This issue of Visions reflects our strong reputation and expertise in Pediatric Ophthalmology - caring for children and their families, and research aimed at eliminating vision loss and blindness in children. I hope you will enjoy learning more about two outstanding ophthalmologists with specialties in pediatrics, Douglas Fredrick, MD, and Joan O’Brien, MD.

You will also read about mentoring as an important part of the training at UCSF Ophthalmology, preparing the next generation of ophthalmologists. And we continue to attract the highest ranked young physician scientists in the country as residents and faculty.

T hanks to That Man May see Board member and friend, Dick Olsen, our residents, fellows and faculty were hosted at the annual Transamerica Dinner, following our Residents’ Day 2005. We enjoyed rigorous and exciting presentations, and an inspiring lecture by our distinguished guest speaker Andrew Dick, Professor of Ophthalmology at University of Bristol, U.K.

T hanks to you, our striving for excellence is matched with the funds essential for progress. I assure you that our faculty appreciate the awards you make possible to further their sight-saving work. I thank you for your generosity.

Sincerely yours,

Creig Hoyt, MD
Theresa M. and Wayne M. Caygill, MD, Endowed Chair
Jean Kelly Stock
Distinguished Professor
Chair, Department of Ophthalmology

We envision Pediatric Ophthalmology as saving children’s sight for a lifetime,” says Professor Douglas Fredrick, MD, Director of Pediatric Ophthalmology at UCSF’s Beckman Vision Center + Koret Vision Institute. “Our work starts with the earliest visual development in the fetus, and extends to the visual rehabilitation of children who have lost vision due to disease or trauma.

“We now have the technology to diagnose genetic disorders prenatally,” Dr. Fredrick says. “That means we can care for vulnerable children immediately after they are born; and with UCSF as a center for fetal surgery, it is conceivable that one day we will be able to treat sight threatening conditions prenatally.”

Today, infants are fitted with intraocular lenses at UCSF, replacing congenital cataracts that would otherwise cloud vision for the rest of their lives. In 1982, Creig Hoyt, MD, Professor and Ophthalmology Department Chair, changed the practice of infant cataract care internationally, when he was first in the world to show that very early cataract surgery saves the sight of infants with unilateral congenital cataracts. Now a groundbreaking study by Drs. Fredrick and Hoyt and research scientist Hilary Beggs, PhD, is examining the cause of congenital cataracts and long-term outcomes after treatment.

Envision the Future
Mentoring Medical Students in the Competitive Field of Ophthalmology

By exposing UCSF medical students to ophthalmology early and giving them the opportunity to do clinical care and research, we help them be the best candidates for specialty training after graduation,” says Professor Joan O’Brien, MD, Director of Medical Student Education in Ophthalmology and Director of Ocular Oncology.

“For the past 10 years, our medical students who apply for ophthalmology residencies have all been accepted by their first or second-choice training programs in a highly competitive process,” notes Director of Resident Education in Ophthalmology.

Continued on page 2
We congratulate this year’s fourth-year medical students who have once again been offered residencies at top ophthalmology programs:

- **Elisa Aghaian** University of Southern California BA, Business Economics, UCLA. Born in Iran, raised in Los Angeles.
- **Ying Pan** University of Southern California BA, Human Biology, Stanford University. Born and raised in Fremont, CA.
- **Isabella Pham** University of California, San Francisco BS, Anthropology, U.C.L.A. Raised in Fremont, CA.
- **Michele Trager** University of California, San Francisco BS, Biological Sciences, Stanford. Born in Seattle, raised in Danville, CA.
- **Ali Zahedi** University of Pennsylvania BS, Biology, Rice University, Houston. Born in China, raised in Chicago.

Dr. Joan O'Brien

Dr. Douglas Fredrick

**Saving Children’s Vision**

At UCSF, a newborn whose sibling has the devastating childhood eye cancer retinoblastoma (R B), can be screened and treated within weeks after birth to protect the eyes from vision loss. Internationally known pediatric oculist, Professor Joan O’Brien, MD, Director of Ocular Oncology, is at the forefront in finding less toxic new therapies that are more effective in saving sight. (See Faculty Profile of Dr. O’Brien, page 3.)

Children come to UCSF from the Bay Area and beyond for specialty care in ophthalmology, because our research findings are quickly translated into sight-saving care. We offer the most advanced diagnosis and treatment by experts in multiple fields of ophthalmic medicine - including glaucoma, retina, reconstructive surgery, neonatology, neurology, radiology and oncology.

Treating Premature Infants

As medical intervention improves survival for small, premature infants, we see more children with developmental and neurologic problems. Our investigators are seeking interventions that can preserve these children’s vision.

Our newest research targets early treatment for retinopathy of prematurity (ROP), with abnormal blood vessels in the retina that obstruct the vision of 80% of premature infants under 2.2 pounds. Dr. Fredrick and the neonatology staff will determine whether ‘growth factors’ originally developed to treat macular degeneration, can halt this blinding disorder.

