

Koret Vision Institute + Beckman Vision Center + Department of Ophthalmology + Francis I. Proctor Foundation Summer 2

Summer 2013 Univ

University of California, San Francisco + That Man May See

Focal Point



Dear Friends

In this issue, we recognize global eye health and people at UCSF driven to excellence in eye care, vision research, and teaching. We are proud of the Francis I. Proctor Foundation international group and its partners worldwide, making great strides in combating blinding eye disease in Africa and beyond. We highlight our faculty's involvement in development and evaluation of the Argus II "Bionic Eye," especially the role of Eugene de Juan Jr., MD. Federal approval is a giant step for those with advanced retinal disease.

We welcome new faculty member Bertil Damato, MD, PhD, from the United Kingdom. He is an internationally renowned eye cancer specialist who pioneered some of the most effective therapeutic interventions in the field. David and Elva Sinai Fellow Dr. Sarah Sitati-Ng'anda is committed to improving the sight and lives of infants and children in her native Kenya. George and Rosalie Hearst Fellow Moreno Menghini, MD, comes to UCSF from Switzerland to study novel therapies for macular degeneration.

These stories are evidence of our commitment to new approaches for the most challenging vision disorders, first-rate patient care, and education of the most promising clinicians and scientists in ophthalmology today.



Gates Funds Global Vision A Team Determined

The Proctor International Programs Group includes (clockwise from upper left) Dr. Bruce Gaynor, Dr. Thomas Lietman, Dr. Travis Porco, Nicole Stoller, MPH, Dr. Jeremy Keenan, and Sun Yu, MPH.

Ur trachoma programs in sub-Saharan Africa are designed to prevent blindness, but there's a chance they may save children's lives as well," says Thomas Lietman, MD, director of the International Programs Group at UCSF's Francis I. Proctor Foundation for Research in Ophthalmology. "With the support of the Bill & Melinda Gates Foundation, we have set up a more definitive study to assess whether mass oral azithromycin given in trachoma programs has a collateral benefit – reducing child mortality."

The Gates Foundation has awarded \$14.5 million for the comprehensive study, to be led by the Proctor Foundation. Dr. Lietman and his colleagues have long studied whether

community-wide administration of antibiotics can eradicate trachoma, which blinds children and adults alike. Now the scientists will study the effect of the antibiotic distribution on the survival of young children in Niger, Malawi, and Tanzania – countries with some of the world's highest rates of child mortality.

Leveraging Early Efforts

Back in 2000, Proctor's International Programs Group decided to study treatment strategies that might eventually eradicate trachoma, which is epidemic in developing countries. A pilot study in rural Ethiopia soon followed.

Continued on page 2



"Bionic Eye" **FDA Approves Device**

Thank you for your generosity to That Man May See. Your contributions inspire our work.

Sincerely,



Stephen D. McLeod, MD Theresa M. and Wayne M. Caygill, MD, Endowed Chair Professor and Chairman The UCSF Department of Ophthalmology is celebrating a major victory in treatment for the blind. The US Food and Drug Administration (FDA) has approved a revolutionary treatment that helps people with severe retinitis pigmentosa to regain some sight. Three faculty members played roles in the breakthrough. **Eugene de Juan Jr., MD,** who holds the Jean Kelly Stock Distinguished Professorship, is a founder of Second Sight Medical Products,

Continued on page 4

A PEEK INSIDE:

Augie Inspires His Family





Meet New Faculty: Dr. Bertil Damato



The Art and Science of Dr. Scarlette Wilson



The Optimistic Taylor Melcher

That Man May See Welcomes Don McCubbin







Gates Funds Global Vision

Continued from page 1

Conditions were daunting. Rutted roads meant Jeeps; impassable roads meant hours-long hikes through intense heat and dust. The team carried its

own drinking water and special coolers for preserving biosamples. That team, which included **John** Whitcher, MD, MPH,

and **Bruce Gaynor, MD,** found that mass antibiotics could eliminate the chlamydia infection that causes trachoma from even the most severely affected communities.

Now a mentor to the team, Dr. Whitcher remains grateful to donors who stepped

forward in the early years. "When our needs for funding were so critical, these generous people allowed us to make global strides in the prevention of blindness," he says.

UCSF vision researchers found a startling 50 percent decrease in child mortality.

By 2007, positive outcomes and additional investment led to large-

scale studies across Ethiopia. More than 80,000 Ethiopians, hoping to save their young people from blindness, participated in three drug studies over 11 years. UCSF's most recent Ethiopian study, focused solely on children, startled researchers who also found a 50 percent decrease in child mortality.

