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 data-sets. 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

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A RESOURCE FOR SENIOR POSTDOCS AND EARLY-CAREER FACULTY

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 PIs 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 PIs to obtain advice on a specific question from established investigators outside of their home institutions—often through a single phone call.

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Timing for first grant submission
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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
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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.

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• Your “first stop” for major advances
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1. 2015 Journal Citation Reports
2. 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/ei-jcr-brochure.pdf, accessed 12/23/15
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
Immunology to Bacterial Pathogens

Elina Zuniga, University of California, San Diego
Immunology 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 | Seaport World Trade Center | 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
Glycomimunology

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.
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IMMUNOLOGY 2018™
May 4–8
Austin, Texas

2019
IMMUNOLOGY 2019™
May 9–13
San Diego, California

2020
IMMUNOLOGY 2020™
May 8–12
Honolulu, Hawaii

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