

A MESSAGE FROM THE PRESIDENT

GARY W. ABRAMS, MD



At its meeting in October, The Association for Research in Vision and Ophthalmology (ARVO) Board of Trustees discussed several issues directly impacting the present and future nature of our organization.

Disciplines vs. Specialties

Many of the older discipline-based Sections are experiencing a decline in membership. Contributing to this decline has been a shift over the years at ARVO (and in training programs in general) away from disciplines (anatomy, bio-chemistry, physiology, etc.) to more integrative programs. A shift away from discipline-based programs to integrated programs has also occurred in graduate training in the biomedical sciences. Most institutions have dropped discipline degree offerings in favor of more integrated programs. Are ARVO discipline Sections outdated? ARVO must evaluate whether there is a better way to represent Sections so that we move to a more integrated approach in the future. A working group of past ARVO Trustees is looking closely at this issue and other key aspects of ARVO's governance as we position the Association for the future.

Clinician Scientist "Endangered Species"

The clinician-scientist faces many challenges in a time of declining

reimbursement in clinical medicine and increasing competition for research grants. **Dr. Robert Weinreb**, in a symposium at the annual meeting of The Association of University Professors of Ophthalmology (AUPO) in January, 2004, spoke on the importance of the clinician-scientist as part of the research enterprise. He proposed the question, "Are clinician-scientists needed?" He answered that "clinician-scientists are vitally important and necessary in order to identify clinically relevant questions to answer in the laboratory, solve problems through rigorous clinical investigation, and translate laboratory discoveries into new methods for diagnosis, prevention, and treatment

"With a strong, stable membership, exceptional financial position, and dedicated volunteers, we are prepared [for]... a rich future,"
ARVO President, Gary W. Abrams, MD

of eye disease. They are needed to mentor the next generation of clinician-scientists, fill the void between the laboratory and the clinic, and to articulate and advocate the clinical relevance of basic and translational research." Elias Zerhouni, the director of the National Institutes of Health (NIH) has noted that "...exciting basic science discoveries demand that clinical research continue and even expand, while striving to improve efficiency and better inform basic science." Among NIH initiatives to expand the clinical enterprise will be increased efforts to provide advanced training in clinical research through existing and new programs to train clinician-scientists and new programs aimed at institutions and clinical centers.

ARVO has the opportunity to join with the AUPO and the NIH to raise

President's Message continued on page 3

Annual Meeting Highlights
New Meeting Schedule



Visit www.arvo.org to see specific schedule and make your travel plans accordingly.

Keynote Session

ARVO is honored to host two distinguished speakers at the 2005 Keynote Session. NIH Director, Elias A. Zerhouni, and acclaimed Nobel Laureate, Peter Agre will speak on Sunday night.

Wireless Internet Access

In addition to expanded free secure Internet access in the ARVO Internet Suite and Cyber Café, Wireless Internet hot spots will be located in designated areas of the Convention Center. Refer to the *Meeting Update* for locations and access information, and look for signs in the Convention Center identifying the hot spots.

ARVO Social in Exhibit Hall

The popular ARVO Social on Sunday, May 1, will be located in Hall B/C and exhibitors will be available at their booths.

ARVO Jobs and Career Fair

On Tuesday, from 12:00 PM - 4:00 PM, you will have the opportunity to speak with representatives from industry, academia, and government about opportunities with their organizations at the ARVO Career Fair, located in the Registration area, adjacent to the ARVO Jobs Placement Center. ■

IN THIS ISSUE

ARVO Elections 2
Letter to Members on Open Access ... 4
 Committees 6
 ARVO Advocacy & NEI/NIH News ... 7-10
 JOV 12
 IOVS 13



2004 - 2005 Officers

Gary W. Abrams, MD
President

Thomas Yorio, PhD
Vice President

Larry J. Takemoto, PhD
President-Elect

Joel M. Miller, PhD
Vice President-Elect

Steven E. Wilson, MD
Vice President-Elect

Sally S. Atherton, PhD
Immediate Past President

Paul L. Kaufman, MD
Executive Vice President

ARVO Office

Joanne G. Angle
Executive Director

Kimberly M. O'Sullivan
Publications Coordinator

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



There is still time to become a member of ARVO, renew your membership or register for the 2005 Annual Meeting – Global Networking!

www.arvo.org

ARVO ELECTIONS

2005 Trustee Election

All voting members (Regular, Family, Sustaining, Life, and Family Life) of the Retina (RE) and Physiology and Pharmacology (PH) Sections will elect Trustees in 2005 at their Sections Business Meeting in Fort Lauderdale. Proxies and candidate information will be distributed in February, 2005.

PHYSIOLOGY AND PHARMACOLOGY

Nicholas Delamere, PhD
University of Louisville
M. Christine McGahan, PhD
North Carolina State University

RETINA

Paul Sternberg, MD
Vanderbilt University Medical Center
Yasuo Tano, MD
Osaka University Medical School

Proxies may be registered online or mailed to the ARVO Office. Advance proxies must be registered by April 18, 2004. Instructions for both methods of registering your proxy will be included in the election mailing. Proxies may also be cast in person or amended in the 15-minute period preceding the Section Business Meeting. Election results will be announced in the corresponding Section's Business Meeting. ■

Sections to Nominate Trustees in 2005

At their Sections' Business Meeting, the following Sections will nominate candidates for Trustee:

- Cornea (CO)
- Eye Movements, Strabismus, Amblyopia and Neuro-Ophthalmology (EY)
- Lens (LE)

The ARVO Bylaws stipulate that "each standing Scientific Section whose Trustee's term of office will expire at the end of the following year's Annual Meeting shall nominate no more than two (2) candidates, one of whom will be elected as the Successor Trustee at the following year's Scientific Section's separate business meeting, which will take place at the Annual Meeting."

All members are encouraged to consider who will best represent their Sections in this important role. ■

Volunteer Today For An ARVO Committee

ARVO committees are active in many areas; developing programs, enhancing member services, assisting the Board of Trustees in the leadership of the Association. Each year, ARVO members have the chance to express interest in serving on a committee and playing a more active role in filling these critical committee functions. Service on an ARVO committee will bring you close to the inner-workings of the Association, providing opportunities for personal and professional development and advancement.

Appointments to ARVO committees are made each year by the President-Elect. New committee appointees are encouraged to attend committee functions at the Annual Meeting prior to the commencement of their terms at the close of the Annual Meeting. Throughout the year, committees meet via conference call, with

the only face-to-face meetings typically occurring in conjunction with the ARVO Annual Meeting making participation by Members outside the US possible and convenient.

To be considered for appointment, visit the committees page under "About ARVO" on the ARVO Web site. Here you can view committee descriptions and learn more about the work of the committees. A Volunteer form can be found on the Web site at the committee main page and on each committee's individual page. All individuals completing this form online will be considered for appointment in 2005.

To learn more about committee participation, you may also contact ARVO Director of Governance and Strategic Initiatives Robert Rupp at rrupp@arvo.org or 240-221-2912. ■



ARVO is redesigning its Web site and we need your help. We are looking for reviewers to provide guidance and feedback on the new design and functionality. To sign up to be a reviewer or to find out more, please contact TJ Rainsford, director of technology & web services, at tjrainsford@arvo.org. ■

President's Message continued from page 1

awareness of issues facing clinician-scientists. ARVO has embarked on a series of initiatives to recognize clinician-scientists in training, provide career development information to new and budding clinician-scientists, advocate for development of a mechanism to provide bridge funding for young clinician-scientists during the K award development process, promote communication among clinician-scientists at all stages of development and promote international development of clinician-scientists. (More information on page 8).

International Outreach

The global funding needs for eye and vision research are significant and are growing every day. An important initiative that has come from the strategic planning process is the need for international advocacy for research funding. The most successful strategy for persuading governments to increase research funding may be to develop a program supported by individuals and industry that convinces these governments that research funding is a worthy investment. In addition, it is also important to collect enough data to explain how socio-economic factors will mitigate the cost of funding research in a given country or setting; making the case for governments and funding agencies that the growing incidence of vision loss and blindness are too costly a crisis to ignore.

A key component to this strategy is assembling cadres of researchers in their own countries willing to promote the value of vision research and work in their country to secure industry and governmental funding. Already groups of ARVO members in some countries, including Argentina, Brazil and Israel have formed independent national research organizations. The Board feels that these organizations have great potential to serve as the foundation for the formation of international ARVO chapters in the not-so-distant future. Questions remain as to the formal model that would be most effective and how chapters would formally relate to ARVO, but it is clear that chapters will have significant impact on promoting vision research, generating much needed funding, and increasing the opportunities for active involvement in ARVO.

Finally, the Board considered the nomination process for Trustees. This process has varied among Sections over time. In order to assure representation of all Section members, including international members, a working group made up of current and former Trustees and Section Program Chairs will evaluate and make recommendations on improving current processes by increasing participation and inclusiveness for all ARVO members.

The excitement of the Board in its discussion of these issues was particularly reassuring to me, not only in my role as President, but also as an ARVO Member. With a strong, stable membership, exceptional financial position, and dedicated volunteers at all levels of the Association, we are prepared to face these issues and address them with solutions that will build on ARVO's strong history, and lead to a rich future. ■

Sincerely,

Gary W. Abrams, MD
ARVO President

Calendar

Important Dates and Upcoming Events

2005

- January 21-22** Program Committee Meeting
- January 25** **DEADLINE** for Abstract Withdrawal (if withdrawn after this date, abstract(s) will still appear in Meeting publications)
- February 24** Notification of Abstract Acceptance **and** Abstract Search Program available at www.arvo.org
- March 4** **DEADLINE** for 2006 ARVO Awards Nominations
- April 1** **DEADLINE** for Online Housing Reservations
- April 8** **DEADLINE** for Early Registration Fees
- April 22** **DEADLINE** for Annual Meeting Advance Registration
DEADLINE for ARVO Courses Registration www.arvo.org
- April 27** **DEADLINE** for Advance Registration Refund Requests (must be made in writing and accompanied by namebadge.)
- April 29 - 30** Vision Research Conference
- April 30** ARVO Education Courses: *Nanotechnology and Nanomedicine: Applications for Vision Research* 1:00 PM - 4:00 PM
Ocular Oncology Collaborative Research 8:20 AM - 4:00 PM
- May 1 - 5** ARVO Annual Meeting, Fort Lauderdale, Florida
- September 8-10** *Ocular Cell and Molecular Biology: Summer Eye Research Conference* Sarasota, Florida
- September 25-28** *Regenerative Ocular Biology: Western Eye Research Conference* Laguna Beach, California

LETTER TO ARVO MEMBERS ON OPEN ACCESS

In November you received a letter from the Board of Trustees urging you to comment on the National Institutes of Health (NIH) Notice on Public Access. We thank you for sending your comments regardless of whether you supported the Notice or agreed with the delay of implementation until more information is available. This is a complex issue with potentially wide ranging effects on all of us. The comment period has closed and there are some indications that a decision on how NIH will proceed may be forthcoming. Watch the ARVO Web site for updates.

