# ONEVV

Association for Research in Vision and Ophthalmology

A MESSAGE FROM THE PRESIDENT

#### LARRY J. TAKEMOTO, PHD

global ophthalmic profession.

## **Building International Collaborations**



s an ARVO member and in my role as President, I am particularly proud of the significant strides ARVO is making to further

global scientific research. The theme for this year's ARVO Annual Meeting,

Building International Collaborations, will highlight research accomplished as the result of multi-

"... we will continue to make great strides in facilitating worldwide advancement of vision research." ARVO President, Larry J. Takemoto, PhD discuss com-

national collaborations and the sharing of findings within the global community.

In addition, at its meeting in October, the ARVO Board of Trustees discussed a number of issues to expand ARVO's presence around the world and to better serve our international members. These included the launch of **ARVO** International Chapter Affiliates in Argentina, Brazil, and Israel, the Asia-ARVO Meeting in 2007, and mechanisms for increasing international membership on the ARVO Board.

#### Launch of International Chapter **Affiliates Pilot Program**

ARVO has launched an International Chapter Affiliates Pilot Program to provide educational and networking opportunities to international members and potential members in their own country. Our goal is to increase available funding opportunities for vision researchers, with respect to travel grant funds, and to promote vision research to governments, industry, and the public, which will help further develop the

To become an ARVO International Chapter Affiliate, an organization must operate as a separate and legal entity within its own country, and at least 10 percent of its membership must be ARVO members. ARVO International Chapter Affiliates will also be responsible for collecting their own membership dues and fees. In turn, ARVO will establish an International Affiliates

Council for the leaders of each Chapter Affiliate to network and mon issues.

The pilot program will last for 18 months with Argentina, Brazil, and Israel being the first three countries to participate. After conducting an evaluation of the pilot program, ARVO will begin accepting other countries into the program.

#### **Asia-ARVO Meeting**

ARVO has signed an agreement with the Singapore Eye Research Institute (SERI) to establish a biennial meeting to be held in various locations throughout Asia highlighting the important clinical and translational aspects of vision and ophthalmic research. Previously known as SERI-ARVO for meetings held in 2003 and 2005, the name was changed in 2005 to reflect ARVO's commitment to partnering with many countries in Asia that have expanding eye research programs.

The inaugural Asia-ARVO Meeting will be held February 28 through March 3, 2007 at the Suntec Singapore International Convention and Exhibition Centre.

#### Winter Newsletter 2005

#### **2006 Annual Meeting**

The 2006 ARVO Annual Meeting, Building International Collaborations, April 30 - May 4, 2006, is



highlighted in the enclosed Annual Meeting Focus. As the premier meeting for vision science and eye research, it provides an exciting opportunity to connect with colleagues for professional networking, social events, and science, in a spectacular setting.

Program highlights include:

- ARVO/Alcon Keynote Session
- ARVO Education Courses
- Career Fair and Placement Service
- Exhibits
- Committee-sponsored Workshop on Working in the International Arena
- Strategies for Research Grants for International Members: Opportunities at NIH

For the latest information, logon to www.arvo.org/AM.

#### IN THIS ISSUE

ARVO Governance
ARVO Advocacy
Scientific Resources
NEI/NIH News
Grants and Awards14-15
ARVO Publications
JOV
<i>IOVS</i>
Membership News
ARVO Education Program
ARVO Foundation for Eye Research24



2005 - 2006 Officers

Larry J. Takemoto, PhD President

Joel M. Miller, PhD Vice President

Steven E. Wilson, MD Vice President

Frederick L. Ferris, MD President-Elect

Robert B. Barlow, PhD Vice President-Elect

Daniel T. Organisciak, PhD Vice President-Elect

Paul L. Kaufman, MD Executive Vice President

#### **ARVO Office**

Joanne G. Angle Executive Director

Elinore L. Tibbetts Marketing and Communications Manager

> Kimberly M. O'Sullivan Publications Coordinator

12300 Twinbrook Parkway, Suite 250 Rockville, MD 20852-1606 Phone: (240) 221-2900 Fax: (240) 221-0370 www.arvo.org

#### New Process for Program Committee and Trustee Nominations

During the 2005 Fall ARVO Board of Trustees Meeting, a new method for nominating Trustees and Program Committee members was discussed. It was proposed that, in addition to taking nominations on the floor at the Section Business Meeting, voting members in the Section should be able to submit nominations to the current Trustee by e-mail in advance. It was suggested that the current process does not allow sufficient time for members to consider nominations and to communicate nominees' qualifications to the Section membership in general.

It was proposed that at the Section Business Meeting, the Trustee announce the nominations received in advance and open up the floor to additional nominations. The Section will then have the opportunity to discuss the nominations, narrow the field down if necessary, and voting members will cast their votes.

ARVO will distribute more information regarding the new process to the membership in early March.■

# General Elections for Executive Vice President and Editors-in-Chief of *IOVS* and *JOV*

A ll voting members of ARVO (Regular, Family, Sustaining, Life and Family Life) will elect ARVO's Executive Vice President and the Editors-in Chief of *IOVS* and *JOV* in the spring of 2006 at the General Business Meeting in Fort Lauderdale. Proxies and candidate information will be mailed in February 2006.

Proxies may be registered online or mailed to the ARVO Office. Advance proxies must be registered by April 17, 2006. Instructions for both methods of registering your proxy will be included in the election mailing. Proxies may be cast in person or amended in the 15-minute period preceding the General Business Meeting. Election results will be announced during the corresponding General Business Meeting. The candidates are:

**Executive Vice President Sally S. Atherton, PhD** Medical College of Georgia

M. Christine McGahan, PhD North Carolina State University

Thomas Yorio, PhD University of North Texas Health Science Center

# 2006 Trustee Elections

A ll voting members (Regular, Family, Sustaining, Life and Family Life) of the Lens (LE), Cornea (CO) and Eye Movements (EY) Sections will elect Trustees at their Section Business Meeting at the 2006 Annual Meeting in Fort Lauderdale. Proxies and candidate information will be distributed in February 2006. The candidates are:

#### ee Lens

Allan Taylor, PhD, Tufts University

J. Mark Petrash, PhD Washington University at St. Louis

Cornea

#### Shigeru Kinoshita, MD

Kyoto Prefectural University of Medicine

# Editor-in-Chief, *IOVS* Paul L. Kaufman, MD

University of Madison-Wisconsin Marco A. Zarbin, MD, PhD

UMD New Jersey Medical School

Editor-in-Chief, JOV Andrew B. Watson, PhD NASA Ames Research Center

**M. Elizabeth Fini, PhD** Bascom Palmer Eye Institute

#### Eye Movements Joseph L. Demer, MD, PhD Jules Stein Eye Institute/UCLA

David Hunter, MD, PhD Children's Hospital Boston

Proxies may be registered online or mailed to the ARVO Office. Advance proxies must be registered by April 17, 2006. Instructions for both methods of registering your proxy will be included in the election mailing. Proxies may also be cast in person or amended in the 15minute period preceding the Section Business Meeting. Election results will be announced during the corresponding Section's Business Meeting.■

# Sections to Nominate Trustees in 2006

A t their respective Business Meetings, the following Sections will nominate candidates for Trustee:

- Clinical/Epidemiologic Research (CL)
- Visual Neurophysiology (VN)
- Biochemistry/Molecular Biology (BI)

The ARVO Bylaws stipulate that "each standing Scientific Section whose Trustee's term of office will expire at the end of the following year's Annual Meeting shall nominate no more than two (2) candidates, one of whom will be elected as the Successor Trustee at the following year's Scientific Section separate business meeting, which will take place at the Annual Meeting." All members are encouraged to consider who will best represent their Sections in this important role.

# **Committee News**

## **ARVO Represented at AAALAC Board Meeting**

A RVO Animals in Research Committee Chair, **Carol Toris, PhD**, serves as ARVO's delegate to the Board of Trustees of the Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC). Dr. Toris reported on the following outcomes from the September 2005 AAALAC Board Meeting:

The development of a formal AAALAC International Education and Training Program is well underway. The goal of this newly established program is to help institutions achieve and sustain full accreditation by providing topical training and education services based on the AAALAC International perspective. The program is being designed to be highly flexible and capable



of being tailored to the specific **EXAMPLE TRANSPORT** needs of an organization. Identified topics are being designed in a modular format that can be mixed and matched to allow an organization to obtain training in a variety of general areas with specific issues that may be of particular interest to their current situation.

An Institutional Animal Care and Use Committee (IACUC) module is completed. Following final review and editing, the module will be available. The Occupational Health and Safety module is currently under construction.

## Long Range Planning Committee Report

A RVO is making progress on the five-year (2004-2009) long range plan and has established specific deadlines for completing all activities. To date, the Annual Meeting and Publications goals have been completed, as have many of the goals under Governance, Membership, Advocacy, and Other Meetings. A full report will be provided at the 2006 ARVO General Business Meeting at the Annual Meeting in Fort Lauderdale.

## **Clinical Trials Working Group**

Several leading journals of internal medicine have recently adopted a policy, originally proposed by the International Committee of Medical Journal Editors, stating that controlled clinical trials must be registered in a publicly available database or these journals will not publish manuscripts based on the results of these trials. As a result, members from the ARVO Publications, Ethics in Regulations and Human Research, and Program Committees formed a working group to review the implications and recommended that ARVO adopt a policy of its own.

The policy (on page 5 of this newsletter and online at http://www.arvo.org/clinicaltrials) will apply to all ARVO publications beginning July 1, 2006 and to ARVO meeting abstracts for the 2007 Annual Meeting. The policy was drafted by the Clinical Trials Working Group and approved by the ARVO Board of Trustees in October 2005. An editorial was also published in the January issue of *IOVS*.

