Koret Vision Institute + Beckman Vision Center + Department of Ophthalmology + Francis I. Proctor Foundation

Summer 2009

University of California, San Francisco + That Man May See

### Focal Point



Dear Friends,

Today's economic times substantially impact California, our School of Medicine, and UCSF Ophthalmology. Extraordinary individuals in the vision sciences and at That Man May See are pulling together to weather a harsh financial climate. We remain enthusiastic about the tradition of scientific discovery at UCSF and our ability to translate research to enhance the lives of our patients.

Generous members of our community value our research, teaching, and clinical care, and they are responding to the opportunities ahead. One such example is a friend who made a challenge gift of \$110,000 to help attract increased support for critical programs. Our anonymous contributor wants to spur giving through matching new gifts dollar for dollar up to his challenge amount.

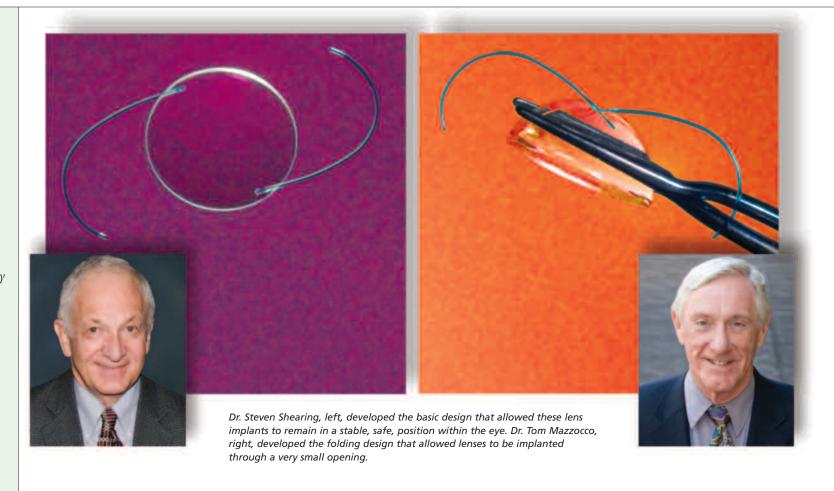
In this issue, we salute our alumni who returned for the 50th anniversary of the Frederick C. Cordes Eye Society. We are proud of our graduates, our current faculty, and the many friends who contribute to the cause of saving and restoring sight.

Thank you for your part in helping us achieve distinction among the leading eye institutes in the country.

Sincerely,



Stephen D. McLeod, MD Theresa M. and Wayne M. Caygill, MD Endowed Chair Professor and Chairman



## Ophthalmology Insight

# **ÚCSF** Pioneers in Cataract Surgery

Uurgeons have been removing cataracts for centuries—the procedure was performed in India in the sixth century BCE, and it was known to the Romans and the medieval Arabs. Taking a leap forward in the last 60 years, surgeons could finally remove the cloudy natural lens and restore sight through an artificial one. Cataract surgery is common today, and UCSF Ophthalmology played a leadership role in pioneering the modern devices and procedures used around the world.

The biggest breakthroughs have been in the development of replacement intraocular lenses (IOLs). Since the first intraocular lenses were developed in the 1940s, the primary challenge for doctors

(and patients) has been fixing the lens in the eye so that it stays in place without damage to the delicate structures surrounding it. In the 1970s, innovator, eye surgeon, and former UCSF Ophthalmology resident **Steven Shearing, MD**, introduced a lens with novel, flexible suspension loops. These loops hold the lens in place behind the iris, supported by the back layer of the transparent membrane (the "posterior capsule") that envelops the cataract. Then, in the 1980s, UCSF clinical faculty member **Thomas Mazzocco, MD**, envisioned a foldable lens requiring only a small incision in the eye. Affectionately known as the "Mazzocco taco," the lens brought

Continued on page 2



### Envision the Future

### Fellows and Mentors in Vision Sciences

Medical fellowships are prestigious and highly coveted opportunities for new young doctors to partner with UCSF physicians in their fields of interest. During the year or two they spend at UCSF, fellows accomplish significant research and learn clinical expertise through faculty mentors.

This article introduces four of the fellows currently training at UCSF. Each year, the department awards fellowships in various ophthalmological specialties: cornea, glaucoma, neuro-ophthalmology, oncology, retina-vitreous, and uveitis. In addition, the endowed George and Rosalie Hearst Fellowship

in Ophthalmology makes a global impact.

Marco Coassin, MD, from Rome, Italy's Università Campus Bio-Medico, is this year's Hearst fellow. Dr. Coassin works in the retina clinic at UCSF's Ambulatory Care

Continued on page 5

### A PEEK INSIDE:



Dr. David Chang Wins Binkhorst Award



Among the Best – UCSF Vision





Tom Hernandez Superb Surgical Technician



Drs. Daniel Schwartz, Stephen McLeod, and David Chang, back row, left to right, are contemporary pioneers benefiting from the mentorship and cataract breakthroughs of Drs. Steven Shearing and Creig Hoyt, seated.

### If I have seen further, it is only by standing on the shoulders of giants"

Sir Isaac Newton

consistently as we would like." One problem is that the lens cannot move very far, so unless it is a high-power lens—which not everybody needs—the change in focus is not large enough.

"The approach we've been working on," continues Dr. McLeod, "is to use a high-powered optic as the moving lens, so when it moves you get a big shift. Couple that to a second compensatory lens to get the appropriate power for the eye. The high-power lens moves back and forth, giving you good dynamic range, while the compensatory lens brings the image to sharp focus on the retina."

Dr. McLeod has been working on the dual-lens design with a group of engineers in Irvine, California, for several years, and the result is called the Synchrony™ lens, made by Visiogen, Inc. It was approved in Europe, and the company just completed enrollment for its FDA trial in the US.

### **Novel Instrument Design**

David F. Chang, MD, former UCSF resident and a member of the clinical faculty, is internationally recognized as an educator, author, investigator, and opinion leader in the field of cataract surgery (See David F. Chang, MD, "Honored at ASCRS," page 3). He has designed novel instruments for eye surgery, given 17 named or keynote lectures, edited four popular textbooks, and authored many important peer-reviewed articles, including the original study on what he named *intraoperative floppy iris syndrome*, a complication that may occur during cataract extraction in certain patients.

Dr. Chang has held key leadership roles in both the American Academy of Ophthalmology and American Society of Cataract and Refractive Surgery, and will be the ASCRS president in 2012. Dr. Chang has been a clinical investigator for many new devices and lenses, and was the first US surgeon to implant the light-adjustable intraocular lens developed by Dr. Schwartz and the Synchrony accommodating lens developed by Dr. McLeod.

A graduate of Harvard College and Medical School, Dr. Chang credits the UCSF faculty for fostering his interest in teaching and clinical research during his residency. "John Stanley in particular allowed and encouraged me to try new ideas, including a controversial and challenging cataract-removal technique called phacoemulsification."

### UCSF Pioneers in Cataract Surgery

greater safety and faster vision recovery, eliminating the overnight stay in the hospital.

"And that's basically how cataract surgery is done today," says **Stephen McLeod, MD, Chair of Ophthalmology at UCSF.** "We take a Shearing-style posterior chamber lens, then we fold it up using Mazzocco's technique, and we fit it inside the eye."

## Infants with Cataracts Benefit from UCSF Breakthrough

Also in the 1980s, UCSF's then head of Pediatric Ophthalmology, **Creig Hoyt, MD**, made another cataract breakthrough—this time with a new idea for a procedure on infants born with cataracts. Dr. Hoyt was first to believe that very early cataract surgery could save the sight of infants with unilateral congenital cataracts. These clinical research findings changed the practice of infant cataract care internationally. (Hoyt, CS, *American Journal of Ophthalmology*, 1982)

### On the Shoulders of Giants

"If I have seen further, it is only by standing on the shoulders of giants."