Expertise and Innovation

The UCSF team attracts experts with missionary zeal. Dr. Lietman, who holds the Pearl T. and Samuel J. Kimura, MD, Chair; **Jeremy Keenan, MD, MPH; Nicole Stoller, MPH; Sun Yu, MPH; Travis Porco, PhD;** and Dr. Gaynor have designed the new study and will lead field training in Niger.

UCSF's mHealth Group is developing a customized mobile application for the international team. Lightweight but powerful tablets allow more accurate field data collection (no more scribbled notes) and speedy analysis. "Everyone is excited that we will be able to access the data so quickly," says Dr. Porco. "It means we can troubleshoot from afar and begin data analysis much sooner." Because the child mortality study integrates so many disciplines – ophthalmology, infectious disease, pediatrics, and public health – UCSF's rich research environment is a vital asset. Cross-disciplinary consultations strengthen the study design and provide timely answers when questions arise. Phil Rosenthal, MD (UCSF Infectious Diseases), and George Rutherford, MD (UCSF Pediatrics and Epidemiology and Biostatistics), will play important roles.

Attracting Powerful Partners

To carry out research at this scale, the UCSF team draws on diverse allies. Teams from Johns Hopkins University and the London School of Hygiene and Tropical Medicine will lead the field investigations in Tanzania and Malawi. The academic teams will provide

Child Mortality Study

Enrollment

250,000 children aged 1 month through 4 years, in Malawi, Niger, and Tanzania* **Treatment** Azithromycin in a suspension of fruit-flavored sugar water Double-Masked Trials

Treatment administered at four six-month intervals

* To include 90% of the children in each village study site



PLANNING

RANDOMIZED TRIALS

2015

MORTALITY TRACKING

ANALYSIS

CONTINGENT FOLLOW-UP AND ANALYSIS

Leveraging Funds for Vital Research

That Man May See brings together private philanthropists who provide seed funds to initiate new investigations and anchor large-scale research programs to save sight. Early investments in 2001 led to deeper commitments to the Francis I. Proctor Foundation from the Bernard Osher Foundation, Research to Prevent Blindness, and the International Trachoma Initiative. As results demonstrated impact, the National Institutes of Health joined the effort with \$4.5 million to support the Proctor team. The Bill & Melinda Gates Foundation has recognized and advanced this important work with investments now totaling more than \$17 million.











Eradicating an Eye Disease

The international team will leverage the child mortality study's structure to advance its research on the eradication of trachoma. The team's mathematical models indicate that repeated treatment of a core group of young children may eliminate trachoma from an entire village. Separate funds will be used to collect and process ocular biosamples from young children enrolled in the child mortality study.

"If we can deliver this outcome in one developing country, it may be possible across the globe," says Dr. Lietman. "We are especially excited to test this in areas of Niger, Malawi, and Tanzania, where trachoma rates are low enough that the World Health Organization does not distribute mass azithromycin."



workers who carry out the enormous task of administering one million doses of antibiotic/placebo.

Ministries of Health and nongovernmental organizations in Africa smooth the research process and provide manpower. The Carter Center works with UCSF in Niger.Village chiefs organize residents and assist teams going house to house to census children and note child deaths.

Outcomes in Motion

The Bill & Melinda Gates Foundation has apportioned \$2.5 million of the grant for a second two-year child mortality study in Niger, contingent on a successful result of the first study. Ongoing access to data, courtesy of the tablet application, makes it possible to progress from one study to the next without interruption. community-wide antibiotic administration significantly reduces child mortality, it would strengthen the case for a global health policy recommendation to deploy antibiotics to save children's lives. However, the World Health Organization must also weigh the dangers of antibiotic resistant bacteria selected for by mass use of antibiotics. Both the initial study and the contingent follow-up study will closely monitor the development of antibiotic resistance.

"Is mass administration of antibiotics necessarily the best strategy, even if it saves children's lives?" asks Dr. Lietman. "Everything we learn in this study will improve our capacity to make wise choices." •

Children at Risk

In Niger, one child in six dies before his or her fifth birthday.

In Malawi and Tanzania, the number is about one in twelve.

A cross Africa, pneumonia, malaria, and diarrhea cause at least half of all child deaths. Unclean water and poor sanitation breed infectious bacteria, viruses, and parasites, and malnutrition weakens children's natural defenses. Underfunded clinics run short of medicine. The UCSF team will explore how antibiotics, given to children community wide, impact the "big three" killers.

