

MESSAGE FROM THE PRESIDENT

MARTINE J. JAGER, MD, PhD

## ARVO Expands Global Activities



ARVO is doing well. It has developed into a global eye research organization with over 12,000 members and a yearly meeting, which in 2007 attracted over 10,000 attendees. The

fact that ARVO has for the first time an international member as president is further proof of its international growth, as is the current presence of three international members on the ARVO Board of Trustees. ARVO has truly become an international organization, with the development of chapters and collaborations with other eye organizations around the world. The first ARVO International Chapter Affiliate Council was held this year and, as chapters are a very useful instrument to stimulate research collaboration and raise money for research, I expect that many other countries will also start their own chapters. The Asia-ARVO meeting in Singapore was once again a great success,

with the next meeting scheduled for 2009, this time in Hyderabad, India.

### Advocacy

Advocacy is an essential focus of ARVO and we receive continuous support from AEVR/NAEVR. The importance of lobbying cannot be underestimated, and I think that the US is a role model for many other countries in the proper support of eye and vision research. As support from NIH is essential for the continuation

*... the US is a role model for many other countries in the proper support of eye and vision research.*

of eye research in the US, efforts to increase money for research is of the greatest importance. Only with proper support for young investigators will (eye) research continue to be a goal in life for those considering a scientific career. In many countries eye research is hardly supported by the local government. Only by first showing the importance of eye diseases in different regions of the world by good epidemiological studies can researchers convince their governments to invest in

See *President's Message*, page 4

## Annual Meeting Survey Results

More than 800 attendees responded to the 2007 Annual Meeting survey and provided important feedback about the scientific program, publications, and services. Ninety-three percent of respondents indicated that the Annual Meeting met or exceeded their expectations, and 91% ranked the quality of the scientific program as excellent or good. One respondent noted, "I met so many interesting people and got lots of great

ideas for projects and future employment."

Another attendee commented, "This was my first ARVO experience and it was excellent! Not only was it informative but also very enjoyable." Suggestions about the meeting publications, including the *Program Summary Book* and online and CD-ROM versions of the Abstract Search and Itinerary

Builder, will be considered. Additional

See *Survey*, page 4

### Concerns Raised and Being Addressed

- Building Temperature
- Missing Message Center
- Meeting Publications
- Abstract Search/Itinerary Builder



Board of Trustees, May 2007

## ARVO at Other Meetings

Visit the ARVO Exhibits and attend ARVO Symposia at the following:

**European Association for Vision and Eye Research (EVER)**

Portoroz, Slovenia  
October 3-6, 2007

**American Academy of Optometry**

Tampa, Florida  
October 24-27, 2007  
Booth 717

**American Academy of Ophthalmology**

New Orleans, Louisiana  
November 10-13, 2007  
Booths 5341-5343

See page 17 for details.

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## ARVO GOVERNANCE

### New Trustees Elected at 2007 Annual Meeting

The BI, CL, and VN Sections held Trustee elections this year. The response rate for all Sections was well over 30 percent, with almost 80 percent of all votes registered online. The newly-elected Trustees are:



The Biochemistry/Molecular Biology (BI) Section elected **Jeffrey H. Boatright, PhD**, to a five-year term. Dr. Boatright is an Associate Professor in the Department of Ophthalmology at Emory University School of Medicine in Atlanta, GA. He has been an ARVO member since 1989, and has served on ARVO's Annual Meeting Program Committee, the Public Policy Network, and as a Travel Grant Reviewer.



The Clinical/Epidemiologic Research (CL) Section elected **Paul Mitchell, MD, PhD**, to a five-year term. Dr. Mitchell is Professor, Department of Ophthalmology, University of Sydney; Director of Ophthalmology, Sydney West Area Health Service, Westmead Hospital; and Director, Centre for Vision Research, Westmead Millennium Institute in Sydney, Australia. He has been an ARVO member since 1990, and has also served on ARVO's Annual Meeting Program Committee and the Awards Committee.



The Visual Neurophysiology (VN) Section elected **Robert F. Miller, MD**, to a five-year term. Dr. Miller is the 3M Bert Cross Chair in Visual Neuroscience in the Department of Neuroscience at the University of Minnesota in Minneapolis, MN. He has been an ARVO member since 1969. ■

### Trustee Nominations for 2008

At business meetings held during the 2007 ARVO Annual Meeting, the following Sections nominated candidates to stand for election as Trustees in 2008:

- AP Section: **Hans E. Grossniklaus, MD, MBA**, Emory University, Atlanta, GA  
**Jacob Pe'er, MD**, Hadassah-Hebrew University Medical Center, Jerusalem, Israel
- GL Section: **Peng T. Khaw, MD, PhD**, Moorfields Eye Hospital, London, England  
**Louis R. Pasquale, MD**, Massachusetts Eye & Ear Infirmary, Boston, MA

The 2008 Trustee elections will be conducted using an online election system, which has proven to be quite successful over the past few years. Only voting members of the Sections with nominees will be eligible to take part in the 2008 elections. ■

### ARVO Thanks Outgoing Committee Chairs and Volunteers

ARVO extends its thanks to all members who served on committees this past year. Special thanks go out to those who completed their terms as Chair this year: **Alan D. Marmorstein, PhD** (Advocacy's Scientific Policy Subcommittee); **James E. Puklin, MD** (Advocacy's International Advocacy Subcommittee); **Carol B. Toris, PhD** (Animals in Research); **Joseph L. Demer, MD, PhD** (Awards); **Gail M. Seigel, PhD** (Diversity Issues); **Dwight Stambolian, MD, PhD** (Ethics and Regulations in Human Research); **Donald T.H. Tan, FRCS** (International Members); **Gary W. Abrams, MD** (Long Range Planning); and **David C. Beebe, PhD** (Publications). ■

## Spotlight On Committee Activities

ARVO's Committees develop and implement specific programs and projects that address the long-range goals of ARVO. In this edition of ARVONews we will focus on the work of three Committees.



### Diversity Issues Committee

The Diversity Issues Committee (DIC), chaired by **Laura Robles, PhD**, is pursuing ways to augment ARVO's participation in the Society for Advancement of Chicanos and Native American in Science (SACNAS) Annual Conference, the Annual Biomedical Research Conference for Minority Students (ABRCMS), and the National Medical Association (NMA) Annual Meeting. Funds have been budgeted in 2008 for ARVO to award prizes at each conference. Prizes include a travel grants to the ARVO Annual Meeting for the best

presenters at each meeting and ARVO T-shirts and certificates for the other top presenters. The Committee intends to have at least one member on site at each of these meetings.

As an adjunct to increased involvement in the above-mentioned conferences, the DIC, in collaboration with the Members-in-Training Committee, is developing a brochure on careers in eye and vision research, which will include information about ARVO membership, the Annual Meeting, brief descriptions of the types of careers pursued by ARVO Members (with Member testimonials), and educational requirements needed to pursue a career in vision and vision research.



### Animals in Research Committee

Based on the recommendation of the Animals in Research Committee (ARC), chaired by **Catherine Thut, PhD**, the ARVO Board of Trustees approved ARVO joining the National Association for Biomedical Research's (NABR) Legal Strategy Group, a legal team that works with universities whose researchers come under attack. Specifically, the Group works with the legal and public outreach departments of universities to develop education programs on the use of animals in research and teach how to respond to attacks on the faculty who use animals in their research.

The Group is also working with NIH to include a check-off box on grant application forms for universities to indicate a clear understanding that if NIH funds are received, the university is required to take responsibility for their researchers if they come under attack.

The ARC is reviewing international standards for possible incorporation into ARVO's "Statement for the Use of Animals in Ophthalmic and Visual Research." The ARC also encourages all non-US ARVO members to consider joining the European Biomedical Research Association (EBRA), an association of individuals and organizations in the scientific, medical, and veterinary professions in Europe. More information can be found at [www.ebra.org](http://www.ebra.org).



### Commercial Relationships Committee

**Todd P. Margolis, MD, PhD**, ARVO President-Elect and Commercial Relationship Committee (CRC) Chair recently represented ARVO on a panel of experts convened by the Federation of American Societies in Experimental Biology (FASEB). The panel has developed an online conflict of interest (COI) toolkit for managing financial relationships between academia and industry in all fields of biomedical research. The COI Toolkit specifically addresses the conduct of research (including clinical trial registration), publishing, mentoring, etc.

This spring, the CRC provided input on the first draft of the Toolkit. After reviewing the final draft, the CRC, Publications Committee, and the Ethics and Regulations in Human Research Committee recommended that the ARVO Board of Trustees endorse the Toolkit and approve posting a link to the Toolkit on the ARVO Web site. Look for the link in the "Other Resources" section at [www.arvo.org](http://www.arvo.org). ■

## 2007-2008 Committee Chairs

The following have been named as ARVO Committee Chairs for this coming year. Go to [www.arvo.org/committee](http://www.arvo.org/committee) for Committee descriptions and activities:

### Advocacy Committee

Barry S. Winkler, PhD

### Animals in Research Committee

Catherine Thut, PhD

### Annual Meeting Program Committee

Sally S. Atherton, PhD

### Awards Committee

Reza Dana, MD, MPH, MSc

### Commercial Relationships Committee

Todd P. Margolis, MD, PhD

### Diversity Issues Committee

Laura J. Robles, PhD

### Ethics and Regulations in Human Research Committee

Leonard A. Levin, MD, PhD

### Exhibits Committee

Thomas R. Friberg, MD

### Finance Committee

Donald C. Hood, PhD

### International Members Committee

Robert Ritch, MD

### Long Range Planning Committee

Frederick L. Ferris, III, MD

### Members-in-Training Committee

John Paul SanGiovanni, ScD

### Professional Development and Education Committee

Maureen G. Maguire, PhD

### Publications Committee

Nicholas A. Delamere, PhD

### Volunteer Management Committee

Todd P. Margolis, MD, PhD

## Volunteer!

Share your expertise and play a part in shaping ARVO's goals and future. Volunteer to be on your favorite ARVO Committee. Read more about the wide variety of opportunities and complete an online Committee Volunteer Form on the ARVO Committees' home page at [www.arvo.org/committee](http://www.arvo.org/committee).

## Proposed Bylaws Amendment to Update Section Trustee Nomination Process

In 2005, ARVO began taking Section Trustee Nominations in advance of the Section Business Meetings held each year at ARVO in an effort to increase the number of candidates to nominate. Individuals still had the option to nominate candidates from the floor of the Business Meeting. Since ARVO implemented this process, the number of nominations received in advance of the Section Business Meeting has increased. Therefore, it is questionable as to whether there is a need to continue accepting nominations on the floor of the Section Business Meetings.

At the General Business Meeting of the 2008 Annual Meeting, the ARVO membership will vote to amend the ARVO bylaws to adopt an online electronic voting method to nominate the two Section Trustee candidates in advance of the Section Business Meetings. The candidates will be announced at the Section Business Meetings.

100 votes are required to amend the ARVO bylaws, so we strongly encourage you to attend the 2008 General Business Meeting in Fort Lauderdale.

The Proposed bylaws amendment is listed below:

5.03 Election. (a) Nomination of Trustees. During the course of each Annual Meeting of ARVO, each Scientific Section of ARVO shall hold a separate business meeting. By the end of the first day of the ARVO Annual Meeting, ~~At the separate business meeting;~~ each standing Scientific Section whose Trustee's term of office will expire at the end of the following year's Annual Meeting shall nominate by online vote no more than two (2) candidates. The two candidates will be announced at the separate business meeting. ~~e One of whom~~ candidate will be elected as the Successor Trustee by an online electronic election prior to the following year's Scientific Section's separate business meeting, which will take place at the Annual Meeting.

## ARVO Gearing Up to Develop New Long-Range Plan

This October, the ARVO Board of Trustees will meet with the ARVO Strategic Planning Group, chaired by Rick Ferris, MD, to begin developing ARVO's next five-year strategic plan.

