

MESSAGE FROM THE PRESIDENT

FREDERICK L. FERRIS III, MD

Board of Trustees Steers ARVO's Future



At its meeting in October, the Association for Research in Vision and Ophthalmology (ARVO) Board of Trustees discussed a number of issues directly impacting the present and future of both our organization and the vision science community. It is a pleasure to have an opportunity to share these discussions with you.

NIH Funding for New Investigators

Currently the average age a scientist receives his or her first RO1 is 42 (PhD) and 44 (MD, MD/PhD), compared with 34 in 1981. This trend has been associated with a decrease in new investigators entering the field. Also, the reduction in total grants available to researchers is leading to a reduced number of postdocs as laboratories cut back activities. The National Institutes of Health (NIH) developed a program known as the NIH Pathway to Independence Award Program (K99/R00 Awards) to facilitate an RO1 award earlier in an investigator's research career, and to ultimately maintain and increase the number of new and talented independent investigators. The program awards a total of 171 research grants with four allocated to the National Eye Institute (NEI). At the October Board Meeting, NEI Director Paul Sieving invited ARVO to submit a set of recommendations on how to increase the number of NEI-available awards. The ARVO Board has appointed an ARVO Working Group to collaborate with the NEI. As a first step, the Working Group will query basic and clinical department chairs on their estimation of future needs and will submit a report with its findings and recommendations to

the Board of Trustees in the spring.

NEI Population-based Studies

The NIH posted a notice in July 2006 which announced its intent to review the current program plan for epidemiological research and, in particular, population-based studies. At the ARVO Board Meeting, Dr. Sieving invited Trustees to nominate candidates to participate on the review panel. ARVO has submitted a list of names and will continue to monitor the progress and inform the membership of opportunities and developments.

International Travel Grants Program

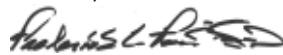
At the October Meeting, the Trustees approved funding for 25 additional travel grants for the 2007 Annual Meeting. These grants are available to non-U.S. citizens residing and conducting research outside the United States and brings the total number of ARVO International Travel Grants to 75.

ARVO Officers/Trustees/Program Committee Nominations and Elections

The Trustees reviewed staff recommendations for upgrading the ARVO Trustees and Officers election process, which will be presented to the ARVO membership for vote at the General Business Meeting in May. They also approved a new policy for nominating Trustee candidates and Annual Meeting Program Committee members. Please see page 2 for more details.

I thank you for your continued participation in ARVO and we welcome your input as together we prepare for the future. ■

Sincerely,



Frederick L. Ferris III, MD
ARVO President

2007 ARVO Annual Meeting

The 2007 ARVO Annual Meeting, *The Aging Eye*, May 6-10, 2007,



is highlighted in the enclosed Annual Meeting Preliminary Program. As the premier conference for vision science and eye research, the ARVO Annual Meeting provides an exciting opportunity to connect

with your colleagues for professional networking, social events, and science, all in a sunny setting. The Meeting offers programs, including:

- ARVO/Alcon Keynote Session featuring William Novelli, CEO, AARP and Paul Lee, MD, JD
- ARVO Education Courses
- Career Fair and Placement Service
- Exhibits
- Members-in-Training Events
- Paper and Poster Sessions
- Social Events
- Special Interest Groups (SIGs)
- Symposia
- Workshops/Special Events

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

IN THIS ISSUE

ARVO Governance 2-3
 Around the Globe 4-5
 ARVO Advocacy 6-7
 ARVO Education Programs 8-9
 ARVO Membership News 10-11
Journal of Vision 12
Investigative Ophthalmology & Visual Science.. 13
 Awards and Grants 17
 ARVO Foundation for Eye Research 18-19



2006 - 2007

Officers

Frederick L. Ferris III, MD
President

Robert B. Barlow, PhD
Vice President

Daniel T. Organisciak, PhD
Vice President

Martine J. Jager, MD, PhD
President-Elect

Robert Ritch, MD
Vice President-Elect

Paul L. Kaufman, MD
Executive Vice President

Sally S. Atherton, PhD
Executive Vice President-Elect

ARVO Office

Joanne G. Angle
Executive Director

Elinore L. Tibbetts
*Marketing and Communications
Manager*

Kimberly M. O'Sullivan
Publications Coordinator

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

ARVO GOVERNANCE

2007 Trustees Elections

All voting members of the Biochemistry/Molecular Biology (BI), Clinical/Epidemiologic Research (CL) and Visual Neurophysiology (VN) Sections will elect Trustees at their Section Business Meetings at the upcoming ARVO Annual Meeting. Proxies and candidate information will be distributed in February 2007. The candidates are:

<i>BI Section</i>	<i>CL Section</i>	<i>VN Section</i>
Jeffrey H. Boatright, PhD Emory University Eye Center	Paul Mitchell, MD, PhD University of Sydney	Stuart C. Mangel, PhD Ohio State University
Dusanka Deretic, PhD University of New Mexico School of Medicine	Hugh R. Taylor, MD, PhD University of Melbourne	Robert F. Miller, MD University of Minnesota

Proxies may be registered online or mailed to the ARVO Office. Advance proxies must be registered by April 20, 2007. Instructions for both methods of registering proxies will be included in the election mailing. Proxies may also be cast in person or amended in the 15-minute period preceding the Section Business Meeting. Election results will be announced during the corresponding Section's Business Meeting. ■

ARVO Members to Vote on New Trustee and Officer Election Process

ARVO members will vote on Board-recommended revisions to the Trustee and Officers election process which has been in place since 1999. The new process would require all elections of Officers, Trustees, and other ARVO elected officials to take place by the end of the first day of the ARVO Annual Meeting, eliminating onsite voting in the 15-minute period preceding the General and Section Business Meetings. The other significant change under consideration is to phase-in an electronic-only ballot system. These two changes, proposed for implementation in 2008, require a two-thirds majority vote from ARVO voting members at the General Business Meeting to amend the ARVO Bylaws. The process will be discussed at the 2007 General Business Meeting. Members are strongly encouraged to attend this Meeting and to vote. ■



Section Trustees and Annual Meeting Program Committee Members Nomination Policy

In an attempt to standardize the nomination process for each Section's new Trustees and Annual Meeting Program Committee Members, a uniform call for nominations will be sent out via e-mail to each Section Member in January and March of each year. Nominations will be closed two weeks before the ARVO Annual Meeting to allow electronic distribution of the list of Nominees to the Section Members.

Individuals wishing to nominate a Section Member for either position must also be a Section Member in good standing and should seek the consent of the Nominee. Members are encouraged to nominate individuals that reflect the diversity of our organization and our international membership. After obtaining consent, the Nominator should develop a brief biographical sketch (500 words or less) about the Nominee, describing attributes that would qualify the member for the role and their willingness to serve (either Trustee or Annual Meeting Program Committee Member). An electronic photograph (jpg format) of the nominee can accompany the biographical sketch. Self-nomination will be accepted.

In addition, the opportunity to nominate individuals from the floor at the Section Business Meeting will remain an option. Voting for both the Trustees and the Annual Program Committee Members will still be completed at the Business Meeting for each individual Section.

Nominees must be: a Section Member in good standing; willing to serve; and expected to be at the Business Meeting on the day of the vote. ■

Approved: ARVO Board of Trustees, October 21, 2006

ARVO Establishes Cross-Sectional Groups Pilot Program

The ARVO Board of Trustees recently launched a 24-month Cross-Sectional Groups Pilot Program to meet the needs of members whose scientific interests are not easily defined by existing Sections. The Groups will have their platform sessions at the 2007 ARVO Annual Meeting during the SIG/Workshop time.

