

ARVO news

www.arvo.org

Nominations sought for ARVO awards

AFER/Pfizer Ophthalmics/Carl Camras Translational Research Awards

Honoring the late University of Nebraska researcher Carl B. Camras, the new AFER/Pfizer Ophthalmics/Carl Camras Translational Research Awards will recognize early-career investigators who exhibit excellence in scientific discovery that promises to lead to clinical applications. Up to three awards of \$10,000 each will be presented annually for the next 10 years through a generous grant from Pfizer Ophthalmics.

The deadline for the AFER/Pfizer/Camras Translational Research Award is February 1.

i See story on page 3 of the AFER Insert

or visit www.arvofoundation.org/pfizercamrasawards.

2011 ARVO Awards

Nominations for all of the prestigious ARVO Annual Awards are being accepted online. These awards cover all types of contributions to ophthalmology and vision research. Please remember to think about early career achievers for the Cogan Award (must be under 40 at time of nomination). Nominators may not be from the same institution as the Nominee.

The ARVO awards nomination deadline is March 1. ■

i See www.arvo.org/awards.

Check out your 2010 Annual Meeting Preview enclosed



We want you!

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2009 Champalimaud Award Recipient: Helen Keller International

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Fellows class of 2010

ARVO is pleased to announce the Fellows Class of 2010 (see page 10). More than 250 recipients are being recognized for their leadership, dedication and contributions to ARVO.

ARVO Fellows serve as knowledgeable representatives of ARVO, role models and mentors for individuals pursuing careers in vision and ophthalmology research. ARVO Fellows are entitled to use the professional designation of FARVO following their names.

At the October 2009 Board of Trustees meeting, the Trustees modified the criteria for Fellows points to ensure that the level of prestige intended for this honor is maintained. ARVO sent notification letters to 2010 Fellows in December. The revised criteria are available online at www.arvo.org/awards/fellows. ■



Plenty to celebrate: When Krysten Farjo received her PhD from the University of Oklahoma in November, her husband, Rafal Farjo, PhD, surprised her with a special "IOVS cake." Krysten was also co-author of an article published in the November 2009 issue of *Investigative Ophthalmology & Visual Science*, and the cover image featured her data. Here, the new Dr. Farjo is pictured with her mentor Jian-xing Ma, MD, PhD. Photo courtesy of Rafal Farjo.



This year, ARVO is offering three Summer Eye Research Conferences, each focusing on different aspects of diabetic retinopathy.

i See page 11 or www.arvo.org/serc.

2009–2010 Officers

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Vice President

J. Mark Petrash, PhD
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Don't miss receiving payment receipts, ARVO e-newsletters, funding alerts, deadline reminders and more. Add www.arvo.org to your e-mail's safe senders list today. ■

President's Message

Exploring our options



Nicholas A.
Delamere, PhD,
FARVO

Planning is well underway for the 2010 Annual Meeting, May 2–6 in Fort Lauderdale. This will be the 16th ARVO Annual Meeting held in Fort Lauderdale.

The city and its convention center have served us well. The airport is convenient, accommodations adequate, the city seems safe, and before 2001 security checkpoints were not an issue. The beach and warm climate gave the Annual Meeting a pleasant ambiance that for me at least, meant that one week a year I had the work-life balance almost right.

In 1995, when the Annual Meeting was first held in Fort Lauderdale, the convention center seemed outstanding. Under one roof the organization had more than enough rooms for platform sessions and an exhibit hall that permitted ARVO to give more space to both commercial exhibits and poster presentations.

Looking back, the conditions were ideal for growth. And grow we did! Since 1995, the ARVO membership has increased from about 9,400 to more than 12,500, and the number of attendees at the Annual Meeting has grown from under 7,000 to well over 10,000 last year.

Nowadays, conditions at the convention center are tight. Even though the meeting space was expanded in 2002, the Annual Meeting Program Committee now finds itself increasingly pressed for space for the scientific program.

A new hotel attached to the convention center might have saved the day. Planning for this hotel has been in the works since 1996. Most recently, the

hotel was scheduled to open in 2012 or 2013. However, the current economic and political climate in Fort Lauderdale and Broward County has caused the project to stall indefinitely.

ARVO's Long Range Planning Committee recently warned the Board of Trustees that at the projected rate of growth, and with the present scientific program format, the meeting space available at the Fort Lauderdale Convention Center will soon be insufficient. In a few years, ARVO would need to hold some platform sessions at nearby hotels.

The committee has urged ARVO to consider other potential destinations for our Annual Meeting. That's what is happening now. The Annual Meeting will be held in Fort Lauderdale through 2011, but after that it may be moved if a better venue can be found.

This isn't quite like booking a restaurant for dinner. There are simply not that many cities with facilities large enough to cope with the ARVO meeting. A working group has made site visits to several destinations and has scheduled more.

We have invited members to take several surveys to gauge sup-

port for moving the Annual Meeting, and perhaps rotating it among several destinations. About 10% of the membership has so far responded. Keep in mind ARVO is your organization; your opinion is highly valued. The staff and Board of Trustees need to hear your thoughts. Please feel free to e-mail annualmeeting@arvo.org.

Best,



Nick Delamere

"Since 1995, the ARVO membership has increased from about 9,400 to more than 12,500, and the number of attendees at the Annual Meeting has grown from under 7,000 to well over 10,000 last year."



ARVO International Chapter Affiliates

ARVO-NED
Nijmegen, The Netherlands
www.oogheelkunde.org

Austria ARVO (AARVO)
Vienna, Austria

**Asociación de Investigación
en Visión y Oftalmología
(AIVO)**
Buenos Aires, Argentina

**Brazilian Research
Association for Vision and
Ophthalmology (BRAVO)**
São Paulo, Brazil
www.fesbe.org/br/bravo

**Hungarian Association for
Research in Vision and
Ophthalmology (HARVO)**
Budapest, Hungary
www.harvo.org

**Israel Society of Vision and
Eye Research (ISVER)**
Jerusalem, Israel
www.isver.org

**South-East European
Association for Research in
Vision and Ophthalmology
(SEE-ARVO)**

 See www.arvo.org/affiliates. ■

SEE-ARVO becomes newest ARVO affiliated chapter

The South-East European Association for Research in Vision and Ophthalmology (SEE-ARVO) became the newest organization to join the ARVO international chapter affiliate program on October 29, 2009. SEE-ARVO was created in August 2009 as a sub-group of the South-East European Ophthalmological Society (SEEOS) to promote activities and programs in ophthalmology and vision.

By affiliating with ARVO, SEE-ARVO hopes to strengthen the collaboration between basic and clinical scientists, develop regional education programs, and increase available funding opportunities for vision researchers in South-East Europe. SEE-ARVO is the first regional ARVO international chapter affiliate, consisting of members from 16 countries, including Moldova, Russia, Slovakia, Cyprus, Croatia, Slovenia, Turkey, Serbia, Albania, Hungary, Greece, Italy, Bosnia and Herzegovina, Romania, Bulgaria and Macedonia. ■

ARVO International Chapter Affiliate in Mexico in the works

A group of ophthalmologists and vision researchers from Mexico are in the process of creating an independent organization in Mexico to promote vision and eye research. The organization is expected to receive its incorporation status in January 2010 and will then apply for affiliation with ARVO. ■



ARVO President-elect Mark Petrash, PhD (center) meets with Hugo-Quirez-Mercado, MD (front) and other eye and vision colleagues from Mexico at the AAO meeting in San Francisco to discuss ARVO chapter affiliation.

Chapter affiliates receive first AFER-ARVO/ Alcon grants

The ARVO International Chapter Affiliates were recently awarded matching education grants from the ARVO Foundation for Eye Research (AFER), thanks to a donation from the Alcon Foundation. These grants match the funds that ARVO provides to the International Chapter Affiliates each year. The chapter affiliates will use the matching grants to partially fund educational programs and travel grants to the 2010 ARVO Annual Meeting. ■

Mark your calendar

February 8
Annual Meeting abstract
acceptance notification

February 26
Annual Meeting Abstract
Search and Itinerary Builder
available online

March 1
ARVO Awards nomination
deadline

March 16
Annual Meeting early
registration deadline

CO, EY and LE to select 2011 Trustee candidates

At the 2010 Annual Meeting, nominations for Trustee candidates will take place at the Section Business Meetings of Cornea (CO), Eye Movements/Strabismus/Amblyopia/Neuro-Ophthalmology (EY) and Lens (LE). Those who are nominated will stand in the 2011 Board of Trustees elections.

