ARVO 2010: Bigger — and more connected — than ever

A record 11,200 participants attended the 2010 ARVO Annual Meeting, May 2-6 in Fort Lauderdale, Fla. About 12% of attendees from across ARVO’s Scientific Sections responded to the post-meeting survey, providing feedback about the program, publications and services. Some 94% indicated that the Annual Meeting met or exceeded their expectations, and 91% ranked the scientific program as excellent or good. ARVO staff carefully reads all comments and will continue to consider suggestions for improving the Meeting. Plans are already underway for enhanced signage at shuttle bus pickup locations, more opportunities for networking at social events and increased visibility of healthy choices at Convention Center concession stands. Look for additional plans and improvements in upcoming Insights.

Movshon, Newsome named co-recipients of €1 million Champalimaud Award

ARVO member J. Anthony Movshon, PhD, FARVO, director of New York University’s Center for Neural Studies, and Journal of Vision author William T. Newsome, PhD, investigator at Howard Hughes Medical Institute and Professor of Neurobiology at Stanford University, are the recipients of the 2010 António Champalimaud Vision Award. Presented by the Champalimaud Foundation, the award comes with €1 million (US $1.27 million), the largest monetary prize in the field of vision and one of the largest scientific and humanitarian prizes in the world.

Movshon and Newsome are being recognized for their groundbreaking work over the last 30 years on the brain’s role in visual perception. The two will present the ARVO-Champalimaud Lecture on May 4 at the 2011 ARVO Annual Meeting in Fort Lauderdale, Florida. Read more at www.fchampalimaud.org.
ARVO President’s Message

Relevance on a global scale

J. Mark Petrash, PhD, FARVO

I recently had the honor of participating in a symposium organized by the Hungarian international chapter affiliate (HARVO), held in conjunction with the annual meeting of the Hungarian Ophthalmological Society at Szeged University. As the site of Nobel Laureate Albert Szent-Gyorgyi’s laboratory, Szeged remains a city of great thinkers.

It was a wonderful experience to hear presentations from young ophthalmologists-in-training, including two young clinician-scientists who were supported by the HARVO chapter to attend the ARVO Annual Meeting in Fort Lauderdale earlier this year. I was struck by their enthusiasm for incorporating solid research with their clinical training, and by their eagerness to discuss vision research issues.

For me, one of the most gratifying encounters came during my visit to the Semmelweis University Eye Clinic headed by Janos Nemeth, MD, PhD, in Budapest. There I observed the close collaboration between PhD students and HARVO-supported ophthalmologists-in-training. By partnering with their patients to develop new technologies for early diagnosis of eye diseases such as glaucoma, these young investigators were living out one of the primary missions of ARVO — to encourage and assist research and training in vision and ophthalmology.

In fact, although only five years old, the ARVO International Chapter Affiliate program is becoming an effective channel for fulfilling all aspects of ARVO’s mission for members around the world. Over 500 of ARVO’s new members in the past two years have come from our International Chapter Affiliates. Alongside vibrant meetings such as Asia-ARVO, affiliate activities enable ARVO members to help build and strengthen capacity in developing countries and elsewhere.
Reaching out
Currently, there are nine chapter affiliates located in Argentina/Paraguay/Uraguay, Austria, Brazil, China, Hungary, Israel, Mexico, Netherlands and Southeast Europe. Each affiliate is responsible for hosting at least one educational program each year. Financial support from ARVO to offset the cost of recruiting speakers for educational programs is available to eligible chapters. ARVO also provides support to help chapter affiliates identify government agencies and organizations to assist them in promoting a greater understanding and appreciation of vision science.

Having an impact
Affiliate chapters help to solidify the community of vision scientists in a given region of the world. They help to strengthen education programs in the area, and they may help establish research collaborations, such as those being built through the AFER/Pfizer Collaborative Research Award program (see the AFER section of this newsletter).

Affiliate chapters are responsible for sending one or more promising young vision scientists to our Annual Meeting where they can participate in the exciting new science discussed there every year. Chapters may also work with ARVO to establish advocacy efforts in their regions.

Advocating for the vision research community
As one of the standing committees of ARVO, the Advocacy Committee plays an important role in seeing that funding agencies and decision-makers know the needs and virtues of vision research. We have subcommittees that focus on advocacy at many levels. For example, the International Advocacy Sub-committee provides assistance to ARVO members as they work to increase research funding in their home countries. Similarly, the Public Policy and Research Agency subcommittees deal mainly with issues relating to the National Institutes of Health, the National Eye Institute and the Food and Drug Administration, which operates internationally.

The ARVO leadership is committed to the principle that membership in the organization should give value and relevance on a global scale — and create the best environment in which our own great thinkers may flourish.

Sincerely,

J. Mark Petrash

Members respond: Keep Annual Meeting the first week of May
A large majority of members who responded to a survey this spring about dates for the ARVO Annual Meeting in 2017 and beyond indicated that they prefer the current timeframe: the first week in May.

ARVO e-mailed the survey to all members* on May 27. By mid-June, 2,024 members had completed the survey. Of these, 1,403, or 69%, said they prefer the first week in May.

The runners up were the second and third weeks in May, with 177 and 153 votes respectively.

Annual Meeting dates can play a key role in determining the availability of space in destination cities. ARVO will continue to ask members for such input to help the Board of Trustees and the Annual Meeting Program Committee continuously improve the scientific program of the ARVO Annual Meeting while offering our members ample opportunity for networking and reasonable logistics.

*If you wish to receive polls, news and announcements, please be sure that arvo@arvo.org is on your safe senders list and double-check that your e-mail address is correct in your member profile.

Future Annual Meetings

May 1–5, 2011
Fort Lauderdale

May 6–10, 2012
Fort Lauderdale

May 5–9, 2013
Seattle

May 4–8, 2014
Orlando

May 3–7, 2015
Denver

May 1–5, 2016
Seattle
SEE-ARVO hosts inaugural meeting

Inspired by successful ARVO international chapter affiliate meetings in Hungary and Austria, researchers in 18 southeastern European countries set up an organization to promote eye research in their part of the world: the South-East European International Chapter Affiliate or SEE-ARVO.

Professor Petja Vassileva and other leaders aim to contribute to the development of both basic and clinical eye research.

SEE-ARVO members organized their first symposium in Tirana, Albania in June 2010, during the yearly meeting of SEEOS, the South-East European Ophthalmological Society. It was the first time that an international ophthalmological meeting was held in Albania.

— Martine Jager, MD, PhD, FARVO

ARVO holds International Advocacy Luncheon Meeting

The International Advocacy Luncheon at the 2010 Annual Meeting was jointly organized by the ARVO Advocacy Committee and the International Members Committee. Janos Nemeth, MD, PhD, DSc, opened the luncheon and introduced the first speaker, Eberhart Zrenner, MD, PhD, who is the president of the European Vision Institute (EVI), the leading European scientific cooperation and advocacy institute. He spoke about the aims and structure of the EVI and detailed the present achievements. The EVI is in a position to begin the formation of a pan-European platform for clinical trials as well as give significant help to European researchers in the application process for major grant resources.

The second speaker, introduced by then ARVO president-elect J. Mark Petrash, PhD, FARVO, was Peng Tee Khaw, MD, PhD, FARVO, the director of the Moorfields Eye Hospital/UCL Institute of Ophthalmology. Khaw detailed efforts to raise funds for Moorfields’ new Children’s Eye Centre, including successful advocacy of opinion leaders and public donors through media campaigns. He outlined how important it was to involve the public by sharing patient stories and to increase awareness of eye health among British politicians by organizing direct ophthalmic screenings in the Houses of Parliament.

The audience, including invited representatives from the United States, the United Kingdom, Spain, Germany, Bulgaria, Hungary, Brazil and other countries, were active in commenting and asking questions from the floor following these two presentations.
Mexico and China launch ARVO International Affiliate Chapters

Mexico

Ophthalmologists and vision researchers in Mexico recently formed an independent organization, Colegio Nacional de Investigación en Ciencias Visuales (MARVO), to encourage and promote visual sciences in their country. Currently, MARVO has 40 members focusing on clinical research, basic laboratory research and clinical epidemiology. MARVO’s long-term goal is to build scientific research collaborations in Mexico through its affiliation with ARVO. The group’s first activity was to co-sponsor a two-day clinical trials education course with ARVO and the Mexican Centre of Cornea and Refractive Surgery at the end of July with 89 attendees. The course is being planned again for next year along with a statistical course. In addition, MARVO is planning to organize its first-ever ophthalmic research conference in 2011 and is also developing a Web site.

China

A group of ophthalmic and vision researchers under the umbrella of the Chinese Ophthalmological Society came together in February 2009 and organized a one-day meeting to focus on research. The Chinese Congress of Research in Vision and Ophthalmology (CCRVO) hosted a second meeting in March 2010. The success of both meetings and the 253 CCRVO members (also members of ARVO) paved the way for international chapter affiliation status with ARVO in May 2010.

