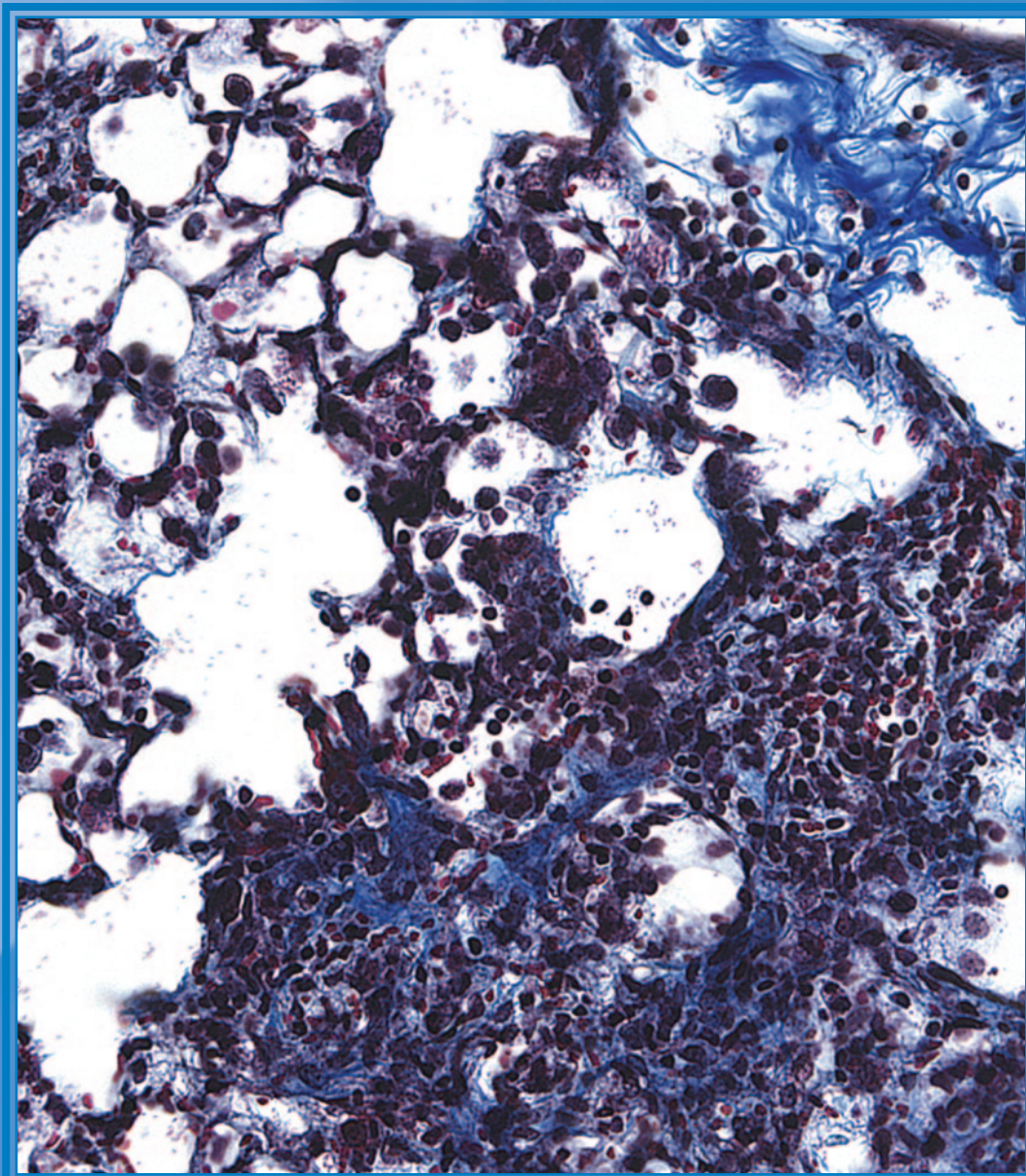


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Volume 176 / No. 7 / April 1, 2006

# IMMUNOLOGY

THE JOURNAL OF







## 2006 AAI Award Recipients

The American Association of Immunologists congratulates the following distinguished members on their selection as AAI Award Recipients for 2006.