Members of CO, EY and LE are encouraged to nominate who would be best to represent and lead their sections. Self-nominations are permitted. Ideal candidates for nomination are members whose dues are paid by February 1, 2010, are willing to serve, and who have expertise or service in committees or with other organizations' governance. Members outside the U.S. are strongly encouraged to accept this opportunity.

Trustees serve a five-year term and the Board meets three times annually: once in the fall and twice at the ARVO Annual Meeting. Visit www.arvo.org/governance to learn more about this critical role.

Nominations will be accepted through April 16, 2010 and finalized in person at the Section Business Meetings. A call for nominations notice with eligibility criteria and an online application form will be posted at www.arvo.org. ■

 Contact Betsy Spruill Clarke (bspruill@arvo.org).

Proposed bylaws amendment to update the ARVO Trustee nomination process

Beginning on March 15, 2010, Regular, Sustaining and Life members of ARVO will have an opportunity to vote online on a proposed bylaws amendment. The amendment would allow members to vote online to narrow the Trustee nomination candidates down to two, instead of conducting an in-person vote at the Section Business Meetings. Online votes must be cast by 5:30pm Sunday, May 2, 2010. Members may also vote or amend their votes in the 15-minute period preceding the General Business Meeting which takes place on Tuesday, May 4, 2010 at 10:20am. The results will be announced at the General Business Meeting.

Proposed bylaws amendment text

The bylaws will need to be amended if the membership votes in favor of changing the process. The proposed bylaws amendment is listed below. Proposed changes are in italics and deleted items are crossed out.

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 nominated candidates will be announced at the separate business meeting.* ~~One of whom~~ of the candidates will be elected as the Successor Trustee *the following year* 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 Trustee nomination proposal and timeline

The new Trustee nomination process is suggested to be implemented with the 2012 Trustee candidates. The proposed changes and timeline are:

- A call for nominations notice will be sent to members mid- to late December 2010.
- Interested members will be required to submit bios, nomination statements, endorsements, pictures and an optional video to ARVO by mid-February 2011.
- The candidate information will be placed on an online ballot with instructions to vote for the two candidates they would like to see on the Trustee election ballot the following year. Voting will open mid-March 2011.
- Voting will close the first day of the ARVO Annual Meeting (May 1, 2011).
- The two members receiving the most votes will be announced at the Section Business Meeting on Monday, May 2, 2011. (Both nominees must be present at the Section Business Meetings.)
- The two candidate names will be placed on an online ballot for final vote which will take place March 2012. The voting for this election will close on May 5, 2012 and the new Trustee will be announced May 6, 2012. (Please note that this part of the process is already in place. See section 5.03 part c of the ARVO bylaws.) ■

Long range planning update

Future site of the Annual Meeting

As part of the 2009–2013 long-range planning process, the ARVO Board of Trustees formed a working group in 2008 to review Fort Lauderdale as the location of the Annual Meeting and to assess other potential meeting locations. On October 29, 2009, the Board of Trustees reviewed the working group's report and voted to allow consideration of destinations other than Fort Lauderdale for the Annual Meeting. The Meeting will remain in Fort Lauderdale at least through 2011, with a chance of moving to another destination as early as 2012. See ARVO President Nick Delamere's column on page 2 for more details.

Working groups reporting in Spring 2010

ARVO members have formed several working groups to recommend strategies for meeting many of the objectives and goals outlined in the five-year plan. These groups will report their recommendations to the Long Range Planning Committee and the Board of Trustees in Fort Lauderdale in May 2010. The working groups currently formed are:

ARVO Board Composition: Evaluating the ARVO Board membership in terms of needs, selection, size, term, job description and diversity.


ARVO Cross-Sectional Group Programs: Assessing the ARVO cross-sectional group programs at the Annual Meeting and determining a process for nominating and electing representatives to serve as group program organizers.

Annual Meeting Program: Reviewing the structure for program development at the Annual Meeting (including diversity of topics, etc.)

Diversified Meeting Opportunities: Assessing ARVO's involvement at other ophthalmology/eye and vision research meetings, determining needs for smaller meetings, and working with the Annual Meeting Program Committee to develop a strategy for including applied sciences at the Annual Meeting.

Online Scientific Resources: Working with members to recommend an online tool of scientific resources to be accessible through the ARVO Web site.

Young Investigators: Developing strategies for attracting more young investigators to ARVO. The group will also recommend ways for increasing networking opportunities between and among young and senior investigators and opportunities for young investigators to participate in ARVO governance. ■

 See www.arvo.org/strategic13 to learn more about the long-range plan.

Help plan your section's Annual Meeting sessions

Got a good finger on the pulse of your section? The Annual Meeting Program Committee (AMPC) needs your voice!

Each section can vote to elect a representative to the AMPC. The online nomination process will open January 6, 2010 and close on February 8. The nominees will then be placed on an online ballot for vote. All voting members (i.e. Regular, Sustaining and Life) whose dues are paid by February 1, 2010 will be eligible to vote online beginning March 15. Voting will close on Sunday, May 2 at 5:30pm. Results will be announced at the Section Business Meetings during the 2010 Annual Meeting.

AMPC members serve a three-year term (VI members serve a four-year term). Members can nominate colleagues in their section or self-nominate. ■

 Contact
Betsy Spruill Clarke
(bspruill@arvo.org).



Investigator Awards

Deadline: March 1, 2010

The Prevent Blindness America Investigator Awards provide funding for clinically-based research investigating issues related to the burden of eye-related illness. All research grants must focus on preserving sight and preventing blindness.

Funding priority is given to projects for research relating to clinically important eye diseases. Basic laboratory science research will not be supported under this program. These awards provide assistance to defray costs of personnel, equipment and consumable supplies. Grants are for a one-year period, range from \$20,000 to \$50,000 and commence on **July 1, 2010**. Grant recipients will be required to submit quarterly progress reports.

ARVO will review grant applications.

Complete guidelines and applications are available at www.preventblindness.org. ■

 Nita Patel, PBA Director of Public Health
+1.312.363.6019, npatel@preventblindness.org.

PH and RE to vote for Section Trustees

On March 15, 2010, the Retina (RE) and Physiology/Pharmacology (PH) Sections will vote for their Trustees. All RE and PH voting members (Regular, Sustaining and Life) whose dues are paid by February 1, 2010 will be eligible to vote online beginning March 15.

Members will receive their voting instructions by e-mail prior to the opening of the election. All votes must be cast online by 5:30pm, Sunday, May 2, 2010. Results of each election will be announced at the Section Business Meetings during the 2010 Annual Meeting.

The 2010 Board of Trustees candidates are:

PH Section

■ **Jeffrey W. Kiel, PhD, FARVO**
van Heuven Distinguished Professor, Department of Ophthalmology, University of Texas Health Science Center

■ **Carol B. Toris, PhD, FARVO**
Professor and director of glaucoma research, University of Nebraska Medical Center

RE Section

■ **Ron A. Adelman, MD, MPH**
Associate professor of ophthalmology, Yale University

■ **William F. Mieler, MD**
Professor and vice-chairman, Department of Ophthalmology and Visual Sciences, University of Illinois ■



See candidate bios at www.arvo.org/candidates2010.

Wanted: Your expertise and passion

Volunteering for an ARVO committee is more than a chance to benefit your career by learning a new skill or broadening your knowledge; it is also a great opportunity to influence the current and future course of ARVO.

Committee members typically serve a three-year term. ARVO committees value all contributions — from student members as well as experienced professional members. Committee listings, descriptions and recent activities can be found online at www.arvo.org/committees. You will also find a link to apply for a committee online. Committee appointments will be made in March 2010. ■

Why do I volunteer on an ARVO committee?



The Animals in Research Committee provides vision researchers with the latest information necessary for properly conducting animal research and highlights issues that may impact vision research programs. As chair of the IACUC at our eye institute, I must be aware of constantly changing policies and decisions affecting animal research.

Volunteering for the ARC allows me to assist with disseminating up-to-date information to not only my local colleagues, but also to the vision research community as a whole.