Congenital glaucoma can lead to lifelong blindness, without early treatment. A study of genetic samples from children at the Pediatric Glaucoma Clinic could determine the cause and optimal treatment. Glaucoma specialists Jorge Alvarado, MD, Robert Stamper, MD, and Shan Lin, MD, are joined by Dr. Fredrick in this research.

Another study using MRIs may predict vision problems in premature infants. Drs. Fredrick and Hoyt are collaborating with UCSF radiologists and neuro-ophthalmology specialist Jonathan Horton, MD, PhD, Professor of Ophthalmology, Neurology and Physiology, who is examining how the brain interprets electrical signals.

“With state-of-the-art facilities, we can care for the sight of vulnerable children,” says Dr. Hoyt. “As we develop the Pediatric Ophthalmology facility at Children’s Hospital, we can anticipate the needs of the future.”

**Meeting the Clinical & Research Needs of the Future**

What will be possible for the child who has already lost sight? How can early intervention help with vision and with developmental and social function? Within the decade, the new Children’s Hospital at Mission Bay could be the site of a unique Center for Visual Rehabilitation andRestorative Technologies at UCSF. “This is a unique opportunity to integrate clinical and research needs in ophthalmology for the coming century,” says Dr. Fredrick.

At the new Children’s Hospital, Dr. Fredrick explains clinical care would be integrated with groundbreaking research of investigators like Cornfeld and Director of Pediatric Ophthalmology, Professor Douglas Fredrick, MD. “Our students’ success is a testament to how well they are prepared by the mentoring we offer.”

In each fourth-year Medical School class at UCSF, 5 to 10 students will decide to pursue ophthalmology as a career. They are paired with faculty mentors who guide them in intensive clinical and research training, including a ‘sub-internship’ where they spend several months working full time at a clinic or in a lab, alongside residents and faculty. Students are interviewed by Dr. O’Brien and members of the faculty, and ‘matched’ to do clinical care or research studies.

Many of the medical students at UCSF take a closer look at ophthalmology” explains Dr. O’Brien. “Those students learn the basics of eye anatomy and physiology and common ocular disease conditions and practice microsurgical skills.”

In their third year, medical students can elect a two-week rotation in ophthalmology to test out their interest in the field. They can also work a half-day a week in an ophthalmology clinic, seeing patients under the supervision of an experienced ophthalmologist. Because these positions are so attractive, applicants are selected via a lottery. This spring, the 130 third-year medical students at UCSF will be making their first career decisions. We welcome those who will become tomorrow’s ophthalmologists.

**Mentoring Medical Students**

Continued from page 1

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Dr. Joan O’Brien: Finding New Ways to Treat Eye Cancer

When people are losing their sight to a life-threatening ocular cancer, there is tremendous urgency to the diagnosis and treatment of their disease. It is to save the sight and lives of children and adults with eye cancer that Professor Joan O’Brien, M.D., has dedicated her professional life for the past 15 years. The Director of Ocular Oncology at UCSF, Dr. O’Brien holds the Pearl and Samuel Kimura Endowed Chair in Ophthalmology.

“It’s really about the patients,” Dr. O’Brien says, acknowledging her career as a highly respected and sought-after clinician, caring for children with the devastating childhood eye cancer retinoblastoma (RB); and her treatment of adults with eye tumors ranging from usually-benign hemangiomas (purple, raised tissue) to potentially life-threatening ocular melanomas. Patients from infants to seniors come for expert treatment from all over the West Coast, and from as far as South America and the Philippines.

Dr. O’Brien has developed a multidisciplinary clinic for children with RB, where they see experts from all over the UCSF campus and have access to cutting-edge care. Adult patients have the additional benefit of highly focused radiation treatment with the proton beam at UCSF, which is one of two major centers in the U.S. offering this therapy.

“As an academic physician, you are always leading three lives,” Dr. O’Brien says. “You have a clinical life, treating patients; a research life; and a teaching and administrative life.”

Research to Find New Therapies
Dr. O’Brien is recognized internationally for her research on retinoblastoma—through her discoveries may be applicable to the majority of other cancers. In 1990, Dr. O’Brien identified the first transgenic model of RB, an important new tool for evaluating experimental therapies. Both the severity of the disease and her desire to make a difference led her to study the RB genetic pathway and her laboratory is investigating more cost-effective RB testing.

Respected Teacher
As Director of Medical Student Education in Ophthalmology, Dr. O’Brien oversees the curriculum and counseling medical students on their ophthalmology studies. She also teaches the basics of ophthalmology to medical students.

In her own lab, she works closely with a select group of third and fourth-year medical students. She is also involved in ongoing projects of the majority of other cancers.