### *AAI Lifetime Achievement Award*

Hugh O. McDevitt, M.D., Stanford University  
School of Medicine



*In recognition of  
distinguished scientific  
accomplishment and  
extraordinary service  
to the AAI*

### *AAI Distinguished Service Award*

Leslie J. Berg, Ph.D., University of Massachusetts  
Medical School



*For dedicated leadership  
as the Chair of the  
AAI Program Committee  
(2003-2006)*

### *AAI Excellence in Mentoring Award*

Norman R. Klinman, M.D., Ph.D., The Scripps  
Research Institute



*In recognition of exemplary  
career contributions to a  
future generation of  
scientists*

### *AAI-Dana Foundation Award in Human Immunology Research*

Max D. Cooper, M.D., University of Alabama,  
Birmingham, School of  
Medicine



*For a record of significant  
achievement and sustained  
accomplishment in  
immunology research pertinent  
to human disease pathogenesis,  
prevention, and therapy*

### *AAI-Huang Foundation Meritorious Career Award*

Laurie H. Glimcher, M.D., Harvard Medical  
School, Harvard School  
of Public Health



*For a career of sustained  
achievement and  
contribution to the field  
of immunology*

### *AAI-BD Biosciences Investigator Award*

Ruslan Medzhitov, Ph.D., HHMI-Yale University  
School of Medicine



*For outstanding, early-career  
research contributions to the  
field of immunology*

The 2006 AAI Awards will be conferred at IMMUNOLOGY 2006, The AAI Annual Meeting,  
May 12-16, 2006, in Boston, MA.



**THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS**  
***INSTANT Trainee Membership !!***



A visit to the AAI Booth could be your most valuable stop during  
IMMUNOLOGY 2006! Come to AAI Booth #201 in the  
Exhibit Hall to complete an application form and secure  
the benefits of Trainee Membership in AAI:

- Membership in the largest and most prestigious professional association of immunologists in the world -- over 6,500 AAI-member scientists working together to advance immunology research and address issues that affect their careers
- A subscription to *The Journal of Immunology*, which includes a print copy as well as on-line access and free access to a searchable, full text archive
- A subscription to the *AAI Newsletter*
- **REDUCED** registration rates at AAI and FASEB society meetings
- Eligibility for AAI Awards
- **Effective representation!** Your views, issues, and concerns on research funding and science policy brought before Congress and responsible federal agencies by professional staff and member-driven committees

***Become an AAI Trainee Member on the spot!***  
***Visit AAI Booth #201!***







Cadmus Communications

Congratulates

The American Association of Immunologists  
on 90 years of supporting the scientific  
community through publication of  
*The Journal of Immunology*

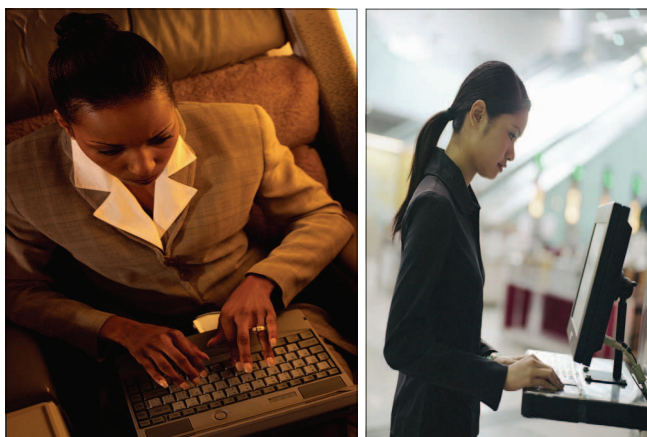
1916-2006





# AAI/IMMUNOLOGY 2006 Career Activities

AAI Annual Meeting/Immunology 2006 —Boston, Massachusetts —May 12-16, 2006



## AAI/IMMUNOLOGY 2006 Virtual Career Fair

The AAI/FASEB Virtual Career Fair will operate between April 10 and May 31, 2006, and will be located on the Internet at: <http://careers.faseb.org/>.

In addition to online services, space will be available for scheduling/conducting interviews during each day of the meeting. Career development seminars, resume critiquing and one-on-one career counseling services are also available.

You must be wearing an AAI/IMMUNOLOGY 2006 or FASEB Career Center badge in order to participate in the onsite events.