A brief history of what prompted the recent activities may clarify the issue. In July the US House of Representatives Appropriations Committee issued a report recommending that NIH develop a policy for all articles for which grant funds are used to pay publication charges and making those articles available no later than six months after publication through PubMed Central. The House report called for a full report from NIH to the Committee by December 1 about how NIH intends to implement the policy that will apply from Fiscal Year (FY) 2005 forward.

Between August 15th and 29th NIH arranged three meetings with different groups potentially affected by the policy: intra- and extramural scientists; publishers; and patient advocacy groups. All constituents were invited to voice concerns and submit their suggestions about the US House requirements. ARVO participated in the discussions and sent a letter to Dr. Elias Zerhouni, director, NIH, expressing concerns that more information about the plan and its implementation would be needed before a complete response would be possible. We requested a delay until more information was available. The Notice referred to in our email to you was published on the NIH site on Friday, September 3 and in the Federal Register on September 17 and the deadline for sending comments to NIH was extended to November 16.

Associations, private publishers, advocacy groups, and individuals submitted "thousands" of comments according to David Lipman, director, National Center for Biotechnology Information at the National Library of Medicine. All comments are being reviewed and categorized now and a question and answer site is being built to address the concerns and finalize the policy.

The NIH has three stated goals that the policy is designed to meet:

- Creating a stable archive of peer-reviewed research publications to ensure the permanent preservation of these vital published findings;
- Securing for NIH a searchable compendium of peer-reviewed research publications that the agency can use to manage its research portfolio and monitor scientific productivity; and
- Giving the public better access to a time-delayed archive of published results of NIH-funded research.

The goals illustrate several of our concerns: as defined, this archive would result in only part of the peer reviewed and accepted articles stored in the archive since there is no accommodation for those articles not funded by NIH. This would

provide a partial picture of the research to both scientists and the public. More than 50 percent of articles published in *Investigative Ophthalmology & Visual Science (IOVS)* and *Journal of Vision (JOV)* report funding support from NIH. In addition, the process by which the author's version of the accepted manuscript and the final published version of the article would be provided and linked has not been described. We are concerned that with electronic file processing and changes that are frequently made during the editing and production process, the author's manuscript may not match the published article of record. Also, the author's version may be available through PubMed Central before the published article which could lead to confusion. We believe that the final published version should

"We are concerned that with electronic file processing and changes that are frequently made during the editing and production process, the author's manuscript may not match the published article of record,"

ARVO President, Gary W. Abrams, MD

be the article of record since it has been copy edited, the references have been checked, and the article verified again through proofs read by the author.

There is also concern about the financial impact on journals. ARVO has three primary sources of income: dues; subscriptions; and author fees. This revenue must cover the costs of peer review, copy editing, file preparation, printing, and mailing as well as contributing to the other ARVO benefits and programs. If any of these sources of revenue is reduced, there will be two choices only: raise dues and fees or reduce programs and journal pages. Currently more than 1,700 articles are submitted each year; due to the rigorous review and high quality standards, less than 850 are accepted and published.

ARVO currently deposits all *IOVS* and *JOV* abstracts in Medline provides links back to the published articles of record. The *IOVSONline* articles are protected from potential misuse and all articles are stored in a "deep" or protected archive that can be updated to meet the needs of ever changing technologies. This archive is at Stanford University Library, which is one of the highly regarded, secure repositories recommended by librarian's world wide. ARVO currently makes *IOVS* articles freely accessible 12 months after publication and articles from the free access *JOV* are open and freely accessible from the time of publication.

On November 20, the House of Representatives passed the 2005 Appropriations Bill and included the following statement: "NIH is directed to give full and fair consideration to all comments before publishing its final policy. The conferees request NIH to provide the estimated costs of implementing this policy each year in its annual Justification of Estimates to the House and Senate Appropriations Committees. In addition, the conferees direct NIH to continue to work with the publishers of scientific journals to maintain the integrity of the peer review system."

ARVO looks forward to participating in these discussions and working with NIH and all stakeholders to develop an equitable and reasonable solution and is willing to provide open access to all articles six months after date of publication. ■



Gary W. Abrams, MD
ARVO President

ARVOMEMBERSHIP NEWS

Brain Awareness Week – March 15 - 21, 2005

Brain Awareness Week is an international effort organized by the Dana Alliance for Brain Initiatives to advance public awareness about the progress, promise, and benefits of brain research. The Dana Alliance is joined in the campaign by partners in the United States and around the world, including medical and research organizations; patient advocacy groups; the National Institutes of Health, and other government agencies; service groups; hospitals and universities; K-12 schools; and professional organizations.

Your organization or institution is invited to host a special event or educa-

tional activity highlighting the wonders of the brain and nervous system.

Take part in the tenth annual celebration of Brain Awareness Week, and visit their Web site at www.dana.org/brainweek for information to help you plan programs during Brain Awareness Week, including advice on finding a speaker, developing ideas for activities and events, and communicating neuroscience to the public. ■



www.dana.org/brainweek

Please Confirm Your E-mail Address!

Are you receiving e-mails from ARVO? If not, we need your correct e-mail address! Check the online Member Directory at www.arvo.org and update your e-mail address or e-mail us at mem@arvo.org.

With e-mail addresses for more than 90 percent of our members, this has become our primary method of communication.

If we do not have your correct e-mail address, you may not receive notification regarding abstract submission or updated Annual Meeting information. **You will not get spammed by ARVO!** We do not permit our e-mail list to be used by outside organizations. Update your e-mail address today and do not miss any more important announcements and reminders. ■

Member Discounts on Vision-Related Journals

ARVO members are entitled to discounted subscriptions to a variety of professional journals. To take advantage of this member benefit, go to www.arvo.org/Membership/DiscountJournals.asp.

American Orthoptic
Binocular Vision &
Strabismus Surgery
Quarterly
Current Eye Research
European Journal of
Ophthalmology
Graefe's Archive
Neuro-ophthalmology
Ocular Immunology
The Ocular Surface
Ophthalmic Epidemiology
Ophthalmic Genetics
Ophthalmic Research
Ophthalmologica
Orbit
Perception
Strabismus
Vision Research
Visual Neuroscience

If there are additional journals you would be interested in receiving at a discount, please forward the name of the publication to mem@arvo.org, and we will contact the publisher about participating in this member benefit program. ■

ARVOJobs! – New Enhanced Job Site <http://jobs.arvo.org>

We are pleased to announce the new ARVOJobs Web site that includes the following features.

Job Seekers (post your CV for FREE):

- Job Seeker privacy
- Posting of CVs, cover letters and other documents
- Job Search engine with multiple criteria including keyword, category, level, location, etc.
- Online application process
- Registration for notification when jobs matching your criteria are posted
- Activity reports of institutions applied to, number of time their CV has been viewed, etc.

Employers:

- Searchable CV database
- Enhance listing with logos, institutional profiles, Web site links
- Register different criteria for different jobs and receive E-mail notification when matching CVs are posted
- Job management info including number of times position is viewed, number of online applications, etc. ■

Check it out TODAY!
<http://jobs.arvo.org>

NEWS FROM COMMITTEES

ARVO Represented at AAALAC Board Meeting

ARVO Animals in Research Committee Chair Jeff Kiel, PhD, serves as ARVO's delegate to the Board of Trustees of the Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC). Dr. Kiel reported on the following outcomes from the AAALAC Board Meeting held in September.

New European Section Council

AAALAC has created a new European Section Council on Accreditation. The European Section is comprised of nine European members and is responsible for performing accreditation site visits in Europe. The European Section received training on how to perform site visits by the North American Section Council in September, and met on their own in Brussels recently. Applications and institutional self-reports as well as supporting documentation from an institution can be in English, or the native language of the institution with translation provided by

AAALAC as needed. The European Section Council anticipates needing approximately 20 ad Hoc site visitors to fulfill their mission.

The goal of the European Section Council is to increase the number of accredited institutions in Europe. AAALAC anticipates that European funding agencies may soon require accreditation, as may the European Union. However, harmonization of regulations governing research animal use in Europe is not likely soon.

AAALAC is promoting accreditation in Asia (Singapore, India, China, Korea), South America, and South Africa and is also in the early stages of offering accreditation for agricultural facilities overseas.

Agricultural Research Programs

AAALAC is expanding into accreditation of North American Agricultural Research Programs. Such site visits will

use the "Agricultural Guide for the Care and Use of Animals" (the "Ag Guide") which differs significantly from the Guide for the Care and Use of Laboratory Animals (the "Guide"). Also, agricultural animals do not always fall under the jurisdiction of the Animal Welfare Act or the United States Department of Agriculture. This will be a significant evolution for AAALAC. ■

CONCERNED ABOUT ANIMAL USE ISSUES?

The ARVO Animals in Research Committee monitors the global regulation of animals used in ophthalmic research.

Visit the Web site, www.arvo.org/Committee/AnimalsInResearch/animalresearch.asp for more information.