-Sir Isaac Newton

UCSF benefits from its close proximity to Silicon Valley, home of modern technological advancement, where a tradition of innovation and entrepreneurship continues. Current faculty and residents at UCSF are encouraged to think big as they conduct research that can lead to the next breakthroughs in modern science and patient care.

### Potential for a Light-Adjustable Lens

According to **Daniel Schwartz, MD,** retinal faculty member at UCSF Ophthalmology, half of all cataract patients still need some form of glasses afterwards.

Dr. Schwartz is seeking a way of modify the power of the lens once it is implanted. "About 12 years ago," he says, "I had the idea of making a light-adjustable lens—one that could change its shape and, consequently, its focus power upon exposure to light."

Relying on seed funding in 1996 from That Man May See, and working with Nobel Prize-winning chemist Robert H. Grubbs, PhD (among others), Dr. Schwartz spent three years developing a prototype. The silicone lens includes photosensitive molecules, which change their orientation upon exposure to ultraviolet light. The eye, with the IOL inserted, is exposed to UV light for just a minute or two, and the effects take place over the next eighteen hours.

Dr. Schwartz's pioneering lens, now being sold in Europe, is in Phase II of FDA trials in the US.

### **Toward an Accommodative Lens**

Doctors and engineers have been trying to develop accommodative lenses that allow full function, from distance vision through intermediate to near. "While the FDA has approved an accommodative lens that can be moved back and forth by the eye's ciliary muscle," says Dr. McLeod, "it really doesn't work as well or as

# Returning Hearst Fellow, Marita Uusitalo, MD

arita Uusitalo, MD, came back to San Francisco from her native Finland on the tenth anniversary of her Hearst Fellowship here to give a lecture on conjunctival melanoma. The talk was part of the Frederick C. Cordes Eye Society's Scientific Meeting held in April at the Bank of America's Giannini Auditorium.

Dr. Uusitalo was mentored at UCSF from 1998–2000 by Joan M. O'Brien, MD, and had previously done research work in Finland on ocular pathology. She had just finished her ophthalmology residency before coming to UCSF for two years of post-doctoral research. She also performed clinical work in the field of oculoplastics.

"I learned many new things during my stay at UCSF," says Dr. Uusitalo. "It resulted in five original publications and one review paper, so the

experience was fruitful in many aspects." After she returned home to Finland's Helsinki University Eye Clinic, she became a "docent," which is similar to an Associate Professorship in the United States. Currently she works as chief of Oculoplastics.

"My clinical work is mainly with oculoplastic oncology patients," says Dr. Uusitalo. "The time I spent at UCSF was extremely useful and important, and I continue to draw from lessons learned there."

Drs. Marita Uusitalo (left) and Joan M. O'Brien

# David F. Chang, MD, Honored at ASCRS Delivers Distinguished Binkhorst Lecture



he American Society of Cataract and Refractive Surgery (ASCRS) chose David F. Chang, MD, to be this year's honoree of the Cornelius D. Binkhorst Lecture and Medal. ASCRS has given this medal every year since 1975 to an individual whose career has made significant contributions to the science and practice of ophthalmology, and it is considered the highest international honor for cataract surgeons. The lecture took place on April 4, 2009, at Moscone Center in San Francisco.

#### **Dedicated Leader in Cataract Surgery**

Dr. Chang earned his MD at Harvard Medical School and completed his ophthalmology residency at UCSF, where he is now a clinical professor. In 2006, he became only the third ophthalmologist to ever receive the Charlotte Baer Memorial Award, honoring an outstanding clinical faculty member of the UCSF Medical School. In addition to chairing the ASCRS Cataract Clinical Committee, the AAO Cataract Preferred Practice Pattern Panel, and the AAO Annual Meeting Program Committee, Dr. Chang has delivered 17 named and keynote lectures at many of the most prestigious ophthalmology programs in the country.

#### Saving Sight Around the World

In his lecture, Dr. Chang addressed the epidemic increase in the backlog of blindness due to cataracts in the developing world. Although cataract surgery could reverse more than half of all world blindness, the obstacles include the high cost of the surgical equipment, supplies, and intraocular lenses; the greater difficulty of operating on advanced cataracts; and a critical shortage of ophthalmologists in developing countries, who lack the educational infrastructure to learn the necessary surgical skills.

Binkhorst Award . . . the highest international honor for cataract surgeons."

Dr. Chang highlighted his first-hand experiences with the Aravind Eye Hospital system (Southern India), Himalayan Cataract Project (Nepal), and Project Vision (China)—three different, but successful models of providing high-volume and low-cost cataract surgery within a financially self-sustaining system. They all rely on a rapid, "low-tech" manual method of cataract surgery using lens implants and supplies that are locally manufactured to reduce the cost. High surgical volumes are achieved by using standardized and streamlined systems that rely on a high staff-to-surgeon ratio.

Dr. Chang is on the medical advisory board of both the Himalayan Cataract Project and Project Vision. In addition to the global reach of Dr. Chang's talent and dedication, he served this past year as president of the Frederick C. Cordes Eye Society (alumni) for UCSF Ophthalmology. The University is proud of Dr. Chang's many achievements and the difference he makes in the lives of others. •

# Among the Best – UCSF Vision

CSF's Department of Ophthalmology was rated sixth in the nation in the 2008 annual survey of Best Programs in the United States conducted by *Ophthalmology Times*. Published on October 15, 2008, the rankings were tabulated by polling chairpersons and residency directors from ophthalmology departments across the nation.

"UCSF is fortunate to provide a home to the most accomplished and promising clinicians and scientists at work in ophthalmology today," says Stephen McLeod, MD, professor and chairman of Ophthalmology. "This is the finest faculty one could imagine. I am extremely proud of our accomplishments in advanced patient care, research, and teaching. Every day, we thank That Man May See for its essential role in funding our breakthroughs and helping us train the next generation of leading ophthalmologists. Thanks to this partnership, we are making tremendous progress toward solving the most challenging causes of blindness."

Based on its excellence in teaching, quality patient care, and research, the Department of Ophthalmology at UCSF ranks sixth in the Best Overall Program category. The department received top ten national

rankings for Best Clinical
Programs, Best
Research Programs,
and Best
Residency
In the
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Programs.

Residency
Programs.

## John Stanley, MD, Honored with the Resident Education Fund

Uring the celebration of the 50th anniversary of the Frederick C. Cordes Eye Society in April, it was announced that the Resident Education Fund at That Man May See will be named after John Stanley, MD.

UCSF Ophthalmology has named this fund for Dr. Stanley in recognition of his lifelong pursuit of excellence in teaching and in his professional career. He has served as a profound inspiration to two generations of ophthalmologists, and he has had a significant impact on medical training and research.

Following Dr. Stanley's example, the UCSF faculty continues to break new ground in the diagnosis and treatment of the most challenging vision disorders, to mentor and train the most promising clinicians and scientists in ophthalmology, and to deliver first-rate patient care.

The legacy of outstanding residency training in the Department of Ophthalmology has been built upon the dedication of its faculty mentors. Dr. Stanley represents true commitment to residency education and excellence in all aspects of his professional life. The John Stanley, MD, Resident Education Fund honors Dr. Stanley's leadership, enthusiasm, and dedication to UCSF residents.



On the occasion of his own retirement in 2006, Dr. Stanley said, "The most lasting part of my ophthalmic career has been my work as a teacher."

Ayman Naseri, MD, describes the impact of Dr. Stanley. "His leadership at the VA Medical Center and his dedication to UCSF's clinical and surgical training is measured not only through his own achievements, but through the doctors who have emerged from UCSF."

