

AAI COURSE IN BIG DATA ANALYSIS IN IMMUNOLOGY

September 6–9, 2017

Johns Hopkins University Montgomery County Campus www.aai.org/education/courses

Rockville, Maryland



The vast amount of immunological data has pushed immunology research into the big data era. The challenge for immunologists is to transition from working with data, to obtaining knowledge that can be used to generate data-driven hypotheses. Knowledge discovery relies on both the availability of accurate and well-organized data, and proper analysis.

The **AAI Course in Big Data Analysis in Immunology** will provide hands-on training in specialized analysis of large immunological datasets. Topics covered include, but are not limited to: reproducibility, introduction to programming (Linux and R), high-throughput flow cytometry data analysis,

RNA sequencing data analysis, downstream analysis, biological data repositories (ImmPort, Immune Epitope Database, and Analysis Resource), and biological networks. This course is taught by leading bioinformatics experts and is suitable for attendees with a background in immunology. Previous programming experience is helpful but is not required. Course attendees will need to bring their own laptops.

This course is sponsored by The American Association of Immunologists, the largest association in the world for professional immunologists.

www.aai.org/education/courses

Notice: While AAI has rented facilities from the Johns Hopkins University, AAI and any programs operated by it are not related to or affiliated with the Johns Hopkins University in any way. AAI is an entirely separate legal entity with no connection to the Johns Hopkins University, aside from the temporary use of facility for the specified program.



The Career Advisory Board

A RESOURCE FOR SENIOR POSTDOCS
AND EARLY-CAREER FACULTY

Serving on NIH study sections

ing a mentor Timing for first grant submission







Handling personnel issues
Preparing for leadership Finding a mentor

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

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



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

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

Selected Topics

Balancing family and work

Timing for first grant submission

Recruiting

Handling personnel issues

Managing a lab

Finding a mentor

Building networks

Preparing for leadership

Balancing service obligations

Teaching

Serving on NIH study sections



Comprehensive • Authoritative • Foundational

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

Comprehensive

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

Authoritative

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

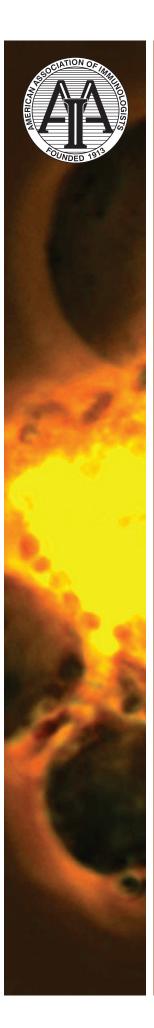
Foundational

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

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

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





2017 INTRODUCTORY COURSE IN IMMUNOLOGY

July 11-16, 2017 | UCLA Luskin Conference Center | Los Angeles, California

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

University of Toronto and Sunnybrook Research Institute

Don't miss the most comprehensive introduction to immunology available!

This intensive two-part course, taught by world-renowned immunologists, provides a comprehensive overview of the basics of immunology. This course is for students new to the discipline or those seeking more information to complement general biology or science training. Part I (July 11–13) is a detailed introduction to the basic principles of immunology and is suitable for students with a general biology background. Part II (July 14–16) is a clinically oriented lecture series focusing on specialty areas.

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

Faculty

Juan Carlos Zúñiga-Pflücker, University of Toronto and Sunnybrook Research Institute Introduction to the Immune System

Lewis L. Lanier, University of California, San Francisco Innate Immunity: Introduction to the Cells

Deborah A. Fraser, California State University Long Beach Complement

Helen S. Goodridge, Cedars-Sinai Medical Center Innate Immunity: Introduction to Pattern Recognition and Intracellular Signaling

Wendy L. Havran, The Scripps Research Institute Introduction to Adaptive Immunity

Nilabh Shastri, *University of California, Berkeley Antigen Processing and Presentation*

Juan Carlos Zúñiga-Pflücker, University of Toronto and Sunnybrook Research Institute MHC Restriction and Thymic Selection

David Nemazee, The Scripps Research Institute B Cell Development and Maturation

Christine Moussion, Genentech, Inc.