New Ophthalmology Text
Comprehensive Treatment of the Child
Pediatric Ophthalmology and Strabismus (3rd Edition)
by David Taylor, MD, and Creig Hoyt, MD

As ophthalmic investigations become more powerful, the authors contend, pediatric ophthalmologists must consider all aspects of treating the child— including physiology, anatomy and psychology—and involve the family in patient management and care.

Ophthalmology Chair Creig Hoyt, MD, and his British colleague, David Taylor, MD, FRCS, FRCP, FRCOphth, DSc(med), have produced a uniquely comprehensive reference on pediatric ophthalmology. The 1300-page text is an entirely revised edition that will be a staple in the field.

Dr. Hoyt and Taylor have assembled an extensive array of information from leading international experts featuring state-of-the-art research and procedures. The text covers diagnostics, investigative guidelines, and principles of managing specific eye problems in children. Dr. Taylor is Professor of Pediatric Ophthalmology at the Institute of Child Health in London.
The Patient’s Point of View
Keyani Family Transforms Fear to Fortunate

Just before her fourth birthday, Louisa Keyani had a routine eye exam that revealed a congenital cataract. Her pediatrician, Charlotte Drew, MD, recommended UCSF Ophthalmology as the place to provide the answers for Louisa and her family. Douglas Fredrick, MD, Director of Pediatric Ophthalmology, operated on Louisa a few weeks later, removing the cataract and restoring her sight. Today, Louisa, a happy and talented child, has the gift of sight and many new friends at the UCSF Department of Ophthalmology.

"This was very sudden and the first experience of its kind in our family," describes Cathy Keyani, Louisa’s mother. “My husband, Ed, and I had to draw on our experience as teachers to guide us in doing what was right for Louisa," she explains. "As upset and fearful as we were, it was important to keep Louisa safe and calm."

“We went day by day until we met Dr. Fredrick," she continues. "We could breathe again when we met him; his calming presence put us all at ease." Everyone we encountered in Pediatric Ophthalmology at UCSF was wonderful."

“I’m grateful that by improving Louisa’s vision, we can improve her quality of life dramatically, and that this bright little girl has had an excellent outcome," says Dr. Fredrick. "Without cataract surgery and an intracocular lens implant, it is likely Louisa would not have vision in one eye.

Innovative Motivation
One of the greatest challenges now for Louisa is to wear a patch on her healthy eye – something she must do for part of each day until she turns eight. This will force the brain to accept the image from the “weaker” eye and help the visual system in this eye to develop. Wearing anything different can make a child self-conscious. Thanks to the creativity of her mother, Louisa plays a constructive game each day with a chart to record her progress and engage her in decisions about taking medications and gauging her behavioral responses in productive ways.

Cathy has encouraged other parents to try this method of engaging the child in the process with innovative motivation. She calls it “an incentive kit for the child’s compliance.” The Keyani family even provided Dr. Fredrick with samples of the kit to help other patients.

Her advice to other parents confronting medical challenges: “Always put the child’s emotional needs before your own. Express your fears after they go to bed,” she says.

“We all have things that happen to us that tell us not to take life for granted," says Cathy. “What Louise learned about herself through this is amazing. She’s a brave little girl and has gained such confidence in her abilities.”

Macular Degeneration Q&A
by Robert Bhisitkul, MD, PhD, Jacque Duncan, MD, and Daniel Schwartz, MD

Patient Margaret Mallory, former Food Editor of the Oakland Tribune, asked our faculty to respond to questions about current research and care for macular degeneration at UCSF.

Q: What is AMD (age-related macular degeneration) research going? How close are we to a possible cure?

A: Five years ago, treatment for macular degeneration was limited to thermal laser, which damaged the vision cells over the wet AMD. Today, we have several new FDA-approved treatments.

Our scientists at the Koret Vision Institute are now exploring exciting new approaches to identify and treat AMD including:

- AMD Light Treatment – Diagnosing and treating early AMD with new imaging technology and light-activated drug delivery. (Daniel Schwartz, MD)
- GROWTH FACTOR PD THERAPY – Using growth factors to protect light-exposed retinal cells from damage in PDT therapy for 'wet' macular degeneration. (Jacque Duncan, MD, Matthew LaVail, PhD, Robert Bhisitkul, MD, PhD)
- Drug Studies – Evaluation of promising new AMD drug therapies and basic science studies of a new class of drugs (using R N A interference to combat growth factors). (Robert Bhisitkul, MD, PhD)
- AMD Diagnostic Center – Cutting-edge diagnostic tests for patients with “dry” AMD to measure the impact of experimental treatments. (Jacque Duncan, MD)
- RPE-Gene D-34 Studies – Development of RPE-specific gene therapy could apply to retinal degenerations when the functional gene defects are identified. (Matthew LaVail, PhD, Jacque Duncan, MD)
- Tackle AMD – Conference on devising new strategies to prevent visual loss (see Upcoming Continuing Medical Education listing, page 7).