— *Michelle C. Callegan, PhD*
University of Oklahoma Health Sciences Center
Dean A. McGee Eye Institute



In my view, a good way of getting the maximum out of ARVO is to be an active member of it. Being a non-US based member, I am very happy to volunteer for the International Members Committee. This is a wonderful role to get an international exposure while interacting with other members and of course, feeling good about volunteering. It has been a good learning experience as well as an enriching one professionally.

— *Poonam Mudgil, PhD*
University of Western Sydney



As the new chair of the Professional Development Committee, I like to promote stimulating discussions among scientists through symposia, courses, and summer and special conferences. I think there is still a gap in communication between basic scientists and clinicians. The ARVO meetings try to close this gap through interactive discussions and encouraging more translational research. My goal will be to promote this discussion in every possible way. ■

— *Arup Das, MD, PhD, FARVO*
University of New Mexico School of Medicine



Interested in volunteering? See www.arvo.org/committees.

Cora Verhagen Prize — apply now

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 2010 Cora Verhagen Prize will be awarded at the 2011 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 post-doctoral 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 2010 ARVO Annual Meeting poster or paper presentation dealing with a subject in the field of ocular immunology. ■

Application Form 2010 Cora Verhagen Prize

I would like to compete for the 2010 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 2, 2010. 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: +1.617.912.0137
E-mail: andrew.taylor@schepens.harvard.edu



Learn about
current research
and state-of-the-art
technology in
ophthalmic imaging

May 1, 2010
Fort Lauderdale,
Fla.

Abstracts accepted
January 5–
February 16, 2010



www.arvo.org/isie

2011

ARVO Awards



See www.arvo.org/awards
Contact: awards@arvo.org
etblackmon@arvo.org
+1.240.221.2949

Call for Nominations

The ARVO awards honor individuals for their exceptional contributions to ophthalmology and visual science. There are no membership requirements or geographical restrictions for nominees or nominators. Members of the vision community are invited to nominate their colleagues for the prestigious ARVO awards to be presented at the 2011 ARVO Annual Meeting.

Proctor Medal

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

Friedenwald Award

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

Mildred Weisenfeld Award for Excellence in Ophthalmology

Distinguished scholarly contributions to the clinical practice of ophthalmology.

Cogan Award

Contributions to research in ophthalmology or visual science that are directly related to disorders of the human eye or visual system, by a promising individual 40 years of age or younger.

Kupfer Award

Distinguished public service on behalf of eye and vision research.

Special Recognition Award

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

Nomination Deadline: March 1, 2010

Nominations must be completed online at www.arvo.org/awards. Nominations must include a detailed nomination letter, a CV and three brief letters from colleagues who support the nomination.

€1 million buys a lot of sweet potatoes

2009 António Champalimaud Vision Award
Helen Keller International

“Four out of five people who are blind did not have to lose their sight,” said Kathy Spahn, president and CEO of Helen Keller International (HKI). As this year’s recipient of the €1 million 2009 António Champalimaud Vision Award (US\$1.48 million), HKI plans to use the prize to extend at least two key programs that help prevent blindness in children.

Vitamin A deficiency (VAD) is the leading cause of preventable blindness in children and also weakens the immune system. Each year, as many as 500,000 children go blind because of VAD; 70% of these children die within a year of losing their sight.

HKI employs several strategies to control VAD, including Vitamin A supplementation, fortifying staple foods, and promoting the production and the consumption of foods rich in Vitamin A. One food that is rich in Vitamin A is the orange-fleshed sweet potato.

“The traditional sweet potato grown in Africa is white-fleshed; it doesn’t have high levels of beta-carotene, which the body turns into Vitamin A,” explains Spahn. “HKI is working with local partners to develop and promote a hardy and tasty orange-fleshed — and Vitamin A-rich — variety.” HKI also develops educational and social marketing programs to ensure that the potatoes reach the target consumers, particularly children.

Funds from the Champalimaud Award will help scale up HKI’s successful program in Mozambique. HKI also hopes to apply the prize money to extend its Vitamin A supplementation program, which

provides capsules twice a year to young children and mothers. Last year, HKI’s programs reached over 87 million in 13 countries in Africa and five in Asia.

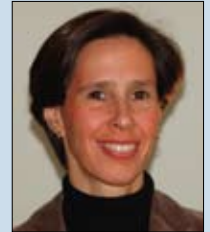
This represents about 85% of children who need Vitamin A. HKI’s goal is to reach 100%. As Spahn says, “We want to use the Champalimaud money to help the hardest to reach, those children who are literally at the end of the road in rural areas, or in the worst urban slums, where the infrastructure can’t support the growing population.”

For more information about Helen Keller International and to learn how you can help, visit www.hki.org. ■

 To learn more about the António Champalimaud Vision Award, visit www.fchampalimaud.org.

The Champalimaud Award

The António Champalimaud Foundation gives its annual €1 million Vision Award on an alternating cycle. Odd-numbered years focus on organizations — like Helen Keller International — fighting blindness



Kathy Spahn
Helen Keller
International

and vision impairment, preferably in developing countries. In even-numbered years (including 2010), the Foundation recognizes overall contributions to vision research.

Recipients present the ARVO/Champalimaud Award Lecture at the ARVO Annual Meeting the following year.

HKI’s Kathy Spahn will present the ARVO/Champalimaud Award Lecture on Wednesday, May 5, 2010 at 5:45pm. The lecture is followed by a reception. All are welcome. ■



Portugal President Aníbal António Cavaco Silva presents the António Champalimaud Vision Award to Kathy Spahn of Helen Keller International.

ARVO online calendar: All the key meetings in one spot

The searchable ARVO Calendar allows you to easily find the meeting that meets your needs, whether you are searching by location, organization, topic or CME!

List your meeting for free: Post your own meeting announcements directly on the site. Just click “Add Meeting” and provide the details for your workshop, course or conference. ■

 See www.arvo.org/calendar.

Awards and Grants

ARVO Fellows Class of 2010

ARVO is pleased to honor these distinguished members in recognition of their individual accomplishments, leadership and contributions to the Association for Research in Vision and Ophthalmology.

2010 Gold Fellows

Acott, Ted S
Albert, Daniel M
Baum, Jules
Becker, Bernard
Bennett, Jean
Berson, Eliot L
Bressler, Neil M
Bron, Anthony J
Caspi, Rachel R
Chader, Gerald J
Chodosh, James
Craft, Cheryl M
Curcio, Christine A
Das, Arup
Dorey, C Kathleen
Dryja, Thaddeus P
Enoch, Jay M
Ernest, J Terry
Folberg, Robert
Gipson, Ilene K
Goldberg, Morton F
Gouras, Peter
Green, Daniel
Hageman, Gregory S
Hjelmeland, Leonard M
Horwitz, Joseph
Jampol, Lee M
Kampik, Anselm
Kaplan, Henry J
Kiel, Jeffrey W
Kijlstra, Aize
Krupin, Theodore
Legge, Gordon E
Levin, Leonard A
Maguire, Maureen G
Masland, Richard H
McGahan, Mary Christine
Milam, Ann
Mitchell, Paul
Mittag, Thomas W
Mochizuki, Manabu
Odom, J Vernon
Pe'er, Jacob
Pepose, Jay Stuart
Pugh, Edward N
Reddy, Venkat N
Sarthy, Vijay P
Silverstein, Arthur
Smith, Lois EH
Smith, Ronald E

Spector, Abraham
Trinkaus-Randall, Vickery E
Tso, Mark O M
Ubels, John L
Werblin, Frank S
Wiggs, Janey L
Winkler, Barry S
Zelenka, Peggy S

2010 Silver Fellows

Abel, Larry A
Adamis, Anthony P
Adamus, Grazyna
Alm, Albert
Andley, Usha P
Austin Clayton, Janine
Azar, Dimitri T
Bateman, J Bronwyn
Bernstein, Paul S
Bhat, Suraj P
Birk, David E
Blake, Randolph
Blumenkranz, Mark S
Boatright, Jeffrey H
Bone, Richard A
Borras, Terete
Bullimore, Mark A
Calkins, David J
Callegan, Michelle
Camarata, Patrick R
Carper, Deborah
Carter-Dawson, Louvenia D
Chakravarthy, Usha
Chang, Stanley
Chung, Susana
Coleman, Anne L
Conrad, Gary W
Costello, M Joseph
Courtois, Yves G
Danciger, Michael
Danis, Ronald P
Davis, Janet L
Delori, Francois C
Elnor, Susan G
Elnor, Victor M
Feke, Gilbert T
Ferguson, Thomas A
Fitzgerald, Malinda EC
Fleiszig, Suzanne MJ
Flynn, John T
Foster, C Stephen