Much has been accomplished under the last strategic plan (created in 2004) that has benefited the ARVO membership and the eye and vision research community as a whole. The plan has led to the implementation of international chapter affiliates and collaborations with numerous eye organizations to continue advancing vision research around the world. New programs

and activities also have been launched to support the work of clinician-scientists in eye and vision research and cross-sectional scientific interests. A complete list of all the accomplishments under the last strategic plan is available on the ARVO Web site at [www.arvo.org/strategic](http://www.arvo.org/strategic).

ARVO would like to thank the members who provided input on the future direction of ARVO through the member survey sent in August. Your comments and suggestions are vital in planning ARVO's future and will be discussed at the October Strategic Planning Meeting. ■

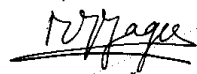
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eye research. With the increase in elderly people in the world, it is certain that age-related eye problems such as macular degeneration and corneal problems will occur in more patients; with the incredible new surgical techniques for corneal diseases and the medical possibilities for the macula, very many clinical comparative studies will be necessary. The further identification of the genetic basis of diseases will make it possible to identify the pathobiological basis of many diseases which may lead to better preventive measures. These topics and many more in any field of ocular research are fascinating, but in order to perform studies, research money is needed. ARVO will do its best to help researchers anywhere learn how to raise money for research and will also help with the development of educational sessions on clinical trials.

### International Travel Grants

Internationally, ARVO has reached out to its young researchers by expanding its own travel grant program and by collaborating with industry and private individuals to create more travel grants for those who otherwise could not afford to come to the ARVO annual meetings. In 2008, ARVO will award 100 travel grants to researchers from outside the US. The incredible number of applications shows the popularity of this program, and the ARVO office will continue to put a lot of effort into managing and expanding it.

ARVO exists as a base of support for eye researchers. If you have any ideas to further stimulate our goal of improving eye research, please let us know. The Association is here for you. ■

  
Martine J. Jager, MD, PhD

Surveys, continued from page 1

comments were provided about the Annual Meeting location, audiovisual services, and meeting services and activities. Excellent comments were offered about ARVO's complimentary shuttle bus service to and from the Convention Center. In particular, feedback about the cold temperature in the Convention Center and the lack of a Message Center were viewed as critical. All of these areas

will be reviewed and concerns will be addressed in the planning process for the 2008 Annual Meeting.

All feedback about the Annual Meeting is welcome. If you have suggestions about the Annual Meeting, or would like to propose an ARVO Education Course, Summer Eye Research Conference, or other educational program, contact Ellyn Terry, Director of Meetings and Education, at [eterry@arvo.org](mailto:eterry@arvo.org). ■

## Indo-US Workshop to Generate Collaborations

Interest in generating additional research collaborations between India and US researchers brought together a group of established and prospective collaborators at the 2007 ARVO Annual Meeting. Chaired by Drs. D. Balasubramanian and P. Kaufman, the participants heard Dr. P. Sieving support the collaborations and emphasize the National Eye Institute's (NEI) interest in studies vis-à-vis the phenotype profiles in the two countries. Dr. L. Aiello spoke about the diabetic retinopathy clinical research (DRCR) project and how Indian groups under the leadership of Aravind are participating. Drs. G. Dagnelie and R. Tandon introduced the bi-national effort on genetic predisposition and antioxidant trials that they hope to have funded through the NEI in the US and the Department of Biotechnology (DBT) in India.

### Joint grants scenarios

Dr. T.S. Rao of the DBT and Dr. L. Ellwein of NEI focused on three types of joint grant proposals: (i) Asking for funds from NIH where supplementary amounts are asked for the Indian partners (Dr. D. Beebe and Dr. J. Costello work with Dr. Balasubramanian under this arrangement). (ii) Joint proposals submitted simultaneously to NIH and to DBT: the joint pre-proposal (short summary of what is intended) is first seen and agreed to by the Joint Working Group (JWG), which is composed of eye researchers representing the two governments. The next step is to submit the joint proposal to both NIH and DBT so that proposals are funded by the respective governments. The Dagnelie/Indian group is an example. (iii) For a project already funded for the US partner, such as through an ongoing R01, the Indian partner adds his part and sends the proposal to the DBT, which reviews it via the Indian JWG, and then processes it for possible funding, such as the Aravind/Aiello DRCR project.

### Material transfer

Under the 2005 Agreement to Expand Vision Research Collaborations signed by the US and Indian governments, and the work by Dr. T.S. Rao of the DBT, the exchange of human biological material between the two countries has become far simpler and faster. A single window clearance from the DBT suffices; all that the researchers need to give is a short write-up justifying the need and the amount of material.

### Exchange of researchers

Dr. T.S. Rao talked about the facility for exchanging researchers through the existing DBT's Visiting Scientist from Abroad Program (VSAP), and the Overseas Associate Program (OAP) for Indians. It is very likely that DBT will designate three to four such visits each year, each way. Drs. J. Bennett and M. Friedlander will be going to India, thanks to VSAP, while a member of the Sankara staff is in the US through the OAP. Note that this dual scheme is funded totally by DBT.

### Sending US medicos to India

Talks have been initiated between Dr. Balasubramanian and NIH's Fogarty Center to re-establish a program for post-third-year MD students to spend a year abroad in Indian eye centers.

### Workshops to kindle and sustain interest

In addition to holding workshops at the ARVO Annual Meeting there is the hope that workshops could also be held in conjunction with the twice-yearly JWG meetings.

ARVO maintains information on the Indo-US Collaborations at [www.arvo.org/usindo](http://www.arvo.org/usindo). An inventory of collaborations can be found there as well as the names of researchers who have been involved with collaborations. ■



*Dr. T.S. Rao, India Department of Biotechnology, and Dr. L. Ellwein, US National Eye Institute*



*Workshop moderator Dr. D. Balasubramanian and speaker Dr. D. Beebe*



*Participants question workshop speakers.*

## Luncheon Spotlights Funding

The ARVO International Advocacy Subcommittee hosted a luncheon at the 2007 ARVO Annual Meeting that featured a discussion on biomedical research funding with leaders from the ARVO International Chapter Affiliates in Argentina, Brazil and Israel. Each Chapter spoke to the 35 attendees about the manner and level at which governments and private industry fund biomedical research in their countries. The presentations were followed by a discussion on developing advocacy resources and tools for ARVO international members to obtain more research funding at the local level, as well as opportunities to learn more about raising funds from private industry.

The ARVO International Advocacy Subcommittee is a subcommittee of the Advocacy Committee. It provides guidance and assistance to ARVO international members as they work to increase research funding in their countries. ■



Angela Suburo, MD, PhD from the Asociación de Investigación en Visión y Oftalmología (AIVO) leads a discussion on support for biomedical research funding in Argentina.

## First ARVO International Chapter Affiliate Council Convenes

The first meeting of the ARVO International Chapter Affiliate Council took place at the 2007 Annual Meeting in Fort Lauderdale. The Council consists of officers from each of the International Chapter Affiliates, as well as past and present trustees from the ARVO Board. Their charge is to work with ARVO international members to recommend strategies and policies for increasing available funding opportunities for vision researchers outside the US; developing and promoting education programs at the local level; increasing travel grant opportunities for young researchers outside the US to attend ARVO; and promoting vision research around the world. ■



2007-2008 ARVO International Chapter Affiliate Council Members (front row, from left): Lori Methia and Ruth Rosenstein, MD; (back row, from left) Jacob Pe'er, MD; Janetha Pena, MD, PhD; Robert Barlow, PhD; Juan Gallo, MD; Luis Politi, PhD; Mario Guido, PhD; and Nora Rotstein, PhD

## 2007 ARVO International Chapter Affiliates Travel Grant Recipients

Each year, the ARVO International Chapter Affiliate Travel Grant recipients are selected by the organizations in the ARVO International Chapter Affiliates Program. Individuals interested in applying should contact the ARVO International Chapter Affiliate directly for application instructions and deadlines. Visit the ARVO Chapter Affiliate Web page at [www.arvo.org/affiliates](http://www.arvo.org/affiliates) to learn more. ■

Left: 2007 Israel Chapter Affiliate Ohad Shaham, Tel Aviv University; right: 2007 Argentina Chapter Affiliate Pablo Alejandro, Barrionuevo Universidad Nacional de Tucumán. Not pictured: 2007 Brazil Chapter Affiliate Mirella Gualtieri, University of Sao Paulo; 2007 Brazil Chapter Affiliate Eneida Mastrantonio, Federal University Uberlandia; and 2007 Argentina Chapter Affiliate Ana Vanessa Torbidoni, Universidad Austral.



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## Symposia Sunday April 27, 2008

### Molecules to Machines: Innovations in Restoring Vision

Organizing Sections: RE, VI, VN, RC

Organizers: Joseph Carroll, Maureen McCall, Ron Adelman, and Michael Boulton

The human visual system is extremely susceptible to disease and damage; degeneration and damage occur in response to a variety of environmental and genetic insults. Unfortunately, in many cases the result is severe vision loss or even blindness. As researchers have begun to identify the specific disease mechanisms, it has become possible to design therapeutic strategies to intervene and restore vision. This symposium will feature five international leaders in their respective fields who will openly discuss the successes, failures, and future prospects of restorative therapies.

### Innovative Strategies for Eye Development and Regeneration in Non-Mammalian Models

Organizing Sections: CO, GL, LE

Organizers: Judith West-Mays and Michael Robinson

This symposium will highlight recent progress in the genetic and molecular aspects of eye development and regeneration through the use of innovative (non-mammalian) animal models. Models to be discussed include invertebrates, fish, amphibians, and birds, and multiple ocular tissues will be considered, including the lens, retina, cornea, and anterior chamber. The main focus will be to demonstrate that these innovative animal models, including *Drosophila*, zebrafish, and amphibians, offer quick and easily manipulated strategies for understanding the genetics of eye development and regeneration and have provided many lessons that have been applied to human ocular development and disease.

### Nanomedicine Applications in Ophthalmology

Organizing Sections: BI, CO, GL, RC

Organizers: Michael Boulton and Robert Ritch

Nanomedicine offers a new and important tool in the diagnosis and treatment of ocular diseases. Exciting new developments in the field of nanomedicine are now being realized and are being translated into diagnosis, treatment, and prevention of a variety of ocular conditions. This symposium will feature six international experts in the exploitation of nanomedicine who will review the state-of-the-art and current strategies being developed to combat ocular disease. The speakers will evaluate advantages and limitations of current nanomedicine and discuss future prospects.

### Ocular Biomechanics

Organizing Sections: GL, EY, LE, CO, AP

Organizer: S. Claude Burgoyne, Ross Ethier, and Crawford Downs

This symposium will summarize the current state of knowledge regarding the role of biomechanics in the physiology and pathophysiology of the ocular tissues and suggest new directions for this field to explore. The biomechanics of seven ocular tissues will be discussed. Three broad areas will be addressed: What is the current state of knowledge regarding the biomechanics of their tissue? What needs to be done next to advance the science in their field? What are the important clinical implications and opportunities for translation? ■

## Scientific Sessions Expanded in 2008

In response to feedback from members, additional paper sessions will be offered at the 2008 Annual Meeting for ARVO's three largest sections — Cornea, Glaucoma and Retina. In addition, requests from members for expanded viewing time for posters has prompted the Board of Trustees to extend the Poster Session hours on Sunday through Wednesday. Posters will be available for viewing each day until 7:00 pm to allow maximum access to the science. ■

## Eyes on Innovation

Eyes on Innovation, the theme for the 2008 ARVO Annual Meeting, April 27–May 1 in Fort Lauderdale, Florida,



will be a major forum for vision researchers and practitioners to explore the latest innovative techniques, protocols, and tools in development and use by ophthalmic researchers whose quest is to improve patient care and

vision and to cure eye diseases. ARVO encourages the submission of abstracts to the 2008 Annual Meeting that showcase research innovations. Abstract submissions begin October 15, 2007 at [www.arvo.org](http://www.arvo.org). (See the Call for Abstracts in the center of this newsletter for more information.) ■

## ARVO/Alcon Keynote Session



Ray Kurzweil

The ARVO/Alcon Keynote Session, Sunday, April 27, 2008, will feature renowned author and inventor, Ray Kurzweil.