"Dr. Stanley is a warm and kind man," he continues, "whose understated and selfless personality never overshadowed or intimidated his trainees. Rather, his patience and understanding gave each resident the space to mature as individual clinicians and surgeons so that we might go on to care for our own patients, each of whom is better off because of Dr. Stanley's commitment to education. This may be his greatest, yet quietest, legacy."

# Match \$110,000 Challenge Keep UCSF at Leading Edge

Ophthalmology

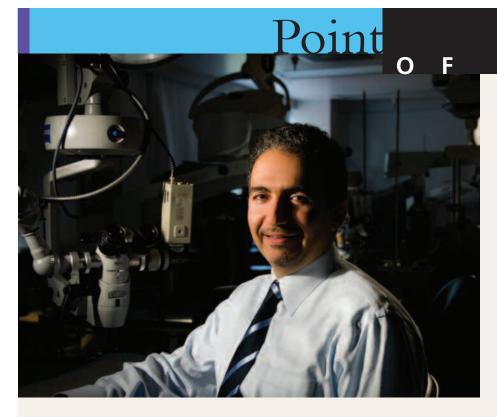
Times

here has never been a more important time to help us sustain and accelerate the work of our dedicated clinician scientists at UCSF. The faculty is dedicated to making a difference—matched by the generosity of special friends.

We just received a matching challenge of \$110,000 to attract and increase support for critical programs. Our challenger hopes to spur giving through matching your gifts dollar for dollar up to the challenge amount.

Please make your contribution today and help us turn this \$110,000 challenge into the \$220,000 gift it can be.

That Man May See and UCSF Ophthalmology put private donations to work to accelerate current research and to plan for focused growth. An entrepreneurial faculty leverages each of our contributions to achieve even larger sums from government sources, sustaining productive research in macular degeneration, glaucoma, childhood eye diseases, and complex corneal disorders.



# Ayman Naseri, MD Teaching Tomorrow's Leaders

s a surgical mentor, I am extremely proud to serve as residency director at UCSF's Department of Ophthalmology. Our residency selection committee seeks out candidates who immediately convey the integrity critical for physicians' intellectual and academic accomplishment, as well as the ambition to assume leadership positions in their profession. The

department is host to fifteen residents at any given time—five in each of three classes. Chosen from an applicant pool of about 450, they represent the top students in their medical schools, with consistent records of excellence.

What the department endeavors to offer residents is an optimal combination of clinical training and academic stimulation. Our approach to clinical

Dr. Naseri in the newly equipped Mazzocco surgical suite, a state-of-the-art teaching facility of UCSF Ophthalmology.

VIEW

training balances supervision with autonomy—we want our residents to learn the right way to do things but also to develop independence and self-confidence. At our clinics at San Francisco General Hospital and the VA Medical Center, residents ably care for patients in a supervised setting that allows them to develop the confidence needed to become excellent clinicians and surgeons.

On the academic side, medicine is constantly changing—what we learn today will be different from what we do tomorrow. Residents are required to remain current with changes in scientific literature. They also complete a challenging independent research study, honing their skills to make their own significant contributions to the way we care for patients. Most of our residents complete more than one project, and many of these studies are published in leading medical journals of our field. This process teaches our residents the scientific basis for what we do, and how we can adapt to changes in scientific and clinical thinking.

In my opinion, our program is at another high point in its history. Chair of Ophthalmology Dr. Stephen McLeod has made the quality of our residency program a priority, and accordingly he has recruited several faculty members with a dedication to resident education. As a testament to the current level of our training program, many of our recent graduates who have gone on to pursue subspecialty training have been recruited to faculty positions at leading academic institutions across the nation. Others have gone on to highly successful clinical practices in California and beyond. We are extremely proud of all of our residents, and we know that thousands upon thousands of patients will benefit from the exemplary care that our graduates continue to deliver to our community. •

### Ayman Naseri, MD

Steven P. Shearing Professor of
Ophthalmology
Residency Director
Chief of Ophthalmology at San Francisco
VA Medical Center

Welcome First-Year Residents

Charles Lin, MD
Born Taipei, Taiwan
College/Major Harvard College/Environmental Science and Public Policy
MD UCSF Medical School
Internship Cedars-Sinai Internal Medicine Internship,
Los Angeles, California
Interests Tennis, hiking, following the Lakers

Joseph Martel, MD Born Elvria, Ohio

College/Major University of Nevada, Las Vegas/Molecular Biology MD University of Nevada, Reno

Internship Brigham and Women's Hospital, Boston, Massachusetts Interests Baseball, hiking, biking, travel, kayaking

Jason Ruggiero, MD
Born New York, New York
College/Major Brown University/Neuroscience
MD New York University
Internship Hospital of St. Raphael, New Haven, Connecticut
Interests Music composition, origami

Brett Shapiro, MD Born Orange, California

College/Major Pomona College, Claremont, California/Chemistry; Heidelberg University, Germany/Quantum Physics, Fulbright Scholar MD UCSF School of Medicine

**Internship** University of Hawai'i at Manoa, Honolulu **Interests** Backpacking, outdoor photography

Alison Skalet, MD, PhD

Born Rochester, New York

College/Major Tulane University/Cell and Molecular Biology/BFA in Music

MD/PhD University of Pennsylvania School of Medicine.

MD/PhD University of Pennsylvania School of Medicine,
PhD in Immunology

PhD in immunology

**Internship** The Children's Hospital of Philadelphia **Interests** Music, travel



### Fellows and Mentors in **Vision Sciences** Continued from page 1

UCSF is one of the world's best places for retinal training."

- Dr. Marco Coassin

Center and also does research on agerelated macular degeneration (AMD) in Daniel Schwartz, MD's laboratory. "We grow retina cells in culture plates, subjecting them to the same conditions found in the human body," he explains. "In particular, I am studying the release of vascular endothelial growth factor (VEGF). VEGF plays a major role in AMD, and its mechanisms of action are not fully understood."

"UCSF is one of the world's best places for retinal training," says Dr. Coassin. "I'm very grateful to Dr. Schwartz for giving me the opportunity to be trained by the best surgeons in the world. Now I can go back to my country and change some approaches to treating retinal disease."

> My experience here will be a strong and beneficial influence on mv future work."

- Dr. Stephan Estermann

Stephan Estermann, MD, hails from Zurich, Switzerland, where he spent two years in the ophthalmology clinic at City Hospital Triemli. He still considers that his "home clinic," but he is thrilled to have been selected to spend a year on a glaucoma fellowship at UCSF.

"I particularly enjoy the combination of clinical work with Robert Stamper, MD, and the research in the laboratory," he says. "Glaucoma is a very challenging disease. It afflicts a lot of people and, if left untreated, can affect their lives in a devastating way."



Marco Coassin. MD



Stephan Estermann, MD



Yousuf Khalifa, MD



Paula Wynn, MD

"If I want to specialize, I must train in an institution big enough to have specialists for each discipline," says Dr. Estermann. "My experience here will be a strong and beneficial influence on my future work. Besides the professional reasons, I believe it's also important in life to learn a new culture, and broaden one's horizons. It's a unique privilege to work with such an enthusiastic team in a motivating environment like UCSF."

l benefit because Proctor uses the most current therapies to correct visual impairments that result from ocular inflammation."

- Dr. Yousuf Khalifa

Yousuf Khalifa, MD, is a Proctor Foundation fellow working with Drs. Nisha Acharya, Todd Margolis, and Ira Wong, learning advanced treatments for patients with all forms of uveitis, an inflammatory eye disease. "I benefit

because Proctor uses the most current therapies to correct the visual impairments that result from ocular inflammation."