- This service is FREE for candidates/ job seekers. Post your resume and candidate qualifications online.
- Employers pay a \$275 registration fee and post an unlimited number of employment opportunities online.
- Search employer job listings and candidate resume profiles; send/ receive electronic messages; and request/schedule interviews
- Limited interview space will be available onsite on a first-come-first-served basis
- Visit the "AAI/FASEB Career Corner" at the meeting for career development seminars, one-on-one resume critiques and career counseling services by experts in the field



**Hours of Operation:**  
8AM-5PM (Friday thru Monday)

Register online at <http://careers.faseb.org/>, or onsite at the Hynes Convention Center.

*This is a service arranged by AAI/ IMMUNOLOGY 2006 and provided by FASEB Career Resources.*





## THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

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### AAI Committee Chairs

David H. Raulet, *Awards Committee*  
Terri M. Laufer, *Clinical Immunology Committee*  
Ellen Kraig, *Committee on Public Affairs*  
Lori R. Covey, *Committee on the Status of Women*  
Peter E. Jensen, *Education Committee*  
Steven J. Burakoff, *Finance Committee*  
Nancy E. Street, *Membership Committee*  
Randy R. Brutkiewicz, *Minority Affairs Committee*  
Kristin A. Hogquist, *Nominating Committee*  
Leslie J. Berg, *Program Committee*  
Judy M. Teale, *Publications Committee*  
William T. Golde, *Veterinary Immunology Committee*

### AAI Program Committee

Leslie J. Berg, *Chair, University of Massachusetts Medical School*  
Marcia Blackman, *Trudeau Institute*  
Linda M. Bradley, *University of California, San Diego*  
Michael C. Carroll, *CBR Institute of Biomedical Research*  
Wendy L. Havran, *Scripps Research Institute*  
Eric O. Long, *NIAID, NIH*  
Robin G. Lorenz, *University of Alabama at Birmingham*  
John G. Monroe, *University of Pennsylvania*  
Andrey S. Shaw, *Washington University School of Medicine*  
Barry P. Sleckman, *Washington University School of Medicine*  
Dale T. Umetsu, *Harvard Medical School*

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### FOR MEETING INFORMATION CONTACT

#### **IMMUNOLOGY 2006**

9650 Rockville Pike  
Bethesda, MD 20814  
Phone: 301-634-7010 Fax: 301-634-7014  
[www.faseb.org/meetings](http://www.faseb.org/meetings)





The American Association of Immunologists  
**2006 Introductory Course in Immunology**

**June 23 - 29, 2006**

The University of Pennsylvania, Philadelphia, PA

This 38-hour, two-part course will give students the tools necessary to understand and discuss current topics and methods in the field of Immunology. Part I (June 24-26) is a comprehensive introduction to the basic principles of immunology and is suitable for students with a general biology background. Part II (June 26-29) is a lecture course covering major areas of immunology and will require an understanding of basic immunology. Parts I and II may be taken independently at the discretion of the student. 38 Continuing Medical Education (CME) Category I credits are offered.\* Minority Access to Research Careers (MARC) travel awards are available. **Registration Deadline: June 2, 2006.**

**Course Directors:** Terri M. Laufer, M.D., and John G. Monroe, Ph.D., University of Pennsylvania School of Medicine

**Part I: June 24-26**

- **John Monroe**, Univ Penn Sch Med  
*Overview*
- **Kathleen Sullivan**, Children's Hosp of Philadelphia  
*Innate immune systems*
- **Jennifer Punt**, Haverford Col  
*Adaptive immune system and memory*
- **John Monroe**, Univ Penn Sch Med  
*Molecular basis of diversity and antibody formation*
- **David Allman**, Univ Penn Sch Med  
*B cell development*
- **Terri Laufer**, Univ Penn Sch Med  
*Introduction to the MHC*
- **Mickey Marks**, Univ Penn Sch Med  
*Antigen processing and presentation*
- **Alfred Singer**, NCI, NIH  
*T cell development*
- **Gary Koretzky**, Univ Penn Sch Med  
*Antigen receptor proximal signaling*
- **Laurence Turka**, Univ Penn Sch Med  
*B and T cell activation and co-stimulation*
- **Craig Thompson**, Univ Penn Sch Med  
*Lymphocyte homeostasis and apoptosis*
- **Marc Jenkins**, Univ Minn Sch Med  
*Visualization of immune response: putting back the pieces*

