Graduate Student, Emory University, USA
25. Penelope A. Morel, M.D. (AAI '93), Professor, University of Pittsburgh, USA
26. Olanrewaju Morenikeji, Ph.D. (AAI '21), Assistant Professor, University of Pittsburgh, USA
27. Kamal D. Moudgil, M.D., Ph.D. (AAI '95), Professor, University of Maryland School of Medicine, USA
28. Mustafa G. Mujtaba, Ph.D. (AAI '14), Associate Professor, Florida Gulf Coast University, USA
29. Rodrigo Pacheco, Ph.D. (AAI '12), Full Professor, Fundación Ciencia & Vida, CHL
30. Tanapat Palaga, Ph.D. (AAI '18), Professor, Chulalongkorn University, THA
31. Santiago Partida-Sanchez, Ph.D. (AAI '01), Associate Professor, Nationwide Children's Hospital, USA
32. Parameswaran Ramakrishnan, Ph.D. (AAI '15), Associate Professor, Case Western Reserve University, USA
33. Aryana Razmara (AAI '21), Graduate Student, University of California, Davis, USA
34. Jay Reddy, M.V.Sc., Ph.D. (AAI '09), Professor, University of Nebraska, Lincoln, USA
35. Jenna Reed (AAI '21), Graduate Student, University of Utah, USA
36. Rajnish Sahu, Ph.D. (AAI '22), Post Doctoral Research Associate, Alabama State University, USA
37. Surojit Sarkar, Ph.D. (AAI '22), Associate Professor, University of Washington School of Medicine, USA
38. Meiqing Shi, Ph.D. (AAI '14), Associate Professor, University of Maryland, USA
39. Om Prakash Singh, Ph.D. (AAI '15), Assistant Professor, Banaras Hindu University, IND
40. Liliane K. Siransy, M.D., Ph.D. (AAI '16), Associate Professor, University Felix Houphouet Boigny, CIV
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The next IUIS Congress will be held August 17-22, 2025, in Vienna, Austria.

## AAI Education Committee Highlight: Teaching Tools

In 2016, the AAI Education Committee initiated a new session focused on improving immunology education: the Immunology Teaching Interest Group (ITIG). The ITIG is an informal group comprised of past speakers and attendees of the ITIG sessions, including current immunology educators spanning a range of institutions and levels. It is a resource for novel teaching tools and practices that can be implemented in courses to enhance immunology education. The session has grown from an audience of 20 in 2016 to more than 200 participants today. Because of the great interest in this topic, the AAI Newsletter features “Teaching Tools” articles highlighting ITIG presentations.

### A Perfect Fit: 3D-Printed Kit to Teach Students Principles of Antigen-Antibody Recognition and Herd Immunity

#### Authors:

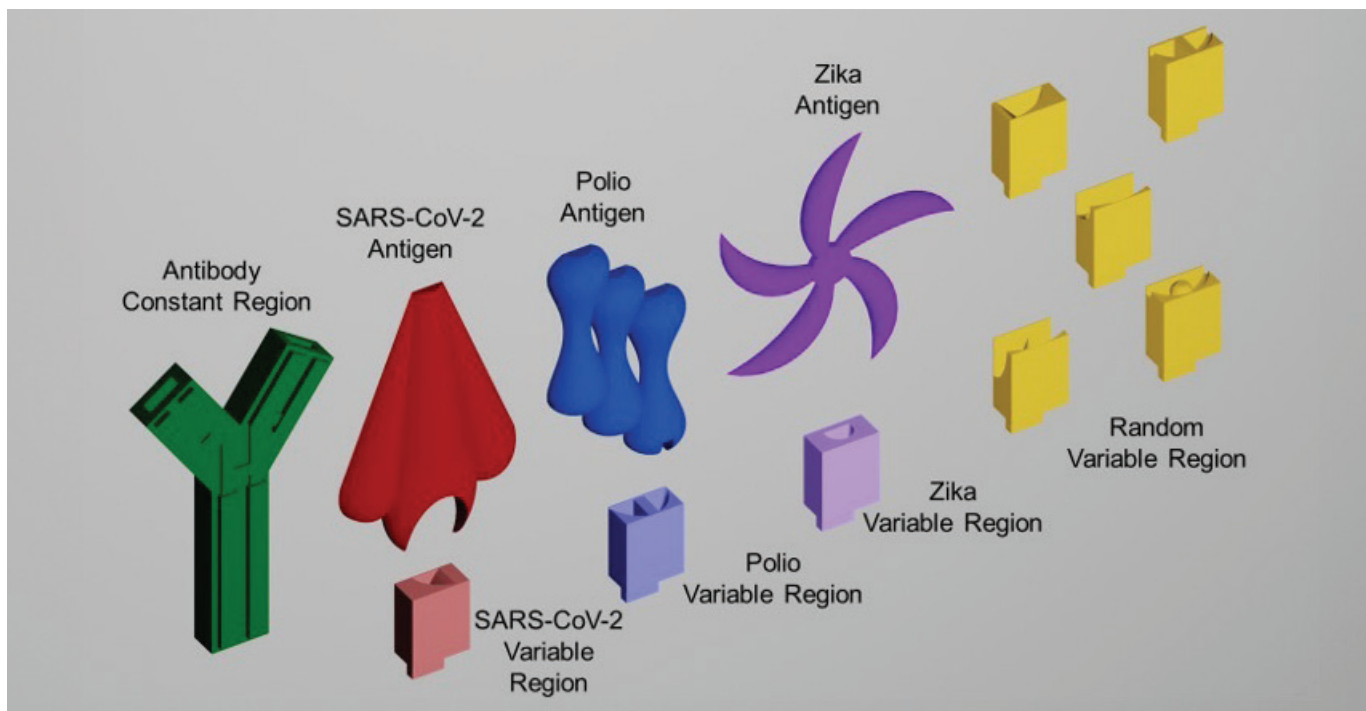
Sarah N. Ohashi<sup>1</sup>, graduate student; Lindsey D. Hughes<sup>1</sup>, Ph.D. (AAI '23), postdoctoral associate; Matthew Spencer<sup>1</sup>, graduate student; Tomomi Yoshida<sup>1</sup>, graduate student; Jennifer Wang<sup>2</sup>, undergraduate student; Sasha Tabachnikova<sup>1</sup> (AAI '21), graduate student; Andrew Woosnam; and Paula Kavathas<sup>1</sup>, Ph.D. (AAI '89), professor.