Patient Point of View Family Inspires Fund for Children

A ugie Wintroub-Hansen is a brave boy. At the age of five, he deals with an eye movement disorder that resulted in the development of amblyopia. Augie and his family appreciate his care from UCSF pediatric ophthalmologists. Treatment includes specialized glasses and patching to correct Augie's refractive error.

During the course of treatment, Augie's family recognized how expensive the specialized glasses can be. Frames and spectacles once a year cost around \$250. More specialized glasses, like those tinted for patients with severe light are raising support to pay for these costly aids to sight. The family has a long association with UCSF – Augie's grandfather Bruce Wintroub is the chair of the Department of Dermatology and Vice Dean of the School of Medicine.

The family urges early screening for treatable eye disease in infancy and childhood, which can have far-reaching implications for vision, quality of life, and schooling. Without correction of substantial refractive errors, a child's development can be permanently impacted.

We started The Augie Fund to help make sure that all children have the vision resources they need to thrive."

Anne Wintroub

sensitivity from corneal problems or glaucoma, are at least double that price.

The Augie Fund Will Help Others

It occurred to the Wintroub-Hansens that there are many families with inadequate insurance who struggle to pay for specialized glasses essential to their child's development. The family decided to meet the challenge of this need and established The Augie Fund through That Man May See. They "Healthy vision is so important for early learning and children's development, and we started The Augie Fund to help make sure that all children have the vision resources they need to thrive," says Augie's mother Anne Wintroub. "We value UCSF's care of Augie so much, and we appreciate That Man May See for helping us give back to other vision-challenged children and their families."



Augie Wintroub-Hansen with his grandmother Marya Wintroub (left) and mother Anne Wintroub (right)

With the help of The Augie Fund and with zero red tape for struggling families, UCSF's pediatric ophthalmologists assist in dispensing specialized glasses to families with hardship, just as if they were covered by insurance. These important gifts will forever make a difference in the lives of the babies and children who benefit.

What Is Amblyopia?

Affecting two percent of the population, amblyopia is a common condition usually

treated with spectacles. With amblyopia, the eyes are structurally normal except for one or both being defocused, misaligned, or otherwise disadvantaged. The brain responds by learning to see with the better eye and reducing vision from the disadvantaged eye.

To join the Wintroub-Hansens or learn more about The Augie Fund for vulnerable families, contact That Man May See at 415.476.4016, tmms@vision.ucsf.edu, or www.thatmanmaysee.org.

FDA Approves Device Continued from page 1

the company that developed the Argus II Retinal Prosthesis System over a 20year period. **Jacque Duncan, MD,** who holds the Steven G. Kramer, MD, PhD, Endowed Chair in Ophthalmology, served as UCSF clinic director for the combined phase 1/2 clinical trial of the

In some cases follow up has continued to five years.

"The experience in a number of patients has demonstrated that it's safe, well tolerated, and really has been effective in restoring some vision to people who have profound vision loss from retinitis pigmentosa." says Dr. Duncan. Clinical trial participant Dean Lloyd, a Palo Alto lawyer, says that his new views of people – their eyes, their outlines – allow him to feel more connected with others.



pigmentosa, hopefully before the end

To learn more about the Argus II Retinal

device. **Robert Bhisitkul, MD, PhD,** assisted in the surgeries to implant the Argus chip into the retinas of trial subjects.

Restoring Vision

Early studies of the device showed positive outcomes, leading to expanded clinical trials. Many participants were

Celebrating a major victory in treatment for the blind.

able to read large letters on a computer screen and see high-contrast images such as a curb or the white lines of a crosswalk. For the final clinical trial, ten leading eye institutes around the world independently monitored groups of subjects for periods of at least one year. Hope through Bio-Engineering With US approval, Second Sight will now work with clinical centers including UCSF to make the treatment commercially available to patients who have lost nearly all their sight to retinitis of 2013. Eventually the device may prove to benefit people with other retinal disorders.

Emerging technologies will continue to provide new options for the most challenging sight disorders. "Our research teams are integrating new findings in genetics, neurobiology, and physiology with state-of-the-art bioengineering approaches to develop promising and truly novel solutions," says Dr. McLeod. Prosthesis System and other promising work on retinal degeneration, go online to http:// ucsfeye.net/visionsfal11/visionsfal11.pdf •



Dr. Eugene de Juan Jr.

New Faculty Dr. Bertil Damato World-Renowned Ocular Oncologist

he UCSF Departments of Ophthalmology and Radiation Oncology welcome to their faculties Bertil Damato, MD, PhD, a global leader in ocular oncology. His innovations in the treatment of ocular melanoma have greatly enhanced specialists' ability to eradicate ocular cancer while preserving sight, and his methods have been adopted around the world.