Mr. Kurzweil is the author of *The Age of Spiritual Machines*, and his latest book, *The Singularity is Near*, is a *New York Times* best seller. As one of the leading inventors of our time, Kurzweil was the principal developer of the first Charge Coupling Device (CCD) flat-bed scanner, the first omni-font optical character recognition, the first print-to-speech reading machine for the blind, the first text-to-speech synthesizer, the first music synthesizer capable of recreating the grand piano and other orchestral instruments, and the first commercially marketed large-vocabulary speech recognition.

Kurzweil is the recipient of the MIT-Lemelson Prize, the world's largest award for innovation, and in 1999 he received the National Medal of Technology, the nation's highest honor in technology, from President Clinton in a White House ceremony. ■



## ARVO Committee-Sponsored Workshops



**Animal Models in Ocular Drug Delivery**  
*Organized by the Animals in Research Committee*

**From Bench to Bedside: Tips for Developing Your Drug or Medical Device**  
*Organized by the Commercial Relationships Committee*

**Leadership in Science: Setting a Course for Women, Minorities, and Persons with Disabilities**  
*Organized by the Diversity Issues Committee*

**The Ethics of Genetic Studies**  
*Organized by the Ethics and Regulations in Human Research Committee*

**Successful Transition From Degree to Independence in Scholarship, Research, and Practice — Identifying and Developing Skills That Can Shape Your Career**  
*Organized by the Members-in-Training Committee ■*

## ARVO Education Courses



The following courses will be offered Saturday, April 26, 2008. Separate registration is required. For more information log on to [www.arvo.org/AM](http://www.arvo.org/AM).

### Economic Evaluation in Eye Care

*Organizers: Kevin Frick, PhD, Johns Hopkins University, and Steven Kymes, PhD, Washington University*

This course will introduce students to the use and conduct of economic evaluations in eye care. Attendees will learn about the standards that guide the measurement and calculation of costs and benefits in high quality cost-effectiveness analyses. Attendees will also have a chance to discuss the planning of a hypothetical economic evaluation. At the completion of the course, attendees will understand the basic methods for a high-quality economic evaluation of an eye care program and be able to contribute to the planning of an economic evaluation in eye care.

### Eye Cancer: New Insights From Developmental and Stem Cell Biology

*Organizer: J. William Harbour, MD, Washington University*

Developmental and stem cell biology are providing exciting new insights into the mechanisms of cancer development and progression, and the study of cancer stem cells is rapidly emerging as one of the most important fields in cancer research. Eye cancer has played a leading role in this unfolding story, due largely to the exceptional level of detail that is known about eye development. This course will explore emerging concepts that link developmental, stem cell, and cancer biology, and it will demonstrate the experimental techniques being used in this research. ■

## Reserve Your Hotel Today!

All 2008 Housing Reservation Forms received at the Housing Desk during the 2007 Annual Meeting have been processed and confirmations have been sent. If you have not received a confirmation for your 2008 reservation, contact the Housing Bureau via e-mail at [gflhousing@broward.org](mailto:gflhousing@broward.org) or fax 954-765-4414 or 4197 for assistance.

If you have not already made a hotel reservation for 2008, log on to [www.arvo.org/housing](http://www.arvo.org/housing). The hotels closest to the Convention Center sell out quickly — nearly 75 percent of all available rooms are already sold out — so don't delay. ■

## ARVO Travel Grant Program

The ARVO Travel Grant Program provides partial travel support to investigators who demonstrate potential for future significant research accomplishments, and whose research findings, selected to be presented at the ARVO Annual Meeting, are considered to be of high interest to the vision and ophthalmology community.

**Application deadline is December 7.** Travel Grant applicants must submit an abstract as First Author and complete a corresponding online Travel Grant Application Form, applying only for grants for which the First Author is eligible using the Online Abstract Submission Program (available at [www.arvo.org](http://www.arvo.org) between October 15 and December 7, 2007). To view the number of grants available, and their restrictions and requirements, go to [www.arvo.org/TravelGrant](http://www.arvo.org/TravelGrant).

One grant may be awarded to an investigator who has not previously received a grant and whose abstract is accepted for presentation. The amount of the grant (\$500–\$1,000) depends on the grant awarded and the grantee's geographic location. Annual Meeting registration fees will be waived. Travel Grant awardees will be notified in March 2008. Contact Rhonda Williams at [rwilliams@arvo.org](mailto:rwilliams@arvo.org) or 240-221-2908 for additional information. ■

## Minisymposia

Each of ARVO's Scientific Sections organizes a Minisymposium during the Annual Meeting.

- AP: Nitric Oxide in Ocular Health and Disease**  
Organizers: William Stell and Debora Nickla
- BI: AMD Minisymposium Honoring Peter Dudley**  
Contributing Sections: RC, RE  
Organizers: Muna Naash and Robert Anderson
- CL: QALYS, DALYS and Dollars: The Economics of Eye Disease**
- CO: Proteoglycans and Glycosaminoglycans, and Their Roles in the Cornea**  
Organizers: Andrew Quantock and James Funderburgh
- EY: The Developing Brain, Strabismus, and Amblyopia**  
Organizers: Linda McLoon, Richard Harad, and Len Levin
- IM: Microbial Subversion of Ocular Defenses**  
Contributing Sections: CO, RE  
Organizers: Dale Gregerson, Suzanne Fleiszig, and Andrew Dick
- IM: Trafficking of Leukocytes in the Eye**  
Contributing Sections: CO and RC  
Organizers: Dale Gregerson, Andrew Dick, and Suzanne Fleiszig
- GL: How Does Age Increase Risk in Glaucoma?**  
Organizer: Claude Burgoyne
- LE: The Physiological Function of Reactive Oxygen Species (ROS) in Cell Signaling**  
Organizers: Marjorie F. Lou and P. Vasanth Rao
- PH: The Many Diverse Roles of Serotonin in Ocular Biology**  
Organizers: Carol Toris, Dan Stammers, and Filippo Drago
- RC: Zebrafish Models of Eye Disease: The Second Generation**  
Organizers: James M. Fadool and Jayakrishna Ambati
- RE: Is There an Innovative Role of Laser in the Treatment of Retinal Diseases?**  
Organizer: Paolo Lanzetta
- VI: Linking Retinal Structure and Visual Function**  
Organizers: Nancy Coletta and Joseph Carroll
- VN: Structural and Functional Consequences of Manipulating Synaptic Transmission**  
Contributing Sections: BI, RC  
Organizers: Maureen McCall and Anand Swaroop ■

## JOV Call for Papers

### Eye movements and the perception of a clear and stable visual world

Recent developments have led to new insights into how the visual system copes with natural retinal image motions, as well as the neural mechanisms underlying their perceptual suppression. These developments are highlighted by behavioral, psychophysical, computational, and neurophysiological research carried out under the complex conditions of the natural retinal environment.

Topics include:

- Visual function with natural and artificial retinal image motions
- Eye movements and perceptual stability
- Perceptual localization during and around the time of saccades
- Transsaccadic memory
- Eye movements of fixation
- Attention and eye movements
- Oculomotor compensation for movements of head and body
- Perceptual suppression of eye movements

### Guest Editors:

- Susana Martinez-Conde, Barrow Neurological Institute, US
- Rich Krauzlis, Salk Institute for Biological Studies, US
- Joel Miller, Smith-Kettlewell Eye Research Institute, US
- Concetta Morrone, Istituto di Neuroscienze CNR, Italy
- David Williams, University of Rochester, US
- Eileen Kowler, Rutgers University, US

### Deadline for submissions:

December 1, 2007

**Target publication date:** June 2008

Journal of Vision is an online, open-access journal that encourages the use of images, color, movies, hyperlinks, and other digital enhancements. To submit a paper to this special issue, please follow the Instructions for Authors. ■

## Important Dates

### 2007

September 1

Membership dues renewal online opens

October 1

Annual Meeting registration online opens

October 15

Abstract submission and revision online opens

December 7

Deadline: Online abstract submission at 11:59 pm EST

Deadline: ARVO/Alcon Awards application (see page 25)

Deadline: Travel Grant Awards application (see page 9)

December 9

Deadline: Online abstract revision at 11:59 pm EST

### 2008

February 8

Notification of abstract acceptance

February 22

Abstract Search and Itinerary Builder available online

March 3

Deadline: ARVO Annual Awards nomination

March 10

Deadline: Housing reservations

March 28

Deadline: Early registration rates

April 18

Deadline: Registration cancellation

April 25

ARVO/Pfizer Ophthalmics Research Institute

April 26

ARVO Education Courses

April 27–May 1

ARVO Annual Meeting: Eyes on Innovation ■

## 2007 Annual Meeting Information

### What Exhibitors Thought of ARVO ...

Overall the response was that the 2007 ARVO Annual Meeting was "Great!" The meeting met or exceeded the exhibitors' expectations as the best scientific and research ophthalmology meeting they attend. The exhibitors appreciated the good traffic in the hall. Over 47% of the companies that exhibited at the 2007 ARVO Annual Meeting responded to a survey sent to them in late May. Reflecting ARVO's membership, exhibitors were almost equally divided in their aims to meet basic researchers and clinical researchers, with clinicians, ophthalmic surgeons, and educators running a close second. Some 98% of companies believe that the meeting was very successful for them and plan to exhibit at the 2008 meeting. The only company that stated it would not be returning will not be exhibiting at any meetings in 2008. The services provided by ARVO and by contracted vendors, such as decorating and photographic services, were ranked by 85% of respondents to be excellent or good; less than 3% did not use most of the services. ■

### ... and What Members Thought of the Exhibits

Eight percent of attendees who responded to the Annual Meeting Survey this year reported that they visited the Exhibit Hall at least two times, and 57% visited the Hall three or more times during the meeting. However, since many members advised us that there is not enough time to spend in the exhibit areas, ARVO will be extending exhibit hours by 45 minutes every day in 2008. The new hours will be from 9:00 am to 4:45 pm Sunday through Wednesday. Almost 150 people suggested companies, products, or services that they would like to see at the 2008 Annual Meeting and the sales staff will make every effort to meet those requests. ■

## Future ARVO Annual Meeting Dates

May 3-7, 2009

May 2-6, 2010

May 1-5, 2011

## ARVO Exhibits — NEW Longer Hours

Visit exhibitors Sunday, April 27 through Wednesday, April 30, 9:00 am–4:45 pm daily. See the latest products and services that will help you in your research and/or clinical work. For more information visit [www.arvo.org/AM/exhibits](http://www.arvo.org/AM/exhibits). ■

## 2008 ARVO Annual Meeting Preliminary Schedule

Friday/Saturday April 25-26	Time	Sunday April 27	Monday April 28	Tuesday April 29	Wednesday April 30	Thursday May 1
ARVO/Pfizer Ophthalmics Research Institute April 25-26	8:30 am	Posters & Symposia	Papers & Posters	Papers & Posters	Papers & Posters	Papers & Posters
	10:20 am		Section Business Meetings	Section Business Meetings	General Business Meeting	
ARVO Education Courses April 26 ■ Economic Evaluation in Eye Care ■ Eye Cancer: New Insights from Development and Stem Cell Biology	10:45 am	Posters & Symposia				Papers & Posters
	11:00 am		Papers & Posters	Papers & Posters	Papers & Posters	Papers & Posters
	11:15 am		SIGs/Workshops	SIGs/Workshops	SIGs/Workshops & Pizza with a Prof	
	1:00 pm	Posters & Basic/Clinical Lecture	SIGs/Workshops	SIGs/Workshops	SIGs/Workshops & Pizza with a Prof	ALL POSTERS
	1:15 pm					
	2:30 pm					
	2:45 pm					
	3:00 pm		Papers & Posters	Papers & Posters	Papers & Posters	ALL POSTERS
	4:15 pm	ALL POSTERS	ALL POSTERS	ALL POSTERS	ALL POSTERS	
	4:45 pm	Poster Viewing*	ALL POSTERS	ALL POSTERS	ALL POSTERS	
5:15 pm	ARVO/Alcon Keynote Session	Poster Viewing*	Poster Viewing*	Poster Viewing*		
5:30 pm		Awards Lectures	Awards Lectures			
7:30 pm	ARVO Social Everyone invited!	MIT Social			ARVO Classical Concert	
8:00 pm			ARVO Rocks!			

