Koret Vision Institute + Beckman Vision Center + Department of Ophthalmology

Spring 2008

University of California, San Francisco + That Man May See

#### Focal Point



Dear Friends,

Our feature story highlights the importance of finding new treatments for glaucoma. Current demographic trends predict that the health burden of glaucoma will increase as we live longer lives. Our physicians and patients eagerly seek a cure for this lifelong debilitating disease.

UCSF's glaucoma team stands out as uniquely positioned to make breakthroughs that can change the way we think about and treat this major cause of blindness. Success in the fight against glaucoma requires a deeper understanding of underlying disease mechanisms and the focused, rapid translation of scientific advances to the clinic. These efforts can ultimately transform the quality of life for each person already afflicted—and prevent glaucoma from taking the eyesight of those at risk.

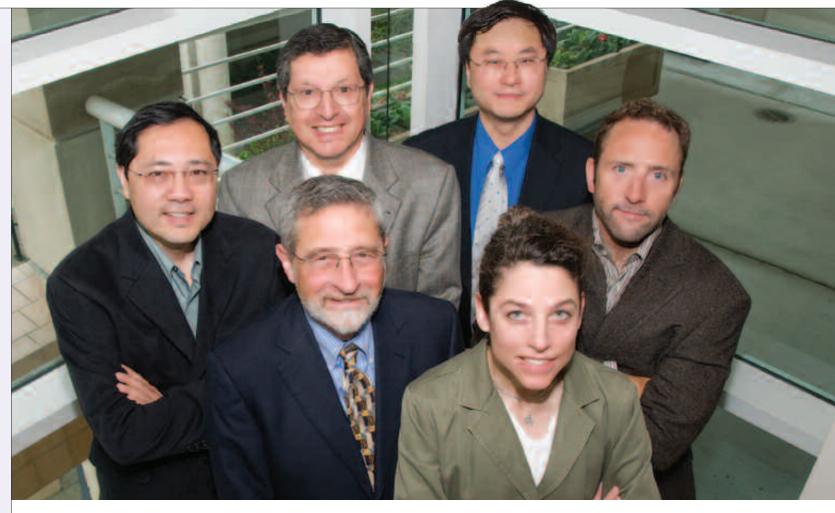
In this issue, we salute our residents and fellows, as well as the faculty who shape the next generation of ophthalmologists. As one of the top residency programs in the country, UCSF nurtures individuals who will lead the future of eye care for years to come.

We hope that you enjoy reading about our faculty and the stories of our patients. We appreciate your support for innovative research, inspired teaching, and compassionate patient care. Thank you for your generous gifts to That Man May See, making a difference — and making vision breakthroughs possible.

Sincerely,



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



UCSF Ophthalmology's glaucoma team. Pictured clockwise from bottom are Drs. Jeanette Hyer, Robert Stamper, David Sretavan, Jorge Alvarado, Shan Lin, and Douglas Gould.

# Ophthalmology Insight UCSF Team Fights Glaucoma

hat drives us to make breakthroughs in research," says

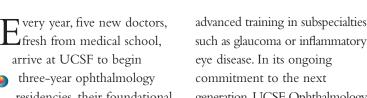
Stephen McLeod, MD, chair of ophthalmology, "is being
confronted by diseases that frustrate our patients. Our UCSF faculty
share ideals of making vision better for future generations." The
power to effectively fight glaucoma – "silent thief of sight" – comes
from the strengths of the UCSF environment and first-rate clinician
scientists attracted to this campus for its collaboration, innovative
spirit, and a passion for making a difference.

Heading the UCSF glaucoma effort is **Robert Stamper**, **MD**, who has dedicated his life to the research and treatment of glaucoma.

Dr. Stamper and his clinical colleagues Jorge Alvarado, MD, and Shan Lin, MD, provide UCSF patients with the best care available today, but that's just one aspect of their work. Together with basic scientists David Sretavan, MD, PhD, Jeanette Hyer, PhD, and Douglas Gould, PhD, they are an awe-inspiring team committed to improving outcomes for patients and ultimately finding a cure for this leading cause of irreversible blindness. They put innovative approaches and emerging technologies to work in their laboratories, where the big discoveries happen.

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## Envision the Future Mentoring the Next Generation

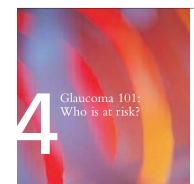


three-year ophthalmology residencies, their foundational training in the field. And about a dozen young doctors who have completed residencies arrive to accept prized fellowships, advanced training in subspecialties such as glaucoma or inflammatory eye disease. In its ongoing commitment to the next generation, UCSF Ophthalmology is like a sturdy, ever-branching tree of ocular clinicians and scientists who serve patients throughout the world.

"It's an immensely important part of what we do in the department – train leaders for the future," says **Shan Lin, MD,** Residency Director. "It's as much our legacy as our research is."

Continued on page 8

#### A PEEK INSIDE:





Glaucoma at Age 8: A Family's Journey



Fellows and Residents Enhance Research and Patient Care





Dr. Jacque Duncan Honored for Geriatric Research

## UCSF Fights Glaucoma Continued from page 1

#### The Glaucoma Threat

UCSF experts literally wrote the book on glaucoma. Texts by Dr. Alvarado and Dr. Stamper are widely used in medical schools throughout the United States and around the world. The impressive scholarship of the UCSF glaucoma team has also been recognized with a substantial body of work in the world's most prestigious ophthalmology journals.

With the sight of an estimated 70 million people around the world at stake (and the number of U.S. cases set to triple as our population ages), glaucoma is one of the great vision challenges of our time. There are several types of glaucoma, including childhood glaucoma, and narrowing of the visual field and eventual blindness are its common denominators. People over the age of 60 are prime targets for glaucoma, so the repercussions for living independently in old age are great. Dr. Stamper has seen incremental progress over the years, but he is still hungry for the critical breakthroughs in understanding and management of the disease that will prevent significant sight loss.

Glaucoma is diagnosed when a doctor detects damage to the optic nerve. Unlike the skin, which constantly forms new cells, the optic nerve fibers that run from the retina to the brain cannot renew themselves. Each microscopic optic nerve fiber relays a tiny area of the visual field to the brain. There are millions of these fibers in a human eye but, over time, chronic glaucoma can destroy them all.

Scientists know that when intraocular pressure builds, that pressure affects the weakest part of the eye wall – where the optic nerve begins its journey from the retina toward the brain. This damage affects peripheral vision first, but in advanced glaucoma even the central vision deteriorates (see photo illustration on next page). Doctors currently manage glaucoma by lowering eye

This team is committed to improving outcomes for patients and ultimately finding a cure for this leading cause of irreversible blindness.

pressure with medications, laser procedures, and microsurgical procedures that slow disease progression in most patients.

Glaucoma is referred to as the "silent thief of sight" because half the people affected by the disease don't know they have it. In chronic glaucoma (the most common type in the United States) optic nerve fibers die so gradually that vision loss goes unnoticed until substantial damage has occurred, and the attendant elevated eye pressure is usually painless.

#### **Clinicians Take New Tacks**

For those at high risk for glaucoma, development of more sensitive screening tools is paramount, so patients can be diagnosed and treated early (see "Glaucoma 101," page 4). Drs. Alvarado, Stamper and Lin studied a new type of electroencephalogram (EEG) – the multifocal visual evoked potential, which registers brain activity when light is seen by the eye – for its usefulness in glaucoma. It identifies flaws in the visual field almost automatically, which is a huge improvement over the standard test in which patients have to report tiny flashes of light across their field of vision. This new EEG test is helpful when someone cannot perform the more difficult manual test, and it may detect abnormalities earlier than the conventional test.

#### Dr. Stamper:

#### Better Tools for Diagnosis and Surgery

Dr. Robert Stamper studies and validates some key diagnostic tools and works to improve surgical devices. Many of these are now incorporated in the care of glaucoma patients around the world.