ARVO Committee Sponsored Workshops During 2005 Annual Meeting

CAREER DEVELOPMENT THROUGH NETWORKING AND COLLABORATIONS

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

CASE STUDIES IN INTELLECTUAL PROPERTY: PROTECTING YOUR IDEA

Organized by the Commercial Relationships Committee
Sunday, May 1 1:00 PM - 2:30 PM

CURRENT ANIMAL WELFARE ISSUES AND ARVO MEMBER RESEARCH

Organized by the Scientists Center for Animal Welfare in Cooperation with the Animals in Research Committee
Sunday, May 1 1:00 PM - 2:30 PM

ETHICAL ISSUES IN RESEARCH PUBLICATION

Organized by the Committee on Ethics and Regulation in Clinical Research
Monday, May 2 1:15 PM - 2:45 PM



Attention: Students, Post-Docs and Fellows

FIRST ONLINE COMMUNITY LAUNCHED BY THE MEMBERS-IN-TRAINING COMMITTEE



www.arvo.org/community/mit

CHECK OUT YOUR NETWORKING RESOURCE

- **MIT e-Forum** – sign up for this interactive listserv
Pose and respond to questions about all the issues facing you
- **Online Library of Resources** – documents and links
- **Under Construction** - calendar of MIT events

Congress Passes Fiscal Year 2005 Spending Bill; Includes Increase for Medical Research Funding

On November 20, Congress passed the Fiscal Year (FY) 2005 Omnibus spending bill, which was a series of nine appropriations bills including that for Labor, Health and Human Services, and Education, consolidated under HR4818, the Foreign Operations appropriations bill. To pay for any additional spending, the bill included a .83 percent across-the-board cut to the appropriated amounts for all non-defense, non-homeland security

	FY2003 Actual	FY2004 Actual	FY2005 Request/ House	FY2005 Senate Bill	Final FY 2005*
NEI	\$632.3 M +9.2%	\$652.7 M +3.3%	\$671.6 M +2.9%	\$660.3 M +4.2%	\$669M +2.6%
NIH	\$27.2 B +14.9%	\$28 B +3.1%	\$28.5 B +2.6%	\$28.9 B +4%	\$28.4 B +2%

*Net of FY2005 Appropriated amount minus .83% across-the-board cut to non-defense programs and prior to other program transfers

spending. The appropriated amount for the National Institutes of Health (NIH), prior to the .83 percent cut, is \$28.6 billion, which is \$800 million more than in FY04 and reflects a 2.8 percent increase. Applying the .83 percent cut to the NIH appropriated amount, the FY05 increase nets to about \$560 million or an FY05

funding level of \$28.4 billion, reflecting a net 2 percent increase over FY04. This amount does not reflect program transfers that could additionally affect the net.

The appropriated amount for the National Eye Institute (NEI), prior to the .83 percent cut, is \$674.6 million, which is \$21.5 million more than the final programmatic amount of \$653 million in FY04 and reflects a 3.3 percent increase. Applying the .83 percent cut to the NEI appropriated amount, the FY05 NEI increase nets to \$669.5 million, reflecting a net 2.6 percent increase over FY04, prior to program transfers that could additionally affect the net.

Commenting on Congress' actions, the National Alliance for Eye and Vision Research (NAEVR) president and ARVO member **Stephen J. Ryan**, MD stated, "Given the tight fiscal environment, we commend the Appropriations leaders from both sides of the aisle for ensuring increases in federally-funded medical research.

They are making a cost-effective investment that will result in treatments and therapies to delay or prevent the onset of disease and improve the quality of life for all Americans."

While acknowledging that the FY2005 appropriated level for the NEI is still only 94 percent of the NEI budget-doubling goal of \$711 million (to bring it into parity with the budget-doubling that occurred overall at the NIH from FY1998-FY2003), NAEVR Executive Director James Jorkasky said that the Appropriators' actions were a "significant step to close the gap in eye and vision research funding" but added that, "since federal vision research spending is still less than one percent of the annual economic and societal cost of vision impairment of \$68 billion, NAEVR will continue to advocate for completion of the NEI budget-doubling to \$711 million to deal with this major public health problem." ■

ARVO Members Key to Capitol Hill Advocacy Efforts

As Congress grappled with the Fiscal Year 2005 budget and appropriations process in the last half of 2004, members of the ARVO community were effective advocates for eye and vision research funding on Capitol Hill and in Congressional districts. Some examples appear below.

On July 14, ARVO member **Neil Bressler**, MD met with key Members of the Maryland delegation, as well as Appropriations leaders, sharing with them the new National Alliance for Eye and Vision Research (NAEVR) developed Age-related Eye Disease fact sheet, available on www.eyeresearch.org. While advocating overall for additional National Eye Institute (NEI) funding, Dr. Bressler tailored



Left to right: Dr. Neil Bressler meets with Liz Connell and Rachel Dallin of Senator Ted Stevens' office. Ms. Dallin's brother is sight-impaired due to retinitis pigmentosa

his message to the concerns of each office, for example: Senator Sarbanes (children's vision, as his health legislative assistant is a pediatrician); Senator Mikulski (an Appropriator and women's/aging health advocate); Congressman Cummings (vision health disparities, as Congressman Cummings chairs the Congressional Black Caucus); Congressman Hoyer (an Appropriator and aging

advocate); and Senator Stevens, Senate Appropriations Committee chair (Native American health issues advocate).

On September 8, ARVO member **Alan Marmorstein**, PhD hosted a district staff member, Sami Hamed, from the office of Congressman Raul Grijalva for a briefing on the NEI sponsored Early Treatment of Retinopathy of Prematurity (ETROP) study, presented by study chair and ARVO member **William Good**, MD. Mr. Hamed is sight-impaired due to ROP.

On September 8, after Rohit Varma, MD and **Mildred Olivier**, MD finished speaking at the Alliance for Eye and Vision Research-sponsored *Vision Health Disparities Research Briefing* (see page 8), they met with key Appropriations staff just as the Senate Labor, Health and Human Services, and Education Subcommittee markup was being finalized- which was approved the next day and recommended higher funding for the National Institutes of Health overall, and NEI,



Left to right: Dr. Rohit Varma and Dr. Mildred Olivier meet with Brent Jaquet of the office of Congressman Bill Young, chair of the House Appropriations Committee

Research!America Releases New Fact Sheet

In early December 2004, Research!America (RIA) and The Lasker Foundation released a new fact sheet, *Vision and Blindness*, developed in conjunction with the National Alliance for Eye and Vision Research (NAEVR). This is the first-ever vision-related fact sheet within the RIA portfolio of position papers showcasing how investment in research saves lives and money – especially that sponsored by the National Eye Institute. The fact sheet accompanied the December RIA newsletter which also featured NAEVR as its "Member of the Month."

The fact sheet's official release on Capitol Hill and to the media will occur in January 2005 with the start of the 109th Congress and the Fiscal Year 2006 appropriations process. "We are pleased to have worked with RIA to expand the message about the value of eye and vision research," stated NAEVR Executive Director James Jorkasky, "as it adds another powerful resource to our advocacy efforts with the new Congress."

The fact sheet is available at www.researchamerica.org and www.eyeresearch.org. ■



CLINICIAN SCIENTIST DEVELOPMENT PROGRAMS

The National Eye Institute has awarded several K12 grants for programs for individuals wishing to develop careers as clinician-scientists in vision research. The Wilmer Eye Institute and Harvard are seeking applicants for these programs. For additional information about the Wilmer Eye Institute program at Johns Hopkins, see www.wilmer.jhu.edu, or contact Pat Tracey at ptracey@jhmi.edu. For information on the Harvard program, contact Cori O'Brien at cori_o'brien@meci.harvard.edu. ■

Los Angeles Latino Eye Study Issues; Principal Investigator Speaks at Capitol Hill Briefing on Vision Health Disparities Research

On August 9, the National Eye Institute released the results of the Los Angeles Latino Eye Study (LALES), the largest, most comprehensive epidemiological analysis of visual impairment in Latinos conducted in the United States. Co-sponsored by the National Center on Minority Health and Health Disparities and Research to Prevent Blindness, the study showed that Latinos had high rates of low vision, open-angle glaucoma and diabetic retinopathy. Full study results appeared in the June, July and August 2004 issues of the journal *Ophthalmology*.

On September 8, LALES Principal Investigator and ARVO member **Rohit Varma**, MD, MPH was joined by ARVO member **Mildred Olivier**, MD, FACS during a Capitol Hill Briefing on *Vision Health Disparities Research*, sponsored by the Alliance for Eye and Vision Research (AVER) and attended by more than 70 Congressional staff. While Dr. Varma reported on the recent LALES results, Dr. Olivier reported on the use of pressure-reducing drops to delay or prevent glaucoma in African Americans in a subset analysis of the larger Ocular Hypertension Treatment Study (OHTS).



Left to right: AVER Executive Director James Jorkasky; Saul Pena of Congressman Ciro Rodriguez's office; Jennifer Grodsky of Congresswoman Hilda Solis' office; and Dr. Rohit Varma (Doheny Eye Institute)

Prevalence rates of visual impairment in Latinos are higher than those reported in Whites and comparable to those reported in African Americans," said Varma, who added that "given that Latinos are the fastest growing segment of the US population, we are facing a significant increase in the burden of eye disease as the population ages." He also noted that one in five individuals with diabetes was newly diagnosed during the LALES clinical exam, and 25 percent of these were found to have diabetic retinopathy. Overall, almost half of all Latinos with diabetes had diabetic retinopathy.

Acknowledging that African Americans are three times as likely to have glaucoma as Whites, Dr. Olivier reported that the OHTS study found that daily pressure-lowering eye drops reduced the development of primary open-angle glaucoma in African Americans by almost 50 percent. "The OHTS study is not only important because it confirmed that the risk for developing glaucoma is higher in African Americans," said Olivier, "it was also the first study to recruit large numbers of African Americans to examine the benefit of eye drops to delay or prevent its onset."

In opening comments, AVER's James Jorkasky thanked the Congressional Hispanic Caucus for sending a "Dear Colleague" letter to Hill offices supporting the event. ■

REQUEST FOR APPLICATIONS

DIABETIC COMPLICATIONS

Collaborative Studies on Angiogenesis and Diabetic Complications, will provide up to \$3 million to fund five to ten new R01 awards with project periods ranging from two to four years. Letters of Intent due February 17, 2005. Complete details regarding this Request for Applications can be found at:

<http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-04-022.html>

Vision Public Information Network

The National Eye Institute (NEI) grantee institutions across the country participate in the NEI's VISION Public Information Network. The Network now has 202 members representing 85 eye institutes and departments of ophthalmology, 16 schools and colleges of optometry, and 11 affiliated organizations.