## ARVO Committee-Sponsored Workshops at the 2006 Annual Meeting

#### Recent Developments in Intellectual Property Law: Impact on Inventors in the Academic World

Organized by the Commercial Relationships Committee Sunday, April 30, 1:00 PM – 2:30 PM

**Stem Cell Chimeras: Implications for Vision Research** *Organized by the Animals in Research Committee* Sunday, April 30, 1:00 PM – 2:30 PM

#### A World of Good: Inclusion of Minorities as Research Subjects at Home and Abroad

Organized by the Diversity Issues Committee and Ethics Committee

Monday, May 1, 1:15 PM - 2:45 PM

#### Ethical and Regulatory Issues in Stem Cell Research

Organized by the Ethics and Regulation in Human Research Committee Monday, May 1, 1:15 PM – 2:45 PM

# Getting a Job in the Private Sector or in Academia

Organized by the Members-in-Training Committee Monday, May 1, 2006, 1:15 PM -

2:45 рм

#### Clinician-Scientist Forum

Organized by the Members-in-Training Committee Tuesday, May 2, 1:15 PM – 2:45 PM

OARIO

# Strategies for Research Grants for International Members: Opportunities at NIH

Organized by the International Members Committee Tuesday, May 1, 1:15 PM – 2:45 PM

# **Committee News (continued)**

#### 2006 Annual Meeting Events for Members-in-Training

The Members-in-Training Committee will host several workshops and events for students, post-grads, fellows, and residents at the 2006 Annual Meeting in Fort Lauderdale. All workshops and events will take place at the Fort Lauderdale Convention Center.

**Getting a Job in the Private Sector or in Academia** Monday, May 1, 2006, 1:15 PM - 2:45 PM Room 315

**NEI Grants Workshop** Monday, May 1, 2006, 1:15 PM - 2:45 PM Room 305

Members-in-Training Social Honoring Travel Grant Recipients Monday, May 1, 7:30 PM - 8:30 PM



2005 Career Fair

#### Get Involved in an ARVO Committee!

#### **Career Fair**

Tuesday, May 2, 12:00 PM - 4:00 PM Hall B/C, Registration Area

**Clinician-Scientist Forum** 

Tuesday, May 2, 1:15 PM - 2:45 PM Floridian Ballroom A

#### Pizza with a Prof: Ask the Experts

Wednesday, May 3, 1:15 PM - 2:45 PM Palm B



Members-in-Training enjoy themselves during the 2005 MIT Social.

C ommittees represent, involve, and serve ARVO members, as well as provide an important training ground for future leaders. They offer members an opportunity to be actively involved in developing new programs, enhancing member services, and assisting the Board of Trustees in the Association's leadership.

Each year, ARVO members have the opportunity to serve on a Committee. Appointments to ARVO Committees are made annually by the President-Elect. New committee appointees are encouraged to attend committee functions at the Annual Meeting prior to the commencement of their terms at the close of the Annual Meeting. Committees meet face-to-face once a year at the ARVO Annual Meeting to make participation by members outside the U.S. more convenient. In addition, Committees meet via conference calls throughout the year. A list of ARVO Committees follows:

#### **ARVO Committees**

Advocacy Committee Animals in Research Committee Awards Committee Commercial Relationships Committee Diversity Issues Committee Ethics and Regulations in Human Research Committee Exhibits Committee Finance Committee International Members Committee Long Range Planning Committee Members-in-Training Committee Professional Development and Education Committee Publications Committee Volunteer Management Committee

If you are interested in serving on an ARVO Committee, visit the ARVO Web site at **www.arvo.org**. Click on "Committees" on the left navigation bar to find Committee descriptions, rosters, and an online volunteer form. All individuals who complete this online form will be considered for appointment in 2006. To learn more about Committee participation, you may also contact Lori Methia at lmethia@arvo.org or at (240) 221-2912.

# Statement on Registering Clinical Trials

The editors of several leading journals of internal medi-L cine have recently adopted a policy, originally proposed by the International Committee of Medical Journal Editors (ICMJE), that controlled clinical trials must be registered in a publicly available database or these journals will not publish manuscripts based on the results of these trials. These standards were published simultaneously in four leading journals of internal medicine,<sup>1-4</sup> but they have subsequently appeared in numerous other journals and in several languages. The editors of several leading peer-reviewed ophthalmic journals have subsequently published a joint editorial endorsing this policy,5 as has the Association of American Medical Colleges,6 and editorial and reader commentaries in numerous publications have strongly endorsed it. The Association for Research in Vision and Ophthalmology (ARVO) completely agrees with the principles of clinical trial registration put forth by the ICMJE and endorsed by numerous other journals.

At the October Board Meeting, the ARVO Board of Trustees approved the following policy:

#### **Guidelines on Clinical Trials Registration**

- Beginning July 1, 2006, ARVO will no longer consider abstracts or articles dealing with clinical trials that were not registered before the first subject was enrolled. Trials that began before this date and were not registered must be registered by July 1, 2006. The letter accompanying manuscript submission must state the beginning date of the trial, and the date of registration.
- 2. The registration requirement will apply to abstracts submitted for presentation at the Annual ARVO Meeting beginning in 2007. Investigators will be prompted to include the registration number on the online abstract form.
- 3. Registration must be done on a publicly available database. At present, the only databases that are satisfactory are the NIH's registry, http://www.clinicaltrials.gov and the International Standard Randomized Controlled Number (http://isrctn.com). Further information about these sites can be obtained through http://prsinfo.clinicaltrials.gov and http://www.controlled-trials.com. The ICMJE standards can be obtained at http://www.icmje.org/faq.pdf. Registration must include completion of all 20 items on the list recommended by the World Health Organization advisory group (Ref. 7).
- 4. For the purposes of this policy, a "clinical trial" consists of any study involving a new therapy of any kind, whether medical, surgical, psychological or sociological, in which subjects are concurrently divided

into one or more treatment or control groups. Several treatments may be compared simultaneously, or one or more treatment groups may be compared to a simultaneous, untreated control group. Although the division into such groups in most such trials is presently by random assignment, randomization is not a part of the requirement for registration but only the evaluation, in the trial, of concurrent control groups.

5. The size of a clinical trial is not a relevant consideration as to whether it must be registered. This policy applies not only to large, multi-institutional clinical trials sponsored by pharmaceutical companies or other large organizations, but also to individual investigators at a single institution who are conducting their own trials. The only consideration is whether the trial is comparing an experimental therapy, or therapies with a simultaneous control group, or groups.

#### References

- DeAngelis CD, Drazen JM, Frizelle FA, et al. Clinical trial registration: a statement from the International Committee of Medical Journal Editors. JAMA 2004; 292:1363-4.
- 2. DeAngelis CD, Drazen JM, Frizelle FA, et al. Clinical trial registration: a statement from the International Committee of Medical Journal Editors. Ann Int Med. 2004; 141:477-8.
- 3. DeAngelis CD, Drazen JM, Frizelle FA, et al. Clinical trial registration: a statement from the International Committee of Medical Journal Editors. N Engl J Med. 2004; 351: 1250-1.
- 4. DeAngelis CD, Drazen JM, Frizelle FA, et al. Clinical trial registration: a statement from the International Committee of Medical Journal Editors. Lancet 2004; 364:911-2.
- 5. Levin LA, Gottlieb, JL, Beck RW, et al. Registration of clinical trials. Arch Ophthalmol 2005; 123: 1263-4.
- Ehringhaus S, Korn D. (For the Association of American Medical Colleges) Principles for protecting integrity in the conduct and reporting of clinical trials. Available online at http://www.aamc.org/ research/clinicaltrialsreporting/start.htm.
- DeAngelis CD, Drazen, JM, Frizelle FA, et al. Is this clinical trial fully registered? – A statement from the International Committee of Medical Journal Editors. N Engl J Med. 2005; 293:2927.

Approved by the ARVO Board of Trustees October 29, 2005.■

# Eye and Vision Community "Scorecard" Issues

## NAEVR Encourages LHHS Conferees to Support Highest FY2006 Funding Level for NIH/NEI

The Senate's October 27 passage by 94-3 of the Fiscal Year (FY) 2006 Labor, Health and Human Services (LHHS) Appropriations bill (HR 3010) presents a significant challenge for LHHS conferees, as the Senate bill contains \$29.4 billion for the National Institutes of Health (NIH) and \$694 million for the National Eye Institute (NEI) (a 3.7 percent increase for each). The Senate bill calls for \$1 billion more for the NIH and \$20 million more for the NEI than in the House version of the bill passed in June. In addition to resolving the NIH funding difference, the conferees must also address the \$8 billion in the Senate bill in emergency spending for pandemic influenza preparedness, which is not in the House bill.

	FY2005	FY2006	FY2006
	ACTUAL	HOUSE	SENATE
NEI	\$669 M	\$673.5 M	\$693.6 M
	+2.5%	+0.7%	+3.7%
NIH	\$28.4 B	\$28.5 B	\$29.4 B
	+2%	+0.5%	+3.7%

NAEVR has conducted visits with House and Senate appropriations leaders to

urge support for the higher Senate-recommended funding level in conference. This was supplemented by hand-delivered letters to the offices of all conferees and hundreds of e-mail letters sent by the NAEVR networks (including ARVO) through the Web site. NAEVR and several network members (including ARVO) also joined with the larger community of support as signatories in letters sent by the ad hoc Group for Medical Research Funding and Research!America urging adoption of the Senate funding level in conference.

*Editor's Note:* At press time, the conferees had just met and recommended the Lower House-recommended funding level for the NIH/NEI in the conferee bill. On November 17, the House defeated the conferee bill 224-209, with Democrats and moderate Republicans opposing its funding level for health and education programs. On November 18, the Senate approved a motion to instruct conferees to adopt the higher Senate-recommended level in a second conference on the bill, which had not yet been scheduled. Congress passed a Continuing Resolution funding the government until December 17 while appropriation bills are finalized.