The standard tool for measuring eye pressure (called a tonometer) can be inaccurate because its results are skewed by the thickness of the patient's cornea. Dr. Stamper, in collaboration with Dr. Christoph Kniestedt of Switzerland, has helped validate and prove the clinical usefulness of a much more accurate tonometer for assessing elevated pressure. This new device is receiving increasing attention and use in many glaucoma specialists' offices.

Lasers are best known for treatment and changing the optical properties of the eye. However, lasers can also be used for diagnosis. Drs. Stamper and Lin have looked at the usefulness of special lasers that map the nerve of the eye and also the front of the eye. One of these devices (the anterior segment optical coherence tomography device) may be helpful in detecting various types of narrow-angle glaucoma, which is particularly common in people of Asian descent. A different form of optical coherence tomography can be used to detect subtle changes in the optic nerve, which better allows the ophthalmologist to determine if glaucoma is progressing.

Dr. Stamper also has made refinements to glaucoma surgery. He helped to develop a catheter that fits into the eye's drainage canal. It has gained FDA approval for adults and is now in clinical trials for infants. Dr. Stamper is also the lead investigator for a new shunt that reduces the side effects of microsurgeries in some cases.

## The Thomas J. Long Foundation Invests \$1 Million

Dr. Alvarado's Glaucoma Research

The Thomas J. Long Foundation has made a \$1 million gift to support the pioneering glaucoma research of Jorge Alvarado, MD. This generous support builds on prior investments of the Thomas J. Long Foundation to That Man May See, in search of a cure for the eye disease that affected both Long brothers. Thomas and Joseph Long were both patients of UCSF ophthalmologists.

**Gratitude Flows Both Ways** 

"We are grateful to be a partner in this important research project," says Sidne Long, the foundation's board president. "Dr. Alvarado is one of the finest and most attentive doctors I have ever met," adds Howard Bell, Thomas J. Long Foundation board member. "We are happy to help him and his team with funding they need to make progress."

#### **Energizing the Quest for a Cure**

This significant gift energizes Dr. Alvarado's efforts to counter the effects of glaucoma, allowing him the opportunity over the next three years to make truly significant progress in discovering new therapies for

this blinding disease. Dr. Alvarado's team is investigating the role of cells in the regulation of eye pressure towards a novel treatment that would "vaccinate" the patient against the disease.

"With this support from the Thomas J. Long Foundation, we could implement a new therapeutic approach relatively soon, as the methodologies required are already developed and in use in a special laboratory constructed at UCSF," says Dr. Alvarado. "These ideas constitute a promising prospect for our research field, and they are particularly exciting for me."

Robert M. Coakley (left), executive director of the Thomas J. Long Foundation, with Dr. Alvarado in the Koret Vision Reseach Laboratories.

#### How Glaucoma Alters Vision







Normal Vision Early-Stage Glaucoma Advanced Glaucoma Advanced Glaucoma

#### Dr. Alvarado:

#### Translational Research

Understanding the biological mechanisms of the disease is crucial to discovering how glaucoma develops and finding new treatments for this blinding condition. One approach involves the investigation of the mechanisms that regulate eye pressure. Dr. Alvarado addresses this challenge by examining the cellular and molecular basis for regulation of the drainage system (called the trabecular meshwork) in normal and glaucomatous eyes.

His team has uncovered the existence of an elaborate signaling mechanism that allows two cell types to "talk" to each other in order to maintain normal pressure in the eye. One cell type detects changes in eye pressure and sends molecular signals down the drainage pathway. Another cell type receives these messages and responds by increasing or decreasing flow as necessary to maintain normal eye pressure. Importantly, blockage of the drainage tissues in glaucoma patients occurs as a consequence of disruption of this basic molecular signaling mechanism. Dr. Alvarado's team has also uncovered involvement of the body's immune system (and of a type of white blood cell known as the monocyte) in maintenance of the normal function of the drainage system.

Dr. Alvarado's laboratory, in collaboration with William Reed, MD, and supported by a three-year, \$1 million gift from the Thomas J. Long Foundation, is now in the early stages of developing a novel cellular therapy for reducing eye pressure via the auto-transplantation of these special white blood cells. Working with Dr. Reed, they will isolate the monocytes from a vein in the patient's arm, prepare them, and then introduce them into the drainage system of that patient's eye. They hope these cells will stimulate a molecular repair process that reduces pressure in the eye continually. This treatment would be tantamount to vaccinating the patient with his or her own cells against the fluid blockage that elevates pressure and damages the optic nerve.

#### Dr. Lin:

#### Stem Cell Research and Risk Assessment

Improving drainage in the eye is a key strategy for reducing dangerous pressure. Dr. Shan Lin's investigation in this area focuses on the potential for trabecular

Our long-term goal is to open new therapeutic avenues that intervene directly on the process that leads to vision loss."

- Dr. David Sretavan

meshwork (TM) stem cells to replace diseased cells. He is working with UCSF's Tejal Desai, PhD, an expert on tissue bio-engineering, on developing a delivery method for these new cells. A founder of the Trabecular Meshwork Society, Dr. Lin facilitates progress on glaucoma research by bringing together the world's premier TM investigators for discussion and collaboration.

Another of Dr. Lin's interests is closed-angle glaucoma, a particularly aggressive form of the disease more common among Asians (see Faculty Profile, page 5). He is assessing the value of a new, rapid test (anterior segment optical coherence tomography) in San Francisco's Chinese population to see if it can assess risk of closed-angle glaucoma. Dr. Lin also has gathered data on the American Chinese population in San Francisco regarding rates of glaucoma, cataracts, and other eye diseases. Drs. Lin and Stamper are co-investigators on numerous studies of

leading-edge diagnostics.

Clinical trials represent a critical stage of research where successes in the laboratory are tested with patients. Dr. Lin heads the UCSF site for the Memantine<sup>TM</sup> Glaucoma Trial, a multicenter clinical study of an innovative therapy aimed at strengthening optic nerve tissues. This is the first full-scale clinical study of its kind and, although the initial results have been mixed, the concept of treating the

optic nerve directly shows great promise. Dr. Lin is also the Principal Investigator for the Ocular Hypertension Treatment Study at UCSF, an NIH-sponsored study that has substantially altered the treatment of glaucoma.

#### **Basic Scientists: Finding All the Pieces**

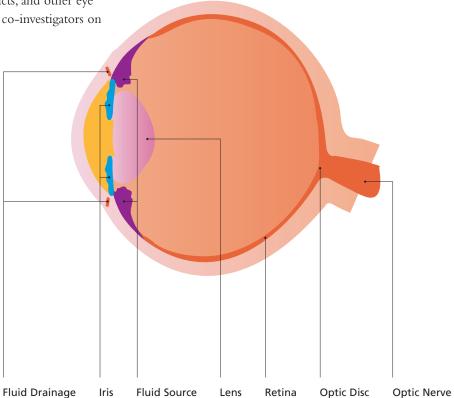
"Remarkably, the fundamental biological processes that result in the optic nerve damage characterized as glaucoma are poorly understood," says Stephen McLeod, MD, department chair. That Man May See provides seed funding to these vision scientists, who use cellular and molecular biology, bioengineering strategies, and genetics to explore every facet of the disease.