\*NEW: Extended Poster Viewing Hours, Sunday–Wednesday, until 7:00 pm



ARVO  
2008  
ANNUAL  
MEETING  
Eyes on  
innovation

■ APRIL 27-MAY 1, 2008 ■  
FORT LAUDERDALE, FLORIDA

## ARVO/Alcon Keynote Session

The 2007 ARVO/Alcon Keynote Session featured William Novelli, CEO of AARP, and Paul Lee, MD, JD of Duke University. The annual keynote session, sponsored by The ARVO Foundation for Eye Research through a generous donation from Alcon, was held Sunday, May 6, 2007, to open the 2007 ARVO Annual Meeting and provide a context for the Annual Meeting theme — The Aging Eye.



William Novelli



Paul Lee, MD, JD

Mr. Novelli discussed the role that individuals, communities, the workplace, and health care systems have in promoting sight preservation in older adults. Dr. Lee, known for his work in assessing cost-effective approaches to improving vision and quality-of-life in people with major blinding eye diseases, emphasized the need for health care providers to improve patient education and to understand patterns of health care services and the economic impact of vision disorders. Both Novelli and Lee support interdisciplinary research and advocacy to

transform the health care system to improve eye health and all health care. The session was videotaped and is available online at [www.arvo.org/education](http://www.arvo.org/education). A summary of the keynote session is available at [www.arvo.org/keynote07](http://www.arvo.org/keynote07). ■

## Attendance Remains Strong

Attendance at the Annual Meeting remained strong with 10,272 attendees, including 38% of registrants from outside the US representing 61 countries. ■

## Research Grant Administrators Workshop Expert Panel Focuses on Online Applications and Communication

For the fourth time ever, at its 2007 Annual Meeting, ARVO held a Research Grant Administrators Workshop for grant administrators from universities, foundations, and institutions. The focus of this year's workshop was (1) implementation of the year-old SFS 424 (R&R) grant application and (2) communications between and expectations of granting organizations and recipient institutions. The electronic SFS 424 (R&R) replaces the paper-based PHS 398 grant application.

Program organizers for the workshop were William Darby, the chief grants management officer in the Division of Extramural Research at the National Eye Institute (NEI) of NIH; Cheryl Formes, the chief operations officer of the Department of Ophthalmology at the University of Texas Southwestern Medical Center; and Tracy Perkins, MPH, administrative director at the University of Wisconsin Eye Research Institute in Madison. They encouraged the 40 attendees to discuss, with each other and with the speakers, any ideas that might help improve the grant application process. Representatives from granting organizations and recipient organizations presented their perspectives on the SFS 424 and the granting process. Representatives from the Foundation Fighting Blindness gave a peek into how their organization funds eye and vision research.



The different perspectives helped attendees understand each other's expectations and the challenges that sometimes arise. The face-to-face interactions — among colleagues and with officials from NEI, the American Health Assistance Foundation, and the Foundation Fighting Blindness — also helped advance communications.

Key features of the Workshop were the updates from the National Eye Institute and National Institutes of Health about their many requirements, changes, and upgrades; the direct interaction between research grant administrators and NEI grants management staff; presentations by and interactions with foundation staff; conversations among like-minded colleagues; and the ability to return to home institutions with key information and contacts to share with researchers and colleagues. Organizers Cheryl Formes and Tracy Perkins expressed their gratitude and satisfaction, saying that the workshop was an especially valuable forum for exchanging ideas and having pressing questions answered.



Plan now to attend the fifth Research Grant Administrators Workshop at the 2008 ARVO Annual Meeting. ■

— Elaine A. Richman, PhD

Above: W. Darby, grants management officer at NEI, addresses participants  
Below: Workshop participants

# No limits in sight

Allergan Eye Care is focused on the future, and on the unlimited possibilities in sight. For more than five decades we've helped shape the landscape of eye care. We will continue to pursue research and development that address the field of vision, never losing sight of all the lives we can touch along the way.



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APC101762006 605979

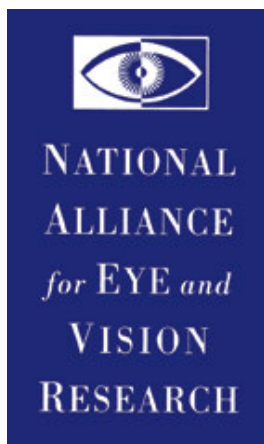
## House and Senate FY2008 Appropriations Bills Propose NIH/NEI Funding Increase

On July 19, the House passed H.R. 3043, the Fiscal Year (FY) 2008 Labor, Health and Human Services, and Education (LHHS) funding bill that includes a \$750 million and \$9.9 million increase respectively, for the NIH and NEI over FY2007 (see funding chart). Although the Senate Appropriations Committee has reported out S. 1710, the Senate's FY2008 LHHS funding bill that increases NIH and NEI funding by \$1 billion and \$14.8 million respectively, it had yet to be considered on the Senate floor at press time. Both bills were developed with strong bipartisan support.

Although the vision research community is advocating for the higher NEI funding level in the Senate bill, it has supported both bills, even if the House bill's NEI funding level is used as a "floor" in conference with the Senate. This is because the President has threatened to veto these bills since they exceed his FY2008 budget proposal, and having these bills passed/conferenced may preclude a series of short- or long-term Continuing Resolutions or an omnibus bill that could not guarantee funding increases. In its advocacy, NAEVR has stated the need for both increased and timely NEI appropriations, such that researchers do not have to rely on bridge funding in advance of grant awards.

At the June 7 meeting of the National Advisory Eye Council (NAEC), NEI Director Dr. Paul Sieving announced that NEI received a total of \$4.2 million in NIH Director's Bridge Awards from the \$91 million pool contained in the FY2007 funding Joint Resolution (JR). With the \$8.5 million already available for NEI programs from the JR (since it directly funded the newly established NIH common fund,

obviating NEI's contribution), NEI has netted \$12.7 million more for programs in FY2007 than in FY2006, despite the actual appropriations level remaining at \$667 million. ■



	FY 2007 Final	FY 2008 Budget	FY 2008 House	FY 2008 Senate
<b>NIH*</b>	\$28.9 B	\$28.6 B -1.7%	\$29.6 B +2.6%	\$29.9 B +3.5%
<b>NEI+</b>	\$667.1 M	\$667.8 M +0.1%	\$677 M +1.5%	\$681.9 M +2.2%

\* Program level, inclusive of transfers/one-time expenses.  
+ FY07 NEI excludes \$8.5 M for NEI programs due to direct appropriation to NIH common fund and \$4.2 M in NIH Director Bridge Awards.

## NEI Director Dr. Paul Sieving Testifies Before the Senate

On June 22, Dr. Sieving testified before the Senate LHHS Subcommittee in a hearing appropriately titled *A New Vision for Medical Research*. This was the last in a series of hearings with NIH Institute and Center directors, which were reinstated after an absence of several years as part of the FY2008 appropriations process led by Subcommittee Chair Sen. Tom Harkin (D-IA), in conjunction with Ranking Member Sen. Arlen Specter (R-PA). NAEVR has commended Sen. Harkin and Sen. Specter for their leadership in this regard.



NAEVR Executive Director James Jorkasky and NEI Director Dr. Paul Sieving

"NEI-funded research has resulted in remarkable advances to save and restore sight," stated Dr. Sieving, who in written and verbal testimony focused his comments on the vision public health challenge resulting from the aging of the baby boom generation. Citing age-related macular degeneration (AMD), the leading cause of vision loss, as an example of NEI research that meets NIH goals of research that is preemptive/preventive, predictive, personalized, and participatory, he described NEI's identification of genes associated with an increased risk of developing AMD, NEI's demonstration that antioxidant vitamins and minerals can reduce the progression of moderate to severe AMD by 25 percent, and new Food and Drug Administration (FDA)-approved ophthalmic drugs that are stabilizing and restoring vision loss.

In response to a follow-up question, Dr. Sieving announced that within the next two months, NEI-funded investigators would begin human clinical trials in the United States of a gene therapy to treat neurodegenerative eye diseases, including Lebers Congenital Amaurosis (LCA). Previous research has restored vision in dogs with LCA.

Dr. Sieving was joined by the following directors: Dr. Ruth Kirschstein (National Center for Complementary and Alternative Medicine), Dr. Lawrence Tabak (National Institute of Dental and Craniofacial Research), Dr. David Schwartz (National Institute of Environmental Health and Sciences), and Dr. Duane Alexander (National Institute of Child Health and Human Development). ■

## ARVO Advocacy Strengthens the Vision Community's Voice

Working with NAEVR, ARVO researchers have lent their voices in e-mails, letters, and in personal visits with Congressional offices throughout the FY2008 appropriations process. At the 2007 Annual Meeting, ARVO members sent hundreds of letters in support of NIH/NEI funding increases at the Contact Congress booth, located within the ARVO pavilion. They redoubled these efforts with hundreds of letters to support the July 19 passage of H.R. 3043, the House FY2008 L/HHS funding bill with an NIH/NEI increase that is threatened by a potential Presidential veto.



On June 20, ARVO Trustee David Hunter, MD, PhD (Harvard University) visited the offices of the Massachusetts delegation. Although these Democratic offices are supportive of NIH/NEI funding increases, this provided an opportunity to offer thanks and urge the strongest support possible to override the looming Presidential veto of increased FY2008 funding bills. In March, April, and July visits, NAEVR President and ARVO member Stephen Ryan, MD (Doheny Eye Institute/USC) visited with House and Senate appropriations leaders from both sides of the aisle, as Republican support of the funding bills is crucial to override a Presidential veto. Dr. Ryan consistently heard in these visits that the value of NEI-funded vision research is being communicated effectively to Capitol Hill. ■



*Above, from left: Huey Cai, MD, of Columbia University, Steven Pittler, PhD of the University of Alabama at Birmingham, and Cynthia Ricard, PhD, of the St. Louis University Eye Institute send letters to their Congressional Representatives.*

*Below, from left: Dr. David Hunter with John Phillips in the office of Sen. John Kerry (D-MA)*

## ARVO Members Educate Congress about Visual Imaging and Children's Vision Research

On April 17, Alliance for Eye and Vision Research (AEVR) President Stephen Ryan, MD spoke at a Congressional briefing about how visual imaging technologies, specifically optical coherence tomography (OCT), are changing the diagnosis and treatment of blinding eye disease. "OCT will transform and improve the way we diagnose AMD, diabetic retinopathy, and glaucoma since it creates quantitative measurement of retinal changes which, when coupled with a functional measurement of vision, can maximize the use of evidence-based medicine in eye care," said Dr. Ryan. He added that the



quantitative basis of OCT will also impact clinical trials of new treatments, since this research will require fewer patients, take less time, and be far less costly.