# NIH Reauthorization Stalls Amid Strong Opposition to Budget Clusters/Elimination of Line Item Budgets

On August 22, the House Energy and Commerce Committee released its second draft of National Institutes of Health (NIH) reauthorization legislation, following up on an initial July 12 draft reported on in the last issue of *ARVONews*.

Although the second draft clarified some issues of concern raised by the medical research community and NAEVR, the draft still contained provisions to reduce the NIH budget to three line items: the Office of the Director, which would also include a new Division of Program Coordination; Planning and Strategic Initiatives that would manage trans-Institute collaborative research; a cluster of 14 "mission-specific" Institutes, including the NEI; and a cluster of 10 "science-enabling" Institutes/Centers. This proposed structure would eliminate Congressional review of individual Institute line item budgets – a move NAEVR strongly opposes, as this serves as an important "check and balance" to the NIH budget-development process. NAEVR is also concerned that the draft legislation plans to authorize funding levels for each of the next three fiscal years, FY2007-2009, and the current fiscal environment is not favorable to these ceilings being set so as to reflect the medical research advocacy community's requested eight percent annual increases to the NIH budget.



Dr. Zerhouni at the Town Hall Meeting

On August 25, NAEVR joined more than 100 other coalition partners in a Town Hall meeting sponsored by the American Association of Medical Colleges and Federation of American

Societies for Experimental Biology. This Town Hall was the first gathering of the medical research advocacy community in which to express both support and concern over various provisions. Clearly, support for the draft centered on greater transparency, uniform metrics/reporting and increased Director discretion. Concerns focused on the authorizing levels for FY2007-2009, the proposed clusters/elimination of individual Institute line item budgets, the management of a "common fund" for trans-Institute collaborative research, and a potential increase in the NIH Director's transfer authority.

The Town Hall provided an important opportunity for many organizations not previously engaged in advocacy to present a united medical research advocacy community message to Capitol Hill. NAEVR had already been engaged extensively in meetings with Energy and Commerce Committee members and House appropriators, as *continued on page 9* 

## ARVO Leaders Thank Senate for Increased FY2006 NIH/NEI Funding in its Bill

uring an October 28 Congressional Lobby Day, members of the Board of Trustees of the Association for Research in Vision and Ophthalmology (ARVO) were the first to thank Senate offices for the affirmative vote the previous evening by the Senate of its Fiscal Year 2006 Labor, Health and Human Services, and Education (LHHS) Appropriations bill (HR 3010). The Senate bill contains \$1 billion more for the National Institutes of Health (NIH) and \$20 million more for the National Eye Institute (NEI) than in the House version of the bill, passed in June (see NIH/NEI funding story on page 6).

In more than 60 Capitol Hill visits, these vision researchers not only expressed appreciation to Senate offices, but also urged their House members to support the highest possible funding level for the NIH and NEI in the conference process which began in November. These visits followed hundreds of letters sent the previous week to Senators through NAEVR's Web site supporting passage of the funding bill.

ARVO members also expressed the eye and vision community's opposition to provisions in a current draft of NIH



Dr. Barry Winkler and Lisa Layman, office of Senator Debbie Stabenow (D-MI)

reauthorization legislation pending in the House Energy and Commerce Committee that would cluster the budgets of the NEI and other missionspecific Institutes and eliminate Congressional review of individual Institute line item budgets (see NIH Reauthorization story on page 6).

In total, 35 House and Senate engaged in appropriations, NIH reauthorization

(House Energy and Commerce Committee, Senate Health, Education, Labor and Pensions Committee), defense appropriations, and aging were visited. Barry



Lynn Dondis, office of Senator Barbara Boxer (D-CA), and Dr. Todd Margolis of the University of California at San Francisco

Winkler, PhD,

of the Eye Research Institute of Oakland University, noted that, "All the legislative aides of Michigan congressional offices were eager to hear the views of basic scientists and clinicians regarding the NIH/NEI budgets and NIH reauthorization. They told me that they almost never hear from investigators, and they welcomed the opportunity to discuss the issues and would pass our views on to the members of Congress. These conversations serve as the first step in a dia-

logue that I intend to pursue in the coming years."

NAEVR plans to host a Lobby Day for the ARVO Program Committee on January 20,

2006.



John Ford, office of Cong. John Dingell (D-MI) and Dr. Gary Abrams of Wayne State University

# AEVR Holds Briefing on Genetic Basis of AMD During AMD Awareness Week

n September 21, 2005, AEVR hosted a Capitol Hill briefing featuring ARVO member Gregory Hageman, PhD, (University of Iowa Carver College of Medicine), a lead investigator of one of the four independent teams funded by the National Eye Institute (NEI) that recently reported discovery of the complement factor H (CFH) gene strongly associated with a



Dr. Hageman speaks during a Capitol Hill briefing. www.arvo.org

person's risk of developing age-related macular degeneration (AMD). "Variants in the CFH gene account for 30 to 50 percent of the overall risk for developing AMD," said Dr. Hageman, who added, "Individuals have a two- to four-fold increased risk of developing the disease if they inherit the risk CFH gene variant from one parent, and a five- to seven-fold risk if they inherit the risk variant from both parents." Dr. Hageman noted, however, that protective forms of the CFH gene have been identified, which could

pave the way for strategies to treat and prevent AMD. "With continued NEI funding, researchers can now develop diagnostic platforms for early detection and therapeutic strategies such as gene therapy can be evaluated," said Dr. Hageman, who examined more than 3,200 pairs of human donor eyes over the past 15 years to make the CFH/AMD association.

continued on page 20

ARVO's Joanne Angle introduces

Dr. Hageman.

7

# **ARVO Leadership Meets with Center for Scientific Review**

In October ARVO leadership met with Dr. Antonio Scarpa, Director of the Center for Scientific Review (CSR), and CSR representatives Drs. Michael Martin, Donald Schneider and Anita Miller Sostek, to discuss a number of issues on scientific study



From left to right: Drs. Paul Kaufman; M. Christine McGahan; Larry Takemoto; Michael Gilmore; Anita Miller Sostek; Antonio Scarpa; Michael Martin; and Donald Schneider

sections concerning the eye and vision research community. In attendance from ARVO were Larry Takemoto, PhD, ARVO President; Paul Kaufman, MD, ARVO Executive Vice President; Christine McGahan, PhD, Chair of ARVO's Advocacy Committee; and Michael Gilmore, PhD, ARVO Advocacy Committee member. Also at the meeting were Ronald E. Smith, MD, from the Board of Trustees of the American Academy of Ophthalmology, and Bartly J. Mondino, MD, Executive Vice President of The Association of University Professors of Ophthalmology (AUPO).

Solutions for increasing the number of clinician-scientists and senior scientists represented in Study Sections and improving Study Section operations were discussed. Dr. Scarpa is appointing a working group to examine the Anterior Eye Disease/AED and Biology and Diseases of the Posterior Eye/ BPDE Study Sections. In addition, AUPO will be working with university department chairs on releasing clinicians to serve on Study Sections. Also, Dr. Scarpa described plans for a pilot study to offer quicker reviews to new investigators who need to resubmit revised applications for their first RO1 grant for an estimated savings of four months. Details can be found at http://grants.nih.gov/ grants/guide/ notice-files/NOT-OD-06-013.html.

# National Advisory Eye Council Helps Set Pace for Research

The National Advisory Eye Council plays a significant role in determining the direction of vision research and training for the National Eye Institute (NEI) and the National Institutes of Health (NIH). The Council's main functions are to advise, assist, consult with, and make recommendations to the Director of the NEI, along with the Director of the NIH and the Secretary of the Department of Health and Human Services, on matters pertaining to the support of research and training related to national efforts in vision research.

The Council is also charged with performing a second level broad policy and programmatic review of all applications for grants and cooperative agreements, following an initial peer review of scientific and technical merit. Council may recommend approval of individual applications for projects which show promise of making valuable contributions with respect to blinding eye diseases, visual disorders, mechanisms of visual function, preservation of sight, and the special health problems and requirements of individuals with visual impairments.

Listed below are the current members of the Council. Names listed in bold indicate ARVO membership.

Ruben Adler, MD Department of Ophthalmology Johns Hopkins University School of Medicine

Roy W. Beck, MD, PhD Jaeb Center for Health Research

**Suraj P. Bhat, PhD** Department of Ophthalmology Jules Stein Eye Institute

**Eileen E. Birch, PhD** Retina Foundation of the Southwest

Gunilla Haegerstrom-Portnoy, OD, PhD

School of Optometry University of California, Berkeley

#### Barrett G. Haik, MD

Department of Ophthalmology College of Medicine University of Tennessee Health Science Center

**Lenworth N. Johnson, MD** Mason Eye Institute University of Missouri, Columbia

**Todd P. Margolis, MD, PhD** Department of Ophthalmology F. I. Proctor Foundation

**Earl L. Smith, OD, PhD** College of Optometry University of Houston

Lois E. H. Smith, MD, PhD Harvard Medical School Mriganka Sur, PhD Department of Brain and Cognitive Science Massachusetts Institute of Technology

Janey L. Wiggs, MD, PhD Department of Ophthalmology Massachusetts Eye and Ear Infirmary

Ex Officio Members

Lt. Col. David E. Holck, MD Department of Ophthalmology Wilford Hall Medical Center

Marco A. Zarbin, MD, PhD Department of Ophthalmology New Jersey Veterans Administration Hospital

# ARVOADVOCACY

Eye and Vision Community "Scorecard" Issues continued from page 6

well as the Senate Health, Education, Labor and Pensions Committee (which has authorizing jurisdiction in the Senate), Senate appropriators and the Special Committee on Aging.