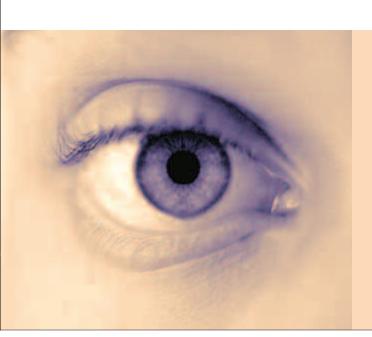
#### Dr. Sretavan:

#### The Critical Role of Optic Nerve Damage

Recognized as an expert in the field of developmental neuroscience with special interest in the optic nerve, Dr. David Sretavan was a 2006 recipient of a Lew R. Wasserman Merit Award from Research to Prevent Blindness. The question, Where is the initial site of the disease? guides Dr. Sretavan to explore the back of the

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#### Major Gifts Advance Glaucoma Research

That Man May See thanks major donors currently supporting research to combat glaucoma with gifts ranging from \$10,000 to \$1 million.\*

The Thomas J. Long Foundation
OptiMedica Corporation
Alcon Laboratories, Inc.
Jeanne and Sanford Robertson Fund
Frannie Fleishhacker

R. Jean & James D. Taylor Foundation
Allergan Pharmaceuticals
Santen Holdings Company, Inc.
The Joan Leidy Foundation, Inc.
Anonymous
Robert J. Drabkin
Mrs. Charlene C. Harvey
McBean Family Foundation
Elaine A. Eklund

\*Commitments made since January 1, 2007

#### Glaucoma 101

Although various forms of glaucoma affect individuals of all ages, it is most prevalent in people older than 60. With our "over-60" population poised to triple by 2030, glaucoma poses a serious risk to the independence and quality of life of 9 million Americans over the next 25 years. Without improved treatment options, a substantial proportion of glaucoma patients will lose sight in one or both eyes.

#### Who has glaucoma now?

3 million individuals in the United States 70 million worldwide (estimate)

#### What are the symptoms?

The most common type of glaucoma (open-angle glaucoma) has no symptoms until vision loss is substantial. Eye exams with dilation are the only way to identify this type of glaucoma early. Symptoms for other, less common types of glaucoma include hazy vision, eye pain or head pain, nausea or vomiting, sudden sight loss, and rainbow-colored circles around bright lights

#### Who should be tested and when?

Those with strong risk factors, especially those of African descent over the age of 35, those with a family history of glaucoma, and everyone over the age of 60, should be tested every 1 to 2 years.

## What risks are correlated with glaucoma? Strong Risk Factors

High eye pressure (also called intraocular pressure, or IOP)

Age 35 and older for African Americans
Age 55 and older for Hispanic Americans
Age 60 and older for other Americans
Glaucoma in a parent or sibling
Suspicious optic nerve appearance
Very thin cornea

#### **Other Risk Factors**

Severe nearsightedness
Diabetes
High blood pressure
Eye injury or surgery
History of steroid use
Migraine headache and peripheral
vasospasm
Sleep-related breathing disorder
Male gender

#### Glossary

Wide-angle glaucoma A chronic and slowly developing type of glaucoma, most common among Caucasian Americans, Hispanics, and African Americans.

Narrow-angle glaucoma An acute type of glaucoma that often includes the sudden onset of pain. Most common among members of certain Asian populations including Chinese, Vietnamese, and Philippino. Also called angle-closure or closed-angle glaucoma.

**Optic disc** The indented center of the optic nerve as it exits the back of the eye.

Trabecular meshwork The sieve-like tissues that drain fluid from the area between the cornea and the lens. Blockage of these tissues elevates eye pressure.

Visual field The entire expanse of space visible at a given instant without moving the eyes.

## UCSF Fights Glaucoma Continued from page 3

eye, where the optic nerve fibers fail. He believes that doctors must find a way to intervene in glaucoma here, upstream of the retina.

His laboratory has identified genes that regulate development of the optic nerve and that, interestingly, reappear later in life at the optic nerve if trauma occurs. He applies molecular genetics to look at the role these genes may play in the initiation and/or progression of glaucoma. If the genes are shown to play a significant role in the disease, his next step would then be to explore how manipulation of the protein products of these genes can be used to alter the course of disease and benefit the health of optic nerve axons. Dr. Sretavan

explains, "Our long-term goal is to open new therapeutic avenues that intervene directly on the process that leads to vision loss."

#### Dr. Hyer: Cellular Biology in the Front of the Eye

Dr. Jeanette Hyer is the recipient of a National Glaucoma Foundation grant. She studies the development and formation of the anterior (front) portion of the eye. The final arrangement of anterior structures (fluid-producing tissues, lens, and drainage systems) comes about through complex communication between the tissues throughout development. Knowledge of how these tissues normally develop will assist in

understanding the requirements for their continued maintenance and viability, especially relevant for keeping eye pressure within a healthy range.

#### Dr. Gould: Focus on New Genes

The major goal of Dr. Douglas Gould's work is to understand how genetics affects human eye disease. His lab investigates how genetic factors cause, predispose to, or influence the progression of glaucoma and age-related macular degeneration. His team's approach is to identify new genes that contribute to disease, understand how they work, and determine how this function is impaired in disease. His goal is to exploit this newfound knowledge to

develop new and more effective therapeutic interventions to prevent or delay visual disability and blindness. Dr. Gould's laboratory efforts at UCSF were launched with a special award from the Jane and Marshall Steel, Jr., Endowment for Vision Research.

#### **Moving Closer to a Cure**

New technologies such as gene therapy and tissue bioengineering hold promise for the millions of people suffering from glaucoma blindness and disability. As UCSF scientists discover more about the "nature of the beast," new directions for taming it will emerge. As Dr. Sretavan puts it, "Once you understand the disease, you have a real shot at curing it." •

## THAT MAN MAY SEE



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.



Early every Wednesday morning, I meet with Dr. Stephen McLeod. We connect on the latest departmental news, and I gain insight into the treatment breakthroughs our faculty seeks with funds you provide through That Man May See. Foremost on Dr. McLeod's mind is the incoming patient that morning! I love accompanying him to the clinic – keeping up with his rapid pace not withstanding – and directly seeing the benefits of our work.

In the clinic, mind and heart intersect with research and patient care. The glaucoma service, retinal care, and pediatric ophthalmology are buzzing with activity, and I realize that each patient comes to us with hope as well as with fears. The patients are seeking interventions against blinding diseases. Only at preeminent vision institutions like UCSF

Ophthalmology can you, as patient, gain the benefit of leading-edge research and the novel therapies made possible by years of dedicated research (much of it accomplished next door in the Koret Vision Research Laboratories). Moving ideas quickly from lab bench to clinic patient – this is why we are here!

That Man May See recently transferred \$1.6 million to UCSF Ophthalmology to fund new research and provide bridge funding to continue studies endangered by cuts in government spending. Yet much more is needed! Your commitment helps the UCSF vision team to pioneer vital new treatments, purchase up-to-date equipment, and attract and retain the finest ophthalmologists in the country. Thank you for this and for all you do.



## Glaucoma Can Affect the Young Harry Meyerson Shares His Story of Treatment

or Harry Meyerson, playing drums allows him to focus solely on one thing - and not always on his vision challenges. At age eight, he was diagnosed with uveitis, an inflammation of the middle layer of the eye. Untreated, uveitis can lead to blindness. A patient at UCSF for the past five years, Harry's awareness that something was wrong began with seeing "floaters" and his family's concern when he couldn't read signs in cafes. Through his pediatrician and ophthalmologist, Harry was referred to a retinal specialist who sent him to Ira Wong, MD, uveitis specialist at UCSF's Francis I. Proctor Foundation.

#### A Mother's Concern

"Harry has an incurable but treatable eye disease," explains Harry's mother Maris. Essential uveitis treatment led to the development of glaucoma, an eye disorder of increasing concern for young people. UCSF's Shan Lin, MD, implanted an Ahmed<sup>TM</sup> glaucoma valve into Harry's left eye. This innovative device uses state-of-the art technology to control intraocular pressure.

You have to make some relative sense of thinas."