Genetics Group:

Group Chair: Janey Wiggs, MD, PhD
Monday, May 7, 2007
1:15 PM - 2:45 PM

Nanotechnology Group:

Group Co-Chairs: Robert Ritch, MD
and Marco Zarbin, MD, PhD
Tuesday, May 8, 2007
1:15 PM - 2:45 PM

Ophthalmic Imaging Group:

Group Chair: Wolfgang Drexler, PhD
Wednesday, May 9, 2007
1:15 PM - 2:45 PM

Group Chairs are in the process of organizing their scientific programs which are scheduled for 50 minutes and followed by 40 minutes of discussion on organizing the Group in the future. If you are interested in participating or attending, complete a Group Interest Form by logging onto one of the Web sites below.

Genetics Group: <http://www.zoomerang.com/survey.zgi?p=WEB225VPW69E4L>

Ophthalmic Imaging Group: <http://www.zoomerang.com/survey.zgi?p=WEB225VNPQ8NML>

Nanotechnology Group: <http://www.zoomerang.com/survey.zgi?p=WEB225VQ389H7H>

Visit www.arvo.org/AM to review the ARVO Group Guidelines. ■

Call for 2007-2008 Committee Volunteers

Members are encouraged to join their peers and colleagues in helping lead ARVO into the exciting future of vision research. 2007-2008 Committee appointments will be made in March 2007 by ARVO's President-Elect. Committees covering topics ranging from advocacy and professional development to diversity issues and members-in-training need your input on important issues affecting vision professionals worldwide.



To be considered for 2007-2008 Committee appointments, complete an ARVO Volunteer Interest Submission Form online today at www.arvo.org/committee. ■

ARVO Committee-Sponsored Workshops at the 2007 Annual Meeting

A Global Perspective on Health Disparities

Organized by the Diversity Issues Committee
Wednesday, May 9, 1:15 PM – 2:45 PM

Clinician Scientist Forum

Organized by the Members-in-Training Committee
Tuesday, May 8, 1:15 PM – 2:45 PM

Don't Get Caught Red-Handed: Three Hot Topics for ARVO Members

Organized by the Commercial Relationships Committee
Tuesday, May 8, 1:15 PM – 2:45 PM

Networking – Identifying, Developing, and Fostering Relationships That Can Shape Your Career

Organized by the Members-in-Training Committee
Sunday, May 6, 1:00 PM - 2:30 PM

Ocular Imaging Technologies: From Bedside to Animal Models and Back Again

Organized by the Animals in Research Committee
Sunday, May 6, 1:00 PM – 2:30 PM

Professional Responsibility versus Product Liability: Do Clinical Trials Cross the Line?

Organized by the Ethics and Regulation in Human Research Committee
Sunday, May 6, 1:00 PM – 2:30 PM



India and U.S. Collaboration in Vision Research Continues to Unfold

Rich ideas for fostering collaborative research between eye and vision scientists from India and the U.S. are coalescing into action. The latest activity was a September 2006 meeting of members of the newly formed Joint Working Group (JWG) held in New Delhi. The JWG is tasked with identifying the steps needed for U.S. and Indian scientists to share their expertise, resources, data, and biological materials for addressing the enormous and growing problem of vision loss and blindness in the world.

Joint research by a handful of researchers from the U.S. and India has been going on for more than 20 years. An Indo-U.S. collaboration was formalized in 2005 with the signing of a Statement of Intent by representatives of the governments of India and the U.S. Earlier in 2005 the Association for Research in Vision and Ophthalmology (ARVO) sponsored the U.S.-Indo Workshops on Collaborative Research. For details, see *IOVS*, 2006;47:1717 – 1735.

The Indo-U.S. collaboration was triggered by a strong desire to combine the strengths of the two countries. For example, India has an unusually large number of people whose vision impairment can be traced to genetic or environmental causes. The U.S. has a unique expertise in genomics and the execution of large-scale clinical research trials and epidemiological studies.



Members of the Joint Working Group

Representing the U.S. at the September meeting of the JWG were Leon Ellwein, NEI; Suraj Bhat, PhD, University of California Los Angeles; David Beebe, PhD, Washington University; Janey Wiggs, MD, PhD, Harvard University; and Joanne Angle, ARVO. From India were M.K. Bhan, PhD, T.S. Rao, PhD, and Shailja Gupta, PhD, Department of Biology, Government of India (DBT); D. Balasubramanian, PhD, L.V. Prasad Eye Institute; Atul Kumar, PhD, and Tandon, MD, All India Institute of Medical Sciences; D. Kumaramanickavel, MD, and Lingam Gopal, MS, DNB, FRCSed, Sankara Netralaya; Kunal Ray, PhD, Indian Institute of Chemical Biology, and Partha P. Majumdar PhD, Indian Statistical Institute. Also attending was Altaf Lal, PhD, health attaché at the U.S. Embassy. JWG co-chairs are Drs. Balasubramanian and Beebe.

The JWG addressed a variety of topics:

- Priority areas include genetic studies of special populations; clinical trials; and development of research



Left to right: D. Balasubramanian, Co-Chair; Leon Ellwein, Facilitator; T.S. Rao, Facilitator; and David Beebe, Co-Chair

- resources such as animal facilities and tissue banks. Additional priority areas are to be identified and honed during workshops to be planned by the JWG.
- The transfer of biological materials to and from India has been eased with DBT handling the process for the Government of India. This has streamlined shipments on the India side, however, restrictions in the U.S. and costs associated with importation and exportation still need to be addressed.
- There is considerable interest in an exchange of researchers, for both long- and short-term visits. DBT already funds short-term exchanges for young researchers. Of interest is the development of an “Overseas Scholars Program” which would provide funding to foreign researchers to transition research to a laboratory in their home country.
- For flagship projects, the JWG emphasized seeking collaborations where there is a strong scientific rationale; the opportunity is unique; and the impact would be meaningful. Two that were mentioned were an ocular genotype/ phenotype database and establishment in India of a Diabetic Retinopathy Clinical Research network similar to the DRCCR.net in the U.S.
- Funding of the U.S. component of the Indo-U.S. collaborative research is to be through the NIH using the R01 research grant award mechanism. The Indian component is to be funded through the DBT following its award rules and policies. Applications for research awards are expected to originate with individual investigators who develop proposed research plans within an area of study relevant to the Indo-U.S. initiative.

ARVO is pleased to be serving as the hub for communications and events in support of the Indo-U.S. collaboration in vision research. ARVO will host a workshop on Wednesday, May 9, during the 2007 ARVO Annual Meeting to plan additional details of the collaboration. Logon to www.arvo.org/india for more information on the initiative and how to find research partners. ■

Argentinian Chapter Holds Clinical Session and Reception

AIVO (Asociación de Investigación en Vision y Oftalmología) and ARVO held a clinical session dur-



Left to right; Ruth Rosenstein, PhD, President of AIVO; Jose Luna, MD, of AIVO; and Gerald Latty, PhD, of ARVO

ing the meeting of the International Congress for Eye Research (ICER) in Buenos Aires on November 1. Coordinated by AIVO and ARVO members S. Fabián Lerner, MD, and Juan Gallo, MD, the session, "Advances in Translational Research" drew over 100 local clinicians, chapter members, and Congress participants. Thirteen researchers

from the United States, Brazil, Switzerland, Japan, Poland, New Zealand, and the United Kingdom spoke about their work and its applications for clinicians.