By affiliating with ARVO, CCRVO members look forward to expanding the scientific diversity of their meetings, providing funds to support young researchers to attend more international meetings — including the ARVO Annual Meeting — and learning how to write high-quality scientific papers to increase their chances of getting published. CCRVO is planning a third meeting in early 2011.

Visit www.arvo.org/affiliates.
ARVO Awards

Congratulations: 2011 ARVO Annual Awards recipients

ARVO is pleased to introduce the recipients of the 2011 ARVO Annual Awards. All awards and lectures will be presented at the 2011 ARVO Annual Meeting, May 1–5, 2011, in Fort Lauderdale, Florida (check the Meeting Preview enclosed with your Winter/Spring 2011 ARVOnews for lecture titles, dates and times).

Proctor Medal and Lecture
Robert E. Anderson, MD, PhD, FARVO, Ophthalmology/Cell Biology, University of Oklahoma Health Sciences Center

The Proctor Medal is presented for outstanding research in the basic or clinical sciences as applied to ophthalmology.

ARVO presents the Proctor Medal to Robert E. Anderson for more than 40 years of research on the advancement of our understanding of the biochemistry and cell biology of photoreceptors. Anderson’s recent studies show the insulin receptor is present in rod and cone outer segments, is activated by light and protects against stress-induced retinal degeneration; and that mutation in AD Stargardt’s Disease is in a gene that encodes a fatty acid elongase.

Friedenwald Award and Lecture
James T. Rosenbaum, MD, FARVO, Casey Eye Institute, Oregon Health and Science University

The Friedenwald Award is presented for outstanding research in the basic or clinical sciences as applied to ophthalmology.

ARVO presents the Friedenwald Award to James T. Rosenbaum for his primary responsibility in the initial description of endotoxin-induced uveitis in a rodent model that is the standard to study innate immunity and intraocular inflammation. He and his collaborators have blended contributions to understanding the pathophysiology of intraocular inflammation with advances in the characterization of many clinical forms of uveitis.

Mildred Weisenfeld Award and Lecture
Paulus TVM de Jong, MD, PhD, FEBOpht, FARVO, Department of Clinical and Molecular Ophthalmogenetics, Netherlands Institute for Neuroscience

The Weisenfeld Award is presented in recognition of distinguished scholarly contributions to the clinical practice of ophthalmology.

ARVO presents the Mildred Weisenfeld Award to Paulus TVM de Jong for his global leadership in retinal diseases for the last 25 years, focusing on the genetic and epidemiologic aspects of retinal diseases and glaucoma. De Jong combines clinical excellence with proper genetics testing, which has led to the identification of several new genes. The Rotterdam eye study provided significant information on the genetic and environmental risk factors in AMD and POAG.

Cogan Award and Lecture
Andrew J. Fischer, PhD, Department of Neuroscience, College of Medicine, Ohio State University

The Cogan Award is presented in recognition of a researcher, 40 years of age or younger, who has made important and worthwhile contributions to research in ophthalmology or visual science that are directly related to disorders of the human eye or visual system, and who shows substantial promise for future research.

ARVO presents the Cogan Award to Andrew J. Fischer for important contributions to the fields of myopia and vision-guided ocular growth, retinal stem cells and retinal regeneration. As a postdoctoral fellow, he demonstrated that Müller glial cells are the source for retinal regeneration in birds, a finding that motivated research in both the zebrafish and mouse, leading to a better understanding of the regenerative potential for these species as well. He has continued pioneering studies in mechanisms of ocular growth and repair.

Kupfer Award
Gullapalli N. Rao, MD, LV Prasad Eye Institute

The Kupfer Award is presented periodically to honor those who have demonstrated distinguished public service on behalf of eye and vision research.

ARVO presents the Kupfer Award to Gullapalli N. Rao for outstanding accomplishments as a researcher, ophthalmologist and humanitarian. As the former president of the International Agency for Prevention of Blindness (an organization founded by Dr. Kupfer), Rao showed exemplary commitment to moving forward the agenda of eliminating avoidable blindness by the year 2020.
Call for Nominations

The ARVO Annual 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 2012 ARVO Awards to be presented at the 2012 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, 2011
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.

awards@arvo.org | +1.240.221.2900
www.arvo.org/awards

What’s a FARVO?
You’ve seen it after members’ names … what does it mean?
Two years ago ARVO created the honorific title of FARVO — Fellow of ARVO. Fellows are members who have contributed a significant amount of their time to ARVO, its journals and events in exceptional ways.

Members earn points for the number of years they have been ARVO members and served the organization and their fellow members — as committee and editorial board members, journal reviewers, program organizers, elected officials and for presenting their research at the ARVO meetings.

These members have been accumulating participation points for several years and have attained the number of points needed to be recognized as ARVO Fellows. To learn more about the Fellows point structure, check the ARVO Web site at the URL below.

We encourage every member to volunteer to serve ARVO in whatever area they are most qualified. Later this year, we will include each member’s FARVO points status in online profiles, so you will know how close you are to achieving this distinguished status.

E-mail Barbara Hollis (bhollis@arvo.org) or see www.arvo.org/awards/fellows.
2011 ARVO Trustee candidates

The following candidates have been nominated to stand for election in 2011:

**Cornea (CO) Section**

Dimitri T. Azar, MD, FARVO
University of Illinois at Chicago, Department of Ophthalmology and Visual Sciences chair

James V. Jester, PhD, FARVO
Jack H. Skirball Endowed Research Chair and professor of Ophthalmology and Biomedical Engineering at the University of California, Irvine

**Eye Movements/Strabismus/Amblyopia/Neuro-Ophthalmology (EY) Section**

Leonard A. Levin, MD, PhD, FARVO
Canada Research Chair in Ophthalmology and Visual Sciences at the University of Montreal and professor of Ophthalmology and Visual Sciences at the University of Wisconsin

Linda K. McLoon, PhD, FARVO
Professor in the Departments of Ophthalmology and Neuroscience at the University of Minnesota

**Lens (LE) Section**

John I. Clark, PhD, FARVO
Chair of Biological Structure at the University of Washington

Bylaws amendment changes Trustee nominations
BI, CL and VN sections select 2012 Trustee candidates

This year, as ARVO members elected two new Trustees and a new class into the Annual Meeting Program Committee, they also voted to pass a proposed bylaws amendment (see inset), which will change the way Trustee candidates are nominated.

The new Trustee nomination process is expected to be implemented with the 2012 Trustee candidates from the BI, CL and VN sections.

Starting this December, an official call for Trustee nominations will be sent to voting members. Interested members will be required to submit a bio, a nomination statement, an endorsement, a headshot and an optional video to the ARVO office by mid-February 2011.

Voting will then open in March and close the first day of the ARVO Annual Meeting.

In the past, ARVO voting members narrowed down the nominees for candidacy during their Section Business Meetings at the Annual Meeting. Now, with the new bylaws amendment in place, all the nominee information will be placed on an online ballot with instructions to vote for the two nominees she/he would like to see on the final Trustee election ballot the following year.

The two members receiving the most votes will be announced at the Section Business Meeting on Monday, May 2, 2011. All nominees must be present at the Section Business Meetings. Any ties will be broken by lot. If only two nominations are received, those names will automatically be placed on the final election ballot.

Finally, in March 2012, the names of the two nominees will be placed on an online ballot for final vote. The voting for this election will close on May 5, 2012 and the new Trustee will be announced May 6, 2012.

See [www.arvo.org/candidates2011](http://www.arvo.org/candidates2011).

Nomination of Trustees Bylaw Amendment

5.03 ELECTION.

(a) Nomination of Trustees The Association will issue an open call for nominations to the Voting Members of the Scientific Section(s) whose Trustee’s term is expiring at the end of the follow year’s Annual Meeting. By the end of the first day of the ARVO Annual 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 Section business meetings. Any ties will be broken by lot at the Section Business Meeting. If only two (2) nominations are received, those names will automatically be placed on the final online election ballot for Section Trustee. One of the candidates will be elected as the Successor Trustee the following year by an online electronic election prior to the Scientific Section’s business meeting at the Annual Meeting.

See [www.arvo.org/bylaws](http://www.arvo.org/bylaws), section 5.03 part b: election of trustees.
ARVO is grateful to all members who served on committees this past year. Special thanks go out to chairs who completed their terms this year: Pedram Hamrah, MD (Members-in-Training); Donald L. MacKeen, PhD (Exhibits); and Todd P. Margolis, MD, PhD, FARVO (Continuing Medical Education).

We also thank outgoing Annual Meeting Program Committee Chairs: Chea-su Kee, PhD; Debora L. Nickla, PhD; Patricia Chévez-Barrios, MD; Muna Naash, PhD; Seang-Mei M. Saw, MBBS; James L. Funderburgh, PhD; Kohji Nishida, MD, PhD; Leonard Levin, MD, PhD; Andrew D. Dick, MD; W. Daniel Stamer, PhD; Arup Das, MD, PhD; Motohiro Kamei, MD, PhD; Dong Feng Chen, MD, PhD; Joseph Carroll, PhD; and Ido Perlman, PhD.

