



## Genomics pioneer to speak at Annual Meeting



J. Craig Venter

**J.** Craig Venter, PhD, is the keynote speaker at the 2012 ARVO Annual Meeting in Fort Lauderdale, Fla. One of the 21st century's leading scientists, he has numerous contributions to genomic research, including publication of the first draft human genome in 2001, first complete diploid human genome in 2007, and creation of the first self-replicating bacterial cell constructed entirely with synthetic DNA.

He is founder, chairman and president of the J. Craig Venter Institute, a nonprofit organization dedicated to human, microbial, plant, synthetic and environmental genomic research, and the exploration of social and ethical issues in genomics. He is also founder and CEO of Synthetic Genomics Inc., a privately held company developing and applying genomic-driven commercial solutions to markets including biofuels, biochemicals, and new bio-based food products.

**ARVO Keynote: Sunday, May 6, 5:45 – 7pm. ■**

## ARVO introduces new journal

**A**RVO announces a new online-only journal, *Translational Vision Science and Technology (TVST)*. The journal will emphasize multidisciplinary research that bridges the gap between basic research and clinical care.

For more information, see page 23. ■

## Check out your 2012 Annual Meeting Preview (enclosed)



## The latest on imaging

Special Advertising Report

## Congratulations 2012 Fellows

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## New perspectives: Members of the Annual Meeting Site Selection Working Group reflect

**E**very five years, as part of the ARVO strategic planning process, a group of members works closely with ARVO's meeting-planning staff to review Annual Meeting venues for the next five years. Four members share their volunteer experience as part of the 2011 working group to help pick locations for 2017 – 2021.

### Daniel J.J. Carr, PhD University of Oklahoma Health Sciences Center

I wanted to be a part of a group that would look into potential sites and what goes into organizing a meeting of this size, and be able to address some of the major concerns. It was important to me because there are always those who want to keep the Meeting where it is and there are those who would rather

move it around. Although I really like Fort Lauderdale, I think it is important to

See [Site Selection Working Group](#), page 4



Site selection committee, back row, from left: Miller Ogdigben, PhD; John Penn, PhD, FARVO; Sem Genini, PhD; Sally Atherton, PhD, FARVO; Judy Kim, MD. Front row, from left: Linda McLoon, PhD, FARVO; Joe Carroll, PhD; Jeff Boatright, PhD; Dan Carr, PhD; Craig Crosson, PhD, FARVO; Dan Epstein, MD, PhD (standing).

2011 – 2012

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## President's Message

### Coffee and WiFi: The start of a great scientific meeting



Jeffrey H. Boatright,  
PhD, FARVO

I'm sitting here enjoying a great cup of Fair Trade coffee, chuckling a bit. I'm on the last day of a series of trips for ARVO that included Seattle, Vancouver, New Orleans and San Francisco. The Site Selection Working

Group and the Trustees have been checking out these and other cities, testing the waters (or coffee, as the case may be) for future Annual Meeting sites.

I'm chuckling because this coffee exemplifies a small part of where ARVO is going and why.

I will remember our move from Sarasota to Fort Lauderdale in 1995 — hotels towering over the beaches, where scores (!) of us could stay together in the same building and hundreds of us could be within a few minutes' drive of the convention center. And what a convention center! Miles of cohesive space with facilities onsite that we never dreamed of in Sarasota — all under one roof! Sarasota had its own feel, but if you want to see an "old timer" blanch, whisper "Royal Marine Ballroom" and "Golden Apple Dinner Theater" into his ear.

Fast-forward 18 years, and things are a bit cramped. We would love to have more platform sessions and presentations in varied formats, but we can't divide the big halls at the Fort Lauderdale convention center into moderate-sized rooms. We would love to have more evening get-togethers, but we're spread across 40 hotels sited 50 miles up and down the state. We'd love to be able to have nice chats over coffee without waiting in lines for the joe, but we can't plug in even one more coffee kiosk — the whole barn could go dark!

Someone in the meeting industry told me that scientists demand only two things: coffee and WiFi. There are lots of coffee kiosks in these new-generation convention centers; no worries about blowing circuit breakers here. And because these newer centers host the meetings for high-end tech fields, WiFi access is top-notch and ubiquitous.

Coffee: check. WiFi: check.

Of course, there's lots of everything else that makes for great scientific meetings. These new convention centers have rooms and halls of all sizes that will allow varied meeting formats. Who knows what our program planning committees will be able to do with this flexible space? I think we'll end up having lots of interesting, different types of presentation formats.

And beyond the meeting rooms, the centers have wonderful spaces for



ARVO Site Selection Committee gets shuttled around New Orleans, La.



Breakfast presentation at the Washington, D.C. convention center.

impromptu face time – protected nooks and crannies with plenty of chairs and sofas, good lighting and inspiring scenery out of the windows. Between sessions, we'll have many more opportunities to chat with one another in beautiful settings specifically designed to encourage such interaction.

These convention centers are surrounded by hotels that run a gamut of prices and amenities. The sheer number and concentration of hotel rooms is such that this facet of these venues will fundamentally alter our experience of the ARVO Annual Meeting. We'll basically all be staying together for a week. We will be able to easily meet with one another during and after meetings without having to drive or take buses. I suspect that many more conversations and collaborations will get their starts due to this aspect of these new sites.

Another feature of these 21st century venues that is difficult to grasp until

you've lived it is the abundance of interesting things to do within short *walks* from the centers. How about *walking* to lunch followed by touring an excellent museum and still getting back in time for the first afternoon session? Got a few hours of

**“[T]he centers have wonderful spaces for impromptu face time – protected nooks and crannies with plenty of chairs and sofas, good lighting and inspiring scenery out of the windows.**

downtime? *Walk* down to the water and take a floatplane tour of the city and

environs. *Walk* a couple of blocks over to a glassblowing class. In the evenings, you can walk a couple of blocks to a different world-class restaurant every night. You're guaranteed to have an interesting dinner conversation – the whole restaurant will be filled with fellow ARVOnians. The beer and wine is pretty good in these places, too. Glad I'll be *walking*.

Fort Lauderdale was great for us when we moved there. We badly needed meeting rooms and halls under one roof and we needed more hotel rooms near the convention center. We had simply outgrown our beloved Sarasota. Eighteen years later, we are now a major scientific society that holds a major annual meeting. Our needs have again expanded. Though I'll miss The Elbo Room and other sites up and down A1A, it's time to move on. I'm thankful for our time in Fort Lauderdale, but I'm thrilled with the opportunities we have going forward.

It's going to be fun. ■

## Abstract submission deadline June 4, 2012

**EVER** the European Association for Vision and Eye Research, is the leading non-profit ophthalmological research association in Europe which covers all areas of ophthalmology and the visual sciences. Membership is open to individuals of any nationality engaging in or with an interest in ophthalmic and vision research.

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## Autumn Board meeting highlights: New journal, next strategic plan

Approval for a new ARVO journal and planning for ARVO's next five years were key topics at the Board of Trustees autumn meeting in Seattle, Wash. — site of the 2013 Annual Meeting — in October last year.

The Trustees approved publishing a new online-only ARVO journal, *Translational Vision Science and Technology (TVST)*. TVST will emphasize multidisciplinary research that bridges the gap between basic research and clinical care.

Marco Zarbin, MD, PhD, FARVO, has been appointed the journal's first editor-in-chief. TVST will begin accepting papers in early 2012. The first issue will be published this spring.

The Trustees also discussed developing a new strategic plan. The current plan (2009 – 2013), has led to an expansion of the international chapter affiliate program; an update to the Association's logo to strengthen ARVO's brand; changes to the Annual Meeting, including rotating to different locations and organizing sessions under scientific tracks; and a new seat on the Board of Trustees for a member-in-training.

Work to develop a strategic plan for 2014 – 2018 will begin this spring. This will include a general membership survey, interviews and focus groups with key members and stakeholders, and a retreat in August 2012. The Trustees will provide information in their Section Business Meeting reports during the 2012 Annual Meeting. ■

**Site Selection Working Group**, continued from page 1

consider not just the members in the United States but also our members overseas.

I never met the [staff] at ARVO before. By listening to their point of view and different members' points of view, I was able to understand the size of the facility that we need, the hotel needs and better understand the needs of vendors.

When you go to these cities it is really eye opening to compare and contrast the tourist industry and the convention industry. From the two cities I visited, the members of the group all reached similar conclusions about the advantages or disadvantages of the two cities. And that was very surprising since we all have different and diverse needs.



Joe Carroll, PhD, of the Medical College of Wisconsin and Joanne Angle, Executive Director of ARVO, look at the Baltimore Convention Center. Camden Yards baseball stadium is in the background.

### Joseph Carroll, PhD Medical College of Wisconsin

I saw that ARVO put out a call for volunteers, but the primary reason I joined the group is the importance of ARVO as an organization for my own career development. I just feel vested in ARVO as an organization and also in the Annual Meeting. So when there was an opportunity to ensure the long-term viability of the meeting, I thought it would be a good way to give back to ARVO in some measurable way.

What I personally got out of it was how a decision like this isn't taken lightly and how much work and preparation goes into planning a meeting of this size. There is probably as much research that goes into selecting these cities as there is in my research when I'm writing a paper on a scientific topic. To be privy to it and see the process has been pretty rewarding, especially as a person who thrives on data and analysis.