#### Affiliations:

<sup>1</sup> Department of Immunobiology, Yale School of Medicine; <sup>2</sup> Yale College

The immunological principles underlying vaccines are a critical part of understanding human health and disease but are typically not included in K-12 curriculum (1). The COVID-19 pandemic underscored the importance of science literacy, as a lack of understanding regarding vaccine biology in the general public contributes to vaccine hesitancy (2-3).

Recognizing this knowledge gap, we developed innovative learning activities that would make the concepts of adaptive and herd immunity accessible to middle and high school students. Herein, we present one such learning activity intended to help students visualize the structural features of an antibody and the specificity of antibody-antigen interactions. This active learning exercise has been effective for teaching middle and high school students in stand-alone workshops ranging from 40-60 minutes.



**Figure 1. Rendering of 3D-printed antibody components.** Variable regions interchangeably lock into the antibody constant region. For ease of reading, the color of the variable regions match the antigen in this figure, but we do not recommend retaining this color-matching when printing.

For the antibody activity, each student is provided with a 3D-printed antibody constant region, three model pathogen protein antigens, and three sets of variable region domains that can be exchanged into the constant region of the antibody. Students then explore the ability of their antibody combinations to recognize the different pathogens. This activity illustrates the specificity of antibody-antigen interactions, while providing tactile means for students to understand antibody structure.

To introduce herd immunity, some students receive variable region domains that do not bind the provided antigens; inclusion of these non-binding regions allows instructors to vary what fraction of their class receives antibodies targeting a particular pathogen. The kits can then be used in a game where which students witness how an infectious pathogen spreads through a community depending on vaccination rates (the fraction of students who have an antibody/immunity to a given pathogen). If few students have a given antibody in their kit, the microbe is passed along to more of the students. This activity models how vaccines elicit protection against pathogens at both an individual and population level.

Thus far, these kits have primarily been utilized to teach high school students at Yale's annual Day of Immunology outreach event. In an anonymous survey, students indicated that they enjoyed the activities and content of this vaccine workshop (Mean: 4.56 out of 5 with 5 being most enjoyable; STDEV: 0.65). Moreover, students found the material very understandable, with a mean score of 3.50, STDEV: 0.79, in which 3.0 corresponded with "just right" (1="too easy",

5="too difficult"). Students also reported increased confidence in their ability to explain how vaccines work to a friend or family member. Inclusion of this active learning activity in STEM outreach events or classroom curriculum may, therefore, provide an opportunity for early educational intervention to promote vaccine literacy.

The designs for the 3D-printed antibodies/antigens and all supplementary materials are freely available upon request: [outreach-yaleibio.weebly.com/3d-printed-antibodyantigen-kits.html](http://outreach-yaleibio.weebly.com/3d-printed-antibodyantigen-kits.html). We are working on developing interchangeable constant regions to teach the concept of isotype switching to students at higher educational levels.

### Acknowledgements:

We would like to thank Yale Pathways to Science staff Rick Crouse and Maria Parente, the Yale Immunobiology Department, and AAI for their generous support in the development and implementation of this learning activity at Yale Day of Immunology.

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## The Power of Immunoengineering

*Immunoengineering is a scientific field that involves creating treatments and therapies that use the body's immune system to fight against various illnesses and diseases. By leveraging the power of the human immune system, immunoengineering offers the hope of more effective and personalized treatments for a wide range of diseases.*

The January 15, 2024, issue of *The Journal of Immunology* features a unique collection of Brief Reviews titled “Immunoengineering a Future of Molecular, Material, and Cellular Therapeutics.”

Eugene Oltz, Ph.D. (AAI '95), who was Editor-in-Chief during the curation of this special issue, states, “As the molecules and cells of our immune system become more and more prevalent as therapeutics, it is imperative that we understand how to rationally engineer these immune components to enhance their effectiveness in treating diseases of all kinds.”

To bring attention to the field of immunoengineering, Dr. Oltz invited Jeffrey A. Hubbell, Ph.D. (AAI '22), the Eugene Bell Professor of Tissue Engineering in the Pritzker School of Molecular Engineering at the University of Chicago, to serve as a guest editor for this issue. Dr. Hubbell emphasizes in his editorial that collaborations between immunologists, engineers, and clinicians are crucial for driving the field forward and translating research into tangible clinical applications.