Freddo, Thomas F
Gabel, Veit-Peter
Gallie, Brenda L
Garland, Donita
Goldbaum, Michael Henry
Gottsch, John D
Griep, Anne E
Grierson, Ian
Gwiazda, Jane E
Haller, Julia A
Hansen, Ronald M
Harrad, Richard A
Harris, Alon
Hartzer, Michael K
Hassell, John R
Helbig, Horst
Hendricks, Robert L
Hill, James M
Holopigian, Karen
Honda, Yoshihito
Hurwitz, Richard L
Hyman, Leslie
Inana, George
Jaffe, Glenn J
Jampel, Henry D
Johnson, Mark W
Johnson, Mary A
Kardon, Randy H
Kay, Eun Duck P
Kellner, Ulrich
Kenney, M Cristina
Khaw, Peng T
King, George Liang
Kitazawa, Yoshiaki
Klein, Ronald
Kompella, Uday
Koretz, Jane F
Kowluru, Renu A
Laurie, Gordon W
Lausch, Robert N
Lee, David A
Lee, Paul P
Li, Tiansen
Lindsey, James D
Ljubimov, Alexander
Mackey, David A
Manny, Ruth E
Marmorstein, Alan D
Marshak, David W
McCally, Russell L
McCarty, Bernard E

McCarty, Catherine A
McCormick, Steven A
McLaren, Jay W
McMenamin, Paul
Meek, Keith M
Menko, A Sue
Midena, Edoardo
Miller, Joan W
Miller, Joseph M
Mircheff, Austin K
Miyake, Yozo
Molday, Robert S
Movshon, J Anthony
Murray, Timothy G
Naash, Muna I
Nesburn, Anthony B
Newsome, David A
Nickells, Robert W
Nickla, Debora L
Nishida, Kohji
Nork, T Michael
O'Brien, Colm J
O'Brien, William J
O'Day, Denis M
Olsen, Timothy W
Pang, Iok-Hou
Panjwani, Noorjahan A
Parel, Jean-Marie A
Parrish, Richard K
Pasquale, Louis R
Pepperberg, David R
Petrash, J Mark
Pfister, Roswell R
Pittler, Steven J
Pournaras, Constantin J
Puklin, James E
Reid, Ted W
Reinecke, Robert D
Repka, Michael X
Richards, Julia E
Ripps, Harris
Rizzolo, Lawrence J
Robin, Alan L
Robinson, Michael L
Roth, Steven
Russell, Paul
Ryan, Stephen J
Sakamoto, Taiji
Schor, Clifton M
Schultz, Gregory S
Schuman, Joel S

Schwartz, Michal
Sebag, Jerry
Seiple, William H
Shevell, Steven K
Smith, Justine
Smolek, Michael K
Soubrane, Gisele
Stamer, W Daniel
Steinbach, Martin
Stepp, Mary Ann
Stone, Edwin M
Sunness, Janet S
Svoboda, Kathy KH
Takemoto, Dolores J
Tamai, Makoto
Tamm, Ernst R
Taylor, Andrew W
Taylor, Hugh R
Tervo, Timo MT
Thompson, Debra A
Tielsch, James M
Toth, Cynthia
Travis, Gabriel H
Trevithick, John R
Trick, Gary L
Tripathi, Brenda J
Troilo, David
Trousdale, Melvin D
Twining, Sally S
Vingrys, Algis J
Vinores, Stanley
Wagner, BJ
Walcott, Benjamin
Watsky, Mitchell A
Watson, Andrew B
Wen, Rong
Wensel, Theodore G
Westall, Carol A
West-Mays, Judith A
Whitcup, Scott M
Wiedemann, Peter
Wiggert, Barbara N
Wilhelmus, Kirk R
WoldeMussie, Elizabeth
Wyatt, Harry J
Yazulla, Stephen
Yu, Fushin
Zangwill, Linda M
Zee, David S
Zemon, Vance M
Zrenner, Eberhart ■

Upcoming ARVO meetings




April 30–May 1, 2010

Fort Lauderdale, Fla.

Observer space available

The 2010 ARVO/Pfizer Ophthalmics Research Institute covers “Current Prospects in Optic Nerve Protection and Regeneration.” This conference will bring scientists from several disciplines together to help focus research in optic nerve degeneration and repair, and accelerate progress in research through networking and collaboration.

 See www.arvo.org/arvopfizer.



May 1, 2010

Fort Lauderdale, Fla.

The 8th ARVO/ISIE (International Society for Imaging in the Eye) Meeting offers one day of concentrated sessions

Call for proposals

7th ARVO/Pfizer Ophthalmics Research Institute
April 29–30, 2011
Fort Lauderdale, Fla.

Topic: Biomarkers in Glaucoma
These multi-disciplinary research conferences, held just prior to but separate from the ARVO Annual Meeting, are funded by the ARVO Foundation for Eye Research through a grant from Pfizer Ophthalmics. The conferences invite scientists from various disciplines to focus on strategies to improve research and clinical care in areas of ophthalmology related to preventable vision loss and blindness. ■

 For details and deadlines, see www.arvo.org/arvopfizerinstitute2011.

on current clinical and basic science advances in ophthalmic imaging. This critical and informative research will help you further your practice and better care for your patients. Learn scientific principles behind ophthalmic imaging, discuss clinical applications of imaging technologies, and explore new research and recent advances in imaging.

Submit your abstract January 5–February 16, 2010. Abstracts will be accepted for original research on current clinical and basic science advances in glaucoma, retina, cornea, anterior segment, orbit and neuro-imaging in ophthalmology. Submissions must not conflict with ARVO Annual Meeting abstracts.

 See www.arvo.org/isie.



ARVO Annual Meeting
May 2–6, 2010
Fort Lauderdale, Fla.

 See www.arvo.org/am.



2010 Summer Eye Research Conferences

Diabetic retinopathy is the leading cause of vision loss in middle-aged adults. Worldwide, blindness due this devastating disease is increasing. ARVO will present three conferences on different aspects of diabetic retinopathy in locations around the world.

- **Diabetic Retinopathy: Approaches to a Global Epidemic**
July 30–August 1, 2010, Bethesda, Md. This conference will focus on an integrated approach to fighting the diabetic retinopathy epidemic, including current challenges and what needs to be done.


- **Diabetic Retinopathy: Neurovascular Dysfunction & Protection**
Date and location to be determined

Diabetes mellitus is expected to reach a prevalence of 300 million people worldwide by the year 2030. The burden of visual loss due to diabetic retinopathy (DR) — to the individual, their caregivers and society at large — will be unprecedented. This meeting is dedicated to the notion that DR is a disease of both the retinal vasculature and the neuronal compartments. It will evaluate the concepts of neurovascular dysfunction and protection and the implications for pre-clinical modeling and clinical trial design.

- **Diabetic Retinopathy: From Bench to Population**

Chennai, India; dates to be determined


Over the last decade, we have seen sound epidemiological studies from both developed and developing countries that look at genetic risk and protective mechanisms in diabetic retinopathy in various ethnic groups, and examine both prevalence and follow-up. This conference will provide an update of new insights into the pathogenesis, diagnosis, screening and treatment for diabetic retinopathy, and present information about the latest research achievements. This meeting will be suitable for basic science researchers, general ophthalmologists, retina specialists and diabetologists.

 See www.arvo.org/serc for updates. More details will be coming soon.



January 20–22, 2011
Singapore

The Asia-ARVO Meeting reflects ARVO's commitment to partnering with different countries in Asia that have expanding eye research programs. Mark your calendar and plan to attend the 3rd Asia-ARVO Meeting, organized and hosted by the Singapore Eye Research Institute. ■

 See www.arvo.org/asiaarvo.