Network members play an important role in disseminating research results through the media. In 2004, the NEI released the results of the following studies with the assistance of 36 Network member institutions and Study Centers in 18 states.

- Los Angeles Latino Eye Study
- Ocular Hypertension Treatment Study-African American Results
- Prevalence of Blindness Data
- Vision in Preschoolers Study

If you plan to release the results of NEI-funded research, check with your public information officer to see if your institution is represented in the Network. He

or she can work with the NEI to help maximize media coverage for your institution, feature the contributions of your scientists, and highlight the benefits of vision research.

Additional details and a listing of member institutions are available on the Network Web site at

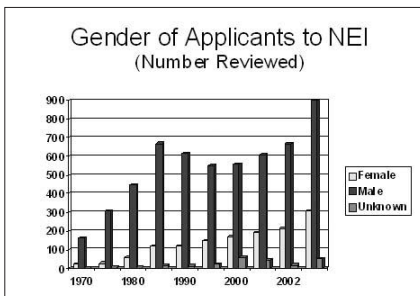
www.visionnetwork.nei.nih.gov.

For more information, please contact Jean Horrigan at jh@nei.nih.gov. ■



Participation of Women in NEI Extramural Grant Programs

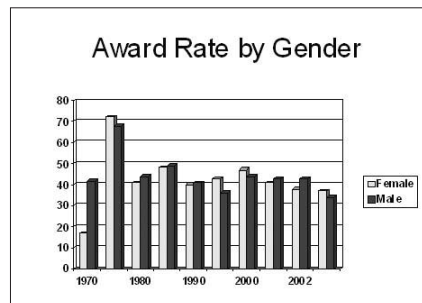
This past summer, members of the National Advisory Eye Council (NAEC) asked National Eye Institute (NEI) staff to report on the participation of women in the Institute's extramural grants programs. Starting from 1970, when only 12 women submitted any type of grant application to NEI, the number of women applicants has risen steadily over the years. By Fiscal Year 2003, the number of women applying had risen to 303. This represents 25 percent of the total number of applicants for that year, a percentage which is identical to that of the NIH as a whole.



Although the number of women submitting applications is lower than that of their male colleagues, women are funded at approximately the same rate as men. Both genders have had essentially equivalent success rates since the early 1970s with small year-to-year fluctuations. In Fiscal Year 2003, the

success rate was 37 percent for women and 34 percent for men.

There is evidence for a "glass ceiling" for women with regards to being Principal Investigator (PI) on certain



types of NEI funding. Women are less likely to be the PI for large, complex grant mechanisms, such as the institutional training grants or center core grants. Only 11 of 85 such PIs (13 percent) are women. Women are also under-represented as PIs for large, collaborative grant activities such as Study Chairs of Phase III clinical trials, Bioengineering Research Partnerships, or Collaborative Research on Therapy for Visual Disorders.

The NAEC examined this data at their September 2004, meeting and made observations and suggestions for the NEI staff. It is obviously gratifying that there is no evidence for discrimination in success rates for women, and

that the NEI should continue its time-tested policies of grant review and award. Council urged NEI to explore policies and outreach programs that might increase the number of women who apply for funding. To help address "glass ceiling" issues, Council noted that the vision research community as a whole needs to do more to promote women to higher leadership positions.

NEI wishes to highlight a program designed to support women who wish to reenter an active research career after taking time off to care for children or attend to other family responsibilities. The "Supplements to Promote Reentry into Biomedical and Behavioral Research Careers" provide salary, fringe benefits, and up to \$10,000 in research-related costs for an individual to become a full participant in an ongoing, NEI-funded research project. Applications for this program are brief and are reviewed administratively under an expedited process (typically four to six weeks). Details are available at <http://grants2.nih.gov/grants/guide/pa-files/PA-04-126.html>. Interested individuals are urged to contact Dr. Ralph J. Helmsen, research resources officer, at 301-451-2020, or via E-mail at rjh@nei.nih.gov. ■

NIH Neuroscience Blueprint



Paul Sieving, MD, PhD
NEI Director

Recently, I had the pleasure of participating in announcing the new National Institutes of Health (NIH) Neuroscience Blueprint. This is a cooperative plan among 14 NIH Institutes to foster neuroscience research. The Blueprint was unveiled at the Society for Neuroscience annual meeting in San Diego, in October 2004, and is the beginning of an estimated 100 million dollar investment in tools, resources, and coordinated neuroscience training over the next five years. This initiative indicates that neuroscience diseases and research into their fundamental biology are a major priority for the NIH.

Over the past year, directors of 14 NIH Institutes with extensive neuroscience portfolios examined their respective research programs to identify commonalities. In addition, we invited distinguished neuroscientists and neurobiologists to the NIH to comment on research needs and opportunities. The eye and vision community was well represented at these meetings. Progress reports were presented to institute Advisory Councils, including the National Advisory Eye Council in September. Since the inception of this idea in early 2004 by NIH Director Dr. Elias Zerhouni, the process has been both challenging and rewarding. Through this effort, we have identified several cross-cutting areas of emphasis.

The 14 participating NIH institutes have a collective budget of nearly 4.5 billion dollars and will devote a small but significant percentage of funds to create additional shared resources for research on three biologic themes: Development, Neurodegeneration, and Plasticity. In the area of developmental biology, the Blueprint suggests focusing

on factors that control cell specialization; signals that guide the formation of connections among nerve cells; and the mechanisms by which experience and genes work to sculpt the nervous system. In neurodegeneration, the Blueprint targets both normal aging and cell death due to disease and dysfunctional cells. In examining plasticity, the Blueprint emphasizes the capacity to adapt and change in response to environmental cues, experience, injury and disease.

"Neuroscience" should be a comfortable term to the vision community. We are all familiar with the term "visual neuroscience" which often is taken to indicate visual processing, particularly in central circuits of the brain

and visual system. In fact, however, involvement of the eye and vision in the science and medicine of neuroscience is far broader and encompasses ocular neurobiology of diseases and processes.

Neuroscience and neurobiology are already built into the vision community through major portions of the National Eye Institute (NEI) portfolio. Glaucoma research is probing mechanisms which cause the death of ganglion cells and concomitant vision morbidity in a sizeable portion of the US and world population. Retinal neurodegenerative diseases affect rod and cone photoreceptors and result in vision loss from retinitis pigmentosa and macular degeneration, including macular degeneration associated with aging. Other parts of the existing NEI grant portfolio that involve neuroscience, neurosensory perception, and the neurobiology of vision include low vision and vision rehabilitation, retinal cell biology and circuitry, oculomotor systems, strabismus, amblyopia and central visual processing. In short, the vision community has always had a major stake in neuroscience studies.

The intent of the Neuroscience Blueprint is to coordinate efforts for the

benefit of the broad scientific community. Eye and vision research is an integral part of the neuroscience community and has much to contribute to and learn from the broader field. NEI is joining vigorously with the other institutes that have a core scientific interest in neuroscience, to make this initiative available to the vision community. This ultimately will enhance the study and treatment of visual diseases based in neurobiology and neuroscience.

I encourage you to examine the major neuroscience themes, tools and resources that will become available in the near future. Information on the Neuroscience Blueprint can be found at the NIH Web Site: <http://neuroscienceblueprint.nih.gov/> ■

continued from page 7

specifically, than the House bill.

On October 24, at the annual meeting of the American Academy of Ophthalmology in New Orleans, NAEVR hosted a dinner with Congressman Mark Foley, a member of the Ways and Means Committee whose district represents the fifth largest Medicare-eligible population in the United States. ARVO member **Jean Jacob**, PhD described to Congressman Foley the importance of NEI funding



Photo: Congressman Mark Foley hears about vision research at LSU from Dr. Jean Jacob.

to the achievements and goals of the vision research program at Louisiana State University.

NAEVR is pleased to engage interested ARVO members in advocacy at the national or local level. Contact NAEVR's James Jorkasky at 240-221-2905 or jamesj@eyersearch.org. ■

The ARVO Foundation

The ARVO Foundation thanks all our donors and supporters who made our accomplishments in 2004 possible.

Gary Abrams	Joseph Dowling	Paul Lee	Botir T. Sagdullaev
Daniel Albert	John Dowling	Franklin T. Li	Julie Sandell and
Alcon Laboratories	Henry Edelhauser	Litho Ind	Jeremy Wolfe
Doug Anderson	Jay Enoch	Stuart Mangel	Ramin Sarrafizadeh
Joanne Angle	John Epstein	Rex E. Martin	Ann Marie Skoczenski
Sally Atherton	Debora Farber	Masao Matsubara	Robert G. Smith
Robert Barlow	Frederick Ferris	James McCulley	Ronald E. Smith
Bernard Becker	Robert Frank	Suzanne McKee	Abe Spector and
David Beebe and	Israel and Diane Goldberg	Joel Miller	Marguerite Filson
Elizabeth Beebe	Richard Green	Robert and Rosine	Martin Steinbach
Joe Besharse	Karen L. Gunther	Nussenblatt	Mark Tso
Laszlo Bito	David Guyton	Janice Oliva	Gunter Von Noorden
Janet and Robert Blanks	Linda Hazlett	Mildred M. G. Olivier	Susan Vitale
William Bourne	Anita Hendrickson	OPREF	Jeff Walline
Robert Boynton	Edward Howes	Daniel Organisciak	Joseph Walsh
Oliver Braddick	Martine Jager	Christopher Paterson	Robert Weinreb
Harvey Brown	Geeta Kadambi	Jacob Pe'er	Sheila West
David Callanan	Jeffrey Kalenak	Pfizer Ophthalmics	Steve Wilson
Oscar Candia	Paul Kaufman and	Harry Quigley	Barry Winkler
Leo Chylack	Margaret George	Lorin A. Riggs	Agnes Wong
Mandi D. Conway	Ron and Barbara Klein	Robert Ritch	Robert Yee
Cheryl Craft	Stephen Klyce	Retina Research Foundation	Thomas Yorio
Janet Davis	Kirsten J. Lampi	Melvin Rubin	Lorenz Zimmerman
Claes Dohlman	Ellen Lee	Stephen Ryan	

*Be a Part of This Exciting Chapter of ARVO's Evolution
Support The ARVO Foundation With Your Donation Today
The ARVO Foundation...Assuring the Future of Vision Research*

The ARVO Foundation Sets Goals for 2005

Since the inception of The ARVO Foundation in 2001, \$1.75 million has been committed through pledges and donations from individual and corporate donors. This has allowed the Foundation, while still in its infancy, to pursue a number of high-profile projects. At this year's ARVO Annual Meeting, The Foundation will be supporting 27 travel grants, the inaugural ARVO/Pfizer Research Institute Conference on Angiogenesis, and the first presentations of the ARVO/Pfizer Translational Research Award.