"Uveitis is very challenging," explains Dr. Khalifa. "It deals with a lot of systemic disease, not just the eyes. But it gives you the opportunity to make the connection among systems and treat them early. For example, someone may have eye inflammation and back pain, and, paradoxically, treating the eye may help their back."

His experience at Proctor has shown him what it takes to be able to diagnose such challenging, multi-symptom conditions. He points to the way his mentors interact with patients: "The more time you spend with patients, the more likely you are to get a correct diagnosis. And at UCSF, the doctors are willing to spend that time."

> I'm interested in working with underserved populations... internationally and locally, so the experience of the Bay Area is very helpful."

> > - Dr. Paula Wynn

Paula Wynn, MD, came to UCSF to learn from excellent mentors and to gain experience among the diversity of patients throughout the Bay Area. A vitreoretinal fellow working with all of the department's attending physicians, she has a very busy week.

She spends Monday mornings supervising the resident laser clinic at San Francisco General Hospital, and Monday afternoons at UCSF with Robert Bhisitkul, MD, PhD. "Tuesdays are retina surgery days at UCSF," she says, "and Wednesdays and Thursdays are spent seeing patients with Drs. Bhisitkul, Jay Stewart, or Daniel Schwartz. Fridays are often surgery days at SF General Hospital."

"Vitreoretinal encompasses all aspects of medicine," she says when asked about her specialty. "We see general medical problems that affect the eye, such as diabetes, and we also treat specific diseases and inflammations of the eye. It's a very diverse pathology. I'm interested in working with underserved populations throughout my career, whether internationally or locally, so the experience of the Bay Area is very helpful."

Each fellowship costs \$100,000, planting seeds that bear fruit in ophthalmology clinics and teaching institutions all over the world. Fellowships contribute to UCSF's worldwide reputation as a leading site for ophthalmology research and care. For more information about funding a fellowship, contact Kathleen Rydar at That Man May See, rydark@vision.ucsf.edu.

# 2008-2009 Fellows

Jamie Bhamra, MD Cornea

Julie Chen, MD Glaucoma

Marco Coassin, MD Hearst Fellow, Retina Knut Eichhorn-Mulligan, MD, PhD Oncology

Eliza Hoskins, MD Cornea

Yousuf Khalifa, MD Uveitis

Eve Moscato, MD Plastics

Paula Wynn, MD Retina

Tien-An Yang, MD, PhD Glaucoma

Michael Yoon, MD Neuro-Ophthalmology/Plastics

# Contributors to That Man May See For Research to Prese

Active grants as of April 2009 for UCSF Vision Sciences, Department of Ophthalmology, and Francis I. Proctor Foundation total over \$53 million. Many of these grants were leveraged from seed funds provided by generous donors to That Man May See.

Туре	Purpose	Recipient Name	Sponsor Name	Proposal Title	Start Date	Approx. End Date
Grant	Instruction	Nisha Acharya, MD, MS	Research to Prevent Blindness, Inc.	Predicting and Improving Outcomes in Bacterial and Fungal Keratitis	7/1/07	6/30/11
Grant	Instruction	Nisha Acharya, MD, MS	National Institutes of Health / National Eye Institute	Predicting and Improving Critical Outcomes for Bacterial Keratitis	2/1/07	1/31/12
Contract	Clinical Trial	Nisha Acharya, MD, MS	Genentech, Inc.	Effect of Ranibizumab on Refractory Macular Edema in Uveitis	6/1/07	8/30/09
Contract	Clinical Trial	Nisha Acharya, MD, MS	Novartis Pharmaceuticals AG	The Study to Assess the Efficacy of AEB071 in the Treatment of Uveitis	12/17/07	8/8/09
Contract	Research	Jorge A. Alvarado, MD	Alcon, Inc.	Evaluation of the Therapeutic Potential of De-Acetylated Anecortave (AL4940) When Used as a Glucocorticoid Antagonist for the Treatment of Glaucoma	5/15/08	5/14/11
Grant	Research	Katayoon Baradaran Ebrahimi, MD	Knights Templar Eye Foundation, Inc.	Assessment of the Mutator Phenotype in Retinoblastoma	7/1/08	6/30/09
Grant	Research	Hilary E. Beggs, PhD	National Eye Institute	Mechanisms of Cell-Matrix Interaction and Signaling in Lens Development	4/1/06	3/31/11
Grant	Instruction	Hilary E. Beggs, PhD	Research to Prevent Blindness, Inc.	Investigating the Connection between Disrupted Basement Membranes and Eye Disease	7/1/05	6/30/09
Contract	Clinical Trial	Robert B. Bhisitkul, MD, PhD	Genentech, Inc.	BRVO Protocol FVF4165g - A Phase III, Multicenter, Randomized, Sham Injection-Controlled Study of the Efficacy and Safety of Ranibizumab Injection Compared with Sham in Subjects with Macular Edema Secondary to Branch Retinal Vein Occlusion	8/1/07	7/31/10
Contract	Clinical Trial	Robert B. Bhisitkul, MD, PhD	Genentech, Inc.	Cohort2 - FVF3426g - An Open-Label, Multicenter Extension Study to Evaluate the Safety and Tolerability of Ranibizumab	12/1/08	11/30/12
Contract	Clinical Trial	Robert B. Bhisitkul, MD, PhD	Genentech, Inc.	CRVO Protocol FVF4166g - A Phase III, Multicenter, Randomized, Sham-Controlled Study of the Efficacy and Safety of Ranibizumab Compared with Sham in Subjects with Macular Edema Secondary to Central Retinal Vein Occlusion	8/1/07	7/31/10
Contract	Clinical Trial	Robert B. Bhisitkul, MD, PhD	Genentech, Inc.	FVF3426g - Horizon Study - Amendment 2	9/16/05	12/31/09
Contract	Clinical Trial	Robert B. Bhisitkul, MD, PhD	NeoVista, Inc.	CABERNET - NEOVISTA - A Randomized, Prospective, Active Controlled, Study of the Epi-Rad90 Ophthalmic System for the Treatment of Subfoveal Choroidal Neovascularization Associated with Wet Age-Related Macular Degeneration	9/1/07	8/31/12
Grant	Basic Science Research	Matilda F. Chan, MD, PhD	Alta California Eye Foundation	The Role of Extracellular Enzymes in Regulating Corneal Repair	9/1/08	9/1/09
Grant	Basic Science Research	Matilda F. Chan, MD, PhD	National Institutes of Health / National Eye Institute	The Role of Extracellular Enzymes in Regulating Corneal Repair	4/1/08	3/30/13
Grant	Research	David R. Copenhagen, PhD	National Eye Institute	Synaptic Interactions and Mechanisms in the Retina	5/30/05	3/31/09
Fellowship	Research	Dan Darcy	National Research Service Award	Neuronal Identities and Mechansims Underlying Plasticity in the Visual Cortex	5/10/09	4/30/12
Grant	Research	Jacque L. Duncan, MD	American Health Assistance Foundation, Macular Degeneration Research Program	Relationship between Fundus Autofluorescence and Cell Survival	4/1/09	3/30/11
Grant	Research	Jacque L. Duncan, MD	American Geriatrics Society, Inc.	In Vivo Study of Cell Death in Aging and Dry Age-Related Macular Degeneration	7/1/08	6/30/10
Subcontract	t Research	Jacque L. Duncan, MD	Johns Hopkins University	Studies of the Ocular Complications of AIDS	6/11/05	7/31/13
Contract	Clinical Trial	Jacque L. Duncan, MD	Neurotech USA, Inc.	CNTF3 - A Phase II/III Study of Encapsulated Human NTC-201 Cell Implants Releasing Ciliary Neurotrophic Factor for Participants with Retinitis Pigmentosa Using Visual Acuity as the Primary Outcome	3/1/07	2/28/11
Contract	Clinical Trial	Jacque L. Duncan, MD	Neurotech USA, Inc.	CNTF4 - A Phase II/III Study of Encapsulated Human NTC-201 Cell Implants Releasing Ciliary Neurotrophic Factor for Participants with Retinitis Pigmentosa Using Visual Field Sensitivity as the Primary Outcome	3/1/07	2/28/11
Contract	Research	Jacque L. Duncan, MD	Novartis Institute for Biomedical Research	Adaptive Optics Imaging to Measure Short-Term Progression of Dry AMD	11/1/08	10/31/12
Grant	Research	Jacque L. Duncan, MD	Research to Prevent Blindness, Inc.	Physician Scientist Award	1/1/08	12/31/12
Contract	Clinical Trial	Jacque L. Duncan, MD	Second Sight, LLC	CP-003-001 - Argus II Retinal Stimulation System Feasibility Protocol - SSMP	4/1/07	3/31/11
Grant	Research	Douglas B. Gould, PhD	The Karl Kirchgessner Foundation	Mouse Genetic Models of AMD	1/1/09	12/31/09
Grant	Research	Douglas B. Gould, PhD	American Heart Association	Determining the Role and Cellular Mechanism(s) of COL4A1 in Cerebrovascular Diseases	1/1/08	12/31/11
Grant	Research	Douglas B. Gould, PhD	The Larry L. Hillblom Foundation	Determining Allelic Differences and Cellular Mechanisms in a Novel Model of AMD	1/1/07	6/30/10
Grant	Research	Jonathan C. Horton, MD, PhD	National Institutes of Health / National Eye Institute	Structural Basis of Amblyopia and Strabismus	7/1/00	6/30/13
Grant	Research	Jonathan C. Horton, MD, PhD	Research to Prevent Blindness, Inc.	Lew R. Wasserman Award	7/1/00	Indefinite
Grant	Research	Mark A. Jacobson, MD	National Institutes of Health / National Eye Institute	Aberrant T-Cell Function and Immunopathogenesis of CMV Immune Recovery Uveitis	9/1/07	8/31/09
Grant	Research	Jeremy D. Keenan, MD	National Institutes of Health / National Eye Institute	Optimal Trachoma Control After Mass Antibiotic Distributions	8/1/08	7/31/13
Grant	Research	Jennifer H. LaVail, PhD	National Institutes of Health / National Eye Institute	Genetic Analysis of Herpes Virus Neurotropism and Encephalitis	9/1/08	8/31/12