Q: What new AMD treatment has been approved by the FDA? How effective is it in halting progression of the disorder? Has it been tried at UCSF?

A: Macugen® was approved by the FDA in December 2004 to treat ‘wet’ AMD. Patients at UCSF first received Macugen® treatment in January 2005.

Macugen® inhibits the VEGF protein that causes abnormal blood vessel growth in AMD. The drug must be injected in the eye every 6 weeks. With this drug, there is reduced risk of visual loss after one and two years.

Another anti-VEGF drug, Lucentis® (ranibizumab) is in clinical trials at UCSF, as part of a national multi-center trial. Although it is not yet FDA-approved, 1 year results suggest it is effective in preserving vision in many patients with wet AMD."
Discovering How Vision Works
Dr. David Copenhagen

Research scientist David Copenhagen, PhD, is driven by curiosity and a desire to understand the fundamental workings of the eye. "I get a lot of satisfaction from discovering the basic principles of how the retina functions and how it matures," he says, explaining his dedicated interest in the retina and the eye.

"The adult visual system relies on the concerted actions of hundreds of millions of precisely connected nerve cells," says Dr. Copenhagen. He is Professor of Ophthalmology and Physiology, and Director of Ophthalmology Research at UCSF. "How do all the nerve cells figure out the other neurons with whom they should communicate?" he asks.

"The visual system could be considered a complex computer system that builds itself from a collection of young nerve cells," Dr. Copenhagen explains. "Many of the connections are preprogrammed genetically. However, the final refining of the visual system's wiring requires that the eyes be able to see the best possible visual images. Older children with untreated congenital cataracts, or other unrecognized problems that impair vision during maturation, can have permanent, irreparable loss of vision."

Investigating Vision Quality in Infants:
One of the quests of Dr. Copenhagen's laboratory is to discover how the development of retinal structure and function is influenced by quality of vision during infancy. "A second quest is to discover which naturally-occurring molecules regulate this development," Dr. Copenhagen explains. His laboratory's enduring interests include the role of BDNF (Brain-derived neurotrophic factor) in the retina, with Kenneth T. Brown, PhD, former Professor of Physiology, and the retina's ability to detect light.

"The adult retina is 'wired' during the initial period of development," Dr. Copenhagen says. "We have found that the first connections of some nerve cells (also called 'neurons') are 'pruned' during the early stages of development. This pruning, needed for the refinement of vision, requires visual inputs. Without this early visual input, the neurons remain in an immature state, and vision remains less than optimal."

Dr. Copenhagen and his associates have found specific molecules called neurotrophins (BDNF or Brain-derived neurotrophic factor and NT-3) play a role in refining early nerve connections and the fine structure of these nerve cells. Dr. Copenhagen says, "These findings suggest that BDNF might be able to offset abnormalities caused by visual deprivation such as congenital cataract;" Dr. Copenhagen says, "However, many more experiments must be done to prove the validity of this hypothesis."

TMMS Awards Make Cutting Edge Research Possible
"Research awards from That Man May See are essential to our progress," says Dr. Copenhagen, who serves on the TMMS Peer Review Committee that evaluates faculty and student applications for support. "As the recipient of one of the early Jane and Marshall Steel awards from TMMS, I was able to buy sophisticated instrumentation to do early work looking at responses of retinal neurons," he says. "The preliminary results from these experiments helped fund a larger grant from the National Institutes of Health."

"With their restricted budgets, federal funding agencies increasingly support research that is based on solid preliminary evidence. Fewer than 20% of grant applications are funded by NIH," Dr. Copenhagen says. "With a TMMS award for preliminary research, scientists can experiment with promising new approaches as quickly as possible, to see if they will be successful. From data such as these, preliminary experiments enable us to successfully compete for NIH support that leverages the initial TMMS support many times over."

Q: Which doctors at UCSF treat patients with AMD?
A: Our retina faculty specializes in cutting-edge AMD diagnosis, treatment and research. We apply research advances as quickly as possible to improve patient care.

Dr. Robert Bhidlik – AMD & clinical trials for new treatments.
Dr. Jacob Duncan – AMD & hereditary degenerations.
Dr. David Schwartz – AMD & development of new prevention approaches.

For an appointment or consultation, please call (415) 353-2402.

To learn more about the retina, with Kenneth T. Brown, PhD, then-Professor of Physiology, and Dr. Copenhagen has been a member of the UCSF faculty since 1977.

Q: What other treatments are currently available for "wet" and "dry" AMD?
A: The only currently approved treatment for "dry" AMD is prevention:
• Specific vitamin supplements (Ocuves 
anti-oxidant/zinc tablets) have been shown to reduce the chance of developing advanced AMD and vision loss by ~25%.