On June 28, AEVR educated Congressional staff about NEI's children's vision research. In introductory comments, AEVR Executive Director James Jorkasky noted that NEI's research exemplifies NIH's larger goals of research that is collaborative (engaging ophthalmic and optometric researchers, as well as various NIH Institutes), community-based, and which enrolls multi-ethnic patients. Lynn Cyert, PhD, OD (Northeastern University/Oklahoma College of Optometry) spoke about the *Vision in Preschoolers (VIP)* study, while Michael Repka, MD (Wilmer Eye Institute/Johns Hopkins University School of Medicine) spoke about the Pediatric Eye Disease Investigator Group (PEDIG), which he co-chairs. Dr. Repka also discussed retinopathy of prematurity (ROP) and the potential impact of the recently-released NEI-funded research on the protective effect of omega-3 polyunsaturated fatty acids against retinal disease, as demonstrated in mice. NEI plans to follow up on this basic research with a clinical trial in premature infants, and this research also suggests a protective effect in diabetic retinopathy and AMD. ■



*Above, from left: Repka, Cyert, and ARVO's Joanne Angle*

*Below, from left: Dr. Stephen Ryan and Sen. Tom Harkin (D-IA)*

## ARVO Researchers Awarded \$4.8 Million for Defense-Related Vision Research

In early July, the Department of Defense's (DOD) Peer-Reviewed Medical Research Program finalized its awards from the FY2006 appropriations process, and five ARVO members received a total of \$4.8 million. These researchers included Balamurali Ambati, MD (Medical College of Georgia), Michelle Callegan, PhD (University of Oklahoma), Lu Chen, PhD (Schepens Eye Research Institute), Shelley Fried, PhD (Harvard Medical School), and Joseph Rizzo, III, MD (Massachusetts Eye & Ear Infirmary); and their awards reflect 10% of the \$50 million pool of funds in this program. The PRMRP program was not funded in the FY2007 appropriations process.

In its advocacy, NAEVR is urging that the FY2008 Defense Appropriations bill retain the eligibility of eye and vision research for PRMRP funding since 16% of Iraq war injuries involve vision, usually traumatic eye injury. On July 10, NAEVR President Stephen Ryan, MD delivered to defense-related vision research champions, Sen. Kay Bailey Hutchison (R-TX) and Sen. Barbara Boxer (D-CA), letters from ophthalmology chairs and optometry deans from those states in support of vision research's continued eligibility.



Dr. Stephen Ryan (left) and NAEVR's James Jorkasky (right) meet with Kevin Kane, an Iraq war veteran handling defense issues in the office of Sen. Kay Bailey Hutchison (R-TX).

"The responsiveness of the vision community to this new and additional source of funding was dramatic," said NAEVR Executive Director James Jorkasky, who added that 52 of all 651 grants submitted for PRMRP funding, or 8%, came from this community. He noted that, if successful in retaining eligibility in FY2008, NAEVR will work in future years for a direct earmark that would obviate competition for funds with the 28 other areas of research within the PRMRP. ■

## Vision Community Urges Further FDA Collaboration with the NEI

In a May 2 letter, NAEVR President Stephen Ryan, MD thanked Food and Drug Administration Commissioner Andrew von Eschenbach, MD for his recent public mention of the collaborative research between the NEI and National Cancer Institute (NCI) that resulted in the first generation of FDA-approved ophthalmic drugs to treat the "wet" form of AMD.

NAEVR used this opportunity to commend FDA's Janice Soreth, MD, director of the Division of Anti-Infective and Ophthalmology Products within the FDA's Center for Drug Evaluation and Research (CDER), for working with NEI Director Dr. Paul Sieving on the November 2006 NEI/FDA *Ophthalmic Clinical Trial Design and Endpoints* meeting, which was managed by ARVO. That meeting addressed outcomes, variables, and clinical trial strategies for evaluating new treatments for AMD and diabetic retinopathy (DR).



ARVO member and meeting speaker Neil Bressler, MD of the Wilmer Eye Institute/Johns Hopkins School of Medicine with FDA's Dr. Janice Soreth

"The vision research community looks forward to further collaborations between NEI and the FDA to consider how the latest research can be applied to ophthalmic product approvals, not only for retinal diseases such as AMD and DR, but also complex neurodegenerative diseases such as glaucoma," wrote Dr. Ryan. ■



## Aravind Wins First Champalimaud Vision Award

Given for an exceptional contribution to the alleviation of visual problems in a developing country, Aravind was selected from 34 candidates to receive the €1 million award. The Madurai, India, Aravind Eye Care System was commended for its systems approach to overcoming obstacles to provide cataract surgery to millions. View the announcement video at [www.youtube.com/watch?v=6UeS8r6uuqQ](http://www.youtube.com/watch?v=6UeS8r6uuqQ).

The 2008 Champalimaud Award will recognize major breakthroughs in the understanding of vision. Details will be forthcoming at the Champalimaud Foundation website [www.fchampalimaud.org/cf/content/category/Vision\\_award/](http://www.fchampalimaud.org/cf/content/category/Vision_award/). Candidate entry forms must be completed and signed by a nominator. Forms will be available online at [www.fchampalimaud.org](http://www.fchampalimaud.org) on October 1, 2007. Deadline for submission of entries is December 31, 2007. ■



## Upcoming ARVO Events

The ARVO Ocular Cell and Molecular Biology (OCMB) Conference will be held September 6–8, 2007 at the beautiful Colony Resort & Spa in Sarasota, FL, right on the beach! For details, see [www.arvo.org/ocmb](http://www.arvo.org/ocmb).

The fourth annual ARVO/Pfizer Ophthalmics Research Institute is scheduled April 25–26, 2008 in Fort Lauderdale, FL.

Watch for details about the 2008 ARVO Summer Eye Research Conferences at [www.arvo.org/serc](http://www.arvo.org/serc). ■

## ARVO Seeks CME Certification

ARVO has applied to the Accreditation Council for Continuing Medical Education (ACCME) for certification as a provider of continuing medical education (CME). Through the 2008 Annual Meeting CME will continue to be available through ARVO's joint sponsorship with the Federation of American Societies for Experimental Biology (FASEB).

A requirement for consideration of ACCME provider status is a self assessment report of ARVO's continuing education program for compliance with ACCME's accreditation standards and guidelines. When completed in October 2007, and approved by ACCME, ARVO will be able to award CME credits for educational activities such as the Annual Meeting and the Summer Eye Research Conferences. It is anticipated that ARVO will be certified and begin awarding CME credit for all appropriate programs in July 2008. An ARVO CME Committee has been appointed to provide guidance and program oversight and is chaired by Todd Margolis, MD, PhD. The CME Committee will be working with the Annual Meeting Program Committee to ensure that all eligible sessions at the 2008 Annual Meeting have stated educational objectives and meet ACCME requirements. ■

## ARVO Online Education

ARVO is pleased to present its online education series. Several new educational programs are now available at [www.arvo.org/education](http://www.arvo.org/education) for viewing:

- 2007 ARVO/Alcon Keynote Session
- 2007 ARVO Awards Lectures
- ARVO Education Course, "Clinical Trials: Hands on with the Experts"
- "In Sights Into the Early Years of Vision Research with Bob Barlow, John Dowling, and Harris Ripps" ■



*Dr. H. Ripps responds to audience questions.*

## ARVO Co-Sponsors Upcoming Symposia

ARVO continues to collaborate with other societies and co-sponsor symposia at other meetings, including:

- European Association for Vision and Eye Research (EVER), October 3–6, 2007, Portoroz, Slovenia. *Mentoring: How, What, Why, and When* will be presented October 4, 2:00 pm–3:30 pm. Session details at [www.ever.be/view\\_session.php?ses\\_id=605](http://www.ever.be/view_session.php?ses_id=605).
- American Academy of Optometry, October 24–27, 2007, Tampa, FL. *Advances in Dry Eye Disease: Women, Nutrition, and Impact on Vision and Quality of Life* will be presented October 25, 1:30 pm–5:30 pm. Session details at [www.aaopt.org/meetings/meeting7/Education/Symposia/index.asp](http://www.aaopt.org/meetings/meeting7/Education/Symposia/index.asp).
- American Academy of Ophthalmology, November 10–13, 2007, New Orleans, LA. *Regenerative Ophthalmology: Looking to the Future* will be presented November 11, 10:30 am–12:00 pm. For session details, logon to [www.aao.org/meetings/annual\\_meeting/program/onlineprogram07.cfm](http://www.aao.org/meetings/annual_meeting/program/onlineprogram07.cfm) and enter the event number, SYM03.
- ARVO will sponsor two symposia at the World Ophthalmology Congress (WOC), June 28–July 2, 2008 in Hong Kong. *Nanotechnology in Ophthalmology: The Great Leap Forward* will be organized by Robert Ritch and *New Discoveries in Ocular Oncology* will be organized by Martine Jager. ■



The second Asia-ARVO Meeting will be held in Hyderabad, India, January 15–18, 2009. The Asia-ARVO Meeting will be organized by the Indian Eye Research Group (an interest group of all eye researchers in India) and will be hosted by the L.V. Prasad Eye Institute. Additional information is available at [www.arvo.org/asiaarvo](http://www.arvo.org/asiaarvo). ■



## 2007 Summer Eye Research Conferences



**"P**reventing Vision Loss in Diabetic Retinopathy," was held July 15-18, 2007 in Providence/Warwick, RI. The conference was attended by 82 scientists who had many opportunities to interact with each other during scientific sessions and social activities. Course Directors Edoardo Midena, MD (University of Padova) and Thomas W. Gardner, MD, MS (Penn State College of Medicine) convened a distinguished group of scientists from around the world to advance the understanding of how diabetes impacts the entire retina, and to develop strategies for improved clinical testing methods and interventions. Cheryl Formes, RN (chief operations officer, Department of Ophthalmology, UT Southwestern Medical Center, Dallas, TX) speaking on behalf of program attendees said, "The networking with colleagues and agency reps is phenomenal. You cannot get this anywhere else on this intimate of a level."



"*New Frontiers in Retinal Diseases: Linking Genetics to Molecular Pathways and Therapeutic Strategies*," was held August 23-25, 2007 in beautiful Monterey, CA. This conference brought together often disparate fields of relevance to disease processes and function within the retina by examining and contrasting biological and pathological paradigms worked out in other organ systems. Keynote speakers highlighted research in "non-retinal" fields to advance areas of research lagging in the field of retinal disease processes (e.g., retina systemic disorders, etc.). The conference promoted exchange among fields and education in new areas of potential importance. Successes and limitations in current approaches to the understanding and treatment of current disease processes were presented to bridge current basic, translational, and clinical approaches. ■



Left: Scenes from the Preventing Vision Loss in Diabetic Retinopathy meeting

## ARVO MEMBERSHIP NEWS

### Member in the News

The 2007 Otto Schade Prize in Display Performance and Image Quality is being awarded to **Andrew B. Watson, PhD**, Editor-in-Chief, *Journal of Vision*. Dr. Watson is being recognized for his application of vision science to important and innovative developments in image-quality metrics, vision-based image compression, and models for the visibility and diagnosis of display artifacts in both the spatial and temporal domains. ■

### Dues Renewal Time!

2008 Renewal Notices have been mailed; this is the only printed notice you will receive. Renew quickly online at [www.arvo.org](http://www.arvo.org) using Visa or MasterCard.

*Remember, your 2008 Membership Dues must be paid before you can access the online abstract submission program.*

### Security of Member Information

The ARVO Member Directory contains proprietary and confidential information. It is designed as a service to ARVO members for personal, non-commercial, and informational use only. Any commercial use or other solicitation is strictly prohibited. ARVO does not distribute e-mail addresses, phone or fax numbers to outside groups. Please help to keep member information secure by not sharing your login and password!

Anyone interested in mailing information to ARVO members, such as meeting announcements, etc. may rent the mailing list.