Dr. Damato was previously the director of the Ocular Oncology Service at the Royal Liverpool University Hospital in the United Kingdom (UK). He established this service in 1993 and developed it into one of the world's most comprehensive and advanced ocular oncology clinical centers.

Innovations Enhance Patient Care

"We want UCSF Ophthalmology to become the new home of Dr. Damato's international treatment program," says Stephen D. McLeod, MD, chair of the Department of Ophthalmology. "With his expertise, we expect to serve not only patients in our community and from across the western United

States but also those from the Pacific Rim and the Middle East. He has a remarkable track record of discovery and innovation that we expect he will extend here in Northern California."

New Ways to Treat Ocular Melanoma

Dr. Damato was the first to use genetic typing for clinical management of intraocular melanoma. Mathematical tools developed by Dr. Damato and his team have improved estimates of individual patients' life expectancies. This allows counseling and treatment to be tailored to each patient.

"Eradicating tumors is only one aspect of patient care," says Dr. Damato. "It is essential to treat patients, and indeed families, holistically." To address patients' emotional needs, psychologists are included in his multidisciplinary team approach to treatment.

Scholarship and Honors

Dr. Damato has published close to 200 scientific articles and authored or coauthored several textbooks. His numerous honors include the Bjerrum Medal (Denmark), Cohen Medal (South Africa), Watson and Ashton medals (UK), and the highly prestigious Platinum Award of National Health Service (UK). He has also

> advanced his specialty by founding and leading major professional societies. He currently serves as president of the International Society of Ocular Oncology.

Passion for the Sea

An avid sailor, Dr. Damato looks forward to exploring the ocean from his new Pacific coast perspective. He and his wife Frankanne have two children. His daughter

is an ophthalmologist conducting clinical research in New Zealand, and his son consults as a clinical pathologist at Oxford University."The Ocular Oncology Service in Liverpool is secure and will continue to flourish," says Dr. Damato. "I would like to replicate that success here," he adds. "The high caliber of UCSF's clinicians and scientists as well as the excellent clinical and research facilities make this opportunity very attractive."

That Man May See and the Department of Ophthalmology thank Don and Judy McCubbin for their support of Dr. Damato's recruitment and research.

Update: International **Glaucoma** Initiative

CSF's Fortisure Foundation Glaucoma Research Center, led by Robert Stamper, MD, is moving forward on testing novel glaucoma screening devices on rural populations in India. Jeremy Keenan, MD, and Dr. Nita Subramanian are working with Dr. Stamper on efforts in India. Two Indian hospitals - the Narayana Nethralaya in Bangalore and the Aravind Eye Care Hospital in Madurai - will host the study. The screening methods have already proven effective at the UCSF glaucoma clinic.

Making Diagnosis Easier

In India, more than 12 million people are blind, and ophthalmologists are scarce, especially in rural areas. "If lay people can screen patients and correctly diagnose glaucoma, it will remove a major obstacle to glaucoma detection across India," says Dr. Stamper. Early detection is key because glaucoma usually damages the eye before symptoms become noticeable.

Computer-based Tools

PP Dr. Damato has a remarkabe track record of discovery and innovation."

- Dr. Stephen McLeod



This low-cost, portable diagnostic device may increase early glaucoma diagnosis in India and lead to sight-saving surgeries.

If lay people can screen patients and correctly diagnose glaucoma, it will remove a major obstacle to glaucoma detection across India."

– Dr. Robert Stamper

The study will use two low-cost, portable diagnostic devices. The "3nethra," developed by India's Forus Health, is designed to screen large numbers of people for multiple eye diseases. It contains a retinal camera that works without dilating the pupil and interprets data to produce a report in five minutes. The award-winning device also can be integrated with telemedicine. The second tool, a British motiondetection perimetry device, uses a laptop to test peripheral vision in as little as two minutes per eye.

Next Step: Intervention

Widespread early diagnosis is the first step toward meaningful intervention to stem the crisis of glaucoma blindness in developing nations. To prepare for eventual clinical trials in India, Dr. Stamper is in discussion with several companies that make surgical devices that may be suitable for glaucoma procedures in remote settings. •

Cordes Connection An Eye for Beauty

carlette Wilson, MD, MPH, has an eye for beauty as well as for healing. She was the first African American admitted to the UCSF Ophthalmology residency program, and she completed her training in 1976. She dedicated her career to comprehensive ophthalmology and patients with AIDSrelated eye disease. But Scarlette found the arts first and ophthalmology second.