For most patients with 'wet' AMD, treatment can slow vision loss, and some patients have visual improvement with M acugen (see above). Treatments for 'wet' AMD include:
• PDT (P foto D yamic T herapy) – A dye that concentrates in abnormal blood vessels is activated by targeted laser light that closes the abnormal vessels with minimal damage to the retina. This has become a mainstay treatment for patients with blood vessels under the fovea (central retina), though there may be retinal damage.
• M acugen – See prior question.
• A rgon Laser – An intense beam of laser light closes leaking vessels. Now less commonly used, this non-selective treatment may damage the retina.

Dr. David Copenhagen

Left to right:
Dr. Robert Bhidlik,
Dr. Jacob L. Duncan,
Dr. Daniel M. Schwartz.
Solving Mysterious Cases in Ophthalmology

Since the beginning of his career, Todd M. Margolis, MD, PhD, has been motivated by the energy that can result from applying basic science to a clinical problem. “It’s the ‘aha’ moment, when you can bring something from the laboratory into the clinic or from the clinic into the lab,” explains Dr. Margolis.

As Professor of Ophthalmology at UC SF, Director of the Francis I. Proctor Foundation, and Director of the R aph and Sophie Hentz Research Laboratory (within Proctor), Dr. M argolis is able to live out his dream “to make a difference in the lives of others through applied research.”

Dr. M argolis is a graduate of the UC SF School of Medicine, where he completed his residency after interning at San Francisco Children’s Hospital. He holds a PhD in Neuroscience from UCSF; he completed Fellowships in Cornea, Uveitis, and External Disease at UCSF and at the UCLA Jules Stein Eye Institute; and he was a Predoctoral Fellow at the UCLA Department of Microbiology and Immunology. Energized by the challenge and opportunity of the Proctor Foundation, Dr. M argolis sees medicine as a puzzle, in which both the clinic and the lab provide clues. “You investigate, try to piece the problem together, and complete the picture. It’s intellectually and emotionally rewarding,” he explains. Because many Proctor patients have seen numerous doctors before coming here, Dr. M argolis refers to Proctor as “the place where we can take the time to listen, to delve, and to find solutions to otherwise mysterious cases. It’s a critical thought process that has been handed down since Dr. Phillips Thygeson was a founding member of the Proctor faculty in 1947.”

The Francis I. Proctor Foundation was established in 1947 as an Organized Research Unit at UCSF, to prevent blindness worldwide through research and teaching on infectious and inflammatory eye disease. The Foundation is recognized as the preeminent center in the world in these disciplines.

The Proctor Foundation is the home of the world’s leading non-governmental organizations supporting eye research; the grant will help fund Dr. M argolis’ research into the regulation of HSV infection and, ultimately, improved treatment and management for patients with HSV eye disease.

Thanks to the Proctor Endowment and additional generous support, specialists working with Dr. M argolis treat patients from throughout the Bay Area, as well as patients from other parts of the country and beyond. Proctor Foundation Faculty do clinical research and care around the world, in remote regions of Ethiopia, India, Argentina, China and Japan, under the direction of John P. “Jack” W hitcher, M. D., M. P.H., and Tom Lietman, M. D.

The Proctor team is addressing its international vision through the creation of the World Blindness Center at UC SF, with an ambitious program of lab remodeling, endowed chairs, and endowments to fund pilot research projects. They are seeking $2.5 million to complete the project.

In addition to the Proctor Endowment, funds for the Proctor Foundation last year were generously provided by the International Trauma Initiative, the Bernard Osher Foundation, the City of San Francisco, the Brotman Foundation, the Bodri Foundation, the P HAN Foundation, and the National Institutes of Health.

That Man May See Faculty Awards
Leveraging Further Research Funding

One of the greatest pleasures of serving on the Board of That Man May See is our ability to fund early-stage research,” says TMM S Board Chair, Stephen S. Smith.

Recognizing the research expertise and immediate needs of four members of the faculty, the T MMS Board awarded research funds for basic research and equipment. R ecommendations for awards were made by a Faculty Peer Review Committee, modeled after the National Institutes of Health (N IH) review process. T he T MMS Board announced four recipients of funds

David R. Copenhagen, PhD: Developing advanced microscopic tools to image the real-time function of single nerve cells in the retina. These methods should improve medical diagnosis by providing valuable insight into how the retina behaves under normal and pathological conditions.

Matthew Lavi, PhD: Electroretinography (ERG) non-invasively determines the functional status of the retina. T he new ERG will be used for virtually all experiments on pharmaceutical and gene therapy for inherited and age-related retinal degenerations, including macular degeneration.

Robert L. Stamper, MD: For continuing research using Accumap which records visual fields objectively, directly from the patient’s visual cortex. Less complicated than the standard visual field test for glaucoma, the Accumap can be used for patients who cannot sit through standard testing. Studies will evaluate the accuracy of Accumap testing vs. standard visual field testing.

