

'09 Annual Meeting: Mixing science and fun



From left to right: Keynote speaker Hugh Taylor, MD, of the University of Melbourne; a student shares her research at a poster session; and a little Hawaiian flair at the ARVO social. For more highlights of the 2009 Annual Meeting, see page 12.

Annual Meeting attendees undaunted by flu fears

Despite extensive media coverage of the H1N1 virus outbreak, more than 10,100 ARVO members and others flocked to the 2009 Annual Meeting in Fort Lauderdale in May.

Only about 500 eye and vision researchers, mostly from Japan and Singapore, opted not to attend the Meeting due to the uncertainties surrounding the H1N1 virus as well as travel restrictions issued by their governments and institutions.

Also strong was the response to ARVO's post-Meeting survey, with about 10% of

attendees from all Scientific Sections providing feedback about the scientific program, publications and services. Ninety-four percent of respondents indicated that the Annual Meeting met or exceeded their expectations and 92% ranked the scientific program as excellent or good.

ARVO staff carefully reads all comments and we will continue to consider suggestions for improvements in all aspects of the Annual Meeting. ■

ARVO's e-learning initiative offers CME

ARVO has launched a portal to our educational resources, the new eLearning Center at www.arvo.org/elearning. Visitors can view lectures, workshops and symposia from past ARVO Annual Meetings.

In addition, the site offers opportunities to earn Continuing Medical Education (CME) credits as well as a system for users to track their own CME.

Robert Nussenblatt, MD, FARVO (National Eye Institute), who serves on the organizing committee of ARVO's Clinical Trials Education Series, talks about the features of the new system.

Q. Tell us more about ARVO's new eLearning Center.

Nussenblatt: The ARVO eLearning Center will be the central place for professionals in ophthalmology and vision science to access the latest educational resources the Association has to offer. Some programs will help professionals keep up to date with advances in the field, while others will enhance specific skills and knowledge.

Professionals can view synchronized PowerPoint presentations with audio and video from past meetings, including the

See [e-learning](#), page 20

Check out your 2010 Call for Abstracts enclosed



See who will receive the ARVO 2010 Awards.

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IOVS goes online only, starting January 2010. See details.

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Renew online now!

Don't wait until December! Every year we have members who wait to renew until the abstract deadline and are unable to complete their renewals on time. Don't miss presenting at the 2010 meeting because you missed the deadline! Renew now at www.arvo.org/renew using Visa, MasterCard or American Express. ■

Change that makes sense



Nicholas A. Delamere, PhD, FARVO

ARVO has changed considerably over the years. Obviously the Association has grown. Membership now exceeds 12,000 and close to half the group resides outside the US.

In the early days, abstracts for the presentations at the

Annual Meeting could be printed as a small booklet and mailed to attendees. Now, the Annual Meeting includes over 6,200 presentations and the abstract book is simply too big to print and deliver. When the abstract book grew too large, ARVO began mailing members a *Program Summary* and optional CD. More recently, the program was made available online.

At the Annual Meeting this year we heard some of you express concern about the *Program Summary* being distributed onsite, as opposed to mailed to attendees in advance. We also know some of you were surprised that we didn't produce a CD containing the Abstract Search and Itinerary Builder.

We listened, and the Board of Trustees carefully re-examined the available options. The CD will be brought back for members to pick up at the Annual Meeting. It will contain PDFs of all the sessions and a full table of contents linked to session names.

Given the prohibitive costs of shipping and the difficulty of timely delivery, we won't be mailing the *Program Summary* book ahead of the 2010 Meeting. Instead, the Online Abstract Search and Itinerary Builder will be online at www.arvo.org. [org/am](http://www.arvo.org/am) on February 26. And, the full contents of the *Program Summary* will be available online at www.arvo.org/am by March 30, 2010. You will be able to download (and print, if you wish) the

entire *Program Summary*. Or you can make your own customized version with just the sections you want. And you can still pick up the print version of the *Program Summary* when you arrive at the Convention Center.

Members have told us it's important to have searchable information available online. The complete 2009 Abstract Search will be archived permanently on the IOVS Web site. In fact, the Abstract Searches from the past four meetings are available online, and you can search every meeting abstract from 2002 through 2009 on the *Investigative Ophthalmology & Visual Science (IOVS) Web site*, www.iovs.org.

The move to online information is also very much in evidence at ARVO journals.

Like other academic publishers, ARVO has recognized the need for change. The *Journal of Vision* has been remarkably successful as an online-only journal, rapidly becoming one of the leading publications in the field. *IOVS* has seen a precipitous decline in demand for the print edition as people grew accustomed to reading the journal online.

ARVO can be a print publisher or an online publisher but not both, and the print side of the business is waning quickly. The high costs of print production could not be recovered from diminished print subscriptions. So, starting in January 2010 the print version of *IOVS* will be discontinued and the journal will be available online only.

For many of us, this change is difficult. Thumbing through the printed journal was enjoyable; it felt good to hold the journal and turn the pages. But the electronic format certainly has its advantages. Online-only production speeds the delivery of published research. It also enables *IOVS* to give readers access to supplementary materials. Read more about what's ahead for *IOVS* and *JOV* on page 29.

There are a few more technology-inspired initiatives on the horizon. ARVO is launch-

"Online-only production speeds the delivery of published research. It also enables *IOVS* to give readers access to supplementary materials."

ing a collection of Web 2.0 tools to help members network with each other and share information. These include updates from the "ARVOinfo" Twitter feed as well as posts, discussions, news and updates on the ARVO Facebook fan page and LinkedIn page. You can read and comment on the posts on the new ARVO Blog. Also look for videos on the ARVO YouTube channel, as well as photos on Flickr. More details about all of these networking tools are on page 28.

There will be changes as ARVO makes increasing use of today's technological tools. The hope is that these initiatives will help strengthen the high

quality, cutting-edge scientific discourse that has always characterized ARVO.

Give the new initiatives a chance. Try Twitter or look into Facebook. You might find comments from someone like me pondering the passing of the printed page and visits to the quiet, comforting library to read the latest articles. ■

Best



Nick D.

HARVO hosts second symposium in Budapest

The 2nd HARVO Symposium was held June 25-27 in Budapest in conjunction with the Hungarian Ophthalmological Society Annual Congress. ARVO member Wolfgang Drexler, PhD, gave the keynote lecture. The HARVO travel grant recipients from the 2008 ARVO Annual Meeting gave scientific presentations. ■



From right: ARVO Vice President Elect David Hunter, MD, PhD, meets with HARVO chairman János Németh, MD, PhD, DSc, and HARVO secretary Miklós Resch, PhD, to recognize the HARVO chapter and discuss ways to further support ARVO International Chapter Affiliates.

Austria launches affiliate chapter

A group of basic and clinical researchers in Austria recently formed a subgroup under the Austrian Ophthalmological Society aimed to increase the scientific interest in young vision researchers in Austria.

The subgroup was approved as the newest ARVO International Chapter Affiliate by the ARVO Board of Trustees in May. Through its affiliation with ARVO, the subgroup will focus on attracting and improving the quality of research in Austria. ■

Grants for chapter affiliates

The Alcon Foundation has generously awarded the ARVO Foundation for Eye Research (AFER) a three-year grant to provide matching grants to the International Chapter Affiliates. These will match the funds that ARVO provides to International Chapters each year.

The matching grant funds will support educational programming at chapter affiliate meetings and events. A portion of the funds may also be used to support a travel grant to the ARVO Annual Meeting. The first set of grants will be awarded this year. ■



ARVO International Chapter Affiliates

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

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

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

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

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

Visit www.arvo.org/affiliates to learn more. ■



ARVO/Alcon Early Career Clinician-Scientist Awards

The ARVO/Alcon Early Career Clinician-Scientist Research Awards are made available through a generous donation by Alcon Laboratories to the ARVO Foundation for Eye Research and support researchers who are committed to a career as a clinician-scientist (funds pending).

Congratulations to the 2009 award recipients:

Masayuki Ashikari, PhD
Nagoya City University

Michael V. Boland, MD, PhD
Johns Hopkins University

Yu-Guang He, MD
University of Texas Southwestern Medical Center

Alessandro Iannaccone, MD
University of Tennessee Health Sciences Center

Nobuyoshi Kitaichi, MD
Hokkaido University Graduate School of Medicine

Applications for the 2010 awards must be completed during abstract submission. ■

ARVO-AFER/Merck Innovative Ophthalmology Research Award

Thanks to a generous grant from Merck & Co., Inc., this series of biennial awards encourages young researchers to undertake investigative work in critical areas of ophthalmology. The 2009 recipients are:

First Place

- Glaucoma: Mike Karl, MD, University of Washington
- Back of the Eye Diseases: Chung-Jung Chiu, PhD, Tufts University, JM USDA Human Nutrition Research Center on Aging

Second Place

- Glaucoma: Wolf Lagreze, MD, University Eye Hospital, Freiburg, Germany
- Back of the Eye Diseases: Hyun Woong Kim, MD, PhD, Inje University College of Medicine, South Korea ■

Congratulations 2010 ARVO Awards Recipients

ARVO is pleased to announce the recipients of the 2010 ARVO Awards. Awards and lectures will be presented at the 2010 ARVO Annual Meeting, May 2-6, in Fort Lauderdale, Fla.

Proctor Medal



Richard H. Masland, PhD, Massachusetts General Hospital

Presented for seminal contributions to our understanding of the retina as a system that

processes images and transmits them to the brain and for enduring characterization of the diversity, numerosity, morphology and functional properties of many types of retinal cells in widely used preparations.

Friedenwald Award



Rachel R. Caspi, PhD, FARVO, National Eye Institute, NIH

Presented for fundamental and widely influential contribu-

tions to ocular and systemic immunology, including the understanding of uveitis as an autoimmune disease, the development and thorough characterization of animal models of autoimmune uveitis, and the nature of autoimmunity.

Weisenfeld Award



George L. Spaeth, MD, FARVO, Wills Eye Institute

Presented for lasting contributions to the gonioscopic evaluation of glaucoma and

the advancement of its treatment, and to the education of two generations of ophthalmic physicians.