Artist Within

Born in Washington, DC, during the Civil Rights movement, she benefited from early mentors such as Miss Adams, who taught her newly desegregated sixth-grade class. Miss Adams introduced students to the fine arts, including National Symphony concerts, igniting Michael J. Hogan, MD; Chandler R. Dawson, MD; John P. Whitcher, MD, MPH; J. Brooks Crawford, MD, FACS; Bruce Ostler, MD; Fred C. Williams, MD; and Samuel J. Kimura, MD. The Kimuras always opened their home to first-year residents, and they delighted Scarlette with her first bite of sashimi.

"I applied the humanitarianism I found at UCSF to serving people in the community with inflammatory ocular diseases," says Scarlette. During the early days of the AIDS epidemic, she practiced in San Francisco's Castro district with mentor and associate Dr. Fred Williams.

UCSF was a special place to learn and grow as an ophthalmologist."

- Dr. Scarlette Wilson

Scarlette's love of culture. Her interest in science led her to a degree in pharmacy and medicine, and she later brought her passion for the arts to San Francisco, where her ophthalmology career began. She enjoyed the ballet, opera, calligraphy, and photography.

Community in Action

"UCSF was a special place to learn and grow as an ophthalmologist," says Scarlette. Her many mentors included Dr. Williams, a long-serving UCSF clinical professor, cultivated her love of ocular pathology and interest in eye diseases that most affect patients who suffer with health disparities. She too achieved the rank of clinical professor of ophthalmology at UCSF and enjoyed teaching medical students and residents.

After retiring in 1998, Scarlette returned to the East Coast and completed her master of public health degree at Johns





Hopkins University. She continued her involvement with ophthalmology by volunteering her services as Chair of Continuing Medical Education with the Ophthalmology Section of the National Medical Association, the largest and oldest minority physician group in the United States. She became deeply involved in efforts to increase African American representation in the field and served on the Council of the American Academy of Ophthalmology.

Natural Talents

During retirement, Scarlette's early love of art blossomed. She began studying painting in earnest and found a natural talent for watercolor and oil painting – with botanicals and still lifes as her favorite subjects. In 2012 her work was included in the Delaware Art Museum exhibition, Dr. Scarlette Wilson has become an accomplished artist, working in watercolor and oils. Three of her oil paintings are reproduced below.





Beyond Words: The Symbolic Language of Plants.

Dynamic and engaging, Scarlette carries on the legacy of her mentors as a volunteer educator and mentor to young ophthalmologists. In this way, she still helps to save sight for patients, so that they may see the world's beauty. She also creates beauty through her art. •

Recent Gifts to That Man May See

Thank you for your generous contributions and pledges for vision research, teaching, patient care, and community outreach received between October 12, 2012, and April 30, 2013.

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Patient Point of View Taylor Melcher – Standing Up to Glaucoma

When Taylor Melcher was just six weeks old, her family noticed she avoided the light. A pediatrician near their home in Reno confirmed that Taylor needed expert vision care, right away. According to Taylor, "The choices back then were New York or San Francisco. My parents hastened me to UCSF to meet the ophthalmologist who would care for me for over 20 years."

Leading Glaucoma Specialist

UCSF's **Jorge Alvarado**, **MD**, is one of the country's leading glaucoma specialists. He heads a laboratory where breakthroughs in glaucoma diagnosis and treatment have occurred throughout a career dedicated to patient care, education, and research.

No one knows for sure what caused Taylor's rare condition of glaucoma at birth, but by her first birthday she needed a tiny Molteno device inserted surgically into her left eye to reduce eye pressure. Dr. Alvarado used the device to bypass the trabecular meshwork, redirecting the outflow of aqueous humor into an outlet chamber. Eventually, her right eye required a Molteno device as well, and both eyes returned to normal levels of intraocular pressure.

Education as Part of Care

Taylor recalls two decades of fellows and residents in training peering into her unusual eyes. "The young doctors were always amazed by what they saw," she says. At birth, her pupils were already abnormal. They were neither round nor located in the center of the iris. "Look up to the top of my iris," Taylor coaches the viewer, taking off her glasses for closer scrutiny. "You will see thin slivers, like a cat's eyes, and they don't dilate."



With help from some very skilled doctors – plus a little humor and a lot of stubbornness – people can overcome anything."

Taylor Melcher



At birth, Taylor's pupils were already abnormal. They were neither round nor located in the center of the iris.

"You have very beautiful eyes" is a phrase Taylor hears often. "Thank you," she tells people, "and they are severely broken." Her corneas are scarred, and she is highly sensitive to light. Her eyes don't pick up reds well and can't distinguish oranges, yellows, and pale pink.