Endpoints 2009: Using patient-reported outcomes in product development

Can patient-reported outcomes (PROs) be used as a primary endpoint in new product evaluation? If so, what would it take to develop and validate that PRO, similar to clinical data? And how do PROs impact product labeling claims or other patient information?



PRO Endpoints Symposium co-chairs Neil Bressler, MD, FARVO, of the Wilmer Eye Institute, Johns Hopkins (left) and Rohit Varma, MD, of the Doheny Eye Institute, University of Southern California.

These issues were examined at the third ARVO-managed Endpoints symposium in October, sponsored by NEI and the US Food and Drug Administration (FDA). The meeting featured representatives from the reviewing divisions

within FDA's Center for Drug Evaluation and Research (CDER) and the Center for Devices and Radiological Health (CDRH) that oversee ophthalmic drug and device approvals, respectively.

Because some treatment effects are known only to the patient, PROs are increasingly recognized as an essential component in the evaluation of drugs and medical devices. Quality-of-life indicators that arise from PROs are increasingly used in decisions about drug and device reimbursement and are even being considered in potential health care reform legislation.

"Although the vision community may not yet use PROs as primary endpoints, they serve an important role in the evaluation of new treatments."

— Rohit Varma, MD

Symposium co-chairs and ARVO members Neil Bressler, MD (Wilmer Eye Institute/Johns Hopkins) and Rohit Varma, MD (Doheny Eye Institute/University of Southern California) emphasized the importance of PROs in vision trials and epidemiologic assessments sponsored by NEI and industry.

Since PROs are increasingly being considered in new product evaluations across the FDA, representatives of its Division of Epidemiology discussed concepts that are incorporated into a draft FDA guidance document, Patient-Reported Outcomes Measures: Use in Medical Product Development to Support Labeling Claims. They encouraged attendees to consider meeting early with the reviewing division to discuss the potential use of PROs in regulatory submission.

CDER representative Wiley Chambers, MD (Division of Anti-Infective and Ophthalmic Products), said for ophthalmic drug approval, there is no requirement for a quality-of-life study in addition to safety and effectiveness, but if a manufacturer wants to use a PRO in a label claim, then it must be developed and validated.

CDRH representative Malvina Eydelman, MD (Division of Ophthalmic, Neurological and Ear, Nose and Throat Devices) explained that although PROs are not usually primary endpoints, they are considered in safety reviews of a device both pre- and post-market and may be included on separate information sheets to patients. She added that the FDA would announce a collaborative study with the NEI that would use PROs to examine the potential impact on quality of life from LASIK. The study will identify factors that can affect quality of life following LASIK and potentially reduce the risks of adverse effects.

Varma concluded: "Although the vision community may not yet be prepared to use PROs as primary endpoints, they serve an important role in the evaluation of new treatments." ■

ARVO eLearning Center

ARVO's eLearning Center provides educational resources for research professionals in ophthalmology and vision science.

Use the eLearning Center to:

- Access previous Annual Meeting lectures and workshops
- Participate in online educational activities
- Earn Continuing Medical Education (CME) credits

ARVO's eLearning Center content is updated regularly.

www.arvo.org/elearning





One-day course

Designing and Managing Clinical Trials in Eye Research

May 1, 2010

Fort Lauderdale, Fla.

Course Director:

Frederick L Ferris, III, MD, FARVO
National Eye Institute/NIH

Jointly sponsored by



www.arvo.org/CTES

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Abstract deadline:
June 14, 2010

2011 Bressler Prize In Vision Science

CALL FOR NOMINATIONS

Open to established professionals in the field of vision science whose contributions have advanced vision care, the treatment of eye disease, or the rehabilitation of persons with visual disabilities or blindness, and whose further work is expected to contribute significantly.

Nominations must be made online. Please go to www.jgb.org/bressler.asp. Closing date for nominations and receipt of all supporting documents is December 31st, 2010.

The prize of \$40,000 will be awarded at the Alfred W. Bressler Vision Science Symposium to be held in New York City in Autumn 2011.

For additional information call 212-769-7801 or e-mail bressler@jgb.org.



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ARRA funding facts for FY2009*

NIH

- \$4.73 billion of the two-year \$10.4 billion stimulus funding has been committed to grants and contracts
- 12,788 grants have been funded to date
- 60% reflect new science; the remainder has gone to accelerate existing projects
- An estimated 50,000 jobs will be created or retained
- 5,000 of these are summer 2009 and 2010 positions for students and science educators

NEI

- Of the \$175 million appropriated, 97% is funding extramural research. \$5.4 million is going to administration (peer review process)
- NEI has already committed \$142 million to 333 grants, mostly to investigator-initiated research (R01) grants and supplements
- NEI awarded 10 Challenge Grants at \$1 million each, seven of which were funded through NIH's Office of the Director
- NEI's "Signature Program" is its Centers for Excellence in Genomics of Eye Disease
- The FY2010 funding balance of \$26.7 million will be committed to grants, supplements and other initiatives. Many of these are co-funded by the Office of the NIH Director.

*Source: NIH Preliminary Report, October 2009

What difference is ARRA making to eye and vision research? ARVO members tell Congress

On October 30, ARVO Trustees and local members went to Capitol Hill with their stories about how American Recovery and Reinvestment Act (ARRA) funding is benefitting eye and vision research. The vision science community has been one of the first to educate members of the US Congress and their staffs about the impact of ARRA funding, now and in the long-term. The National Alliance for Eye and Vision Research (NAEVR) organized the meetings with each congressional office and provided talking points to participants during a breakfast briefing.

The participants included several international Trustees: Vice President-Elect Shigeru Kinoshita, MD, PhD, FARVO (Japan); Jacob Pe'er, MD, FARVO (Israel); and Peng T Khaw, MD, PhD (UK).

In addition to describing research being conducted in other countries, the three emphasized the unique nature and important global leadership role of the National Institutes of Health (NIH) biomedical enterprise.

The NIH had just released its initial report on how the \$10.4 billion in stimulus funding has been spent, so ARVO members provided a useful context by describing the vision research awards that they and their institutions received. Three of the researchers — incoming ARVO President-elect J. Mark Petrash, PhD, Shukti Chakravarti, PhD, and Justine Smith, PhD — were direct recipients of ARRA-related NEI awards.

The ARRA discussion was a prelude to two important requests: that Congress finalize FY2010 NIH funding at the higher House bill level of a 3.1% increase (3.57% for NEI), and that Congress fund NIH at a robust, predictable and sustained level in FY2011, especially since stimulus funding expires in FY2010. ARVO advocates pointed out that in both FY2009 and FY2010, NIH is supporting research at a level of \$35 billion (base appropriations, plus half of the two-year stimulus). ■



Jacob Pe'er, MD, FARVO, J. Mark Petrash, PhD, FARVO, incoming ARVO President/ARVO Advocacy Committee Chair and Sally Mayes, office of Senator Michael Bennet (D-CO).



Andras Komaromy, PhD, with Liz King, office of Rep. Chaka Fattah (D-PA), who serves on the Appropriations Committee.



Todd Margolis, MD, PhD, FARVO, and Peng T. Khaw, MD, PhD, FARVO, with Deborah Trautman, PhD, RN, office of House Speaker Nancy Pelosi (D-CA). Since the Speaker introduced the leadership's healthcare reform bill the previous day, Trautman was interested in how vision research can help to cut healthcare costs.



Participants on their way to the Senate included: (front row) Shigeru Kinoshita, MD, PhD, FARVO; Major General (Ret) Gale Pollock, CRNA (University of Pittsburgh Eye Center); ARVO Past President Todd Margolis, MD, PhD, FARVO; ARVO President Nicholas Delamere, PhD, FARVO; (back row) David Williams, PhD, FARVO; David Hunter, MD, PhD; and ARVO Advocacy Committee member Peng Khaw, MD, PhD, FARVO.

Telling your story could keep research funding up

Picture this: a stack of paper four times the height of the Washington Monument (which is 555 feet or nearly 170 m tall). That stack represents all the applications NIH received for American Reinvestment and Recovery Act (ARRA) funding. It illustrates how eager the research community is for investment.

Recently, ARVO staff members spoke to several researchers who received ARRA funding. Every one of them indicated that the funds came at a time when they were facing difficult decisions about staffing and projects. ARRA funding helped them retain and hire staff and continue their research.