- Harry Meyerson

#### **How Harry Stays Positive**

"I was dealing with things way beyond my maturity level then," says Harry, now 13. "But I tried to keep it from getting me down. You have to make some relative sense of things," he adds, and refers to a thick file kept by his family during the course of treatment. For Harry and his parents, dealing with uveitis and glaucoma meant learning all the options and building an arsenal of resources to understand these diseases. "We are extremely proud of Harry and how he handles all that has come his way," says Maris. "We often wonder if he would be the same person if he hadn't had to deal with this."

A large part of Harry's young life has been spent at UCSF - with teams of residents, fellows, and medical faculty.

For Harry, it's "cool" to meet with doctors-in-training. He describes their patience and the time they spend to explain carefully what happens next. "They are fresh and bright and make a difference to Harry and to his parents," extols Maris. "That's the beauty of a teaching hospital."

"Harry is very intelligent, and he has the ability far beyond his years to understand and deal with his

conditions.

It is always a joy to see him and his parents in my clinic," says Dr. Lin. One visit in particular stands out for Harry. "That would be when things were on the upswing [inflammation was down and pressure was

normal] – by far my most favorite day." Afterwards the Meyerson family went out for dinner to celebrate.



## Dr. Shan Lin

## Service To His Students, Service To His Community

The low-key style and ▲ humor of Shan Lin, MD, make for easy relationships with colleagues, patients, and students. As Associate Professor of Clinical Ophthalmology, Dr. Lin specializes in glaucoma.

As the recently appointed Residency Director, he helps to shape the education of ophthalmologists-in-training. In December the residency program received an impressive five-year accreditation, a strong sign of Dr. Lin's leadership.



#### **Residents as Leaders**

Fifteen medical school graduates are doing their residency training at UCSF at a given time – five in each year of the three-year program. Dr. Lin oversees instruction, clinical rotations, and surgical volumes, and he also has a say in who gets accepted. Dr. Lin looks for candidates with "that extra drive," who want not only to care for patients but to become leaders in the field whether through research, by increasing access to care in other countries, or as academic or community leaders. He also favors individuals that he would choose as his own doctor.

"Being Residency Director provides a unique opportunity to build nurturing relationships with our ophthalmologists-intraining, to teach them clinical skills as well as cataract and glaucoma surgery," Lin says. "I'm enjoying it tremendously."

#### Asian Glaucoma

Dr. Lin gets around San Francisco in unique fashion. He sometimes travels in the Mobile

Eye Service van, an eye health clinic on wheels that brings ophthalmology to the nine community clinics of San Francisco General Hospital. During 2005, Dr. Lin took advantage of the "eye mobile" - which was funded with the support of Santen Holdings Company of Napa – to

Dr. Lin explains. Among Chinese in Asia, closed-angle glaucoma accounts for 30 percent of all cases. By contrast, only one percent of Caucasians with glaucoma have this type. His team found that the risk for closed-angle glaucoma among its subjects was in

My job provides a unique opportunity to build nurturing relationships with our ophthalmologists-in-training."

conduct a pilot study among the San Francisco Chinatown population. Dr. Lin and his team screened 300 residents to understand the spectrum and distribution of eye diseases among the Chinese American population - in particular, closed-angle glaucoma.

"Understanding the distribution of diseases, as well as risk factors, will help us to manage eye diseases in the Asian American population,"

line with data on Chinese populations living in Asia.

Why does he investigate closed-angle glaucoma? Dr. Lin replies with a simple "I'm Chinese." It's personal, too. Three of his uncles and a grandmother suffer from it and one of the uncles is almost blind.

## Clinical Fellows 2007-2008

#### 1. Katayoon Baradaran Ebrahimi, MD

Ocular Pathology Fellow

Mentor Joan O'Brien, MD

Born Tehran, Iran

MD, Internship and Residency
Iran University of Medical Science
and Health

**Previous Fellowships** Moorfields Eye Hospital (London), Wilmer Eye Institute/Johns Hopkins University

**Interests** Cooking, mountain climbing, meeting people from various cultures

Interesting Facts Fellowship sponsored by the Wayne and Gladys Valley Foundation. Won the Iran national mathematics prize at age 16

#### 2. Marco Coassin, MD

Retina Fellow

Mentor Daniel Schwartz, MD

Born San Vito al Tagliamento, Italy

**MD and Residency** University of Rome, Italy

**Previous Fellowship** Wilmer Institute/Johns Hopkins University

Interests Reading, tennis, jogging

#### 3. Nicole Fram, MD, MA

Proctor Fellow in Cornea, Refractive, and External Disease

Mentors Todd Margolis, MD, PhD, Tom Lietman, MD, Nisha Acharya, MD, Erich Strauss, MD

Born Los Angeles

**College/Major** University of California, San Diego/Psychology

Masters Columbia
University/Psychology

**MD** Thomas Jefferson University, Jefferson Medical College

**Internship** Crozer Chester Medical Center, Internal Medicine

**Residency** Wills Eye Institute, Thomas Jefferson University

Interests Cooking, music, yoga

#### 4. Thomas Hwang, MD, PhD

Oculoplastics and Neuro-ophthalmology Fellow

Mentors Timothy McCulley, MD, Jonathan Horton, MD, PhD, William F. Hoyt, MD

Born Narberth, Pennsylvania

College/Major Harvard
University/Biomedical Engineering

MD Stanford Medical School

**PhD** UCSF Biomedical Sciences Graduate Program

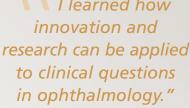
**Internship** Kaiser Permanente Santa Clara

Residency Stanford Medical School

Interests Ballroom dancing, running, martial arts







Katy BaradaranEbrahimi, MD













#### 5. Jeremy Keenan, MD, MPH

Proctor Fellow in Cornea, Refractive, and External Disease

**Mentors** Tom Lietman, MD, and Todd Margolis, MD, PhD

Born Arlington Heights, Illinois

College/Major Villanova University/Biology

**MD** College of Physicians and Surgeons, Columbia University

Masters of Public Health Columbia University

Internship St. Vincent's Hospital

**Residency** Illinois Eye and Ear Infirmary

**Interesting Fact** Ran the Chicago triathlon last year and training for it again

#### 6. Dawn Lam, MD, PhD

Retina Fellow

Mentors Robert Bhisitkul, MD, PhD, Eugene de Juan, Jr., MD, Jacque Duncan, MD, Daniel Schwartz, MD, Jay Stewart, MD

Born Hong Kong

**College/Major** Johns Hopkins University/Biomedical engineering and Psychology

MD Stanford Medical School

**PhD** University of Cambridge, United Kingdom

Internship Stanford Medical School

**Residency** University of Southern California/Doheny Eye Institute

Interests Table tennis and hiking

#### 7. Agnes Nagpal, MD

Proctor Fellow in Uveitis

Mentor Nisha Acharya, MD

Born Zakopane, Poland

**College/Major** Barnard College/Political Science

MD State University of New York at

Stony Brook

Internship St. Vincent's Medical Center

**Residency** Mount Sinai Hospital, New York City

**Interest** Opera

#### 8. Bryan Seiff, MD, MS

Oculoplastics and Reconstructive Surgery Fellow

Mentor Stuart Seiff, MD

Born New York City

College/Major Cornell University/Psychology

Masters Georgetown
University/Physiology

**MD** University of Medicine and Dentistry of New Jersey

**Internship** Mount Sinai Medical Center, New York City

**Residency** New York Presbyterian Hospital

#### 9. Jason Skalet, MD

Proctor Fellow in Cornea, External Disease, Uveitis, and Refractive Surgery

Mentors Nisha Acharya, MD, Tom Lietman, MD, Todd Margolis, MD, PhD, David Hwang, MD, FACS, Stephen McLeod, MD, Richard Abbott, MD, Doug Holsclaw, MD

Born Washington, DC

**College/Major** Amherst College/ Neuroscience

**MD** University of Pennsylvania

**Internship** Presbyterian Medical Center, University of Pennsylvania

**Residency** Scheie Eye Institute, University of Pennsylvania

**Interests** Travel and mountain sports

#### 10. Tien-An Yang, MD, PhD

Glaucoma Fellow

**Mentors** Robert Stamper, MD, Jorge Alvarado, MD, Shan Lin, MD

Born New York City

**College/Major** Yale University/ Molecular Biophysics and Biochemistry

**MD** Weill Medical College of Cornell University

PhD The Rockefeller University

Internship Stanford Medical School

**Residency** Jules Stein Eye Institute, UCLA

Interesting Fact Performed at Lincoln Center and Carnegie Hall as a singer •

trials of treatment strategies to prevent widespread blindness in Ethiopia."