### Subhabrata Chakrabarti, PhD Brien Holden Eye Research Centre, L.V. Prasad Eye Institute, Hyderabad, India

I wanted to represent the international community because a lot of us, especially

coming in from Asia, would like to attend the Annual Meeting regularly. It was important to be a part of this change and represent the international perspective from these countries and address our needs.

The process was good.

It met my expectations because of the extreme detail and attention we took in considering the hotels, the dining areas, the rates, the activities, etc. The process was hectic, I admit. But it also was a lot fun too!

We learned a lot about how the meeting is organized, what goes into planning a meeting of this size and all the issues we need to consider while planning. Now we get to use this knowledge not just for the site selection at ARVO but also to help conferences being held in our own communities, internationally or domestically.

### Dan Epstein, MD, PhD Universitaets Spital Zurich

Until joining the group, my understanding of why it was necessary to consider other sites was limited to what I learned at two previous Annual Meetings. Being part of the site selection group gave me great insight into the negotiation process and why and how decisions are made. I am now more aware of the details concerning the problems and the advantages of different locations and convention centers.

In looking at the sites, there were certain things to consider from the perspective of members, such as great access for international flights. Ease of access from the hotels to the convention center is another example; we looked at sites where the hotels are all within walking distance to the convention center. The overall attractiveness of the city was also a very important consideration for members, largely because our membership are used to Fort Lauderdale. I think members will be flabbergasted at some of the sites we selected in terms of the breathtaking view. And of course, cost was a major issue for us to take into account when selecting sites. In narrowing down the choices, I think we accomplished our goal. ■

## Seattle: ARVO 2013 attendees to enjoy the best of a vibrant city

The Board of Trustees held its autumn 2011 meeting in Seattle, Wash., to learn more about the city where ARVO's 2013 Annual Meeting will take place (May 5 – 9, 2013).

The Trustees took time after the meeting to tour the Washington State Convention Center, adjacent to Freeway Park, shops, hotels, restaurants and cafés.

“The layout of this convention center means we have fewer constraints around meeting space, and the Annual Meeting Program Committee can be more creative about increasing program options,” said EY Trustee Linda McLoon, PhD, FARVO (University of Minnesota).

“This facility is conducive to different types of meetings,” added ARVO President Jeff Boatright, PhD, FARVO (Emory University). “There’s a lot of informal meeting space for networking.”

The Washington State Convention Center is at the heart of a “vibrant, living city,” in McLoon’s view. “You go right out the door to a good coffee shop or a great restaurant.”

The Trustees spent an extra day in Seattle for a tour of the city. First on the itinerary was a walking tour to the variety of hotels located within a 5-block radius of the convention center. “It’s so nice to have so many hotels so close to the convention center,” noted McLoon. “No more shuttle buses. I didn’t realize how beautiful the city is; we’re surrounded by water.”

Next stop was the famous Pike Place Market. Board members then visited the Underground for a historical tour of Seattle’s old, underground city, the Experience Music Project in Seattle Center and the iconic Space Needle.

“There’s an astounding variety of food, sightseeing and activities all within a short walk of the convention center and the hotels,” said Boatright. “And the city and convention center are in a beautiful setting.”

The Annual Meeting Program Committee will begin their planning in earnest for an exciting, compelling 2013 scientific program during their upcoming meeting in January, also taking place in Seattle. Watch your Annual Meeting E-Updates and the ARVO website for news.

For more information about Seattle, see [www.visitseattle.org](http://www.visitseattle.org). ■

**“The layout of this convention center means we have fewer constraints around meeting space, and the Annual Meeting Program Committee can be more creative about increasing program options.”**

— EY Trustee Linda McLoon, PhD, FARVO



Pike Place Market, a well-known Seattle tourist attraction and landmark.



ARVO President-elect Peng Khaw, MD, PhD, FARVO, with the Seattle skyline in the background.

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## Who's on the 2012 election ballot?



**O**n March 16, ARVO members (i.e. Regular, Sustaining and Life) whose dues were paid by February 1, 2012 will receive their online ballot and voting instructions. Here's a sneak peek at who will be on the ballot:

### Trustee Candidates\*

BI Paul S. Bernstein, MD, PhD, FARVO  
Alison Hardcastle, PhD

CL Emily Y. Chew, MD, PhD  
Tien Yin Wong, FRCS, PhD

VN Peter D. Lukasiewicz, PhD  
Samuel Miao-Sin Wu, PhD

\*Section members will elect a candidate to represent their sections on the Board of Trustees. Learn more about the 2012 candidates at [www.arvo.org/elections](http://www.arvo.org/elections).

### Trustee Nominations\*

AP Nominees (TBD)  
GL Nominees (TBD)

\*Section members will elect two nominees from their sections to run in the 2013 ARVO election.

### Annual Meeting Program Committee

All Sections Nominees (TBD)  
All Cross-sectional Groups Nominees (TBD)

\*Members will elect one member from their sections. Cross-sectional Groups members will elect one member of their group.

### Self-nominate or nominate a colleague

AP/GL Trustee nominations and Annual Meeting Program Committee nominations close February 13, 2012. If you are a Regular, Sustaining or Life member and would like to submit an online nomination or self-nomination, visit [www.arvo.org/elections](http://www.arvo.org/elections).

Please note that in order to qualify, your dues must be paid by February 1, 2012. Women and members residing outside the U.S. are strongly encouraged and invited to apply. ■

## Committees in action

**W**hat are your ARVO committees working on? Here are some highlights of their activities:

**Advocacy Committee:** Organizing a workshop on patient advocacy for the 2012 ARVO Annual Meeting and reviewing strategies to reach more members through e-communication efforts and online discussion.

**Animals in Research Committee:** Planning a workshop on translational animal models in vision and ophthalmology research for the 2012 ARVO Annual Meeting. Monitoring the status on a number of legislative, policy and/or regulatory issues that could potentially affect ARVO members who work with animals.

### Annual Meeting Program

**Committee:** Finalizing the program for the 2012 ARVO Annual Meeting and identifying new session formats to increase attendee participation and engagement.

### Commercial Relationships

**Committee:** Organizing a workshop for the 2012 ARVO Annual Meeting, "Off Label, Off the Radar, On the Hook." Exploring ways for presenters to more clearly disclose their commercial relationships.

### Continuing Medical Education

**Committee:** Reviewing scientific content of educational activities seeking CME credit. Working with ARVO staff to enhance promotion of CME-approved sessions.

### Diversity Issues Committee:

Co-organizing (with the Ethics and Regulations in Human Research Committee) a workshop at the 2012 ARVO Annual Meeting titled "Henrietta Lacks and the Ethics of Human Experimentation." Providing resources on funding opportunities for women and minorities for the ARVO *online funding guide*.

### Ethics and Regulations in Human Research Committee:

Co-organizing (with the Diversity Issues Committee) a workshop at ARO 2012. Provided feedback on the Advanced Notice of Proposed Rulemaking for substantial changes in regulation of human subjects research.

### International Members

**Committee:** Organizing a workshop on advocacy and fundraising for vision research.

### Members-In-Training Committee:

Organizing three sessions at the 2012 ARVO Annual Meeting, including Pizza with an Expert, the Clinician-Scientist Forum and the Members-in-Training Job Forum. Co-organizing a publishing workshop with the Publications Committee. Piloting a members-in-training outstanding poster award program for the 2012 ARVO Annual Meeting.

### Professional Development and Education Committee:

Working with ARVO staff to implement more online education via an online learning management system.

### Publications Committee:

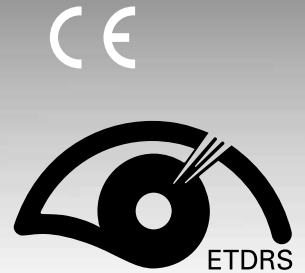
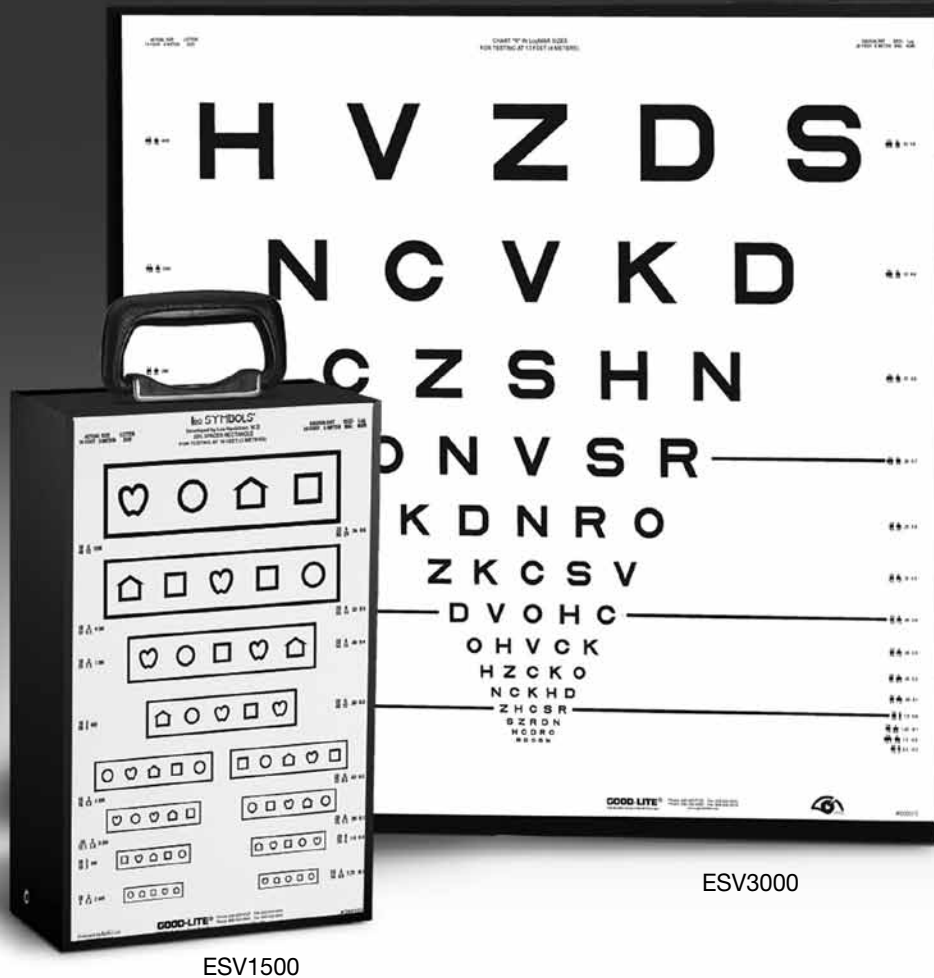
Co-organizing a workshop with the Members-in-Training Committee for the 2012 ARVO Annual Meeting. Working with staff on having a "paper of the month" feature for IOVS.