Cogan Award



Jayakrishna Ambati, MD, University of Kentucky

Presented for exceptional contributions to the understanding

of the role of innate immune mechanisms and macrophages, in particular, in angiogenesis, including establishing that macrophages can be anti-angiogenic, and advancing their potential role in understanding mechanisms and treatment of age-related macular degeneration.

Special Recognition Award



Christina Fasser, Retina International

Presented for major contributions in the fight to cure retinal degenerative diseases, acting as spokesperson

for the needs of patients and information conduit between patients, investigators and funding agencies.

Distinguished Service Awards



Todd P. Margolis, MD, PhD, FARVO, University of California, San Francisco

Immediate Past President 2009-2010
President 2008-2009
IM Section Trustee 2004-2009



Don C. Hood, PhD, FARVO, Columbia University

Vice President 2008-2009
VI Section Trustee 2004-2009



Barry S. Winkler, PhD, FARVO, Oakland University

Vice President 2008-2009
RC Section Trustee 2004-2009

See www.arvo.org/awards ■

ARVO Awards

Call for Nominations

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

Proctor Medal

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

Friedenwald Award

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

Mildred Weisenfeld Award for Excellence in Ophthalmology

Distinguished scholarly contributions to the clinical practice of ophthalmology.

Cogan Award

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

Kupfer Award

Distinguished public service on behalf of eye and vision research.

Special Recognition Award

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

Nomination Deadline:

March 1, 2010. Nominations must be completed online at www.arvo.org/awards. Nominations must include one nomination letter, a CV and the names of three colleagues who support the nomination.



Promoting sight-saving research

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

2010 ARVO Trustee candidates

The Physiology/Pharmacology (PH) and Retina (RE) Sections nominated the following candidates to stand for election in 2010:

PH Section



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



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


RE Section



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



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

 See www.arvo.org/nominations

ARVO Commercial Relationships Policy changes

At the recommendation of the ARVO Commercial Relationships Committee, the ARVO Board of Trustees approved the ARVO Commercial Relationships policy to be in compliance with ACCME.

“R” indicates if you have received gifts in kind, honoraria or travel

reimbursement valued in any amount in the last 12 months from a company or competing company which provides a product, service, process or equipment that is the subject matter of your presentation or publication. ■

 See www.arvo.org/commercial.

A thank you to outgoing committee chairs and volunteers

ARVO extends thanks to all members who served on committees this past year. Special thanks go out to chairs who completed their terms this year: Barry Winkler, PhD, FARVO (Advocacy); Catherine Thut, PhD (Animals in Research); Edward Pugh, PhD, FARVO (Awards); Laura Robles, PhD, (Diversity Issues); Don Hood, PhD, FARVO (Finance); Robert Ritch, MD, FARVO (International Members); Maureen Maguire, PhD, FARVO (Professional Development and Training); and Nicholas Delamere, PhD, FARVO (Publications).


We also thank outgoing Annual Meeting Program Committee Chairs: Charlotta All Ericsson, MD, PhD; Diane E. Borst, PhD; Emily West Gower, PhD; Thomas James Millar, PhD; Janine Austin Clayton, MD; Richard A. Harrad, FRCS; David F. Garway-Heath, MD; Suzanne M.J. Fleiszig, OD, PhD; Michael L. Robinson, PhD; Filippo Drago, MD, PhD; Steven D. Schwartz, MD; Paolo Lanzetta, MD; Jayakrishna Ambati, MD; Nancy J. Coletta, OD, PhD; and Maureen A. McCall, PhD. ■

CO, EY and LE Sections to choose Trustee candidates in 2011

Are you a leader who wants to help guide ARVO into the future? The voting members of the Cornea (CO), Eye Movements/Strabismus/Amblyopia/Neuro-Ophthalmology (EY) and Lens (LE) Sections will nominate their candidates to stand for election in 2011. Trustees serve a five-year term and meet face-to-face three

times annually. Be sure to attend your Section's Business Meeting during the 2010 ARVO Annual Meeting to nominate the candidate of your choice.


Watch your e-mail and the ARVO Web site for a call for nominations notice in February 2010. ■

 See www.arvo.org/governance

ARVO Clinical Trials Registration Policy to include Phase 1 trials

Beginning July 1, 2010, registration will be required for Phase 1 trials. This includes submissions to IOVS and JOV and abstracts submitted for the 2011 ARVO Annual Meeting or any educational meeting sponsored by ARVO. Although this policy

change will not affect 2010 ARVO Annual Meeting abstract submissions, investigators are strongly encouraged to register their trials as soon as possible and before the first patient is enrolled. ■

 See www.arvo.org/clinicaltrials

Committees in action 2009–2010 Committee Chairs

The ARVO Committee Chairs for this coming year are:

Advocacy Committee
J. Mark Petrash, PhD

Exhibits Committee
Donald L. MacKeen, PhD

Animals in Research Committee
Brian C. Gilger, DVM

Finance Committee
David G. Hunter, MD, PhD

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

International Members Committee
János Németh, MD, PhD, DSc

Awards Committee
Sheila K. West, PhD, FARVO

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

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

Members-in-Training Committee
Pedram Hamrah, MD

Continuing Medical Education Committee
Todd P. Margolis, MD, PhD, FARVO

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

Diversity Issues Committee
Jeffrey J. Walline, OD, PhD

Publications Committee
Steven E. Wilson, MD, FARVO

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



ARVO's 2008–2009 Board of Trustees — back row, left to right: Shigeru Kinoshita, MD, PhD, FARVO; Paul Mitchell, MD, PhD, FARVO; David Hunter, MD, PhD; Robert Miller, MD; President-elect Nick Delamere, PhD, FARVO; Donald Hood, PhD, FARVO; Barry Winkler, PhD, FARVO; Executive Director Joanne Angle. Front row, left to right: Mark Petrash, PhD; Executive Vice President Sally Atherton, PhD, FARVO; President Todd Margolis, MD, PhD, FARVO; Past President Martine Jager, MD, PhD, FARVO; Jeffrey Boatright, PhD; and Jacob Pe'er, MD, FARVO. Peng Khaw and Paul Sternberg, MD, FARVO, were not present for the photo.



8TH ANNUAL MEETING
May 1, 2010
Fort Lauderdale
Florida

www.arvo.org/isie

Important dates

2009

September 1

2010 Membership dues renewal online opens

September 15

2010 Annual Meeting registration opens

October 15

2010 Annual Meeting abstract submission and SIG proposal opens

December 4

- 2010 Annual Meeting abstract submission deadline, 11:59pm EST
- ARVO Travel Grant Awards application deadline
- ARVO/Alcon Awards application deadline
- Special Interest Group (SIG) proposal deadline

December 6

2010 Annual Meeting abstract revision deadline, 11:59pm EST

2010

February 8

Notification of 2010 Annual Meeting abstract acceptance e-mailed to First Authors

February 26

2010 Annual Meeting Abstract Search and Itinerary Builder online

March 1

- ARVO Annual Awards nomination deadline
- ARVO Travel Grant Awards announced online

March 15

Program Summary online

March 16

- 2010 Annual Meeting housing deadline
- 2010 Annual Meeting early registration deadline

April 23

2010 Annual Meeting registration cancellation deadline

April 30–May 1

ARVO/Pfizer Ophthalmics Research Institute

May 1

- ARVO/ISIE Meeting
- ARVO Education Courses (see page 9)

May 2–6

2010 ARVO Annual Meeting: For Sight: The Future of Eye and Vision Research



FOR SIGHT:

The Future of Eye and Vision Research
May 2–6, 2010 • Fort Lauderdale, Florida

Join your colleagues to share research in scientific sessions, networking events and more. The theme, “For Sight: The Future of Eye and Vision Research,” will focus on changes in technology, communications, careers and funding. The Annual Meeting — the largest international gathering of eye and vision researchers in the world — will explore advances in these areas and their implications for eye and vision research during the next decade and beyond.

Call for abstracts

ARVO encourages members to submit abstracts to the Meeting that highlight advances and improvements that will impact the future of eye and vision research. Abstract submission begins October 15, 2009, at www.arvo.org. See the *Call for Abstracts* mailed with this newsletter for more information.

Reserve your hotel today!

The ARVO Housing Bureau has processed all hotel requests made during the 2009 Annual Meeting and has sent reservation confirmations. If you have not received a confirmation, contact the Housing Bureau at gflhousing@broward.org.

If you have not already requested a hotel reservation for the 2010 Annual Meeting, go to www.arvo.org/housing to check rates and availability. Hotel rooms in the official block at ARVO's discounted rates are limited and sell out quickly — don't delay. If you have questions about reserving a room through the Housing Bureau, view the Hotel Reservation FAQs at www.arvo.org/housing/faq.

To request a block of 10 or more rooms, contact Lancey Cowan, lcowan@arvo.org. ■

Basic/Clinical Lecture

Sunday, May 2, 2010, 2:45–4:45pm

Emerging Stem Cell Therapies for Eye Diseases

Organizing Sections: EY, AP, BI, CO, EY, RC, RE

Organizer: Neeru Gupta, MD, PhD

The Basic/Clinical Lecture, presented from a basic perspective to clinical researchers, will provide the most up-to-date, cutting-edge knowledge available regarding emerging stem cell therapies to treat a wide variety of blinding eye diseases.

Topics will include stem cell therapies for diseases of the ocular surface, cornea, retina, optic nerve and glaucoma, and selective stem cell targeting for eye tumors, including engineering stem cells. The ethics of stem cells use will be discussed. Gaps and opportunities for future research in each or combinations of these areas will be identified through active discussions. ■

Symposia

Sunday, May 2, 2010

8:30–10:30am

Gene–environment Interactions and Retinal Disease

Organizing Sections: BI, CL, RC, RE
Organizer: Paul S. Bernstein, MD, PhD

This symposium will bring together leading researchers who are studying the complex interactions of genetic and environmental risk factors and modifiers of retinal disease at the molecular level, in animal models and in the clinic. Each invited speaker will review current progress on a particular retinal disease and will provide insights on future research and therapeutic approaches on a broad range of retinal diseases spanning the range from infancy to old age.