Over 60 session speakers and attendees, AIVO members, sponsors, ARVO and ICER leaders, and guests gathered later in the day for a reception. Dr. Gallo welcomed everyone on behalf of the Chapter. International Society of Eye Research President Robert E. Anderson, MD, and ICER Chairman Oscar Candia, MD, applauded



Juan Gallo, MD, with Guadalupe Rolon, MD, from Paraguay during a break in the session



Carlos H. Plotkin, MD, President of the Sociedad Argentina de Oftalmologica, displays his ARVO membership card while ARVO Trustee Robert Barlon, PhD, looks on.

the efforts of the session organizers. Paul Kaufman, MD, Executive Vice President of ARVO, brought greetings from the ARVO Board of Trustees and thanked the AIVO leadership for its initiative to bring together clinicians and researchers in Argentina. ■

European Association for Vision and Eye Research



EVER
07

October 3-6, 2007
Portoroz, Slovenia

10th
EVER CONGRESS

The EVER congresses are accredited
by the European Accreditation Council
for Continuing Medical Education
(EACCME)



www.ever.be

JOIN EVER in Portoroz - Slovenia

- Largest annual eye research meeting in Europe
- Keynote lectures
- Special interest symposia
- Free papers, posters, courses
- New attractive location every three years

BECOME AN ACTIVE MEMBER

Your benefits :

- Keep up-to-date
- Free electronic subscription to Acta Ophthalmologica
- Reduced fee for annual meeting
- Possibility of organizing minisymposia in annual meetings
- Quarterly E-Newsletter
- Voting right

DATES TO REMEMBER

June 1st, 2007: online submission of abstracts
July 15th, 2007: final programme online
September 1st, 2007: early registration deadline

05-12-2006

BRAVO Joins ARVO Chapter Affiliate Pilot Program

The ARVO Board of Trustees unanimously approved the affiliation application with the Brazilian Research Association of Vision and Ophthalmology (BRAVO) this past October. Established in 2004, BRAVO has approximately 200 basic researchers and holds a meeting each year. This past year, ARVO members Nicholas Bazan, MD, PhD, and Steven Fliesler, MD, gave the opening lecture to approximately 2,000 attendees.

BRAVO is one of 11 scientific societies in Brazil that is part of the Federation of the Experimental Biology Societies and is also linked closely with the Brazilian Neuroscience Society. BRAVO's affiliation with ARVO will help the association build stronger links with other vision research organizations and raise awareness of vision research in Brazil. BRAVO has also received funding from Allergan to fund three travel grants to the ARVO Annual Meeting for the next three years. For more information on BRAVO, visit www.fesbe.org.br/bravo/. ■

ARVO Trustees Educate Congressional Offices About Their Vision Research

Members of the ARVO Board of Trustees held a Capitol Hill Lobby Day on October 20. Participating Board members were: Nicholas A. Delamere, PhD; Robert N. Frank, MD; David G. Hunter, MD, PhD; Martine J. Jager MD, PhD; Shigeru Kinoshita II, MD, PhD; Todd P. Margolis, MD, PhD; J. Mark Petrash, PhD; Larry J. Takemoto, PhD; Barry S. Winkler, PhD; and ARVO Executive Director Joanne G. Angle.



Left to right: New ARVO Trustee David Hunter, MD, PhD, meets with Derek Scholes, PhD, of the Senate HELP staff of Sen. Edward Kennedy (D-MA).

With the mid-term elections looming, the 40-plus visits enabled these researchers to educate senators and representatives from their work and home districts about the importance and broad implications of NEI-funded vision research they are conducting locally. Participants also visited House appropriators and Energy and Commerce Committee members from neighboring districts. In organizing the event for ARVO, NAEVR placed an emphasis on meetings with members of the Senate Health, Education, Labor, and Pensions (HELP) Committee, which has jurisdiction over NIH reauthorization (see story below). NAEVR plans to host a January 19, 2007 Lobby Day of ARVO Program Committee members. ■



Top (left to right): New ARVO Trustee Mark Petrash, PhD, relates his visits to NAEVR Legislative Counsel John Porter. Bottom (left to right): Nicholas Delamere, PhD, was joined by ARVO President-Elect Martine Jager, MD, PhD, in a visit with the office of Sen. John McCain (R-AZ).

Congress Passes NIH Reauthorization Legislation

On December 9, 2006, the 109th Congress passed a bill to reauthorize the National Institutes of Health (NIH) for the first time since 1993. The bill represented several Senate-generated “improvements” over the bill passed by the House in late September, which NAEVR endorsed. These improvements were in response to input from the medical advocacy community, including NAEVR.

The legislation includes an authorized seven percent increase in NIH funding in FY2007, eight percent in FY2008 and “as sums as may be necessary” in FY2009, although the actual final funding levels will depend on the appropriators. Since Congress adjourned without finalizing FY2007 appropriations for all government programs except defense and homeland security—passing instead a Continuing Resolution (CR) to fund the government until February 15, 2007—the Democratically led Congress must either finalize FY2007 appropriations by that date or pass a year-long CR.

Both the authorizers and appropriators will play an active role in oversight of the expanded discretion provided to the NIH Director, including review of any management or structural changes recommended by the new Scientific Management Review Board. Although the legislation does create the

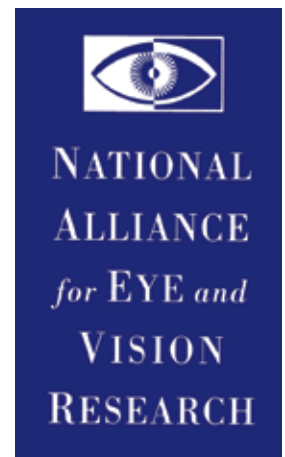
“common fund” for trans-Institute research, it is not funded by 50 percent of all new monies up to a level of five percent of the overall NIH budget. Rather, the Director will work with the newly created “Council of Councils” to recommend trans-Institute research and an appropriate reserve fund for this research, subject to the appropriators.

NAEVR Executive Director James Jorkasky commented that, “We certainly did come a long way on this bill, and NAEVR will generate all of the appropriate communications of commendation to the various leaders for their bipartisan efforts.” He also noted that NAEVR has established and/or reinforced excellent relationships moving forward on a number of other key issues, and Capitol Hill is keenly aware of the leadership role that the National Eye Institute has taken in trans-Institute research.

Other vision community issues in the end-of-session legislation included action to prevent Medicare physician fee reductions and a bill sponsored by outgoing Veterans Affairs Committee Chair Sen. Larry Craig (R-ID) that would add \$2 million for additional blind rehabilitation specialists and increase the number of facilities where the specialists would be located. ■



ARVO member Jason Ng, MD, sends an e-mail to Congress urging increased NIH/NEI funding.



Congress Considers Year-long Continuing Resolution to Fund NIH/NEI

Before ending its “lame duck” session on December 9, Congress passed a Continuing Resolution (CR) to fund government programs until February 15, 2007, as it had only completed Fiscal Year (FY) 2007 appropriations bills relating to defense and homeland security. Subsequently, incoming Senate and House Appropriations Chairs Sen. Robert Byrd (D-WV) and Cong. David Obey (D-WI) announced that they would likely seek a year-long CR, which would preclude earmarks included in the remaining unpassed spending bills by the previous Republican leadership. The 110th Congress will take up the FY2007 spending bills, including that for the Labor, Health and Human Services, and Education (LHHS), which includes NIH/NEI funding, when it returns on January 4.

The current CR, as well as any potential year-long CR, funds the NIH/NEI at the FY2006 level. For NIH, that means flat funding, but for NEI, that would mean an additional \$5.3 million over that initially proposed in the President’s FY2007 budget, which would have cut NEI funding by 0.8 percent. At this time, however, until final action is taken on a year-long CR or an omnibus spending bill, the NEI cannot make budget commitments beyond the President’s FY2007 proposal.

	FY2006 ACTUAL	FY2007 HOUSE	FY2007 SENATE*
NEI	\$666.8 M -0.3%	\$661.5 M -0.8%	\$666.9 M +0.001%
NIH	\$28.5 B -0.2%	\$28.5 B 0%	\$28.6 B +0.8%

*Programmatic level, inclusive of one-time expenses and transfers

Another result of a year-long CR is that eye and vision research would automatically retain its eligibility in FY2007 for funding under the Department of Defense’s Congressionally directed Medical Research Program (CDMRP). NAEVR obtained this listing in FY2006, and two vision researchers were recently notified that they have received DOD/CDMRP grants.