See [www.arvo.org/committees](http://www.arvo.org/committees). Watch your e-mail in late January for a committee volunteer recruitment notice. This is a great opportunity to get more involved with ARVO. We value expertise and passion from all members — including students. Members are typically appointed to three-year terms. ■

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## Meet the new Member-in-Training Board member



Anton Kolomeyer, PhD  
New Jersey Medical School

**A**nton M. Kolomeyer, PhD, was appointed by the ARVO Board of Trustees to be the first Member-in-Training (MIT) Board member. He attended his first Board meeting in Seattle in October 2011. He talked to *ARVONews* about his career and expectations as MIT Trustee.

**ARVONews:** Tell us about your career path so far.

**Kolomeyer:** After completing my undergraduate studies at Rutgers and Columbia Universities, I enrolled in an MD/PhD program at New Jersey Medical School (NJMS). I spent the first two years completing a rigorous medical school curriculum.

For my PhD thesis, I worked under the direction of Marco A. Zarbin, MD, PhD, FARVO, professor and chair of the Department of Ophthalmology and Visual Science. My thesis focused on characterizing the trophic factor secretion profile of retinal pigment epithelial cells with the hopes of applying this information towards slowing the progression of retinal degenerative diseases, such as age-related macular degeneration and retinitis pigmentosa. I am currently in my fourth year of medical school and interviewing for a position in an ophthalmology residency.

**ARVONews:** Why did you decide to apply for the MIT Board seat?

**Kolomeyer:** I have attended the last four ARVO annual meetings, and have always wondered how such a grand meeting comes together so smoothly. I was particularly excited when the email was sent out regarding the newly established MIT board position because I thought that, if elected, this opportunity would allow me to achieve an understanding of the inner workings of this organization. Additionally such a position would also allow me to network with potential

future colleagues and gain insight into this ever-evolving field through the eyes of the experts.

Having finished graduate school and three-and-a-half years of medical school, I believe that I am well suited to represent the ARVO Member-in-Training (MIT) community. Not only do I understand the frustration of applying for (and failing to secure) a research grant, but I also recognize the demands of medical school curriculum. Additionally, I have had first-hand experience in interacting with basic scientists as well as clinicians. Translational research relies on building relationships between skilled and meticulous researchers and clinicians with a keen understanding of disease pathophysiology and desire to help patients. I appreciate the importance of organizations such as ARVO in facilitating the transition of basic science breakthroughs into clinical application.

**ARVONews:** What are you hoping to accomplish during your time on the Board?

**Kolomeyer:** By the end of my term, I would consider having done an adequate job if, at the very least, I will have accomplished the following: 1) effectively initiated or represented MIT committee conceptions/ideas to the Board; 2) communicated successfully with the MIT community regarding Board proceedings and reassured the MITs that they are taken into account when major decisions are made, and 3) gained an understanding of the inner working of a large and diverse scientific organization, especially in terms of how decisions are made by a group of scientists and clinicians with different scientific backgrounds and academic priorities.

**ARVONews:** What sort of difference do you think the position can make to MIT members?

**Kolomeyer:** My position as a liaison to the ARVO MIT committee may facilitate more direct communication of the concerns and needs of the MITs to the ARVO Board. In turn, the proceedings, deliberations and decisions of the Board will be

communicated to the MIT community in a more swift and direct manner. I believe that these steps will result in improved understanding and may foster the development of new and exciting initiatives, which will not only benefit individual MITs, but also allow ARVO to grow as an organization.

**ARVONews:** What did you think of your first Board meeting?

**Kolomeyer:** I had almost no expectations for my first Board meeting, as I have never sat on a board of any kind. (I don't consider clubs in college and medical school as adequate preparation.) It was certainly an interesting, eye-opening and informative experience. I was impressed by the meticulous attention to detail by the meeting organizers, and that each and every section of ARVO has an equal voice irrespective of the number of members in that section. What struck me the most was how much expertise was brought to the u-shaped table, and the process by which a very lively and at times passionate discussion transitioned into a relative concordance in regard to some difficult decisions.

**ARVONews:** Do you have any thoughts you want to share about Seattle, either as a destination and/or as a venue for the ARVO Annual Meeting?

**Kolomeyer:** Seattle is truly an amazing city with many things to do and see, lots of restaurants to frequent and of course, a Starbucks around every corner. You will certainly not miss that French café [next to the Fort Lauderdale Convention Center] charging \$10 for a skinny baguette. In Seattle, the hotels are very close to the convention and city centers so you do not have to spend 45 minutes waiting for the drawbridge and wading through the Ft. Lauderdale beach traffic. These hotels are also on average \$20 – \$30 cheaper than in Ft. Lauderdale, and ARVO was able to secure a large block of \$99/night hotels for the MITs. All this and much more is accessible via highly functional local transportation. I cannot wait to be in Seattle for ARVO 2013! ■



## MARVO chapter affiliate hosts second clinical trials course

by Everardo Hernandez-Quintela, MD, MSc  
MARVO President

**S**ome 75 attendees took part in the second Principles and Concepts in Clinical Trials for Eye Researchers course in Mexico City last October. Participants included ophthalmologists, residents, scientists, statisticians, optometrists, among other disciplines.



Organizers facilitate small group sessions during the course.

MARVO was pleased to welcome ARVO faculty: David C. Musch, PhD, MPH, FARVO; Brenda W. Gillespie, PhD; Mae Gordon, PhD; Michael S. Ip, MD; Douglas A. Jabs, MD, MBA; and Paul VanVeldhuisen, PhD, all of whom helped make the one-day course truly excellent.

This course was jointly sponsored by ARVO and Mexico's National Association of Research in Visual Sciences (MARVO).

Colleges are already asking when and where the next course is going to be held. We look forward to continue bringing this event to our country. ■



Mexico Clinical trials course directors, back row: Francisco Beltran, MD, MARVO Officer. Middle row, from left: Douglas A. Jabs, MD, MBA, Faculty; Paul C. Van Veldhuisen, PhD, Faculty; David C. Musch, PhD, MPH, Course Director & Faculty; Everardo Hernandez-Q, MD, MSc, MARVO President; Michael S. Ip, MD, Faculty. Front row, from left: Jans Fromow, MD, MSc, MARVO Treasurer; Concepcion Santacruz, MD, MARVO Officer; Mae O. Gordon, PhD, Faculty; Narly Ruiz, MD, MARVO Officer; Brenda W. Gillespie, PhD, Faculty.



CHAPTER AFFILIATE

**ARVO-NED** — 2008  
Nijmegen, the Netherlands  
[www.oogheelkunde.org](http://www.oogheelkunde.org)

**Asociación de Investigación en Visión y Oftalmología (AIVO)**

— 2007  
Buenos Aires, Argentina  
<http://aivo.com.ar>

**Austrian Association for Research in Vision and Ophthalmology (AARVO)** — 2009

Vienna, Austria

**Brazilian Research Association of Vision and Ophthalmology (BRAVO)** — 2006

São Paulo, Brazil

**Chinese Congress of Research in Vision and Ophthalmology (CCRVO)**

— 2010  
Beijing, P.R. China

**Colegio Nacional de Investigación en Ciencias Visuales (MARVO)**

— 2010  
Mexico City, D.F., Mexico  
[www.mexarvo.org](http://www.mexarvo.org)

**Hungarian Association for Research in Vision and Ophthalmology (HARVO)** — 2007

Budapest, Hungary  
[www.harvo.org](http://www.harvo.org)

**India Eye Research Group – ARVO (IERG-ARVO)** — 2011

Hyderabad, India

**Israel Society for Vision and Eye Research (ISVER)** — 2006

Jerusalem, Israel  
[www.isver.org.il](http://www.isver.org.il)

**ARVO Italy (IT-ARVO)** — 2011

Catania, Italy

**South-East European Association for Research in Vision and Ophthalmology (SEE-ARVO)** — 2009

Sofia, Bulgaria ■



Year indicates year of affiliation  
See [www.arvo.org/affiliates](http://www.arvo.org/affiliates).