The Value of Seed Funding

These awards are made with the hope that faculty can use the seed funds to apply for even greater support from government sources. For example, T om Lietman, M. D., and John W hitcher, M. D., M. P.H., received a grant of $30,000 from That Man May See to study the use of antibiotics to treat trachoma, for which there is no effective vaccine. T his disease is the leading infectious cause of ocular morbidity in the world and the second leading cause of blindness.

“Because of That Man May See’s award, we were able to go full speed ahead and set up the trachoma project,” reports Dr. Lietman. Subsequently, Dr. Lietman received $1.9 million from the NIH to test the use of antibiotics over five years, in the hopes of eliminating the disease. The grateful researcher says, “The T MMS money helped us get it started.”

Dr. Todd P. M argolis

The Proctor Perspective

Todd P. Margolis, MD, PhD

Solving Mysterious Cases in Ophthalmology
Dr. David F. Chang
Why Mentors Matter

This interview is part of the ongoing Cordes Connection, which features UCSF ophthalmology alumni.

Whether through patient care, teaching, clinical research, or international volunteer work, ophthalmologists have so many ways to make a lasting impact.” So responds David F. Chang, MD, when asked if he would still recommend medicine as a career.

Dr. Chang completed his residency at UCSF in 1984, coming to the Bay Area with a BA (Summa Cum Laude) and MD degrees from Harvard. During his 20 years in private practice in Los Altos, he has continued teaching cataract surgery to residents as a UCSF clinical professor. Dr. Chang explains that it was his residency experience at UCSF that ultimately shaped his career.

“We were fortunate to have full-time faculty who took a personal interest in the residents,” says Dr. Chang. “For cataract surgery, Dr. Jorge Alvarado taught me to be a precise technician. Dr. Steven K rame r (Department Chair Emeritus) nurtured an interest in instrumentation and technology. Dr. Alex Irvine modeled the importance of ethics and bedside manner. Most important, Dr. John Stanley encouraged me to try rather than fear new ideas, such as phacoemulsification (now the preferred form of cataract removal).”

Dr. Chang’s fellow residents at UCSF were Drs. Richard M. Condon, Stuart Seiff, Greer Greger, and Alex Zaffarani (who is one of his partners in private practice). “I worked hard as a resident, just to keep up with this group,” he acknowledges. “Despite whatever prominence we currently enjoy, we still know enough to blackmaill each other.”

As a member of the UCSF Collaborative Vision Research Group, Dr. Chang notes that he has been “fortunate to work with leading faculty members, Drs. Daniel Schwartz and Stephen M. Cleod, on exciting projects like the Calhoun adjustable IO L (intracocular lens implant) and the Synchrony Accommodating IO L (the lens implant that replaces bifocals, allowing the eye to accommodate, to see both near and far objects).” Dr. Chang is the medical monitor for the upcoming FDA trial of the Synchrony lens, and he is an investigator in multiple clinical studies – ranging from the implantable telescope to the artificial iris implant. He recently organized a large multi-center prospective study on iris problems during cataract surgery, in patients who take the prostate drug Flomox.

Cataract Authority

An internationally recognized authority in cataract surgery, Dr. Chang is co-chief editor of Cataract & Refractive Surgery Today, and on the editorial boards of five other trade journals. He has designed popular cataract instruments, published numerous cataract papers and chapters, authored a best selling textbook on advanced techniques in cataract surgery, and he is editing the first virtual textbook of cataract surgery. He is in his fifth year as cataract editor for Ocular Surgery News and the medical monitor of one of the largest online educational sites for ophthalmologists.

Dr. Chang recently began a five-year term as Chair of the AAO (American Academy of Ophthalmology) Annual Meeting Program Committee. “This is the third largest medical meeting in the United States, and it is a huge responsibility,” he says. He previously chaired the AAO Cataract Program Subcommittee, and organized the first four Spotlight on Cataracts symposia at the AAO Annual Meeting. Dr. Chang also serves on the AAO Cataract Ophthalmology Knowledge Base Panel, the AAO Cataract Preferred Practice Pattern Panel, and the Cataract Clinical Committee of the American Society of Cataract and Refractive Surgery.

“Some of my role models were leading clinicians at UCSF who forged academic careers while in private practice,” notes Dr. Chang. “They included some of our best teachers, Drs. Brooks Crawford, George Hilton, Ariah Schwartz, Howard Schatz, H. Dunbar Hsikins, John Hetherington, and Robert Shaffer.”

Pacific Rim Center Advisor

That Man an My See and the Department of Ophthalmology at UCSF are grateful that Dr. Chang will serve as an advisor to the newly formed Pacific Rim Center for Vision – focusing on research and combat devastating eye disease among Asian families and individuals (see Visions Fall 2004, page 4). Dr. Chang has worked with the Aravind cataract surgeons in India, and he traveled to Nepal to work with the Himalayan Cataract Project in April.