Since NIH champion Sen. Tom Harkin (D-IA) will assume leadership of the LHHS Subcommittee early next year, it is likely that he and former chair Sen. Arlen Specter (R-PA) may call for an increase in NIH funding even if an overall year-long CR is passed. To maintain the pressure on Congress in this regard, NAEVR is hosting a ARVO Program Committee Lobby Day on January 19, 2007, and a January 31, 2007, “Welcome Reception for the 110th Congress” to emphasize the value of vision research funding. ■



NAEVR Board President Stephen Ryan, MD, in a meeting with Sen. Tom Harkin earlier this year. Sen. Harkin will chair the LHHS Appropriations Subcommittee in the 110th Congress.

FY2007 LHHS Appropriations Bills Laud NEI Trans-Institute Research

Although FY2007 LHHS appropriations have yet to be finalized, the Report Language associated with the House and Senate bills, recommended by NAEVR, recognizes the importance of NEI’s collaborative research, as follows:

House

“The Committee applauds NEI for the collaborative efforts of the Diabetic Retinopathy Clinical Research Network to test innovative treatment for diabetic eye disease. The Institute is encouraged to expand and extend the network by increasing the number of clinical trials with new drugs and therapeutics that can reverse or prevent diabetic retinopathy.”

Senate

“The Committee was pleased to hear of the recent discovery of a second gene which can increase the risk of developing age-related macular degeneration. The identification of these genes creates the opportunity to predict and preempt the disease, thus preserving independence and mobility for millions of Americans. The Committee urges the Institute to move on an expedited basis to translate this finding into treatment for those suffering from this condition.” ■



Senate Report Language was derived from NAEVR testimony presented by ARVO member Peter McDonnell, MD, seen here with Senate LHHS Appropriations Subcommittee Chair Arlen Specter (R-PA).

ARVO Online Education

As a part of its commitment to providing leading edge and timely information to members, ARVO is pleased to present its online education series, covering a wide variety of topics of interest to the vision and ophthalmology research community. Logon to www.arvo.org/education to view the many sessions now available:

- 2005 ARVO Keynote Session
- 2006 ARVO/Alcon Keynote Session
- 2006 ARVO Awards Lectures
- ARVO Education Course: AMD and Complement Factor H
- ARVO Education Course: Visual Informatics
- Nanotechnology and Nanomedicine: Applications for Vision
- Nanotechnology for Drug Delivery and Tissue Bioengineering
- Pearls of Research From U.S. Institutions
- Successfully Conducting International Research
- Successfully Conducting International Research in Europe ■

Educational Outcomes

The proceedings from the second annual ARVO/Pfizer Ophthalmics Research Institute conference, "Aqueous Humor Outflow: What Do We Know? Where Will It Lead Us?" were published in the October issue of *Investigative Ophthalmology & Visual Science*. The conference, held on April 28 and 29, 2006, in Fort Lauderdale, Florida, brought together experts from within and outside the eye field to evaluate the current understanding of the aqueous outflow pathway; determine what the most important scientific questions are; and discuss how these questions can be answered in the future.

Conference attendees consisted of 31 researchers on aqueous outflow, eight scientists working outside the field but with expertise relevant to the subject, and 11 observers. Four general areas of outflow research were examined: Conventional Outflow: Cell Function in the Aqueous Humor Outflow Pathway; Conventional Outflow: Role of the Extracellular Matrix; Uveoscleral Outflow: The Other Pathway; and Normal vs. Primary Open Angle Glaucoma: What is the Cause of Elevated Pressure? ■

ARVO Symposium at EVER

The European Association for Vision and Eye Research (EVER) Meeting, held October 4-7, 2006, in Portugal, featured an ARVO Symposium, "Pearls of Research from U.S. Institutions." Presentations were made by ARVO members Don Zack, MD, PhD, William Merigan, PhD, and Narsing Rao, MD. The presentations will be available for viewing February 1, 2007 at www.arvo.org/education. ■



Apply To Be an Observer at the ARVO/Pfizer Ophthalmics Research Institute

A limited number of observers may register to attend the third annual ARVO/Pfizer Ophthalmics Research Institute scheduled for May 4-5, 2007, in Fort Lauderdale, Florida. The conference will address the topic of "Drug Delivery to the Anterior Segment." Deadline for applications is February 9, 2007. Apply today at www.arvo.org/observer. ■



OCMB 2007



Ocular Cell & Molecular Biology

SEPTEMBER 6 - 8, 2007

Sarasota, Florida

The Colony Beach & Tennis Resort

Deadline for Abstracts:

June 27, 2007

ARVO Summer Eye Research
Conference presented by



Logon to www.arvo.org/ocmb for more information.

Call for Meeting Proposals

Proposals are currently being accepted for the following upcoming meetings:

2008 ARVO/Pfizer Ophthalmics Research Institute
(www.arvofoundation.org)

2008 ARVO Summer Eye Research Conferences (SERC)
(www.arvo.org/serc)

Proposals are due March 1, 2007. For details, logon to the corresponding Web site or contact Rhonda Williams, Meetings Manager, at rwilliams@arvo.org, or (240) 221-2908. ■

ARVO EDUCATION PROGRAMS

NEI/FDA Ophthalmic Clinical Trial Design and Endpoints Meeting

The first NEI/FDA Ophthalmic Clinical Trial Design and Endpoints Meeting was held on November 28-29, 2006, in Washington, DC. ARVO provided meeting management services. This symposium, attended by over 260 people, included a series of invited presentations by representatives of the National Eye Institute (NEI) of the National Institutes of Health, U.S. Food and Drug Administration (FDA), and academia. It also included a roundtable discussion of outcome variables and clinical trial strategies for evaluating new treatments for AMD, diabetic retinopathy, and other eye diseases. Methods to assess the long-term safety of new therapies after they have been marketed to the public were also discussed. Presenters and members of the panels included experts from academia, the NEI, the FDA and the Centers for Medicare and Medicaid Services.

This symposium's purpose was to provide avenues for discussions of important questions in the topic areas of: visual acuity parameters as outcome measures; endpoints for diabetic retinopathy; study design and endpoints for wet AMD; study design and endpoints for dry AMD; and post-marketing drug surveillance. The NEI plans to produce and issue a white paper in the near future. ■



Symposium co-hosts Janice Soreth, MD, Director, Division of Anti-Infective and Ophthalmology Products, FDA Center for Drug Evaluation and Research, and Karl Csaky, MD, PhD, NEI Senior Investigator

Upcoming Events

The inaugural **Asia-ARVO Meeting** will be held in Singapore, at the Suntec Singapore International Convention and Exhibit Centre, March 2-5, 2007, and will be hosted again by the Singapore Eye Research Institute.

Programs will include an ARVO-sponsored symposium, "State-of-the-art Research and Development in Ophthalmology and Visual Science," to be held Saturday, March 3. Speakers at the symposium will include Robert Nussenblatt, MD, Masayo Takahashi, MD, PhD, Sally Atherton, PhD, and Shigeru Kinoshita, MD, PhD. For details including the program and abstracts, logon to www.arvo.org/asia.

The third annual **ARVO/Pfizer Ophthalmics Research Institute** is scheduled for May 4-5, 2007, in Fort Lauderdale, Florida. The conference, organized



by Henry Edelhauser, MD, will address the topic of "Drug Delivery to the Posterior Segment." A limited number of observers may register to attend. To apply, logon to www.arvo.org/arvopfizer.

The 11th Annual **Vision Research Conference**, co-sponsored by ARVO, will be held again in Fort Lauderdale, Florida, May 4-5, 2007, on the topic of "Retinal Degeneration and Gene Therapy." For more details, logon to www.visionresearch-conference.elsevier.com.