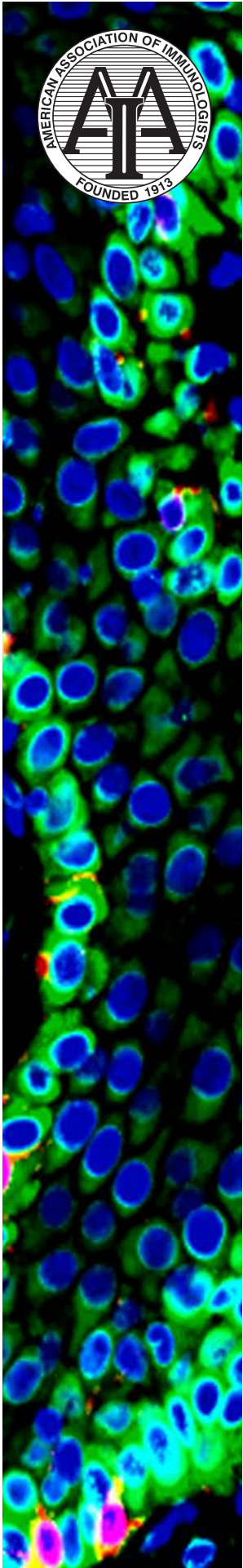
This special issue includes eight Brief Reviews from invited authors working in the cutting edge of immunoengineering research and covers a wide array of topics, serving as an essential primer for those outside the field. Darrell J. Irvine, Ph.D. (AAI '02) and David J. Mooney, Ph.D. highlight the importance of immunoengineering in vaccine design, discussing antigen availability and materials-based cancer vaccines, respectively. A Brief Review by Melody Swartz, Ph.D. (AAI '14) focuses on autologous cellular cancer therapies, such as chimeric antigen receptor (CAR) T cells and dendritic cell vaccines, and antibody engineering. Sai T. Reddy, Ph.D. (AAI '22) discusses the uses of machine learning to engineer antibodies with greater therapeutic effects. Jamie Spangler, Ph.D. reviews the use of antibodies to optimize cytokine efficacy. New materials-based drug deliveries to induce islet tolerance are presented by Evan A. Scott, Ph.D. (AAI '22). James J. Moon, Ph.D. (AAI '11) covers emerging strategies to modulate the microbiome to enhance immune responses against disease. Finally, Susan N. Thomas, Ph.D. (AAI '22) discusses screening methods for cellular trafficking to optimize the movement of therapeutic T cells.

The field of immunoengineering is a promising solution to the ever-evolving health challenges. It marries the precision of engineering with the complexities of the immune system, paving the way for a new era in healthcare. To read these reviews, please visit [journals.aai.org/jimmunol](https://journals.aai.org/jimmunol).

Members are encouraged to suggest topics of interest and potential guest editors and authors for future guest editor collections to Jennifer Gommerman, Ph.D., Deputy Editor, Special Collections, *The Journal of Immunology* at [jen.gommerman@utoronto.ca](mailto:jen.gommerman@utoronto.ca).



*The Journal of Immunology*, Volume 212, Issue 2, 15 January 2024



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# Ludvig Hektoen: First Class in the Second City

Bird's-eye-view of the business district of Chicago, ca. 1898  
Library of Congress

Before Ludvig Hektoen (AAI 1919, president 1926–1927) could begin what would become a long and illustrious career in Chicago, he needed to spend a year at the Northern State Hospital for the Insane in Oshkosh, Wisconsin.

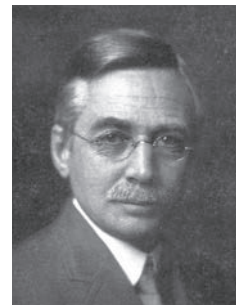
As an aspiring medical student in 1884, Hektoen was unable to pay the tuition at the College of Physicians and Surgeons in Chicago, so he found work as an attendant at the asylum in his home state. The resourceful young man was swiftly put in charge of the hospital's pharmacy. There, he not only saved enough money to start medical school the next fall, but also shadowed the doctors and performed many autopsies himself, developing a lifelong interest in pathology and a head start to his professional education. He would go on to become a key figure at several of the institutes of research in Chicago and practically synonymous with the rise of medical science and immunology in the city.<sup>1</sup>



Northern Hospital, 1885  
Wikimedia Commons

## Early Life

Hektoen's parents came to the United States from Norway by way of Canada in 1854. Nine years later, their first child, Ludvig, was born in Westby, Wisconsin, a community composed almost entirely of Norwegian immigrants. As a child, Hektoen spoke only Norwegian except at school. Even after beginning college at fourteen, half of his curriculum was in his native tongue. When he graduated with a B.A. in 1883, he had not yet taken a single course in science, but a friendship with a local physician in Westby inspired him to take a year of pre-med courses following graduation.<sup>2</sup>



Ludvig Hektoen, undated  
University of Chicago  
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After finishing medical school as valedictorian in 1887, Hektoen had his internship at Cook County Hospital and, like many physician-scientists at the time, went to Europe for further study. Once back in Chicago, he quickly amassed a dizzying number of overlapping positions around Chicago: pathologist at the Cook County Hospital, physician at the Cook County Coroner's Office, and professor at not only the College of Physicians and Surgeons (now University of Illinois College of Medicine) but also Rush Medical College (RMC, now Rush University)—where he also served as curator of the medical history museum. By 1901, he had joint appointments as professor of pathology at RMC and head of the pathology department at the University of Chicago, both of which he held until retirement.<sup>3</sup>

## HISTORY

At this time, the city of Chicago was growing rapidly thanks to industrialization and waves of immigration from Europe: the city more than tripled in population from 1880 to 1900.<sup>4</sup> The 1893 World's Columbian Exposition showcased the city and promoted the idea that urban areas could be beautiful as well as functional. As the city grew, so did its capacity for medical research.