**Part II: June 27-29**

- **Andrew Caton**, Wistar Institute  
*T and B cell tolerance*
- **Randolph Noelle**, Dartmouth Med Col  
*Lymphocyte activation and effector responses*
- **Cathryn Nagler**, Mass Gen Hospital  
*Mucosal immunology*
- **Betty Diamond**, Columbia Univ Med Ctr  
*From autoimmunity to autoimmune disease*
- **Phillip Scott**, Univ Penn Sch Vet Med  
*Immunity to parasites*
- **George Yap**, Brown Univ  
*Intracellular infections and infectious disease*
- **Joel Ernst**, NYU Sch Med  
*Immunity to bacterial infections*
- **Andy Hurwitz**, NIH  
*Tumor Immunology*
- **Robert Seder**, NIAID, NIH  
*Vaccines*
- **Arnold Levinson**, Univ Penn Sch Med  
*IgE-mediated hypersensitivity*
- **Mary Ellen Conley**, Univ Tenn Med Group, Inc.  
*Immunodeficiencies*
- **Wayne Hancock**, Children's Hosp of Philadelphia  
*Transplantation*
- **Andrew Chan**, Genentech, Inc.  
*Current problems in clinical immunology*

**FOR INFORMATION, COURSE OUTLINES, AND REGISTRATION, VISIT:**

**[www.aai.org/Courses.htm](http://www.aai.org/Courses.htm)**

For questions or assistance in registering, contact **[aaioffice@aai.org](mailto:aaioffice@aai.org)** or **301-634-7178**.  
**Overseas applicants are advised to apply early for visas.**

\* This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Federation of American Societies for Experimental Biology (FASEB) and the AAI. FASEB is accredited by the ACCME to provide CME for physicians. FASEB designates this educational activity for up to 38 credit hours in category 1 credit towards the AMA Physician's Recognition Award.





The American Association of Immunologists  
**2006 Advanced Course in Immunology**

**July 15 - 21, 2006**  
Stanford University, Stanford, California

This intensive annual course is designed for serious students of immunology. Leading experts will present recent advances in understanding the biology of the immune system and its role in health and disease. This course is directed toward advanced trainees and scientists who wish to expand or update their understanding of the field. This is not a survey course and requires that attendees have a firm understanding of the principles of immunology. 43 Continuing Medical Education (CME) Category I credits are offered.\* Minority Access to Research Careers (MARC) travel awards are available.  
**Registration Deadline: June 2, 2006.**

**Course Director:** Olivia Martinez, Stanford University School of Medicine, Palo Alto, CA

**FACULTY**

- **Mitch Kronenberg**, La Jolla Inst for Allergy and Immunology  
*Innate immunity*
- **Lewis Lanier**, Univ of Cal, San Francisco  
*NK cells*
- **Gwendalyn Randolph**, Mt. Sinai Med Ctr  
*Dendritic cells*
- **Nilabh Shastri**, Univ of Cal, Berkeley  
*Antigen presentation and processing I*
- **Peter Jensen**, Univ of Cal, San Fran  
*Antigen presentation and processing II*
- **Ellen Rothenberg**, Cal Inst of Tech  
*T cell development*
- **Ann Feeney**, Scripps Res Inst  
*B cell development*
- **Chris Garcia**, Stanford Univ Sch Med  
*Structural basis of immune recognition*
- **Mark Davis**, Stanford Univ Sch Med  
*T cell antigen recognition*
- **Andrew Chan**, Genentech, Inc.  
*Signal transduction*
- **Fred Ramsdell**, Zymogenetics, Inc.  
*T regulatory cells*
- **Jason Cyster**, Univ of Cal, San Francisco  
*B cell activation and tolerance*
- **Michael Croft**, La Jolla Inst for Allergy & Immunology  
*Co-stimulatory molecules*
- **Charles Surh**, Scripps Res Inst  
*Memory and homeostasis*
- **Carl Ware**, La Jolla Inst for Allergy & Immunology  
*Mediators of the immune response*
- **Phillip Scott**, Univ of Penn  
*T cell response to pathogens*
- **William Robinson**, Stanford Univ Sch Med  
*Autoimmunity*
- **Phillip Greenberg**, Univ of Washington  
*Tumor Immunology*
- **Olivia Martinez**, Stanford Univ Sch Med  
*Transplantation immunology*
- **KEYNOTE SPEAKER**  
**Art Weiss**, Univ of Cal, San Francisco  
*T cell receptor signaling*

**FOR INFORMATION, COURSE OUTLINES, AND REGISTRATION, VISIT:**

**[www.aai.org/Courses.htm](http://www.aai.org/Courses.htm)**

For questions or assistance in registering, contact **[aaioffice@aai.org](mailto:aaioffice@aai.org)** or **301-634-7178**.  
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## AAI 2006 ABSTRACT BLOCK CHAIRS

The AAI thanks the Abstract Block Chairs for their vital role in reviewing and programming abstracts submitted to **IMMUNOLOGY 2006**.