ARVO will sponsor a symposium at the **XXVII Pan-American Congress of Ophthalmology**, May 31-June 3, 2007, in Cancun, Mexico. The session will be on the topic of ocular immunology and will be organized by Robert Nussenblatt, MD, and Rubens Belfort, Jr., MD. ■



2007

ARVO Summer Eye Research Conferences



Preventing Vision Loss in Diabetic Retinopathy

July 15 - 18, 2007



Warwick, Rhode Island
Deadline for Abstracts: May 14, 2007

New Frontiers in Retinal Diseases: Linking Genetics to Molecular Pathways and Therapeutic Strategies

August 23 - 25, 2007



Monterey, California
Deadline for Abstracts: June 20, 2007

For details, logon to www.arvo.org/serc.

Career Resources at the 2007 ARVO Annual Meeting

ARVOJobs at <http://jobs.arvo.org>

New features and enhancements have been added to ARVOJobs including:

For Job Seekers:

- Post your CV for free
- Job seeker anonymity
- Posting of CVs, cover letters, and other documents
- Job search engine with multiple criteria
- Search other databases in the JobTarget network
- Online application process
- Registration for notification when jobs matching your criteria are posted

For Employers:

- Targeted advertising to reach the largest audience of eye and vision research professionals
- Easy online job management
- CV searching access
- Enhance listings as "Featured Jobs" or with logos, institutional profiles, or Web site links

Placement Service

All 2007 ARVO Annual Meeting registrants and exhibitors may use the Placement Service at no cost. The area is open 7:30 AM - 6:00 PM, Sunday through Wednesday.

The Placement Service will feature all positions listed online at ARVOJobs through the Annual Meeting. Onsite services will include:

- Postings of current positions available at ARVOJobs online and copies for Meeting attendees to take with them
- Folders for interested job seekers to leave messages, CVs, requests for interviews, and other relevant materials for employers
- Dedicated computers for employers to search the Job Seeker database
- Private interview areas

Workshop: Networking – Identifying, Developing, and Fostering Relationships That Can Shape Your Career

Monday, May 7, 1:00 PM – 2:30 PM

Networking with scientists and administrators is essential for efficiently developing a meaningful impact on the scientific discovery process. The objective of this workshop is to teach Members-in-Training effective networking skills. The initial workshop presentation will offer practical advice on optimizing networking experiences at the ARVO Annual Meeting. Subsequent speakers will discuss the importance of networking in the context of scientific inquiry and career development, describing specific networking skills. Presentations will emphasize the interaction of networking perspectives from domestic and international environments within academic, private, and government research sectors.

For additional information about any of these activities, e-mail bhollis@arvo.org. Find your next job at <http://jobs.arvo.org>. ■

ARVO Career Fair
Tuesday, May 8, 12:00 PM - 4:00 PM
Hall B/C Registration Area

Job Seekers! Don't miss this extremely popular event which provides you the chance to meet the highest number of employers in the shortest amount of time. Hiring employers and job seekers can mingle in a low-pressure, convenient environment.

Employers! This is your best opportunity to find highly qualified candidates for your positions. The Career Fair boasts a great location for the most traffic at the entrance to the exhibit hall! Participating employers will also receive a 30 percent discount off all jobs posted online at ARVOJobs between April 6 and May 10. See <http://jobs.arvo.org> for details and to register as a participating employer. ■



2006 Career Fair



All employers registered for the ARVO Career Fair will receive a 30 percent discount on job postings during the Annual Meeting. See Career Fair details above.

A Reminder About Visa Applications

A RVO members from outside the U.S. should take action now if they need to request a letter of invitation and make plans to apply for a visa. ARVO recommends applying for a visa no later than February 6, 2007. For more information, logon to www.arvo.org/visa. ■

2008 ARVO Annual Awards – Call for Nominations

Members of the vision community are invited to nominate their esteemed colleagues for the prestigious ARVO Awards to be presented at the 2008 ARVO Annual Meeting. **Deadline for nominations is March 2, 2007.**

ARVO Awards include:

Proctor Medal

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



Proctor Medal

Friedenwald Award

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

Mildred Weisenfeld Award for Excellence in Ophthalmology

Distinguished scholarly contributions to the clinical practice of ophthalmology

Cogan Award

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

A complete list of awards and procedures is available at www.arvo.org, or contact Barbara Hollis at bhollis@arvo.org or (240) 221-2940. ■

Important Dates and Upcoming Events

2007

January 23	Deadline for Abstract Withdrawal
February 2	Notification of Abstract Acceptance
February 16	Online Abstract Search and Itinerary Builder available at www.arvo.org/AM
March 2-5	Asia-ARVO Meeting, Singapore
March 2	Deadline for 2008 ARVO Awards Nominations
April 6	Deadline for Online Housing Reservations
April 13	Deadline for Early Registration Fees
April 27	Deadline for Annual Meeting Advance Registration (mail or fax)
May 4	Deadline for Annual Meeting Advance Registration (online)
May 4-5	Vision Research Conference; ARVO/Pfizer Ophthalmics Research Institute
May 5	ARVO Education Courses
May 6-10	ARVO Annual Meeting, Fort Lauderdale, Florida

July 15-18	ARVO Summer Eye Research Conference (SERC): Preventing Vision Loss in Diabetic Retinopathy, Providence/Warwick, Rhode Island
August 23-25	ARVO Summer Eye Research Conference (SERC): New Frontiers in Retinal Diseases, Monterey, California
September 5-8	ARVO Ocular Cell and Molecular Biology (OCMB) Conference, Sarasota, Florida ■

IN MEMORIAM

Robert M. Boynton, PhD (VI)
September 4, 2006
Del Mar, California

Ramon F. Dacheux, II, PhD (VN)
May 30, 2006
Birmingham, Alabama

Henk Spekreijse, PhD (VN)
October 20, 2006
Amsterdam, The Netherlands

Please submit notifications to mem@arvo.org.

isie
International Society
for Imaging in the Eye

May 4-5, 2007

HYATT REGENCY PIER SIXTY-SIX • FT. LAUDERDALE, FL

This meeting will review original research on the current clinical and basic scientific developments on the latest technologies in ophthalmic diagnostic imaging.

Papers will focus on:

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

Register Today!

www.isie.net/meeting • 1-877-307-5225

This CME activity is jointly sponsored by



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

This activity has been approved for **AMA PRA Category 1 Credits™**.

Impact of the Impact Factor at *Journal of Vision*



As a scientific journal, *Journal of Vision* depends for its existence entirely upon submissions from its authors. Perhaps the greatest challenge in starting a new scientific journal is convincing authors to submit. Why should they send the final product of their long labors to an untested venue? This concern may have been especially deep in the case of *Journal of Vision*,

which was launched as a digital, online-only, open-access journal. And yet, authors did submit; a brave few at first, and in larger numbers later. More recently, an event occurred which appears to have had a substantial impact on our rate of submission. In June, 2006, *Journal of Vision* received its first impact factor from the Institute for Scientific Information (ISI). The 2005 impact factor is the ratio of citations in 2005 of articles published in 2003-2004, to the number of such articles. The journal's impact factor is 3.469, ranking it No. 5 in the Ophthalmology category, and No. 1 among journals devoted to vision science.

Submission Rates Up

As the graphs illustrate, since announcement of the impact factor, the submission rate at *Journal of Vision* has doubled. The first graph shows the number of submissions per day, averaged over the previous 90 days, as a function of date since the launch of the journal. The vertical red line marks the date of the announcement of the impact factor. The second figure shows an expanded view of the same data

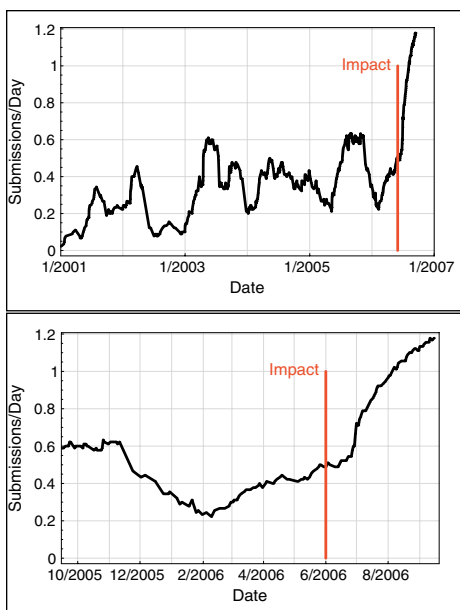


Figure 1. Top: Number of submissions per day, averaged over the previous 90 days, as a function of date since the launch of the journal. The vertical red line marks the date of the announcement of the impact factor. Bottom: Expanded view of the same data for the past 12 months.

for the past 12 months. From a plateau of around 0.5 papers per day, submissions have rapidly climbed to about 1.2 papers per day.