Hektoen's commitment to Chicago as a research center was tested in 1903, when Simon Flexner (AAI 1920) left the University of Pennsylvania for the Rockefeller Institute for Medical Research. Penn tempted Hektoen with Flexner's job as a professor of pathology. His peers, including William H. Welch, urged him to abandon Chicago and take the position at the more prestigious and well-established university. But Hektoen felt an obligation to the city that had given him so many opportunities and had such enormous potential at the turn of the century.<sup>5</sup> He stayed and continued his contributions until he died in 1951.



Electrical Building, World's Columbian Exposition, 1893  
*Library of Congress*

### Rush Medical College

Rush Medical College was chartered in 1837, making it the oldest medical school in Chicago—exactly two days older than the city itself.<sup>6</sup> Ten years later, the nascent institution distinguished itself as the first in the United States to confer a medical degree on an African American, David Jones Peck.<sup>7</sup> By the turn of the 20<sup>th</sup> century, Rush had become the medical school of the University of Chicago, and “Rush doctors” were highly prized throughout the country, especially out west.

When Rush hired Hektoen in 1894, he was given a rather peculiar title as the result of professional rivalry. By this time, he was well known as a pathologist, but John Hamilton, the former Surgeon General of the United States, had already been named professor of pathology at RMC. Not a pathologist by training, Hamilton was given the position largely as a courtesy when he arrived in Chicago in 1893 as editor of the *Journal of the American Medical Association*. To justify the title, Hamilton wrote a textbook on pathology—a volume that Hektoen had reviewed scathingly. When Rush wished to hire Hektoen as chair of pathology, Hamilton remembered his critic and stridently objected, and the administration had to come up with the more creative “professor of morbid anatomy” title—at least until Hamilton's untimely death five years later.<sup>8</sup>



Rush Medical College, ca. 1913  
*Chicago History in Postcards*

From 1898 to 1942, RMC served as the medical school of the University of Chicago, then became affiliated with the University of Illinois until 1969. Today it operates as the medical school of Rush University.

### McCormick Memorial Institute

By the time he was 40 years old in 1903, Hektoen had authored one hundred publications, almost uniformly pathology case studies. But when he accepted a third concurrent position as the inaugural director of the John McCormick Memorial Institute, his career took a sharp turn toward more investigative research into immunity.

Edith Rockefeller and Harold McCormick both came from the families of wealthy industrialists. Edith's father was John D. Rockefeller, the oil magnate, and Harold was the son of Cyrus Hall McCormick, the inventor of the mechanical reaper



Presbyterian Hospital of the City of Chicago, ca. 1906  
*Wikimedia Commons*





Harold Fowler McCormick & Edith Rockefeller, 1895  
*Wikimedia Commons*

and head of International Harvester. When their first son was killed by scarlet fever in 1901, they decided to use a portion of their shared fortune to fund the John R. McCormick Memorial Institute for Infectious Diseases.

The institute's first location was in rented space at Chicago's Presbyterian Hospital (the teaching hospital of RMC), where Hektoen had been the pathologist since 1898.<sup>9</sup> At the institute, he led the drive to provide free care to patients who suffered from many common diseases of the time. The institute treated over 14,000 low-income Chicagoans in its first two decades and had a 97% survival rate for scarlet fever patients. By 1916, it had produced and distributed over 100 million doses of the diphtheria vaccine.

In addition to its public health outreach, the McCormick Institute was the home of important research and development in both print and the laboratory. Under



Scarlet fever quarantine sign, ca. 1910  
*National Library of Medicine*

Hektoen's editorship, the Institute founded *The Journal of Infectious Diseases* in 1904. Hektoen himself was increasingly interested in how the body produces antibodies and the mechanisms by which they work. He pioneered the use of the antibody curve as central to the study of antibody dynamics.<sup>10</sup> During and immediately after the First World War, Hektoen explored how antibody production was affected by various agents that might be encountered on the battlefield, including mustard gas and different forms of radiation—research that ended up being vital in the ensuing atomic age and in the study of leukemia.<sup>11</sup>

When the McCormick Institute was founded, George Dick was one of the first scientists to be recruited. In 1914, Gladys Dick joined her husband there, and ten years later the team identified a group A *Streptococcus* (*S. pyogenes*) as the causative agent of scarlet fever.<sup>12</sup> Using the erythrogenic toxin produced by the bacterium, they developed both a simple test for immunity and an immunizing vaccine for those the test showed to be susceptible.<sup>13</sup> The couple was nominated for the Nobel Prize for their accomplishments in 1925, but no prize for Medicine was awarded that year.



George Dick, undated  
*University of Chicago Library, Special Collections Research Center*



Gladys R. Dick, undated  
*Smithsonian Institution Archives*

## University of Chicago

The University of Chicago was just eight years old when it agreed to an affiliation with RMC in 1898. Founded in large part with a major donation from John D. Rockefeller, the university had sought to expand into medicine quickly, and the partnership with Rush proved beneficial to both institutions, providing the older RMC with necessary financial support, and giving the new university a ready-made medical school.