Seeing into the Future

Taylor is most impressed with technology advancing in leaps and bounds in her two decades of observing medical breakthroughs. A student at Truckee Meadows Community College who loves history and mathematics, Taylor will transition to the University of Nevada, Reno, for the next lap of her education. "Education is not something you can escape in my family," she says. "My mom is a teacher, and Dad is a fireman."

Taylor lives a relatively normal life. "The disease becomes part of who you are," she explains. "It's a disability, but it's not debilitating." Taylor has developed a spunky perspective. "I think about what to say to the parent of a child with glaucoma," Taylor reflects. "I would tell them, 'With help from some very skilled doctors – plus a little humor and a lot of stubbornness – people can overcome anything."

Gerry Marshall and Bernie Newcomb from Bernard A. Newcomb Fund at Silicon Valley Community Foundation Anthony and Lary Lynn Muller Fund of the Community Foundation to Monterey County Mrs. Francis J. Niblett Rosanne and Michael Ogles Richard and Susan Olness Thomas M. and JaMel S. Perkins Frank and Denise Quattrone Foundation Virginia M. Ratto John W. and Barbara H. Rosston at Silicon Francis S. and Christine M. Currie Thomas Darcy Rosalind Gray Davis and Robert M. Davis Mariann Di Minno Marilyn Dompé/Dompé Associates Tom and Gunilla Follett Susan Glikbarg Hanson Dianne and Ron Hoge Drs. Alex and Chauncy Irvine Louise Karr Jack S. and Irene Kaus Man K. Kim, MD, and Grace H. Kim Robert and Linda Klett Tom Kostic Dr. and Mrs. Shiu Y. Kwok Mark Leslie Dave H. and Diane M. Luders Donna L. and Edward E. Martins Foundation Inc. Joan and Roger McGee Walter Jeff Parton Linda Plant Ed and Marcia Pollack George and Karen Rathman John C. and Diane W. Savage Stuart and Marilou Seiff Judith Good Stearns Emil Tanagho, MD Mr. and Mrs. George J. Tichy II WCP II, LLC Jean-Paul Weber Terence and Madeline Welsh Robert H. and Anne K. Zerbst

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AIYIN CHEN, MD Glaucoma Fellow

Mentor: Place of Birth: MD: Internship:

Residency:

Robert Stamper, MD Taipei, Taiwan UCSF Atlantic Health Transitional Medicine UCSF



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HYUNJIN JANE KIM, MD Plastics Fellow

Mentors:

Place of Birth: MD: Internship:

Residency: New Jersey Medica Previous Fellowship: Wills Eye Hospital

Robert Kersten, MD, FACS Reza Vagefi, MD Seoul, South Korea New Jersey Medical School Atlantic Health System, Morristown, New Jersey New Jersey Medical School Wills Eye Hospital (Ocular Oncology)



VINCENT LAM, MD Uveitis Fellow

Mentor: Place of Birth: MD: Internship:

Residency:

Nisha Acharya, MD, MS Winnipeg, Manitoba, Canada St. George's University

Mount Sinai School of Medicine Virginia Commonwealth University

Recent Gifts to That Man May See Continued from page 7

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Contributors Anonymous (4) Ms. Sy Aal Lorita D. Aarons

Fellows Contribute as They Learn



DR. SARAH SITATI-NG'ANDA *David and Elva Sinai Fellow*

O phthalmologists in Kenya are rarer than hens' teeth, and pediatric ophthalmologists rarer still. Enter **Dr. Sarah Sitati-Ng'anda,** recipient of the David and Elva Sinai Fellowship in Retinopathy of Prematurity (ROP). This Kenyan ophthalmologist has big plans to reduce childhood blindness and visual disability caused by ROP in her country.

ROP affects babies born prematurely, and women with few resources and little medical care – such as those in Kenya's immense outback – often have their babies early. Because the Kenyan medical community neither screens nor treats premature infants for ROP, thousands of Kenyan children contend with severe myopia, detached retinas, and even total blindness.



Blindness Prevention Campaign On her return to western Kenya, Dr. Sitati plans to document cases of ROP by providing free screening of infants. "Once charities understand the ROP problem, I know they will join me in working for blindness prevention as well as continuing to help the blind," says Dr. Sitati. The Sinai Fellowship positions her to attract support from major Kenyan eye organizations.

Dr. Sitati has big plans to reduce childhood blindness.