**UCSF Department of Ophthalmology Koret Vision Institute Beckman Vision Center The Francis I. Proctor Foundation for Research** in Ophthalmology

**Clinical/Research Faculty** Stephen D. McLeod, MD Chair of Ophthalmology

Richard L. Abbott, MD Nisha Acharya, MD, MS Jorge A. Alvarado, MD Robert B. Bhisitkul, MD, PhD

Michele M. Bloomer, MD Cynthia S. Chiu, MD J. Brooks Crawford, MD Eugene de Juan, Jr., MD Michael V. Drake, MD Jacque L. Duncan, MD Allan J. Flach, MD, PharmD Jonathan C. Horton, MD, PhD

Edward L. Howes, MD David G. Hwang, MD Bennie H. Jeng, MD Jeremy D. Keenan, MD Thomas M. Lietman, MD Shan C. Lin, MD Todd P. Margolis, MD, PhD Nancy A. McNamara, OD, PhD

# e Help Scientists Leverage Support rve and Restore Sight

Туре	Purpose	Recipient Name	Sponsor Name	Proposal Title	Start Date	Approx. End Date
Grant	Research	Matthew M. Lavail, PhD	National Institutes of Health / National Eye Institute	P30 - Core Grant for Vision Research	3/1/97	2/28/13
Grant	Research	Matthew M. Lavail, PhD	The Foundation Fighting Blindness	Kearn Family Center for the Study of Retinal Degeneration	7/1/06	6/30/11
Grant	Research	Thomas M. Lietman, MD	Research to Prevent Blindness, Inc.	Elimination of Infectious Trachoma from Ethiopia Using Repeated Mass Antibiotic Distributions	7/1/07	Indefinite
Grant	Research	Thomas M. Lietman, MD	Gates / Johns Hopkins University	Research to Programs for Trachoma Elimination	10/10/07	10/10/12
Grant	Research	Thomas M. Lietman, MD	National Institutes of Health / National Eye Institute	Eliminating Trachoma with Repeat Mass Drug Treatment	9/30/04	8/31/09
Grant	Research	Thomas M. Lietman, MD	National Institutes of Health / National Eye Institute	Mycotic Ulcer Treatment Trial	4/1/09	3/31/13
Grant	Research	Thomas M. Lietman, MD	National Institutes of Health / National Eye Institute	The Steroids for Corneal Ulcers Trial	9/30/05	8/31/09
Contract	Clinical Trial	Shan C. Lin, MD	Genentech, Inc.	Evaluation of Safety and Efficacy of Ranibizumab in Glaucoma Patients Treated with Filtration Tubes	3/1/07	2/28/10
Grant	Research	Shan C. Lin, MD	National Institutes of Health / National Eye Institute	Ocular Hypertension Treatment Study	1/1/94	12/31/09
Grant	Research	Stephen G. Lisberger, PhD	National Institutes of Health / National Eye Institute	Collaborative Research in Computational Neuroscience - Precision and Coding in Smooth Pursuit	8/1/05	7/31/10
Grant	Research	Stephen G. Lisberger, PhD	National Institutes of Health / National Eye Institute	Neural Control of Eye Movements	9/1/04	8/31/09
Grant	Research	Todd P. Margolis, MD, PhD	National Institutes of Health / National Eye Institute	Multicenter Uveitis Steroid Treatment	5/1/05	4/30/09
Grant	Research	Todd P. Margolis, MD, PhD	Research Assistance Program, New Directors Grant	Telemedicine Screening for Cytomegalovirus Retinitis Among HIV Patients in Developing Countries: A Pilot Study	7/15/08	7/30/09
Fellowship	Instruction	Stephen D. McLeod, MD	Allergan Inc.	2008 Horizon Grants Program - Francis I. Proctor Fellowship	1/1/09	12/31/11
Grant	Research	Stephen D. McLeod, MD	Research to Prevent Blindness, Inc.	UCSF Research to Prevent Blindness Unrestricted Grant Application	7/1/07	Indefinite
Grant	Research	Nancy A. McNamara, OD, PhD	National Eye Institute	Molecular Mechanisms of Squamous Metaplasia in Dry Eye	7/1/06	6/30/11
Grant	Research	Sarah L. Moseley, PhD	Knights Templar Eye Foundation, Inc	Understanding the Pathways that Guide Connectivity and Patterning of the Developing Visual System	7/1/08	6/30/09
Contract	Other	Joan M. O'Brien, MD	The EMMES Corporation	National Ophthalmic Disease Genotyping Network - RB1 Genetics Screening CLIA Laboratory	11/1/07	11/1/11
Grant	Research	Joan M. O'Brien, MD	National Institutes of Health / National Eye Institute	Improved Ophthalmic Care for Retinoblastoma Patients (includes an Administrative Supplement entitled: High-Throughput Screening for Germline RB1 Mutations in Heritable Retinoblastoma)	8/1/02	6/30/09
Grant	Research	Joan M. O'Brien, MD	National Institutes of Health / National Eye Institute	Genetic Testing, Retinoblastoma	11/1/08	11/1/11
Grant	Research	Joan M. O'Brien, MD	Wayne and Gladys Valley Foundation	Visual Center for the Child, Retinoblastoma	10/1/06	9/30/10
Grant	Research	I-feng Peng, MD	Knights Templar Eye Foundation, Inc.	Exploring the Molecular Basis of Cadherin-Associated Usher Syndrome: Cadherin-Catenin Signaling Pathway Proteins	7/1/08	6/30/09
Fellowship	Instruction	Durga P. Sarvepalli, PhD	Fight for Sight, Inc.	Micro and Nanotechnology-Based Experimental Platforms For Glaucoma Research: Analysis of ephrin-B2 Effects on RGC Axons	7/1/08	6/30/09
Grant	Research	Julie L. Schnapf, PhD	National Institutes of Health / National Eye Institute	Signal Processing in the Retina	7/1/88	11/30/11
Grant	Research	Julie L. Schnapf, PhD	Research to Prevent Blindness, Inc.	Regulation of Gap-Junctional Coupling of Photoreceptors	1/1/08	12/31/12
Grant	Research	Lawrence C. Sincich, PhD	National Science Foundation	Signal Transformation in the Early Visual System	7/1/07	6/30/10
Grant	Research	Lawrence C. Sincich, PhD	National Eye Institute	Adaptive Optics Retinal Microstimulator for Color Vision	4/1/09	3/31/11
Grant	Research	David W. Sretavan, MD, PhD	Research to Prevent Blindness, Inc.	SSI - Mechanisms of RGC Axon Damage in Glaucoma	1/1/09	12/31/13
Grant	Research	David W. Sretavan, MD, PhD	Glaucoma Foundation, The	Micro & Nanotechnology-Based Bioplatforms for High-Throughput Analysis of Axon-Glial Interactions in Glaucomatous Neuropathy	7/1/08	6/30/09
Grant	Research	David W. Sretavan, MD, PhD	National Institutes of Health / National Institute of Neurological Disorder and Stroke	Microscale Axon Repair as a Novel Paradigm for Nerve Injuries	7/1/08	6/30/12
Contract	Research	Robert L. Stamper, MD	Optonol, Inc.	A Multi-Center Study Comparing the Ex-PRESS™ Mini Glaucoma Shunt to Trabeculectomy in Subjects with Open Angle Glaucoma	3/1/07	2/28/10
Grant	Research	Jay M. Stewart, MD	Knights Templar Eye Foundation, Inc.	Collagen Crosslinks: Implications for Scleral Mechanics and Treatment of Myopia	7/1/08	6/30/09
Grant	Research	Michael Stryker, PhD	National Eye Institute	Development and Plasticity of the Visual System	4/1/99	11/30/13
Subcontract	Research	Michael Stryker, PhD	National Institutes of Health	Topographic Mapping Labels in Visual Development	7/1/08	6/30/13
Grant	Research	Erik M. Ullian, PhD	Autism Speaks	Role of Micro-RNAs in ASD Affected Circuit Formation and Function	7/1/07	6/30/10
Grant	Research	Erik M. Ullian, PhD	Fidelity Foundations	Investigating Micro-RNAs in Neurodegeneration	7/1/08	6/30/10
Grant	Research	Erik M. Ullian, PhD	National Institute of Mental Health	Role of Micro-RNAs in Neuronal Circuit Formation and Function	4/1/08	3/31/10
Grant	Instruction	Erik M. Ullian, PhD	Research to Prevent Blindness, Inc.	Investigating Signals Required for Retinal Repair	7/1/06	6/30/10
Grant	Research	Alan Verkman, MD, PhD	National Institutes of Health / National Eye Institute	Functional Role of Aquaporins in Eye Physiology	9/1/07	8/31/12