On October 20, NIH Director Dr. Elias Zerhouni hosted a Town Hall meeting at which he addressed the formalization of the new Office of Portfolio Analysis and Strategic Initiatives (OPASI) within the Office of the Director to coordinate trans-Institute initiatives, including the NIH Roadmap. Dr. Zerhouni noted that what he most wanted in any legislative activity was the establishment of the OPASI Office as a Division that managed an NIH common fund to conduct collaborative research. He characterized the common fund as Institute/Center (IC) Director-driven, not NIH Director-led, and that IC Directors would use a set-aside of their budgets (up to five percent, per an IOM recommendation) in combination



NAEVR's James Jorkasky with AAMC's David Moore and FASEB's Howard Garrison at the Town Hall Meeting.

with other Institutes to pursue collaborative research within a context provided by the OPASI Division. Dr. Zerhouni's concept for the common fund is not as currently presented in the second draft of NIH reauthorization legislation. Dr. Zerhouni concluded by offering his personal opinion that line item budgets for individual Institutes should be retained.

In light of the medical research community's opposition to budget clusters/elimination of line item budgets, NIH reauthorization legislation has stalled. Although the legislation is still officially under negotiation with Democratic leaders and the House appropriations "cardinals," the Energy and Commerce leadership must decide if it will proceed with a bill that does not have bipartisan support, or opt instead for a revised bill that includes provisions the medical research community can support.

Visit NAEVR's Web site at www.eyeresearch.org for NIH reauthorization talking points.

# Other "Scorecard" Issues in Brief...

FY2006 Funding for Defense-related Eye and Vision

**Research:** At press time, conferees from the Senate (Senate Defense Appropriations bill passed in October) and House (Military Quality of Life appropriations bill passed in May) have indicated that there is strong support for adding "Eye and Vision Research" in conference to research eligible for peer-reviewed funds under the Congressionally-directed Medical Research Program. Once this is confirmed, NAEVR will work with ARVO to educate researchers about the Department of Defense grants submission process.

**Expansion of the Embryonic Stem Cell Policy:** LHHS Subcommittee chair Senator Arlen Specter (R-PA) announced that a Senate floor vote on S 471, the *Stem Cell Research Enhancement Act*, would occur early next year, so as not to delay action on the FY2006 LHHS appropriations bill. The House passed a companion measure, HR 810, in May.

# NAEVR Issues Inaugural "E-Zine" to Educate Capitol Hill

On September 19, NAEVR's inaugural "E-Zine" was issued to each Capitol Hill office and key Committee staff members. The E-Zine's topics, including the aging eye (discovery of gene strongly associated with AMD); pediatric vision (amblyopia treatments in older children); and health disparities (glaucoma detection in African Americans), demonstrate that National Eye Institute-funded research can ensure the best vision health of all Americans, no matter what age or race.

NAEVR is pleased to report a click-through rate of 66 percent for the 1,500 recipients who received this initial electronic communication. The E-Zine is available at www.eyere-search.org.

# SCIENTIFICRESOURCES

*RVONews* is pleased to introduce a new feature, "Scientific Resources," which offers news and information about a variety of programs and online information to assist our members in the discovery process. To submit information for possible publication in "Scientific Resources," please e-mail newscomments@arvo.org.

# Access Hardware Designs for Eye Movement Data Analysis

An open-source open-hardware toolkit for low-cost eye tracking, openEyes, was recently launched by Iowa State University. OpenEyes provides hardware designs and software tools useful for the analysis of eye movement data. Contributions to the toolkit from the vision community are welcome. For more information, logon to http://hcvl.hci. iastate.edu/openEyes.

#### HapMap Database Available Online

The International HapMap Consortium recently published in *Nature* the first phase of its haplotype map (HapMap). The HapMap is a catalog of common genetic variants that occur in human beings. It is designed to provide information that researcher can use to link genetic variants to the risk for



research on the current clinical and basic scientific developments on the latest technologies in ophthalmic diagnostic imaging.

- Retina
- Cornea
- Anterior Segment
- Orbit and Neuro-imaging in Ophthalmology

# Register Today! isie.net • 1-877-307-5225



Accreditation: This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of SLACK Incorporated, Vindico Medical Education and the International Society for Imaging in the Eye. SLACK Incorporated is accredited by the ACCME to provide continuing medical education for physicians.

This activity has been approved for AMA PRA credit.

specific illness, leading to new methods of preventing, diagnosing, and treating disease. To access the database, logon to www.hapmap.org.

#### **Neuroscience Database Gateway**

A group of neuroscientists and information specialists recently surveyed neuroscience databases resulting in the Brian Information Group (BIG) White Paper (www.sfn.org/ndgwhitepaper) which identifies needs of the neuroscience community for more sophisticated tools for creating and linking brain databases. A secondary outcome of this survey is the gateway pilot project with links to various databases including The Protein-Protein Interaction Database (www.PPID.org), Mouse Genome Informatics Database (www.informatics.jax.org), Toolkit for Electrophysiological Data Analysis (www.sccn.ucsd. edu/eeglab), and Zebrafish Model Organism Database (www.zfin.org).

#### **Ophthalmic Pathology Collection Available**

The National Eye Institute (NEI), part of the National Institutes of Health (NIH) has launched new online resource for pathologists, ophthalmologists, optometrists, and students. The David G. Cogan Ophthalmic Pathology

Collection, a study and teaching collection of clinical ophthalmic cases and their pathology, is now available on the NEI Web site, www.nei.nih.gov.

The Internet-accessible Cogan Collection is comprised of 1,040 cases and 3,000 slides. The clinical descriptions and photographs were collected by David G. Cogan, MD, during his career as both a clinical and research ophthalmologist.

#### **Proteome Software**

The National Center for Research Resources at NIH recently updated its free online program to identify proteins and their genes. Logon to www.gfs.unc.edu for more information.

# Scientific Management Guide Available for Download

Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty, a free 249-page book from the Howard Hughes Medical Institute and the Burroughs Wellcome Fund, is full of advice, experiences, and opinions from seasoned biomedical investigators and other professionals. Topics include staffing, program and time management, scientific publishing, and more. To download this publication, logon to www.hhmi.org/labmanagement.

# NEIDIRECTOR'S COLUMN

macular degen-

eration is prov-

#### CFH Gene in AMD Garners Resounding Applause at NIH



Paul Sieving, MD, PhD NEI Director

ing to be a high visibility discovery for a broad range of the NIH community.

Shortly after these results were published in April 2005, Dr. Elias Zerhouni, the director of the NIH, highlighted the CFH gene story to underscore the success of the NIH research mission in Congressional testimony and at other NIH public forums. Our colleagues at the NIH National Human Genome Research Institute (NHGRI) are also very enthusiastic about this finding as the discovery relied on results from the emerging International HapMap Project. Francis Collins, the director of NHGRI, focused on the CFH result when he spoke at the opening session of the fall 2005 American Academy of Ophthalmology meeting. This fruitful effort offered immediate validation of the considerable investment made by the NIH in organizing the HapMap project.

CFH is one of only a very few genes discovered thus far for complex, lateonset disease. Moreover, chronic inflammation and activation of the complement system have been implicated in several other common disorders, including cardiovascular and some neurodegenerative diseases. The CFH finding brings widespread credit to the vision research community.

The CFH gene discovery will also reach the notice of Congress through the congressionally mandated Government Performance and Results Act. A related NEI goal is to identify genes that control the risk of development of AMD and glaucoma by 2012. This discovery is ample evidence that important progress is being made in achieving this ambitious goal.

In short, this is an occasion to celebrate an important achievement that transcends the vision research field.

#### Institutional Clinical and Translational Science Award Program Announced

A major focus of the NIH Roadmap Medical Research Initiative is to transform the clinical research enterprise so that we can better foster translational research efforts. In October 2005, NIH

"In an environment where minimal overall budget growth is forecast, we in vision research must take advantage of all opportunities to leverage new resources." NEI Director, Paul Sieving, MD, PhD

director Dr. Elias Zerhouni announced a new grant program called the Institutional Clinical and Translational Science Awards (CTSA). It is anticipated that by 2010, CTSA grants will ultimately replace existing General Clinical Research Center (GCRC) grants. For an explanation of the CTSA and GCRC grant programs, please visit: http://www.ncrr.nih.gov/ clinicaldiscipline/CTSA\_QsandAs.asp.

CTSA grants will be administered through the NIH National Center for Research Resources and will encourage new approaches to clinical and translational research by creating new organizational models and training programs. The program will also support original research to develop clinical methodologies in areas of informatics, laboratory methods and other technology resources.

In announcing the CTSA grant initiative, Dr. Zerhouni said, "The program will give research institutions more freedom to foster productive collaboration among experts in different fields, lower barriers between



#### NATIONAL INSTITUTES OF HEALTH

disciplines, and encourage creative new approaches that will help us solve complex medical mysteries."

The program will also be supported with existing resources that include clinical and translational programs and NIH Roadmap funds. NIH plans to award up to seven CTSA grants in fiscal year 2006 for a total of \$30 million. An additional \$11.5 million will

be available to support 50 planning grants for institutions that need time to submit full applications. The CTSA Request for Applications has a submission deadline of March 27,
2006 with initial awards being announced later in the fall. It is anticipated that by 2012, the CTSA
program will support 60 grants for an annual total of \$500 million.

In an environment where minimal overall budget growth is forecast, we in vision research must take advantage of all opportunities to leverage new resources. The CTSA grant program offers an ideal opportunity to advocate to our colleagues the value of highlighting translational research on the visual system in these grant applications. The recent CFH gene discovery is but a harbinger of many new opportunities in vision research to draw diverse disciplines into the collaborative, translational environment that these new CTSA grants seek to support.