From 1901, when Hektoen started at the University of Chicago, through 1957, the Department of Pathology was chaired by an AAI president. As soon as he took the position, Hektoen hired H. Gideon Wells (AAI 1918, president 1923–24), who quickly established himself as a capable researcher and administrator. Wells put these skills to use at the end of WWI when he led two Red Cross commissions to Romania to battle typhus and famine, a trip that necessitated crossing portions of Russia in the middle of the Bolshevik Revolution.



H. Gideon Wells, ca. 1912  
*University of Chicago Library, Special Collections Research Center*



Paul R. Cannon, undated  
University of Chicago  
Library, Special Collections  
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Wells chaired the pathology department until 1940 and was succeeded by Paul R. Cannon (AAI 1929, president 1941–42). Cannon had wide-ranging research interests in his early career, but by the time of the Second World War, he was especially concerned with the immunological aspects of famine and starvation. Working with rat models, he showed that protein deficiency has a specific impact on immune response and developed standards for minimum daily protein intake.<sup>14</sup>

### The Trial of Johann Hoch

In addition to his teaching and research work, Hektoen remained a practicing pathologist. In 1905, this expertise led to his involvement in one of the highest-profile murder cases Chicago had ever seen. Johann Hoch, a German immigrant, was facing trial for multiple cases of bigamy and the murder of his latest wife. Hoch had met Marie Welker through a newspaper ad and married her about a week later. Once she had sold her candy business and entrusted the money to Hoch, Welker took ill during the couple’s honeymoon and died within days.<sup>15</sup>



Johann Hoch, 1905  
*The Star Ledger*

Hoch attributed his latest wife’s death to nephritis—just like his previous wife, he claimed. Welker’s sister suspected foul play, and when the body was exhumed, an autopsy revealed arsenic in her system. A police investigation quickly connected Hoch to dozens of similar cases of bigamy, fraud, and murder.

Hektoen examined the body and testified that he found no signs of nephritis. His testimony

contributed to Hoch’s conviction for the murder of his fifty-fifth wife. Further inquiry suggested that Hoch killed at least 15 women but perhaps as many as 50 after marrying them under various assumed identities.

As a pathologist, Hektoen regularly provided expert testimony in murder trials throughout his career, but none ever matched the spectacle and drama of the Hoch case. That same year, though, his successor at Chicago, H. Gideon Wells, participated in the identification of the remains of American Revolutionary War hero John Paul Jones by confirming a diagnosis of nephritis in the Admiral’s brandy-preserved corpse.<sup>16</sup>



Several of Hoch’s alleged wives, 1905  
*The Star Ledger*

### Parrot Fever

While on a 1930 trip to the Hygienic Laboratory in Washington DC, Hektoen found himself on the wrong side of research into psittacosis, or parrot fever. Since 1924, he had been serving in various leadership and consulting roles with the National Research Council and the United States Public Health Service, which often took him to the nation’s capital.<sup>17</sup> During this year-long visit, he contracted psittacosis even though he had not come within 30 feet of any lab working on the disease. As he was the eleventh person at the Hygienic Laboratory to be infected in a brief period, US Surgeon General Hugh Cumming stepped in and temporarily halted research.

The rapid spread of psittacosis among physicians and lab staff turned out to be a happy accident that led to a new understanding of how it could be spread. The disease was unknown in the United States until a pandemic in 1929–1930, caused by the importation of large numbers of parrots for Christmas.<sup>18</sup> It was initially believed to be transmitted primarily from close contact with the birds. Still, the local epidemic in the Hygienic Laboratory was evidence that the



A sailor brings home a pet parrot from his travels on this *Saturday Evening Post* cover, 1929

bacteria could be carried in airborne dust particles of bird droppings. Spurred by the high profile of Hektoen's illness, Cumming reorganized psittacosis research at the laboratory, staffing the labs only with workers who had developed immunity to the disease from prior infection. Hektoen and all but one of the other affected scientists recovered with the help of convalescent serum.<sup>19</sup>

## Lasting Contributions



Ludvig Hektoen, undated  
University of Chicago  
Library, Special Collections  
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One of Hektoen's most enduring contributions to immunology came when he was 70. With William H. Welker, he developed a method of adsorbing antigen to aluminum hydroxide; following intramuscular injection, the antigen would continue to stimulate antibody production for months.<sup>20</sup> Aluminum hydroxide is still one of the most used vaccine adjuvants.

Hektoen remained active in all of these capacities around Chicago and with national organizations well into his seventies. He lived to see

the McCormick Memorial Institute renamed the Hektoen Institute in his honor in 1943. His accomplishments are far too many to list here; for more about his work and other immunology stories in Chicago, visit the History exhibit at **IMMUNOLOGY2024™**.