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# Drs. Matilda Chan and Jeremy Keenan Working Toward More Effective Treatments

r. Zena Werb's laboratory at UCSF may look like something out of a science fiction film with its test tubes, Petri dishes, microscopes, incubators filled with growing cells, gel boxes for electrophoresis, and various liquid and solid chemicals. However, devising new and better treatments for disorders of the eye relies on work in the lab as well as work with patients. Many physical and environmental factors influence how effective a treatment is, and the research labs at UCSF are at the forefront of identifying those factors and how they interact. Matilda Chan, MD, PhD, and Jeremy Keenan, MD, are two of the researchers whose efforts could lead to real advancements in therapeutic techniques.

## Making a Difference in Cancer Research

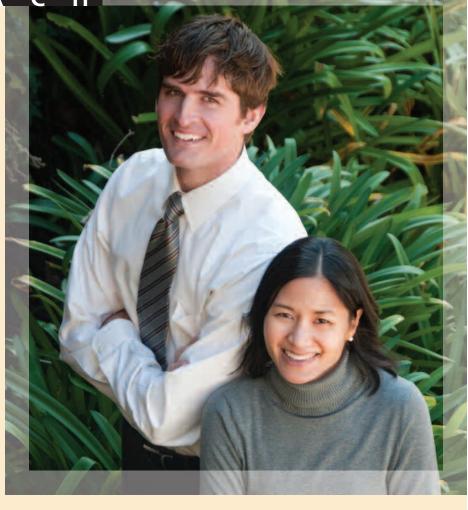
"I spend almost all of my time in Dr. Werb's cancer research laboratory," says Dr. Chan, who is supported by a K08 Mentored Clinical-Scientist Development Award from the National Institutes of Health (NIH) and the National Eye Institute (NEI). "I'm studying the role of extracellular matrix metalloproteinases in corneal wound healing, especially their effects on the rate of repair. There are many common molecular pathways shared between tumorigenesis and tissue repair." Corneal cells, Dr. Chan explains, sit within a support matrix of collagen and other structural proteins. In order for the cornea to stay

transparent, it must rely on a specialized cellular architecture, in which the cells are in a specific alignment. The epithelial (surface) layer of the cornea can easily be damaged, through bacterial, fungal, or parasitic infections; trauma; or surgery. Matrix metalloproteinases—enzymes that break down structural proteins and help to release factors important in growth and inflammation—are critical for the process of healing and remodeling the cornea back to its original state.

"I'm working on understanding the molecular and cellular aspects of wound healing," says Dr. Chan, who also sees patients one half-day a week. "For example, I grow corneal cells in culture plates, scratch them with the tip of a pipette, and then image them with a microscope over several hours as the cells migrate to close the wound." The result of Dr. Chan's research might be the ability to design therapeutics that target specific molecules in the healing process.

## Fighting Blindness in the Developing World

Dr. Jeremy Keenan is working on a different kind of eye injury: the kind resulting from trachoma, an infectious disease that causes the eyelids to turn inward, leading the eyelashes to scratch the cornea, a painful condition that often results in blindness. Working at the Proctor Foundation with Thomas Lietman, MD, under a K23 Mentored Patient-Oriented Research Career



Profile

Development Award from NIH and the NEI, Dr. Keenan is performing statistical analyses of clinical trials of azithromycin in Ethiopia.

"I'm trying to see if there's a better way we can use the clinical exam for trachoma," says Dr. Keenan. "Laboratory tests are the gold standard for detecting infection, but trachoma programs don't have the money to do tests on everyone. Alternatively, conjunctival examinations give clues about infection, but some patients may be infected without showing clinically active trachoma, while in other cases treatment may have cured the infection, but the clinical activity takes a while before disappearing."

Dr. Keenan is working with a dataset of 240 patients, for which he has ocular photographs and the results of laboratory tests for infection. "I designed a 'grading' website so that experts in the US, Australia, and Tanzania can view conjunctival photographs and assign a clinical grade to each photo. I will use different grading systems to see which one best predicts infection before and after azithromycin treatment. The goal is to be better able to provide treatment to the people who need it."