### **Hematopoiesis and Immune System Development**

Cynthia Guidos, Ph.D.  
Hospital for Sick Children, Toronto

Avinash Bhandoola, M.D., Ph.D.  
Univ of Pennsylvania Medical School

### **Immune System Regulation**

Pamela Fink, Ph.D.  
Univ of Washington School of Medicine

Casey Weaver, M.D.  
Univ of Alabama at Birmingham

### **Genetic Regulation of the Immune System**

Gillian E. Wu, Ph.D.  
York Univ, Toronto

Ann Feeney, Ph.D.  
Scripps Research Institute

### **Antigen Processing and Presentation**

Janice Blum, Ph.D.  
Indiana Univ School of Medicine

Lisa Denzin, Ph.D.  
Memorial Sloan-Kettering Cancer Center

### **Cytokines and Chemokines**

John Atkinson, M.D.  
Washington Univ School of Medicine

Thomas Wynn, Ph.D.  
NIAID, NIH

### **Cellular Adhesion, Migration and Inflammation**

Paul Kubes, Ph.D.  
Univ of Calgary

Daniel C. Bullard, Ph.D.  
University of Alabama at Birmingham

### **Autoimmunity**

Joan Goverman, Ph.D.  
Univ of Washington

Matthias G. von Herrath, M.D.  
La Jolla Inst for Allergy and Immunology

### **Immediate Hypersensitivity, Asthma and Allergic Disorders**

David Corry, M.D.  
Baylor College of Medicine

Rosemarie Dekrueff, Ph.D.  
Children's Hospital Boston

### **Mucosal and Regional Immunology**

Cathryn Nagler  
Massachusetts Gen Hospital

Robin Lorenz  
Univ of Alabama at Birmingham

### **Microbial and Viral Immunology**

JoAnne Flynn, Ph.D.  
Univ of Pittsburgh School of Medicine

Hao Shen, Ph.D.  
Univ of Pennsylvania School of Medicine

### **Tumor Immunology and Immunotherapy**

Walter J. Storkus, Ph.D.  
Univ of Pittsburgh School of Medicine

W. Martin Kast, Ph.D.  
Univ of Southern California

### **Transplantation Immunology**

Olivia Martinez, Ph.D.  
Stanford Univ School of Medicine

D. Keith Bishop, Ph.D.  
Univ of Michigan Medical Center

### **Host Defense and Innate Immunity**

Donna Paulnock, Ph.D.  
Univ of Wisconsin Medical School

Michael Holers, M.D.  
Univ of Colorado Health Science Center





***IMMUNOLOGY 2006***  
MAY 12-16, 2006  
HYNES CONVENTION CENTER  
BOSTON, MA

The American Association of Immunologists gratefully acknowledges the generous support of its IMMUNOLOGY 2006 annual meeting activities through unrestricted educational grants from the following sponsors (*confirmed as of 2/20/06*):

**BD Biosciences** — La Jolla, CA

- ❖ IMMUNOLOGY 2006 Meeting Bags
- ❖ AAI Gala Reception ❖ AAI President's Reception
- ❖ AAI-BD Biosciences Investigator Award and Lecture

**Cadmus Professional Communications** — Richmond, VA

- ❖ *The Journal of Immunology* Editorial Board Dinner and Meeting

**Dana Foundation** — New York, NY

- ❖ AAI-Dana Foundation Award in Human Immunology Research

**eBioscience, Inc.** — San Diego, CA

- ❖ Cynthia Chambers Memorial-eBioscience Junior Faculty Award

**FASEB Career Resources/NIGMS MARC Program** — Bethesda, MD

- ❖ AAI Minority Scientist Travel Awards
- ❖ AAI Minority Scientist Trainee-Mentor Program
- ❖ AAI Minority Affairs Committee Workshop
- ❖ AAI Minority Affairs Committee Guest Lecture

**Gemini Science, Inc.** — San Diego, CA

Major Symposium C: *Innate and Adaptive Recognition of Bacteria*

**Genentech, Inc.** — San Francisco, CA

- ❖ AAI Distinguished Lecture Series

**Huang Foundation** — Rancho Santa Fe, CA

- ❖ AAI-Huang Foundation Meritorious Career Award
- ❖ AAI-Huang Foundation Trainee Achievement Awards