- Jeremy Keenan, MD

## Welcome First-Year Residents



First-year residents in the Mazzocco Microsurgical Laboratory. Standing are Marielle Young, Juanita Bryant, Cyril Dalmon, and Jennifer Taylor [left to right]. Seated is Phoebe Lin.

Juanita Sonya Bryant, MD
Born Huntington Beach,
California
College/Major University of
New Mexico/Biology

MD Wayne State University
Internship Harbor-UCLA Medical
Center

Interests Basketball, running to support her eating habit, dancing, shopping, traveling

#### Cyril Dalmon, MD

Born Bezier, France
College/Major UC Davis/
Biological Sciences
MD UCSF

Internship Kaiser Oakland, Internal Medicine

Interesting fact Grew up in a small farming community in Southern France and did not learn English until the age of 9

#### Phoebe Lin, MD, PhD

Born Chicago, Illinois
College/Major Washington
University, St. Louis/
Biochemistry

MD University of Illinois, Chicago PhD University of Illinois, Chicago Internship MacNeal Hospital, Berwyn, Illinois

Interesting fact Once caught a shark off the coast of Galveston, Texas, took it home on an airplane, and ate it for dinner

# Born Mount Kisco, New York College/Major Yale University/ Molecular, Cellular, and Developmental Biology MD University of Pennsylvania

**Jennifer Taylor, MD** 

Internship Albert Einstein Medical Center, Philadelphia Interests Travel, dance, good restaurants, time with friends and family

Marielle Young, MD Born Salt Lake City, Utah College/Major

Yale University/History and International Studies

MD University of Utah

Internship Santa Clara Valley
Medical Center, San Jose
Interests Running, cooking,
crossword puzzles •

## Hearst Fellowships Blossom

he George and Rosalie Hearst
Endowment, dedicated to the advanced
training of gifted young ophthalmologists,
supports two fellowships this year.
Established in the 1960s, this
endowment is a wonderful example of
how an investment grows and yields
increasing benefits, not only to
immediate recipients but to UCSF
Ophthalmology and the communities
where fellows serve afterward.

This year's Hearst fellows are **Dandan Wang**, **MD**, who was born and trained in China, and **Somanus (Ann) Thoongsuwan**, **MD**, a native of Bangkok.

Dr. Wang, a glaucoma specialist, works with **Shan Lin, MD,** an expert in the closed-angle glaucoma that is prevalent among Chinese individuals. Dr. Lin introduces her to new approaches for diagnosis and treatment. When she returns to the Zhongshan Ophthalmic

Center in Guangzhou, China, she will make a difference by introducing UCSF's best practices for glaucoma management, treatment, and medical instrument. She wants to enhance research and clinical collaboration between Zhongshan, one of China's most famous eye clinics, and UCSF Ophthalmology. Her work with Dr. Lin also has raised her interest in researching ethnic differences in disease.

Dr. Thoongsuwan is one of only 70 retina specialists in her country of 63 million people. With **Robert Bhisitkul, MD, PhD,** as her guide, Dr. Thoongsuwan is gaining expertise with complex retina cases both in clinic and operating room. Her introduction to the U.S. systems for medical training, patient care, and research will provide her with advanced techniques to teach future doctors at the university hospital in Bangkok.



Somanus Thoongsuwan, MD Retina Fellow

Mentor Robert Bhisitkul, MD, PhD Born Bangkok, Thailand

**MD** Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok

Internship Potharam HospitalResidency Faculty of Medicine, Siriraj

Hospital, Mahidol University

Interest Playing traditional melodious

Interest Playing traditional, melodious

Thai instruments and listening to Thai
music that combines traditional and
modern sounds



Dandan Wang, MD

Glaucoma Fellow

Mentor Shan Lin, MD

**Born** Luoyang, Henan, People's Republic of China

**College/Major** Sun Yat-sen University of Medical Science/Clinical Medical Science

**MD** Sun Yat-sen University of Medical Science

**Internship** Second Affiliate Hospital of Sun Yat-sen University of Medical Science

**Residency** Zhongshan Ophthalmic Center, Guangzhou

**Interests** Music, singing, piano lessons.

Taking photographs that capture the cultural phenomena and feel of various countries ●

The most treasured thing I gained was how respect and communication with your patients make you a good doctor."

Dandan Wang, MD

## Mentoring Continued from page 1



#### **Training Ground for Leaders**

UCSF Ophthalmology's outstanding reputation allows it to select top-rated medical school graduates, but these highly desirable graduates have options, too. "I chose UCSF because my advisor felt that UCSF residents were particularly

It's an immensely important part of what we do in the department – train leaders for the future."

- Shan Lin, MD

knowledgeable and well-trained compared to those in other programs," says first-year resident **Phoebe Lin, MD.** "I've since learned that the faculty is extremely dedicated to resident education, far beyond what I anticipated." During the three-year process, Dr. Lin and the other

residents "rotate" through all the areas of

ocular medicine, immersing themselves

in clinical and surgical care and being

mentored by the faculty. **Cynthia Chiu, MD,** Assistant Residency Director, works with two residents at a time in Comprehensive Ophthalmology, the primary care area of ophthalmology.

"Teaching residents is a gratifying experience on many levels. It's exciting to see the process of discovery through new eyes – I often relive moments of discovery through my students and it keeps the lifelong process of learning exciting," says Dr. Chiu. "I have taught at other institutions, but the UCSF residents constantly exceed my expectations."

As Chief of Ophthalmology at the San Francisco Veterans Administration Medical Center, Ayman Naseri, MD, also leads rotations. "The most rewarding part of my job is to see residents evolve as physicians from their first year through their third, when they are fully trained ophthalmologists," says Dr. Naseri. "As first-year residents, they're trying to figure things out. By the third year, they're flourishing. I remember what it was like to be in their shoes," he continues. "It helps me understand their perspectives and the challenges they face."

#### **Life-long Dedication**

Jack Whitcher, MD, has enjoyed teaching throughout his tenure and isn't letting his recent retirement stop him. On Wednesday mornings, he runs his "Kodachrome conference," where he presents photos of diseased corneas and challenges residents and fellows to identify maladies and propose treatments. "It's a Socratic teaching approach," he says. "It's pretty popular because I bring donuts." Wednesday afternoons find him in the cornea clinic, mentoring fellows and third-year

These young people have been the pride of my life."

- William F. Hoyt, MD

residents as they work with the most difficult cornea cases, some of which have been referred from as far away as Hong Kong. "Teaching is so much fun, I can't imagine giving it up. And the international fellows often come back and say that the year they spent at UCSF changed their lives. We encourage them to challenge and question in a way they aren't encouraged in their home countries."

Professor Emeritus **William Hoyt, MD,** who is UCSF's 2008 Alumnus of the Year, also has a long history of bringing out the best in his students. The seminal text that Dr. Hoyt wrote with Frank B. Walsh, MD, (*Clinical Neuro-Ophthalmology*, now in its sixth edition) was "a magnet that attracted highly motivated eye doctors who wanted to learn about the brain and eye," recalls Dr. Hoyt. Over his career, he mentored 72 fellows;

of those, 69 have become professors of ophthalmology, neurology, or neurosurgery, in locations from Buenos Aires to Moscow, Venezuela to Turkey. "Good people, given time, do good things," he says.