ARVO members, supported by staff as well as the National Alliance for Eye and Vision Research, are working to make sure members and staff of the US Congress understand what a difference this investment can make by explaining exactly what they are doing with this funding, and how their work may benefit people in the long term (see story, below).

All politics are local

Members don't have to work in the US or travel to Washington, DC, to tell their funding stories

to decision-makers. By talking about how government funding — including ARRA funding — is allowing an institution to do research that will benefit the local community, members can play a role in strengthening eye and vision research funding.

Members can contact their institutions' communications staff to let them know how funding (particularly ARRA funding, if applicable) for research:

- improves job retention/creation
- could lead to improvements in predicting eye disease
- can improve diagnosis and treatment for eye disease
- leads to better access to information on the benefits/risks of eye care treatments.



NAEVR
National Alliance For
Eye And Vision Research

The ARVO Web site has vision advocacy resources that can help members provide contextual information to communications staff.

The story below is an example of how to present a funding story to a lay audience. ■

i See www.arvo.org/advocacyresources.

Three junior scientists continue work that could reduce the cost of vision care

ARRA funding came just in time to the laboratory run by Thomas Norton, PhD, at the University of Alabama at Birmingham. Norton was facing the possibility of having to eliminate the position of a productive research associate, and he was also looking for money to pay a graduate student. ARRA funding allowed him to both keep the associate and pay the student, as well as hire a new technician.

“The ARRA supplement has been a real blessing,” said Norton. “I smile every time I see how it has raised the overall energy level in the lab.”

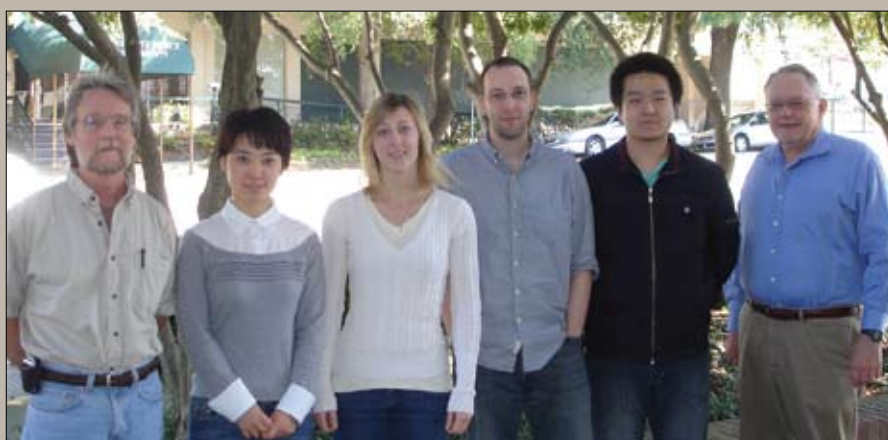
Norton's team is using ARRA funds to identify genes and proteins that start/stop myopia/nearsightedness development. Such studies are necessary prior to developing a pharmacological or optical intervention to slow or prevent myopia in children, which would reduce the economic burden of myopia on the US healthcare system.

Over 25% of the US population is affected by myopia, costing over \$14 billion annually for eye exams, glasses, contact lenses and refractive surgery. The medical cost is significant over a lifetime, considering that the onset of myopia starts at adolescence and the

disease does not go away. Myopia also significantly raises the risk of other eye problems that cause blindness. ■



Search for Project #:
3R01EY005922-23S1 at <http://projectreporter.nih.gov>



From left: John Siegart, Jr., PhD; Lin Guo (graduate student); Carol Herman (research technician); Michael R. Frost, PhD (senior research associate); Li He (graduate student); and Thomas Norton, PhD (principal investigator).



The Alliance for Eye and Vision Research's (AEVR) Executive Director Jim Jorkasky chats with NIH Director Francis Collins at December 2 Capitol Hill reception. ARVO and AEVR served as co-sponsors of the event.

Vision research funding up \$230 million in FY09

Between NIH regular and American Recovery and Reinvestment Act (ARRA) funding and Department of Defense extramural research awards, funding for vision research increased by an unprecedented \$230 million in FY09.

The sources of these funds are shown in the chart (below). They include congressional appropriations to the NEI of \$196 million (both "regular" and ARRA); the NIH common fund (such as the Bridge Awards); grants from the Office of the Director (OD) at NIH (such as the ARRA-related Challenge Grants); other NIH Institutes and Centers (ICs) and Department of Defense funding. ■

FY2009 vision research funding increase of \$230 million

"Regular" NEI appropriation	\$21.4 M
NIH Common Fund (e.g., Bridge Awards)	\$5.6 M
ARRA NEI appropriation	\$175.0 M
ARRA NIH OD, Common Fund, other ICs	\$16.0 M
2009 Awards/FY2008 defense vision	\$12.0 M
Total	\$ 230.0 M

Defense-related vision research update

FY2010: Congress has yet to finalize the Defense appropriations bill. NAEVR has urged that the conference bill includes the House-passed dedicated Peer Reviewed Medical Research-Vision line item that is funded at \$5 million, a 25% increase over FY2009.

FY2009: The Department of Defense's (DOD) Telemedicine and Advanced Technology Research Center (TATRC) will make \$5.4 million of awards in first-quarter 2010. TATRC, which added \$1.4 million to the \$4 million congressional appropriation, is currently reviewing full proposals submitted in October after a mid-summer review of pre-proposal submissions. Awards will be announced in the first quarter of 2010.

FY2008: In 2009, the DOD has awarded \$12 million to vision research, \$6 million from its Peer Reviewed Medical Research Program (PRMRP) and \$6 million from its Deployment Related Medical Research Program (DRMRP) for research into corneal healing, corneal and retinal protection, and eyelid muscle replacement.

Visit the Defense-related Vision Research section of NAEVR's Web site to review the abstracts of DOD awards. www.eyeresearch.org. ■



NAEVR
National Alliance For
Eye And Vision Research

Congress increases FY2010 NEI funding by \$18.5 million

At press time, President Obama was signing an omnibus FY2010 appropriations bill that included NIH funding at \$31 billion, an increase of \$691.8 million, or 2.3%, over FY2009. NEI is funded at \$707.04 million, an increase of \$18.5 million, or 2.7%, over FY2009. The FY2010 "regular" NEI appropriation is in addition to \$26.7 million in remaining ARRA funding that NEI is committing to grants, supplements and other initiatives. That means an additional \$45 million available to vision researchers in 2010 over FY2009 NEI baseline funding, as well as that which will also be available through the DOD. ■

	FY2009 Final†	FY2010 Final†
NIH*	\$30.3 B	\$31 B +2.3%
NEI	\$688.5 M	\$707.04 M +2.7%

* Net of transfers/one-time expenses
† Absent ARRA Funding

Clinician-scientist tells Congress about Robo4 protein pathway AMD research

In September, ARVO member Kang Zhang, MD, PhD, professor of Ophthalmology and Human Genetics at the Shiley Eye Center and director of the Institute for Genomic Medicine at the University of California at San Diego, spoke to US congressional staffers about his research into AMD, which focuses on the role of Robo4, which is a protein found only in cells in the interior surface of blood vessels.

The event was sponsored by the Alliance for Eye and Vision Research as part of its Decade of Vision 2010–2020 initiative to recognize International Age-related Macular Degeneration (AMD) Awareness Week 2009 (September 19–25). ARVO co-sponsored the event.

Once the Robo4 protein is activated, explained Zhang, it initiates a chain of biochemical events to stabilize blood vessels and prevent uncontrolled growth and leakage. In a March 2008 study published in *Nature Medicine*, a team of researchers led by Zhang and Dean Li, MD, PhD (University of Utah), reported that damage from AMD could be prevented or even reversed when the Robo4 protein was activated in mice models that simulated the disease, inhibiting abnormal blood vessel growth and stabilizing blood vessels to prevent leakage.

Zhang's research has used the same animal models required for drug development, meaning that the timeframe required to test treatments for AMD, as well as for diabetic retinopathy, could be shortened. "Our research is already looking at a small-molecule approach to activate the Robo4 protein pathway,

which could result in a minimally-invasive therapy to treat AMD, such as an eye drop or a pill," said Zhang.