Genetic and Epigenetic Regulation of Eye Development and Disease — the Future of Vision Research

Organizing Sections: RC, BI, PH, RE, VN
Organizers: Dong Feng Chen, PhD; Donald A. Fox, PhD

This symposium will focus on a rapidly growing area of biomedical research: how genetic networks and epigenetic modulation shape normal and altered eye development. The speakers will highlight and integrate recent advances in the elucidation of common biochemical, cellular and molecular pathways affected in retinal developmental processes and discuss how alterations of these pathways may lead to retinal dysfunction and disease. The topics of this symposium will provide participants findings with clinical and translational potentials. The speakers will present the newest advances in their own labs as well as discuss the significant contributions made by others on their respective topics. The overall goal of the symposium is to gain insight into the common cellular and molecular mechanisms affected during retinal development and to discover potential new therapeutic targets for treating eye diseases.

11:00am–1pm

Cell-based Therapies: Origins and Model Systems

Organizing Sections: RE, AP, CO, RC
Organizers: Taraprasad Das, MD; James Funderburg, PhD

There are remarkable advances in cell-based therapy. They are currently used very successfully in corneal surface reconstruction. There is a growing need for use of cell-based therapy in a variety of retinal diseases including retinitis pigmentosa and age-related macular degeneration. This symposium will put together the past efforts, recent developments and future application in one platform. This will give an opportunity to design a strategy and road map for future research and therapy.

Current Strategies in the Molecular Biology, Genetics and Epidemiology of Refractive Error Development

Organizing Sections: CL, AP, BI, RE, VI
Organizers: Seang-Mei Saw, MBBS, PhD; Deborah Nickla, PhD; Chris Hammond, PhD

Myopia is a potentially blinding disorder with huge public health importance and a leading cause of visual impairment. The emmetropization process is a delicate balance between the visual experience and mechanism of control of the visual system. The understanding of the developmental pathways for myopia will facilitate the identification of children at risk of developing pathologic myopia. This symposium will highlight the current state of knowledge, including the role of the retina, choroid and sclera, for refractive error development in humans and animals. Suitable therapeutic interventions such as pharmacologic eye drops or multifocal lenses to halt the progression of myopia in children will be evaluated. Multi-disciplinary topics across several platforms that translate myopia research from the “bench” to the “bedside” by six experts will be included. ■

ARVO Education Courses

Saturday, May 1

Separate registration is required. For more information, visit www.arvo.org/courses.

Age-related Macular Degeneration: Fundamental Discovery and Translation in Treatment Paradigms

Organizer: Rajendra S. Apte, MD, PhD

Methods of Modeling Cost-Effectiveness of Eye Care Interventions

Organizers: Kevin D. Frick, PhD; Steven M. Kymes

Probability and Statistics Fundamentals for Analyzing Ophthalmic Clinical Studies

Organizers: Dale Kennedy, PhD; Kathryn S. Kennedy, MSE

Ocular Oncology Course

Organizer: J. William Harbour, MD

Use of Human Embryonic Stem Cells in Treating Eye Disease

Organizer: Lisa A. Neuhold, PhD ■

Minisymposia

Each ARVO Scientific Section has the opportunity to organize at least one Minisymposium during the Annual Meeting.

- | | |
|--|--|
| AP Light Regime and Eye Growth
Organizers: Debora L. Nickla, PhD; Chea-su Kee, PhD | IM Exploiting Virulence as a Therapeutic Target
Organizers: Michelle C. Callegan, PhD; Mary E. Marquart, PhD |
| BI Therapy for Sight
Organizers: Anneke I. den Hollander, PhD; Paul S. Bernstein, MD, PhD | LE Non-crystallin Functions of Lens Proteins in Health and Disease
Organizers: Kirsten J. Lampi, PhD; Paul G. FitzGerald, PhD; Marc Kantorow, PhD |
| CL Genome-wide Association Studies and Gene-environment Interactions for Eye Diseases
Organizer: Seang-Mei Saw, MBBS, PhD | PH Therapeutically Targeting Conventional Outflow: Where Is the Resistance?
Organizers: W. Daniel Stamer, PhD; David L. Epstein, MD |
| CO Novel Gene Targeted Mutations Affecting Structure and Functions of the Cornea
Organizers: James L. Funderburgh, PhD; Shukti Chakravarti, PhD | RC Neuroprotection: Mechanisms and Promise of Future Therapies
Organizer: John D. Ash, PhD |
| EY Axonal Injury
Organizers: Leonard A. Levin, MD, PhD; Jeffrey L. Goldberg MD, PhD | RE Diabetic Macular Edema — Current Management & Future Directions
Organizer: Taraprasad Das, MD |
| GL Current and Emerging Biomarkers of Glaucoma
Organizers: Makato Araie, MD, PhD; Neeru Gupta, MD, PhD | VI Treating Presbyopia: Multifocality, Pseudoaccommodation and Restoring Accommodation
Organizers: Susana Marcos, PhD; Raymond A. Applegate, PhD |
| IM Molecular Immunology in the Eye: Approaching Immune Pathogenesis and Regulation
Organizers: Junko Hori, MD, PhD; Andrew Dick, MD, PhD | VN TRP-channel Function and Its Role in Vision
Organizers: Maarten Kamermans, PhD; Robert M. Duvoisin, PhD ■ |

ARVO Workshops

Committee-Sponsored Workshops

Stem Cells in Animal Models of Ocular Disease

Organized by the Animals in Research Committee

Building a Diverse Research Workforce

Organized by the Diversity Committee

Conflict of Interest and Full Disclosure: An Ongoing Issue for Practitioners, Companies and Government

Organized by the Ethics and Regulations in Human Research Committee

Protecting Your Research: It's Never Too Early!

Co-organized by the Commercial Relationships and Members-in-Training Committees

Getting Published: Options Using Multimedia

Co-organized by the Publications and Members-in-Training Committees

Other Workshops

ARVO-AUPO Workshop: Do You Want to Be a Chair of Ophthalmology?

Organized and presented by department chairs and co-sponsored by the Association of University Professors of Ophthalmology

Indo-US Research Collaboration Workshop

Organizer: D. Balasubramanian, PhD

Pizza with a Prof: Ask the Experts

For trainees and clinician-scientists.
Organized by the Members-in-Training Committee

Clinician-Scientist Forum: How to Succeed as a Clinician-Scientist

Organized by the Members-in-Training Committee

EVER/ARVO Workshop

Organized by the European Association for Eye and Vision Research (EVER)

NEI Grant Writing Workshop

Organizer: Lore Anne McNichol, PhD

US-China Networking Luncheon

Organizer: Shikun He, MD ■

Trustees considering new locations for Annual Meeting

The ARVO Board of Trustees formed a working group in 2008 to review Fort Lauderdale as the location for the ARVO Annual Meeting and to investigate other potential meeting locations. This review is part of the strategic planning process that ARVO undertakes every five years.

At its October meeting, the ARVO Board of Trustees will determine whether the Meeting will stay in Fort Lauderdale or rotate to other destinations. If the Board decides to move the Meeting, ARVO staff will work quickly to finalize arrangements for future Annual Meetings and to communicate plans to members. The Meeting will remain in Fort Lauderdale at least through 2011.

ARVO asked attendees about Meeting location preferences as part of the 2009 post-Meeting survey. If you have not had an opportunity to voice your opinion about the location of future ARVO Annual Meetings, send your comments to annualmeeting@arvo.org. ■

ARVO Cross-Sectional Groups

Genetic Modifiers of Inherited Ocular Disease

Monday, May 3, 12–1:30pm
Organized by the Genetics Group

Nanodiagnostics in Ophthalmology: A New Frontier

Tuesday, May 4, 12–1:30pm
Organized by the Nanotechnology Group

New Frontiers in Imaging

Wednesday, May 5, 12–1:30pm
Organized by the Multidisciplinary Ophthalmic Imaging Group ■

ARVO Exhibits

Sunday, May 2–
Wednesday, May 5, 9am–4:45pm

Visit more than 150 ARVO exhibitors and see the latest products and services that will help you in your research and clinical work. ■

Planning an event at the 2010 Annual Meeting?

Review the ARVO Ancillary Event policy, and submit your request by December 15, 2009 via the online Ancillary Event form at www.arvo.org/ancillary. ■

VSS Symposium

Wednesday, May 5, 12–1:30pm

Understanding the Functional Mechanisms of Visual Performance

Organizers: David R. Williams, PhD, Wilson S. Geisler, PhD

Speakers: David H. Brainard, PhD, University of Pennsylvania; Martin S. Banks, PhD, University of California, Berkeley; David Heeger, PhD, New York University

Considerable progress has been made in understanding the functional mechanisms underlying human visual performance. This progress has been achieved by using a variety of rigorous approaches, including careful psychophysics, functional imaging, computation analysis, analysis of natural tasks and natural scene statistics, and the development of theories of optimal Bayesian performance. This symposium highlights some of the exciting progress that has been made by combining two or more of these approaches in addressing fundamental issues in color coding, distance coding and object recognition. ■

RETINAL GANGLION CELLS

DEVELOPMENT, FUNCTION, AND DISEASE

Thirteenth Annual
Vision Research
Conference

Convention Center, Fort Lauderdale, Florida, USA

30 April - 1 May 2010

Two day satellite meeting prior to 2010 ARVO

CALL FOR POSTERS

Abstracts are invited for poster presentation: For the themes and further information on the program please visit www.visionresearch-conference.elsevier.com

Call for poster presentations deadline:
3rd February 2009

CHAIRS:

T. Wensel, Baylor College of Medicine, USA

W. Baehr, University of Utah, USA

S. Wu, Baylor College of Medicine, USA

Conference Secretariat:
a.hill@elsevier.com

Organized and sponsored by **Vision Research**, An International Journal for Functional Aspects of Vision and Elsevier.
Co-sponsored by ARVO



For full details on abstract submission

www.visionresearch-conference.elsevier.com

Online now: Lectures and workshops

- ARVO/Alcon Keynote Lecture: Hugh Taylor, MD, Washington to Ouagadougou: Who Deserves to See?
- Proctor Medal, Joe G. Hollyfield, PhD, Progress in understanding the initiating events in age-related macular degeneration
- Friedenwald Award: Samuel Miao-Sin Wu, PhD, Synaptic organization of the vertebrate retina: general principles and species-specific variations
- Mildred Weisenfeld Award: Alan Bird, MD, FMedSci, Towards biological treatment of retinal diseases
- Cogan Award: Marie E. Burns, PhD, Deactivation mechanisms of rod phototransduction
- Champalimaud Award: Norrin/Frizzled 4 signaling in retinal vascular development, Jeremy H. Nathans, MD, PhD, Johns Hopkins University (2009), Light detection in the retina, King-Wai Yau, PhD, Johns Hopkins University (2009)
- Do you want to be a chair of ophthalmology? (Workshop)
- Getting Published: Advice and Admonitions (Workshop) ■



Friedenwald Award lecturer Samuel Miao-Sin Wu, PhD

See www.arvo.org/elearning

Did you know?