“When we’ve all retired from ophthalmology,” says Dr. Chang, “we’ll realize that it was much more important to use our training to make a difference than to make a living.”

Eddies & Currents
New Developments in Ophthalmology
December Course 2004

Featuring internationally renowned investigators, including guest speakers and UCSF faculty, the 2004 December Course for practicing ophthalmologists presented cutting-edge research and clinical advances in retina, pediatric ophthalmology, glaucoma, cornea, external eye disease and plastic and reconstructive surgery.

New treatments could emerge for macular degeneration, diabetic retinopathy, neovascularization of prematurity and other eye diseases, as a result of new studies of proteins that interact in complex ways to create abnormal blood vessel growth (angiogenesis), said Peter A. Compochario, MD, Professor of Ophthalmology at Johns Hopkins University, who delivered the keynote Proctor Lecture.

Speakers included Dimitri T. Azar, MD, Director Corneal External Disease at Harvard, on Ablasias In Refractive Surgery; L. Jay Katz, MD, Professor at Jefferson Medical College, Wills Eye Hospital in Philadelphia, on W hat Have W e Learned from N e Clinical Trials?; as well as UCSF faculty and clinical faculty members.

“Our speakers discussed some of the most exciting new developments in ophthalmology,” says Daniel Schwartz, MD who co-chaired the program with R. obert Stamper, MD, Douglas Fredrick, MD, and Stephen M Cleod, MD. N early 300 attended this highly-rated program.

Th ey talk to you the generous contributors who made this program possible: Alcon, P fizer, Eyetech, N ovaris Ophthalmics, Santen Inc., Allegan, Bausch & Lomb and Heidelberg Engineering.

Upcoming Continuing Medical Education Programs:

Tackling Early AMD: Devise New Strategies to Prevent Visual Loss
November 13-14, Fairmont Sonoma Mission Inn

Ophthalmology 2006: New Directions in Ocular Therapy
December 1-2, Hotel Nikko, San Francisco

For information: Thelma D eSouza, 415-502-1127 or tdsouza@itsa.ucsf.edu
H orning Lifelong A dvocacy for D iversity in M edicine
Michael V. Drake, MD

Receives AAMC Nickens Award

Dr. Michael V. Drake

In recognition of his tireless efforts over the past 35 years to enhance diversity in the medical profession, Michael V. Drake, M.D., who is the Steven P. Shearing Professor of Ophthalmology at UCSF and Vice President of Health Affairs for the University of California systemwide, received one of the highest honors bestowed by AAMC (the Association of American Medical Colleges). Dr. Drake became the fifth recipient of the Herbert W. Nickens M.D., Award. Dr. Drake has been an advocate for the success of minority students since his medical education began at UCSF, where he received his medical degree in 1978, and completed his residency and fellowship training in ophthalmology. In the 1980s, when he joined the Ophthalmology Department faculty, he organized a committee on recruitment and retention, which he chaired.

As system vice president, Dr. Drake oversees education and research activities at the university’s system of health sciences schools located on seven campuses. He was appointed to the California Health Manpower Policy Commission, and the federal Institute of Medicine, where he served on the committee that produced the 2004 report, “In the Nation’s Compelling Interest: Ensuring Diversity in the Health Care Workforce.”

Dr. Drake is principal investigator on active grants and contracts totaling over $11 million, and maintains an academic clinical practice. He has received numerous awards, including the School of Medicine’s Clinical Teaching Award, the Ophthalmology Department’s Samuel J. R. Imura Teaching Award, the Chancellor’s Award for Public Service, and the Martin Luther King Jr. Award. He was the UCSF School of Medicine Alumni of the Year in 2000. Dr. Drake is a member of several national scientific and scholarly societies. He is the current president of the Alpha Omega Honor Medical Society, and serves as a trustee of the Association of Academic Health Centers.

The Department is proud to announce that as we were going to press, Dr. Drake was named Chancellor of the University of California, Irvine.

Faculty News

Richard Abbott, MD

Honors: Best Doctors 2005 by San Francisco M magazine; Select Chair of World Health Organization Committee for Cost Reduction, and Effective Improvement in Eye Care Product Services; featured speaker for PBS special on New Developments in Eye Care; Inducted into American Ophthalmological Society.

Appointments: Executive Committee, PROJECT ORBIS International Program Advisory Council; Cyber-Sight Advisory Board; Executive Committee, World Ophthalmology Congress (São Paulo, Brazil-2006); Chair-Liaison committee for Maintenance of Certification, American Academy of Ophthalmology and American Board of Ophthalmology.

Honors: Elected: President, Pan-American Association of Ophthalmology.


Jorge A. Alvarado, MD


Jennifer LaVail, PhD


Joan O’Brien, MD

Honors: Honors in Medicine, M acula Society Research Committee.


Honors: Recognition for Excellence in Teaching, School of Pharmacy.