# New Form, New Submission Portal: NIH Changes Grant Application Process

On December 1, 2005, the National Institutes of Health (NIH) began phasing in both the use of a new application form — the SF424 (Research and Resources) — and the use of a new electronic grant submission portal — http://www.Grants.gov/. ARVO members interested in applying for National Eye Institute (NEI) support should carefully note the transition dates for the grant mechanisms of interest:



**Receipt Date** 

#### **Grant Mechanism**

#### SBIR/STTR (R43,R44/R41/R42) December 1, 2005 Conference Grant (R13/U13) December 15, 2005 AREA (R15) February 25, 2006 Shared Instrumentation (S10)March 22, 2006 Small/Exploratory/Development (R03/R21/R33/R34) June 1, 2006 Research Project/Construction October 1, 2006 (R01/C06/U01) February 1, 2007 Career Development (K-Series) Fellowship (F-Series) April 1, 2007 Training (T-Series) May 10, 2007

Beginning with these dates, all competing applications are required to be submitted through the electronic portal, using the new form. Paper applications will be returned.

Investigators should take the following steps to be ready for Grants.gov:

- Have an up-to-date account in the NIH Commons through your institution
- Start early
- Consult the NIH information site, http://era.nih.gov/electronicreceipt
- · Familiarize yourself with the new forms at: http://grants2.nih.gov/grants/funding/424/index.htm

The NIH is undertaking these changes as part of a government-wide initiative to improve management and to simplify the process of applying for Federal financial assistance.

In addition, electronic receipt will reduce the NIH's scanning, printing, and data-entry costs; improve data quality; create a data repository that can be mined by knowledge management; and allow applicants to submit a clearer grant image.

Please contact any member of the NEI extramural staff at (301) 451-2020, or logon to http://www.nei.nih.gov for more information.■

# Zerhouni Acknowledges NEI Research as Major 2005 NIH Breakthrough

In the past several months, Dr. Elias Zerhouni, Director of the National Institutes of Health (NIH), has heralded the National Eye Institute-funded discovery of the gene strongly associated with AMD as a significant NIH breakthrough in 2005. These citations include:

May 1	ARVO Annual Meeting and associated press interviews		
July 19	Dr. Zerhouni appears before the House Energy and Commerce Committee		
August 30	U.S./India Signing Ceremony to Expand Vision Research Collaborations		
October 20	NIH Town Hall Meeting		

# Agreement Signed to Expand U.S. and India Vision Research Collaborations

In August, the National Institutes of Health (NIH) announced the signing of a United States-India Statement of Intent for collaboration on expansion of vision research. The agreement, signed by Dr. Maharaj K. Bhan, Secretary of

#### The NEI has a historic relationship with India dating back to the 1980's.

the Department of Biotechnology (DBT) in India, and Dr. Elias A. Zerhouni, Director of the NIH in the United States, symbolizes an increased commitment to joint collaborations on eye disorders. The agreement was signed at the NIH campus in Bethesda, Maryland, and witnessed by members of the diplomatic corps as well as NIH senior scientists. The agreement was developed jointly by the National Eye Institute (NEI) and the DBT with support from the John E. Fogarty International Center, which plays a key role in advancing the NIH mission through international partnerships.

"Our scientific collaborations with colleagues in India are strong. Through this agreement, they will become even stronger," said Dr. Zerhouni. "With the rising global burden of disability and suffering posed by eye disorders, partnerships such as the one we forged today are increasingly critical."

The NEI has a historic relationship with India dating back to the 1980's. Dr. Paul A. Sieving, NEI Director, is building on earlier efforts through enhanced vision research collaborations. The signing of this agreement follows two Indo-U.S. workshops held in February and April on expan-

sion of collaborative research held this year in India and the United States. The workshops were arranged by the Association for Research in Vision and Ophthalmology (ARVO) with funding through a cooperative agreement with the NEI.



Dr. Zerhouni (seated left) and Dr. Maharaj Bhan (seated right) sign the Statement of Intent. Tina Chung, of the John E. Fogarty International Center, NIH, and Dr. Kamal Dwivedi, of the Embassy of India, look on.

# NAEVR/AEVR Support NEI Exhibit Openings in Baltimore

On September 13, NAEVR/AEVR Executive Director James Jorkasky joined members of the vision community at openings of two National Eye Institute (NEI) exhibits, including the EYE SITE Low Vision Exhibit at the Enoch Pratt Free Library and the VISION Exhibit at the Maryland Science Center in Baltimore.

Since 2001, the EYESITE has traveled to 81 shopping malls in 33 states across the country. The VISION Exhibit has traveled to 32 cities nationwide since it was launched in 1993.■



Cong. Elijah Cummings (D-MD) welcomes attendees at the EYE SITE Exhibit opening, flanked by left to right: Stan Stoval (Baltimore, Channel 11); Dr. Tyler Cymet (Baltimore City Medical Society); Dr. Eve Higginbotham (University of Maryland); and Dr. Jack McLaughlin (NEI).

Representatives of the sponsoring organizations joined the exhibit's mascot "Elvee" in a ribbon-cutting ceremony. Elvee leads visitors through the multimedia program on the causes and warning signs of low vision.



# 2007 ARVO Annual Awards Call for Nominations – Deadline: March 3, 2006

Members of the vision community are encouraged to nominate their esteemed colleagues for the prestigious ARVO Awards to be presented at the 2007 ARVO Annual Meeting.

#### **Proctor Medal**

Outstanding research in the basic or clinical sciences as applied to ophthalmology.

#### **Friedenwald Award**

Outstanding research in the basic or clinical sciences as applied to ophthalmology.

#### Mildred Weisenfeld Award for Excellence in Ophthalmology

Distinguished scholarly contributions to the clinical practice of ophthalmology.

#### **Cogan Award**

Contributions to research in ophthalmology or visual sciences directly related to disorders of the human eye or visual system, by a promising individual researcher under 40 years of age.

#### ARVO/Pfizer Ophthalmic Translational Research Award

Excellence in research and fundamental scientific discoveries, concepts and novel technologies leading to clinical evidence of diagnosis, prevention or amelioration of the pathological eye and/or an understanding of the normal vision processes.

#### **Kupfer Award**

Distinguished public service on behalf of eye and vision research.

#### **Special Recognition Award**

Outstanding service to ARVO and/or the vision research community.

#### ARVO/Alcon Early Career Clinician-Scientist Award

For research presented at the Annual Meeting by clinician-scientists engaged in basic or clinical vision research. Up to five awards will be presented annually and must be applied for during the 2007 online abstract submission in the fall of 2006. Logon to **www.arvo.org** for complete criteria.

For complete nomination and award information, please visit the ARVO Web site, **www.arvo.org**, or contact Barbara Hollis at bhollis@arvo.org or (240) 221-2940.■

> Prevent Blindness

# Apply Now for Prevent Blindness America Investigator Awards

The Prevent Blindness America Investigator Award provides funding for clinically based research investigating public health issues related to the burden of illness of eye-related health and safety topics. All research grants must focus on preserving sight and preventing blindness.

and safety topics. All research grants must focus on preserving sight and preventing blindness. Researchers will be chosen based on their level of qualifications relating to the eye health field and the quality and feasibility of the proposed research project. Researchers must demonstrate a high level of academic achievement, the urgency of the research agenda, and an immediate human benefit. Research pertaining to prevalence, early detection strategies, and outcomes and prevention will take priority.

Grants will be awarded for \$25,000 to \$50,000 each for a one-year period. Grants are available to U.S citizens only. Up to a total of \$100,000 will be granted annually. The number of awards depends on the dollar amount of the grants awarded. Grant recipients are required to submit quarterly progress reports. ARVO will provide the scientific review of grant applications. Application forms can be found at www.preventblindness.org, and must be submitted by March 1, 2006.

For more information, contact Andrea Hays, Public Health Manager, Prevent Blindness America, at (312) 363-6038 or ahays@preventblindness.org.■

# Fight for Sight Individual Grants and Awards

For 60 years, Fight for Sight has encouraged research into the causes and cures of eye disease, focusing its resources on young investigators.

Since 1946, Fight for Sight has awarded more than 3,000 grants. These awards enable researchers to demonstrate the validity of their ideas and obtain subsequent support from other funding sources. Past grant recipients have been



leaders in the field of ophthalmology including more than 80 past and current ophthalmology chairs. Award selection is made by a committee of more than 30 scientists and clinicians headed by Randy Kardon, MD, PhD, of the University of Iowa. The grant review process takes place prior to the ARVO Annual Meeting

and successful applicants are notified in early May.

continued on page 21

# Tear Film & Ocular Surface Society Accepting Travel Grant Applications

The Tear Film & Ocular Surface Society (TFOS) is seeking applicants for its annual Travel Awards. These awards provide partial travel support to the ARVO Annual Meeting for at least four postdoctoral fellows, graduate students, or young investigators (35 years old or younger) whose ARVO 2006 abstract in which they appear as first author demonstrates significant scientific achievement in the field of tear film, ocular surface, or Sjogren's syndrome research. Each

\_\_\_\_\_

award is \$750 and will be accompanied by a free ticket to the TFOS Cruise & Dinner on May 1 in Fort Lauderdale as well as a complimentary subscription to *The Ocular Surface*.

To apply, please combine your accepted ARVO abstract plus one figure into a one-page file and e-mail it as a PDF to Linda Herrington at admin@tearfilm.org before April 3, 2006. The figure should demonstrate evidence of the abstract's most important finding, and will be held in strict confidence by the awards committee. Awardees



Tear Film & Ocular Surface Society es

will be notified by April 25 and will be announced during the TFOS Cruise & Dinner. 2006 ARVO travel grant award winners are not eligible to apply. For more information about these awards or the cruise, please visit the TFOS Web site, www.tearfilm.org.