For 2005, The Foundation has identified three distinct short-term program goals. Working with ARVO members, it is hoped that the travel grant pro-

grams for new researchers from outside the US can be expanded. In addition to travel grants, The Foundation plans to fund additional research awards and grants, particularly for innovative research, pilot projects, and international research. Finally, The Foundation will team with ARVO to pursue new initiatives supporting clinician-scientists.

To learn more about The Foundation programs, review *The Foundation Prospectus*, visit www.arvofoundation.org or contact The Foundation staff at 240-221-2950. You can pledge your support by sending your donation to The ARVO Foundation, 12300 Twinbrook Parkway, Suite 250, Rockville, MD, 20852.

Special Issue: Perception of Color



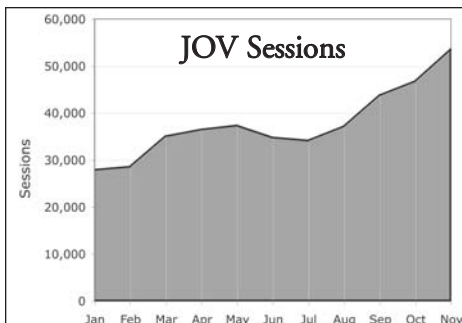
Recently *Journal of Vision* (*JOV*) completed publication of 11 articles on the theme Perception of Color and Material Properties in Complex Scenes. In their introduction, Guest Editors David H. Brainard and Laurence T. Maloney posed the question "How do human observers estimate the location, form, and color of objects?" (<http://journalofvision.org/4/9/i/>.) Read the articles to find out the answers and learn about recent advances in this area. The complete collection can be viewed free online at <http://journalofvision.org/4/9/>.

As a service to the vision science community, *JOV* continues to publish abstracts from meetings of interest to ARVO members and those interested in vision science around the world. In 2004 *JOV* published the abstracts of the Vision Sciences Society meeting held April 30-May 5 in Sarasota, FL. Most recently, the full abstracts from the Optical Society of American Fall Vision Meeting, held October 14-17 in Rochester, NY, were published. You can read these abstracts at <http://journalofvision.org/4/8/>. ■

Update on Indexing

The Thomson/ISI is completing the indexing and testing of the *JOV* content as this newsletter goes to press. In January *JOV* articles from 2002 - 2004 should be available in [Web of Knowledge](#), [Web of Science](#), and [Current Contents](#).

In early December PsychInfo accepted *JOV*'s content and proposal for inclusion in that index! We have been advised that the only barrier to inclusion is the time it takes to index the articles. So look for the announcement of availability late this Spring. ■



'Session' is defined as a series of clicks on a site by an individual visitor during a specific period of time. A Session is initiated when the visitor arrives at a site, and it ends when the browser is closed or there is a period of inactivity.

Reviewer Acknowledgment

The Editor-in-Chief and the Board of Editors would like to publicly thank all of the people who have assisted them with the reviews of submitted manuscripts since the inception of the journal. The names of everyone who has completed a review since 2001 will be included in the December issue of the journal. This acknowledgment of service will become a regular feature that will appear twice yearly - in the June and December issues. ■

NEW APPOINTMENTS TO BOARD OF EDITORS

Andrew B. Watson, editor-in-chief, is pleased to announce six new appointments to the Board of Editors

Pablo Artal
Universidad de Murcia, Murcia, Spain

Randolph Blake
Vanderbilt University, Nashville, TN

David Knill
University of Rochester, Rochester, NY

Laurence T. Maloney
New York University, New York, NY

John C. Palmer
University of Washington, Seattle, WA

John S. (Jack) Werner
University of California, Davis, CA

The Editor-in-Chief would also like to thank the following outgoing members of the Board for their generous support and contributions in both time and ideas while charting the path of *Journal of Vision*: **Barbara A. Doshier, David L. Sparks, and Jitendra Malik.** ■

MILESTONES

In November *JOV* reached two significant milestones:

200th article was published

400th submission was received.

Thanks to the vision community's support, the journal is thriving!

New Staff

Welcome to Alice O'Donnell who joined the ARVO headquarters staff in September as the *JOV* Managing Editor. Alice is responsible for all peer-review management; quality control of submissions and final files; oversight of production and invoicing; and developing marketing, sponsorship opportunities, and communications plans for the journal. You can contact Alice at aodonnell@arvo.org or 240-221-2930. ■

New Name Convention for PDF Files

As a new service to our readers, each published PDF downloaded from the *Journal of Vision* now has a unique, meaningful filename consisting of first author's last name, the year, the journal, the volume, issue, and article numbers. For example, a recent article is [McDermott-2004-JOV-4-10-9.pdf](#). This change is retroactive to all articles in the journal. Meaningful filenames will make it easier to organize, search, and share your personal collection of digital reprints. We hope this small advance will be of use to our authors and readers. ■

Featured Editorial in May 2005 Issue

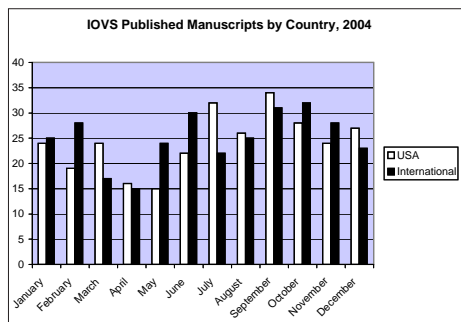
The five Editors of the leading ophthalmology and visual science journals in the world, *IOVS*, *American Journal of Ophthalmology*, *Archives of Ophthalmology*, *Experimental Eye Research*, and *Ophthalmology* are issuing a "Joint Ophthalmic Journal Editors' Statement on 'Double Publication'". Although there are no conclusive statistics about increases in dual publication, several recent, serious violations involving the above mentioned journals prompted the Editors to develop this statement. The

editorial will appear in the May issue of *IOVS* and will be featured on the ARVO Web site (www.arvo.org). An excerpt from the draft of the policy follows.

"'Double publication' involves repeat publication, or attempts at publication, of text, figures, or data in any form of publicly available media without citation in the later manuscript. ... As editors of major journals within the fields of ophthalmology and visual science, we recognize with some regret this problem within our profession." ■

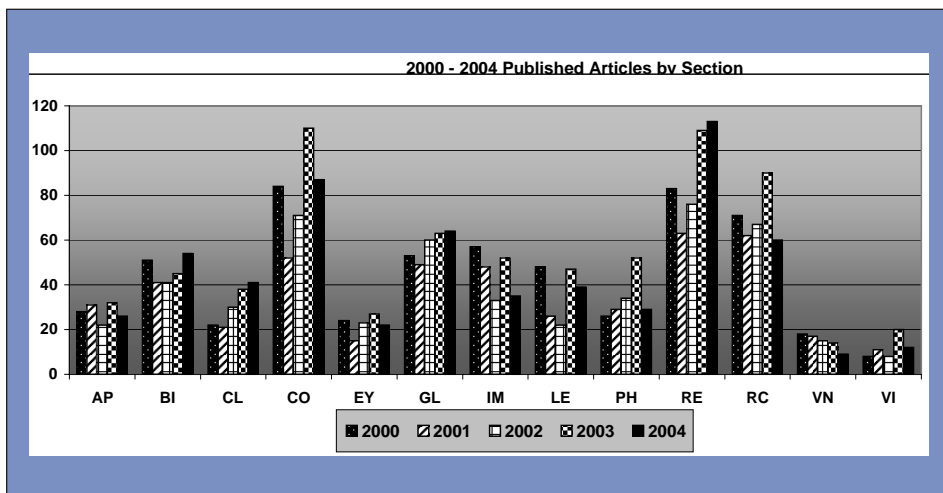
Quick Facts

- **NEW in 2005** – Download Tables of Contents with links to your Personal Digital Assistant (PDA)
- **4.148: #2** ranking ISI **Impact Factor** of 41 ophthalmology journals; #1 is a review journal



- **#1 in ISI Immediacy Index** for 2003 of 41 clinical/research ophthalmology journals
- +7% increase in submissions over 2003
- -27 days: Decrease in time from submission to publication from 2003 to 2004
- -14 days: Decrease in time from submission to first decision in the last 2 years

- 591: Total referred articles published in 2004
- >491,000: Number of hits per month for *IOVS*Online
- 6.9 years: Citing half-life of *IOVS* articles ■



Announcing New Editorial Board Members

Dr. Robert Frank welcomes the following newly appointed members of the *IOVS* Editorial Board:

- Ted S. Acott, PhD**
Casey Eye Institute-OHSU, Portland, OR
- Jayakrishna Ambati, MD**
University of Kentucky, Lexington, KY
- Dirk-Uwe Bartsch, PhD**
Shiley Eye Center-UCSD, La Jolla, CA
- Martine Jager, MD, PhD**
Leiden University Medical Center
Oegstgeest, The Netherlands
- James V. Jester, PhD**
University of California-Irvine, Irvine, CA
- Jeffrey W. Kiel, PhD**
University of Texas Health Science Center,
San Antonio, TX
- Aize Kijlstra, PhD**
Wageningen University, Lelystad, The
Netherlands
- Joseph F. Rizzo, MD**
Massachusetts Eye & Ear Infirmary
Boston, MA
- Lois E.H. Smith, MD, PhD**
Harvard Medical School/Children's Hospital,
Boston, MA
- Kazuo Tsubota, MD**
Keio University School of Medicine
Shinjuku-ku, Tokyo, Japan
- Algis J. Vingrys, PhD**
University of Melbourne,
Melbourne, Victoria, Australia
- Michael A. Walter, PhD**
University of Alberta, Edmonton,
Alberta, Canada
- Christine F. Wildsoet, PhD**
University of California-Berkeley,
Berkeley, CA
- Sebastian Wolf, MD**
University of Leipzig, Leipzig, Germany
- Tien Y. Wong, FRCS, PhD**
University of Melbourne, Melbourne,
Victoria, Australia

Dr. Frank would also like to thank the following people, who will be leaving the Board for their diligence, thoughtful reviews, and expert recommendations during the past two years: **Ruben Adler, MD**; **Joseph Caprioli, MD**; **Paulus de Jong, MD, PhD**; **Eberhard Zrenner, PhD**; **David BenEzra, MD, PhD**; **Henry Edelhauser, PhD**; and **Susan Lightman, MD, PhD**. ■

The expansion of ARVO educational activities is very apparent in 2005, with involvement in more than 10 educational events beyond the Annual Meeting, including the launch of four new conferences. Under Elyn Terry, ARVO's director of meetings and education, the ARVO Education Group has been created to handle these exciting opportunities for outreach to members and others.