Robert Stamper, MD

Honors: Distinguished Alumni Washington University School of Medicine, St. Louis, MO; A ssociation of University Presidents in Ophthalmology Fellowship Committee; Appointments: “Barriers to Glaucoma,” Washington University School of Medicine, St. Louis, MO; American Academy of Ophthalmology meeting, New Orleans; “Update on Functional Testing in Glaucoma,” Ophthalmic Neuro Imaging Systems, Evolutionary New Surgical Approaches to Glaucoma, Endocyclophotocoagulation: State University of New York, Update medcal Center Annual Meeting; “New Functional Testing in Glaucoma,” U C S F Annual Course.

Dr. Jennifer LaVail, PhD, is professor of Ophthalmology and Neurosciences at the University of California San Francisco. She is a leading researcher in retinal degenerative diseases, with a focus on retinal dystrophies and glaucoma. She is also an accomplished clinician-scientist who has been instrumental in the development of novel therapeutic strategies for these disorders.

Dr. Robert Stamper, MD, is the director of the Ophthalmology Residency Program at New York Eye and Ear Infirmary of Mount Sinai and the chairman of the Department of Ophthalmology at New York Presbyterian Hospital. He is also the chief of the retina service at Mount Sinai Medical Center. Dr. Stamper is a recognized expert in the field of retinal disease, with a particular focus on macular degeneration and diabetic retinopathy.

Dr. Joan O’Brien, MD, is the director of the Ocular Genetics Institute at the University of California, San Francisco, and the co-director of the Center for the Study of Genomics and Complex Diseases. She is also the associate dean for research at the University of California, San Francisco. Dr. O’Brien is a leader in the field of ophthalmic genetics, with a focus on the molecular basis of eye disease and the development of genetic testing and prevention strategies.
New Members Join TMMS Board of Directors

Allan J. Flach, MD, PharmD, is a Professor of Ophthalmology at UCSF, with a primary interest in pharmacology and cataract surgery. He is the Past President of Prevent Blindness Northern California, and the current President of the Cordes Society whose members include former UCSF ophthalmology residents and fellows and ophthalmology faculty. He and his wife Teri live in San Rafael.

Françoise (Frannie) Fleishhacker lives in San Francisco with her husband Mort. She is involved with the American Conservatory Theater (A.C.T.) and the Garden Conservancy. She is a recent treasurer and active member of the Francisca Club of San Francisco.

Tom Follett is a retired partner of Accenture, a global management consulting, technology services and outsourcing company. Tom is a member and past president of the ALS Association, Bay Area Chapter. He and his wife Gunilla live in Los Altos.

Larry Haimovitch is the President of Haimovitch Medical Technology Consultants. Larry has been an active Board member for 12 years with the Zen Hospice Project, a nationally recognized model to improve end-of-life care. He and his wife Carie reside in Mill Valley.

Isabel (Patsy) Schuchardt and her husband Robert live in San Francisco. She has been actively involved with the Edgewood Children’s Center and San Francisco’s Children’s Hospital. Patsy is especially dedicated to supporting and raising funds for research aimed at finding a cure for macular degeneration.

Robert L. Stamper, MD, is Professor of Ophthalmology and Director of the Glaucoma Service at the University of California, San Francisco. He is on the Board of Directors of the Glaucoma Research Foundation, and a former Board member of the Jewish Federation of Greater East Bay. Dr. Stamper is Past President of the American Glaucoma Society, and served on the Board of Directors of the American Board of Ophthalmology. He is the author of two glaucoma textbooks. He and his wife Naomi reside in Berkeley.

Bob Coakley, Executive Director of The Thomas J. Long Foundation, presents a check for $100,000 to Kathleen Rydar, President of That Man May See. The award supports the Cellular Therapeutics research of Jorge Alvarado, MD, seeking an innovative cure for glaucoma.

John Hall, center, and Paul Comory, right, both veteran Board members of TMMS, welcome new Board member, Bob Stamper, MD, to the meeting at the World Trade Club in San Francisco.

Debbie Hoyt with new research faculty member Erik Ullian, PhD, and Marilyn Pratt, Board member of That Man May See, at the Annual Vision Awards Dinner.

That Man May See welcomes Netta Fedor as the new Development Associate, sighted at the offices of TMMS with Reggie Briggs, Awards and Research Manager.
Thank you for your recent generous gifts. You helped meet the Newcomb challenge.

Michael B. Cohen, MD
President

215 North High Street
Huntington, WV 25701
Telephone: 304-529-2000
Fax: 304-529-2008

To support the Newcomb challenge, please make your check payable to Marshall University Department of Ophthalmology and mail to above address.

For those who have previously pledged a gift, thank you for your continued support.

Tony and Linda Raynor
Chairman, Department of Ophthalmology

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Huntington, WV 25705

Mountaineer Medical Center
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