It appears that a large number of potential authors may have been reluctant to submit to the *Journal of Vision* until an impact factor was received. The impact factor is a very imperfect measure of the quality of a journal, and even less perfect a measure of the quality of individual articles, but it nonetheless has become one of the few objective measures that university departments can use to grade the quality of journals, and of their faculty. We may bemoan this circumstance, but, like the weather, we can do little about it. But when good weather occurs, we are unlikely to complain. So in this instance, at least, we can be gratified that, with an excellent impact factor achieved, *Journal of Vision* is poised to receive an ever larger number of high-quality papers. ■

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

Journal of Vision Welcomes New Editors

Journal of Vision is pleased to announce the appointment of seven new editors to the journal's Editorial Board:

- Geoffrey Boynton, PhD, Salk Institute
- Marisa Carrasco, PhD, New York University
- Matteo Carandini, PhD, Smith-Kettlewell Eye Research Institute
- Karen Dobkins, PhD, UC San Diego
- Julie Harris, PhD, University of St. Andrews, UK
- Michael Paradiso, PhD, Brown University
- Allison Sekuler, PhD, McMaster University

Clinical Trial Registration DOES Matter!

ARVO recently received a letter from Dr. Deborah A. Zarin, Director, ClinicalTrials.gov, commending ARVO on its requirement to register all clinical trials for abstracts and articles submitted for the Annual Meeting and ARVO's journals including JOV and IOVS. Since May 1, 2006 Dr. Zarin reports a 600% increase per month in ophthalmic trials registered at ClinicalTrials.gov site and attributes ARVO's policy as having a positive impact on the registration. ■

From the Editor of IOVS



IOVVS is continuing to thrive. At the time of this writing, in mid-November 2006, manuscript submissions are falling somewhat behind our record-setting year of 2005 (when we received over 1,600 submissions, the largest number in the history of the journal), but ahead of 2004, which until now was the second most prolific year in our history. The manuscript acceptance rate for 2006 is approximately 50 percent of manuscripts submitted, somewhat higher than in the previous three years, for which acceptance rates were of the order of 43 percent.

Citation Index

Our "Citation Index" for 2005, reported by the Institute for Scientific Information (ISI), was 3.643. This put IOVS in third place overall for ophthalmology/visual science journals, very slightly behind *Ophthalmology* (a monthly peer-reviewed, clinical journal) and well behind *Progress in Retinal and Eye Research*, a journal of review articles published six times a year. Until the 2005 rankings, IOVS for the last number of years had been in second place behind *Progress in Retinal and Eye Research*. Our slight decline in ranking occurred despite an increase in our citation index from 3.577 in 2004. For 2005, IOVS had an "Immediacy Index" of 0.533, which put us in second place for all ophthalmology/visual science journals, once again behind *Progress in Retinal and Eye Research*. The "Immediacy Index" is an indication of how soon, after publication, articles in a given journal are cited. For 2005, there were 22,467 citations to articles that appeared in IOVS.

Where Is IOVS Cited?

One other piece of information supplied by ISI is a listing of the various journals in which citations to IOVS appear. These are nearly

all other journals in ophthalmology and visual science, with very few citations in other journals of biology, clinical medicine, or biomedical science. Thus, although I believe that most of us feel that IOVS publishes articles that should have wide interest to investigators and clinicians outside of our own specific field, our journal is evidently viewed by the broader basic science and medical communities as a "sub-specialty journal." Where appropriate, those who are considering submitting a manuscript to IOVS might wish to emphasize in the Introduction and/or Discussion sections of their manuscript the broader applicability of their work to areas of biomedical science outside of the eye and vision.

Genetics Policy In Development

Finally, as the number of submitted articles in molecular genetics is growing, I will be working with the Editorial Board members who are experts in this area and the ARVO Genetics Working Group, to develop guidelines and an editorial policy to define the kinds of molecular genetics articles that IOVS will consider for review. As we all know, this field has progressed rapidly in recent years. IOVS continues to receive many manuscripts that describe individual, or a small number, of pedigrees with particular unusual



phenotypes that involve new mutations in genes for which other mutations have been reported, usually with similar phenotypes. Some of our Editorial Board members have suggested that such manuscripts, although of interest to some of our readers, are no longer at the cutting edge of genetic science. When our new policy is developed, it will be announced in an editorial in an upcoming issue of the journal. Please continue to send IOVS your leading edge molecular genetics research.

It continues to be a great pleasure to work with our Editorial Board, our reviewers, and, of course, those who contribute manuscripts to IOVS. ■

Robert N. Frank, MD
Editor-in-Chief
Investigative Ophthalmology & Visual Science

FIGHT FOR SIGHT

Celebrating sixty years as the Pioneer in Eye Research, FIGHT FOR SIGHT awards \$500,000 in grants each year and encourages projects with strong clinical relevance. Grants include:



Summer Student Fellowships

\$2,100 stipends are paid to college students, graduate and medical students who wish to explore ophthalmology or eye research as a career. Deadline for submission is FEBRUARY 1, 2007.

Postdoctoral Fellowships

The goal of this \$20,000 award is to foster interest in vision research from up-and-coming basic scientists, and to encourage ophthalmologists to incorporate research into their practice. Applicants must submit a four-page proposal and letters of support by MARCH 1, 2007.

Grants-In-Aid

Junior faculty with limited funding are invited to apply for grants of up to \$20,000. These awards can be used for equipment, supplies, or support staff. Applicants may submit a four-page project description and letters of support before the deadline of MARCH 1, 2007.

For guidelines and electronic applications, please visit our website, www.fightforsight.com, or contact Janice Benson, Assistant Director, at janice@fightforsight.com or 212.679.6060.

See You in Singapore in 2007!

Asia ARVO®

**MEETING ON RESEARCH
IN VISION AND OPHTHALMOLOGY**

2 - 5 March 2007

Singapore

For more information, please contact:

Ms Karen Chee

Singapore Eye Research Institute

11 Third Hospital Avenue #05-00

Singapore 168751

Tel: +65 6322 4500 Fax: +65 6323 1903

Email: event@seri.com.sg

Website: www.seri.com.sg

Platinum Sponsors



ALLERGAN

Alcon®

Silver Sponsor



**THE VISION CARE
INSTITUTE**

Johnson & Johnson Vision Care, Inc.

Supported by

**UNIQUELY
Singapore**

visitsingapore.com

Looking Over the Fence



Paul Sieving, MD, PhD
NEI Director

This past fall I attended the Society for Neuroscience meeting in Atlanta. I was invited to participate in a press briefing along with six other NIH institute directors whose research portfolios include neuroscience. As I listened to the presentations by my peer directors, I was struck by the many opportunities for our field to collaborate with and contribute to the larger neuroscience enterprise.

Vision is the primary sense we rely on in our daily lives to inform and orient our consciousness. Almost one-third of the cerebral cortex is devoted to processing vision. Vision is central to neuroscience endeavors. The neuronal network that extends throughout the eye and visual cortex presents infinite opportunities to solve universal neuroscience challenges. Indeed, the creation of the NIH Neu-

roscience Blueprint, a collaborative and information sharing trans-NIH initiative that includes the NEI and 13 other institutes, was created out of the recognition that many common areas of research would benefit from a united effort. Synaptogenesis, neurodegeneration, regeneration, gene expression and plasticity are but a few common themes

“As the conduct of science becomes ever more collaborative, it is vital that we reach out to other disciplines.”