## Brazil chapter meeting features US and UK speakers, travel grant presentations

Solange R. Salomão, PhD, BRAVO President

The final selection of three recipients of travel grants to ARVO 2012 was among the highlights of the eighth Brazilian Research Association in Vision and Ophthalmology (BRAVO) Annual Meeting, which took place last August in Rio de Janeiro, Brazil. The meeting was part of the 26th Federation of Brazilian Societies in Experimental Biology (FeSBE) Annual Meeting.



From left: Maureen Neitz, PhD; Jay Neitz, PhD (both from University of Washington) and David Zenisek, PhD (Yale University) having a break at the coffee shop in Rio de Janeiro

BRAVO has awarded US\$1,000 travel grants to the ARVO Annual Meeting since 2003, with the support of Allergan Laboratories of Brazil. The awards aim to encourage young scientists to submit abstracts for and attend ARVO meetings, as well as to improve their scientific background and networking.

The August meeting included a day-long pre-FeSBE BRAVO session devoted to research scientists and clinician scientists in the field of visual sciences and ophthalmology and a general FeSBE program, to which BRAVO contributed with lectures of invited international guests.

The exclusive BRAVO section of the meeting with 80 attendees featured Jay Neitz, PhD (University of Washington) as the keynote speaker with the lecture “Relative Activity of the L and

M Cone Photoreceptors and the Cause and Prevention of Myopia.”

Other international speakers were:

- David Zenisek, PhD (Yale University): Neurotransmitter Release at the Retinal Ribbon synapse
  - M. Francesca Cordeiro, MD, PhD (University College London): Apoptosis *in vivo*: DARC (Detection of Apoptosing Retinal Cells)
  - Maureen Neitz, PhD (University of Washington): Genotype-Phenotype Correlations in Inherited Red-Green Color Vision Defects
  - Victor Perez, MD (Bascom Palmer Eye Institute, University of Miami): Advances to Understand and to Treat Rejection in Cornea and Limbus Grafts in Ocular Surface Diseases
- As part of the FeSBE meeting, which had more than 4,000 attendees, BRAVO speakers took part in a variety of sessions:
- Maureen Neitz, PhD: Curing Color Blindness in a Primate Using Gene Therapy (Gene therapy session)
  - David Zenisek, PhD: Molecular and Cellular Aspects of Neurotransmitter Release from the Analog Ribbon-Type Synapses of the Retina (Signal transduction in sensory, hormone and drug receptors session)
  - M. Francesca Cordeiro, MD, PhD: Alzheimer’s and Neurodegeneration — Can We Use the Retina as a Window on to the Brain? (Neurodegeneration session)

Brazilian BRAVO members participated in sessions on Function and Dysfunction of Sensorial Systems; Advances in Angiogenesis; Signal Transduction in Sensory, Hormone and Drug Receptors; Novel Mechanisms Involved in the Neurobiology of Pain and its Control; and Aging: from Bench to Bedside.

The meeting was sponsored by a grant from the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES, Brasília, Brasil), a major grant agency from the Brazilian federal government and a special donation from Allergan do Brasil. The full program is at [www.bravo.org.br/Noticias.html](http://www.bravo.org.br/Noticias.html). ■



Back row, from left: Maureen Neitz, PhD; Jay Neitz, PhD (both from University of Washington) and David Zenisek, PhD (Yale University); front row: Dora F. Ventura, PhD (BRAVO Vice-President); Solange R. Salomao, PhD (BRAVO President); Adriana Berezovsky, PhD (BRAVO Secretary) and Christina Joselevitch, DVM, PhD (BRAVO Annual Meeting Organizing Committee)

## Indian Eye Research Group becomes ARVO Chapter Affiliate

By Inderjeet Kaur, PhD

Over 230 attendees gathered for the 19th annual meeting of the Indian Eye Research Group, during which delegates unanimously agreed to a name change to mark the group's participation in ARVO International Chapter Affiliate program. The group is now known as Indian Eye Research Group -ARVO-India Chapter (IERG-ARVO-IC).

The July meeting was organized jointly by the LV Prasad Eye Institute (LVPEI) and the

sary, "Approaches to Understanding the Biology of Diseases" drew over 100 delegates from across the country. Six scientists, all women, who have done notable work in disease-based biology presented their research, each highlighting her approaches to studying a particular aspect of her chosen disease and its implications in diagnostics and therapeutics.

In agreeing to the name change, delegates at the general session also decided that research



Centre for Cellular and Molecular Biology at LVPEI's Kallam Anji Reddy Campus in Hyderabad, and included 184 presentations (12 invited talks, 45 papers and 116 posters) from all over India.

Highlights included:

- A special evening lecture, "Next generation DNA sequencing" followed by a gala dinner
- The 14th Bireswar Chakrabarti Oration, "Protein Aggregation in Cataract," delivered by Usha P. Andley, PhD, Department of Ophthalmology and Visual Sciences, and Biochemistry and Molecular Biophysics, Washington University School of Medicine, St. Louis, Mo.
- The First Prof. D. Balasubramanian Oration, delivered by Prof. Robert C. Augusteyn from Vision CRC, Sydney, Australia

A special one-day symposium prior to the meeting commemorated LVPEI's 25th anniversary,

which has been the hallmark of IERG since its inception in the early 1990s, will continue to be key to planning IERG-ARVO-IC activities.

IERG-ARVO-IC will operate as a wing of the Hyderabad Eye Research Foundation, led by a 10-member council. There will be an annual membership subscription, plus registration fee for each annual meeting. ■



## ARVO Awards

### 2013 Call for Nominations

#### For young investigators

- **Cogan Award** — Recognizes 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.
- **AFER/Pfizer Ophthalmics/Carl Camras Translational Research Awards** — Recognizes excellence in research, scientific discoveries, concepts and technologies that have led to, or have the promise of leading to, clinical applications, by an individual no more than 45 years old. Awards are worth \$10,000.

#### For career achievement

- **Proctor Medal** — Honors outstanding research in the basic or clinical sciences as applied to ophthalmology.
- **Friedenwald Award** — Honors outstanding research in the basic or clinical sciences as applied to ophthalmology.
- **Weisenfeld Award for Excellence in Ophthalmology** — Honors distinguished scholarly contributions to the clinical practice of ophthalmology.
- **Kupfer Award** — Honors distinguished public service on behalf of eye and vision research.
- **Special Recognition Award** — Honors outstanding service to ARVO or the vision research community.

**Deadline is March 1, 2012.** Nominations must include a detailed nomination letter, a CV and three brief letters from colleagues who support the nomination. Nominations must be completed online at [www.arvo.org/awards](http://www.arvo.org/awards).



### ARVO reaches record-high membership; new benefits offered

In 2011, ARVO reached new heights with a record-high membership of 12,794. To better serve all our new and existing members, ARVO has increased your benefits by offering more educational courses, an expanded webinar program and a newly enhanced online members-only area on the ARVO website with additional resources.

These resources include an updated Member Directory, direct access to *IOVS* and *JOV*, account management tools and the all new Web Library. As the eye and vision research community continues to grow worldwide, these ARVO resources will enable members to make strong connections at a global level.

- **Enhanced Member Directory:** The directory continues to give members a great resource for finding colleagues around the world. Recent upgrades include additional search criteria, paving the way for better results. The directory is already one of the most-accessed member benefits and with these improvements should prove an even more valuable resource.
- **Direct access to journals:** Login to *IOVS* and *JOV* right on the ARVO website. Previously, members had to login in separately to access the journals. With the change to single sign-on, you only need to enter your ARVO member ID and password once.
- **Manage your ARVO account:** New account management functionality lets you review and print outstanding invoices and receipts from previous purchases, including membership renewals and meeting registration fees from any time in the past five years. We hope it helps you manage your ARVO account and gives you quick access to documentation you need.
- **Web Library:** This addition to the members-only area is a repository for all member-only publication and resources, including the *ARVO Funding Guide*, the *ARVO International Advocacy Handbook* and the *Handbook for the Use of Animals in Biomedical Research*. If you haven't had a chance, please login to the ARVO website at [www.arvo.org](http://www.arvo.org) and explore these enhancements. ■

# RETINA CILIOPATHIES

## FROM GENES TO MECHANISMS AND TREATMENT

14<sup>th</sup> VISION RESEARCH CONFERENCE

### Two-day satellite meeting prior to ARVO 2012

In recent years numerous mutations in genes encoding proteins involved in development, structure, function and maintenance of photoreceptor cilia have been linked to human disease. The preARVO 2012 satellite meeting will review the latest developments in retina ciliopathies including retinitis pigmentosa, Leber congenital amaurosis, and Usher/ Bardet-Biedl syndromes. We will focus on genes involved in intraflagellar transport, photoreceptor outer segment morphogenesis, molecular motors and novel animal models that closely mimic human ciliopathies. Main emphasis is on human/mouse genetics, next generation DNA sequencing, proteomics, biochemistry, and cell biology.

#### Organizers:

**Wolfgang Baehr**, *University of Utah, USA*

**Hemant Khanna**, *University of Massachusetts Medical School, USA*

**Marius Ueffing**, *University of Tübingen, Germany*

**Samuel M. Wu**, *Baylor College of Medicine, USA*

#### Call for Posters

Abstracts are invited for poster presentations on the topics below. Submit abstracts using the online abstract submission system on the conference website by **3 February 2012**. Selected quality posters will be chosen to present a 10-minute oral presentation based on their poster and latest results.