## **Cora Verhagen Prize**

The Cora Verhagen Prize is awarded for the best ocular immunology poster or paper presentation at the ARVO Annual Meeting. The Cora Verhagen Prize was instituted in 1995 to honor the memory and scientific contributions of our colleague Cora Verhagen.

An international jury committee of six active ARVO members has been appointed to select the two prize winners. The first prize winner will receive an award of \$250 and a plaque with an inscription of his or her name along with those of previous awardees. This plaque may be temporarily mounted in the institute during the year following the presentation at ARVO. The winner will also receive a bronze medallion. Both the medallion and the plaque contain the image of Winged Victory. The money and the plaque for the 2006 Cora Verhagen Prize will be awarded at the 2007 ARVO Annual Meeting. The second prize winner will receive an award of \$100.

- Eligible candidates for the prize should conform to the following criteria: Candidates must be students or postdoctoral fellows considered as trainees in ocular immunology working under the guidance of a mentor. Such trainees may have independent support for salaries, but cannot hold a personal grant to support the cost of their research. Excluded are individuals with permanent faculty appointments at universities or research institutes, and employees of companies. Applications must include the name of the mentor and the title of the presentation.
- 2. Candidates must be the first author of a 2006 ARVO Annual Meeting poster or paper presentation dealing with a subject in the field of ocular immunology.

\_\_\_\_\_

## **APPLICATION FORM – 2006 CORA VERHAGEN PRIZE**

I would like to compete for the <b>2006 Cora Verhagen Prize</b> to be awarded for the best "ocular immunology" presentation by a trainee.
Name:
Abstract Title:
Mentor Name:
<b>Mentor Statement:</b> I hereby state that the above-named applicant fulfills the "trainee" criteria for the <b>Cora Verhagen Prize</b> .
Mentor Signature:
<b>Deadline for applications is April 1, 2006. Do not send Application Forms to the ARVO Office.</b> Please send all Application Forms to: Dr. Martine J. Jager, Department of Ophthalmology. LUMC-J3, P.O. Box 9600 • 2300 RC Leiden, The Netherlands • Fax: 31-71-5248222 • E-mail: M.J.Jager@lumc.nl

#### A Message From the President continued from page 1

#### **International Membership in ARVO Governance**

To increase international membership on the ARVO Board of Trustees, the Board will invite an at large ex-officio international member from the International Chapter Affiliate Council to serve on the Board of Trustees. Commencing its first meeting in May 2006, the Council will nominate and elect an individual to serve an initial one-year term, beginning at the 2006 Fall Board of Trustees meeting. Subsequent terms will be determined.

In addition, the Trustees also approved the formation of a working group made up of current and former Trustees who will be charged with developing a formal process for electing international members to the Board. The working group will provide a report to the Trustees at the 2006 Spring Board Meeting. In the meantime, the Trustees have invited the Chair of the International Members Committee to serve as an *ex-officio* on the Board for a two-year term while the working group develops recommendations on next steps.

#### **Other Issues**

A number of other issues were also discussed at the 2005 Fall Board Meeting including adopting a policy on registering clinical trials for ARVO publications and abstracts, and developing a process to educate the ARVO membership on the importance of research integrity. More information on these topics can be found under the ARVO Governance section of this newsletter.

These significant accomplishments demonstrate the health of vision research and the exciting work being done around the world. With a stable membership, strong financial position and dedicated volunteers at all levels in the Association, we will continue to make great strides in facilitating worldwide advancement of vision research.

Sincerely,

Jany J. Tokemito

Larry J. Takemoto, PhD **ARVO** President



## **Update on Open Access**

#### Overview

 $2^{005}$  has seen several policies issued about Open Access of peer-reviewed articles supported by various funding agencies. These policies are briefly explained below as are the ways in which ARVO is supporting members in complying, if they chose to do so.

In February 2005, the National Institutes of Health (NIH) announced the new Open Access policy to enhance public access to articles resulting from NIH-funded research effective for all articles accepted on or after May 2, 2005. This **voluntary** program requests that PIs electronically submit their final, accepted manuscripts to PubMed Central at the following URL: http://nihms.nih.gov/db/sub.cgi. NIH requires that articles be released to the public within 12 months of the actual publication date in the journal.

The Wellcome Trust's policy was published May 19 and required that all Trust-funded articles accepted on or after October 1, 2005 be submitted electronically to PubMed Central by the grantee and be made open to the public within six months of publication in a peer-reviewed journal.

At the end of June, the Research Councils UK (RCUK) issued a position statement that grantees are required to deposit published journal articles or conference proceedings in an appropriate e-print repository, either institutional or subject-based, as soon as possible after publication and subject to copyright and/or licensing agreements with publishers. The requirement initially was for all articles resulting from grants awarded on or after October 1, 2005. Because of suggestions from publishers and stakeholders worldwide, that date has since been delayed and the policy is expected to take affect in early 2006.

RCUK consider HighWire Press a qualified repository. If this proposal is accepted, *IOVS* authors will not need to deposit articles.

• In concert with members of the DC Principles, ARVO has proposed to NIH that author-submitted PDFs be displayed in PubMed Central and link back to the authorized version of the article online. ARVO's preference is to display the indexed abstract at PubMed Central and provide a link to the authorized, published online article.

#### **ARVO's Position on Public Access**

ARVO was one of the first scientific societies to publish a journal, *JOV*, which is free to all, whether or not they are ARVO members. ARVO provides free access to all *IOVS* abstracts at the time of publication and free access to all *IOVS* articles 12 months after the date of publication. In addition, ARVO is in the process of making all back issues of *IOVS* freely available online, starting with volume one. All of these services cost the Association a significant amount of money. Subscriptions, dues, and publications charges allow ARVO to publish the print and online editions of our journals and to fund the other educational activities of our Association.

Almost 50 percent of the articles published in *IOVS* and *JOV* result from studies that were funded by the NIH; another 20 to 30 articles are supported by the Wellcome Trust. The immediate release of articles through PubMed Central or a similar archive *could lead to losses in subscription and reprint revenue* that would threaten our ability to meet the needs of ARVO and its members and **assure the integrity of the peer-review process and the published article**. ARVO could be forced to substantially increase publication charges to offset loss of income.

#### What ARVO Does to Assist You

- ARVO modified the copyright release form for *Investigative Ophthalmology & Visual Science (IOVS)* and *Journal of Vision (JOV)* to permit scientists to fulfill NIH's and other funding bodies policies.
- The acceptance date of *IOVS* articles has been changed to be the date on which the corresponding author approved the electronic page pages, incorporating all corrections.
- The final PDF, with page numbers and complete citation information, is made available to the corresponding author for electronic retrieval and submission to PubMed Central if they choose.
- ARVO requests that articles **not be made available to the public until 12 months after publication**, as stated on the copyright release form.
- Along with approximately 50 other biomedical journals published online at HighWire Press, ARVO has requested that

#### EVER wanted to experience a different culture and combine it with a career opportunity? Let EVER help you!

EVER is the European Association for Vision and Eye Research. Our members include vision scientists and clinical ophthalmologists from all European countries. We now include a growing number of non-European members in our association with the common aim to facilitate vision and eye research.

EVER will host a minisymposium at the 2006 ARVO Annual Meeting which will focus on ways in which non-European scientists and clinicians can collaborate within Europe. What Europe can offer, where to start, how to obtain funding, and what difficulties to anticipate will be discussed.

Speakers: Per Soderberg (Sweden), Amanda Churchill (UK), Pinar Aydin (Turkey), Ivan O. Haefliger (Switzerland)

For more information about EVER, logon to www.ever.be.

# JOURNALOF VISION



# New Feature: RSS Feeds

*Journal of Vision (JOV)* now offers RSS feeds, which contain title, authors, publication date, icon, and abstract for each published article.

RSS is a simple file format for representing news-like items. It is based on XML and the technology allows Internet users to subscribe to news feeds from Web sites that change or add content regularly such as newspapers and other news sources. RSS files are called "feeds" and most RSS subscriptions are free. On Web pages, RSS feeds are typically connected with

an orange rectangle optionally with the letters XML XML or **RSS** 

JOV's RSS feeds have proven to be very popular. Since their introduction on September 23, 2005, they have been accessed a total of 29,261 times. More information on how to use JOV RSS feeds is available at http://journalofvision.org/rss/.

# **Current Call for Papers**

rowding: Including illusory conjunctions, surround suppression, and attention. Articles are invited which will stimulate discussion between two of the guest editors, Patrick Cavanagh and Denis Pelli: the former claims that crowding measures the "spatial resolution of attention," the latter asserts that crowding limits all vision and has nothing to do with attention. See http://journalofvision.org/SpecialIssues/fvf.aspx for a full description. **Guest Editors:** 

Denis Pelli, PhD, NYU Patrick Cavanagh, PhD, Harvard University Robert Desimone, PhD, MIT

Bosco Tjan, PhD, USC Anne Treisman, PhD, Princeton University

#### JOV Sessions Reach **All-Time High**

During the last year (October 1, 2004 through October 31, 2005) there were 21,090,788 hits at the Journal of Vision (JOV) site. This totals approximately 53,259 hits per day. Over the same interval, there were 757,158 sessions, for an average of about 1,912 sessions per day (a session is a series of hits over a 30minute period by one visitor). In October 2005 *JOV* logged 94,617 sessions, our best month ever, and a 103 percent increase over the previous year. Finally, the top five most frequently downloaded papers averaged 1,333 downloads each over the last year.

Deadline for submissions is June 1, 2006.

# JOV is a Free Online-only Publication

RVO members may receive JOV by going to http:// journalofvision.org/ info/subscribe.aspx. Members can sign up and receive notification as articles are published online, or when an issue is completed. For more information about JOV, please contact aodonnell@arvo.org.