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## GRANTS AND AWARDS DEADLINES

# AAI Grants and Awards Deadlines

## March 15

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### AAI Careers in Immunology Fellowships

- **Prize/Award:** Multiple awards in support of the laboratories of AAI member principal investigators (PIs), each providing one year's salary for a graduate student or postdoctoral fellow working in the PI's lab
- **Eligibility:** Any AAI member principal investigator with less than \$350,000 (excluding PI salary) in annual direct costs who seeks salary support for an AAI member trainee working in the PI's lab
- **Details:** [www.aai.org/CIFP](http://www.aai.org/CIFP)
- **Contact:** [fellowships@aai.org](mailto:fellowships@aai.org)

## March 15

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### AAI High School Teachers Summer Research Program in Immunology

- **Prize/Award:** Multiple awards providing high school science teachers with the opportunity to participate in a four- to six-week, hands-on summer research experience in the lab of an AAI member; program provides stipend, assistance from an educational consultant in developing an innovative classroom curriculum to be published by AAI on the program website, support to attend a national professional meeting to present program experiences, and support to attend the three-day AAI Introductory Course in Immunology, Part I, to learn the basic principles of the discipline
- **Eligibility:** High school teachers seeking creative ways to bring the excitement of cutting-edge research and discovery to their classrooms while developing their ability to cultivate the next generation of talented biomedical investigators and enhance public understanding of the critical nexus between basic research and human health
- **Details:** [www.aai.org/HSTProgram](http://www.aai.org/HSTProgram)
- **Contact:** [infoaai@aai.org](mailto:infoaai@aai.org)

## June 15

---

### AAI Travel for Techniques Awards

#### *Summer application cycle opens April 15*

- **Prize/Award:** Multiple awards providing up to \$1,500 each in reimbursement of travel expenses for a visit to another laboratory specifically to learn a technique beneficial to award applicant's research
- **Eligibility:** AAI regular and associate member scientists with independent research programs; awarded travel may be that of the applicant, applicant's trainee, or applicant's lab member (traveler must be an AAI member); award selection is based on relevance of the technique to the applicant's program and financial need
- **Details:** [www.aai.org/TravelforTechniques](http://www.aai.org/TravelforTechniques)
- **Contact:** [awards@aai.org](mailto:awards@aai.org)

## September 1

---

### AAI Fellowship Program for Career Reentry

#### *2024 application cycle opens June 1*

- **Prize/Award:** In support of immunologists' reentry into the workforce after a qualifying lapse of research or research training, multiple awards providing one year of salary support to postdoctoral trainees who have taken a leave of absence of one year or more for family-related issues, medical absences, or military obligations
- **Eligibility:** Applicants with a tentative written offer of appointment as a postdoctoral fellow in immunology or a related field; trainees funded under this program may not be supported concomitantly by other fellowships that provide salary compensation
- **Details:** [www.aai.org/ReentryFellowship](http://www.aai.org/ReentryFellowship)
- **Contact:** [fellowships@aai.org](mailto:fellowships@aai.org)

September 1

## AAI Intersect Fellowship Program for Computational Scientists and Immunologists

### 2024 application cycle opens June 1

- **Prize/Award:** Multiple postdoctoral fellowship awards providing one year of salary support allowing immunology researchers to train in computational science and/or computational scientists to train in immunology
- **Eligibility:** At least one of the collaborating PIs seeking support must be an AAI member in good standing; application may be for support of a postdoctoral fellow trained in basic bench research to undertake one year of training in computational science, or a postdoctoral fellow trained in computational science to spend one year in an immunology research lab to learn basic immunological

principles and laboratory techniques; reciprocal six-month exchanges between labs will also be considered; trainees must be in years 1–5 of postdoctoral training in the physical/mathematical/computational sciences, immunology, or related fields (those who have completed five years of training and transitioned into a second postdoctoral position will be considered on a case-by-case basis); trainees funded under this program may not be supported concomitantly by other fellowships that provide salary compensation

- **Details:** [www.aai.org/IntersectFellowship](http://www.aai.org/IntersectFellowship)
- **Contact:** [fellowships@aai.org](mailto:fellowships@aai.org)

## Non-AAI Grants and Awards

Visit the AAI website at [www.aai.org/GrantsAwardsDeadlines](http://www.aai.org/GrantsAwardsDeadlines) for links to non-AAI grant and award program listings and deadlines



## IMPORTANT DATES

### REGISTRATION

Registration Opens . . . . . Now Open  
 Early Registration Discount Ends . . . . . April 4, 2024

### HOUSING

Discounted Housing Reservations . . . . . Now Open  
 Discounted Hotel Rates End . . . . . April 10, 2024

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[WWW.AAI.ORG/FUTUREMEETINGS](http://WWW.AAI.ORG/FUTUREMEETINGS)

# **IMMUNOLOGY2025™**

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**MAY 3 – 7, 2025**



## Mark Your Calendar for These Important Dates!

Dear readers, please note that the meetings listed on these pages were still scheduled at press time, but cancellations may occur. Please check an individual meeting's website to confirm that it is still scheduled.

### April 4–7

#### American Physiology Summit

Long Beach, CA

[www.physiology.org/professional-development/meetings-events/american-physiology-summit](http://www.physiology.org/professional-development/meetings-events/american-physiology-summit)

### April 5–10

#### American Association for Cancer Research (AACR) Annual Meeting 2024

San Diego Convention Center, San Diego, California

[www.aacr.org/meeting/aacr-annual-meeting-2024](http://www.aacr.org/meeting/aacr-annual-meeting-2024)

### April 11–14

#### WCO-IOF-ESCEO 2024: World Congress on Osteoporosis, Osteoarthritis, and Musculoskeletal Diseases

Hilton London Metropole, London, England

[www.wco-iof-esceo.org](http://www.wco-iof-esceo.org)


### April 22–25

#### Canadian Society for Immunology (CSI) Annual Conference 2024

The Banff Centre, Banff, Alberta, Canada

[www.csi-sci.ca/Scientific\\_Meeting.html](http://www.csi-sci.ca/Scientific_Meeting.html)