4-5 May  
**2012**  
FORT LAUDERDALE  
FLORIDA, USA

### Sessions

- |                        |   |
|------------------------|---|
| <b>Opening Speaker</b> | <b>Cilia, IFT and disease</b><br>George Witman, <i>University of Massachusetts, USA</i>   |
| <b>Session 1</b>       | <b>Vesicular trafficking in photoreceptors and RPE</b><br>Chair: Miguel C. Seabra, <i>Universidade Nova de Lisboa, Portugal</i> |
| <b>Session 2</b>       | <b>Intraflagellar transport in photoreceptors</b><br>Chair: Eric A Pierce, <i>Harvard Medical School, USA</i>                   |
| <b>Session 3</b>       | <b>Photoreceptor disk morphogenesis</b><br>Chair: Ching-Hwa Sung, <i>Cornell University, USA</i>                                |
| <b>Session 4</b>       | <b>Non-syndromic retinal ciliopathies</b><br>Chair: Marius Ueffing, <i>University of Tübingen, Germany</i>                      |
| <b>Session 5</b>       | <b>Syndromic ciliopathies</b><br>Chair: Hemant Khanna, <i>University of Massachusetts, USA</i>                                  |
| <b>Session 6</b>       | <b>Ciliary systems biology</b><br>Chair: Ronald Roepman, <i>Radboud University of Nijmegen Medical Centre, The Netherlands</i>  |
| <b>Session 7</b>       | <b>Animal models of retinal ciliopathies</b><br>Chair: Tiansen Li, <i>NEI, USA</i>  |

This meeting is co-sponsored by Vision Research, Elsevier and ARVO



[www.visionresearch-conference.elsevier.com](http://www.visionresearch-conference.elsevier.com)



## 2012 Prevent Blindness America Investigator Award

**Deadline: March 30, 2012**

The 2012 Prevent Blindness America Investigator Award provides funding for research investigating public health related to eye health and safety. Applications will be accepted in the following priority areas in adult vision, children's vision, or eye injury: Burden/economic aspects of eye disease/vision loss on society; Best practices to integrate vision screening/follow up care to system care access; and Vision program effectiveness/evaluation.

All research grants must promote the core mission of Prevent Blindness America: preventing blindness and preserving sight. Basic laboratory science research will not be supported under this program.

Grants are for a one-year period, up to \$30,000, reviewed by ARVO and commence on July 1, 2012.

For more information, visit: [www.preventblindness.org/investigatorawards](http://www.preventblindness.org/investigatorawards). ■

## Congratulations! 2012 Class of Fellows

ARVO is pleased to honor the following 29 members who have earned the honor of Gold Fellow or Silver Fellow for their years of dedication and contributions to the Association.

### Silver Fellows

James J. Augsburger  
Scott E. Brodie  
Sylvain Chemtob  
Sarah E. Coupland  
Jeffrey L. Edelman  
Gordon L. Fain  
Juana Gallar  
Irene Gottlob  
David Hicks  
Andrew J.W. Huang

Marc Kantorow  
Andrew J. Quantock  
Seang-Mei M. Saw  
Ursula Schmidt-Erfurth  
Shigeto Shimmura  
Trefford Simpson  
Stanislav I. Tomarev  
Tetsuya Yamamoto

Jeffrey H. Boatright  
Ann E. Elsner  
Igal Gery  
Timothy S. Kern  
Timothy W. Olsen  
John S. Penn  
William K. Stell  
Anand Swaroop  
Andrew B. Watson  
David R. Williams

### Gold Fellows

Suraj P. Bhat

These Fellows will be recognized at the 2012 ARVO Annual Meeting, May 6 – 10 in Fort Lauderdale, Fla. These members earned points by serving as committee members, program organizers, journal reviewers and editorial board members, as well as in other capacities. Gold Fellows must attain 60 points and Silver Fellows must earn 50 points. For a full description of how to earn Fellows points, please see [www.arvo.org/awards/fellows](http://www.arvo.org/awards/fellows). ■

## IM section members present young investigator awards

**The Raniyah Ramadan Award** is a new award that will be given to the **best ocular microbiology** poster or paper presentation at the ARVO Annual Meeting. This award honors the memory and scientific contributions of our colleague and friend, Dr. Raniyah Ramadan, who passed away this summer following a hard fought battle with cancer. Dr. Ramadan's family is recognizing her enthusiasm for vision research by providing this award to young investigators attending ARVO, a meeting at which Raniyah presented and enjoyed attending the past several years.

**The Cora Verhagen Prize** was instituted in 1995 to honor the memory and scientific contributions of our colleague Cora Verhagen by awarding the **best ocular immunology** poster or paper presentation at the ARVO Annual Meeting. The award is supported by Cora's family and donors to the Verhagen fund at the Streilein Foundation of Ocular Immunology.

These awards are judged independently at the current 2012 ARVO Annual Meeting and will be awarded at the 2013

ARVO Annual Meeting in Seattle. The first prize winners will each receive an award of \$250, a traveling plaque with their names inscribed along with those of previous awardees and a bronze medallion. The second prize winners will each receive an award of \$150.

Applicants must be a trainee graduate student or postdoctoral fellow presenting a first author poster or paper at the 2012 ARVO Annual Meeting in an **IM sponsored session**. Excluded are individuals with permanent faculty appointments, employees of companies or those who received their doctorates more than three years ago.

To apply, email by April 6 your name, institute, the name of your mentor and the title of your ARVO presentation. Place the name of the award (Ramadan or Verhagen) in the subject line.

Raniyah Ramadan award in microbiology:  
Michelle C. Callegan at  
[Michelle-Callegan@ouhsc.edu](mailto:Michelle-Callegan@ouhsc.edu)

Cora Verhagen award in immunology:  
Andrew W. Taylor at [awtaylor@bu.edu](mailto:awtaylor@bu.edu) ■

## Upcoming events



### ARVO Webinars

Take advantage of this exciting new learning opportunity!

Webinars are educational programs delivered via the Web. In the comfort and convenience of your own office or home, you will gain insight, best practices and practical tools from experienced professionals. You can also earn CME credits.

The following one-hour webinars, part of ARVO's Clinical Trial Education Series, are now available for purchase on-demand. ARVO members pay just \$79 for each.

- Elements of the Clinical Trial Protocol
- Randomization Strategies for Large, Multicenter Clinical Trials\*
- The Prevention and Treatment of Missing Data in Clinical Trials\*
- Challenges in Designing Small Clinical Trials\*

\*Cosponsored by:



 See [www.arvo.org/ctes](http://www.arvo.org/ctes) for information or contact Ellyn Terry at [eterry@arvo.org](mailto:eterry@arvo.org)



### 8th ARVO-Pfizer Ophthalmics Research Institute

May 4 – 5, 2012  
Fort Lauderdale, Fla.

Funded by the ARVO Foundation for Eye Research through a grant from Pfizer Ophthalmics, the 2012 Research Institute (the last in a series of multi-disciplinary research conferences) will focus on Aqueous Humor Outflow: Dynamics and Disease.

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

Do you have an idea for a conference or webinar? Contact Ellyn Terry at [eterry@arvo.org](mailto:eterry@arvo.org).



### 10th ARVO/ISIE Imaging Conference

Saturday, May 5, 2012

Fort Lauderdale, Fla.

Attend this one-day conference focusing on state-of-the-art technology in ophthalmic imaging. Learn scientific principles, discuss clinical applications, explore new research and recent advances in imaging, and meet with vendors who provide the latest products and services.



See [www.arvo.org/isie](http://www.arvo.org/isie) or contact Rhonda Williams at [rwilliams@arvo.org](mailto:rwilliams@arvo.org).

### Upcoming conferences

ARVO conferences are small-scale, highly interactive meetings that focus on specific, significant topics in ophthalmic research. Attendees say this intensive approach facilitates deeper learning about each topic, so they return to their labs, patients and colleagues with practical, relevant insights that they can apply to their work.



### Drug and Gene Delivery to the Back of the Eye: From Bench to Bedside

June 15 – 16, 2012,  
University of Colorado  
Aurora, Colo.

This conference will focus on topics related to current and emerging technologies for drug/gene delivery for the treatment of diseases of the back of the eye, and will address clinical successes and failures in delivering drugs to the eye's posterior segment. It will integrate the topics of nanotechnology; current and emerging drug and gene delivery systems; and smart delivery strategies to address current challenges and future opportunities in treating blinding diseases.



See [www.arvo.org/drug-gene](http://www.arvo.org/drug-gene) or contact Rhonda Williams at [rwilliams@arvo.org](mailto:rwilliams@arvo.org). ■



## Imaging Conference

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

May 5, 2012  
8am – 5:45pm  
Fort Lauderdale, Fla.

Abstract submission open through February 13

[www.arvo.org/isie](http://www.arvo.org/isie)

## Members weigh in on changes to human subject protection regulations

By James Chodosh, MD, MPH, FARVO  
Member, Advocacy Committee and Research Agency  
Subcommittee chair

The Department of Health and Human Services (HHS) recently requested comments on how the 20-year-old “Common Rule” (HHS Regulation 45 CFR part 46), which regulates human research subjects, can be updated.

Proposed changes include:

- improving protection of subjects from informational risks
- eliminating continued review of expedited studies
- improving and standardizing informed consent forms
- mandating a single Institutional Review Board (IRB) for multi-center domestic studies
- extending HHS regulations to all human subject research performed at institutions that receive federal funding.