# Vision Sciences Society Meeting Abstracts Available Online

s a service to the vision science community, the abstracts from the Vision Sciences Society Meeting held May 6-11,  $\Lambda$  2005 have been published by *Journal of Vision* at http://journalofvision.org/5/8/.lacksquare

# **Recent Articles of Interest**

iew these articles and many others at http://journalofvision.org.



Symmetry impedes symmetry discrimination Bosco Tjan and Zili Liu



Accumulation and persistence of memory for natural scenes David Melcher



Illusory motion from change over time in the response to contrast and luminance Benjamin T. Backus and Ipek Oruc



Synergistic Center-Surround Receptive Field Model of Monkey H1 Horizontal Cells Orin S. Packer and Dennis M. Dacey



Size matters, but not for everyone: Individual differences for contrast discrimination Tim S. Meese, Robert F. Hess and Cristyn B. Williams

# INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE

# Activate Your Online Subscription to IOVS

- Step 1: Go to: www.iovs.org (or click on Publications then *IOVS* from the ARVO home page: www.arvo.org).
- Step 2: Click on "Subscriptions."
- Step 3: Click on "ACTIVATE your Individual Online Subscription (ARVO Member or Non-Member).
- Step 4: Enter your ARVO member number and click "Submit."

# Sign up TODAY for Electronic Tables of Contents (e-TOCs) and Citation Alerts!

- Step 1: Go to: www.iovs.org.
- Step 2: Click on "Customized Alerts" on the left navigation bar.
- Step 3: Click on the "Sign up now" link to register.
- Step 4: Sign up using either your e-mail address and click "Subscribe."
- Step 5: Then, click "Edit Settings" to define your alerts and set your citation alert requirements (author, key words) across all 869 journals hosted at HighWire Press.■

Excerpta Medica

# **IOVS** Publishing Statistics







October 2005 PLEAST Community 36 page publication entitled "Anti-Infective tion for Research in Vision and Ophthalmology (ARVO) ciety of Cataract and Refractive Surgery (ASCRS) 2005 this publication, 19 abstracts were presented to ophthalmologists. Due ersight, the appropria copyright clearances for use of these abstracts were gize for this error. ublication indicated that it was from the publishers of the Ophthalmology, the Editor-in-Chief, Editorial Board and agers of AJO were not aware of this project until after it had been distributed by Excerpta Medica. As part of the world's largest scientific, technical and medical publisher, we respect the intellectual property rights of others and are committed to complying with copyright law. We sincerely regret that this error occurred. Sincerely 5 Jøan G. Parker Senior Vice President Publishing and Reprint Services Excerpta Medica, an Elsevier business 685 Route 202/206 Bridgewater, New Jersey 08807

Excerpta Medica, an Elsevier business | 685 Route 202/206, Bridgewater, NJ 08807, USA Tel: +1 (908) 547 2100 | Fax: +1 (908) 547 2200 | excerptamedica@elsevier.com | www.excerptamedica.com



# **ARVO** Jobs – New Features and Enhancements Have Been Added!

#### Job Seekers:

- Post your CV for FREE
- Job Seeker optional anonymity
- Posting of CVs, cover letters, and other documents
- Job search engine with multiple criteria
- Save up to 100 jobs to a folder for easy reference
- Online application process
- Registration for notification when jobs matching your criteria are posted
- RSS capability to bring you the latest job postings
- Activity reports of jobs applied for, number of times your CV has been viewed, and more.

For additional information, contact bhollis@arvo.org.

#### **Employers**:

- Targeted advertising to reach the largest audience of eye and vision research professionals
- Easy online job management
- CV searching access
- Enhance listings as "Featured Jobs" or with logos, institutional profiles, or Web site links
- Specify criteria for different jobs for e-mail notification when matching CVs are posted



#### AEVR Holds Briefing... continued from page 7

Dr. Hageman concluded by emphasizing that National Institutes of Health (NIH) Director Dr. Elias Zerhouni's characterization of the discovery as one of NIH's most important breakthroughs of the year is not to be taken lightly. "Variants of the

CFH gene might also be involved with other inflammation-associated diseases such as Alzheimer's and various kidney diseases, so understanding this gene may elucidate the immune system's relationship to a variety of debilitating diseases. That is why continued funding of medical research at the NIH is so important, as we are now benefiting from an acceleration of discovery from past NIH research investments."

In introducing Dr. Hageman, ARVO Executive Director Joanne Angle reminded attendees

that this "breakthrough" was 15 years in the making, and that basic research should be funded over the long-term. AEVR Executive Director James Jorkasky



added that the CFH/AMD association represents a tangible return on investment in the NEI, which "is working on all circuits, collaboratively with other Institutes and in public/private partnerships, which is the very intent of the draft NIH reauthorization legislation pending in the House."

AEVR's briefing was one of many events held worldwide during AMD Awareness Week. The previous day, the AMD Alliance, the Macular Degeneration Partnership, Prevent Blindness America, and the Seniors Coalition held a briefing to educate Congress about the significant impact of AMD on the productivity, independence and quality of life of seniors. At the event, the AMD Alliance released its 2005 Global Report *Awareness of AMD and Associated Risk Factors* which is available at www.amdalliance.org.



The International Society for Eye Research

(ISER)



Invites you to attend the XVII International Congress of Eye Research

(ICER)



To be held in Buenos Aires from October 29<sup>th</sup> to November 3<sup>rd</sup>, 2006 See details at <u>www.ICER2006.com</u>

# ARVOMEMBERSHIP NEWS

# **Updating Your Information Is as Easy as 1-2-3!**

The new ARVO Web site allows you to update your own information quickly and easily. Just follow these steps:

- 1. Login to www.arvo.org through the Member Login link at the top of the screen.
- 2. Click on "View Your Member Profile" on the right-hand side below the Welcome.
- 3. When your record appears, click on "Edit Your Profile" at the top of your record.

Update your information if you move or get a new e-mail address so you won't miss any important communications from ARVO, or from your colleagues who use the online Member Directory to contact you!

#### Fight for Sight continued from page 14

#### **Summer Student Fellowships**

A \$2,100 stipend is paid to undergraduate, graduate, or medical students who wish to pursue ophthalmic or vision-related research. The project must take place in a hospital or university in the U.S. and should be completed during the summer months. Technicians or lab employees are not eligible for this award. Applicants must submit a letter of recommendation from their sponsor and a two-page description of the project by February 1, 2006.

#### **Postdoctoral Fellowship**

Fight for Sight Postdoctoral Fellowships provide \$20,000 stipends for individuals interested in pursuing academic careers in vision science or ophthalmology. Eligibility is limited to those who are no more than three years beyond the awarding of their doctorate. There are no citizenship requirements, but the fellowship training must take place in a U.S. institution. The applicant should not be on the staff of the laboratory prior to the start of the fellowship. The sponsoring institution is expected to supplement this award so the Fight for Sight fellow's compensation is commensurate with other research fellows.

Postdoctoral Fellowships are also available to graduates of ophthalmology residencies pursuing advanced clinical training who wish to incorporate a significant research component in their training. The preceptor is expected to supplement the current NIH fellowship salary level, and must agree to arrange protected research time. In these cases, the \$20,000 award can be applied to supplies and other research expenses.

Applicants must submit three letters of support and a four-page project description by March 1, 2006.

#### **Grants-in-Aid**

Fight for Sight offers Grants-in-Aid to young physicians and scientists looking to

establish themselves as independent investigators. New faculty with limited funding are invited to submit proposals. In rare circumstances, applications from senior investigators pursuing novel pilot projects are considered, particularly if the research involves resident or student participation. No salary support is available for the PI, but up to \$20,000 is awarded to defray the costs of support staff and/or supplies for the project. Grants-in-Aid applications for projects with strong clinical relevance to common eye diseases and vision disorders are especially encouraged.

Applicants must submit a letter of support from their department chair and a four-page project description. The deadline for applications is March 1, 2006.

For an application, logon to www.fightforsight.com. For more information, contact Janice Benson, Assistant Director, at janice@fightforsight.com or (212) 679-6060.■

## CALENDAR

IMPORTANT DATES AND UPCOMING EVENTS

### 2006

January 24	<b>Deadline</b> for Abstract Withdrawal
February 17	Notification of Abstract Acceptance <b>and</b> Online Program Planner and Itinerary Builder Available at <b>www.arvo.org</b>
March 3	<b>Deadline</b> for 2007 ARVO Awards Nominations
March 30	<b>Deadline</b> for Online Housing Reservations
April 7	<b>Deadline</b> for Early Registration Fees
April 21	<b>Deadline</b> for Annual Meeting Advance Registration (mail/fax)
April 28	<b>Deadline</b> for Annual Meeting Advance Registration (online)
April 28-29	Vision Research Conference; ARVO/Pfizer Ophthalmics Research Institute
April 29	ARVO Education Courses
April 30- May 4	ARVO Annual Meeting, Fort Lauderdale, Florida
July 9-12	Summer Eye Research Conference, Fort Myers, Florida

# **Successful Events**

The inaugural **ARVO Summer Eye Research Conference**, "Ocular Cell and Molecular Biology



(OCMB)," was held September 8-10, 2005, in Sarasota, Florida, and attracted more than 120 people for a highly interactive meeting on studies of the retina, lens,

cornea, and other ocular tissues. Returning to Sarasota was a revisit to ARVO's roots as many attendees remembered the early days of the Association and its smaller beginnings. The



From left to right: Sally Atherton, Pinar Aydin, Tom Yorio, Asma Haefliger, and Ivan Haefliger in Turkey.

younger investigators also appreciated a more intimate setting which enabled them to interact one on one with the more established researchers.