**Paul Sieving, MD, PhD
NEI Director**

where vision researchers can find and recruit talent to augment our field.

The need for collaboration is not just confined to neuroscience. The discovery of the CFH gene in age-related macular degeneration has created opportunities to further leverage immunology to better understand the mechanisms underlying the disease. Ocular immunologists in turn have applied less toxic, IL-2 antibody therapies in uveitis

thanks to collaborations with oncology and transplant rejection investigators. A highly novel finding that high dose radiation followed by bone marrow rescue in mice prevents neurodegeneration in inherited glaucoma, presents an unusual opportunity to examine a disease mechanism from several different scientific disciplines. Opportunities to attract nanotechnology talent to the study of the visual system are limitless.

As the conduct of science becomes ever more collaborative, it is vital that we reach out to other disciplines. ARVO has led much of this effort by sponsoring reciprocal symposia at annual meetings with the American Academy of Allergy and Immunology, the American Association of Anatomists, the American Society for Cell Biology, and American Society for Human Genetics. Collaboration outside of the traditional confines of ophthalmology and optometry departments also presents the chance to gain additional grant support throughout the broader NIH community. ■

NIH RO1 Grant Applications Go Electronic

For the new February 5, 2007 receipt date and beyond, the NIH will require electronic application submission for all RO1 applications. The new SF424 (R&R) form set contains the same information as the paper application, but has a different look and feel. This change marks a milestone in the NIH's transition to receive all grant applications electronically, which began with the electronic submission of Small

Business Innovation Research applications in December 2005.

The new process changes the approval and submission procedures within researchers' institutions. The NIH recommends that researchers work with their central grants office to learn how their institution is handling the changes. Logon to <http://era.nih.gov/ElectronicReceipt/> for the most up-to-date information on this new process. ■

FY2007 NIH Extramural Grants Fiscal Policies

The NIH recently announced that inflationary adjustments for existing non-competing renewal awards, including modular grants, will not be made in FY2007. Institutes and centers (ICs) will maintain the flexibility to supplement such non-competing awards on a case by-case basis according to scientific and programmatic imperatives. However, such supplements will not be considered as part of the base for future budgetary adjustments.

The following guidelines apply in order of priority: 1. maintain a number of new investigators comparable to the average of the most recent five years. 2. Develop IC specific mechanisms to insure that first time grantees applying for their first renewal and who receive review scores near the

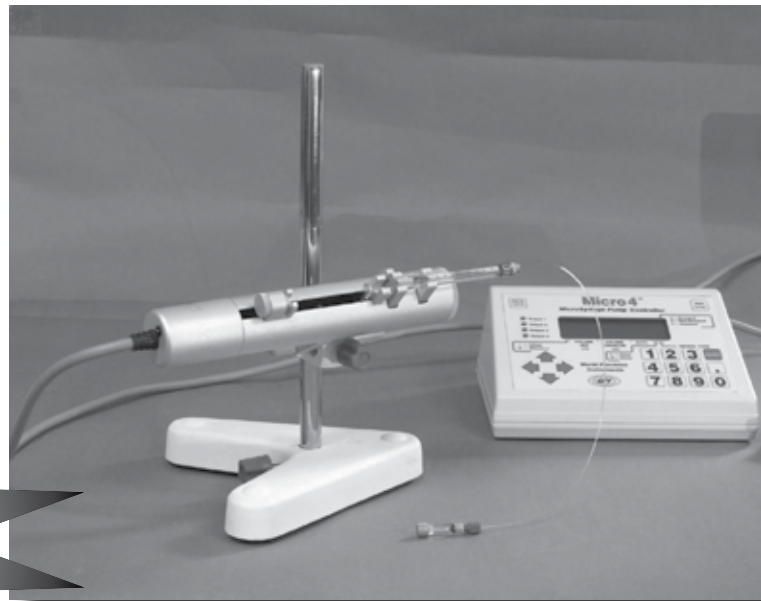
nominal payline of the relevant IC be given appropriate consideration with the goal of avoiding serious attrition or closure of new laboratories to the greatest extent possible. 3. Develop IC specific mechanisms to insure to the greatest extent possible that established grantees with insufficient other support and who receive review scores near the nominal payline of the relevant IC be given appropriate consideration, with the goal of not losing outstanding laboratories. 4. Each IC will have flexibility to adjust its policies for funding other mechanisms according to its specific scientific and programmatic imperatives. For more information about these policies, logon to <http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-07-030.html>. ■

NanoFil™

Sub-microliter injection system for small animal research

Inject nanoliter volumes quickly and easily with specially designed NanoFil syringe, optional accessories and WPI's UltraMicroPump (UMP2)

- 10 and 100 microliter syringes
- Less than 3 microliter dead volume in entire set-up
- Several needle sizes available:
blunt, sharp, beveled
26 ga. to 36 ga.



**RPE and IO Kits
available**

Complete set-up as shown above includes NanoFil syringe, IO kit, UMP2 with Micro 4 controller and footswitch mounted on a v-base with rod.



How it works:

1. Load the syringe using the 26 g needle included.
2. Remove 26 g needle and replace it with flexible tubing
3. Attach holder to other end of flexible tubing
4. Insert needle of choice in holder (several sizes and styles available)
5. Insert NanoFil syringe in WPI's UMP2 microinjection pump
6. Program Micro 4 controller to dispense required volumes
(as low as 0.58nL per step in 10 microliter syringes)



World Precision Instruments, Inc.

175 Sarasota Center Boulevard

Sarasota, FL 34240

941-371-1003

www.wpiinc.com

**For detailed information visit
www.wpiinc.com/injection**

Prevent Blindness America Investigator Award

The Prevent Blindness America Investigator Award is presented to researchers whose work focuses on preserving sight and preventing blindness. Awardees will be chosen based on their level of qualifications relating to the eye health field and the quality and feasibility of the proposed research project. Researches must demonstrate a high level of academic achievement; the urgency of the research agenda; and an immediate human benefit. Research pertaining to prevalence, early detection strategies, and outcomes and prevention will take priority.

Grants will be awarded for \$25,000 to \$50,000 each for a one-year period and are available to United States citizens only. Up to a total of \$100,000 will be granted annually. The number of awards depends on the dollar amount of the grants awarded. Grant recipients will be required to submit quarterly progress reports. ARVO will provide the scientific review of grant applications. Applications are available at www.preventblindness.org. Deadline for applications is March 1, 2007.

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



Cora Verhagen Prize

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

An international jury committee of six active ARVO members has been appointed to select the two prize winners. The first prize winner will receive an award of \$250 and a plaque with an inscription of his or her name along with those of previous awardees. This plaque may be temporarily mounted in the institute during the year following the presentation at ARVO. The winner will also receive a bronze medallion. Both the medallion and the plaque contain the image of Winged Victory. The money and the plaque for the 2007 Cora Verhagen Prize will be awarded at the 2008 ARVO Annual Meeting. The second prize winner will receive an award of \$100.

1. Eligible candidates for the prize should conform to the following criteria: Candidates must be students or postdoctoral fellows considered as trainees in ocular immunology working under the guidance of a mentor. Such trainees may have independent support for salaries, but cannot hold a personal grant to support the cost of their research. Excluded are individuals with permanent faculty appointments at universities or research institutes, and employees of companies. Applications must include the name of the mentor and the title of the presentation.
2. Candidates must be the first author of a 2007 ARVO Annual Meeting poster or paper presentation dealing with a subject in the field of ocular immunology. ■

APPLICATION FORM – 2007 CORA VERHAGEN PRIZE

I would like to compete for the 2007 Cora Verhagen Prize to be awarded for the best “ocular immunology” presentation by a trainee.

Name: _____

Abstract Title: _____

Mentor Name: _____

Mentor Statement: _____

I hereby state that the above-named applicant fulfills the “trainee” criteria for the Cora Verhagen Prize.