Mentorship Ideal

Dr. Sitati smiles a lot. She has found the perfect mentor in UCSF's Director of Pediatric Ophthalmology **Alejandra de Alba Campomanes, MD, MPH.** Dr. Sitati's UCSF training will provide pediatric expertise to improve outcomes for Kenyan children and their families. Dr. de Alba is an ROP specialist who has spearheaded blindness prevention efforts in rural Mexico.

Improving Children's Sight

Dr. Sitati observes Dr. de Alba's neonatal screenings, clinical appointments, and surgeries. She also observes **Eddy Tamura, MD,** and **Omondi Nyong'o, MD,** at the David and Elva Sinai Pediatric Ophthalmology Clinic.

During her stay in the United States, Dr. Sitati teaches those around her about conditions for children in rural Kenya. Her passion for improving their health and quality of life is apparent in all her roles – as student, researcher, and educator.



DR. MORENO MENGHINI George and Rosalie Hearst Fellow

Moreno Menghini, MD, traveled from Switzerland to spend a year learning from retinal specialist Jacque Duncan, MD. His fellowship was generously funded by the George and Rosalie Hearst Endowment. Dr. Duncan, one of the few ophthalmologists



It's wonderful to train at a teaching hospital." – Dr. Moreno Menghini

worldwide to study inherited retinal diseases in living patients, uses an adaptive optics scanning laser ophthalmoscope (AOSLO). This rare and advanced tool captures detailed images of patients' retinal cones.

Advancing Innovative Treatment

Dr. Menghini assists Dr. Duncan with two studies of a capsule designed to reduce retinal cell death. The implanted capsule slowly releases a protein shown to protect vital retinal cells. In a clinical trial of the device in subjects with retinitis pigmentosa, Dr. Menghini uses the AOSLO to image the trial subjects' retinas, and the detailed images allow him to count the individual surviving cones. In May, he presented promising preliminary findings at a meeting of the Association for Research in Vision and Ophthalmology in Seattle.

For an exploratory study of the capsule's potential to treat age-related macular degeneration, Dr. Menghini records and analyzes retinal images of two patients implanted with the device. Positive results would lead to further investigation.

Training Dr. Menghini

Dr. Duncan's patients have severe inherited retinal diseases that require ongoing management. She teaches Dr. Menghini to identify retinal abnormalities associated with particular retinal disorders and disease stages. "It's wonderful to train at a teaching hospital, where patients help young ophthalmologists learn their craft," he says.

Dr. Menghini also benefits from a variety of undertakings with other ophthalmologists. **Jay Stewart, MD,** provides mentorship in vitreoretinal treatment. Dr. Menghini works closely with him to understand surgical and postsurgical aspects of retinal care. He also teams up with Clinical Professor **Brendan Lujan, MD,** to compare two advanced technologies. Their goal is to determine the most accurate way to diagnose retinal degenerations.

Special Experiences

Dr. Menghini finds himself awed by the quality of specialists he encounters to UCSF. "The Grand Rounds lectures expose me to key opinion leaders in the field," he says. "I couldn't be happier." •

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Faculty News Outstanding Honors to Two Leaders



Richard L. Abbott, MD, was recently honored in Manila with the highest award conferred by the Asia Cornea Society. According to the society, the 2012 Asia Cornea Foundation Medal and Medalist's Lecture were awarded to Dr. Abbott as an eminent corneal specialist "renowned for outstanding repute at an international level."

The lecture serves not only to recognize his contributions to research and devotion to teaching but also to provide a source of

inspiration to the younger generation of corneal clinicians, surgeons, and scientists.

Dr. Abbott, who holds the ophthalmology department's Thomas W. Boyden Endowed Chair, divides his time between clinical practice and international efforts to improve the quality of ophthalmology service worldwide.



The Society of Heed Fellows has bestowed its 2012 Heed Award on Todd P. Margolis, MD, PhD. The award is given to a former Heed Fellow for outstanding investigation and long-term leadership in ophthalmology.

Dr. Margolis received a prestigious Heed Fellowship in 1988-1989. He gained clinical training in cornea, external diseases, and uveitis at UCSF's Francis I. Proctor Foundation for Research in Ophthalmology, and he continued

research into how the herpes simplex virus causes recurrent ocular disease, a course of investigation he has deepened throughout his career. UCSF neuroophthalmologist William Hoyt, MD, also received the Heed Award, in 1965, and a Heed Fellowship in 1957.

Today Dr. Margolis serves as director of the Proctor Foundation. Looking ahead, he is committed to translational research with the potential to impact the greatest number of underserved individuals and to teaching the next generation of ophthalmology educators.