### Committees in action

#### 2010–2011 Committee Chairs

The ARVO Committee Chairs for this year are:

- **Advocacy Committee**
  J. Mark Petras, PhD, FARVO

- **Animals in Research Committee**
  Brian C. Gilger, DVM

- **Annual Meeting Program Committee**
  Sally S. Atherton, PhD, FARVO

- **Awards Committee**
  Laura J. Frishman, PhD

- **Commercial Relationships Committee**
  Russell N. Van Gelder, MD, PhD

- **Continuing Medical Education Committee**
  Arun D. Singh, MD

- **Diversity Issues Committee**
  Jeffrey J. Walline, OD, PhD

- **Ethics and Regulations in Human Research Committee**
  Leonard A. Levin, MD, PhD, FARVO

- **Finance Committee**
  David G. Hunter, MD, PhD

- **International Members Committee**
  János Németh, MD, PhD, DSc

- **Long Range Planning Committee**
  Frederick L. Ferris, III, MD, FARVO

- **Members-in-Training Committee**
  Joseph Carroll, PhD

- **Professional Development and Education Committee**
  Arup Das, MD, PhD, FARVO

- **Publications Committee**
  Steven E. Wilson, MD, FARVO

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ARVO’s 2009–2010 Board of Trustees — back row, left to right: Jacob Pe’er, MD, FARVO; David Hunter, MD, PhD, FARVO; Jeffrey Boatright, PhD; David Williams, PhD, FARVO; Justine Smith, MBBS, PhD, FARVO; Robert Miller, MD; Executive Director Joanne Angell; John Penn, PhD, FARVO; Paul Mitchell, MD, PhD, FARVO; and Peng Khaw, MD, PhD, FARVO. Front row, left to right: Shigeru Kinoshita, MD, PhD, FARVO, President-elect J. Mark Petras, PhD, FARVO; Executive Vice President Sally Atherton, PhD, FARVO; President Nick Delamere, PhD, FARVO; Past President Todd Margolis, MD, PhD, FARVO; and Paul Sternberg, MD, FARVO.
sent at the Meeting. All e-Posters remained online and available for viewing until June 15. They were accessible from any personal computer, as well as from dedicated kiosks onsite. Watch for expanded e-Posters at the 2011 Annual Meeting.

Also new: Programs available for e-books and smartphones
For the first time in 2010, the full Meeting program was available for download — free from the ARVO Web site or for a nominal fee from Amazon — for your Kindle, Nook or Sony e-Reader or for your iPad or iPhone. Downloads exceeded 7,200, so ARVO will explore making the program available for e-books and smartphones in 2011.

Blog racks up more than 12,000 views
General advice, where to eat, what to wear, individual itineraries and even a discussion about what attendees were doing when the power at the convention center failed briefly on Thursday morning … these were among the topics of more than two dozen posts that our 20 guest bloggers posted on the 2010 Annual Meeting blog before, during and just after the meeting. Some posts were brief, some were just for fun and others provided detailed and timeless advice about how to prepare for presentations and manage one's time. The 2010 Annual Meeting blog racked up well over 12,000 views. You can still review them at www.arvo.org/2010blog.

CME Credit — Free
CME Certificates, as well as Certificates of Attendance, are available at www.arvo.org/cme. Certificates can be updated/printed at any time.

ARVO is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

ARVO designates the 2010 ARVO Annual Meeting for a maximum of 30 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The AMA has determined that physicians not licensed in the USA who participate in this CME activity are eligible for AMA PRA Category 1 Credits™. ■

ARVO Awards Lectures
- **Proctor Medal:** Richard H. Masland, PhD, "The Fundamental Plan of the Retina"
- **Friedenwald Award:** Rachel R. Caspi, PhD, FARVO, "Understanding Ocular Autoimmune Disease Through Animal Models"
- **Mildred Weisenfeld Award:** George L. Spaeth, MD, FARVO, "Valid Relevance in Research and Practice: Lessons from the Field of Glaucoma"
- **Cogan Award:** Jayakrishna Ambati, MD, "Age-related Macular Degeneration and the Other Double Helix"

Missed the Proctor, Friedenwald or Weisenfeld lectures? View them free online at www.arvo.org/elearning.
Representatives of the Seattle Convention and Visitors Bureau were in ARVO Central in Hall B/C for much of the Meeting. The ARVO Annual Meeting will move to Seattle in 2013, so attendees were eager to find out about hotels, transportation, the weather and the many recreational activities available (including fishing, golfing, hiking and other outdoor activities. Learn about Seattle at www.visitseattle.org/visitors.

Always online:
Annual Meeting Abstracts 2002–2010

All Annual Meeting abstracts from 2002 through to 2010 are available online at www.iovs.org. The 2010 abstracts are also still available through the online Abstract Search and on e-Books. Search for and print individual abstracts, or create your own abstract book by downloading and/or printing abstracts by session (PDF) through the http://home.abstractsonline.com/temp/web/arvo.

Taking a break from sessions, many attendees headed to ARVO Central’s photo spot.
Attendees gave high marks to the small size and quality presentations at this year’s Summer Eye Research Conference (SERC), titled “Diabetic Retinopathy: Approaches to a Global Epidemic.” The two-day meeting of 150 scientists from both the United States and overseas took place at the end of July on the National Institutes of Health campus in Bethesda, Md.

"[It] was without doubt a worthwhile experience," said Jennifer Wilkinson-Berka, PhD (Monash University, Melbourne, Australia). "The meeting was crammed with excellent presentations from scientific and clinical leaders in almost all fields of diabetic retinopathy."

Noted Taiji Sakamoto, MD, FARVO (Kagoshima University School of Medicine, Japan): "The conference consisted of both basic scientists and clinicians with the same goal — that is, overcoming the diabetic retinopathy pandemic. This type of conference focusing on the specific issue is beneficial and should be held frequently."

Course directors Arup Das, MD, PhD, FARVO; Lloyd P. Aiello, MD, PhD, FARVO; Maria Grant, MD; and Barbara Araneo, PhD, convened a notable faculty of experts to present various aspects of diabetic retinopathy from a global perspective — what is known, what are the challenges and what still needs to be learned.

This conference summarized the current knowledge about molecular mechanisms, laser and surgical treatments of diabetic retinopathy, and presented novel approaches and challenges ahead in fighting this devastating blindness.

Attendees, including Sakamoto, said they appreciated the smaller size of this meeting. "The smaller number of attendees allowed us to exchange questions and ideas freely on the floor."

"The intimate and friendly format allowed increased opportunities for discussions with colleagues that are often difficult to orchestrate at the large ARVO meeting," added Wilkinson-Berka. Also appreciated was the opportunity to spend quality networking time with colleagues. "For investigators such as myself who are based outside the United States, this was an invaluable and stimulating experience," continued Wilkinson-Berka. "I hope meetings of this kind are held more frequently, with the aim of understanding the factors involved in the pathogenesis of diabetic retinopathy and identifying future treatment targets."

"Above all," concluded Sakamoto, "it was a valuable experience to know first-class researchers of diabetic retinopathy of different fields with whom I could not directly talk to at the huge ARVO Annual Meeting."
ARVO/Pfizer Institute explores optic nerve degeneration

The 6th ARVO/Pfizer Ophthalmics Research Institute, April 30–May 1 in Fort Lauderdale, Fla., explored “Current Prospects in Optic Nerve Protection and Regeneration.” The conference brought scientists together from several disciplines to help focus research in optic nerve degeneration and repair, and accelerate progress in optic nerve degeneration research through networking and collaboration.

The Research Institute is a series of multidisciplinary conferences just prior to the ARVO Annual Meeting. It is funded by the ARVO Foundation for Eye Research (AFER) through a grant from Pfizer Ophthalmics. A report on the presentations and discussion will be published in Investigative Ophthalmology & Visual Science. Next year’s conference is April 29–30, 2011 in Fort Lauderdale on “Biomarkers in Glaucoma.”

Visit www.arvofoundation.org or contact Rhonda Williams at rwilliams@arvo.org, +1.240.221.2908.

The 8th ARVO/ISIE Meeting, held Saturday, May 1, 2010 in Fort Lauderdale, Fla. attracted a record 227 attendees for a full day of presentations, posters, exhibits and networking in the field of ophthalmic imaging. Sessions addressed advances in imaging technology, retinal imaging, imaging in glaucoma and image processing. The 2010 abstract and session information are available online at www.arvo.org/isie.

ARVO/ISIE draws record attendance

The premier eye research meeting in Asia

Asia ARVO
January 20–22, 2011
Resort World™ Sentosa
Singapore

www.arvo.org/asiaarvo

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.

The Jewish Guild for the Blind
15 West 65th St.
New York, NY 10023
ARVO Education Programs

Upcoming events

Clinical Trials Education Series (CTES)
October 15, Chicago, Ill.
This specialized dinner course, “How to Set up and Manage a Clinical Trial Site,” takes place the day before the sub-specialty day of the American Academy of Ophthalmology (AAO) Meeting. Registration is free to AAO registrants.