### May 3–7



IMMUNOLOGY2024™  
107<sup>th</sup> AAI Annual Meeting  
Chicago, Illinois  
[immunology2024.aai.org](http://immunology2024.aai.org)

### May 8–11

#### American Society of Gene and Cell Therapy (ASGCT) 27<sup>th</sup> Annual Meeting

Baltimore Convention Center, Baltimore, MD

[asgct.org/annual-meeting/future-annual-meetings](http://asgct.org/annual-meeting/future-annual-meetings)

### May 17–20

#### International Congress on Autoimmunity

Ljubljana, Slovenia

[autoimmunity.kenes.com](http://autoimmunity.kenes.com)

### May 18–22

#### American Society for Reproductive Immunology (ASRI) Annual Meeting 2024

Royal Sonesta Houston Galleria, Houston, TX

[theasri.org/2024-Houston](http://theasri.org/2024-Houston)

### May 27–June 1

#### 9<sup>th</sup> International Conference on Osteoimmunology: Interactions of the Immune and Skeletal Systems

Wyndham Loutraki Poseidon Conference Center, Loutraki, Ancient Corinth, Greece

[www.aegeanconferences.org/src/App/conferences/view/173](http://www.aegeanconferences.org/src/App/conferences/view/173)

### May 29–31

#### 11<sup>th</sup> International Mast Cell and Basophil Meeting of the European Mast Cell and Basophil Research Network (EMBRN)

Toulouse, France

[www.embrn.eu](http://www.embrn.eu)

### June 1–5

#### American Transplant Congress (ATC) 2024

Pennsylvania Convention Center, Philadelphia, PA

[atcmeeting.org](http://atcmeeting.org)

### June 12–16

#### American Society for Microbiology (ASM) Microbe 2024

Atlanta, GA

[asm.org/events](http://asm.org/events)

### June 18–21

#### Federation of Clinical Immunology Societies (FOCIS) Annual Meeting 2024

San Francisco, CA

[www.focisnet.org/meetings/focis-2024](http://www.focisnet.org/meetings/focis-2024)

### June 22–23

#### Inflammatory Brain Disorders Conference 2024

Sheraton, Palo Alto, California

[neuroimmune.org/conference/inflammatory-brain-disorders-conference](http://neuroimmune.org/conference/inflammatory-brain-disorders-conference)

### July 6–10

#### International Congress of Mucosal Immunology (ICMI) 2024

Copenhagen, Denmark

[www.socmucimm.org/meetings-events/upcoming-meetings-events](http://www.socmucimm.org/meetings-events/upcoming-meetings-events)

### September 1–4

#### 7<sup>th</sup> European Congress of Immunology (ECI): Conquering Challenges with Immunology

Dublin, Ireland

[eci2024.org](http://eci2024.org)

### September 2–6

#### 19<sup>th</sup> European Meeting on Complement in Human Diseases

Lübeck, Germany

[www.emchd2024.org](http://www.emchd2024.org)

### September 17–19

#### NEUTROPHIL 2024

München, Germany

[theneutrophil.com](http://theneutrophil.com)

### October 20–23

#### International Cytokine & Interferon Society (ICIS) Annual Meeting 2024

Seoul, Korea

[cytokinesociety.org/meetings/future-meetings](http://cytokinesociety.org/meetings/future-meetings)

### October 21–25

#### American Society for Histocompatibility and Immunogenetics (ASHI) Annual Meeting 2024

Marriott Anaheim, Anaheim, CA

[www.ashi-hla.org/page/Meetings](http://www.ashi-hla.org/page/Meetings)

### October 22–25

#### Society for Leukocyte Biology (SLB) 2024

Kellogg Hotel and Conference Center of Michigan State University, Lansing, MI

[www.leukocytebiology.org/meetings](http://www.leukocytebiology.org/meetings)

### October 23–27

#### American Society of Tropical Medicine & Hygiene (ASTMH) Annual Meeting

New Orleans Ernest N. Morial Convention Center, New Orleans, LA

[www.astmh.org/annual-meeting](http://www.astmh.org/annual-meeting)

## MEETINGS AND EVENTS

**October 31–November 2**

**Society for Advancement of Chicanos/  
Hispanics and Native Americans in  
Science (SACNAS): The National Diversity  
in STEP Conference**

Phoenix, AZ

[www.sacnas.org/conference](http://www.sacnas.org/conference)

**November 3–6 | Hybrid Meeting**

**The Obesity Society: Obesity Week 2024**

San Antonio, TX

[obesityweek.org/attend/future-dates](http://obesityweek.org/attend/future-dates)

**November 5–9**

**American Society of Human Genetics  
(ASHG) Annual Meeting 2024**

Denver, CO

[www.ashg.org/meetings/future-past](http://www.ashg.org/meetings/future-past)

**November 6–10**

**Society for Immunotherapy of Cancer  
(SITC) Annual Meeting 2024**

George R. Brown Convention Center,  
Houston, TX

[www.sitcancer.org/education/  
annualmeeting/archive](http://www.sitcancer.org/education/annualmeeting/archive)

**November 13–16**

**ABRCMS 2024: Annual Biomedical Research  
Conference for Minoritized Scientists**

Pittsburg, PA

[abrcms.org](http://abrcms.org)