NEI has funded Zhang's research and described it as "a prime example of basic science research yielding a discovery with direct clinical applications." He has also been supported by the private funding foundations Research to Prevent Blindness (RPB) and Burroughs Wellcome Fund.

Zhang is the recipient of two ARRA-funded NEI grants — a joint project with the Doheny Eye Institute/University of Southern California on the genetic basis of diabetic retinopathy in the Latino population, and support for education of science teachers/summer students. For many congressional staff, this was the first opportunity to meet an ARRA-funded investigator and to learn about the scientific and economic impact of that research. ■



Kang Zhang, MD, PhD, discusses the dramatic implications of his AMD research.



DECADE OF VISION
an initiative of the
2010-2020
Alliance For Eye And Vision Research

"Our research ... could result in a minimally-invasive therapy to treat AMD, such as an eye drop or a pill."

— Kang Zhang, MD, PhD



Zhang with Colonel Donald Gagliano, MD, director of the DOD's Vision Center of Excellence. DOD is funding Robo4 pathway research through its extramural Peer Reviewed Medical Research Program.



Zhang (right) met with representatives of his work and home congressional districts. (From left) AEVR executive director James Jorkasky and Spencer Young of the office of Rep. Susan Davis (D-CA), who has sponsored "Dear Colleague" letters urging congressional support for NIH.

AEVR's Decade of Vision 2010–2020 Initiative provides sustained education about the impact of eye disease and vision impairment. In House Resolution 366 and Senate Resolution 209 passed in 2009, Congress designated 2010–2020 as the decade of vision and acknowledged the 40th anniversary of NEI.

Collins appointment energizes NEI, NIH



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

On August 17, 2009, the NIH community welcomed Dr. Francis Collins as its new director. We are delighted that President Obama selected Dr. Collins, a physician and geneticist who has led the National Human Genome Research Institute and is well positioned to take on the opportunities and challenges that face the NIH.

Dr. Collins has articulated five goals and priority areas for medical research: [<http://videocast.nih.gov/Summary.asp?File=15247>]

1. Apply genomics and other high throughput technologies to understand fundamental biology and uncover causes of specific diseases.

2. Translate basic science discoveries into new and better treatments.

3. Put science to work for the benefit of health care reform.

4. Encourage a greater focus on global health.

5. Reinvigorate and empower the biomedical research community.

The NEI and the vision research community will continue to play a crucial role in these areas. Vision investigators used information from the International HapMap project

"Vision diseases are an important target for global health initiatives ... ranking 9th in the world for disease burden."

to demonstrate the association of a gene with a disease, in this case, age-related macular degeneration (AMD). Dr. Collins acknowledged this tremendous accomplishment which identified the link between the CFH gene and AMD as "one of the early home runs, and it presages a lot more to come." Nearly one-fifth of all human disease genes discovered to date are associated with eye disease and vision impairment. Vision research is poised to tackle new approaches to disease treatments with these findings.

The NEI was one of the first two Institutes to release genetic data and disease information through dbGap, the NIH genotype-phenotype database, in 2007. Information from clinical trial cohorts in the Age-Related Eye Disease Study (AREDS) is now available to investigators through the database. The NEI has also initiated research collaborations that will facilitate the collection of valuable phenotypic data. These include the Pediatric Eye Disease Investigator Group (PEDIG), the Diabetic Retinopathy Clinical Research Network (DRCR), and eyeGENE, the National Ophthalmic Disease Genotyping Network.

A remarkable example of translating basic science discoveries to treatments comes from three current clinical trials for Leber congenital amaurosis (LCA), a blinding childhood disease. Elegant basic research led to the discovery of the RPE65 gene in 1993. Subsequently, scientists elucidated its biological function in vision as the retinal isomerase, and RPE65 mutations were implicated in LCA. The work culminated this year in the partial restoration of visual function through gene therapy. This achievement heralds the opportunity for additional





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gene therapy in eye and vision diseases. Stem cells and pharmacologic therapies may also afford tremendous opportunities in translational science.

The third of Dr. Collins' priorities includes comparative effectiveness research, a benchmark for identifying beneficial and cost-effective treatments in this age of health care reform. Clinical trials are critical for these determinations, and the vision community and the NEI have a number of key trials already underway. One of these is the Comparison of Age-Related Macular Degeneration Treatments Trials: Lucentis-Avastin Trial (CATT). We can anticipate that our evolving genetic understanding of vision will allow us to optimize treatments for vision and eye diseases in the coming age of pharmacogenomics.

Vision diseases are an important target for global health initiatives as well, ranking 9th in the world for disease burden, according to the World Health Organization. Ninety percent of blindness cases are preventable, most for minimal cost. One outcome of a series of workshops moderated by ARVO was the bilateral,

government-level INDO-US statement of intent to facilitate research collaborations and opportunities in India. This agreement also allows for the training of foreign scientists through support by the Department of Biotechnology, India. Vision scientists have been adept at exploring opportunities for global health issues, and will continue to do so by taking advantage of new technologies.

Finally, the NEI will continue to fund promising and exciting vision research and support young scientists and educators as well as new and established investigators. The NEI is working with the other Institutes and NIH leadership to reinvigorate, empower and sustain the biomedical research community.

This is an exciting time at the NIH for both fundamental and applied medical research, especially projects in areas such as computational systems biology, molecular networks, proteomics and nanotechnology. The NEI will take advantage of opportunities to improve eye health and vision worldwide and participate in Dr. Collins' vision of the NIH. ■

"This is an exciting time at the NIH ... especially [for] projects in areas such as computational systems biology, molecular networks, proteomics and nanotechnology."

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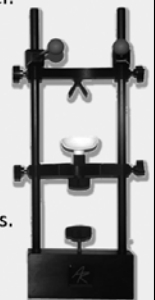


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State of IOVS

January is the time for “state of ...” reports, so I think it’s appropriate to give IOVS readers a state of the journal report and a look to the future.

Last year brought IOVS record numbers of submissions, with over 1,700 predicted at the time of this writing in early December. Accompanying this has been an increase in the acceptance rate because of the high quality of the submissions we have received. While we’ve seen a slightly slower time to the final decision (+ two weeks), the new organization, with five associate editors and a full editorial board, has greatly facilitated the review of articles by experts at the highest level.

The higher acceptance rate has resulted in a slight backlog of articles that will be cleared by the March issue, and we should see a marked improvement in the time from submission to publication. Even with this slight increase in the review time, the average time from submission to publication is less than nine months — the best time of the top journals in the field. In addition, IOVS continues to publish the unedited articles online as soon as they are accepted, as much as 12 weeks before the article of record is published.

All members who have chosen to receive e-mails from ARVO will notice that they are receiving e-mail Tables of Contents and alerts every month when a new issue is published. The alerts include links to all the articles. ARVO set this feature up whether or not you have activated your subscription.

Looking forward

New editorial sections: Starting with the January issue, IOVS is available online only. If you have not done so yet, activate your subscription now. (See box on following page for easy instructions to activate.) Visit the new IOVS home page and look for the newly designed text

pages in April. Going online-only has allowed ARVO to reduce the color charges to \$100 per PDF page, regardless of the number of color figures on the page; this nominal charge covers the expense of producing the color. The basic charge per page will, however, increase to \$70 per page for the first eight pages. Excess page fees remain unchanged.

To meet the needs of ARVO members, this year we are introducing three new editorial sections that you can choose when you submit your articles: Genetics, Nanotechnology and Ophthalmic Imaging. These sections parallel those introduced by ARVO two years ago as Cross-sectional Groups. Since a quarter of all ARVO members have

joined at least one of these groups, it is appropriate that the journal reflect these interests.

In addition to the new editorial sections, there will be two sections added to broaden the appeal and scope of the journal: Reviews and Point/Counter Point. Both will be invited by me with considerable input from the associate editors and the Editorial Board, and suggestions from readers are very welcome.

Reviews will be in-depth summaries of topics of general interest to the vision community and will include historical perspective as well as the latest information. The first of these will be by Lois Smith.

Point/Counter Point will be two or more opposing views on a current topic, the first of which will be on Lens Fluid Circulation Hypothesis. There will be no page charges and one color figure will be free for these new sections. IOVS will continue the Perspectives column, which is the personal viewpoint on a topic of broad interest to the community written by someone other than the editors.