**National Institutes of Health** — Bethesda, MD

- ❖ National Institute on Aging - Special Symposium
- ❖ National Institute of Allergy and Infectious Diseases - Special Symposium
- ❖ National Cancer Institute - Special Symposium

**Henry J. Showell** — Westbrook, CT

- ❖ Pfizer-Showell Travel Award



## Special Discounts for AAI Member Authors



### Waiver of Manuscript Submission Fee for AAI Members

Corresponding authors who are regular, emeritus, or honorary AAI members in good standing on the date of manuscript submission to *The Journal of Immunology* (*The JI*) receive a waiver of the regular \$50 submission fee.

### Reduced Charges for Color Figures

Corresponding authors who are regular, emeritus, or honorary AAI members in good standing on the date their manuscript is accepted for publication in *The JI* are entitled to reduced charges for submitted color figures. AAI members receive a \$200 reduction for the first color figure on each page.

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For complete details on AAI member privileges and benefits, eligibility requirements, and application forms, please visit [www.aai.org/membership](http://www.aai.org/membership) or contact the AAI membership office at 301-634-7195 or by e-mail to [members@aai.org](mailto:members@aai.org).

For complete details on manuscript submission to *The JI*, please visit [www.jimmunol.org](http://www.jimmunol.org) or contact *The JI* office at 301-634-7197 or by e-mail to [infoji@aai.org](mailto:infoji@aai.org).





The American Association of Immunologists gratefully acknowledges **BD Biosciences** for its generous support of the AAI Annual Meeting, *IMMUNOLOGY 2006*, May 12-16, in Boston, Massachusetts.

The following were made possible through  
unrestricted educational grants from  
**BD Biosciences**

\* *IMMUNOLOGY 2006 Meeting Bags*

\* *AAI Gala*

\* *AAI President's Reception*

\* *AAI-BD Biosciences Investigator Award and Lecture*







## THE AAI – JOHN H. WALLACE HIGH SCHOOL TEACHERS PROGRAM “Immunology 101”

AAI has sponsored an education program in immunology for high school teachers since 1995, funded through a grant from the NIAID-NIH. The *AAI – John H. Wallace High School Teachers Program* brings the excitement of immunology directly to high school students by sending high school science teachers into the laboratories of established immunologists who mentor them in a hands-on summer laboratory internship. The teachers, with the help of curriculum specialists, develop science projects for the classroom based on their summer experiences. These curricula are made available through the AAI to any interested high school teacher. Since its inception, over 120 high school teachers and their mentors throughout the country have participated in this exciting AAI program – to the benefit of young minds. This year’s participants will present the results of their internship at:

### *J.H. Wallace High School Teachers Workshop “Lessons in Immunology”*

Saturday, May 13, 9:00 AM,  
Hynes Convention Center, Rm. 309

Participants will also present their work in a poster session in the Exhibit Hall C/D, Saturday, May 13.

This program is currently under the direction of **Arthur Tzianabos**, AAI Education Committee and Harvard University. AAI is grateful to the AAI members who served as mentors for their invaluable contributions to this program.

### 2006 AAI – John H. Wallace High School Teachers Program Participants

#### **Felicia Benson**

Osborn High School  
Detroit, Michigan

**Mentor:** Yi-Chi Kong, Ph.D.  
Wayne State University School of Medicine

#### **Amanda Dice**

Baltimore Talent Development High School  
Baltimore, Maryland

**Mentor:** Jan Powell, Ph.D., M.P.H.  
University of Maryland School of Medicine

#### **Claire Hypolite**

Edison High School  
Minneapolis, Minnesota

**Mentor:** Kristin Hogquist, Ph.D.  
University of Minnesota

#### **Marjorie Maxey**

Western Albermarle High School  
Crozet, Virginia

**Mentor:** Robert Sawyer, M.D.  
University of Virginia Health Science Center

#### **Tamica Stubbs**

E.E. Waddell High School  
Charlotte, North Carolina

**Mentor:** Juan Anguita, Ph.D.  
University of North Carolina Charlotte

#### **Elizabeth Zdrojewski**

West Allis West Milwaukee School  
West Allis, Wisconsin

**Mentor:** Douglas Steeber, Ph.D.  
University of Wisconsin