Now Dr. Hoyt focuses on residents. "I love it. I love the contact. It's so nice to help them," Dr. Hoyt says with obvious pleasure. "These young people have been the pride of my life."

#### Chairman's Forum Contributions to That Man May See

Thank you for generous contributions and pledges for vision research, teaching, and patient care received between September 12, 2007, and February 29, 2008.

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# Becky Jennings Joins That Man May See Keeping Communications Flowing

The *Visions* newsletter is enhanced by new staff member Becky Jennings. Her skills with words and images made her the ideal candidate to be managing editor. Becky previously worked at *Publish* magazine and at Casper Design Group (now Formatics), where she oversaw the production of a marketing magazine for PeopleSoft. She started her editing career at *Leonardo*, a scholarly journal on art, science, and technology now affiliated with the San Francisco Art Institute.

Becky calls on a variety of her communication talents to balance a myriad of projects that support UCSF Ophthalmology. She holds a degree in fine arts with an emphasis in painting and printmaking. Becky also carries on the family tradition of making quilts by constructing hand-dyed, hand-stitched fiber art pieces.

Before her full-time commitment to That Man May See, Becky volunteered at the Graphic Arts Workshop, a printmaking cooperative, and at Streetside Stories, a children's literacy and creative writing nonprofit. She lives in Bernal Heights with her husband and dog in a house that just turned 100. •

#### Dream Makers (\$2,500+)

Becky and Jeff Bleich June M. Carros Mr. and Mrs. Norman E. Cima Edward and Margaret Collins Mr. and Mrs. Daniel G. Cook Mr. and Mrs. Donald W. Davis John de Benedetti and Nina Srejovic Sandra and Conrad Donner Elaine A. Eklund Enersen Foundation Gunilla and Tom Follett Gap Foundation Mr. and Mrs. Milo S. Gates Paul and Béatrice Gomory William H. and Frances D. Green Philanthropic Fund John Hall and Rebecca Derrington Komes Foundation Doris S. and Theodore B. Lee Sally and Donald Lucas James and Janet Mitchell Nancy and Tim Müller Chuck Robel Toni and Arthur Rock Kathleen L. Rydar Robert and Isabel Schuchardt W. Scott Thomas Mr. and Mrs. Dexter C. Tight WCP II, LLC Drs. Myra and Burton Wise Jacqueline and Robert Young

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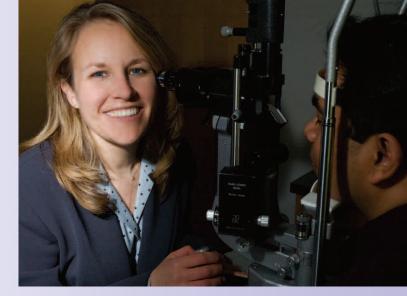
Marco Zarbin and Susan Carter

Christopher and Lori Toomey Tony Tsai, MD, and Julie Steiner, MD Geriatrics + Ophthalmology
"Rocket Boost" for
Dr. Jacque Duncan's
AMD Research

acque Duncan, MD, is furthering our knowledge of agerelated macular degeneration (AMD) through her collaborative research. Now a prestigious award – the Jahnigen Career Development Scholars Award for ophthalmology – will provide "a rocket boost to her career trajectory in the field of geriatric ophthalmology," according to C. Seth Landefeld, MD, chief of the Geriatrics Division at UCSF.

AMD heads the list of blinding diseases in adults 65 and older. As Americans age and live longer, there is increasing urgency to integrate an understanding of geriatrics into ophthalmology, as well as other specialties that heavily impact seniors. The American Geriatrics Society grants the Jahnigen Award for ophthalmology, selecting from a highly competitive national field, to support the career development of one or two exceptional ophthalmologists who are committed to geriatric medicine.

"Dr. Duncan's work is truly remarkable in its range," Department Chair Stephen McLeod, MD, emphasizes. "Not only is she a skilled and highly sought-after clinician who cares



Prestigious award honors Dr. Duncan, clinician scientist.

for patients with degenerative retinal disorders, she is actively engaged in the translation of scientific insights to clinical correlates, the development of improved diagnostics, the design and implementation of significant clinical trials, and the epidemiological and public health impact of potential therapeutic strategies."

Dr. Duncan will receive \$200,000 over a two-year span, allowing her significant time to pursue her study of *in vivo* photoreceptor cones in aging eyes with and without AMD. Excited about the potential for research breakthroughs that this award represents, she also will continue her clinical practice, maintaining her connection with retinal patients and mentoring young doctors. •

## New Board Members Join That Man May See

#### **David Bulfer**

David Bulfer's interest in neuroophthalmology and brain trauma research
led him to UCSF, and he discovered
TMMS through friends Rebecca
Derrington and John Hall (also a TMMS
board member). David works in Silicon
Valley as a consultant for new businesses
in the information storage market. He
worked with Network Appliances as
Director of Systems Architecture from
1995 to 2002 and has a long history of
growing businesses, managing teams, and
developing relationships with key
Fortune 500 customers. David and his
wife Kelly Pope live in Los Altos Hills.



#### Ron Drabkin

Ron Drabkin currently serves as Vice President of Online Business at JustAnswer.com, the largest quality

answer site on the internet. JustAnswer is one of the top 500 websites in the United States and features real doctors, lawyers, auto mechanics, veterinarians, and other professionals who answer questions online 24 hours a day.

Earlier in his career, Ron cofounded JRG Software, a company he eventually sold to CDC Software. Prior to entering the startup world, he spent eight years as a manufacturing and supply chain manager at Intel Corporation. He has a MBA from UC Berkeley, undergraduate degree from Duke University, and is fluent in Japanese. Ron lives in Burlingame with his wife Davina and three small children.



## Faye Mellos is

Faye Mellos is a Senior Vice President at Morgan Stanley Global Wealth Management Division in San

Francisco. She is excited to get involved in the mission of That Man May See.

With a career in financial services spanning more than 30 years, Faye is very passionate about advancing the status of women and children everywhere through her membership in Zonta International and using her financial expertise to help families pass their wealth on to heirs and philanthropic organizations.

A long-time resident of Menlo Park and San Francisco, Faye is a graduate of the University of Utah. She and her husband have one child, Eric, who is an entrepreneur.

#### John V. Stock

John V. Stock is a principal and vice president at Saylor & Hill Co., an insurance brokerage in Oakland. He graduated from UC Berkeley with a bachelor's degree in political science, and earned his MBA from the University of Southern California. Raised in Berkeley, John and his wife Peggy live in Piedmont; they have three college-aged children.

John is active in his community, having served on private school boards, the Alta Bates Foundation board, several youth sports boards and councils including the Piedmont Recreation Commission, and a number of UC Berkeley committees relating to intercollegiate athletics.

John has a long family history with That Man May See. One of the most distinguished endowed professorships at UCSF Ophthalmology is named for John's mother, Jean Kelly Stock. John's father, John P. Stock, joined the TMMS board in 1996 and continues as an active member of the honorary board.



#### R. Dudley Stone, MD

President of the Frederick C. Cordes Eye Society (the alumni association for the department),

R. Dudley Stone, MD, has a long history with UCSF Ophthalmology. He spent two years in Sierra Leone, West Africa, as a Peace Corps physician before beginning his UCSF residency in 1970. A UCSF fellowship in Vitreous and Retinal Surgery followed, and Dudley then held numerous teaching positions in the department over the years before going into private group practice, full time, in Sebastopol in 1988. He was appointed Clinical Professor of Ophthalmology in 2000.

After private group practice in Sebastapol, he later established a solo practice in Chico. He has served the community there for the past 15 years while maintaining his academic affiliation with UCSF, teaching at the San Francisco Veterans Administration Medical Center and in the UCSF clinics.

Dudley is married to Kelly Stone and they have two children. He also has two adult children from his previous marriage as well as four grandchildren.