Annual Meeting abstracts from 2002–2009 are available online at www.iovs.org. The 2009 Annual Meeting abstracts are also available on the online Abstract Search at www.arvo.org and can be printed individually or by session. ■

Save the dates

ARVO Annual Meeting
May 1–5, 2011
Fort Lauderdale, FL



Above, left to right: Dimitri Azar, MD; Paul Sternberg, MD, FARVO; and Mark Blumenkranz, MD; “chaired” the workshop. Right: attendees listen intently.



Ambitious attendees fill department chair workshop

Every seat was booked in advance for a new workshop co-sponsored by ARVO and the Association of University Professors in Ophthalmology called “Do you want to be a chair of ophthalmology?”

The workshop was aimed at early and mid-career ophthalmologists. Current chairmen presented their “top 10 lists” of what they wish they had known before becoming

chairs themselves. Panelists shared their experiences, recommendations for preparation and critical factors for success.

The workshop is available on the ARVO elearning Center at www.arvo.org/elearning and will be offered again at the 2010 Annual Meeting.

Bobbie Austin, baustin@arvo.org ■

ARVO/Alcon Keynote Session

Hugh R. Taylor, MD, this year’s ARVO/Alcon Keynote speaker, presented “Washington to Ouagadougou: Who Deserves to See?”, a compelling overview of the need to address inequalities in the treatment and prevention of blindness both among countries and within countries. Taylor’s talk gave context to the Annual Meeting theme, “Reducing Disparities in Eye Disease and Treatment.”

He spoke about preventing the vision loss we can prevent, treating the vision loss we can treat and conducting more research to be able to prevent or treat the vision loss that is currently unavoidable.

More than 2,000 people attended Taylor’s talk, which was sponsored by the ARVO Foundation for Eye Research through a generous donation from Alcon. ■



2009 President Todd Margolis, MD, PhD, FARVO; and Keynote speaker Hugh Taylor, MD



From left: Linda Merrill, president and CEO of Envision; Eli Peli, OD, Schepens Eye Research Institute at Harvard University; and, James Nolan, PhD, director of research at Envision, with the first annual Envision-Atwell award recipient Nicole Ross (second from right) from the New England College of Optometry and Schepens Eye Research Institute.

Ross receives first Envision-Atwell Award

The first annual Envision-Atwell Award for research in low vision and vision rehabilitation was presented to Nicole Ross, a student at the New England College of Optometry, at the Low Vision Research Group (LVRG) social during the ARVO Annual Meeting in May.

The award was originally named the Atwell Award, in honor of long-time low vision research supporter Constance Atwell. Atwell, who was on staff at NEI, played a pivotal role in encouraging and motivating high-quality low vision research. The award has now been renamed the Envision-Atwell Award through an agreement made between Envision, ARVO and the LVRG prior to this year’s meeting.

The Envision-Atwell Award is given to an ARVO presenter who is a junior investigator (i.e., student, post-doctoral researcher or junior faculty member with less than five years since their last professional degree). The award consists of a \$500 stipend and a trophy celebrating the spirit of the award. The LVRG organizational committee reviews applicants’ presentations.

Ross is a member of Eli Peli’s research lab at Schepens Eye Research Institute, Harvard University in Boston, Mass. She received the award for her project “Consideration of Optical Scotomas in Designing Visual Field Expansion Devices.” ■

Reflections on the ARVO 2009 experience



George Kong, PhD Candidate
Centre for Eye Research
Australia
Recipient, ARVO
Foundation for Eye
Research/Pauline and Oswald Lapp Travel
Grant

Research/Pauline and Oswald Lapp Travel Grant

The most valuable aspect of the meeting was the constructive feedback I received on my research, which gave me new direction for further consolidating my research. By attending the conference, I was also able to personally meet prominent leaders in my field of research as well as many others.

Also, the restaurants and music around the beach front were fantastic and a must-go for first-time attendees. ■

Reflections on the ARVO 2009 experience



Paul Kaufman, MD, FARVO Editor-in-chief, *Investigative Ophthalmology & Visual Science* University of Wisconsin School of Medicine & Public Health

From a 2009 Annual Meeting Blog Post:

ARVO week is, for me, always the high point of the professional year. Yet every one is different. This year, much of the week was parsed between many hours in a hotel room (with the ocean as backdrop, so do not feel too sympathetic!) writing two difficult but stimulating manuscripts with a very senior colleague from another country and a senior member of my own research group. We slept little but accomplished much, and it is immensely rewarding to see years of coordinated work by our much larger team come to fruition. International collaboration — a major ARVO goal — in action!

When I wasn't writing and rewriting manuscripts, the other major "asset allocation" (the asset being time, the most valuable one of all!) was meeting with individuals and groups outside of the scientific sessions.

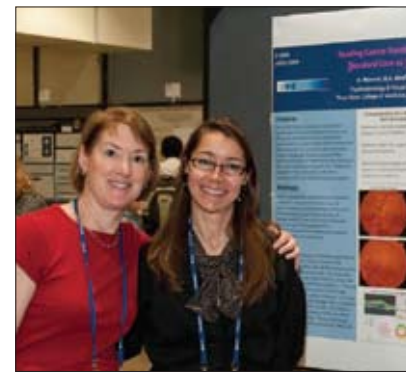
These encounters encompassed other scientific collaborations, IOVS management, personal mentoring, conflict resolution (not the most fun thing!), award adjudication, recruitment, planning, reconnaissance of the research funding landscape and numerous other "infrastructure" activities.

I spent less time in the scientific sessions than usual, and far less than I would have liked. Indeed, most of the "science" time was on the very last day, and it sure felt good!

So for me, ARVO remains the most stimulating week of the year, infinitely kaleidoscopic, and all about networking globally on innumerable issues in every sphere of my professional life. It is like a fine restaurant with a very large menu — what should you choose? You are amazed by your meal, but wistful that you couldn't have that other dish ... Well, there's always next year. ■



I should have registered online earlier and had my badge mailed to me in advance!



Collaboration flourishes in the poster sessions.



The ARVO Exhibit Hall never fails to fascinate.



ARVO began honoring long-time contributing members as Fellows. For more information about the ARVO Fellows program and to see the FARVO class of 2009, see www.arvo.org/awards/fellows.



Franz Grehn, MD, plays at the ARVO Classical Concert.



Members-in-training learn over lunch at the Pizza with a Prof session.



The ARVO Social: an opportunity to network



ARVO staff member Bobbie Austin, PhD, helps President-Elect Mark Petrash, PhD, contact Congress in ARVO Central.



Meeting attendees get an opportunity to talk with representatives from several companies and government agencies at the Career Fair.



Exhibits at the ARVO/ISIE meeting



Nanotechnology Group session



Cogan Award recipient Marie Burns, PhD



ARVO Rocks! with Rita Foulks, MD, on the keyboard.



Dad, we need to go to see this presentation on Inner Retinal Function and Bipolar Cell Modulation.



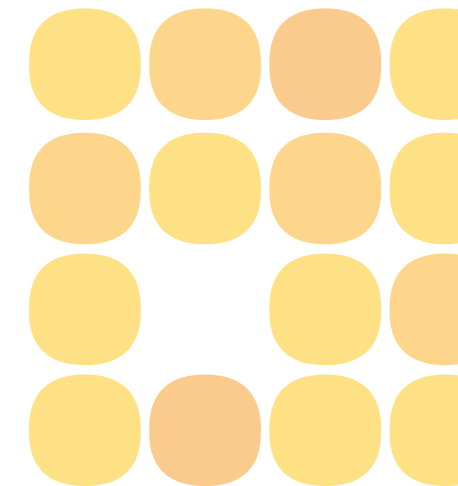
ARVO/Champalimaud Lecture

The joint recipients of the 2008 Antonio Champalimaud Vision Award, worth €1 million (US\$1.45 million in 2008) were Jeremy H. Nathans, MD, PhD, and King-Wai Yau, PhD, both from Johns Hopkins University. They presented lectures on "Norrin/Frizzled 4 signaling in retinal vascular development" and "Light detection in the retina" respectively. ■

See www.arvo.org/elearning



See more photos of the Meeting on Flickr at www.flickr.com/arvoinfo.



Reflections on the ARVO 2009 experience



Outi Renko
Student
Oulu University,
Oulu, Finland

What comes to my mind at first is that there were no minuses to the meeting at all. We were especially happy about the shuttlebus service, because we had no trouble getting to the convention center on time.

Meeting attendees were nice and gave friendly advice. The internet kiosks were also very nice because our cellphones didn't work in the US, so it was the only possible way to keep in touch with home.

The ARVO 2009 meeting was valuable professionally. I got a lot from it and it was a good way to meet new people. ■

Congratulations American Academy of Optometry Grantees

Congratulations to this year's ARVO Student Travel Fellowship recipients, presented by the American Academy of Optometry. The fellowships were handed out at the joint American Optometric Association/American Academy of Optometry reception as were travel grants to the American Optometric Foundation's prestigious Ezell Fellowship recipients.

Ten fellowships were provided by an educational grant generously donated by VISTAKON®, a Division of Johnson & Johnson. ■



ARVO Student Travel Fellowship recipients are back row, left to right: Samuel Hanlon; Xunda Luo; Xin Wei; Paul Gifford; Jean-Marie Hanssens; and Peg Achenbach, OD, of VISTAKON®. Front row, left to right: Juan Huang; Diana Lozano; Vidhyapriya Sreenivasan; Charanya Ramachandran; Aparna Raghuram.