ARVO cosponsored a symposium "Successfully Conducting International Research in Europe and the United States" at the 39th National Ophthalmology Congress of the Turkish Ophthalmology Society held in Beldibi-Antalya, Turkey, September 17-21, 2005. ARVO members Sally Atherton, PhD, and Thomas Yorio, PhD, were presenters.

The ARVO Western Eye Research Conference (WERC) was held September 25-28, 2005, in Laguna Beach, California. More than 100 researchers gathered to focus on the topic of "Regenerative Ocular Biology: Restoring Vision in the Aged and Diseased Eye.'



session

"Successfully

Conducting

International

Presentations were

made by ARVO

members Sally

Atherton, PhD

and Paul

Research."

The European Association for Vision and Eye Research Meeting, held October 5-8, 2005 in Portugal, featured an ARVO



From left to right: Paul Kaufman, Amanda Churchill, Nicholas Galloway, and Anthony Bron in Portugal.

Kaufman, MD, and Lore Ann McNicol, PhD, of the National Eye Institute. Topics included types of collaborations and how to find collaboration opportunities with U.S. researchers.

# **Educational Outcomes**

Watch for upcoming articles in *IOVS* about new research opportunities generated from the U.S.-Indo Workshops on Collaborative Research, conducted in February and April 2005, and the ARVO/Pfizer Ophthalmics Research Institute held in April 2005 on the topic of "Ocular Versus Extraocular Angiogenesis: Mirror Images or Vague Resemblances?" "Nanotechnology and Nanomedicine: Applications for Vision" is now available as a free online course at www.arvo.org/nano. Sponsored by ARVO and the National Eye Institute (NEI), the course was originally

presented prior to the 2005 ARVO Annual Meeting. Learn more about Nanoscience and Nanomedicine, one of the National Institutes of Health (NIH) Roadmap initiatives.

The **2005 ARVO Keynote** Session presentations by Elias A. Zerhouni, MD, Director of the National Institutes of Health (NIH), and Peter Agre, MD, 2003 Nobel Laureate in Chemistry, are now available at no charge at www.arvo.org.

# **Upcoming Events**

#### 2006

**A**RVO will sponsor two symposia at the **World Ophthalmology Congress**, February 19-24, 2006, in Sao Paulo, Brazil. **"Technology in Ophthalmology: New Treatment Strategies,"** organized by Steven Wilson, is scheduled for February 20, from 8:30 AM to 10:30 AM, and **"Progress in Gene Therapy,"** organized by Gary Abrams, is scheduled for February 21, from 3:00 PM to 5:00 PM. For more information, logon to www.ophthalmology2006.com.br.

The second annual **ARVO/Pfizer Ophthalmics Research Institute** will be held April 28-29, 2006 in Fort Lauderdale, Florida. The conference will address the topic of "**Aqueous Humor Outflow: What Do We Know, Where Will It** 



**Lead Us?**" Speakers and participants will be invited by the organizers, Doug Johnson and Mike Fautsch. However, a limited num-

ber of attendees will be selected to participate as observers. To apply, logon to www.arvo.org.

The 10th Annual **Vision Research Conference**, cosponsored by ARVO, will be held in Fort Lauderdale, Florida, April 28-29, 2006, on the topic of **"Rhodopsin: Advances and Perspectives."** Abstracts are invited for poster presentation at the conference and should be submitted online by February 3, 2006. For more information, logon to www.visionresearch-conference.elsevier.com.

The ARVO Summer Eye Research Conference series continues with "Toward the Prevention of Age-related Macular Degeneration," July 9-12, 2006, at the Sanibel Harbour Resort & Spa in Fort Myers, Florida. For more information, logon to www.arvo.org/serc.

## 2007

The inaugural **Asia-ARVO Meeting** will be held in Singapore, at the Suntec Singapore International Convention

and Exhibit Centre, February 28-March 3, 2007 and will be

hosted again by the Singapore Eye Research Institute (SERI). For more information, logon to www.seri.com.sg.

#### **Call for Proposals:**

Proposals are being accepted for the following ARVO conferences:

- 2007 ARVO/Pfizer Ophthalmics Research Insitute (www.arvofoundation.org)
- 2007 Western Eye Research Conference (WERC) (www.arvo.org/werc)
- 2007 Summer Eye Research Conference (www.arvo.org/serc)

For details, logon to the corresponding Web site, or contact Rhonda Williams at rwilliams@arvo.org, or (240) 221-2908.■

## THE INTERNATIONAL SOCIETY FOR OCULAR CELL BIOLOGY in association with ARVO

September 6-10, 2006 Homerton College, Cambridge, UK

Topics will include: stem cells, vascular biology, photoreceptors, RPE, complement factor H, lens, and cell biology of ocular disease.

**Confirmed speakers:** D. Bok (USA), S. Finnemann (USA), J. Kopitz (Germany), M. Fini (USA), L. Rizzolo (USA), M. Seabra (UK), D. Vollrath (UK), V. Arshavsky (USA), M. Cheetham (UK), J. Chen (USA), R. McInnes (Canada), D. Papermaster (USA), U. Wolfrum (Germany), J. Hollyfield (USA), L. Galli-Resta (Italy), W. Harris (UK), D. Rapaport (USA), B. Reese (USA), E. Sernagor (UK), R. Wong (USA), T. White (USA), R. Quinlan (UK), P. Coffey (UK), M. Friedlander (USA), M. Boulton (UK), M. Fruttiger (UK), P. Turowski (UK), S. Fliesler (USA), G. Hageman (USA), P. Luthert (UK), G. Travis (USA), M. Bailly (UK), J. Bennett (USA), P. Bishop (UK), P. Campochiaro (USA), M. deLuca (Italy), P. Khaw (UK), J. Sahel (France)

**Organizing committee**: D. Bok (USA), G. Hageman (USA), J. Greenwood (UK), S. Moss (UK), R.Molday (Canada), P.E. Rakoczy (Australia), D. Williams (USA), I. Grierson (UK), E. Rodriguez-Boulan (USA), J. Usukura (Japan)

For details on conference registration and ISOCB membership, logon to www.isocb.org.



International Society for Ocular Cell Biology

# The ARVO Foundation

for Eye Research

Assuring the Future of Vision Research

#### **Outlook for 2006**

Over \$1.6 million has been committed through pledges and donations from individual and corporate donors to support the ARVO Foundation for Eye Research.

Through the generous support of Alcon Laboratories, the ARVO Foundation for Eye Research will host a Clinician-Scientist Mentoring Program to assist individuals pursuing careers as clinician-scientists. Recognizing that mentors play an important role in the retention of clinical scientists in ophthalmic research, the Program will help develop mentoring skills through an annual workshop, a mentor list-serve, and other networking opportunities.

At the 2006 ARVO Annual Meeting, the Foundation will co-sponsor the ARVO/Alcon Keynote Session. This year's distinguished speakers include Paul Sieving, MD, PhD, Director of the National Eye Institute (NEI), and Gullapali N. Rao, MD, President of the International Agency for the Prevention of Blindness and Chairman of the Board for the L V Prasad Eye Institute. Both speakers will share their experiences and efforts to expand international collaborations in eye and vision research. In addition, the Foundation will present the first ARVO/Alcon Early Career Clinician-Scientist Awards to researchers who are committed to a career as a clinician-scientist. Up to five awards will be presented during the ARVO/Alcon Keynote Session.

Finally, the Foundation will continue working with ARVO members to expand the travel grant program for new researchers outside the U.S. and establish new programs to support innovative research, pilot projects, and international research.

#### ARVO Foundation for Eye Research Launches New Web Site

The ARVO Foundation for Eye Research has launched a new Web site (www.arvofoundation.org) with improved site navigation and new features. ARVO members can now renew their support or make a donation online, learn about Foundation programs and awards, and read the latest on Foundation news and events in "What's New."

#### **Acknowledging our Supporters**

The ARVO Foundation for Eye Research extends its thanks to all its donors in 2005. Visit the Foundation Web site at www.arvofoundation.org for a complete list of donors.

David and Eileen Birch Joseph Bonanno **Rain Bosworth Anthony Bron Thomas Brunner** Chi Chao Chan **Svlvain Chemtob** Ann Child **Christine Curcio** Felicio Da Silva **Ruth Darrow** Janet Louis Davis Anthony de Beus Nicholas Delamere Avinash Desai **Ronald Engerman** John Flynn Kazumi Fukagawa

Franz Grehn Scott Hampton **Yoichi Inoue** Herb Kaufman Jae Chan Kim Shigehiko Kitano Norman Kleiman Jonathan Lass **Robert Lausch** Ralph Levene Ralph Levinson Mortimer Lorber David Maggs **Miyo Matsumura** Tovoaki Matsuura Hiraoki Miichi Akira Nakaiima Katushiko Nanba

Mario Nobrega **David Pepperberg** Jan Peterson **Steven Pittler** Lisa Marie Renzi Harris Ripps Botir T. Sagdullaev **Ramin Sarrafizadeh** Masako Satoh John D. Sheppard **Peter Soliz Barbara Streeten** Hogara Taguchi Larry Takemoto Shigekazu Uga Yukitaka Uji Lillemor M.B. Wachtmeister Takashi Watanabe

#### Help Sustain and Grow our Programs!

A swe move into the future, the programs and projects supported by the **ARVO Foundation for Eye Research** will continue to expand due to the support of individuals like you who share a common belief in the hope offered through vision research. **Show your support!** Donate to the ARVO Foundation for Eye Research online at www.arvofoundation.org or mail your donation to The ARVO Foundation for Eye Research, 12300 Twinbrook Parkway, Suite 250, Rockville, MD 20852.

To learn more about the ARVO Foundation for Eye Research, visit **www.arvofoundation.org** or contact the Foundation staff at (240) 221-2950.■