Mentor Signature: _____

Deadline for applications is April 1, 2007. Do not send Application Forms to the ARVO Office.

Please send all Application Forms to: Dr. Andrew Taylor, Schepens Eye Research Institute

20 Staniford Street • Boston, MA 02114 USA • Fax: (617) 912-0137 • E-mail: andrew.taylor@schepens.harvard.edu

ARVO Foundation for Eye Research

Foundation Establishes Ramon F. Dacheux II Memorial Travel Award

The ARVO Foundation for Eye Research (AFER) has received a generous donation from the International Retinal Research Foundation (IRRF) to establish a travel grant endowment in honor of the late Ramon F. Dacheux II, PhD. Dacheux was a professor in the department of ophthalmology at the University of Alabama at Birmingham. His primary research interest was focused on basic mechanisms of retinal physiology and anatomy. He combined electron microscopy and electrophysiology and made numerous contributions to the understanding of retinal function. He applied basic research concepts to advance knowledge of ganglion cell function during the early onset of glaucoma, the most common cause of blindness worldwide. This award will provide one grant to support travel expenses for student researchers conducting basic science research to report their work at the ARVO Annual Meeting.

"We are thrilled that IRRF and Ray's friends are honoring him with such a wonderful legacy. Ray truly loved research and sharing his knowledge with others and the ARVO Meetings meant so much to him," said Dacheux's widow and award benefactor Sandy Dacheux.

Individual donations to the Ramon F. Dacheux II Memorial Travel Award can be made to the ARVO Foundation for Eye Research, 12300 Twinbrook Parkway, Suite 250, Rockville, MD 20852. Please indicate on your check that the donation is for the Ramon F. Dacheux II Memorial Travel Award. ■



AFER Launches New Eye Research Educational Program Series

Through a generous donation of \$500,000 from the Allergan Foundation, the ARVO Foundation for Eye Research (AFER) has launched the Allergan Eye Research Series. This program will provide eye and vision researchers with new state-of-the-art educational opportunities including Web-based training.

The first offering in the series will be a clinical trials course. The main focus of the overall program is an introduction to issues and methods in clinical trials with examples of the design, implementation, monitoring, and analyses of trial data. The program will consist of a one-day basic course offered by internationally renowned trialists at the 2007 ARVO Annual Meeting, followed by a three-day summer course which will be the fundamental structure for the development of more in depth modules. The modules will be made available online and will supplement the basic course in subsequent years.

The course will serve as a vehicle for attracting new investigators into the clinical trials arena, while offering the opportunity to update more experienced investigators in the latest issues in clinical trials methods. ■

AFER Sets Goals for 2007

Since the inception of The ARVO Foundation for Eye Research (AFER) in 2001, over \$2.3 million has been committed through pledges and donations from individual and corporate donors. In five short years, this has allowed AFER to develop a number of high-profile projects. At this year's ARVO Annual Meeting, AFER will support 30 travel grants, the ARVO/Alcon Keynote Session, ARVO/Alcon Clinician Scientist Mentor Workshop, ARVO Clinical Trials Course, ARVO/Pfizer Research Institute Conference on Drug Delivery to Posterior Intraocular Tissues, ARVO/Pfizer Translational Research Awards, and the ARVO/Alcon Early Career Clinician Scientist Research Awards.

For 2007, AFER will seek funding for an ARVO Leadership Development Program to ensure an adequate pool of future leaders for the organization, to work with ARVO members to establish and fund new programs that support innovative research, and to develop new strategies for creating a permanent legacy to benefit the global vision science research community.

To learn more about AFER programs or to pledge your support, visit www.arvofoundation.org or call (240) 221-2950. ■

The ARVO Foundation for Eye Research strives to enhance development of eye and vision science research through educational programs, research, and services that benefit all who lead, serve, advance, and support vision science. The Foundation complements ARVO's mission of furthering global scientific research for prevention and cure of eye disease through science and communication.

Acknowledging Our Contributors

Thanks to the generosity of friends and contributors, AFER has raised over \$2.3 million to assure the future of vision research. The Foundation gratefully acknowledges all of its contributors. Due to space limitations, an alphabetical listing of 2006 donors as of December 15, 2006, is shown below. For a complete donor list, visit www.arvofoundation.org.

Bruce Allan	John Dowling	Jeffrey Kalenak	Katsuhiko Nanba	Julie Sandell
Allergan Foundation	Ursula Drager	Jae Chan Kim	Thomas Norton	Ramin Sarrafzadeh
Doug Anderson	Nicholas Dushku	Elliot Kirstein	Mario Nobrega	Vijah Sarthy
J. Bronwyn Bateman	Edward Famiglietti	Shigehiko Kitano	Janice Oliva	Julie Schnapf
Barbara Battelle	John Flynn	Norman Kleiman	Tri-Hung Nyugen	David Sherry
Janet Blanks	K. Bailey Freund	Janus Kulikowski	Kirk Packo	Stephen Sinclair
Joseph Bonanno	B. Ann Gabelt	Ralph Levinson	Jacob Pe'er	Peter Soliz
Richard Born	Morton Goldberg	Robert Linsenmeier	David Pepperberg	Lawrence Stark
Claude Boscher	George Haracopos	Paul Lombroso	Brian Perkins	Paul Sternberg
William Brunken	Anita Hendrickson	Mortimer Lorber	Ruth Phinney	Kathy Svoboda
Thomas Brunner	Alcides Hirai	Clint Makino	Joram Piatigorsky	Shigakazu Ugu
Ronald Caronia	Akito Hirakata	Jason Malecka	Lawrence Pinto	Lillemor Wachtmeister
Chi-Chao Chan	David Hunter	Stuart Mangel	Brion Raymond	Pamela Weber
Cheryl Craft	Hidenao Ideta	Nancy Mangini	Harris Ripps	Valerie White
Tristan Darland	Yiochi Inoue	Richard Masland	Charles Riva	Lucy Young
Ruth Darrow	International Retinal	Miyo Matsumura	Melvin Rubin	
Felicio Da Silva	Research Foundation	James McNally		
Nigel Daw	Masayoshi Iwaki	Ann Milam		
Steven Devries	Kazou Iwata	Junona Moroianu		
David Dodwell	Ralph Jensen	Chrisato Nakayama		

Make a Donation Today!

Join your colleagues by making a cash donation to AFER today!
It's easy!

Donate online at www.arvofoundation.org
or mail your check to:

The ARVO Foundation for Eye Research
12300 Twinbrook Parkway, Suite 250
Rockville, MD 20852-1606

Your contribution will support programs for dedicated scientists
whose research aims to eradicate eye diseases and prevent
blindness globally.

You can make a difference!

To learn more about AFER, visit our Web site at
www.arvofoundation.org
or contact us at foundation@arvo.org or (240) 221-2950.

The ARVO Foundation
for Eye Research

The ARVO Foundation
for Eye Research

BOARD OF GOVERNORS

Chair

John E. Dowling, PhD
Harvard University, Cambridge, MA

Chair-Elect

Gary W. Abrams, MD
Wayne State University/Kresge Eye Institute
Detroit, MI

Secretary Treasurer

Sheila K. West, PhD
Johns Hopkins Wilmer Eye Institute, Baltimore, MD

Members

Robert E. Besthof
Pfizer Inc., New York, NY

Gerald D. Cagle, PhD
Alcon Laboratories, Fort Worth, TX

Henry F. Edelhauser, PhD
Emory University Eye Center, Atlanta, GA

Herbert E. Kaufman, MD
LSU Eye Center, New Orleans, LA

Paul L. Kaufman, MD
University of Wisconsin School of Medicine Madison, WI

Christopher A. Paterson, PhD, DSc
University of Louisville, Louisville, KY

AFER Office

Joanne G. Angle, MLS, MPA
Executive Director

Lori J. Methia, MBA
Managing Director

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.