ARVO’s Ethics and Regulations in Human Research Committee along with a panel of clinical trial planning experts prepared the comments below — with input from the Clinical and Epidemiological Section — on a controversial proposal to have one IRB of record for multi-center clinical trials.

Uniform standards that protect human subjects from informational risks are needed. Although some IRBs review risks to privacy/confidentiality, IRBs were not designed for this purpose.

Minimal risk research (on an approved HHS list that is regularly updated) should be eligible for expedited review with one reviewer instead of a convened IRB (71% support).

Expedited studies should not require continuing review unless the reviewers at the time of the review determine a need and document why (100% support).

HHS should mandate one central IRB of record for domestic multi-center research (83% support).

Members suggested ways to improve and standardize informed consent and reduce regulatory burdens that don’t increase human subject protections.

The HHS Office of Human Research Protection will be posting progress on the new regulations. Read the full version of ARVO comments at [www.arvo.org/advocacy](http://www.arvo.org/advocacy). ■

## Bergmanson: Aiming to balance progress and safety

Three members have been appointed to three-year terms as ARVO representatives to the American National Standards Institute (ANSI Z80): Elmer Tu, MD; Gerald McGwin, Jr, PhD; and Jan Bergmanson, OD, PhD, PhD(hc), DSc, FCOptom, FAAO.

Bergmanson recently spoke to ARVONews about ophthalmic standards development.



Jan Bergmanson,  
OD, PhD, PhD(hc),  
DSc, FCOptom,  
FAAO

**ARVONews:** Why did you choose to participate in ANSI Z80?

**Bergmanson:** On one hand, we live in a world with perhaps too many government regulations, which can stifle progress. On the other hand, the safety of the public is a foremost concern. It is rewarding to contribute to the successful compromise between these two opposing powers.

**ARVONews:** Why is it important?

**Bergmanson:** It is important that ARVO — a multi-disciplinary, scientific, apolitical society — is involved and is seen to be involved in matters of public safety and the establishment of scientifically based and meaningful standards.

**ARVONews:** What did you learn that you were not aware of before attending the meeting?

**Bergmanson:** I was impressed by the number of dedicated and knowledgeable experts present at the various subcommittees. I also learned that the act of generating a new standard is a lengthy process involving many different people representing several different aspects and interests of the ophthalmic field.

**ARVONews:** Provide one example of a discussion topic of relevance to ARVO.

**Bergmanson:** The Nonprescription Sunglasses & Fashion Eyewear discussion focused on LED light sources and their effect on visual perception. The lighting industry is converting to LED designs for lights found in road signals and automobiles. All new road signals will have LED lights, which will shift the peak emittance slightly in the visible spectrum, when compared with current non-LED signals.

The question raised concerned people who had blue-blocking IOLs. With multifocal over-the-counter spectacles to be marketed in the future, there is a need for ANSI to identify the effect a tint on such spectacles may have on people’s ability to safely operate a vehicle when they have blue-blocking IOLs.

The same question also applies to pilots of airplanes. With my background in ocular transmittance, I will follow this debate with interest and will provide input on any decision on this matter, since I volunteered to be appointed to a subgroup working on this issue. ■



## Comparing U.S. and E.U. animal regulations

By Jeetendra Eswaraka, DVM, PhD, Animals in Research committee

**R**ecently, both the European Union (E.U.) and the U.S. have revised animal research regulations, and those revisions are currently being implemented. Regulations in both the E.U. and the U.S. mandate alternatives to animal testing (when available) as well as qualified animal care using science-based standards, and call for minimizing pain and suffering.

However, the two systems differ in how compliance is enforced. Europe uses a centralized approach. U.S. institutions have local oversight with periodic federal inspections to assess compliance.

### E.U. directive

The E.U. Parliament passed a directive in 2010 to harmonize laws across member nations and ensure a level playing field across the research community (academia and industry). This overarching regulation provides minimum standards, while allowing member states like the U.K. to maintain existing regulations. It is implemented separately by E.U. states.

For the first time, the directive covers cephalopods. Independently feeding larvae and mammalian fetuses in the last third of gestation are covered, but there is no coverage of the use of eggs.

Non-human primate research is restricted to procedures for avoiding, preventing, diagnosing or treating debilitating or life-threatening clinical conditions in humans, which impacts pharmaceutical toxicology tests. There is a proposal to use only F2 progeny of primates bred in captivity. Great apes cannot be used in procedures unless such research is essential for species preservation or in relation to an outbreak of clinical disease in humans that has no alternative model.

Post-anesthetic pain in rodents must be treated with analgesics. Procedures that cause long-lasting severe pain or distress that cannot be ameliorated is not permitted in rodents, which restricts the use of pain research models.

Animal use has to be authorized and is granted up to five years. Documentation

should be maintained for three years from the project expiration date.

Member states have until January 2013 to implement the directive. By January 2017, they must adopt guidelines on European Treaty Series cage size, temperature and relative humidity, which are expected to impact the cost of rodent breeding and bird housing.

### U.S. Guide

The U.S. Office of Laboratory Animal Welfare (OLAW) is implementing the 8th edition of the Guide for the Care and Use of Laboratory Animals (Guide), effective January 1, 2012. Prior to this decision ARVO and other members of the scientific community expressed concerns that portions of the revised Guide read more like regulations than guidelines, compared with the earlier edition. Some 70% of respondents to a public request for feedback expressed concerns about the impact on budgets; 60% of respondents expressed concerns about changes to cage sizes and other housing specifications. OLAW responded to these concerns in position statements that explain expectations for institutional implementation. "Assured institutions must complete at least one semiannual program review and facility evaluation using the 8th edition of the Guide as the basis for evaluation by December 31, 2012. It is not required that all necessary changes be completed by December 31, 2012, but rather that an evaluation must be conducted and a plan and schedule for implementation of the 8th edition of the Guide must be developed by December 31, 2012."

ARVO'S Animals in Research Committee (ARC) statement about Guide implementation is posted as comment #704 on the OLAW website ([olaw.nih.gov](http://olaw.nih.gov)). ARC is responding to the public request for feedback on the Position Statements. Public comments are due to NIH by January 30, 2012. Feedback for inclusion in an ARVO statement can be submitted to [baustion@arvo.org](mailto:baustion@arvo.org) through January 15, 2012. ■

## Petrash speaks on realities of shrinking research support

**F**uture cuts in government funding will require increased flexibility from scientists and their institutions, Mark Petrash, PhD, FARVO, recently told members of the American Association of Eye and Ear Centers of Excellence (AAEECE).

AAEECE members, who include leaders and administrators from hospitals and research institutions worldwide, share many of the same challenges in stretching limited resources to support research.

Petrash, who is ARVO's immediate past president and chair of the Advocacy Committee, gave a talk entitled "The Reality and Future of Restrictions on Research Grants."

Changes to federal funding policies currently under discussion could include new limits on the size and number of research project grants and lowered caps for principle investigator salary support, he explained.

Investigators should be open to new support mechanisms that are playing out in some areas. For example, an increasing number of large pharmaceutical companies have downsized their in-house research teams, and instead are now investing in university-based research to replenish the new drug pipeline. The U.S. Department of Defense is targeting protection and rehabilitation of the eye.

Petrash said that in light of budget pressures and uncertainties surrounding the funding climate, the new reality of eye and vision research is that scientists and their home institutions must be ever more creative in finding ways to protect their investments in research teams and the infrastructure needed to sustain cutting edge research.

Economies periodically experience growth and contraction, and many economies that support research are currently experiencing the effects of financial contraction, said Petrash. If history is our guide, we can expect the pendulum to swing back toward expansive support of research. It is incumbent on us to persevere through the lean times and redouble our efforts.

The research community has been through this before, Petrash concluded, and as before, we will come out of it stronger and more resolute in our mission to improve lives through research. ■

## Congress cuts defense vision funding

The FY2012 spending bill funds the Peer Reviewed Medical Research-Vision (PRMR-Vision) line in Department of Defense (DOD) appropriations at \$3.2 million, a 20% cut from the FY2011 funding level of \$4 million. This cut applied to most Defense Health Programs, except for orthopedics and traumatic brain injury (TBI) research.

The National Alliance for Eye and Vision Research (NAEVR) had requested a funding level of \$10 million, highlighted in the October 10 editions of *Military Times* and *USA Today*.

Recently, NAEVR announced that its Board of Directors had approved funding for a study of the lifetime costs to the Department of Defense, the Department of Veterans Affairs (VA), and society of blindness and vision impairment as a result of battlefield injuries. NAEVR plans to release the study in first-quarter 2012 for use in FY2013 advocacy.

Despite the cut, NAEVR is encouraged that vision researchers may receive more than \$3.2 million once the FY2012 program is fully implemented. For example, despite the \$4 million FY2011 appropriation, the DOD's Telemedicine and Advanced Technology Research Center (TATRC) is supporting at least \$8.7 million of awards, due to additional funding made available by other DOD programs as a result of the past quality and responsiveness of vision research proposals. ■

## Funding scorecard: At least \$5 million more for vision researchers

### Congress finalizes FY2012 appropriations with an NIH/NEI increase

In mid-December, the House and Senate voted to adopt the conference agreement for a nine-bill FY2012 spending package that finalizes the appropriations process.