November 12–13, Shanghai, China
“Principles and Concepts in Clinical Trials for Eye Researchers” is jointly sponsored by ARVO, Shanghai Jiao Tong University and the Chinese Food and Drug Administration. This advanced course will address clinical trial methodology, analysis and management and is tailored specifically for vision and eye researchers.

ARVO/ISIE Imaging Conference
April 30, 2011
Fort Lauderdale, Fla.
The ARVO/ISIE Imaging Conference will offer presentations on original research, advances and state-of-the-art technology in ophthalmic imaging. Participants will learn principles behind ophthalmic imaging, discuss clinical applications of imaging technologies, and explore new research and advances in imaging. This meeting includes one day of sessions on clinical and basic science advances in ophthalmic imaging and imaging exhibits. Registration is separate from the ARVO Annual Meeting.

ARVO/ISOCB Ocular Cell Biology Conference
September 7–10, 2011
Vancouver, BC, Canada
Mark your calendar for this conference, which aims to promote interaction between cell biologists working in all areas of ocular health and disease. It also serves as an exchange for information and ideas with the larger eye and vision research community.

Other co-sponsored meetings and symposia

TFOS Global Dry Eye Experts’ Meeting
September 22, Florence, Italy
Discuss standard, emerging and accepted clinical endpoints of dry eye syndrome with regulatory authorities and/or experts from around the world, and to consider how to improve clinical trials of treatments for dry eye. Registration is free, but space is limited.

Contact amy@tearfilm.org to register. Registration for the TFOS Conference is separate, www.tearfilm.org.

NEI/FDA Glaucoma Clinical Trial Design and Endpoints Symposium: Measures of Structural Change and Visual Function
September 24, Bethesda, Md.
The NEI/FDA program is organized by Paul Kaufman and Robert Weinreb and is managed by ARVO.

For the agenda and registration information, visit www.arvo.org/endpoints.

Infections, organized by Sally Atherton and Bahram Bodaghi, October 7, 11am–12:30pm. Also: Visit the ARVO exhibit booth.

Visit www.ever.be and check out Programme 2010 from the Congresses link (Thursday’s schedule).

ARVO at American Academy of Ophthalmology
Translational Science and Posterior Segment Disease: Bench to Bedside, organized by Paul Sternberg, MD, October 18, 3:45–5:15pm. See ARVO in Booth 3901.

Search for SYM26 at www.aao.org/meetings/annual_meeting/program.

ARVO at American Academy of Optometry
Normal and Abnormal Ocular and Visual Development, November 18, 1:30–5:30pm. See ARVO in Booth 345.


TFOS Global Dry Eye Experts’ Meeting
September 22, Florence, Italy
Discuss standard, emerging and accepted clinical endpoints of dry eye syndrome with regulatory authorities and/or experts from around the world, and to consider how to improve clinical trials of treatments for dry eye. Registration is free, but space is limited.

Contact amy@tearfilm.org to register. Registration for the TFOS Conference is separate, www.tearfilm.org.

NEI/FDA Glaucoma Clinical Trial Design and Endpoints Symposium: Measures of Structural Change and Visual Function
September 24, Bethesda, Md.
The NEI/FDA program is organized by Paul Kaufman and Robert Weinreb and is managed by ARVO.

For the agenda and registration information, visit www.arvo.org/endpoints.

Infections, organized by Sally Atherton and Bahram Bodaghi, October 7, 11am–12:30pm. Also: Visit the ARVO exhibit booth.

Visit www.ever.be and check out Programme 2010 from the Congresses link (Thursday’s schedule).

ARVO at American Academy of Ophthalmology
Translational Science and Posterior Segment Disease: Bench to Bedside, organized by Paul Sternberg, MD, October 18, 3:45–5:15pm. See ARVO in Booth 3901.

Search for SYM26 at www.aao.org/meetings/annual_meeting/program.

ARVO at American Academy of Optometry
Normal and Abnormal Ocular and Visual Development, November 18, 1:30–5:30pm. See ARVO in Booth 345.

Dear Colleagues: The Board of Governors of the ARVO Foundation for Eye Research (AFER) wishes to thank you for your generosity. AFER continues to grow with the addition of new programs and award opportunities.

I encourage you to make a personal investment in AFER. In addition to your financial gifts, there are other avenues of support to further benefit the Foundation including volunteering, serving on AFER committees or mentoring a visiting researcher. You will be awarded ARVO Fellow points for involvement with AFER.

Together we can continue to further AFER’s mission to support educational initiatives and enhance vision research.

Sincerely,

Gary W. Abrams
Chairman, AFER Board of Governors

Building a bridge between two hospitals

2010 AFER/Pfizer Collaborative Research Fellowship recipient Ruojin Ren is an attending physician at Beijing Institute of Ophthalmology, Tongren Eye Center, Beijing Tongren Hospital, one of the leading ophthalmology centers in China. Four months ago, she flew to New York City to collaborate with Robert Ritch, MD, FARVO, Shelly and Steven Einhorn Distinguished Professor of Ophthalmology, surgeon director and chief, Glaucoma Services at the New York Eye and Ear Infirmary. Ren obtained her PhD in ophthalmology from Capital Medical University, Beijing, in 2009, where she studied pathology and researched glaucoma clinical trials. During that time, she published several papers in peer-reviewed journals such as IOVS, Ophthalmology, and the British Journal of Ophthalmology.

Her current project with Ritch is entitled, “Prevalence and characteristics of Exfoliation syndrome (XFS) and Exfoliative Glaucoma (XFG) in Northern China compared with the United States.”

In an interview, Ren shares her experience as one of this year’s two collaborative research fellowship program participants.

Q: What made you decide to apply for the Fellowships?
Ren: When Prof. Liang Xu, head of Beijing Institute of Ophthalmology, e-mailed the information about this ARVO/Pfizer fellowship, all the young doctors in my hospital were excited about this great opportunity. Even though we all knew that only two recipients in the world would be awarded this fellowship each year, and the chance of success was so small, I still pressed on as I believed it would be a fantastic opportunity.

As a young doctor in China, I have done some research in glau-
Building a bridge, continued from page 1

... and vision science. I believed that I would be able to conduct the collaborative studies under this program. Moreover, in order to broaden my knowledge and further enhance my ability, I looked forward to the chance to work with prominent glaucoma specialists and distinguished clinical scientists in the world. I was fortunate to be accepted and thank the ARVO/Pfizer committee for this great honor.

Q: What can you tell us about the project you are working on now?
Ren: XFS is characterized by production and accumulation of a fibrillogranular extracellular material in various ocular tissues, and is associated with a number of systemic disorders. XFG is a common, sight-threatening disease that develops as a consequence of exfoliation syndrome. Therefore advancing our knowledge in this field is of great significance.

The prevalence and characteristics of XFS varies considerably among different populations. They are regarded as rare in Chinese people but the prevalence of these conditions is not known in Northern China. Therefore, it is especially important that an international collaborative research effort make an assessment of the prevalence of XFS and XFG and to report the clinical features present in Northern China compared with the United States in a population-based study.

Q: What difference has the Fellowship made to your work?
Ren: I was accepted as a researcher at the New York Eye and Ear Infirmary, which has been an extraordinary experience thus far, and will serve as a foundation for my future research contributions. It has been extremely helpful to be at one of the leading glaucoma departments in the world, particularly with respect to the diagnosis and treatment of exfoliation syndrome.

I have been able to work closely with Dr. Ritch, who has done a huge amount of work on research relating to XFS, and from whom I have gained much knowledge about exfoliative glaucoma and glaucoma management. Under his tutelage, I have also gained insight into clinical decision making, surgical techniques, and many useful clinical research skills. In addition, I have developed two study protocols on exfoliative glaucoma, under his guidance and his team's assistance, and have begun to recruit patients and explore further collaborative research as planned.

There is no way I would have been able to do this without the ARVO/Pfizer Fellowship.

Q: What are some of the similarities and differences between your work in China and the work you are doing in the United States?
Ren: Both medical institutions have a long history and a large volume of patients as well as similar advances in clinical skills and surgical techniques. I came here to learn more about clinical trials protocol and systems of training, which is more advanced in the United States. Here, I have the opportunity to learn more about academic research.

Q: What are you planning to work on when you return to China?
Ren: When I return to China, I will transfer what I have learned here with regard to new technologies and resources, to enhance the level of diagnosis and treatment of XFS and XFG to the internationally recognized criteria. More importantly, I visualize myself as a bridge between our two hospitals that will help create similar quality research and standards of training in China.

Q: In what field of research would you ultimately like to work?
Ren: I’m still young so I’m not yet focused on one area or specialty. I think I would like to work not only clinical research but also basic research in ophthalmology. However, in general, I would like to reduce patients’ pain, bring light to them and improve their quality of vision and quality of life to the best of my capability.

Meet AFER’s newest Board member

Tracy Valorie, MBA, is senior director, worldwide commercial lead ophthalmology and glaucoma asset lead at Pfizer Inc. She began her pharmaceutical career with Pfizer in 1990 and spent nearly 10 years in Pfizer’s Global Research Division in Groton, CT.