2005



FEBRUARY 10-15/APRIL 28-29

The ARVO Indo-US Workshop on Collaborative Research will be held February 10-15, in India, and April 28-29 in Fort Lauderdale, Florida. Under a cooperative agreement with the National Eye Institute, these workshops will bring together 40 researchers from the US and India to discuss research opportunities

between the US and India. Five broad themes will be explored in preparation for broad dissemination of a white paper on potential collaborative areas:

- Molecular Genetics of Eye Disease
- Clinical Aspects of Genetics of Eye Disease
- Harmonization of Clinical Measurement Techniques and Terminology for Targeted Diseases and Structures
- Identification, Development and Exchange of Research Resources
- Translational Physiology: Bench to Bedside Application

Site visits to several Indian research institutes are planned. For details, see the Web site at www.arvo.org/india/index.asp.

FEBRUARY 16-20

ARVO is cosponsor for the **2nd SERI-ARVO Meeting** on Research in Vision and Ophthalmology in Singapore, February 16-20, www.seri.com.sg. Plan to attend the ARVO sponsored symposium organized by Elizabeth Fini, MD, *Hot Topics in Eye and Vision Research*, on February 17, 1:00 PM - 4:00 PM.

MARCH 18-21



ARVO is sponsoring a symposium at the **Pan-American Association of Ophthalmology's (PAAO) XXV Panamerican Congress**, March 18-21, 2005, in Santiago Chile. Clinical Applications of Retina Research, organized by Gary Abrams, MD, is scheduled Saturday, March 19, 8:00 AM - 9:30 AM. ARVO is also cosponsoring the PAAO pre-ARVO Day, Saturday, April 30, 2005, in Fort Lauderdale, Florida. For details, check the ARVO Web site, www.arvo.org.

APRIL 2-6

ARVO is cosponsoring a symposium at the **American Association of Anatomists Annual Meeting** on April 4, from 2:30 PM - 4:30 PM in Room 23 of the San Diego Convention Center.



The symposium, *Cellular Pathways in Photoreceptor Neurodegeneration*, is organized by Joseph Besharse, MD.

APRIL 28-30

The ARVO/Pfizer Ophthalmics Research Institute is scheduled for April 28-30, supported by a generous grant to The ARVO Foundation by Pfizer. This inaugural conference, *Ocular Versus Extraocular*



ARVO-PFIZER OPHTHALMICS
**RESEARCH
INSTITUTE**

Angiogenesis: Mirror Images or Vague Resemblances? is organized by Peter Campochiaro, MD. A report on the discussions and opportunities will be widely disseminated via *IOVS* in late 2005.

APRIL 29-30

The Ninth Annual Vision Research Conference – Neuroimaging the Retina – will take place April 29-30, 2005 in Fort Lauderdale, Florida prior to the 2005 ARVO Annual Meeting. Abstracts are invited for poster presentation by February 4, 2005. For further information and instructions on how to submit an abstract, visit www.visionresearch-conference.elsevier.com or contact vr-conference@elsevier.com. The conference is organized and hosted by Elsevier/Vision Research and is co-sponsored by ARVO.

SEPTEMBER 8-10

ARVO is pleased to announce the inaugural **Summer Eye Research Conference, Ocular Cell and Molecular Biology**, September 8-10, 2005, in Sarasota, Florida, at the Colony Resort, right on the beach. Conference attendance is limited. The conference, organized by Steven E. Wilson, MD, and Joe G. Hollyfield, PhD, will feature several keynote speakers, including David Beebe, PhD; Elizabeth Fini, PhD; William Hauswirth, PhD; Leonard A. Levin, MD, PhD; Kris Palczewski, PhD; and Mansoor Sarfarazi, PhD. Save the date and add your name to the mailing list today by contacting rwilliams@arvo.org. (See page 22 for more details.)

OCMB 2005



OCULAR CELL & MOLECULAR BIOLOGY
SEPTEMBER 8-10
Sarasota, Florida
The Colony Beach & Tennis Resort

www.arvo.org/ocmb

SEPTEMBER 25-28

The 2005 **ARVO Western Eye Research Conference, Regenerative Ocular Biology: Restoring Vision in the Aged & Diseased Eye**, will be held September 25-28 in Laguna Beach, California, at the beautiful Surf and Sand Resort. The plenary speaker is Fred H. Gage, PhD. Featured keynote speakers include Mark WJ Ferguson; Mark Humuyan, MD, PhD; Mark Keating; Robert Lavker, PhD; Bjorn R. Olsen, MD, PhD; and Jim Zieske, PhD. To be placed on a mailing list for more information, please send your name and e-mail address to rwilliams@arvo.org. (See page 21 for more details.)



www.arvo.org/werc

*ARVO educational activities continued
on next page*

www.arvo.org

EDUCATIONAL EVENTS

ARVO educational activities continued
from previous page

2006



OCTOBER 5-8

ARVO will sponsor a symposium at the 2005 **European Association for Vision and Eye Research**

(EVER) Annual Meeting, October 5-8, 2005, in Vilamoura, Portugal. EVER will, in turn, organize a symposium for presentation at the 2006 ARVO Annual Meeting.

FEBRUARY 20-24

The **XXX International Congress of Ophthalmology** will be held February 20-24, 2006 in Sao Paulo, Brazil. ARVO will sponsor two symposia on the topics of Technology in Ophthalmology and Progress in Gene Therapy. For further details, see the conference Web site at www.ophthalmology2006.com.br/. ■

2006 ARVO/PFIZER OPHTHALMICS RESEARCH INSTITUTE CALL FOR PROPOSALS

Proposals are now being solicited for the 2006 **ARVO/Pfizer Ophthalmics Research Institute**, scheduled for April 27-28, 2006, on the topic of *Aqueous Humor Outflow: What Do We Know, Where Will It Lead Us?* Proposals are due **February 15, 2005**. For details, visit The ARVO Foundation Web site at www.arvofoundation.org. ■



2006 ARVO SUMMER EYE RESEARCH CONFERENCE CALL FOR PROPOSALS

ARVO is currently soliciting proposals from individuals or institutions wishing to serve as the organizer of a **2006 ARVO Summer Eye Research Conference**. The ARVO Summer Eye Research Conferences have been developed to provide members an opportunity to meet with colleagues on a narrow interdisciplinary topic, promote discussion and free exchange of ideas, explore new approaches in research areas, and stimulate advanced research. At least one ARVO Summer Eye Research Conference will be scheduled between July 1, 2006 and October 1, 2006. The proposal deadline is **March 1, 2005**. You must be an ARVO member to submit a conference proposal. For details and proposal guidelines, go to www.arvo.org/serc or contact Ellyn Terry, eterry@arvo.org, 240-221-2935. ■

Special Announcement on the Women's Eye Health Task Force

The Women's Eye Health Task Force (WEHTF) was formed in response to prevalence of blindness and visual impairment in women.

Rates of blindness and visual impairment are higher in women, in most age groups, worldwide. In 2001, a meta-analysis of more than 70 population-based surveys of blindness revealed a previously unknown, and still largely unpublicized, fact – of all blind and visually-impaired persons throughout the world, two-thirds are women. In the US alone, more than 3.4 million people have visual impairment (including blindness), of these approximately 2.3 million are women.

What accounts for the gender difference? Research continues but at least three factors contribute to the disparity. Blindness increases with age and women live longer than men. For this

reason, in industrialized countries, age-related eye diseases such as macular degeneration (AMD) and cataract affect more women than men. These conditions may be exacerbated by lifestyle factors. For example, 30 percent of AMD and cataract may be associated with smoking.

Women's Eye Health Task Force



Some eye diseases are, however, intrinsically prevalent in women. These include certain types of cataract, dry eye syndrome (a common eye condition two to three times more prevalent in women) and autoimmune diseases such as Sjögren's syn-

drome, that have ocular manifestations.

Outside industrialized countries, both cataract and trachoma are more common in women, and lack of access to information and eye care services has been suggested as an important reason for this disparity. ■

WOMEN'S EYE HEALTH TASK FORCE

Given the burden of blindness in women, the Women's Eye Health Task Force (WEHTF) was founded in 2002. The WEHTF, based at the Schepens Eye Research Institute, is dedicated to protecting the sight of women and their families and is committed to reducing the burden of blindness and visual impairment through advocacy for women's eye health issues, through educational outreach to the public concerning prevention and treatment of eye disease and by raising awareness within professional organizations of women's eye health issues. In addition, the WEHTF is developing international partnerships to advocate for eye health programs that recognize the greater burden of blindness and visual impairment in women, and undertake special efforts to reach this population. You can learn more about women's eye health and the Women's Eye Health Task Force at www.womenseyehealth.org/. ■

Tear Film & Ocular Surface Society Travel Awards Applicants Wanted

The Tear Film & Ocular Surface Society (TFOS) seeks applicants for the annual TFOS Travel Awards. These awards provide partial travel support to the ARVO Annual Meeting for at least four postdoctoral fellows, graduate students or young investigators (35 years or younger) whose ARVO 2005 abstract in which they appear as first author demonstrates significant scientific achievement in the field of tear film, ocular surface or Sjogren's syndrome research. Each award is \$750.00 and will be accompanied by a free ticket to the TFOS Cruise &

Dinner on the evening of Monday, May 2 in Fort Lauderdale.