For additional information see [www.arvo.org/eweb/arvo/pdf/07MailingListForm.pdf](http://www.arvo.org/eweb/arvo/pdf/07MailingListForm.pdf).

## Looking for a New Position? Need Top Quality Professionals?

**A** RVOJobs at <https://jobs.arvo.org> is your best resource!

Job seekers can register to receive alerts when positions meeting their criteria are posted, post their profiles anonymously, and search not only the jobs on the ARVO site, but all jobs that match their criteria in the JobTarget database of over 500 associated employers. Post your profile today so employers know you are available!

Employers — you will reach the largest audience of eye and vision research professionals. Your positions can be viewed not only through the ARVO site, but anyone searching through any of JobTarget's 500 affiliated sites for matching positions.

*Don't miss this resource for finding and recruiting qualified candidates!* ■

## In Memoriam

**Ronald J. Casey, MD (GL)**  
January 17, 2007

**George Duncan, BSc, PhD (LE)**  
January 17, 2007

**Arthur A. Gold, MD (CL)**  
December 15, 2006

**Matthew C. Karch, MD (CL)**  
December 14, 2006

**Gail W. Rutherford, MD (RE)**  
April 11, 2007

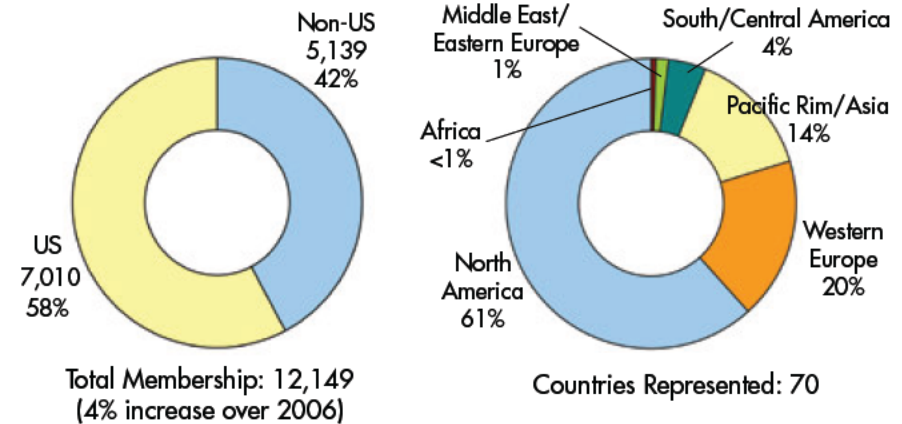
**Kenneth C. Swan, MD (AP)**  
February 23, 2007  
(ARVO President, 1951)

**Seymour Zigman, PhD (LE)**  
December 14, 2006

Submit notifications to  
[bhollis@arvo.org](mailto:bhollis@arvo.org).

## Member News

**A** RVO's membership continues to grow with a strong international presence!



## Member Section Trends

(as of 6/30/07)



## NEW! Enhanced Meetings Calendar!

Many new features have been added to the online calendar, including:

- Search by title, keywords, location, sponsoring organization, or date
- Deadlines for abstracts, registration, and housing
- CME availability
- Detailed descriptions of the meetings
- Print individual meeting announcements
- Submit calendar additions through online "Add Meeting" form

View the extensive list of vision-related meetings on the new calendar or submit a meeting announcement at [www.arvo.org/calendar](http://www.arvo.org/calendar). ■



Top: Travel grant recipients

Bottom: MIT members enjoy the ARVO MIT Social.

## Members-in-Training (MIT) News

The ARVO MIT Committee is pleased to have the opportunity to serve the ARVO Community. Our central roles are to: (1) provide information on mentoring for members-in-training; (2) plan events to support professional development for members-in-training; and (3) act as an information clearinghouse for members-in-training. We are now in the process of developing an online resource containing profiles of the MIT Committee Members; please check the Web site for developments. We currently have an online community available to all ARVO members. You may access this free service at [www.arvo.org/mitcomm](http://www.arvo.org/mitcomm).

The Committee reached consensus at ARVO 2007 about the topic for the MIT Workshop at ARVO 2008: *Successful Transition from Degree to Independence in Scholarship, Research, and Practice — Identifying and Developing Skills That Can Shape Your Career*. In discussing the best approach to planning and implementing the symposium we used the rich international diversity of experience shared by MIT Committee members. The workshop will offer information on developing a basic skill set for successful transition that is applicable in a variety of research and clinical settings; these settings include academia, private practice, and industry. We see great value in providing a program that will best meet the needs of all members-in-training.

In addition to the MIT Workshop we will continue to develop the ARVO Clinician-Scientist Forum and to support the ARVO/Alcon Clinician-Scientist Mentor/Mentee Workshop. If you are a clinician considering or now conducting basic or applied clinical research you may benefit from expertise communicated at this forum. The faculty will include prominent clinician-scientists who are researching issues related to elucidation of pathogenic mechanisms and development of diagnostic, prognostic, and therapeutic approaches to eye health and visual function. These people will also discuss motivation and benefits of a career as a clinician-scientist and the impact of seeing their research result in new therapies for patients.

We are committed to realizing our central roles in service to you. Please do not hesitate to contact me at [jpsangio@post.harvard.edu](mailto:jpsangio@post.harvard.edu). ■

Sincerely,  
John Paul SanGiovanni  
Chair, MIT Committee



ARVO Trustee David Hunter hosts a Pizza with a Prof table.

## Pizza with a Prof 2008—Input Requested!

Have you wished that you could get personal advice from those who have successfully navigated their careers? The MIT Pizza with a Prof session provides this opportunity at the Annual Meeting.

Each “Prof” hosts a table of 10 to informally discuss a topic over lunch. Specific topics are offered on career development issues facing pre-docs, postdoctoral scientists and clinical trainees.

This is a very popular program which is being expanded to provide a broader selection of topics. Forward your suggestions for topics or volunteer as a Prof by contacting Barbara Hollis at [bhollis@arvo.org](mailto:bhollis@arvo.org). ■



## World Sight Day

October 11, 2007

Vision 2020: The Right to Sight, a global collaboration of the World Health Organization with the International Agency for the Prevention of Blindness, is committed to the elimination of avoidable blindness worldwide by the year 2020. Participate in World Sight Day on October 11, 2007, dedicated this year to the impact of blindness and visual impairment for children worldwide. For more information visit [www.v2020.org](http://www.v2020.org). ■

## Impact Factor and DemandFactor: Two sides of the coin



The *Journal of Vision* recently received its 2006 Impact Factor, a measure of how frequently each article is cited in a given period of time. The value of 3.753 placed it No. 4 in the entire

category of 45 ophthalmology journals. We are proud of this figure, and believe the Impact Factor is a useful statistic, but we also believe that online journals allow new and different ways of measuring the utilization of individual articles. We have recently designed a new metric — the DemandFactor — that estimates how often an article is downloaded from the journal in the first 1,000 days after publication. We now provide this metric for every paper published in the *Journal of Vision* that is at least one year old. For more detailed information, consult the recent editorial at <http://journalofvision.org/7/7/i/> and the Information/Download Reports pages at the journal.

DemandFactor is different from and complementary to citation counts and Impact Factor. First, Impact Factor is usually applied to a journal, while DemandFactor is applied to individual articles. Second, DemandFactor reflects interest in an article before it has been read, while citation counts reflect impact of an article after it has been read. Third,

because it takes time for articles to be cited, citation counts are not informative until several years after publication. For example, Impact Factors are typically released 3.5 years after the first cited article is published. In contrast, the DemandFactor for an article is available one year after publication. Fourth, articles may be read by other scientists, and provide useful background information, but not be sufficiently relevant to lead to a citation. In this regard it is well known that various disciplines differ widely in their citation practices. Finally, scientific articles would be of little value to society if they led only to the production of other articles. But of course articles are put to use in other ways, by practitioners, engineers, or the larger public. Download statistics may reflect these wider uses.

In our new, networked age, we are learning that links among pieces of information, and the number of links leading to one item, are valuable tools in searching and sorting among a universe of possibilities. Although popularity is not the same as quality, it is one factor that we may use to select among the daunting flood of articles demanding our scientific attention. ■

Andrew B. Watson, PhD  
Editor-in-Chief, *Journal of Vision*

## JOV Call for Papers: Perceptual Organization and Neural Computation

The goal of this special issue is to highlight new methodological and theoretical developments in visual psychophysics, visual neuroscience, and computational vision that could lead to a more rigorous and complete understanding of perceptual organization.

Original research articles that develop and/or test modern computational or mathematical models of perceptual organization are invited. The focus of this issue is on vision, but studies concerning interactions of vision with other sensory modalities are welcome. Contributions from the computer vision community that advance models of perceptual organization in biological systems are expressly welcome.

A full description of the theme of this special issue can be viewed at <http://journalofvision.org/SpecialIssues/perceptualorg.aspx>.

### Guest Editors:

Sergei Gepshtein, Brain Science Institute, RIKEN, Japan; James Elder, York University, Canada; Laurence T. Maloney, New York University, USA

### Deadline for submissions:

October 1, 2007

**Target publication date:** Articles will be published as soon as ready. It is expected that the first articles will be published in early 2008. ■

## ARVO receives Award for JOV



ARVO has been awarded the APEX 2007 Award of Excellence in the Web & Electronic Publications category for its work on *Journal of Vision*.

The APEX Awards for Publication Excellence is an annual competition for writers, editors, publications staff, and business and nonprofit communicators. It is sponsored by Communications Concepts, Inc., publishers of business communication reports, including *Writing That Works*, a subscription monthly for professional communicators, and special reports on topics such as *Writing for the WEB*. ■

## Abstracts from Vision Sciences Society Meeting

The Vision Sciences Society Meeting was held May 11–May 16, 2007, in Sarasota, FL. As a service to the vision science community, abstracts from the meeting have been published by ARVO at <http://journalofvision.org/7/9/>.

## A Word From the Editor of IOVS



"Time flies when you're having fun." Being the editor-in-chief of IOVS has been a challenging, exciting, and wholly enjoyable experience. It's hard

to believe that my five-year term is almost over, and my successor, Dr. Paul Kaufman, is beginning to assume editorial duties this summer, although the formal transition date is January 1, 2008.

### Innovations During Editorship

The major innovation of the past five years took place right at the beginning: in June, 2002 we initiated our online manuscript submission and review process through ScholarOne of Charlottesville, VA, using its ManuscriptCentral service. IOVS was the first peer-reviewed journal in ophthalmology and visual science to initiate manuscript submission and review entirely electronically. Submitting and reviewing manuscripts online has dramatically shortened the review process. For calendar 2007, the mean time from submission to first decision is now 28.9 days, among the best in biomedical science. From the initiation of our online submission and review process in 2002 to the present, the mean time has been 33.4 days. Time to publication has shrunk as well, now averaging four months from the time a manuscript is accepted. ManuscriptCentral is being upgraded, and as Dr. Kaufman assumes the editorship he will begin working with a newer version of this system, which should benefit authors and reviewers.

### IOVS Highly Rated

At the present time, a journal's prestige is usually assessed by the ISI Citation Index. For many years, IOVS has ranked at or very near the top of this rank list for journals of ophthalmol-

ogy and visual science. Although our Citation Index has consistently increased over the last number of years, we are currently in third place behind *Progress in Retinal and Eye Research*, a review journal, and *Ophthalmology*, a clinical journal.