We also encourage you to submit your translational research to IOVS and to include a clear statement of the translational implications of the article.

IOVS

Investigative Ophthalmology & Visual Science

“Starting with the January issue, IOVS is available online only. If you have not done so yet, activate your subscription now.”



Paul L. Kaufman, MD,
FARVO
IOVS Editor-in-Chief

“[T]here will be two sections added to broaden the appeal and scope of the journal: Reviews and Point/Counter Point.”

See [publications](#), page 22

publications, continued from page 21

ARVO believes that these editorial features will help improve IOVS's Impact Factor over time. While IOVS has the highest Impact Factor of all original vision research journals and is cited almost 10,000 more times in the literature than any of its competitors, the goal is to continue to improve its ranking.

New features: Later this year, we will introduce electronic reprints so that anyone can order a copy of an article. Authors will be able to order a set number of e-prints to distribute to colleagues. We will introduce new functionality, including short movies and animated art (.gif files) in the article. Movies, data sets, extensive tables and even PowerPoint slides may continue to be included as supplementary data and will be reviewed with the article. Since

"While IOVS has the highest Impact Factor of all original vision research journals and is cited almost 10,000 more times in the literature than any of its competitors, the goal is to continue to improve its ranking."

the article of record is the online article, we hope that authors will take advantage of these features.

By early 2011, at the latest, IOVS will join the *Journal of Vision* in publishing articles as they are ready, rather than just once a month. Articles will still be considered as part of an issue each month but will publish continuously throughout the month. Readers will be able to opt to receive article alerts when a new article is published.

On the peer-review side, we will be using iThenticate, a tool to identify possible dual submissions/publications. This is a growing problem across scientific journals.

In closing, your journal is healthy and growing. The Editorial Board and I look

forward to continuing to receive and review the best our field has to offer. ■

You won't see IOVS in your mailbox anymore ... Activate your online subscription – it's as easy as 1-2-3 (4 and 5)

All ARVO members have a subscription to IOVSONline. To activate your subscription and gain full access to the site:

1. Go to: <http://www.iovs.org/subscriptions/>
2. Click on Activate your Individual Online Subscription
3. Enter your 5- or 6-digit member number and click SUBMIT.
4. Complete the contact information, then select a username and password of your choice.
5. Hit SEND FORM.

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Please note that logging on to the ARVO Web site does not also log you on to IOVSONline. You will need to log on separately, using your IOVSONline user name and password.

www.iovs.org



Numbers tell a story of progress

Twice a year, as editor-in-chief of the *Journal of Vision*, I step back and review the progress of our journal. While we are no longer brand new, we still consider ourselves a young journal (a pre-teen!), and our statistical profile has not yet settled into adult stability.

Partly for that reason, we track our numbers very carefully to detect potential problems in our review and production process and to monitor how well we are serving our authors and readers. Here I will take a moment to share some numbers from my most recent report to the ARVO Board of Trustees.

The most gratifying number concerns the time it takes to produce an article once it has been accepted for publication. The most recent mean value is 38 days, a full 50% reduction over the mean value of a year ago. This should please current and future authors, who want their work out as rapidly as possible.

But production is only the final step in the process. In that regard, authors will also be happy to know that time to first decision has

also declined by 27% over the previous year. Other steps in the process have also shortened, so that the total time from submission to publication is down by 25% from a year ago.

Finally, for papers that are not accepted, it is important that authors get that information quickly, and we have reduced time-to-reject by 50% compared with the previous year.

Turning to usage of the journal, logs of web access make it possible to track visits, visitors, downloads and other measures of traffic. Here we can point to an increase of 18% in monthly visits over the previous year to a current value of about 1,593 a day.

The most recent monthly average for pageviews was 2,934 a day. The number of article PDF downloads from unique users was 326 a day.

These numbers show a vigorous, interested readership of the journal. For further information on article downloads, take a look at our continuously updated download reports at <http://journalofvision.org/info/DownloadReports.aspx>. ■



Andrew B. Watson,
PhD, FARVO
JOV Editor-in-Chief



Call for papers

Perception of surface color and material properties

Researchers have devoted much effort to understanding the perception of color and lightness for simple stimulus configurations, often consisting of flat matte surfaces rendered under diffuse illuminations, or simulations thereof. The objects we look at in daily viewing, on the other hand, are rarely flat, matte or diffusely illuminated.

There is now considerable interest in pushing our understanding into the realm of more complex, three-dimensional scenes, spurred in part by advances in computer graphics that allow physically accurate rendering of a variety of materials and thus permit exploration of interactions between object shape and orientation, object material and illumination geometry. The *Journal of Vision* plans a special issue to bring together papers that describe recent advances in this area. The following list provides representative topics, but papers in closely related areas will also be considered.

- What is the effect of object material on color and lightness perception, particularly for objects viewed in complex three-dimensional scenes?
- How are object reflectance properties best measured and parameterized?
- What are good models of image formation for complex scenes?
- How do we perceive what materials an object is made of?
- What information that might allow separation of object and illuminant properties is available in the image, and is this information used by biological vision systems?

This feature is intended to focus on progress since the publication of a similar feature in the *Journal of Vision* in 2004 (<http://journalofvision.org/4/9/>).

Guest Editors

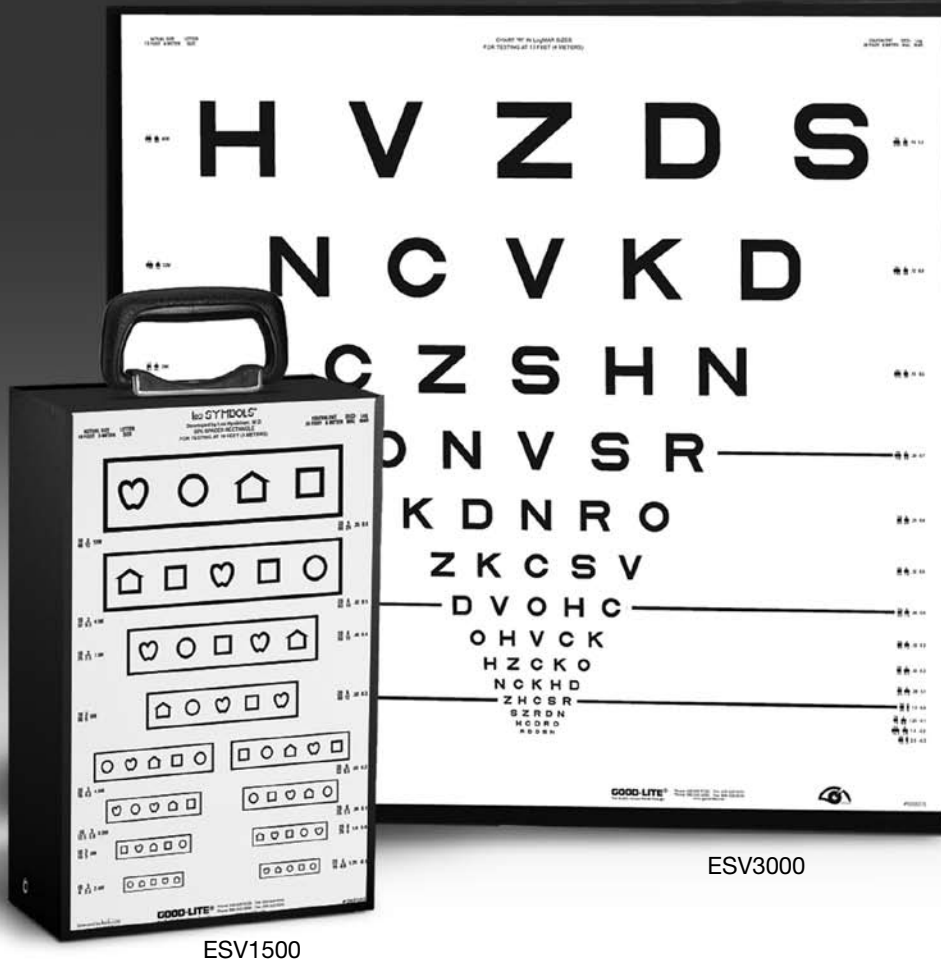
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Deadline for submissions: March 15, 2010
Target publication date: July, 2010 (papers are published as soon as ready) ■

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