## Faculty News

#### Richard L. Abbott, MD

Visiting Professorships: Infectious disease in China: Diagnosis and management. Third International Corneal Disease Symposium, Annual Congress - Chinese Academy of Ophthalmology, Zhenzhou, Henan, China. • Using evidence-based clinical practice guidelines to improve patient care: A global initiative. Kyoto Prefectural University,

Appointments: AAO Global Advisory Board, American Ophthalmological Society Scientific Program Committee.

Invited Lectures: Compass: A new educational tool for ophthalmology; A practical approach to clinical guideline development and implementation: The US and China experience; Potential implications of health care quality initiatives; MOC: What does it mean for ophthalmology?, American Academy of Ophthalmology, Annual Meeting, New Orleans, LA. • The American Academy of Ophthalmology and its role in the globalization of eye care. Keynote lecture, Korean Ophthalmological Society, 60th Anniversary Congress, Seoul, Korea. Choosing antibiotics for cataract and refractive surgery. European Society of Cataract and Refractive Surgery, Stockholm, Sweden. Book Chapters: Abbott, RL. Refractive Intraocular Lenses: Informed Consent and Risk Management Issues, in Mastering Refractive IOLs – The Art and the Science: A Clinical Manual. D. Chang, Editor. Slack Inc., 2008. • Agadzi, A, Menke, AM, Abbott, RL. Risk management in cataract surgery, in Cataract Surgery, Third Edition, Larry Benjamin, Editor. Saunders Elsevier, 2008. • Abbott, RL, Zegans, M and Halfpenny, CP. Acanthamoeba Keratitis and Bacterial Corneal Ulcers, in Clinical Ophthalmology. TD Duane, Editor. Harper and Row Co, Vol IV, 2007.

#### Allan J. Flach, MD, PharmD

Invited Lectures: Dan Vaughn-Margaret Henry Lecture: Nutrition and ophthalmology. Prevention Blindness Northern California, San Francisco. • Systemic toxicity of topically applied glaucoma medications. American Academy of Ophthalmology, Glaucoma Subspecialty Day, New Orleans. • Medical therapy of open-angle glaucoma: Complete review of the pharmacodynamics, pharmacokinetics, and toxicity of all drugs potentially useful; Ophthalmic clinical pharmacology review: Nonsteroidal antiinflammatory drugs and ophthalmology. Teaching and assessing surgical competency: Applications for ophthalmic residents and practicing ophthalmologists (collaborative lecture); Teaching and improving cataract surgery step by step (collaborative lecture). American Academy of Ophthalmology, New Orleans.

Publications: Flach, AJ. Improving the risk-benefit relationship and informed consent for patients treated with hydroxychloroquine. Transactions of the American Ophthalmological Society, 105: 117-132, 2007. • Shapiro, BL, Petrovic, V, Lee, SE, Flach, AJ, McCaffery, S and O'Brien, JM. Choroidal detachment following the use of tamsulosin. American Journal of Ophthalmology, 143: 351-353, 2007.

Book Chapters: Flach, AJ. Ophthalmic therapeutics, in Vaughn and Asbury's General Ophthalmology, 17th Edition. Paul Riordan-Eva and John P. Whitcher, Eds. McGraw-Hill, 2007. • Flach, AJ. Occupational injuries: Eye injuries, in Current Occupational and Environmental Medicine, 4th Edition. Joseph Ladou, Ed. McGraw-Hill, 2007.

#### Douglas B. Gould, PhD

Publication: Vahedi, K, Boukobza, M, Massin, P, Gould, DB, Tournier-Lasserve, E., Germaine Bousser, M. 2007. Clinical and brain MRI follow-up study of a family with COL4A1 mutation. Neurology, Oct 16; 69(16): 1,564-8.

#### Creig S. Hoyt, MD

Honor: Ida Mann Lecturer, St. Anne's College, Oxford University, Oxford, England.

#### David G. Hwang, MD, FACS

Honors: Selected for peer-reviewed database Best Doctors in America (for cornea, cataract surgery, and refractive surgery), 2007-2008. • Who's Who in America, Chicago: Marquis' Who's Who, 25th Edition, 2008.

Appointment: Medical Director, Ophthalmology. UCSF Medical Center Invited Lectures: Advances in Corneal Diagnostic and Surgical Techniques Symposium; USC/Doheny Eye Institute, Los Angeles, CA. • Pearls from the Proctor and Spotlight on cataracts: Current controversies symposium; American Academy of Ophthalmology, New Orleans.

#### Shan C. Lin, MD

Invited Lectures: Patient should first be managed with IOP-lowering medications, then iridotomy. American Academy of Ophthalmology, New Orleans. • The importance of ultrasound biomicroscopy in application of refractive surgery and diagnosis of angle-closure glaucoma. Taiwan Academy of Ophthalmology, Kaohsiung, Taiwan. • Changes in glaucoma treatment perspectives and Understanding Chronic Angle Closure Glaucoma, Pacific Atlantic Glaucoma Symposium, Santa Ana, CA.

Publications: Shah, H, Kniestedt, C, Bostrom, A, Stamper, R, and Lin, SC. 2007. The role of central corneal thickness on baseline parameters and progression of visual fields in open-angle glaucoma. European Journal of Ophthalmology, 17(4):545-9. • DeCastro, D, Punjabi, OS, Stamper, RL, Lin, S. 2007. Effect of statin drugs and aspirin on progression in open-angle glaucoma suspects using confocal scanning laser ophthalmoscopy. Clinical Experiments in Ophthalmology, 35(6):506-13. • Dueker, D, Singh, K, Lin, S, Fechtner, R, Minckler, D, Samples, J, Schuman, J. 2007. Ophthalmic technology assessment corneal thickness measurement in the management of primary open-angle glaucoma. A report by the American Academy of Ophthalmology. Ophthalmology 114(9):1779-87. • Lin, SC, Singh, K, Dueker, D, Fechtner, R, Minckler, D, Samples, J, Schuman, J. 2007. Optic nerve and retinal nerve layer imaging in glaucoma: Ophthalmic technology assessment. Ophthalmology, 114(10):1937-49. Lin, S.C. 2007. Myopia and glaucoma in Chinese (Editors' selection). International Glaucoma Review, 9-1: 23-24.

#### Timothy J. McCulley, MD

Publications: Zoumalan, CI, Erb, MH, Rao, NA, See, R, Bernstine, MA, Shah, SB, and TJ McCulley. 2007. Periorbital xanthogranuloma after blepharoplasty. British Journal of Ophthalmology, 91(8):1088-9. • Pereira, LS, Green, AJ, Hwang, TN, and TJ McCulley. 2008. Suprasellar germinoma and late perioptic seeding. European Journal of Ophthalmology, 18(1):159-61.

#### Stephen D. McLeod, MD

Invited Lectures: Visiting Professorship, Kellogg Eye Center, University of Michigan at Ann Arbor. • Emerging intraocular lens technology. Grand Rounds, UCSF. • Clinical decision-making in infectious keratitis and Patient selection for LASIK. Lectures to residents, UCSF.

#### Joan M. O'Brien, MD

Honor: Invited Examiner - Office Record Review Section, Maintenance of Certification Examination, American Board of Ophthalmology.

Founding Member: Women in Retina

Invited Lectures and Panels: Retinoblastoma: diagnosis and treatment. Visiting Professor, Duke University, Durham, NC. • Co-education at Dartmouth: Women in medicine. Keynote speaker for 35-year Celebration of Women in Medicine Conference, Dartmouth, NH. • Germline RB1 mutation associated with spontaneously regressed retinoblastoma (collaboration), American Academy of Ophthalmology, New Orleans. • Current retinoblastoma research. National Ophthalmic Disease Genotyping Network and Resource, National Institutes of Health, Washington, DC. • Pathways to academic careers (panel presentation and discussion). Heed Ophthalmic Foundation Residency Retreat, Chicago. • Ocular Tumors and Pathology Free Paper Session (panel). American Academy of Ophthalmology, New Orleans. • New drug treatments of retinoblastoma. Drug delivery to posterior intraocular tissues, ARVO/Pfizer Ophthalmics Research Institute Conference. Fort Lauderdale, FL.