### International Scope

Another indication of a journal's international scope and prestige is the number of countries from which manuscripts are submitted. In calendar year 2007, IOVS has received submissions from 45 countries. The "top" countries with numbers of submitted manuscripts through August 22 in parentheses, are:

1. US (336)
2. Japan (105)
3. Germany (76)
4. People's Republic of China (70)
5. United Kingdom (70)
6. Australia (49)
7. Spain (36)
8. Italy (30)
9. India (28)
10. Canada (23)
11. France (23)

### Volunteer Editors Available

It is notable that after the US, which has by far the largest number of ARVO members, the next three countries on the list are countries where English is not the native language. An unfortunate downside of this is that reviewers frequently comment that manuscripts by authors who are not native English speakers can be difficult to comprehend. This may lead to the rejection of a manuscript where the science may be good, but the reviewer gives it a low priority because he/she couldn't understand it. We urge authors whose native language is not English to have a fluent English-speaking colleague read the manuscript before submitting

it, or to seek the assistance of one of our volunteer editors. The volunteer editors are senior scientists who are native English speakers and who have volunteered their time at no cost to authors who need assistance in preparing their manuscripts in fluent English. Names and e-mail addresses of volunteer editors may be obtained on the IOVS Web site ([www.iovs.org](http://www.iovs.org)) or in the IOVS section of the "Publications" drop-down menu on the ARVO Web site ([www.arvo.org](http://www.arvo.org)).

### Contributors to IOVS Success

I believe that the health of our journal is excellent. My own job has been made much, much easier because of the superb guidance and assistance that I've received from Karen Colson, ARVO's Director of Communications and Publishing, with her very great experience in scientific publication, and from our two excellent editorial assistants, Dave Roddy and Debbie Chin, whom all of our authors, Editorial Board members, and reviewers know. Our Editorial Board, many of whom will continue under Paul Kaufman's leadership, have been expert, timely, and fair. Without their help, this journal would not enjoy the success that it has.

I'm grateful to all of ARVO's members for giving me the opportunity to edit IOVS over the past five years. This has been the experience of a lifetime as an academic clinician-scientist. I wish you all the best of scientific and personal success and happiness for the future! ■

Robert N. Frank, MD  
Editor-in-Chief  
IOVS

## Program Planning Update: Ocular Epidemiology



Fueled in part by remarkable advances in large-scale population genetics and molecular biology, ocular epidemiology is poised to make even greater contributions to our efforts to prevent and treat eye disease.

To ensure that these scientific and methodological advances are fully

leveraged, the National Eye Institute has been consulting the research community. In March 2007, I appointed a distinguished, multidisciplinary program planning panel to assess the broad field of ocular epidemiology and look to the future. Dr. Sheila West chairs the panel, whose other members are Drs. Stanley P. Azen, Julie E. Buring, Jonathan L. Haines, Jonathan M. Holmes, Douglas A. Jabs, Paul P. Lee, Lance Liotta, Jerome I. Rotter, Rohit Varma, Daniel E. Weeks, and Karla Zadnik.



The panel has diligently assessed past progress and is looking to determine important future research needs and opportunities for the field. This broad set of experts is engaged in considering realistic goals, objectives, and expectations for the future. Community input was solicited at the annual ARVO meeting, and a draft report was presented to the National Advisory Eye Council (NAEC) for comment on June 6, 2007. Further public comment will be solicited for the revised report after it is posted on the NEI Web site in August. The panel will review these comments for incorporation and will issue the final report to the NAEC in early fall 2007.

Strategic program planning is a challenging endeavor. On behalf of NEI, I extend my gratitude to the panel members for their efforts in working toward producing a timely and informative report. ■

Paul A. Sieving, MD, PhD  
Director  
National Eye Institute

## NEI/NIH NEWS

### eSubmissions Update

January 2007 marked the transition from paper to electronic submission of traditional R01 grant applications using grants.gov and the SF424 (R&R) form. The NIH has now transitioned 80% of its mechanisms of support to electronic submission. A number of other mechanisms of support remain to be transitioned. These include applications for cooperative clinical studies (U01 and U10), the NEI translational research program on therapy for visual disorders (R24), fellowships (F31, F32, F33), mentored career development grants (K08, K23, K12, K22, K99), institutional training grants (T32, T35), and core grants (P30). The transition for these mechanisms has been postponed pending completion and testing of the new forms. Once this occurs, dates will be set for these remaining mechanisms. For the latest information see <http://era.nih.gov/ElectronicReceipt>. ■

### AREDS Genetic Data Sets are Available through dbGaP

NEI has made available Age-Related Eye Disease Study (AREDS) data sets (genotype-phenotype data sets and pre-computed analyses) through dbGaP, the database of Genotype and Phenotype. Researchers can gain access to these data sets in dbGaP at two levels: open (available to anyone with no restrictions), and controlled (requiring preauthorization). The open-access AREDS study documents and protocols, as well as summaries of the genotype and phenotype data are accessible at [www.ncbi.nlm.nih.gov/projects/gap/cgi-bin/study.cgi?id=phs000001](http://www.ncbi.nlm.nih.gov/projects/gap/cgi-bin/study.cgi?id=phs000001).

Researchers may also request access to the individual-level data sets within the controlled-access portions of the database at <http://dbgap.ncbi.nlm.nih.gov/aa/wga.cgi?login=&page=login>. The controlled-access portion of the data set, with authorization, provides for downloads of de-identified, individual-level genotype and phenotype data. The principal investigator (PI) and the signing official

(SO) at the investigator's institution will need to co-sign a request for data access, which contains a data user certification, to be reviewed by the NEI Data Access Committee. In order to complete this step, which utilizes the SF 424 (R&R) form, both PIs and SOs need to have accounts with the NIH eRA Commons. These are the same accounts used to apply for grants, and those who already have such accounts do not need to do anything further to make them applicable to the dbGaP controlled-access authorization process. For further information, please contact:

Hemin R. Chin, PhD  
Director, Ocular Genetics and  
Center Core Grant Programs  
Division of Extramural Research  
National Eye Institute  
Suite 1300, 5635 Fishers Lane  
Bethesda, MD 20892-9300  
301-451-2020  
[hemin@nei.nih.gov](mailto:hemin@nei.nih.gov) ■

## Three ARVO Members Appointed to National Advisory Eye Council

ARVO members Douglas H. Johnson, PhD, M. Christine McGahan, PhD, and Mae Gordon, PhD were recently appointed to the National Advisory Eye Council (NAEC). The 12-member Council meets three times per year to advise, assist, consult with, and make recommendations to the NEI director, the director of the NIH, and the secretary to the Department of Health and Human Services on research and training matters related to national efforts in vision research. The Council is also charged with reviewing all applications for grants and cooperative agreements.

Visit the NEI web site at [www.nei.nih.gov/news/briefs/naec\\_members.asp](http://www.nei.nih.gov/news/briefs/naec_members.asp) to learn more about the newly appointed NAEC members. ■

## NIH Peer Review Meeting with Professional Societies

On July 30, Sally Atherton, PhD, ARVO Executive Vice President, attended an NIH Meeting for Professional Societies to provide input on the peer review process. In June, NIH Director Dr. Elias Zerhouni appointed two working groups (one internal and the other external) to assess the peer review process and recommend additional improvements. ARVO Member Dr. Edward H. Pugh was selected to serve on the External ACD Working Group. This Group will present its findings to the NIH Director's Advisory Committee in December 2007. In January 2008, both working groups will meet and develop a set of collective recommendations for next steps. To learn more, visit the NIH Web site at <http://enhancing-peer-review.nih.gov>. ■

## Interested in Serving as a Peer Reviewer on Study Section?

The Center for Scientific Review regularly appoints scientists to serve as peer reviewers on study section. To learn more about how reviewers are selected and to be considered, visit <http://cms.csr.nih.gov/PeerReviewMeetings/StudySectionReviewers/>. ■

## NEI to Continue Institutional Clinical Scientist Development Award Program (K12)

Well-trained clinician investigators provide a critical bridge between laboratory and clinical vision research. The NEI Institutional Clinical Scientist Development Program (K12) was initiated in 2003 to provide clinicians with the fundamental skills needed to engage in the many facets of modern clinical and patient-oriented vision research.

Awarded to institutions, the K12 program provides for mentored career development opportunities, ranging from two to five years depending on an individual candidate's level of previous research experience. Program graduates are expected to transition successfully into positions as independent investigators. Following a review of this program that included discussions with the National Eye Advisory Council, NEI has determined that with several modifications, the K12 program will continue. Due to budget constraints, the K12 program will be scaled back to help stabilize support for the individual clinician-scientist development award programs (K08, K23). The new K12 announcement will be published soon in the NIH Guide for Grants and Contracts. For further information please contact:

Chyren Hunter, PhD  
 Research Training Officer  
 Division of Extramural Research  
 National Eye Institute  
 Suite 1300, 5635 Fishers Lane  
 Bethesda, MD 20892-9300  
 301-451-2020  
[clh@nei.nih.gov](mailto:clh@nei.nih.gov) ■

## JOV Call for Papers: Neuroimaging in Vision Science

The past decade has seen rapid growth in the use of imaging techniques to study the human brain. In the case of vision research, the firm foundation provided by several decades of detailed psychophysics and neurophysiology has permitted rapid progress in defining the various visual areas of the human brain, establishing the nature of the visual information processing that occurs within them and examining non-retinal influences such as attention, mental imagery and input from the other sense systems.

The Journal of Vision plans a special issue on imaging the human visual system and invites the submission of original research articles describing work using brain imaging techniques to advance our understanding of any aspect of human visual processing. Imaging is defined broadly and includes the following methodologies:

- Magnetic resonance imaging (fMRI, DTI)
- Magnetoencephalography (MEG)
- Electroencephalography (EEG)
- Optical imaging of visual cortex

### Guest Editors:

Andy Smith, Royal Holloway, University of London, UK, [a.t.smith@rhul.ac.uk](mailto:a.t.smith@rhul.ac.uk); David Heeger, New York University, US, [david.heeger@nyu.edu](mailto:david.heeger@nyu.edu); Geoff Boynton, University of Washington, US, [gboynton@u.washington.edu](mailto:gboynton@u.washington.edu); Tony Norcia, Smith-Kettlewell Eye Research Institute, US, [amn@ski.org](mailto:amn@ski.org).

### Deadline for submissions:

December 15, 2007

**Target publication date:** June 2008

**Online call for papers:**

<http://journalofvision.org/specialissues/>

*Journal of Vision is an online, open-access journal that encourages the use of images, color, movies, hyperlinks, and other digital enhancements. To submit a paper to this special issue please follow the Instructions for Authors. ■*



## American Academy of Optometry Student Travel Fellowships to ARVO

Congratulations to this year's ARVO Student Travel Fellowship recipients, presented by the American Academy of Optometry. Thank you to the Academy's Research Committee for reviewing the highly competitive applications!