CME available

The Association for Research in Vision and Ophthalmology (ARVO) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

ARVO designates this educational activity for a maximum of 35.25 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™.

CME Certificates and Certificates of Attendance are available at www.arvo.org/cme. There is no charge for this service. Certificates can be updated/printed at any time. ■



Ezell Fellows are back row, left to right: Dean VanNasdale; American Optometric Foundation Development Director Mark Bullimore, MCOptom, PhD, FAAO; Eric Ritchey; Kathryn Richdale; Bradley Dougherty; Joe Phillips; Joe Wheat; and Patrick Scott. Front, left to right: James Su; Jessica Mathew; Tracy Nguyen; Wendy Harrison; Rachel Redfern; Zan Pan; and Mark Eger, OD, PC, President of the American Academy of Optometry.

Membership updates

Did you receive your 2010 dues renewal e-mail? Dues renewal notices were sent via e-mail on August 31. If you did not receive your notice, please notify us at arvo@arvo.org and provide an updated and/or alternate e-mail address, if available, so we can

resend your notice. This year, we will not be mailing dues notices except to those who cannot communicate via e-mail. If your e-mail is correct, please add all correspondence from arvo@arvo.org to your safe senders list, so you do not miss important announcements. ■

New Associate member category

The Contributing member category has been changed to Associate member. This category is for those who support the objectives of ARVO but who may not meet the criteria of regu-

lar membership. This is a non-voting member category. If you believe that you are in the wrong category, please contact Barbara Hollis at bhollis@arvo.org. ■

Members-in-Training

The events at the Annual Meeting for members-in-training were extremely successful, and plans are underway for next year's meeting, including an expanded Pizza with a Prof that will have a new segment for clinician-sci-

tists. Thanks to all those who recently completed the MIT survey. We will use this information to develop future programs and services to meet the needs of ARVO's trainees. ■

Join a Cross-Sectional Group

Don't forget to join one or all of the ARVO Cross-Sectional Groups when you renew your membership. Network with your colleagues from different but related areas of study and provide input into future educational programs.

	US	non-US	Total
Genetics	718	634	1352
Multidisciplinary			
Ophthalmic			
Imaging	798	668	1466
Nanotechnology	694	653	1347

Each group will present hot topics in interdisciplinary science in a platform session and/or poster sessions at the 2010 Annual Meeting.

If you are interested in becoming a member of one or more of these groups, you may update your profile online or send an e-mail to arvo@arvo.org. ■

In Memoriam

Yasuo Tano (RE)
January 31, 2009

M. Rosario Hernandez (GL)
March 17, 2009

Carl B. Camras (GL)
April 14, 2009

Leo M. Hurvich (VI)
April 25, 2009

Jan P. Koniarek (RE)
April 28, 2009

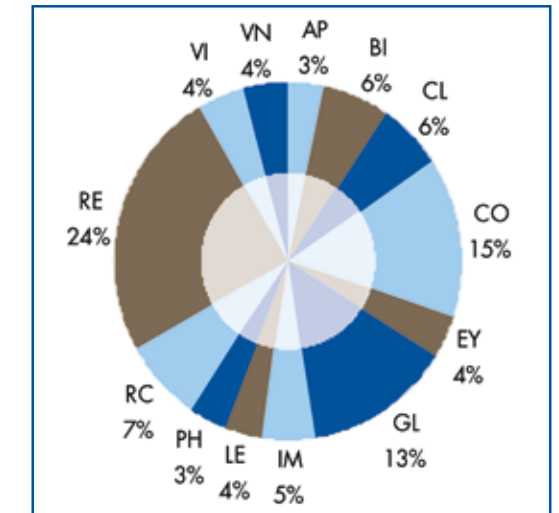
Thom J. Zimmerman (GL)
August 4, 2009

Jeffrey P. Gilbard, MD (CO)
August 12, 2009

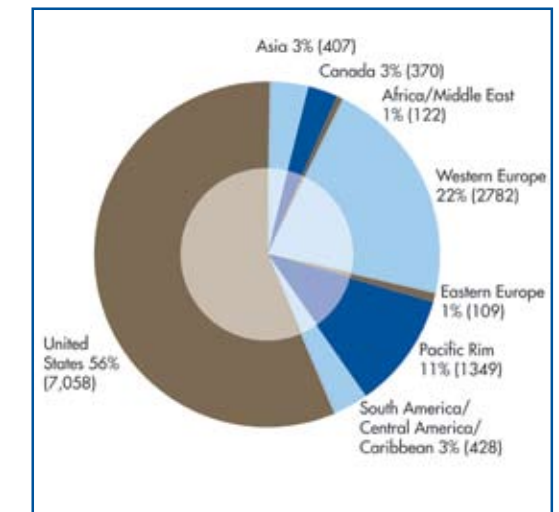
Submit notifications to bhollis@arvo.org. ■

Demographics update: Who are ARVO members?

Membership by section
(2% undefined)



Membership by region



Members-in-Training status extended

Beginning this fall, current members-in-training (MITs) may remain as a pre-doctoral or postgraduate/resident for a total of seven years combined. Please contact the ARVO office when you complete your training to be changed to regular (voting) membership. ■

Summer conference showcases drug delivery

More than 200 experts from around the globe gathered on the National Institutes of Health campus in Bethesda, Md., this summer to present work related to new ocular delivery systems to get more molecules and proteins to the intraocular tissues of the eye.

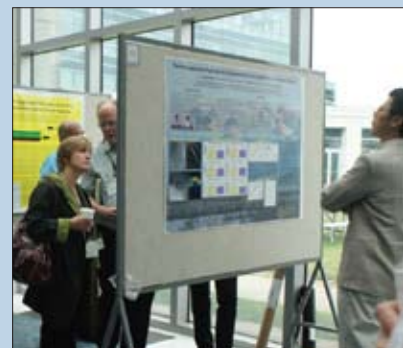
The event was one of ARVO's Summer Eye Research Conferences (SERC) "Ophthalmic Drug Delivery Systems for the Treatment of Retinal Diseases: Basic Research to Clinical Applications" (July 31-August 1).

Sessions covered topics such as ocular barriers to drug transport, vitreous humor in drug delivery, intravitreal drug delivery, trans-scleral drug delivery, topical therapy for retinal diseases and preclinical benchmarks for retinal drug therapy.

Many attendees said they appreciated the smaller size of SERCs because they are able to speak directly with leaders that they might not otherwise have access to. One attendee said this SERC has given rise to several new collaborations.

Course directors on the 2009 SERC were Henry Edelhauser, PhD (Emory University), Michael Robinson, MD (Allergan, Inc) and Cheryl Rowe-Rendleman, PhD (Omar Consulting Group, LLC). ■

See www.arvo.org/serc



Poster viewing at the ophthalmic drug delivery conference

ARVO/Pfizer Ophthalmics Research Institute Exploring corneal dystrophies

Invited researchers took a closer look at the current knowledge of corneal dystrophies at this year's ARVO/Pfizer Ophthalmics Research Institute. The two-day gathering, "Corneal Dystrophies: Molecular Genetics to Therapeutic Intervention," took place in Fort Lauderdale, Fla. May 1-2, just before the ARVO Annual Meeting.

Topics included current diagnostic techniques, molecular genetic analysis and creation of animal models. The aim was to discuss the development of interventional techniques for prevention and treatment.

The gathering included a diverse group of experts in cornea, molecular genetics and related areas. Their objectives:

- Define the scope of the epidemiologic problem that corneal dystrophies provide globally;
- Review the molecular genetic approaches that have facilitated gene discovery in select corneal dystrophies as well as those that are being used to isolate genes in other dystrophies;
- Discuss use of keratocyte culture and animal models in order to elucidate pathogenesis; and
- Provide insights for designing interventional strategies through pharmacologic modalities and gene therapy.

A report on the presentations, discussion and suggestions for research opportunities will be submitted for publication.

The ARVO/Pfizer Ophthalmics Research Institute is a series of multi-disciplinary research conferences held annually just prior to but separate from the ARVO Annual Meeting. These conferences are funded by the ARVO Foundation for Eye Research (AFER) through a grant from Pfizer Ophthalmics.

Previous Institute topics include:

- 2005: Ocular versus Extraocular Neovascularization: Mirror Images or Vague Resemblances
- 2006: Aqueous Humor Outflow: What Do We Know? Where Will It Lead Us?
- 2007: Drug Delivery to Posterior Intraocular Tissues
- 2008: The Role of Glia, Mitochondria, and the Immune System in Glaucoma

Next year's conference is April 30-May 1, 2010 in Fort Lauderdale on the topic of Optic Nerve Regeneration. ■

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



Above: Conference director Jayne Weiss, MD, poses with the meeting sign; middle: discussion during a session; and right: networking during a break.

Upcoming ARVO Meetings



October 13, 2009
NIH, Bethesda, Md.

NEI/FDA Endpoints Symposium Use of Patient-reported Outcomes in Medical Product Development

This conference will determine how vision-related patient-reported outcomes might be used to improve medical product labeling in ophthalmology.

The meeting is part of the Endpoints series sponsored by the National Eye Institute (NEI) and the US Food and Drug Administration (FDA). Participants will explore the issues and challenges related to patient-reported information in ophthalmology. They will also look at FDA guidelines for using patient-reported outcomes and how they are incorporated for medical devices and drugs.

Faculty will include authorities in instrument development, refractive surgery, cataract surgery, glaucoma and retina. FDA representatives will present insights about how the FDA reviews and evaluates patient-reported outcome in support of product labeling for instruments and ophthalmic drugs and biologics.

See www.arvo.org/endpoints or contact Rhonda Williams, rwilliams@arvo.org, +1.240.221.2908.



May 1, 2010
Fort Lauderdale, Fla.

The 8th ARVO/ISIE Meeting offers one day of concentrated sessions on current clinical and basic science advances in ophthalmic imaging. It is a forum for the presentation of original research on current advances and state-of-the-art technology in ophthalmic imaging.

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

Registration is separate from the ARVO Annual Meeting and includes continental breakfast, two refreshment breaks, lunch and course materials. This unique program also offers networking opportunities.

Mark your calendar today and plan to submit your abstract for presentation and attend this exciting imaging conference.