# Memorial Tributes to Visionaries

Jon Shastid Leaves a Legacy for Sight

hen Jon B. Shastid joined the board of That Man May See (TMMS), he wanted to make a difference for all who suffer from vision loss, especially from age-related macular degeneration (AMD). He gave his leadership advice and encouragement to the late Tom Boyden, then president of That Man May See, often over a cold drink at a favorite neighborhood haunt.

As a patient of Alexander Irvine, MD, UCSF professor emeritus of ophthalmology and one of the most influential retinal specialists in the country, Jon knew the devastating effects of AMD. He also valued the UCSF Ophthalmology faculty and their determination to find novel treatments and breakthroughs toward cures. An estimated 10 million Americans suffer from AMD. As people live longer lives, AMD is expected to increase. UCSF research is aimed at halting the disease and its vision loss.

Among Jon's many visionary accomplishments, he professionally joined vintners Ernest and Julio Gallo. Over a 35-year career, he helped turn Gallo Winery into a billion dollar business. Jon provided support for

That Man May See during his lifetime and included vision research in his estate plan through a bequest of more than \$300,000. He died last year, and his wife, Natalie, in 1997. The couple established a research fund in retinal degenerative diseases at the UCSF Department of Ophthalmology. The bequest also helped to complete an endowed chair in honor of Dr. Irvine. "The Shastids' generosity will go a long way to help us expand our research programs in retinal degeneration," says Stephen McLeod, MD. "Our goal is to develop new treatments to prevent vision loss from these disorders, so this support will benefit people in profound ways."

### Jane Steel's Memory Inspires Young Scientists

Jane Steel was a great entertainer. She opened her Pebble Beach home and set the table for world leaders to gather for great conversations. She enjoyed a good party, global travel, and her friends. As one of San Francisco's first female stockbrokers, Jane was a pioneer among investment strategists and a practical, nononsense woman. She joined Merrill Lynch in 1951. Jane helped to found the Financial Women's Association of San Francisco for mutual support and opportunities to know other female professionals. Although there was only a small community of women in the financial industry at that time, the 17 founders saw the benefit of meeting other successful women focused on similar goals.

Jane married Elton Puffer, who remained a lifetime friend. A second marriage to Marshall Steel, Jr., introduced her to the world of vision research and the impact that funding could make to save and restore sight for so many.

In addition to helping her clients, Jane believed in intelligent actions to support research fighting blindness and vision loss. In 1995, after Marshall passed away, she established the Jane and Marshall Steel, Jr., Endowment Fund for Vision Research, which has become known affectionately throughout UCSF Ophthalmology as "The Steel Prize." Valued at over \$2 million, interest earned from the endowment provides the most innovative scientists with the support needed to initiate new efforts aimed at breakthroughs in basic science and translational research.

# Staff

### PROFILE



om Hernandez is the first recipient of the Yvonne Alden Award from the UCSF Ophthalmology staff. He was chosen among his peers for this new award because of his tremendous empathy with patients, even the most apprehensive, and his generosity of spirit and team-oriented approach with coworkers.

# Staff Profile: Tomás Hernandez, Surgical Technician More than Meets the Eye

Sometimes a special person resides behind-the-scenes whose superb skill matches the needs of both patient and doctor alike. Working with such an individual can transform the medical experience.

Stephen McLeod, MD, describes the value of medical practice with Tomás Hernandez, principal laser technician. "For over 25 years, Tom has generated the absolute confidence of the surgeons who work with him," says Dr. McLeod. "He applies a musician's touch to meticulous instrument setup and

maintenance and to the procedures themselves."

"He is a most remarkable partner in the operating room," continues Dr. McLeod. "Tom is an extraordinary observer, adding tremendously to the training of our residents and fellows who perform refractive surgery wet labs with him. He is able to describe the subtlety of our surgical technique, illuminating methodologies we've incorporated habitually for years, and don't realize how unique we are until he points it out!"This keen observation and attention to detail make Tom a great

technician. "He's the perfect person to have on hand in a challenging case," says Dr. McLeod, "because he knows the procedures cold and is able to anticipate every move."

His talents with patients bring additional clinical responsibilities, and he now administers the extensive tests that Jacque Duncan, MD, requires in order to diagnose retinal disorders. "Tom finds a way to place patients at ease even when they are going through procedures that can be intimidating," says Dr. Duncan.

# Faculty News



**Richard L. Abbott, MD,** has served as a board and committee member of the Ophthalmic Mutual Insurance Company (OMIC) since 1993 and on January 1, 2009, was selected as chairman of OMIC's board of directors. OMIC maintains educational alliances with more than 31 state and subspecialty ophthalmic societies and enjoys the exclusive endorsement of the American Academy of Ophthalmology.



**Jorge A. Alvarado, MD,** received an award for "Best Speaker of the Day" from the 2009 Royal Hawaiian Eye Meeting. This was Dr. Alvarado's third time receiving this award—the previous two times were in 2006 and 1997. At the 2009 meeting, his talk was on selective laser trabeculoplasty.



**Michele M. Bloomer, MD,** went to Guatemala in May 2008 on a ten-day medical mission as part of a multispecialty group. She was one of three ophthalmologists who performed 150 ophthalmic surgeries and treated over 450 patients in the clinic. The mission is run through a nonprofit organization, Hospital de la Familia, located in Berkeley, California.



**Jacque L. Duncan, MD,** received a grant from the American Health Assistance Foundation for Macular Degeneration Research in March, 2009. This two-year grant will support her research into the relationship between fundus autofluorescence and cell survival.



Allan J. Flach, MD, PharmD, has served as chair and provides all lectures for the annual Pharmacology and Toxicology Section of the Basic Science Course at Stanford. This section teaches the participants (75 to 100 residents in all stages of training) to use drugs safely while treating eye diseases and to diagnose toxic effects of systemic drugs. Participants actively interact with Dr. Flach and each other as they refine and update pharmacologic and toxicologic treatments and problems as they relate to the eye.



**Jonathan C. Horton, MD, PhD,** gave the 39th Pinckney J. Harmon Memorial Lecture for the Cajal Club on September 25, 2008. This is the main honorary lecture sponsored each year by the Cajal Club, which is the oldest neuroscience society in North America, comprised of scientists devoted to the field of neuroanatomy. Prior speakers in the past five years have included a Nobel laureate.



**Matthew M. LaVail, PhD,** will be one of 31 individuals (of 12,000 members) inducted into the inaugural Gold Association for Research in Vision and Ophthalmology (ARVO) Fellows class of 2009 at their upcoming annual meeting. The title of ARVO Fellow is a new honor that recognizes current members for their individual accomplishments, leadership, participation, elected office, committee service, editorial board service, and other criteria.



**Shan C. Lin, MD,** is the senior author of a paper that appears in the February 2009 issue of *Archives of Ophthalmology*, in which the authors report a very high proportion of normal tension glaucoma among Japanese patients in the United States. The study has important implications in the diagnosis of glaucoma within this growing population.



**Todd P. Margolis, MD, PhD,** gave the keynote address at the ARVO meeting in Hyderabad, India, on January 18, 2009. In this talk, titled "Herpes Simplex Virus Latent Infection," he summarized the last 20 years of research at UCSF's lab aimed at understanding how herpes simplex virus manages to "hide" in the nervous system between outbreaks. Herpes simplex is a major cause of blinding eye disease in all developed countries.



**Timothy J. McCulley, MD,** was appointed the new president of the Peninsula Eye Society. This society has 250 members, distinguished ophthalmologists from around the San Francisco Bay Area.



**Stephen D. McLeod, MD,** joined a distinguished group of leaders in ophthalmology in a two-day symposium at the Illinois Eye and Ear Infirmary, which celebrated its 150th anniversary as the oldest eye specialty hospital in the US. Dr. McLeod presented his research efforts to develop a new generation of intraocular lenses, which will allow cataract-surgery patients to focus easily, both near and far.