Although the agreement funds the National Institutes of Health (NIH) at a \$30.7 billion program level in FY2012 (see funding chart) — a \$299 million increase over FY2011 — it will be subject to a 0.189% across-the-board rescission within the Department of Health and Human Services (DHHS).

The National Eye Institute (NEI) is funded at \$704.043 million, an increase of \$3.2 million or .46% over the FY2011 level of \$700.8 million. NEI's net of the 0.189% rescission yields FY2012 funding at \$702.7 million. Other highlights of the agreement include:

- The conferees strongly urge NIH to maintain extramural research at a level of at least 90% of the budget, as in most recent years, and to establish safeguards to ensure the percentage of funds used to support basic research across the NIH is maintained.
- The bill approves the National Center for Advancing Translational Sciences (NCATS). The conferees anticipate that the mission of NCATS to accelerate the therapeutics development and implementation process will complement, not compete with, the efforts of the private sector. They also encourage NCATS to study and foster private sector models that accelerate commercialization of therapies to patients.
- The agreement funds implementation of the Cures Acceleration Network (CAN) within NCATS at \$10 million, primarily to support the CAN Board and related activities.

The conferees request NCATS to charter an Institute of Medicine (IOM) work group to review, evaluate and identify issues related to CAN authority and provide a report for the CAN Board to help it

identify ways to accelerate and expand the number of cures.

- The conferees address several specific NIH programs that will form the cornerstone of NCATS, including the Clinical and Translational Science Awards (CTSA) program, the Therapeutics for Rare and Neglected Diseases (TRND) program, and the Institutional Development Awards (IDeA) program.
  - Since CTSA's now represent an investment of half a decade of innovation in translational research, the conferees urge NIH to support a study by the Institute of Medicine that would evaluate the program and recommend any necessary changes. Conferees request study results by 18 months after enactment of the bill.
  - They also request an annual report of the TRND program by July 1, 2012, as well as a report addressing concerns about IDeA program eligibility to be included in the FY2013 congressional budget justification.
- The conferees direct NIH to conduct a three-year pilot study to assess the viability of third-party reimbursement for clinical services that are incurred in NIH research facilities.
- The conferees direct the NIH to conduct a trans-NIH review of the applicability of the recommendations made in a 2010 study by the IOM as to how the institutes and centers could better design, implement and manage clinical trials. They request this study by Sept. 30, 2012. ■

	FY2010 Final**	FY2011 Final	FY2012 Final	FY2012 Net of .189% Rescission
<b>NIH*</b>	<b>\$30.7B</b> +2.3%	<b>30.4B</b> -1.0%	<b>30.7B</b> +1%	<b>\$30.64B</b> +.81%
<b>NEI</b>	<b>\$706.7M ^</b> +2.6%	<b>\$700.8M ^^</b> -1.0%	<b>\$704.04M</b> +.46%	<b>\$702.71M</b> +.27%

\* Program level — Net of transfers

\*\* Absent ARRA funding (\$175M for NEI over two fiscal years, FY2009/2010)

^ \$707.04M appropriation reduced by transfer of programs to National Library of Medicine

^^ NEI baseline restated as \$700.25M due to NCATS transfers

## NEI program to help small businesses

### navigate FDA approval

By Matthew McMahan, Senior advisor for translational research, National Eye Institute

A major part of the National Eye Institute's (NEI) mission is to support the translation of basic research discoveries into products and services to prevent and treat blindness and vision loss. One of the programs in the NEI extramural grant portfolio, the Small Business Grant Program, provides funding for companies to convert innovative ideas into real products that help people.

The program has three phases. The first provides funding for companies to establish proof of concept, or to develop a prototype. The second phase funds the development of an actual product that is safe and effective. In the third phase, companies come up with their own financing to commercialize their product or service.

Many of the companies are developing drugs or medical devices that require regulatory approval from the Food and Drug Administration (FDA). This is a major hurdle for these small companies, most of which don't have any experience navigating the FDA approval process.

To improve the success rate of companies funded through the Small Business Grant Program, NEI will be starting a new regulatory assistance program. Companies that are selected will receive 30 hours of high quality regulatory consulting, provided by a well-established regulatory consulting firm, to assist them in developing a step-by-step plan for receiving FDA approval.

The program is modeled on a pilot program established by the National Cancer Institute (NCI). Close collaboration with the NCI has allowed NEI to benefit from their experience in rolling out the program and to save time and costs.

NEI will release a request for applications soon, receive applications in February, and provide the first awards in March. NEI is optimistic that this program will speed up the process, and improve the success rate, of the companies who are developing ophthalmic drugs and devices to treat the blind and visually impaired. ■

## Members comment on NIH resource management

In times of budget constraints for NIH, ARVO members who participated in a request for comments showed the most support for limiting the value of awards as well as limiting total funding awarded to principal investigators (PIs).

ARVO's Advocacy Committee sought comments from members via *ARVOInsight*, the member e-newsletter, and a call directed to research chairs and research directors after NIH posted a request for feedback on these ideas for managing with fewer resources:

- Bottom out success rates. Do nothing. Let the system correct itself.
- Limit the number of awards per PI.
- Limit the total dollar amount per PI.
- Reduce the dollar amount of awards.
- Reduce the total number of awards.
- Institute salary caps.

Along with member comments on these ideas, ARVO submitted a request to present public testimony at the next Scientific Management and Review Board (SMRB) meeting (sometime during first quarter of 2012).

The majority of member feedback came from senior members [professors/senior scientists (N=7/21)] or

research chairs/research directors (N=10/21). Few respondents supported taking no action. Ideas with the most support were limiting the total dollar amount/award and limiting the total dollar amount/PI, followed by limiting the number of awards/PI. Reducing the total number of awards was not supported.

Members suggested evaluating additional ways to manage the NIH budget, including:

- a combination therapy based on projected impacts on success rates
- reduce grant budget inflation
- standardize institutional indirect costs
- assess benefits/cost of tapping research project grants to fund new initiatives
- eliminate institutional costs of unnecessary regulatory burdens

ARVO urged NIH to retain maximum flexibility on funding decisions within institutes and centers (ICs). NIH-wide policies for management of resources may negatively impact some ICs more than others because the proportion of grants funded by different mechanisms varies greatly within each IC.

Read the full statement at [www.arvo.org/advocacy](http://www.arvo.org/advocacy). ■

## ARVO members on Capitol Hill



Emily Chew, MD, FARVO, of the National Eye Institute spoke about NEI's Age-Related Eye Disease Study (AREDS). Her talk was part of an ARVO/Alliance for Eye and Vision Research briefing recognizing International Age-Related Macular Degeneration Week 2011.



On October 13, ARVO joined the vision community in supporting Vision 2020/USA's World Sight Day 2011 briefing at which Kevin Frick, PhD of Johns Hopkins Bloomberg School of Public Health spoke about the cost-effectiveness of blindness prevention activities.



Paul A. Sieving, MD, PhD, FARVO  
Director, National Eye Institute  
National Institutes of Health



## Fostering translational research

**T**ranslational research has become the centerpiece of Francis Collins' tenure at NIH. His effort to create the National Center for Advancing Translational Sciences (NCATS) recognizes both the unprecedented potential and formidable challenges in developing novel therapies founded on basic research discoveries. The mission of the proposed center is to generate innovative methods and technologies to speed the development and delivery of new drugs, diagnostics and medical devices to patients. This, after all, is important to the mission of NIH.

NCATS will be formed by consolidating these existing translational programs: Clinical and Translational Science Awards (CTSA), the NIH Molecular Libraries Program, Therapeutics for Rare and Neglected Diseases (TRND), Rapid Access to Interventional Development (RAID), Office of Rare Diseases Research and the NIH-FDA Regulatory Science Initiative.

The realignment of these programs under the roof of a single center will further facilitate the development of powerful new tools and technologies that can be adopted widely by translational researchers, including those in vision and ophthalmology.

The National Eye Institute (NEI) has been working to ensure that translational research opportunities within vision research receive the attention they deserve. Incumbent in that process is the proper due diligence in reviewing clinical and translational grant applications for this highly collaborative and specialized endeavor.

As you all know, the NIH Center for Scientific Review (CSR) recently realigned the study sections from an anatomical organization toward a more scientific process that also accounts for the increasing emergence of translational science.

A clinical/translational study section, named the Diseases and Pathophysiology of the Visual System (DPVS), will have

an emphasis on translational research and consolidate clinically-related topics in ophthalmology. It will also offer the opportunity to concentrate and increase the critical mass of clinician-scientists serving as reviewers because the focus will be on clinical and translational research.

The Biology of the Visual System (BVS) Study Section will consolidate the review of basic research such as molecular, cellular and developmental, underlying studies specific to vision. Visual neuroscience, including studies of retinal circuitry and processing, has been consolidated in the new Sensory Perception and Cognition (SPC) Study Section.

Clinical trials submitted as cooperative agreement applications (U10s) and applications submitted in response to the NEI

Funding Opportunity Announcement, the NEI Translational Research Program on Therapy for Visual Disorders (R24), will continue to be reviewed by Special Emphasis Panels convened by the NEI Scientific Review Branch. Applications to the R24 translational mechanism

frequently present special issues of review, as these studies often reach far back into domains of basic research and require expertise across a broad swath of fundamental science areas in addition to reviewers with clinical knowledge.

The ability to convene these targeted panels assures that applications with translational or clinical implications are reviewed by the appropriate experts without requiring a long-term commitment to a study section. With an increasing recognition of the importance of translational research in developing vision-sparing therapies, NEI, along with the whole of NIH, is committed to devoting the required resources to assure the appropriate review of these applications and keep pace with the innovative opportunities developed by the vision research community.