See www.arvo.org/isie



January 19-22, 2011
Singapore

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

See www.arvo.org/asiaarvo

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 (www.arvo.org/fundingguide).

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. ■

See www.arvo.org/fundingguide

First ARVO/ISOCB meeting takes place in Portugal

The International Society for Ocular Cell Biology (ISOCB) has become part of ARVO and more than 150 people attended the first conference in September in Ericeira, Portugal.

ARVO/ISOCB conferences will take place every other year to promote interaction for cell biologists working in ocular health and disease and for disseminating information about work in this field to the larger eye and vision research community.

Topics this year included gene expression in the eye, channels, signal transduction/membrane traffic, ocular development and regeneration, inflammation/oxidative stress, blood and lymphatic vasculature, extracellular matrix/cell adhesion, epithelial-mesenchymal transition/epithelial cell biology, stem cells/cell therapy and cytoskeleton. ■

See www.arvo.org/ISOCB or contact Rhonda Williams, rwilliams@arvo.org, +1.240.221.2908.

ARVO @ other meetings

European Society of Cataract and Refractive Surgeons (ESCRS)

September 12-16
Barcelona, Spain
Co-sponsored symposium: The Impact of Refractive Surgery on Corneal Structure, September 12, 11:30am-1pm. Session details at www.es CRS.org under Programme Information/Clinical Research Symposia.

European Association for Vision and Eye Research (EVER)

September 30–October 3
Portoroz, Slovenia
Co-sponsored symposium: Finding a US Postdoctoral Fellow Position
October 3, 1:45–3:15pm. Session details at www.ever.be/view_session.php?ses_id=815.
Exhibit: Please visit the ARVO table.

Society for Neuroscience

October 18–21, Chicago, Ill.
Exhibit: Please visit us at Booth No. 2108

American Academy of Ophthalmology

October 24–27
San Francisco, Calif.
Co-sponsored symposium: Translational Research Can Create New Therapeutic Modalities for Challenging Ocular Diseases, October 26, 10:45am–12:15pm. For session details, search for SYM13 at www.aao.org/meetings/annual_meeting/program/.
Exhibit: Come see us at Booth No. 5500

American Academy of Optometry

November 11–14
Orlando, Fla.
Co-sponsored symposium: Ocular Genetics: Focus on Anterior Segment Disorders, November 12, 1:30–5:30pm. Session details at www.aaopt.org/meetings/meeting9/Education/Symposia/index.asp
Exhibit: You'll find us at Booth No. 931

ARVO-Japanese Ophthalmological Society Joint Symposium

April 15–18, 2010
Nagoya, Japan
Topic: Retina (details coming soon) ■

e-learning, continued from page 1

Awards Lectures, from the 2009, 2008 and 2007 ARVO Annual Meetings.

Users can also access material from ARVO's Clinical Trials Education Series and earn CME credits in the process.

Q. Who is it for?

Nussenblatt: The system is open to anyone who wishes to use it. ARVO's goal is to create a one-stop shop for the educational needs of the eye and vision science community.

Users will be required to register and create a username and password that will allow them into the system at any time to update/print certificates and to keep track of all their ARVO activities.

Q. How can I earn CME credit using the eLearning Center?

Nussenblatt: ARVO has set up a system that will help professionals keep track of the CME credits they have earned through ARVO. Certificates are available at their disposal and can be printed and updated anywhere the internet is available.

In addition, certificates of attendance for ARVO events, including the 2009 Annual Meeting, are available at the eLearning Center. Both access to certificates and printing them are complimentary.

Q. What does it cost?

Nussenblatt: Users can view most materials at the eLearning Center for free. There are a few exceptions, such as the Clinical Trials Education Series (CTES).

For a modest fee, a user can purchase the entire Clinical Trials Course or a specific session.

The full course covers clinical trial methodology, analysis and management. It's tailored specifically for eye and vision researchers. See www.arvo.org/ctes for more information.

Q. What's coming next?

Nussenblatt: The eLearning Center will be constantly updated with new materials. Check the Center often for new educational opportunities. ■

 See www.arvo.org/elearning




ARVO Clinical Trials Education Series

ARVO has developed the ARVO Foundation for Eye Research Clinical Trials Education Series, through a generous grant from the Allergan Foundation, to present state-of-the-art approaches to the design, construction and execution of clinical trials in ophthalmology.

The Clinical Trials Education Series includes one-day basic courses, advanced three-day courses and online sessions. Upcoming meetings include:

- How to Set Up and Manage a Clinical Trials Site, October 23, 2009, 4–9pm, San Francisco, Calif. (preceding the American Academy of Ophthalmology meeting)
- Principles and Concepts in Clinical Trials for Eye Researchers, December 17–19, 2009, Baltimore, Md (co-sponsored by the Society for Clinical Trials) ■

 See www.arvo.org/ctes, or contact Jot Grammer, jgrammer@arvo.org, +1.240.221.2933.

ARVOJobs

Now with new features

Employers:

- Reach the largest audience of eye and vision research professionals
- Manage job listings online
- Enhance listings with logos, institutional profiles, links and "featured listings"
- Search CVs by criteria

Job Seekers:

- Post your CV for free
- Post cover letters and other documents
- Post anonymously
- Search job listings by multiple criteria
- Receive automatic notices when jobs matching your criteria are posted
- Search other databases in the JobTarget network
- Apply to jobs online



<http://jobs.arvo.org>

THE AMERICAN SOCIETY FOR CELL BIOLOGY

49th ANNUAL MEETING

December 5–9, 2009
San Diego Convention Center
San Diego, CA

IMPORTANT DEADLINES

SEPTEMBER 1
Travel Award Application
Regular Abstract Submission
(poster consideration only)

OCTOBER 1
Early Registration

OCTOBER 15
Late Abstract Submission

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House NEI funding would match inflation, Senate increase minimal

Both the House and Senate Appropriations Committees have approved their respective FY2010 appropriations bills for the Departments of Labor, Health and Human Services, and Education (LHHS), which include funding for the National Institutes of Health (NIH) and National Eye Institute (NEI).

The House bill, H.R. 3293, was passed on July 24 and would fund the NIH at \$30.97 billion, an increase of \$670 million (3.1%) over the FY2009 level, and the NEI at \$713.1 million, an increase of \$24.6 million (3.5%) over 2009. The Senate is expected to take up its bill after the August recess. The Senate bill funds the NIH at \$30.8 billion, an increase of \$500 million (1.6%) over 2009, and the NEI at \$700.2 million, an increase of \$11.7 million (1.7%) over FY2009.

On May 7, President Obama had released his FY2010 budget, which proposed to increase NIH funding by \$443 million (1.4%) over the FY2009 level of \$30.3 billion, and NEI funding by \$7.3 million (1%) over the FY2009 level of \$688.5 million. The NEI was among a number of Institutes and Centers (ICs) with a minimal 1% increase, due to the President's targeted funding for cancer and autism research.

NAEVR issued a statement noting that a minimal increase for the NEI was unacceptable, given the increasing burden of eye disease. Congressional leaders went even further in expressing their concerns.

In a May 21 Senate LHHS Appropriations Subcommittee hearing with Acting NIH

Director Raynard Kington, MD, PhD, Chairman Tom Harkin (D-IA) questioned both the adequacy of the NIH increase as well as the majority of that increase being directed to cancer and autism research.

House Appropriations Chair (and LHHS Appropriations Subcommittee Chair) David Obey (D-WI) was even more vocal in a June 2 hearing with Secretary of Health and Human Services Kathleen Sebelius, where he criticized the Administration's proposed targeted funding to specific types of research, rather than deferring to the NIH-priority setting process.

	FY2009 Final	FY2010 President's Budget	FY2010 House Bill	FY2010 Senate Bill
NIH*	\$30.3 B	\$30.47 B +1.4%	\$30.97 B +3.1%	\$30.8 B +1.6%
NEI	\$688.5 M	\$695.8 M +1.1%	\$713.1 M +3.57%	700.2 M +1.7%

* Net of transfers/one-time expenses

He followed that up with a July 10 statement accompanying the LHHS Subcommittee markup of its bill in which he stated that it "rejected the Administration's targeted funding approach and ensured that all ICs receive funding to offset biomedical research inflation." In the end, both the House and Senate bills rejected the President's targeted funding proposal, which resulted in proposed increased funding across the ICs. ■

ARVO members urge at least 7% funding increase for NEI

Despite the two-year American Recovery and Reinvestment Act (ARRA) funding for the NIH of \$10.4 billion (\$174 million for the NEI), ARVO joined the medical research community in urging Congress to increase NIH funding by at least 7% in FY2010 to restore purchasing power lost due to flat funding and biomedical inflation over the past six funding cycles.

ARVO submitted comments to the respective House and Senate LHHS Appropriations Subcommittees and ARVO members contacted Congress from NAEVR's booth at the ARVO Annual Meeting. Plans are already underway for an October 30 NAEVR-hosted ARVO Advocacy Day of the ARVO Board of Trustees and local Washington, D.C. members. ■



NAEVR at the ARVO Annual Meeting



ARVO President Nicholas Delamere, PhD, FARVO (University of Arizona), contacts Congress.



James Weiland, PhD, of the Doheny Eye Institute (left) and Murray Fingeret, OD, of the VA New York Health Care System (right) discuss funding issues with NAEVR's James Jorkasky.

House and Senate resolutions acknowledge NEI 40th anniversary, Decade of Vision

Serving as the "Friends of the NEI," NAEVR worked with its bipartisan House and Senate champions to secure resolutions that acknowledge NEI's 40th anniversary and support the designation of 2010–2020 as the Decade of Vision.

On June 16, the US House of Representatives unanimously passed H. Res. 366. During House floor debate, lead Democratic sponsor Rep. Tammy Baldwin (D-WI) and original Republican co-sponsor Rep. Pete Sessions (R-TX) praised NEI for its work in saving and restoring vision.

Rep. Gene Green (D-TX), resolution co-sponsor and co-chair of the Congressional Vision Caucus, echoed that support, noting that the country's vision health challenges will increase significantly in the next decade due to the aging of the population and the disproportionate increase of eye disease in fast-growing minority populations.