To apply, please e-mail your accepted ARVO abstract plus one PDF, TIFF, JPEG or PowerPoint figure to Lydia Briscoe at lsb2y@virginia.edu before **April 4, 2005**. Send either as two separate files, or better as a single

Word file of the abstract with the graphic inserted below. The figure should demonstrate evidence of the abstract's most important finding, and will be held in strict confidence by the awards committee.

Awardees will be notified by April 25 and will be announced during the TFOS Cruise & Dinner. 2005 ARVO travel grant award winners are not eligible. For more information about these awards or the cruise, please contact Amy Sullivan at amy@tearfilm.org. ■



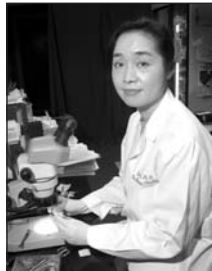
ARVO 2004-2005 Research Fellowship Grants

The ARVO Research Fellowship Grant Program, established in 1987 with one Alcon Laboratories grant, continues to be generously supported by Alcon, Novartis Ophthalmics, and the Japan National Society for the Prevention of Blindness. Recipients are selected from candidates who apply for the Fight for Sight Awards, for which ARVO conducts the scientific review.

ARVO IS PLEASED TO ANNOUNCE THE RECIPIENTS OF THE 2004-2005 GRANTS:



ARVO/Weisenfeld Fund
Mohamed Al-Shabrawey
Medical College of Georgia
Project Title: *Diabetes-Induced Vascular Permeability: Role of NADPH Oxidase*



Japan National Society for the Prevention of Blindness
Hiho Nozaki, MD, PhD
University of Kentucky
Project Title: *Proteome Mapping of Cc12-/- and Ccr2-/- Mouse Models of AMD*



Novartis Pharmaceuticals Corporation
Judith Sabah, PhD, Kent State University
Project Title: *Mechanisms of Internalization of Albumin and Determination of the Protein Function in the Lens*



Alcon Laboratories
Incorporated Research Grant
Magdalena Stanizewska, PhD
Case Western Reserve University
Project Title: *Protein Modification by Tryptophan Oxidation Products in the Human Lens*

Fight for Sight
Research Grant Awards
Available

FIGHT FOR SIGHT

For the 2005-2006 year, the deadline for the grants-in-aid and the postdoctoral research fellowship will be **March 1, 2005**.

The summer student award deadline has been moved to **February 1, 2005**.

Visit the Web site, www.fightforsight.com for instructions and copies of the new application.

See page 18 for a complete list of 2004-2005 award recipients. ■

A W A R D S

2006 ARVO Annual Awards Call for Nominations

Nomination Deadline: March 4, 2005

Members of the vision community are invited to nominate their esteemed colleagues for the prestigious ARVO Awards to be presented at the 2006 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 sciences directly related to disorders of the human eye or visual system, by a promising individual researcher under 40 years of age.

ARVO/Pfizer Ophthalmic Translational Research Award

Excellence in research and fundamental scientific discoveries, concepts and novel technologies that lead to the diagnosis, prevention or amelioration of the pathological eye and/or an understanding of the normal vision processes.

Kupfer Award

Distinguished public service on behalf of eye and vision research.

Special Recognition Award

Outstanding service to the vision research community.

For complete nomination and award information, please visit our Web site at www.arvo.org/AwardsFunding/awardnom.asp. You can also contact Barbara Hollis at bhollis@arvo.org or 240-221-2940. ■

PREVENT BLINDNESS AMERICA ANNOUNCES A NEW OPPORTUNITY FOR RESEARCHERS:

PREVENT BLINDNESS AMERICA INVESTIGATOR AWARD



The Prevent Blindness America Investigator Award provides funding for clinically-based research investigating public health issues related to the burden of illness of eye-related health and safety topics. All research grants must focus on preserving sight and preventing blindness.

Researchers will be chosen based on their level of qualifications relating to the eye health field and the quality and feasibility of the proposed research project. Researches must demonstrate a high level of academic achievement, the urgency of the research agenda and show an immediate human benefit. Research pertaining to prevalence, early detection strategies and outcomes and prevention will take priority.

AWARDS: Grants will be awarded for \$25,000.00 to \$50,000.00 each for a one-year period. Grants are only available to United States citizens. Up to a total of \$100,000.00 will be granted annually. The number of awards depends on the dollar amount of the grants awarded. Grant recipients will be required to submit quarterly progress reports. The Association for Research in Vision and Ophthalmology will provide the scientific review of grant applications.

DEADLINE: All grant applications must be submitted by **March 1, 2005**.

APPLICATION PROCESS: Applications are available at www.preventblindness.org/research.

Fight for Sight Grants and Fellowships

Fight for Sight is pleased to announce that it has awarded more than \$600,000 in grants and fellowships for 2004-2005. Individual awards included: 19 grants-in-aid, 15 postdoctoral research fellowships and 37 summer student fellowships. Support for the pediatric eye services at six institutions was also announced.

The Fight for Sight Scientific Awards are selected under the direction of the Association for Research in Vision and Ophthalmology. The Awards Selection Committee is led by Henry Edelhauser (Emory University) and Randy Kardon (University of Iowa). We wish to acknowledge the participation and contributions of the following members of the review committee: Jay Ambati; Usha Andley; Sally Atherton; Jimmy Bartlett; Barbara Battelle; Curtis Brandt; Ruth Caldwell; Michelle Callegan; Edward Chaum; Alan Franklin; Enrique Garcia; Marion Gordon; Anne Griep; Linda Hazlett; Richard Hertle; Andrew Huang; Kelly Hutcheson; Karen Joos; Nancy Joyce; Maureen McCall; Mabelle Pardue; Matthew Petroll; Stephen Planck; Gail Seigel; Susan Semple-Rowland; Diane Song; Janet Sparrow; Om Srivastava; Michael Stern; Stephen Tsang; John Ubels; Barbara Wiggert; and Matthew Wilson. Their contribution to this effort is invaluable.

Fight for Sight will increase funding for grants-in-aid and postdoctoral fellowships to \$20,000 per award in 2005. No more than three years should have elapsed since the awarding of a degree to those applying for a postdoctoral research fellowship. Fellow candidates need not be American citizens, but the research must take place in the US or Canada. Grants-in-aid are awarded to investigators for pilot projects and studies without other sources of funding.

For the 2005-2006 year, the deadline for the grants-in-aid and the postdoctoral research fellowship will remain March 1, 2005. The summer student award deadline has been moved to February 1, 2005. Visit the Web site, www.fightforsight.com for instructions and copies of the new application.

Grants-in-Aid

Miriam Benezra, PhD; Anissa Buckner, PhD; Richard Chappell, PhD; Nigar Fatma, PhD; Kristen Huang, PhD; Wei Li, PhD; Frank Liang, MD, PhD; Gregory Liou, PhD; Manuel Llano, MD, PhD; Jeffrey Marchant, PhD; Royce Mohan, PhD; Robert Nickells, PhD; Kouros Nouri-Mahdavi, MD; Sanjay Rao, MD; Gabriele Richard, MD; Theodore Schurr, PhD; Gail Seigel, PhD; John Ubels, PhD; Xuemei Zhu, MD.

Postdoctoral Research Fellowships

Vicki Bennett, PhD; Lucy Chen, MD, PhD; Bogdan Gugiu, PhD; Sharon Haymes, PhD; Wei Li, PhD; Toshiyuki Oshitari, MD, PhD; Boris Ovodenko, MD; Katalin Rabl, PhD; Daniel Shurman, MD; Jim Stringham, PhD; Jing Tian, PhD; Abhiram Vilupuru, PhD; Christine Watte, DVM; Zhaohong Yin, MD; Tian-Yi Zhang, PhD.

Summer Student Fellowships

Saba Ali; Afshin Arianjam; Chirag Bhatia; Christina Cheng; Kristina DeSmet; Michael Engles; Sherry Hikita; Karlo Hockmann; Wandu Hu; Arif Ishmael; Kapil Kapoor; Pearl Kurian; David Myung; Hung Nguyen; Rachel Peck; Peter Polewski; Kristin Rarey; Christopher Schultz; Vincent Scoglietti; Nancy Sorokac; Rebeca Tenney; Kristen Thorstenson; Elaine Trieu; Felix Vazquez-Chona; Baotran Vo; Kurt Weaver; William Yang.

Support for Pediatric Eye Centers

Bascom Palmer Eye Institute/Fight for Sight Children's Eye Clinic; Children's Hospital of the University of Pittsburgh/Fight for Sight Children's Eye Clinic; University of Tennessee, Department of Ophthalmology, Study on Shaken Impact Syndrome; University of Wisconsin - Division of Pediatric Ophthalmology; Memorial Sloan Kettering Ophthalmic Oncology Center; University of Alabama - Birmingham, Division of Pediatric Ophthalmology. ■



FIGHT FOR SIGHT AWARDS FOR THE YEAR 2004-2005		
19	GRANTS-IN-AID	\$222,505
15	POSTDOCTORAL RESEARCH FELLOWSHIPS	\$240,000
37	SUMMER STUDENT FELLOWSHIPS	\$ 56,700
6	PEDIATRIC SUPPORT GRANTS	\$ 83,000
77	TOTAL AWARDS	\$602,205

A W A R D S

Cora Verhagen Prize

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

An international jury committee consisting of six active ARVO members has been appointed to select the Prize Winners. Two prizes will be awarded. The first prize winner will receive an award of \$250 and a plaque with an inscription of his or her name along with those of previous awardees. This plaque may be temporarily mounted in the institute in the year following the presentation at ARVO. The winner will also receive a bronze medallion. Both the medallion and the plaque contain the image of Winged Victory. The money and the plaque for the 2005 Cora Verhagen Prize will be awarded at the 2006 ARVO Annual Meeting. The second place winner will receive an award of \$100.