Dendritic Cells: The Bridge Between Innate and

Adaptive Immunity

Michael Croft, La Jolla Institute for Allergy and Immunology

Effector T Cell Differentiation and Response

Shane Crotty, *La Jolla Institute for Allergy* and *Immunology*

B Cell Activation and Humoral Immunity

M. Carrie Miceli, University of California, Los Angeles Signaling in the Immune System Ninan Abraham, University of British Columbia Cytokines

Stephen M. Hedrick, University of California, San Diego Host-Pathogen Co-evolution in Human Beings: the Red Queen and the Grim Reaper

Megan K. Levings, University of British Columbia T and B Cell Tolerance

Matthias G. von Herrath, *La Jolla Institute* for Allergy and Immunology *Autoimmunity*

Michelle Hickey, University of California, Los Angeles Transplantation

Cathryn Nagler, *University of Chicago Mucosal Immunology*

Marion Pepper, University of Washington
Type 2 Immunity

Antoni Ribas, *University of California, Los Angeles Tumor Immunology*

Robert L. Modlin, University of California, Los Angeles David Geffen School of Medicine Immunity to Bacterial Pathogens

Elina Zuniga, University of California, San Diego Immunity to Viruses

Martin Prlic, Fred Hutchinson Cancer Research Center Immunologic Memory

Nicole Frahm, Fred Hutchinson Cancer Research Center Vaccination

Donald B. Kohn, *University of California, Los Angeles Genetic Approaches to Immune-Mediated Diseases*

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

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

For assistance, contact (301) 634-7178 or meetings@aai.org. Overseas applicants are advised to apply early for visas; for details, visit www.aai.org/Education/Courses/Visa.html.

Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit www.faseb.org/Professional-Development-and-Diversity-Resources/Travel-Awards.aspx.



2017 ADVANCED COURSE IN IMMUNOLOGY

July 23-28, 2017 I Seaport World Trade Center I Boston, Massachusetts

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

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

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

This intensive course is directed toward advanced trainees and scientists who wish to expand or update their understanding of the field.

Leading experts will present recent advances in the biology of the immune system and address its role in health and disease. This is not an introductory course; attendees will need to have a firm understanding of the principles of immunology.

Faculty

Ulrich H. von Andrian, *Harvard Medical School Ragon Institute of MGH, MIT and Harvard Anatomy of the Immune Response*

Jonathan C. Kagan, Children's Hospital Boston Harvard Medical School Innate Immunity: Pattern Recognition and Anti-microbial Mechanisms

Bruce Horwitz, Brigham & Women's Hospital Harvard Medical School Innate Immunity: Gene Regulation

Paul Kubes, University of Calgary Innate Immunity: Cellular Mechanisms

Wayne M. Yokoyama, Washington University School of Medicine

NK Cells — Their Receptors and Function in Health and Disease

John P. Atkinson, Washington University School of Medicine

Complement System in Innate and Adaptive Immunity

Edward M. Behrens, Children's Hospital of Philadelphia
Dendritic Cells

Eugene M. Oltz, Washington University School of Medicine

The Generation and Modification of Lymphocyte Antigen Receptor Genes

Lisa A. Borghesi, University of Pittsburgh School of Medicine

B Cell Development

Avinash Bhandoola, NCI, NIH T Cell Development

Kai W. Wucherpfennig, Dana-Farber Cancer Institute Harvard Medical School MHC-restricted Antigen Presentation to T Cells Leslie J. Berg, University of Massachusetts
Medical School

Signaling from Antigen Receptors

David Masopust, University of Minnesota Center for Immunology T Cell Memory

Joshy Jacob, Emory University B Cell Memory

Arup K. Chakraborty, Massachusetts Institute of Technology

Computational Modeling of Immunological Processes

Brian A. Cobb, Case Western Reserve University School of Medicine **Glycoimmunology**

Richard S. Blumberg, Brigham & Women's Hospital Harvard Medical School Mucosal Immunity

Bruce D. Walker, *Ragon Institute of MGH, MIT and Harvard*

Immune Response to Pathogens

Jennifer Anolik, University of Rochester Medical Center

B Cell Tolerance and Autoimmunity

David A. Hafler, *Yale School of Medicine T Cell Tolerance and Autoimmunity*

Jonathan Kipnis, *University of Virginia School of Medicine*

Neuroimmunology

Lisa H. Butterfield, *University of Pittsburgh Tumor Immunology*

Joanne L. Viney, JLV Biotech Consulting **Immunotherapeutics**

Gary J. Nabel, Sanofi Vaccines

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

For assistance, contact **(301) 634-7178** or **meetings@aai.org**. Overseas applicants are advised to apply early for visas; for details, visit **www.aai.org/Education/Courses/Visa.html**.

Financial support for underrepresented minority scientists is available through the FASEB MARC Program; for details, visit www.faseb.org/Professional-Development-and-Diversity-Resources/Travel-Awards.aspx.

Future AAI Annual Meetings

Mark Your Calendar for the Premier Annual Immunology Event!

2018



IMMUNOLOGY 2018™ May 4–8 Austin, Texas 2019



IMMUNOLOGY 2019" May 9–13 San Diego, California 2020



IMMUNOLOGY 2020 May 8–12 Honolulu, Hawaii

GRIP Tont Povious for Immunologists

Grant Review for Immunologists Program

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

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

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

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



Program details at aai.org/Education/GRIP