In total, there were 114 co-sponsors for the bill. Rep. Baldwin and Rep. Sessions each issued press

releases acknowledging the successful passage.

On July 7, the Senate passed S. Res. 209. The lead Republican sponsor was Senator Johnny Isakson (R-GA) and the original Democratic co-sponsor was Senator Ben Cardin (D-MD). ARVO assisted in securing the Senate sponsors.

NAEVR thanks the member networks that responded to the advocacy alert to contact House offices and request that members serve as co-sponsors. In addition, the American Academy of Ophthalmology used its April 23 Mid-Year Forum Advocacy Day to request House co-sponsors, while Prevent Blindness America worked with the Congressional Vision Caucus to request co-sponsors. ■



HR 366 lead sponsor Rep. Tammy Baldwin (D-WI)



Sen. Ben Cardin (D-MD)



Sen. Johnny Isakson (R-GA)



NAEVR hosts key DOD representatives at ARVO 2009

NAEVR hosted a standing room-only Defense-related Vision Research Briefing which featured Robert Read, Senior Project Officer for the Telemedicine and Advanced Technology Research Center (TATRC), and Colonel Donald Gagliano, MD, director of the Vision Center of Excellence (VCE) at the ARVO Annual Meeting in Fort Lauderdale, Fla., in May.



TATRC Senior Project Officer Robert Read and Vision Center of Excellence (VCE) Director Colonel Donald Gagliano, MD

Read spoke about the impending Vision Research Program Announcement. Gagliano emphasized that, although the VCE will not be funding research, the Military Eye Trauma Injury Registry that the VCE is charged with developing will assist in identifying future DOD vision-related research needs. Gagliano also serves on the TATRC Program Review Panel along with ARVO's Joanne Angle and NAEVR's James Jorkasky and David Epstein. ■

Congressional Record documents compelling House floor debate

NAEVR urges the vision community to read the June 16 *Congressional Record*, which documents the compelling statements made by Reps. Baldwin, Sessions and Green — each of which provides a different perspective on the important role that NEI serves in preventing blindness and saving and restoring vision.

The statements also commend NAEVR for its efforts to expand awareness of the incidence and economic burden of eye disease. ■

Vision community celebrates NEI 40th anniversary on Capitol Hill

AEVR hosted a Capitol Hill reception in June that brought together more than 200 attendees to recognize NEI's 40th anniversary. Guests represented members of Congress and their staffs, the vision community and coalition partners.

The event came one day after passage of H. Res. 366 (see page 23). Future AEVR educational events will be held under the Decade of Vision banner as part of a sustained program to educate about the value of federally funded vision research.

While speakers acknowledged the rich history associated with the founding of the NEI, they also focused on current research to save

and restore vision and its global impact.

AEVR board president Stephen Ryan, MD, recognized the important role Research to Prevent Blindness (RPB) and the Lions Clubs played in advocating for the creation of a free-standing eye institute separate from the then-National Institute for Neurological Diseases and Blindness.

RPB and Lions Clubs were just two of the 18 vision community organizations that submitted congratulatory letters to the NEI, which were displayed at the event.

Ryan acknowledged the leadership of NEI's first director, Carl Kupfer, MD, who served for more than 30 years, and Edward McManus, who served for more than 25 years as NEI deputy director and subsequently as AEVR executive director.

Lions Clubs International President Al Brandel, a retired police detective from Long Island who has served as a Lion for 35 years, concluded the program by talking about the global impact of NEI's research. Lions Clubs International programs have helped to preserve vision in more than 40 million people. "We were there for the creation of the NEI, and we will continue our partnership with the NEI in the future to save and restore vision worldwide," he said. ■



Collins confirmed as NIH director

On August 7, the Senate confirmed Francis Collins, MD, PhD, as the 16th director of NIH. NAEVR applauded this move, noting Collins' impressive record as a scientist and leader, having served as director of the Human Genome Project and National Human Genome Research Institute (NHGRI).

NAEVR also cited Collins' past collaborative efforts with NEI on ocular genetics, resulting in one-quarter of all genes discovered to date being associated with vision impairment and eye disease. ■



Rep. Gene Green (D-TX, left), an H. Res. 366 co-sponsor and co-chair of the Congressional Vision Caucus, who provided a welcome, with AEVR executive director James Jorkasky



At AEVR's Capitol Hill reception, Rep. Pete Sessions (R-TX, center), the lead Republican co-sponsor of HR 366 (along with lead Democratic sponsor Rep. Tammy Baldwin, D-WI), joined NEI Director Paul Sieving, MD, FARVO (left); and AEVR President Stephen Ryan, MD, (right).



Left to right: National Advisory Eye Council Members Chris McGahan, PhD, (North Carolina State University) and Richard Stone, MD (University of Pennsylvania)

Data supports \$10 million for vision in FY2010 defense appropriations

On July 10, NAEVR made a last round of visits to members of the House Defense Appropriations Subcommittee, prior to markup of its FY2010 Defense appropriations bill, requesting support to maintain the dedicated Peer Reviewed Medical Research-Vision line item and increase its funding to \$10 million.

NAEVR was joined by Specialist Travis Fugate, USA (retired), who was blinded in Iraq and testified in a March 2009 House Veterans Affairs Committee hearing about the aftermath of his injuries. NAEVR justified the line item increase with the following new data:

- Telemedicine and Advanced Technology Research Center's (TATRC) addition of \$1.2 million of its own funding to the \$4 million FY2009 Congressional appropriation reflects the importance of defense-related vision research to TATRC's mission, as well as battlefield needs.
- DOD's Congressionally Directed Medical Research Program (CDMRP) has posted the last negotiated amounts/abstracts for the six vision awards announced earlier this year. Total funding for vision is \$6 million, or about 12% of the \$50 million CDMRP pool of funds. (FY2008 reflected the last year that vision competed

against 21 other areas of research for funding since, in FY2009, it was given its own funding line item).



Left to right: Specialist Travis Fugate, USA (retired) above with Rep. James Moran (D-VA), a lead House champion for defense-related vision research.



Fugate with Axel Spens in the office of Rep. Jack Kingston (R-GA). NAEVR's request has received strong bipartisan support.

Full details appear in the NAEVR Web site Advocacy Center's section on defense-related vision research.

See www.eyeresearch.org ■

How to Set Up and Manage a Clinical Trials Site

October 23, 2009, 4-9pm
San Francisco, CA
(the day before the AAO Meeting)

This course is FREE, but space is very limited. Register online now.

ARVO Foundation for Eye Research
Clinical Trials Education Series
www.arvo.org/CTES





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



ARRA funding to continue in 2010

Opportunities for vision research projects were greatly expanded when President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) on February 17. The Recovery Act awarded \$10.4 billion to the NIH, of which \$174 million was specifically allocated to the NEI.

The ARRA is intended to preserve and create jobs, promote economic recovery and increase economic efficiency by stimulating technological advances in science and health. To achieve these goals, the NEI is distributing these funds to extramural researchers through Research Project Grants, including revisions and administrative supplements, NIH Challenge Grants and Small Business Catalyst Awards, among others. Some awards have been distributed during fiscal year 2009, and funding will continue through fiscal year 2010.



Key NEI initiatives through ARRA include the support of summer research experiences for students and science educators. These are intended to encourage students to seriously pursue careers in science and to provide science educators with short-term research experiences in NEI-supported laboratories. This summer, the NEI has sponsored 136 research positions for high school students, undergraduate students and science educators in 21 states and the District of Columbia.

Through all of the ARRA funding programs, the NEI continues to have a greater ability to support research that could uncover new scientific and medical knowledge related to vision health. We are pleased that we have the opportunity to extend additional support to the vision research community through these mechanisms. ■

Three ARVO members join National Advisory Eye Council

The National Advisory Eye Council for the National Eye Institute (NEI) has appointed four new members: Joseph A. Bonanno, OD, PhD; James Chodosh, MD, MPH; Col. Donald A. Gagliano, MD, and Alberta L. Orr, MSW. Bonanno, Chodosh and Gagliano are ARVO members.

The council 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 visually impaired individuals.



Joseph A. Bonanno, OD, PhD, is an associate dean and professor of optometry and vision science at Indiana University School of Optometry, where he

teaches biochemistry and physiology. During the past 18 years, Bonanno's research has primarily involved the ion and fluid transport properties of the corneal endothelium. He is a fellow of the American Academy of Optometry and has previously served as member and chair of the ARVO Annual Meeting Program Committee, ad hoc reviewer for several NEI grant panels, and member of the NIH Center for Scientific Review Anterior Eye Disease Study Section.



James Chodosh, MD, MPH, is an ophthalmologist at the Massachusetts Eye and Ear Infirmary and a lecturer in ophthalmology at Harvard Medical

School. Previously, he held the M.G. McCool Chair in Ophthalmology at the Dean A. McGee Eye Institute at the University of Oklahoma College of Medicine, and served as the residency program director, fellowship director, and chief of Cornea and External Diseases. He is past chair of the Anterior Eye Disease Study Section for the NIH Center for Scientific Review. Dr. Chodosh has received funding from the NEI for his research involving ocular adenovirus infection for more than 14 consecutive years. His primary clinical and research interests include medical and surgical treatment of infectious and neoplastic disorders of the ocular surface, and visual restoration of complicated cases.



Col. Donald A. Gagliano, MD, MHA, is executive director of the Department of Defense/Department of Veterans Affairs Vision Center of

Excellence. In 1995, he was awarded the Army Surgeon General's "A" Designator in recognition of his leadership and extensive international contributions as an ophthalmologist and retinal surgeon. He is a fellow of the American Academy of Ophthalmology and the American College of Healthcare Executives. Col. Gagliano also has had a wide range of military education, received numerous military awards and decorations, and led soldiers at every level of command, including the 30th Medical Brigade in Iraq, where he served as the surgeon who planned, integrated, and executed coalition combat health support during the first year of Operation Iraqi Freedom. ■

National Advisory Eye Council

Boldface indicates ARVO member.

Numbers in parentheses indicate the year the member's term ends.