In 2000, she transferred to Pfizer's world headquarters in New York as a member of the US Commercial Organization, where her primary responsibility was to engage institutions with expertise in pediatric medicine. Here she collaborated on strategic initiatives with foundation representatives, residency program directors and department chairmen.

In 2002, Valorie transitioned to Pfizer's World Wide Commercial Organization on the Anti-Infectives team and later assumed responsibility for the Xalabrands Franchise as the director of Worldwide Xalabrands (Xalatan and Xalacom). In 2009 she assumed full leadership of Pfizer's glaucoma franchise with responsibilities spanning early development through late stage commercialization of key products. She also leads a cross-functional team which guides research and development efforts in glaucoma. In 2010 she assumed full leadership of the WW Commercial Organization in addition to her current responsibilities which encompass the areas of glaucoma, retinal disease and ocular surface disorders.

Valorie holds a Masters in Business Administration from Rensselaer Polytechnic Institute and a BS in molecular biology from the University of Connecticut.
Fulfilling a dream

Growing up in a family of four doctors — including his own father, a pediatrician — Afsun Sahin always knew he would also work in medicine one day. The only question was what his specialty would be.

“I wanted to practice in an area that is open to technology and new ideas. Because I like physics, optics and technology, I thought ophthalmology would be the best area to combine all three things into one specialty.”

Sahin earned his MD from Ankara University Medical School and completed his ophthalmology residency in 2004 at Hacettepe University Medical School, Department of Ophthalmology in Ankara. Today, he is an assistant professor in the Department of Ophthalmology at Eskisehir Osmangazi University Medical School. When he received his copy of the ARVO e-newsletter announcing the AFER/Pfizer Collaborative Fellowship program, Sahin saw the award as the opportunity of a lifetime.

“At that time, I was looking for a chance to study an interesting and cutting-edge topic under the supervision of one of the leading scientists in the field of dry eye, David Sullivan, PhD,” said Sahin. “I decided to apply for this award because the training position in his laboratory would serve as a solid platform for me to be able to manage future autonomous research projects in Turkey.”

Sahin’s fellowship award application landed him right where he wanted to be. As one of the two young researchers who received a 2009 fellowship award, he is now conducting research alongside Sullivan at Schepens Eye Research Institute, Harvard Medical School in Boston.

For the past seven months, Sahin has been developing practical expertise in culture development techniques from human ocular surface epithelial cells, a method that is regularly used in Sullivan’s lab. More specifically, he is working on a defined cell culture system to immortalize human conjunctiva epithelial cells.

He further explains, “Normally, conjunctiva epithelial cells don’t grow forever outside the human body. What we are trying to do is to immortalize them. Then, they are going to proliferate extensively and every researcher from all over the world can use this cell line for their research purposes.”

Conducting research at Eskisehir Osmangazi University Medical School, where he is currently the youngest faculty member on staff, has not always been easy to do.

“In Turkey, academic work is very different than it is here in the United States,” explains Sahin. “You have to take care of patients, teach medical students and perform and teach surgery. If you want, you can do clinical studies or basic or translational research, but your schedule is very crazy. You have to do everything at the same time so it is very difficult to find free time to do research.”

He credits the fellowship award with providing him the opportunity to acquire new skills and integrate him into translational research. His time in the United States has also helped Sahin establish links with future scientific collaborators that he believes will significantly enhance his career development. As a result of the fellowship award, he has been able to add different and complementary research competencies at an advanced level. Sahin hopes this will help him to resume a research career in his home country and obtain his goal of creating a robust ocular research program at the university’s medical center.

“I am planning to continue to study the pathogenesis and treatment of dry eye syndromes, with a particular emphasis on determining the mechanisms involved in the regulation of inflammatory pathways on the ocular surface epithelial cells; and the effects of androgens on these inflammatory pathways, which I have already started working on in the lab.”

While Sahin is quick to acknowledge that the fellowship award has added significantly to his career development prospects, he had no idea that it would make him a local celebrity. Once the Turkish Ophthalmological Society posted the news that he was a recipient of the collaborative fellowship award on its Web site, Sahin was overwhelmed by the flood of e-mails and telephone calls he received from all over Turkey as well as the articles and photo that ran in the local newspapers.

While living and working in Boston, he has shared much about his collaborative work with his colleagues in Turkey and encourages others to apply for the fellowship award next year because of the professional advancement opportunities as well as the networking and international relationship building that has been a significant part of his own experience.

“I am very grateful to ARVO and AFER because this fellowship award added so much to my career. It was like a dream come true for me because it greatly enhanced my multidisciplinary scientific profile. Also, it has provided me the ability to live very comfortably here and given me freedom to do everything I want to do, in addition to the research. It has been very important for my professional maturity and independence.”
New award honors Ludwig von Sallmann

The ARVO Foundation for Eye Research (AFER) has established a fund in recognition of Ludwig von Sallmann, MD, a distinguished international ophthalmologist and ophthalmic investigator whose contributions greatly increased the basic and clinical understanding of vision and ophthalmology. The first Ludwig von Sallmann Clinician-Scientist Award is being managed by the Annual Meeting Program Committee and will be presented in 2011.

Dr. von Sallmann served as chief of the Intramural Program of the National Eye Institute and was an ARVO Proctor Medal recipient in 1951. He also served on the staffs of Vienna, Beijing and Columbia Universities.

Award recipients will present a lecture at a scientific session, symposium or minisymposium at the ARVO Annual Meeting. Clinician-scientists from all countries who are under 40 years of age at the time of selection are eligible for the award. The von Sallmann Clinician-Scientist Award will be given annually and is open to both ARVO members and non-members.

See awards at www.arvofoundation.org.

ARVO members: Invest in AFER

Your membership in ARVO is vital to your professional growth and development. Your contribution to the continuance of vision research is equally important. That’s why AFER encourages you to invest in the future of vision research with an annual contribution of $50 or more. You can make this investment at the same time you renew your ARVO membership or online at www.arvofoundation.org.

Wanted: Hosts for visiting researchers!

AFER is looking for members to serve as hosts or mentors for visiting researchers from developing countries attending the 2011 ARVO Annual Meeting as part of our Host-a-Researcher program.

As a host, you have the ability to influence the visiting researcher’s experience before, during and after the ARVO Annual Meeting. Host requirements include communicating with the visiting researcher prior to the Annual Meeting and acquainting them with the meeting and how to plan their time at the meeting.

In Fort Lauderdale, help the researcher navigate the meeting. Introduce them to other attendees with similar research interests. Help create connections that will go beyond the meeting.

We are seeking hosts for 2011 Host-a-Researcher recipients who are coming from South Africa, Latin America, Ethiopia and Russia.

If you are interested in hosting a visiting researcher or have questions, please contact Maureen Dimont at mdimont@arvofoundation.org.

Thank you

Thank you to all who contributed to the ARVO Foundation for Eye Research in 2010. Through ongoing donations from ARVO members, individuals and corporations, we are fulfilling the mission of the ARVO Foundation for Eye Research. For a list of AFER donors, please visit www.arvofoundation.org.

Your donations at work

For information on AFER initiatives, including awards and programs below, visit www.arvofoundation.org

- Collaborative Research Fellowships
- Host-a-Researcher Award Program
- Clinical Trials Education Series
- AFER Travel Grants

Save these dates!

AFER is planning two new events at the 2011 ARVO Annual Meeting in Fort Lauderdale, Fla.

Gala evening to benefit the ARVO Foundation for Eye Research Saturday, April 30, 2011

Investors Seminar Friday, April 29, 2011

See www.arvo.org/foundation
DON'T MISS THE OPPORTUNITY TO EXPLORE THE BREADTH AND DEPTH OF CELL BIOLOGY. FOR INFORMATION, EMAIL ASCBINFO@ASCB.ORG OR CALL 301-347-9300. JOIN US!
### Demographics update: Who are ARVO members?

#### Membership by section

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Vision research awards issued by the US Department of Defense (DoD) have increased because funding bodies have recognized the high quality of these grant submissions.

At the ARVO Annual Meeting in May, representatives of the DoD’s Telemedicine and Advanced Technology Research Center (TATRC) announced that $10 million in grant awards were being made to vision researchers. That number has since grown to $11 million, reflecting TATRC’s Vision Research Program (VRP) FY2009 and 2010 Congressional appropriations of $4 million and $3.75 million, respectively, from the Peer Reviewed Medical Research-Vision (PRMR-Vision) program line item in defense funding, plus $4.1 million from the larger Traumatic Brain Injury (TBI) program, minus administrative costs.

The TBI dollars are funds transferred from the Congressionally Directed Medical Research Program’s (CDMRP) TBI/Post Traumatic Stress Disorder (PTSD) Program which, although it does include visual dysfunction among its areas of interest, had not generally been awarding funds to vision research.

But the TBI/PTSD Program has recognized the high quality of vision-related TBI grants and has transferred funds over to the VRP to underwrite additional top-scoring submissions. Colonel Donald Gagliano, MD, director of the Joint DoD/Veterans Affairs (VA) Vision Center of Excellence (and also an ARVO member), said, “Vision researchers have certainly raised awareness among DoD agencies for both the quality and responsiveness of their grant submissions to the current needs of our military.”