Two students, Huan Guan and Jennifer Hunter, received the Academy's prestigious Weymouth Student Travel Fellowships. Ten fellowships were provided by an educational grant generously donated by VISTAKON®, a Division of Johnson and Johnson. ■



*Fellowship recipients: (front row, from left): Michal Laron, Juan Huang, Vidhyapriya Sreenivasan, Sruthi Srinivasan, Huan Guan, Haixia Liu, Lakshman Subbaraman, Jennifer Hunter; (back row, from left) Kevin Bronson-Castain, Rachel Redfern, Toco Yuen Ping Chui (not pictured), Dongmei Xing*

## PBA Announces 2007 Investigator Awards

The Prevent Blindness America Investigator Awards provide funding for clinically based research investigating public health issues related to the burden of illness of eye-related health and safety. The 2007 Award recipients and the topics of their research are:

- **Anthony J. Adams, OD, PhD**, University of California - Berkeley  
Objective Assessment of Retinal Function in Adolescents with Type 1 and Type 2 Diabetes
  - **Mary J. Kelley, PhD**, Oregon Health Sciences University, Casey Eye Institute  
Molecular Markers of Trabecular Meshwork Stem Cells
  - **Katia Del Rio-Tsonis, PhD**, Miami University of Ohio  
The Use of Human Retinal Cells for Retina Repair
- Applications for the 2008 Awards must be submitted by March 1, 2008. For additional information, see [www.prevent-blindness.org](http://www.prevent-blindness.org). ■

## ARVO/Alcon Early Career Clinician-Scientist Research Awards

The ARVO/Alcon Early Career Clinician-Scientist Research Awards are made available through a generous donation by Alcon to The ARVO Foundation for Eye Research to support researchers who are committed to a career as a clinician-scientist. Up to five awards will be presented at the ARVO/Alcon Keynote Session of the Annual Meeting on Sunday April 27, 2008. Using the Online Abstract Submission Program ([www.arvo.org](http://www.arvo.org)), applicants must submit an abstract as First Author and complete the corresponding online Award Application Form by December 7. Applicants must hold an MD or equivalent clinical degree, have completed a residency or comparable clinical training, and currently hold an academic faculty or comparable appointment. Award winners will be notified in March 2008. Additional information is available at [www.arvo.org/awards](http://www.arvo.org/awards) or by contacting Rhonda Williams at [rwilliams@arvo.org](mailto:rwilliams@arvo.org) or 240-221-2908. ■

## 2008 ARVO Annual Awards Announced

ARVO is pleased to announce the recipients of the 2008 ARVO Annual Awards. All awards and lectures will be presented at the 2008 ARVO Annual Meeting, April 27–May 1, 2008, in Fort Lauderdale, FL. Nominations for the 2009 Awards must be submitted by March 3, 2008. For additional information, see [www.arvo.org](http://www.arvo.org) or contact [bhollis@arvo.org](mailto:bhollis@arvo.org).

### *Proctor Medal and Lecture*

**Robert F. Miller, MD**  
University of Minnesota

### *Friedenwald Award and Lecture*

**Lois E. H. Smith, MD, PhD**  
Harvard University/Children's Hospital

### *Weisenfeld Award and Lecture*

**George O. Waring, III, MD, FACS**  
InView Refractive Surgery Center

### *Cogan Award and Lecture*

**Michael A. Dyer, PhD**  
St. Jude Children's Research Hospital

### *Special Recognition Award*

**Andrew B. Watson, PhD**  
NASA Ames Research Center

### *ARVO Distinguished Service Awards*

**Robert B. Barlow, PhD**  
SUNY Update Medical University

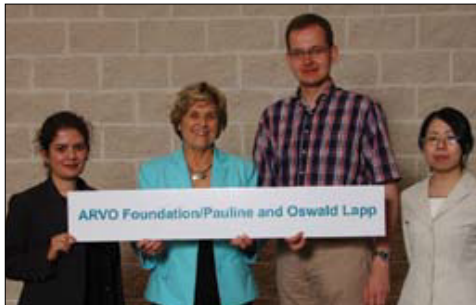
**Frederick L. Ferris, III, MD**  
National Eye Institute/National Institutes of Health

**Robert N. Frank, MD**  
Wayne State University/Kresge Eye Institute

**Daniel T. Organisciak, PhD**  
Wright State University ■

## AFER Salutes 2007 Travel Grant Recipients

The ARVO Foundation for Eye Research would like to recognize the extraordinary talents of all the 2007 travel grant winners. These travel awards are funded through an endowment to AFER and administered by ARVO. ■



Joanne G. Angle, ARVO Executive Director, congratulates three of the five recipients of the Pauline and Oswald Lapp Travel Grant. Funded by Angle and her sister Janice Oliva, this grant serves as a memorial to their parents and values research of the aging eye.



The Grant Wood Balkema Memorial, named to honor Grant Wood Balkema for his dedication to undergraduate students in biological and biochemical research, is awarded to Gulab Zode.



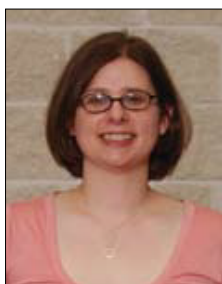
Cheryl Craft, PhD (right) applauds Roseanne Yezemian (left), the recipient of the Richard Newton Lolley Travel Grant. This award, named after Craft's late husband, honors Dr. Lolley's contributions to vision research as it relates to photoreceptors and vision pathways.



The Joseph M. and Eula C. Lawrence Travel Scholarship was awarded to 21 recipients for their work in retina research. Scholarship winners in attendance at the 2007 ARVO Annual Meeting are pictured.

## Two New Travel Grants awarded by AFER

For 2007, AFER added two awards to its travel grant program. The Ramon Dacheaux II Memorial travel grant and the Clinical Research on the Aging Eye travel grant were the latest additions to the highly sought after grants currently being offered by AFER. ■



Left: Amanda Evans-Zacharias is the 2007 recipient of the Ramon Dacheaux II Memorial Grant. Awarded for the first time this year, this grant pays homage to the work of Dr. Ramon F. Dacheaux II.



Left: Xue Cai was awarded the Clinical Research on the Aging Eye travel grant. This one-time award recognized clinical research being conducted on the aging eye, the focus of the 2007 ARVO Annual Meeting.

## AFER Hosts Critical Issues Conference

AFER hosted a conference on critical issues in clinical trials May 4, 2007, in Fort Lauderdale, FL. The one-day conference entitled "Clinical Trials: Latest Issues and Controversies" brought leading clinical trialists together to discuss five issues in terms of current thinking and research, controversies that surround these topics, and suggestions for future work. The small group of 15 trialists identified five topics that were felt to be "hot issues," worthy of presentation, and in-depth discussion of controversies and next steps. These included the following topic areas:

### Issues in Design of Clinical Trials:

1. When can we do large simple trials (especially in ophthalmology)
2. Classic versus adaptive clinical trials design: When is each appropriate
3. Issues in trials for prevention versus trials for treatment

### Issues in Analyses of Clinical Trials:

4. Issues in trials with multiple outcomes and counting events
5. Sub-group analyses: When is it legitimate, how to do it, and how to report

The results from this conference will become a white paper to be published in IOVS, which other researchers in clinical trials might refer to in their work.

In conjunction with the conference, a one-day course in the design, construct, and execution of a clinical trial entitled "Clinical Trials: Hands on with Experts" was held Saturday May 5, 2007. Expert faculty presented key elements in the design, construct, and execution of a clinical trial. Topics included randomization, criteria for eligibility, and impact on generalizations, determinations of endpoints, role of standardization, masking, data and safety monitoring, and special facets of multi-center trials.

These events were supported by a generous grant from the Allergan Foundation to AFER. ■

## ARVO/Pfizer Ophthalmics Research Institute

The Third ARVO/Pfizer Ophthalmics Research Institute conference was held May 4-5, 2007 in Fort Lauderdale, FL. The two-day conference, "Drug Delivery to Posterior Intraocular Tissues" was funded by AFER through a grant from Pfizer Ophthalmics.

The conference evaluated current and innovative techniques to deliver therapeutic drug levels to intraocular tissues

in the posterior segment of the eye. Guest scientists from outside ophthalmic research showed how their research may provide new and improved methods for posterior ocular drug delivery. These techniques were discussed in relationship to treating age-related macular degeneration, macular edema in diabetic patients, retinitis pigmentosa, neuroprotection of ganglion cells in glaucoma patients, and treatment of ocular tumors. The conference covered topics such as: nanoparticles, microbeads,



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and microneedles; ocular tissue dissection and drug distribution modeling; tissue assays (HPLC, mass spectrometry, etc.); transcleral, intravitreal, and suprachoroidal drug and peptide delivery; iontophoresis and electrophoresis for protein delivery and gene therapy; innovative formulations; and posterior ocular disease models.

An article will be published in IOVS to report the proceedings and identify future research initiatives in the field.

The ARVO/Pfizer Ophthalmics Research Institute is held annually through sponsorship by AFER via a charitable grant from Pfizer Ophthalmics. Next year's conference will be held April 25-26, in Fort Lauderdale, FL. For more information on the ARVO/Pfizer Ophthalmics Research Institute, please contact Rhonda Williams at 240-221-2908 or [rwilliams@arvo.org](mailto:rwilliams@arvo.org). ■



Above: Participants in the 2007 Institute

Below: Drs. H. Edelhauser, J. Nickerson, and J. Boatwright organized the 2007 Institute.

## Clinical Trials Education Series

AFER has received a generous grant from the Allergan Foundation to sponsor a Clinical Trials Education Series. The series is being developed specifically for vision researchers and will present state-of-the-art approaches to the design, construction, and execution of clinical trials in ophthalmology.

A Clinical Trials Education Series Advisory Committee has been formed to guide and develop these courses. Members include:

- John Connett, PhD, Professor, Division Head, Division of Biostatistics, University of Minnesota, School of Public Health
- Mae Gordon, PhD, Director, Professor, Department of Ophthalmology and Visual Sciences and Division of Biostatistics, Washington University, St. Louis
- Anne Lindblad, PhD, Executive Vice President, EMMES Corp.
- Curt Meinert, PhD, Director, Professor, The Johns Hopkins Center for Clinical Trials, Johns Hopkins University

- Robert Nussenblatt, MD, Chief of the Laboratory of Immunology, National Eye Institute

The immediate objective is to offer the one-day basic Clinical Trials Course three times in the US and abroad in the summer and fall of 2008. The tentative locations and schedule for the one-day course are:

- World Ophthalmology Congress (WOC), Hong Kong, June 2008
- European Association for Vision and Eye Research (EVER), Portoroz, Slovenia, October 2007
- American Academy of Ophthalmology (AAO), Atlanta, GA, November 2008

The in-depth three-day course will be held one time in the summer of 2008 at a to-be-determined location in the US. The course will be the fundamental structure for the development of more in-depth modules, designed to be available online, which will supplement the basic course in subsequent years. ■



Campaign # 38547

## DC-Area Federal Employees Encouraged to Give in Combined Federal Campaign

AFER will once again participate in the Combined Federal Campaign for 2007. As the world's largest and most successful annual workplace charity campaign, the Combined Federal Campaign solicits donations from Federal employees and members of the military, helping to raise millions of dollars for nonprofit organizations each year.

If you are a Federal employee or know a Federal employee, be sure to designate #38547 during this year's campaign, September 1–December 1. Your contribution to The ARVO Foundation for Eye Research will ensure the future of vision research. ■

## ARVO/Alcon Clinician-Scientist Mentor/Mentee Workshop

Continuing the effort to highlight the unique problems facing young investigators and clinician-scientists, the second ARVO/Alcon Clinician-Scientist Mentor/Mentee Workshop, expanded to include mentees, was held in May at the ARVO Annual Meeting. Funded through a generous grant from the

Alcon Foundation to AFER, the workshop was chaired by Todd Margolis, MD, PhD. Speakers raised common issues and outlined specific steps that could be used to deal with them in a prospective/anticipatory manner. Dr. Margolis said, "My talk focused

on predictors of success from the perspective of the mentor and covered how to gauge trainee personality and attitudes that predict whether the person is likely to enter an academic career and develop an extramurally funded research program."

Other speakers covered a variety of important areas. Julie Lew, MD, a mentee, spoke about goal-setting between the

mentor and mentee and the necessity for regularly scheduled meetings to review progress toward achieving the goals and to work together to alter the goals as needed. Karla Zadnik, OD, covered the steps a mentor must take to assist a mentee in preparing his or her first R01 application.



*Dr. F. Silver shares her expertise with attendees.*

Frankie-Lynn Silver, MD, highlighted challenges to the relationship between mentor and mentee, while George Spaeth, MD, noted that mentors must first have the basic purpose of their program well-defined so that potential trainees, as well as other faculty, know

exactly what will be expected. Questions posed by attendees provided an opportunity for the speakers to further share their experiences.

The third ARVO/Alcon Clinician-Scientist Mentor/Mentee Workshop will be held during the 2008 ARVO Annual Meeting. ■

## The AFER Donor List

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