1. Eligible candidates for the prize should conform to the following criteria: Candidates must be a student or postdoctoral fellow considered as a trainee in ocular immunology working under the guidance of a mentor. Such trainees may have independent support for salaries, but do not hold a personal grant to support the cost of their research. Excluded are individuals with permanent faculty appointments at universities, research institutes, or employees of companies.
2. Candidate must be the first author of a poster or paper presentation at the 2005 ARVO Annual Meeting dealing with a subject in the field of ocular immunology.

Call for Applications deadline is April 1, 2005.

Please send all Application Forms to:

Dr. Martine Jager
Department of Ophthalmology
LUMC-J3
PO Box 9600
2300 RC Leiden
The Netherlands
Fax: 31-71-5248222
E-mail: M.J.Jager@lumc.nl

DO NOT SEND APPLICATION FORMS TO THE ARVO OFFICE.

APPLICATION FORM

CORA VERHAGEN PRIZE

I WOULD LIKE TO COMPETE FOR THE **2005 CORA VERHAGEN PRIZE** TO BE AWARDED FOR THE BEST "OCULAR IMMUNOLOGY" PRESENTATION BY A TRAINEE.

Name: _____

Abstract Title: _____

Mentor Name: _____

Mentor Statement:

I hereby state that the above named applicant fulfills the "trainee" criteria for the **Cora Verhagen Prize**.

Mentor Signature: _____

ARVO 2005

**GLOBAL
NETWORKING**

MAY 1-5, 2005

FORT LAUDERDALE, FLORIDA

PLAN NOW TO ATTEND!
Visit www.arvo.org
for program, registration,
and housing information



**9,000 +
Scientists
Connecting
with
Colleagues**

**5,500 +
Paper and
Poster
Presentations**



**100 +
Exhibitors
Demonstrating
State-of-the-
Art Technology**



**50 +
Special Events
and
Presentations
throughout
the week**



Regenerative Ocular Biology Restoring Vision in the Aged & Diseased Eye

SEPTEMBER 25-28, 2005
LAGUNA BEACH, CALIFORNIA – SURF AND SAND RESORT



Organizers:

James V. Jester, University of California, Irvine and
Corinne G. Wong, SCLERA, LLC

PRELIMINARY SCHEDULE

SUNDAY

September 25, 2005

4:00 PM

Plenary Speaker: Fred H. Gage, PhD, The Salk Institute

Session I: Stem Cell Biology

Keynote Speaker: Robert Lavker, PhD

MONDAY

September 26, 2005

8:30 AM

Session II: Control of Cell Growth and Differentiation by
Gene Transfer

Keynote Speaker: Keisuke Mori, MD (tentative)

1:30 PM

Session III: Regenerative/Developmental Biology

Keynote Speaker: Mark Keating, PhD

TUESDAY

September 27, 2005

8:30 AM

Session IV: Scarless Wound Healing:

Taming of the Screw

Keynote Speaker: Mark W.J. Ferguson, BSc, DDS, PhD,
FFD, FMedSci, CBE (Sponsored by the Discovery
Fund for Eye Research, University of California, Irvine)

4:00 PM

Session V: Bio-mimetic Systems/Artificial
Retina and Cornea

Keynote Speakers: Mark Humuyan, MD, PhD and
Jim Zieske, PhD

WEDNESDAY

September 28, 2005

8:30 AM

Session VI: Biomodulators of Cell Growth,
Differentiation and Function

Keynote Speaker: Bjorn R. Olsen, MD, PhD

FOR MORE INFORMATION

visit www.arvo.org/werc or contact Rhonda Williams, meeting coordinator,
at rwilliams@arvo.org or 240-221-2908.



ARVO Western Eye Research
Conference presented by



The Association for Research in Vision
and Ophthalmology • 12300 Twinbrook
Parkway • Suite 250 • Rockville, MD •
20852-1606 • USA



OCMB 2005



**OCULAR CELL &
MOLECULAR BIOLOGY**

SEPTEMBER 8 - 10

Sarasota, Florida

The Colony Beach & Tennis Resort



ORGANIZERS:

Steven Wilson and Joe Hollyfield
Cleveland Clinic

Keynote Speakers:

David Beebe, PhD

*Conditional Gene Targeting Reveals Functions for Many
Growth Factor Signaling Pathways in Anterior Segment
Development*

Elizabeth Fini, PhD

Matrix Metalloprotenases in the Eye

William Hauswirth, PhD

*Gene Therapy for Dominant, Recessive and
X-linked Retinal Diseases in Animal Models*

Leonard A. Levin, MD, PhD

Axonal Signaling of Retinal Ganglion Cell Death

Kris Palczewski, PhD

*Chemistry of Vision: Inherited Retinal Diseases
and Rhodopsin*

Mansoor Sarfarazi, PhD

*Gene Identification and Protein Characterization
of Glaucoma-Causing Molecules*

Invited Speakers:

Gustavo D. Aguirre, VMD, PhD

Robin R. Ali, PhD

Robert (Gene) Anderson, MD

Nick Bazan, MD

Joe C. Besharse, PhD

John Crabb, PhD

Cheryl Craft, PhD

Stephen Daiger, PhD

Adriana Di Polo, PhD

Anne E. Griep, PhD

Joe G. Hollyfield, PhD

James Jester, PhD

Winston Kao, PhD

Andrius Kazlauskas, PhD

Dan Organisciak, PhD

David Papermaster, PhD

Steven E. Wilson, MD

Donald J. Zack, MD

James Zieske, PhD

FOR MORE INFORMATION

visit www.arvo.org/ocmb or contact Rhonda Williams, Meeting Coordinator,
at rwilliams@arvo.org or 240-221-2908.



ARVO Summer Eye Research
Conference presented by



The Association for Research in Vision
and Ophthalmology • 12300 Twinbrook
Parkway • Suite 250 • Rockville, MD •
20852-1606 • USA



2005 Membership Application

Join/Renew Online: www.arvo.org

Association for Research in Vision and Ophthalmology • 12300 Twinbrook Parkway • Suite 250 • Rockville, MD 20852-1606 • Phone: (240) 221-2900 • Fax: (240) 221-0370

MEMBER INFORMATION (please write legibly)

New Member Candidate* Renewing Member ID#

First Name Middle Last (Surname/Family) Name

Degree(s)

Department

Organization/Institution

Street Address

City State/Province Zip+4/Postal Code Country

Phone Fax

E-mail (required) _____

*Endorsement of Candidate for Membership (Required of All New Member Candidates)

Endorser's Signature Endorser's Printed Name Member Number
(Contributing, Fellows and Predoctoral Members may not endorse)

SCIENTIFIC SECTION AFFILIATION

Check the two-letter code for the Scientific Section that best fits your research. (Descriptions are on the back of this form.)

- AP BI CL CO
- EY GL IM LE
- PH RE RC VI
- VN

MEMBER DEMOGRAPHICS

This is optional and confidential (For ARVO programmatic purposes only)

US CITIZEN Yes No

GENDER Male Female

YEAR OF BIRTH _____

ETHNICITY

- Native American/Alaskan Native
- Asian
- Native Hawaiian/Pacific Islander
- Hispanic
- Black (not African American)
- African American
- White (not of Hispanic origin)

JOURNAL SUBSCRIPTION (Does not apply to Members-in-Training, categories F and P)

All memberships include free access to full-text online of IOVS and JOV, regardless of selections indicated below. \$100 of your dues supports the ARVO journals. **Please select the journal to which you would like your dues allocated.**

Investigative Ophthalmology & Visual Science (IOVS) OR Journal of Vision (JOV)

If you have selected IOVS, do you want to receive the print format? Yes No

2005 ANNUAL DUES PAYMENT

MEMBER CATEGORIES & DUES (Descriptions are on the back of this form.)

Please check the appropriate Membership Category and enter the corresponding amount on the Total line. Dues for all membership categories, except Life and Life Family, are for the 2005 calendar year.

- Regular (R) \$195
- Family (R-FAMJ) \$225
- Sustaining (R-SUS) \$250
- Contributing (R-CON) \$250
- Life (LIFE) \$3,950
- Life Family (LIFEFAM) \$4,950
- Fellow, Resident, or Other
- Postdoctoral Student (F)* \$85 (with IOVS \$185)
- Predoctoral Student (P)* \$85 (with IOVS \$185)

*Student Status Certification (Required). I certify that during 2005 I will have full-time status.

Supervisor's Signature Printed Name/Title

Institution/Department

Total Remittance

\$

Payment must accompany form. Purchase orders will not be accepted.

Check enclosed made payable to ARVO (US dollars drawn on a US bank)

Please charge my: Visa MasterCard

Account Number: _____

Expiration Date: _____

Signature: _____

ADDITIONAL INFORMATION:

♦Meeting Registration Fees are NOT Included ♦Membership Dues are non-refundable ♦ARVO's Federal ID Number is 34-0812556
YOUR 2005 DUES PAYMENT MUST BE RECEIVED AND PROCESSED TO ACCESS ABSTRACT SUBMISSION. ABSTRACT DEADLINE: DECEMBER 3, 2004

Check out the NEW and IMPROVED



The Best Source for Ophthalmology and Vision
Research Jobs & Resources

ARVOJobs

jobs.arvo.org

JOB SEEKERS

- Scan scores of jobs available – For **FREE**
- Target your search by job category, location, and salary level
- Register to receive E-mails when a position matching your criteria is posted
- Post your CV for FREE for employers to review

EMPLOYERS

- Get great exposure among job seekers
- Access an online database of CVs from qualified candidates
- Register to receive E-mails when a candidate matching your criteria is posted
- Enjoy competitive job-posting rates

ARVOJobs is an online service located at jobs.arvo.org. For ARVO Members, the rate for posting jobs is \$200.00 for a 30-day listing; Nonmembers pay \$300.00.

For more information, visit the Web site jobs.arvo.org, E-mail jobs@arvo.org, or call 240-221-2940.

jobs.arvo.org



2005 CAREER FAIR

Sign up to participate in the 2005 ARVO Career Fair, held in the registration area on Tuesday, May 3 from 12:00 to 4:00 pm. Don't miss this great opportunity to meet face-to-face with employers and employees! See www.arvo.org/AM/CareerFair.aspx