Learn more about the restructure of the study sections at [www.arvo.org/insight/10-13-11](http://www.arvo.org/insight/10-13-11). ■

**The mission of [NCATS] is to generate innovative methods and technologies to speed the development and delivery of new drugs, diagnostics and medical devices to patients.**

## IOVS appoints new associate editors

**W**e are pleased that editorial board members Stephen C. Pflugfelder, MD, FARVO, and Russell van Gelder, MD, PhD, FARVO, have joined the IOVS team of associate editors.

Pflugfelder is professor of ophthalmology, the James and Margaret Elkins Chair, Department of Ophthalmology, at Baylor College of Medicine. His research interests involve cornea and external disease, cataract and refractive surgery, dry eye disease and prosthetic replacement of the ocular surface ecosystem (PROSE). Pflugfelder's term began on Nov. 1, 2011.

Van Gelder is the Boyd K Bucey Professor and Chair, Department of Ophthalmology at the University of Washington. Van Gelder and his research interests involve uveitis, ocular inflammation, non-visual ocular photoreception, pathogen detection and discovery, and animal models of human ophthalmologic disease. Van Gelder's term commenced on Jan. 1, 2012.

Additionally, we welcome our newest editorial board members:

- Lynn Gordon, MD, PhD, of the UCLA School of Medicine
- Suzanne Fleiszig, OD, PhD, FARVO, UC Berkeley
- Justine Smith, MBBS, PhD, FARVO, Oregon Health Sciences University
- Andrew Huang, MD, MPH, Washington University

### Thank you

I would like to extend a special thank you to the following for their dedicated service to IOVS, who, due to other commitments and/or retirement, have had to step down as editorial board members. These dedicated volunteers are the unsung heroes. They selflessly donate their time soliciting reviewers, evaluating reviews and making recommendations to the associate editors.

- Takashi Fujikado, Osaka University Medical School
- William Hauswirth, University of Florida
- Leonard Hjelmeland, University of California School of Medicine
- Kohji Nishida, Osaka University Graduate School
- Graziella Pellegrini, University of Modena and Reggio Emilia
- Hidenobu Tanihara, Kumamoto University Graduate School of Medical Sciences
- Steven Wilson, Cleveland Clinic Foundation

The annual thank you list was published in the December issue of IOVS and can be found at [www.iovs.org/content/52/13/9541.full](http://www.iovs.org/content/52/13/9541.full).

### Use your IOVS home page

We encourage readers to check [iovs.org](http://iovs.org) frequently for the latest updates. The IOVS home page is updated weekly and statistical reports are updated monthly.

### Perspective published

*Beyond AREDS: Is There a Place for Antioxidant Therapy in the Prevention/Treatment of Eye Disease?*

Renu A. Kowluru and Qing Zhong discuss the possible use of AREDS-based micronutrients for the treatment of diabetic retinopathy. doi: 10.1167/iovs.10-6768

### Special issue on glaucoma

Plans are under way to publish a special collection of articles with former editor-in-chief Gerald Chader. A publication date in February is expected. ■



Paul L. Kaufman, MD, FARVO

# IOVS

Investigative Ophthalmology  
& Visual Science

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The Association for Research in Vision and Ophthalmology



Andrew B. Watson, PhD

## Journal of Vision – 10 years and growing

Since its launch in 2001, *Journal of Vision* has grown to become a well-respected and established scholarly journal. Submission and publication rates are stable and review and production are doing well. The median over the last year for time to first decision is 47 days. Articles are published less than 40 days from acceptance. The journal can now host

letters to the editor, commentaries, review articles and comments/replies.

### Visits from mobile devices

There is clearly a rapid growth in this area, with an increase of 165% over 2010. See the table at right.

### Special 10th anniversary issue

We expect to publish 13 review articles to mark the journal's 10th anniversary. At the

time of going to press, 11 were published with two more in production. See [www.journalofvision.org/content/11/5.toc](http://www.journalofvision.org/content/11/5.toc) for the final list.

### Interactive demonstrations

The *Journal of Vision* is the first journal of its kind to host interactive demonstrations in the Computable Document Format (CDF) from Wolfram Research, Inc. The CDF Player can be downloaded for free from Wolfram.com. To view a demonstration of how this software works, readers

are invited to go to [www.journalofvision.org/content/11/5/10](http://www.journalofvision.org/content/11/5/10). ■

### Most common devices used for JOV viewing

Device	Visits
iPhone	6,938
iPad	4,259
Android	2,599
iPod	1,990
BlackBerry	446
SymbianOS	162
Windows	91
Nokia	39
Sony	34
Samsung	32



[www.journalofvision.org](http://www.journalofvision.org)

**2013 AFER/Merck Innovative Ophthalmology Research Award**

**Research categories**

- Diabetic eye disease
- Gene therapy in eye disease

**Awards in each category**

First-place prize — \$15,000  
Two second-place prizes — \$10,000

[www.arvo.org/merck-iora](http://www.arvo.org/merck-iora)

### No. of JOV articles submissions per year

Year	Submitted	Published
2001	68	13
2002	69	50
2003	143	75
2004	143	89
2005	154	79
2006	302	117
2007	449	189
2008	444	310
2009	489	312
2010	524	345
2011	(515)	(261)
Total	3,184	1,765

Numbers in parentheses are end-of-year projections

## ARVO launches new journal covering translational research

I am pleased to announce the launch of ARVO's third journal, *Translational Vision Science & Technology (TVST)*. TVST will be an online only, peer-reviewed journal emphasizing multidisciplinary research that bridges the gap between basic research and clinical care.

TVST's associate editors will be:

- Jayakrishna Ambati, MD, University of Kentucky
- Jennifer Elisseeff, PhD, Johns Hopkins University
- John Flannery, PhD, FARVO, University of California, Berkeley
- Scott Fraser, PhD, California Institute of Technology
- James Handa, MD, FARVO, Johns Hopkins University
- Henry Kaplan, MD, FARVO, University of Louisville
- Peng Khaw, MD, PhD, FARVO, University College London
- Mineo Kondo, MD, PhD, Mie University Graduate School of Medicine, Tsu, Japan
- James Leary, PhD, Purdue University
- Ido Perlman, PhD, Technion-Israel Institute of Technology
- Seang Mei Saw, MD, PhD, National University Health System, Singapore
- Ting Xie, PhD, Stowers Institute for Medical Research, Kansas City, Mo.

The journal will cover a broad spectrum of work, such as:

- stem cell
- animal models
- tissue bioengineering
- nanoengineering — virus
- nanotechnology
- nanoengineering — matrices
- nanosurgical environment
- refine algorithms
- phase 1 trials
- reverse translation

Subjects cover ARVO's 13 Scientific Sections and the four ARVO Cross-Sectional Groups, including low vision. Short updates on new developments and controversies will be published by invitation. TVST encourages the use of color, multimedia, hyperlinks, program code and other digital enhancements.

We are looking forward to receiving manuscripts from scientists and clinicians with diverse backgrounds ranging from basic chem-

istry to ophthalmic surgery, bringing together research that, until now, often has been published in journals other than those related to ophthalmology.

We will take advantage of every technological innovation afforded by digital data management to optimize TVST's computer-based reading experience.



Marco Zarbin, MD, PhD, FACS, FARVO

## tvst translational vision science & technology

The submission site is expected to open in the new year. For more information, email [tvstjournal@arvo.org](mailto:tvstjournal@arvo.org). ■

### Meet Editor-in-Chief Marco Zarbin

**M**arco Attilio Eugenio Zarbin, MD, PhD, FACS, was born in Milan, Italy, and raised in Baltimore, Md. He received his MD and PhD degrees from Johns Hopkins University and completed fellowships in vitreoretinal surgery and in medical retinal disease at the Wilmer Eye Institute. Zarbin was assistant chief of service at Wilmer and received American Board of Ophthalmology certification in November 1989.

Zarbin was named co-director of the retinal service at University of California, San Francisco in 1993 and appointed chair of the Institute of Ophthalmology and Visual Science, New Jersey Medical School and chief of ophthalmology at University Hospital in Newark, N.J. in 1994. He is currently a professor of ophthalmology and neuroscience at the New Jersey Medical School and holds the Alfonso A. Cinotti, MD/Lions Eye Research Chair in the Department of Ophthalmology.

As co-director of the Ocular Cell Transplantation Laboratory and the Center for Macular Degeneration Research at UMDNJ, Zarbin's research is focused on developing new surgical treatments for age-related macular degeneration, the leading cause of blindness in people over 55 in the U.S. and Western Europe. This research has been supported by grants from the National Eye Institute (NEI), the Department of Veterans Affairs, the Lincy Foundation and the Foundation Fighting Blindness. Zarbin has co-authored 134 peer-reviewed scientific publications, 57 book chapters, 145 abstracts, and has co-edited a book on AMD.

Zarbin served as an associate editor of *Investigative Ophthalmology and Visual Science (IOVS)* and is a vice chair of the Scientific Advisory Board of the Foundation Fighting Blindness. He is an ex officio member of the National Advisory Eye Council of the National Institutes of Health (NIH), serves on a number of committees for various organizations and chairs ARVO's Professional Development and Education Committee and the Retinal Cell Biology section of ARVO's Annual Meeting Program Committee. ■



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