**November 16–19**

**American College of Veterinary  
Pathologists (ACVP) 2024 Annual Meeting**

Hyatt Regency Seattle, Seattle, WA

[www.acvp.org/page/Future\\_Meetings](http://www.acvp.org/page/Future_Meetings)

**December 7–10**

**American Society of Hematology (ASH)  
66<sup>th</sup> Annual Meeting and Exposition**

San Diego Convention Center, San Diego, CA

[www.hematology.org/meetings/  
annual-meeting](http://www.hematology.org/meetings/annual-meeting)

**December 11–15**

**American Geophysical Union (AGU)  
Annual Meeting**

Washington, DC

[www.agu.org/Plan-for-a-Meeting/  
AGUMeetings](http://www.agu.org/Plan-for-a-Meeting/AGUMeetings)

**December 14–18**

**American Society for Cell Biology  
(ASCB): Cell Bio 2024**

San Diego, CA

[www.ascb.org/meetings-events/future-ascb-meetings](http://www.ascb.org/meetings-events/future-ascb-meetings)

## 2025

**February 15–19**

**Biophysical Society (BPS) Annual  
Meeting 2025**

Los Angeles Convention Center,  
Los Angeles, CA

[www.biophysics.org/upcoming-  
annual-meetings](http://www.biophysics.org/upcoming-annual-meetings)

**April 10–13**

**WCO-IOF-ESCEO 2025: World Congress  
on Osteoporosis, Osteoarthritis, and  
Musculoskeletal Diseases**

Roma Convention Center, Rome, Italy

[www.wco-iof-esceo.org](http://www.wco-iof-esceo.org)

**April 14–17**

**Canadian Society for Immunology (CSI)  
Annual Conference 2025**

Hilton Lac-Leamy, Gatineau, Quebec

[www.csi-sci.ca/Scientific\\_Meeting.html](http://www.csi-sci.ca/Scientific_Meeting.html)



**June 24–27**

**Federation of Clinical Immunology  
Societies (FOCIS) Annual Meeting 2025**

Boston Marriott Copley Place,  
Boston, MA

[www.focisnet.org/meetings/focis-2024](http://www.focisnet.org/meetings/focis-2024)

**September 14–19**

**International Complement Workshop 2025**

Brisbane, Australia

[www.complement.org/Events](http://www.complement.org/Events)

**October 14–18**

**American Society of Human Genetics  
(ASHG) Annual Meeting 2025**

Boston, MA

[www.ashg.org/meetings/future-past](http://www.ashg.org/meetings/future-past)

**October 25–28**

**American College of Veterinary  
Pathologists (ACVP) 2025 Annual Meeting**

Sheraton New Orleans, New Orleans, LA

[www.acvp.org/page/Future\\_Meetings](http://www.acvp.org/page/Future_Meetings)

**October 30–November 1**

**Society for Advancement of Chicanos/  
Hispanics and Native Americans in  
Science (SACNAS): The National  
Diversity in STEP Conference**

Columbus, OH

[www.sacnas.org/conference](http://www.sacnas.org/conference)

**November 4–7**

**The Obesity Society: Obesity Week 2025**

Atlanta, GA

[obesityweek.org/attend/future-dates](http://obesityweek.org/attend/future-dates)

**November 9–13**

**American Society of Tropical Medicine &  
Hygiene (ASTMH) Annual Meeting**

Metro Toronto Convention Centre,  
Toronto, Ontario, Canada

[www.astmh.org/annual-meeting/past-  
meetings#Future%20Annual%20Meetings](http://www.astmh.org/annual-meeting/past-meetings#Future%20Annual%20Meetings)

**December 6–10**

**American Society for Cell Biology  
(ASCB): Cell Bio 2025**

Philadelphia, PA

[www.ascb.org/meetings-events/  
future-ascb-meetings](http://www.ascb.org/meetings-events/future-ascb-meetings)

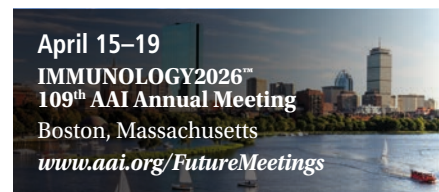
**December 15–19**

**American Geophysical Union (AGU)  
Annual Meeting**

New Orleans, LA

[www.agu.org/Plan-for-a-Meeting/  
AGUMeetings](http://www.agu.org/Plan-for-a-Meeting/AGUMeetings)

## 2026



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#### Key features include:

- Configurable with up to 7 lasers and 186 detectors for highest flexibility in panel design
- Best-in-class AutoSampler enables walkaway operation for 24-tube rack, as well as multiple 96- and 384-well plates
- SFA – Life Sciences Cloud Platform, a flow cytometry data analysis cloud solution for handling high parameter data



### FP7000 Spectral Cell Sorter

This leading-edge innovation from Sony integrates key core technologies in spectral cell analysis and system design to deliver a high-performance spectral cell sorter that is reliable and capable of supporting your high parameter applications.

#### Key features include:

- Configurable with up to 6 lasers and 182 detectors
- 3 nozzle sizes – 70 µm, 100 µm and 130 µm to sort cells of varying sizes
- 6-way sorting capability at event rates of 25,000 events per second

Learn how the ID7000 and FP7000 can meet the needs of your laboratory in supporting high-parameter research applications.

[go.sonybiotechnology.com/FP7000](https://go.sonybiotechnology.com/FP7000)