**Tina Rutar, MD,** published "Risk Factors for Intraoperative Complications in Resident-Performed Phacoemulsification Surgery," Rutar T, Porco TC, Naseri A, in *Ophthalmology*, January 21, 2009. In a study of cataract surgeries performed by residents at the San Francisco VA hospital, they identified risk factors for intraoperative complications. Overall, the rate of major complications was low at 3.1%. Based on the results of the study, residency training programs may assign "higher risk" cataracts to more experienced surgeons. Patients with "higher risk" cataracts should receive additional counseling during the surgical consent process.



**Jay M. Stewart, MD,** published "Collagen Cross-Links Reduce Corneal Permeability" in *Investigative Ophthalmology and Visual Science*, April 2009. This paper contributes to a growing literature on the possible effects of corneal crosslinking, which is a new technique for treating keratoconus that is currently being studied in an FDA clinical trial.



**David W. Sretavan, MD, PhD,** received an award from the Glaucoma Foundation of New York to develop a micro- and nanotechnology-based experimental platform for high-throughput glaucoma research. The award began July 1, 2008, and will possibly be renewed for a second year.



**Robert L. Stamper, MD,** received a 2008 American Academy of Ophthalmology Lifetime Achievement Award. Recipients of this award are chosen based on contributions to the academy, scientific and educational programs, and the field of ophthalmology.

### That Man May See Thanks You

Thank you for generous contributions and pledges to vision research, teaching, and patient care received between October 16, 2008, and May 31, 2009.

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### SIGHTINGS



























- 1 Francisco Contreras, MD, Victoria Chang, David Chang, MD, Cecilia Contreras, Adriane Becker, and Maria Elena Palomino arrive for The Man May See's (TMMS's) Behind the Science Open House at UCSF Ophthalmology and the Proctor Foundation.
- During Behind the Science, Jay Stewart, MD, demonstrates cataract removal in the Mazzocco Microsurgical Laboratory, used for training seminars and ongoing research projects. Bob Coakley, executive director of the Thomas J. Long Foundation, looks on with John Barkan. TMMS board member Faye Mellos peers through the microscope.
- **3** Albert Schreck, TMMS board member, was honored at the Open House. Congratulating him is **Lisa Moran** of Korth Sunseri Hagey Architects.
- TMMS contributors Marcia Elias and Mark Elias, MD, enjoy a glass of Mazzocco wine at the Open House.

- **5** Patrick Butler, MD, and spouse Tari Butler enjoy the Open House, an event for Frederick C. Cordes Eye Society alumni and contributors to That Man May See.
- 6 Returning alumni enjoyed cocktails followed by the 50th Anniversary Dinner at the Stanford Court Hotel in downtown San Francisco.
- 7 Past Cordes President **Syd Williams, MD,** and current Cordes President **David Chang, MD,** begin the program and festivities at the 50th Anniversary Dinner.
- **Bryan Winn, MD,** entertained Cordes guests with a rousing song and piano solo.
- Participating in the dinner program is Virginia Cordes Stout, daughter of Frederick Cordes, MD, first chairman of UCSF Ophthalmology. Frederick Stout, who is her son and Dr. Cordes's grandson, joins her at the podium.

- Michael Drake, MD, Dunbar Hoskins, MD, Ann Hoskins, and Brenda Drake enjoy a moment at the Cordes reception.
- 11 Sharon Solomon, MD, Kristin Nesburn, MD, and Susan Pepin, MD, at the luncheon during the Cordes Scientific Meeting.
- 12 Shelley Day, MD, UCSF Ophthalmology resident, presents the Cordes Faculty Award to Robert Stamper, MD.
- Cordes members **Tina Rutar**, **MD**, **Francisco Garcia**, **MD**, and **Shiu Kwok**, **MD**, enjoy the view atop the Bank of America building during the luncheon.

Correction: Kim Ross, former administrative analyst at UCSF Ophthalmology, now works at the American Academy of Ophthalmology (AAO), not the Association for Research in Vision and Ophthalmology (ARVO) as previously published. We apologize for the error and send Kim our best wishes!

That Man May See is a 501(c)3 public charity. Its mission is to raise funds for the dedicated faculty of UCSF Ophthalmology to make possible breakthroughs in vision research, state-of-the-art patient care, and educational opportunities for residents and fellows.

To make a gift of cash or securities, go to www.ucsfeye.net/tmms.shtml or contact Danielle Pickett at 415.476.4016 or pickettd@vision.ucsf.edu. Checks are payable to That Man May See.

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### Jay Stewart, MD, Receives Prestigious Hellman Award

n outstanding clinician and surgeon and UCSF Department of Ophthalmology's new medical director, Jay Stewart, MD, is the recipient of a Hellman Family Award for Early Career Faculty. This intra-UCSF program provides research incentives to encourage the most innovative medical research, such as Dr. Stewart's project, which could lead to a novel and safer means of delivering treatment for age-related macular degeneration (AMD).

The purpose of this project is to develop a system for using ultrasound energy to deliver drugs into the eye, as a noninvasive alternative to injections. "Currently for AMD, we administer treatments by injections into the eye, using needles," explains Dr. Stewart. "The new system we are developing is a means of getting the drugs into the eye without injection, offering benefits such as increased comfort and reduced risk of complications."

Dr. Stewart's research has already proven feasible, and the Hellman funds will accelerate the work to the level of extensive testing, further developing a technological advancement.

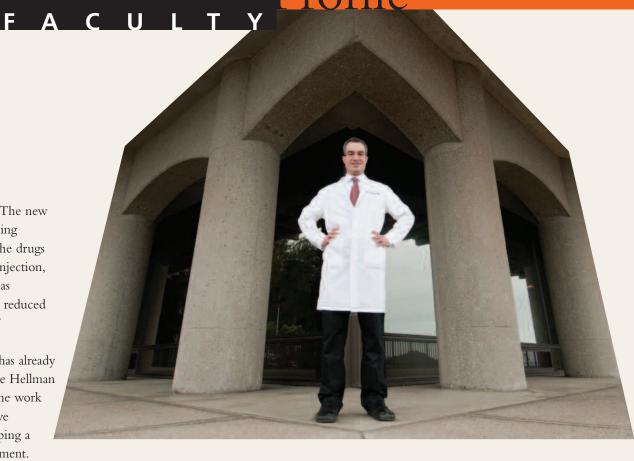
A member of the faculty since 2005, Dr. Stewart was a resident from 2000 to 2003. For the two years following his residency, he was a fellow at the University of Southern California's Doheny Eye Institute. Since his return to UCSF, he has been providing quality patient care in the retina clinic at the Department of Ophthalmology

and has been serving as the director of vitreoretinal services at San Francisco General Hospital. He also conducts research into the biomechanical properties of the eye, hoping to improve treatment of the many ocular disorders, such as myopia and keratoconus, which result from mechanical changes in the ocular tissues.

Dr. Stewart's particular interest, though, is the retina. "The retina has the most unsolved problems," he says, "such as macular degeneration and diabetic retinopathy. The surgery involved is both challenging and interesting."

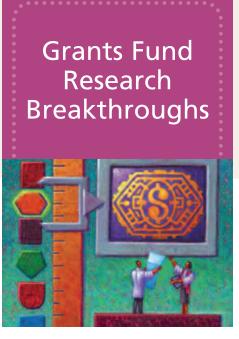
"It's also a subspecialty that is evolving," he continues. "The treatments of today are different from what they were just five years ago, when I was a fellow."

As medical director,
Dr. Stewart oversees the
day-to-day operations of
UCSF Ophthalmology's
clinical practice and works
to ensure its continued
financial viability. •











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