Publication: Shapiro, BL, Petrovic, V, Lee, SE, Flach, A, McCaffery, S, and JM O'Brien. 2007. Choroidal detachment following the use of tamsulosin (Flomax). American Journal of Ophthalmology, 143:351-353.

#### Stuart R. Seiff, MD

Honors: President Elect, American Society of Ophthalmic Plastic and Reconstructive Surgery • Chair, Oculoplastics Panel for Practicing Ophthalmologist Curriculum, American Academy of Ophthalmology • Plastics Representative, Skills Transfer Course Advisory Committee, American Academy of Ophthalmology • Invited Faculty, IV Curso Internacional de Cirugia Oculoplastica y Orbitaria, Acapulco Mexico • Invited Faculty, XVIII Congreso Nacional de la Sociedad Mexicana de Rinologia y Cirugia Facial, Guanajuato, Mexico • Special Guest Faculty, American Academy of Facial Plastic and Reconstructive Surgery, Washington, DC.

#### David W. Sretavan, MD, PhD

Appointment: Edward and Estelle Alexander Chair For Vision Research Professor. Invited Lecture: Glaucoma: Clinical needs and opportunities. Plenary speaker, Berkeley Sensor and Actuator Center 2007 Industrial Advisory Board Conference. Publications: Chang, W, Hawkes, E, Kliot, M, and D Sretavan. 2007. In vivo use of a nanoknife for axon microsurgery. Neurosurgery, 61: 683-692. • Du, J, Fu, C, and D Sretavan. 2007. Eph/ephrin signaling as a potential therapeutic target after central nervous system injury. 2007. Current Pharmaceutical Design, 13: 2507-2518. Chang, W, and D Sretavan. 2007. Microtechnology and medicine: Emergence of surgical microdevices. Clinical Neurosurgery, 54: 137-147.

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#### SIGHTINGS



















#### That Man May See Vision Awards Dinner

- 1 Tom and Gunilla Follett and Marilyn and David Pratt enjoy a moment with Dr. Stephen McLeod (center), chair of Ophthalmology.
- **2 Dr. Todd Margolis** (left) greets **Sandy and Jacques Littlefield,** who accepted an award on behalf of Jeannik M. Littlefield, Mr. Littlefield's mother. Mrs. Littlefield was honored for exceptional support to advance the cause of eye research.
- 3 Award recipients **Pearl Kimura** and **Dr. Alex Irvine**. Mrs. Kimura was honored with the Shirley Reich Award for outstanding honorary board participation; Dr. Alex Irvine received the Thomas W. Boyden Faculty Award for inspirational faculty participation in That Man May See.

**4 Dr. Stacy Mettier, Betty Tight, Nancy Mettier,** and **Ted Tight** enjoy friends and the ambience of the beautiful St. Francis Yacht Club.

#### National Philanthropy Day

**5 Terry Caygill** was honored by That Man May See for her generosity to UCSF Ophthalmology at the "Change the World with a Giving Heart" Luncheon.

#### Frederick C. Cordes Eye Society – Alumni Reception

6 UCSF Ophthalmology alumni, faculty, and friends gathered for a reception in New Orleans during the American Academy of Ophthalmology conference. UCSF alums **Dr.** Susan Pepin and **Dr.** Susan Carter share a moment with art and colleagues.

- **7 Dr. Gail Royal** traveled from South Carolina and **Dr. Manuel Puig-LLano** came from southern California for the professional meeting.
- OptiMedica Vice President **George Marcellino, PhD, Dr. Jorge Alvarado,** and **Brian Kavanagh** relax at the Jonathan Ferrara Gallery.
- 9 Karen Bert and Dr. Melvyn Bert enjoy the company of Dr. Ivan Schwab.

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.

#### That Man May See

10 Koret Way, Box 0352 San Francisco, CA 94143-0352 tmms@vision.ucsf.edu VISIONS is a publication of the Department of Ophthalmology at UCSF and is produced by That Man May See.

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## Research

#### PROFIL

## Dr. Julie Schnapf

## Leveraging Grants and Thriving

ulie Schnapf's mother was so devoted to raising healthy kids that she became an amateur nutritionist, gained the nickname "Dr. Mom," and inspired her daughter to go into medical research. As Director of the Laboratory of Retinal Physiology, Julie Schnapf, PhD, focuses on vision and color, exploring big questions such as: How do the characteristics of our photoreceptors (rods and cones) determine our visual experience? What are the cellular mechanisms of early visual processing in the retina? Her answers will be useful in developing new therapies for patients with retinal diseases.

#### Tracking Cell Death

Dr. Schnapf leads studies on photoreceptor gap junctions (specialized protein "bridges" that connect the interiors of neighboring cells). She hypothesizes that in patients Seed funding positioned her to receive a \$1.9 million grant from the NIH.

with retinitis pigmentosa, cones degenerate because toxic molecules produced in dying rods diffuse across gap junctions into otherwise healthy cones. She is working on strategies for blocking this diffusion by testing pharmacological agents that can selectively close gap junctions.

#### **TMMS Seed Funds Multiply**

In 2004 Dr. Schnapf began a pilot study on gap junction modulation, thanks to \$75,000 from donors to That Man May See. The proven merit of the investigation then positioned her to receive a much larger grant from the National Institutes of Health. Even top-notch crucial research is no longer guaranteed funding, but Dr. Schnapf's work

overcame the hurdles and garnered a five-year, \$1.9 million award, allowing her to continue her work.

#### **Color Vision**

Thomas Young (the same person who deciphered the Rosetta Stone) determined that our color perceptions depend on differences in the stimulation of three color receptors. More than 200 years later, we still don't know how signals of our red, green and blue cones are combined to produce an electrical code for color. Dr. Schnapf and her colleagues were surprised to discover that these color combinations happen in the cones themselves: neighboring red and green cones both excite and inhibit each other, and they both inhibit blue cones. This combination of color signals gives rise to color vision and also to some colorful optical illusions. (Go to http://ucsfeye .net/visions.shtml to explore

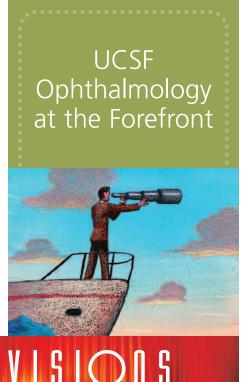
The network of photoreceptors connected through gap junctions can be visualized by dye injection. Only one cell was injected with a green dye, but the dye spread through gap junctions to fill multiple cones and rods.



optical illusions caused by cone inhibition.)

#### **Passion for UCSF**

Having joined the Ophthalmology faculty in 1988, Dr. Schnapf has a strong research record. Just as importantly, she teaches medical students, residents, and graduate students. "I love teaching young people and sharing their energy and enthusiasm," she says. "UCSF is an outstanding community of brilliant scientists with enormous experience and knowledge in a wide variety of disciplines. I am stimulated here and get new ideas every day."



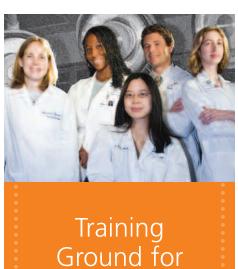
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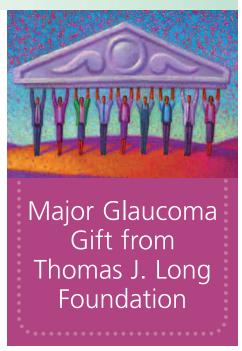
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