The current series of awards resulted from a TATRC Program Announcement that was issued in June 2009 requesting research proposals for five different aspects of traumatic eye injury. The program was open to both domestic and international researchers. Two of the twelve awards (not yet posted on the TATRC Web site) were to international researchers.

“We are mindful not to give Congress the impression that funds transferred from the TBI/PTSD Program are always going to be available and that they do not need to adequately fund the dedicated PRMR-Vision line item in defense appropriations,” said NAEVR’s James Jorkasky, who added that the legislators must keep the VRP as a distinct program focused on all battlefield eye and vision trauma. (See page 21 for NAEVR’s FY2011 funding request submission.)

TATRC Vision Portfolio Manager Robert Read (left) with Michael Steinmetz, PhD, from the NEI’s Division of Extramural Research, who served on the TATRC Programmatic Panel that reviewed grant submissions.

Left to right: Colonel Robert Mazzoli, MD (retired), a former US Army ophthalmology consultant, joins TATRC representatives Robert Read, Marc Mitchell, Lt. Colonel Michael Mines, MD, DVM, and Fran McVeigh, OD, at NAEVR’s session at the ARVO Annual Meeting. The TATRC representatives also met with researchers in the NAEVR Central booth.

What’s it stand for?

CDMRP  Congressionally Directed Medical Research Program
DoD  Department of Defense
PRMR  Peer Reviewed Medical Research
PTSD  Post Traumatic Stress Disorder
TATRC  Telemedicine and Advanced Technology Research Center
TBI  Traumatic Brain Injury
VA  Department of Veterans Affairs
VCE  Vision Center of Excellence
VRP  Vision Research Program
Congress and President propose FY2011 inflationary increase for NIH

As Congress left Washington for its August recess, both the House and Senate proposed FY2011 spending bills that included a $1 billion (3.2%) inflationary funding increase for the National Institutes of Health (NIH) to $32 billion. This was also the funding level proposed by President Obama.

The House bill had yet to be approved by the full Appropriations Committee, so only top line details were available. The Senate bill was approved by the Appropriations Committee and details were released. The Senate bill proposes NEI funding at $723.2 million, a 2.3% increase (see accompanying funding chart). Institute/Center (I/C) increases range from 2.3% to 2.8%. The President’s budget had proposed a 2.5% NEI increase, but all I/Cs were tapped to underwrite funding of the Cures Acceleration Network (CAN) at $50 million.

Rapid translation
CAN, which was authorized earlier this year by Congress at $500 million in the healthcare reform legislation, Patient Protection and Affordable Care Act, P.L. 111-148, but not appropriated. CAN was created to assist NIH in “crossing the Valley of Death from bench to bedside.” It remains unclear to what extent NEI and vision researchers will have access to CAN funds.

The Senate bill’s Report Language highlights how NEI is meeting the five research priorities defined by NIH Director Francis Collins, MD, PhD: genomics, translational research, global health, research that supports healthcare reform and efforts to reinvigorate the biomedical research enterprise.

This language reflects NAEVR’s written submission, which was also used as the basis of oral testimony provided by ARVO member Neil Bressler, MD, FARVO, (Wilmer Eye Institute, Johns Hopkins University) during a May 12 Citizen Witness hearing held by the House Labor, Health, and Human Services (LHHS) Appropriations Subcommittee on FY2011 NIH funding.

Although NAEVR, as part of the medical research advocacy community, had requested FY2011 NIH funding at $35 billion, it has thanked Congressional leaders for the $1 billion increase and their efforts to ensure that NIH funding keeps pace with biomedical inflation, especially in such a tight fiscal environment.

Keeping pace with inflation
NAEVR has cautioned Congress and the Administration, however, that now is not the time for a less-than-inflationary increase for the NEI, in light of the vision impairment and eye disease challenges it faces during the Decade of Vision 2010-2020. NAEVR’s Capitol Hill champions had urged an inflationary increase for NEI, but as Senate LHHS Appropriations Subcommittee Chair Tom Harkin (D-IA) stated during a May 5 hearing, “Congress will be forced to make tough decisions … and some of our friends are not going to be very happy with some of the decisions we make.”

Visit the NIH/NEI funding section of NAEVR’s Web site at www.eyeresearch.org for full details.
Power of “genetic signature”

In June, NIH Director Francis Collins, MD, PhD, explained to the House Energy and Commerce (E&C) Committee how identifying an individual’s “genetic signature” will facilitate more effective personalized medical treatments.

The hearing, entitled “NIH in the 21st Century: The Director’s Perspective,” chaired by Rep. Frank Pallone (D-NJ) of the E&C’s Health Subcommittee. The E&C Committee, which has authorizing jurisdiction over the NIH, spearheaded the last Congressional reauthorization of the NIH through the NIH Reform Act of 2006.

Status report

Collins provided a status report on NIH activities, including those mandated in the 2006 reauthorization. His appearance before the Subcommittee — his first as NIH director — followed earlier appearances before the LHHS subcommittees of the House and Senate Appropriations Committees, respectively, on FY2011 funding.

Collins described how he is working closely with Food and Drug Administration (FDA) Commissioner Margaret Hamburg, MD through the newly formed NIH/FDA Joint Leadership Council to prepare the regulatory process to deal with these new research findings. Subcommittee members asked several questions about embryonic stem cell research, and Collins noted that 73 cell lines are now approved for NIH-funded research, with more than 100 other lines currently being reviewed by NIH.

“Peer review: A complex calculus”

Collins also responded to questions about funding and NIH’s priority-setting process, explaining that it is optimal for science to drive the process with due consideration of disease burden and cost. He emphasized that NIH’s two-tiered peer review system — reflecting scientific excellence of investigator proposals balanced with NIH’s programmatic needs — has served the nation well, stating that “it is a complex calculus that should be best done by scientists.”

He acknowledged the importance of funding basic science while aggressively pursuing the translation of research.

Collins’ written statement had two sections that relate specifically to the vision community:

- In the discussion of chronic disease, he reported that NEI research into AMD has ensured that 1.3 million Americans at risk for severe vision loss over the next five years can receive potentially sight-saving therapies.

- He reported that the NIH-reform legislation-mandated Scientific Management Review Board (SMRB) is currently addressing organizational questions about managing research on substance use, abuse and addiction and carrying out a comprehensive review of the role and structure of the NIH intramural program, including the Clinical Center. The previous month, NAEVR Executive Director James Jorkasky testified before the SMRB, urging it to consider the implications for the actual research being conducted by an Institute before recommending a merger or budget clustering. NAEVR and ARVO have consistently opposed merging the NEI budget line into a “brain” cluster.

New: Translational Medicine and Therapeutics Working Group

In May, Collins requested that the SMRB recommend to NIH how to integrate initiatives to translate basic research more rapidly into treatments and therapies. He noted that several components are already in place, such as:

- Molecular Libraries Initiative, including the NIH Chemical Genomics Center
- PubChem database
- Therapeutics for Rare and Neglected Diseases Program (TRND)
- Rapid Access to Interventional Development (RAID) Program
- NIH Clinical Center
- Clinical and Translational Science Awards (CTSAs)
- NIH/FDA Joint Leadership Council
- Cures Acceleration network

On July 26, the SMRB’s newly formed Translational Medicine and Therapeutics (TMAT) Working Group held its first conference call, clarifying its mission and setting an ambitious goal of December 2010 for the development of recommendations.
NEI 40th anniversary wrap-up: Best is yet to come

NEI’s vision [for translational research] has allowed us to see farther and better and has enabled the NIH to attain its vision. Most importantly, the best is yet to come,” said NIH Director Francis Collins, MD, PhD, the keynote speaker at a June symposium that concluded the year-long celebration of NEI’s 40th anniversary.

At the “Translational Research and Vision Symposium,” Collins also cited NEI’s leadership in ocular genetics, noting that it has worked collaboratively with other NIH institutes and in an inter-disciplinary fashion to elucidate the basis of eye disease and to develop treatments.

“Translational research is not easy, especially since it deals with complex biological systems that require an inter-disciplinary approach to science,” he said.

NEI/NASA collaborate on fiberoptic probe for cataract diagnosis

Collins highlighted the unlikely pairing of NEI and the National Aeronautics and Space Administration (NASA) in developing a diagnostic device for cataracts. “This collaboration has resulted in a compact fiber optic probe that uses dynamic light scattering to measure the amount of the anti-cataract protein alpha-crystalline. The less light scattering from the protein, the more likely the individual is to develop cataracts,” he said.

Collins said he was pleased to feature an example of NEI’s translational research — successful human gene therapy to treat the neurodegenerative disease Leber congenital amaurosis — in his April and May testimony before LHHS Appropriations House and Senate subcommittees.

He also highlighted NEI’s use of Genome-Wide Association Studies (GWAS) to determine the increased risk of developing age-related macular degeneration from gene variants in the Complement Factor H immune pathway. “This was the first demonstration that GWAS is a useful tool to make the connection between gene variants and disease conditions,” he said.