Joseph Bonanno, OD, PhD (12)
Indiana University

James Chodosh, MD (12)
Massachusetts Eye and Ear Infirmary

Scott W. Cousins, MD (11)
Duke University Eye Center

Ronald J. Gardener, MD (11)
National Federation for the Blind

Charles Gilbert, MD, PhD (11)
Rockefeller University

Mae O. Gordon, PhD (10)
Washington University School of Medicine

Gunilla Haegerstrom-Portnoy, OD, PhD (09)
University of California, Berkeley

Juan I. Korenbrot, PhD (09)
University of California, San Francisco

Mary C. McGahan, PhD (10)
North Carolina State University

Alberta Orr (12)
NYC Coalition on Vision and Aging

Val C. Sheffield, MD, PhD (10)
University of Iowa College of Medicine

Richard Stone, MD (10)
University of Pennsylvania

Ex Officio
Marco A. Zarbin, MD, PhD
UMDNJ-New Jersey Medical School

Donald A. Gagliano, MD (Colonel)
Vision Center of Excellence




NEI/FDA Endpoints Symposium

Use of Patient-Reported Outcomes in Medical Product Development

October 13, 2009
National Institutes of Health, Bethesda, MD

Includes specialists in refractive surgery, cataract surgery, glaucoma and retina. FDA representatives will discuss the review and evaluation of patient-reported outcomes. Industry reps will expand on developing instruments, ophthalmic drugs and biologics.

Registration is now open.
www.arvo.org/endpoints

This meeting is being managed by the Association for Research in Vision and Ophthalmology





NIH Campus, Bethesda, MD

Connecting members

Join our conversation.
Click the Web 2.0 button
on the ARVO home page.

The ARVO Annual Meeting — as well as our other events — has always offered an ideal atmosphere for investigators to share eye and vision research. Now the Association is using new tools to further our members' conversations and re-create the collaborative spirit of the Annual Meeting all year long. We hope our e-communities provide members with a platform for a healthy virtual dialogue that leads to real-world progress and collaboration in eye and vision research.

f Facebook: Millions of people use Facebook every day to keep

up with friends, colleagues, share links and videos, and stay involved with organizations and interests. Keep up with ARVO colleagues and keep the discussion going by commenting on and sharing posts.

YouTube **YouTube:** Allows people to watch and share original videos worldwide through the Web. ARVO posts video messages from staff and board members, including topic updates and how-to's.

t **Twitter:** People follow friends, industry colleagues and organizations via Twitter and get information as it happens. ARVO's Twitter updates include links to the latest eye and vision research as well as news about events and funding deadlines.

flickr **Flickr:** An online album for photos and videos. Review and download photos from the 2009 Annual Meeting and other events; we add them all the time.

in **LinkedIn:** A network where you can find, meet and collaborate with colleagues or organizations and make new connections. Join the ARVO LinkedIn group and see who else is there.

BLÔG **Blog:** ARVO's Blog is a forum where members can exchange views on eye and vision topics. Apply to be a blogger by contacting Jessie Williams (jwilliams@arvo.org) or just read and comment on the posts. ■



What's changing with ARVO journals?

The ARVO Board of Trustees made several forward-thinking decisions in November 2008, joining society publishers who recognize that the future of publishing is now.

These decisions were based on a 10-year plan that began in July 1999, when *Investigative Ophthalmology & Visual Science (IOVS)* began providing full text online in addition to the printed issues. Then, in 2005, ARVO gave members the choice of opting out of receiving the print issue. By 2009, almost 50% of members had chosen the online-only version. Along the way, ARVO launched a brand new journal, the *Journal of Vision (JOV)*, online only and free to all, and *IOVS* signed on as one of the first eight journals on Google Scholar.

Now *IOVS* is moving to the next level. Starting with the January 2010 issue, *IOVS* will be delivered to you online only. Issues will no longer be printed.

Part of the original plan for *IOVS* included reducing the costs for color and exploring member concerns about the authors' page costs. The Board of Trustees requested staff to completely re-evaluate the expenses and provide explanations about possible alternatives to what has become widely known as the author-pays model.

Board decisions for IOVS

The ARVO Board of Trustees has completed its evaluation of author charges in terms of the pace of transition to online only as well as long-term plans. The Board has approved the following changes, effective with the January 2010 issue of *IOVS*:

- Page charges will be \$70 per page for the first 8 pages;
- Excess page fees will not change (\$150 per page for each page over 8);
- Color charges will be reduced to \$100 per page of color;
- At no charge, all articles whose authors indicate funding support from NIH, HHMI and

Wellcome Trust will be deposited automatically in PubMed Central to assist investigators in complying with grant requirements.

The board, editors-in-chief and staff continuously monitor costs and explore ways to reduce them whenever possible.



From left to right: Assistant Director, Journals Alice O'Donnell; *IOVS* Editor-in-Chief Paul Kaufman, MD, FARVO; and Director, Publishing & Communications Karen Schools Colson during a meeting at the ARVO office.

New IOVS features

IOVS will be getting a facelift in January when it goes online only, so look for the new home page then. While traditional reprints will still be available, starting with the January issue, you'll have the option to buy electronic or e-reprints — watch the ARVO Web site for more detailed information.

This fall, ARVO will begin pushing the electronic tables of contents

(eTOCs) to all members as issues are published. Subscribers can link directly from the eTOC to the online article. You also have the option to sign up now for weekly alerts for publish-ahead-of-print articles.

Keep in mind: All members have access to *IOVS* now, but you need to activate your

See *publications*, page 30

"... with the January 2010 issue, *IOVS* will be delivered to you online only. Issues will no longer be printed."

Did you know?

- Submissions to *IOVS* continue to increase every year. Submissions have increased over 40% since 2000, averaging between 5% and 9% per year!
- Editorial pages published in *IOVS* have increased 31% since 2004 (from 4,595 to >6,000 projected for 2009).
- All articles ever published in *IOVS* back to Volume 1, Issue 1 have been online for the past four years.
- All Annual Meeting abstracts since 2002 are electronically available and fully searchable in *IOVS*.
- New features have been added to the electronic version of *IOVS* every year, including publish-ahead-of-print for all accepted articles — a feature added in 2008.
- Submissions to *JOV* have increased more than 10% a year since its launch.
- *JOV* publishes the Vision Science Society's Annual Meeting abstracts every year and is considered the official archive.

publications, continued from page 30

account. You only have to activate your account once, because the electronic account will be updated automatically when you renew your ARVO membership. You'll never miss an issue if you renew now!

What's next for JOV?

JOV is moving to HighWire in January to join IOVS and over 1,200 other journals. JOV's URL will still be www.journalofvision.org. All current and back issues, including previously published abstracts for the VSS Meetings and the Fall Vision Science meetings, will be available and fully searchable. References will be linked to any articles in any journal published at HighWire, Pub Med/Medline, Web of Science and CrossRef in addition to all internal links.

JOV will also get a new home page and a new look, with lots of features, such as "other articles in Pub Med by this author" links, "e-mail this article", "search Google Scholar", and "download this citation" in a variety of formats — all from every page of every article. Do

you want to know more about an article when you scan the table of contents? Roll over the title and the complete abstract will pop up.

What about the future?

The long-term plan for IOVS includes moving as soon as possible from publishing once a month to publishing articles as they are ready. Look for an editorial by IOVS Editor-in-Chief Paul Kaufman introducing new sections in January.

Another feature will be a link on the new home page to announcements about special meetings and awards, as well as classified and product ads with links to additional information where available, and full content delivery to your PDA. Right now, staff is exploring sending IOVS and JOV articles to your iPhone!

If you have any questions, or need assistance activating your account, please contact arvo@arvo.org.

Karen Schools Colson
Director, Publishing & Communications

 Contact arvo@arvo.org

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



Downloads and citations: How do they relate at *Journal of Vision*?

Scientific articles are generally judged by their impact: the degree to which they alter the course of a given field of inquiry. But because that alteration may be difficult to quantify or long in coming, we look for simple metrics that can serve as surrogates.

The prime example is the number of times that an article is cited by other papers. This metric has become so ubiquitous and ingrained that we often forget it is only a surrogate. Indirect though it may be, it is often used in decisions on hiring, tenure and promotion, and forms the basis for the well known bragging device known as the H-Index (for a given scientist, the number N of his or her papers that have N or more citations).

At the *Journal of Vision*, because we are an online journal, we have been very interested in a different sort of metric: the number of times an article has been downloaded. Since October 2003 we have collected complete records (Web logs) of internet access of the journal, and this allows us to count downloads for individual articles (to prevent cheating, we count only the first download of a given article by a given user).

Since May 2007, we have published periodic reports of the download counts for each published article. These reports were described in an editorial (Watson, A. B. (2007). Measuring demand for online articles at the *Journal of Vision* (<http://journalofvision.org/7/7/i/>, doi:10.1167/7.7.i.)). There we argued that download counts were a valuable metric of the usage of scientific articles.

But how do download counts and citation counts relate? Recently we looked into this question, and published our findings in a second editorial (Watson, A. B. (2009). Comparing citations and downloads for individual articles. *Journal of Vision*, 9(4):i, 1-4, <http://journalofvision.org/9/4/i/>, doi:10.1167/9.4.i.)). Take a look at that report for the full story, but some of the conclusions are very interesting:

- The overall correlation between downloads and citations for *Journal of Vision* articles is highly significant, about 0.74.
- Citations and downloads increase with article age in remarkably similar ways, but downloads precede citations by about two years, and are about 45 times more numerous.
- For papers published in a single year, the correlation is as high as 0.8, and usually above 0.6.

- The overall correlation between downloads/year and citations/year is about 0.62.
- To summarize, download counts provide a useful indicator, two years in advance, of eventual citations — and presumably of the ultimate impact of the article. We would not be surprised if such counts make an appearance in decisions on hiring, tenure and promotion. They may be especially valuable for young scientists, who often face judgment before their citations counts have had a chance to mature.

PS: At the *Journal of Vision*, we have added a new button to each article. The "Search Google Scholar" button takes you to a page that shows the number of times the article has been cited, according to the free Google Scholar database.



Andrew B. Watson, PhD
IOVS Editor-in-Chief

journal of **VISION**
www.journalofvision.org

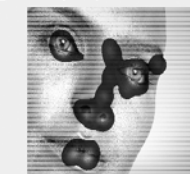
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