Future-oriented

In his welcome comments, NEI Director Paul Sieving, MD, PhD said as rewarding as it is to look back on 40 years of accomplishments, he is most proud of the future-oriented focus of the symposia series that NEI hosted over the past year on topics such as genetics/genomics, optical imaging, neuroscience, stem cell therapies and the latest in glaucoma research. He reminded attendees that the April 2009 inaugural symposium featured blind mountain climber Erik Weihenmayer, who was engaged in testing a new device that uses the tongue to get visual signals to the brain, the development of which had been supported by the NEI.
NAEVR seeks FY2011 PRMR-Vision funding at $10 million

With TATRC’s announcement of its awards (see page 17), NAEVR has tangible examples of vision research to share with its Capitol Hill champions. NAEVR has been working closely with Blinded Veterans Association (BVA) to secure House and Senate “Dear Colleague” letters from non-defense appropriators in support of FY2011 PRMR-Vision funding at $10 million. Rep. Tim Walz (D-MN) has sponsored the House letter. As of the August recess, only the House has taken action on an FY2011 Defense bill, reporting out of the Defense Appropriations Subcommittee a bill that has not yet been made public, pending full Appropriations Committee approval.

Visit the Defense-related Vision Research section of NAEVR’s Web site for more details.

NAEVR’s David Epstein (far left) and James Jorkasky (far right) have updated lead House champion James Moran (D-VA, third left) and staff member Chris Gaspar (second left) about the unique “gap filling” nature of the vision research awards recently announced by DoD’s TATRC.

BVA’s Tom Zampieri, PhD (far left) and Glen Minney, US Navy Petty Officer, retired, who serves as a patient advocate at the Chillicothe, Ohio, VA Hospital (third left) joined NAEVR’s James Jorkasky (right) with Doug Babcock (second left) from the office of Senator Sherrod Brown (D-OH) to support a Senate “Dear Colleague” letter. A Veterans Affairs Committee member, Senator Brown has been a strong supporter of VA Blind Rehabilitation services.

YO ARVO! Happy Hour: Exploring careers in research
Monday, October 18, 4–6pm
McCormick Place
Room N132

Young researchers and ophthalmologists: Looking to network at the American Academy of Ophthalmology meeting?

Drop by this happy hour to meet and mingle with clinician-scientists. Senior ARVO members will be on hand to share their experiences and insights as well as answer questions about career development, opportunities and challenges. Co-sponsored by the Academy Young Ophthalmologist (YO) Committee and ARVO’s Members-in-Training Committee.

Join ARVO for a FREE course*

How to Set Up & Manage a Clinical Trial Site

October 15, 2010
4–9pm with dinner
Hyatt Regency McCormick Place
Chicago, Illinois

Jointly sponsored by the Association for Research in Vision and Ophthalmology and the ARVO Foundation for Eye Research

*FREE to registrants of the American Academy of Ophthalmology meeting.

Learn more at www.arvo.org/ctes.
Each of the institutes at the National Institutes of Health (NIH) periodically undergoes a planning process to explore needs and opportunities for research. The rapid growth of fields that barely existed a decade ago — such as genomics, epigenetics, proteomics, systems biology, synthetic biology, nanotechnology and bioengineering, combined with renewed emphasis on evidence-based medicine, patient-oriented outcomes and translational research — convinces me that the future is brighter than ever.

Indeed, our challenge is to set priorities and identify the best, most productive avenues. More than ever, in these times of government belt-tightening, it is essential for the NEI to re-examine the research portfolio and determine the most pressing needs and priorities in vision research.

Historically, the NEI was one of the first NIH institutes to employ scientific planning to guide its granting decisions. Since the late 1970s, the National Plan for Vision Research — or NEI strategic plan — has been revised approximately every five to seven years. The last plan was completed in 2004, and so it is again time to examine our accomplishments and establish new directions and goals for the future.

In view of this acceleration in knowledge acquisition, I have asked Dr. Richard Fisher, the director of the NEI Office of Program Planning and Analysis (OPPA), to re-examine the planning process in part to make strategic planning an ongoing endeavor that will insure the NEI and vision research community address emerging trends. In response, the OPPA convened a meeting of the Planning Oversight Workgroup consisting of current and former National Advisory Eye Council (NAEC) members and other senior vision researchers to offer guidance on the strategic planning process.

The Workgroup issued a report to the NAEC strongly endorsing the long-held belief that NEI strategic planning be guided by the core principle that investigator-initiated research is the main engine that drives scientific discovery. The Workgroup, with concurrence from the NAEC, recommended that the strategic planning process employ expert panels dedicated to specific areas of vision research, create an ongoing process to identify new opportunities and use targeted initiatives to implement planning recommendations. The Council endorsed the NEI’s recent structural changes in managing grant portfolios where the traditional programs (such as retinal diseases) are enhanced by developing complementary, crosscutting programs, such as ocular genetics, to provide a more comprehensive, scientifically-integrated plan.

A set of general strategic planning goals was also created to:

- Identify scientific directions for which NEI is well positioned to make major contributions.
- Ensure a transparent, inclusive process with grantees and other constituencies having an active role.
- Provide a structure for ongoing implementation and evaluation.
- Evaluate the role of NEI operational policies.

With a process in place to implement strategic planning, the institute will next create expert program panels to review progress in the field and recommend future research goals. This will depend on the participation of the vision research community to provide expert guidance to insure that the next National Plan for Vision Research produces a valuable document to guide the field.
On September 30, the NEI Division of Extramural Research (DER) staff will close out the books on FY2010. As always, this means the end of another regular appropriation cycle, but in addition it marks the end of funding grants under the American Recovery and Reinvestment Act of 2009 (ARRA). When the dust settles, NEI will have obligated monies to within $25 of the $704 million provided for vision research.

On October 1, the DER staff will begin work on FY2011. As this article is being written, there is no signed appropriation bill on the horizon and there will be an election in November. So NEI is taking a cautious, conservative approach to the New Year. We plan to begin making awards on December 1. As in past years, we anticipate that these actions will be made at a reduced level, with readjustments when the fiscal situation becomes clear.

The core values of the NEI continue to direct the highest priority to support for investigator-initiated research project grants. But FY2011 will bring several new opportunities for vision researchers:

- **NEI Institutional Research Training Grants (T32) for Statistical Genetics and Genome Informatics**: These awards aim at attracting young scientists to increase their knowledge and experience in genetics and bioinformatics techniques applied to ophthalmic disorders. Individuals with this expertise will be critical to the vision research community as work progresses to identify genetic effects that impact the development of ocular disease.

- **NEI will participate in OppNet, the NIH Basic Behavioral and Social Science Opportunity Network**. This initiative will support studies to further our understanding of the mechanisms and patterns of behavior and social function that affect health and well-being. A number of Funding Opportunity Announcements will soon be released.

- **NEI will participate in a Joint Agency SBIR/STTR Solicitation** developed by the White House Innovation and Entrepreneurship Working Group, in a series of topics in the general area of robotics research. There will be new emphasis on statistical analysis of large, combined genotype/phenotype data sets; on the use of human stem cells for reparative medicine; and on blindness rehabilitation research.

As one door opens to new opportunities, another door closes. In FY2011 NEI will discontinue its long-term support for two existing programs:

- **National Research Service Awards for Individual Senior Fellows (F33)**

- **Midcareer Investigator Award in Patient-Oriented Research (K24)**

These actions will help focus NEI support on the training and career development of early stage scientists who can bring fresh ideas and new technologies to bear on problems in vision research.

### Many changes to electronic research administration at the NIH

The NEI and the vision research community will continue to work through many thrilling enhancements to peer review. The most significant change for us all is the shorter application. Here is a quick overview of the page length requirements for the grant mechanisms supported by the NEI:

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**IMPORTANT NOTE:** The U10 mechanism is complex and applicants should consult the Funding Opportunity Announcement at http://grants.nih.gov/grant/guide/pa-files/PAR-10-207.html and discuss their plans with an NEI Collaborative Clinical Research Program Director at 301-451-2020. In general, the Research Strategy section may not exceed 30 pages for Study Chair and Data Coordinating Center applications; 12 pages for a Resource Center, and six pages for a Participating Clinic. All Introductions are one page and Biographical Sketches are four pages.
Two ARVO members join National Advisory Eye Council

The National Advisory Eye Council for the National Eye Institute (NEI) has appointed two new members — David R. Copenhagen, PhD, and Bernard F. Godley, MD, PhD. Both are ARVO members.

The council (see inset) advises the NEI about conducting and supporting research, training, health information dissemination and other programs that address blinding eye diseases and disorders, visual function mechanisms, sight preservation, and health needs of the visually impaired.

Copenhagen is a professor and vice chair in the Department of Ophthalmology and professor of physiology at his alma mater University of California, San Francisco. In 2009, he was presented with a Walt and Lilly Disney Award for amblyopia research by Research to Prevent Blindness. He was also recognized by the Alcon Research Institute in 2008 for his dedication to enhancing the understanding of vision and eye health through his extensive work studying visual system development. Copenhagen’s research interests include visual experience and the development of synaptic pathways in neonatal retina, neurotrophins and the development of synaptic pathways in neonatal retina, glutamate transporters and receptors in the retinal circuits, and melanopsin expressing ganglion cells and visual behavior before the onset of rod and cone function.

Godley is professor and chairman of the Department of Ophthalmology & Visual Sciences at the University of Texas Medical Branch. Previously, he was the director and senior scientist at the Sybil B. Harrington Molecular Ophthalmology Laboratory at the Retina Foundation of the Southwest. Godley was the inaugural holder of the David Weeks Distinguished Professorship in Ophthalmology. He has been recognized as the Paul Beeson Physician Faculty Scholar and received the Kaiser Family Foundation Merit Award. He also holds the Roberson-Poth Distinguished Chair in Ophthalmology. He is a principal investigator in a multicenter clinical trial investigating the efficacy of photodynamic therapy for exudative age-related macular degeneration. His basic research interests include the role of oxidative stress and mitochondrial DNA damage as a possible pathoetiologic mechanism of age-related macular degeneration.

Start your funding search with ARVO

Do you know where to go for funding? ARVO can help you get started with our online Funding Guide.

This is an alphabetical listing of dozens of organizations that offer grants, fellowships and awards in ophthalmology and vision research as well as related fields. The list links directly to funders’ Web sites, and highlights deadlines to help you prioritize your search.

The Funding Guide is updated regularly, so visit often. Also, watch the ARVO Web site and the bi-weekly Insight for new opportunities.

See www.arvo.org/fundingguide
New associate editor appointed

Joseph (Joe) Rizzo has agreed to be an associate editor, primarily to handle the areas of neuro-ophthalmology, translational neuroscience and extra-ocular muscle balance. An increasing number of submissions necessitated this addition, and Joe’s expertise in these areas and his service on the Editorial Board since 2003 made him the logical choice. His term will be from May 30, 2010 through December 31, 2012, the end of my term.

IOVS and ISLRR agreement

IOVS and the International Society for Low Vision Research and Rehabilitation (ISLRR) have agreed to work together going forward in this area of growing interest. Look for a new section in IOVS entitled Low Vision. ISLRR is encouraging its members to submit their research to ARVO. This group already participates in the Annual Meeting.

Gary Rubin, secretary of ISLRR and a long-time ARVO member, has been appointed to the Editorial Board as the low vision specialist. The associate editors and I will identify accepted articles that could fit in this section but have been suggested by the author for another section. Authors may be contacted to approve moving the article.

New section updates

Thanks to excellent suggestions and volunteering by Editorial Board Members, there are several articles in review for the new sections announced early this year: Reviews, Point/CounterPoint and Perspectives. The first Point/CounterPoint, published in the May issue, is a lively discussion of the lens circulation model by Donaldson, Musil and Mathias versus Beebe and Truscott.

In addition to the 50–60 research articles in every issue, look for upcoming reviews about the “history and current status and laboratory work for OCT” and perspectives on “interpretations of fundus autofluorescence from studies of the bisretinoids of retina” and “AGEs and diabetic retinopathy.”

Rejection redux

In the Winter/Spring 2009 issue of ARVONews, my column strongly advised authors that NO really means NO! The rejection letter is not an invitation to revise and resubmit. If your article is rejected by your peers, do not even consider resubmitting it later, revised or re-titled or in a new form, other than as specifically allowed by the Instructions to Authors. If you do so, the journal will have to take stronger action, such as not accepting any submission from you for an extended time period.

Rejections are based on reviews by two to three of your peers, an Editorial Board member and the associate editor, and all rejection decisions come through me. If your article is rejected, we cannot devote the time or resources to revisit it. Rejected articles, even if moderately improved or clarified, will still not rise high enough to “make the cut.” If you believe that there was a fatal flaw in the review process — beyond just a difference of scientific opinion or disagreement on various points — such as gross incompetence, personal or professional bias, or conflict of interest — you must describe it to my satisfaction and indicate how it affected the disposition of your article. We take such accusations seriously, so you must present them seriously and in detail.

2011 journal news

To make the journal less reliant on membership dues, the Board of Trustees voted to increase the cost of the first eight PDF pages of all published articles to $85 each. While the Board wanted to lower the cost of color pages it was felt that insufficient data was available to make a change at this time. They will consider the color charges again at the fall Board meeting.

Based on a recommendation from the Publications Committee, the Board also approved decreasing the time from publication to open access from 12 months to 6 months. Authors also may deposit their own articles in institutional repositories if required. Remember, in January 2010, ARVO began depositing articles funded by NIH, Howard Hughes Medical Institute and Wellcome Trust in PubMed Central on behalf of authors. There is no charge for this service.
I'm pleased to report that new manuscript submissions to the Journal of Vision (JOV) now average 45 per month, an increase of 10% compared with the same time last year, and an increase of nearly 50% compared with five years ago.

As a result of this increased activity and to more equitably distribute the workload, I have appointed three new Editorial Board members to assist with the peer review process:

- Mary M. Hayhoe, The University of Texas at Austin, Texas
- Albert J. Ahumada, NASA Ames Research Center, Moffett Field, California
- Mary A. Peterson, University of Arizona, Tucson, Arizona

Impact Factor

In June, the Journal of Vision received its latest Impact Factor. The value was 3.022, which ranks No. 7 out of 49 journals in ophthalmology and ranks No. 5 in the 5-Year Impact Factor (Journal Citation Reports® 2009, published by Thomson Scientific).

Meetings

Two Editorial Board meetings were held at ARVO and VSS meetings in May. Members were updated on the state of the journal.

Symposia and abstracts from the Vision Sciences Society Meeting, which was held May 7–10, in Naples, Fla., were published in the Journal of Vision and are viewable at www.journalofvision.org/content/10/7.toc. These abstracts are published by ARVO as a service to the vision science community.

Special issues

The Journal of Vision has just opened a new Special Issue in response to a call for papers. Perception of color and material in complex scenes is now online at www.journalofvision.org/content/10/9.toc, with guest editors Laurence T. Maloney, New York University and David H. Brainard, University of Pennsylvania.

The goal of this special issue was to bring together papers that describe recent advances as well as progress since the publication of a similar feature in the Journal of Vision in 2004, www.journalofvision.org/content/4/9.toc.

New platform

Recently, JOV moved to the HighWire Press platform. Overall, the process was successful, but like many transitions which are complex in nature, some tagging and links did not activate as expected. ARVO staff and HighWire Press are actively tracking down these broken links, and it is expected that full functionality will be restored shortly.

Activate your IOVS 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.

You’ll have access to full text articles in HTML and PDF, 2002–2009 Annual Meeting abstracts, and all supplements — movies, data sets, tables, figures and more.

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
Mentored Clinical Scientist Development Programs (K12)

The Mentored Clinical Scientist Development Programs (K12) are sponsored by the National Eye Institute/National Institutes of Health (NEI/NIH), there are eight programs in the U.S. These programs are all designed to recruit, train and support top-notch clinical scientists who would dedicate over 75% of their efforts to research cures for eye disease as junior faculty members. The program is open to clinically trained candidates who have recently completed or are about to complete their training. The Institutional Mentored Clinical Scientist Programs offer support for the career development of clinician scientists and patient-oriented clinical investigators to conduct mentored research related to all aspects of vision. Candidates are provided salary support plus fringe benefits commensurate with the institution’s salary structure, and up to $30,000 per year of training-related expenses. K12 funding may also support full or partial completion of an advanced degree in health-related research (e.g., MS, MPH, PhD).

The following institutions have NIH/NEI sponsored K12 Mentored Clinical Scientist Development Programs:

**Berkeley**
Berkeley Clinical Scientist Development Program
http://optometry.berkeley.edu/bcsdp.html
Inez Bailey, Program Coordinator - inezb@berkeley.edu

**Duke Eye Center**
Duke University Mentored Clinical Scientist Development Program (K12)
http://dukeeyecenter.duke.edu/research
Gordon K. Klintworth, MD, PhD, Program Director - klint001@mc.duke.edu

**Harvard**
Harvard-Vision Clinical Scientist Development Program (K12)
www.masseyeandear.org/research/ophthalmology/education/k12/
HarvardVisionK12@meei.harvard.edu

**Penn**
Penn Vision Clinical Scientist Program
www.uphs.upenn.edu/ophthalmology/education/clin-sci training/overview.htm
Maureen G. Maguire, PhD, Program Director - maguirem@mail.med.upenn.edu

**Johns Hopkins**
The Wilmer Institute Mentored Clinician—Scientist Program
Patricia Tracey, Program Coordinator
www.hopkinsmedicine.org/wilmer/education/clinical_scientist1.html
Patricia Tracey, Program Coordinator - ptracey@jhmi.edu - 410-955-2777

Please contact the programs directly if you are interested in more information or an application.

Women & Minorities are encouraged to apply.
All Programs are Equal Opportunity/Affirmative Action Employers.
These programs are funded by the NEI/NIH.
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