J. Brooks Crawford, MD

Publication: Char DH, Cole, TB, Crawford, JB. Necrotic melanomas, The Archives of Ophthalmology, online 2013May; in print 2013 July.

This article discusses the problem of making a preoperative diagnosis in blind, painful eyes that may harbor necrotic choroidal melanoma. Eviscerating such an eye rather than removing it intact presents the danger that the surgeon will miss the malignant melanoma and enhance its ability to metastasize to the liver.



Jacque L. Duncan, MD

Invited Lecturer: New Outcome Measures for Clinical Trials in Retinitis Pigmentosa, Vision Science Seminar Series, Wilmer Eye Institute, Johns Hopkins University

Dr. Duncan's talk describes the development of new ways to measure how vision cells are affected in patients with retinitis pigmentosa and finding better, more sensitive ways to determine if experimental treatments are safe and effective.



Allan J. Flach, PharmD, MD

Invited Lecturer: Toxicology and Pharmacology topics, 37th Annual Basic Science Course, Stanford University

Dr. Flach taught pharmacology and toxicology at the Bay Area Basic Science Course in Ophthalmology. Over a two-day period, he provided didactic instruction to residents and practicing ophthalmologists from all over the world.



Bennie H. Jeng, MD, MS

Invited Lecturer: High-Risk Penetrating Keratoplasty versus Keratoprosthesis; Episcleritis and Scleritis. Asia-Pacific Academy of Ophthalmology Annual Congress, Hyderabad, India

Dr. Jeng chaired two conference sessions focusing on medical and argical treatments of corneal diseases most applicable to patients in the Asia-Pacific region.



Shan C. Lin, MD

Publication: Qiu M, Wang SY, Singh K, Lin SC. Association between myopia and glaucoma in the United States population, Investigative Ophthalmology & Visual Science, 2013 Jan 28;54(1):830-5. doi: 10.1167/iovs.12-11158.

Dr. Lin and his research group reported that near-sightednes (myopia) is associated with a higher risk for glaucoma in a large US population study. Severe myopia (6.0 diopters or more) was found to be correlated with a 14-fold greater chance of vision loss consistent with that of glaucoma.



Robert Kersten, MD, FACS

Invited Lecturer: Keynote speaker, 21st International Congress on Oculoplastic Surgery, Gramado, Brazil



Yvonne Ou, MD

Invited Lecturer: Stem Cells for Retinal Ganglion Cell Replacement. Glaucoma 2.0: Bench to Bedside conference, Bascom Palmer Eye Institute, Miami

Dr. Ou's lecture addressed the potential of stem cells to replace the optic nerve cells damaged in glaucoma, an approach that could eventually lead to restored sight.

Robert L. Stamper, MD



Invited Lecturer: Annular Choroidal Detachment: Detection, Differential Diagnosis, and Management. American Glaucoma Society annual meeting, San Francisco

Dr. Stamper discussed the diagnosis and management of a type of retinal detachment that is a relatively uncommon complication of glaucoma surgery.

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That Man May See Donald J. McCubbin Joins Board of Directors

on McCubbin and his wife Judy have been generous contributors to That Man May See for more than a decade - supporting transformational projects that are the highest priorities for Stephen D. McLeod, MD, chair of the Department of Ophthalmology.

Don is an estate planning attorney. Many of his clients are private philanthropists, and he advises charities on their development programs. Don has written several chapters on charitable giving and aspects of trust administration for California's Continuing Education of the Bar. He is a fellow of the American College of Trust and Estate Counsel and a

life member of the American Bar Foundation, among other professional affiliations. He is often included in publications such as The Best Lawyers in America.

Don is a founding director of the Kimball Foundation and serves on its board, which has generously supported That Man May See's initiatives to improve pediatric ophthalmology, including the new clinic at San Francisco General Hospital and Trauma Center. For many years, Don has served as chief financial officer and treasurer of the Kimball Foundation. His personal charitable interests include health care, medical research, education, and assistance for

underprivileged children. Don also serves on the board of directors of Hind Health Care, a privately held pharmaceutical company, where he recently assumed the position of CEO. He also serves as trustee of numerous private trusts.

A native Californian, Don graduated from the University of California, Santa Barbara, with a degree in economics and earned his law degree at the University of California, Hastings College of the Law. He is currently a principal with Friedman, McCubbin, Spalding, Bilter, Roosevelt & Montgomery.

Ocean sailing has become a prized pursuit. In 2004, the McCubbins sailed



from San Francisco across the Pacific to New Zealand, where their boat awaits "sailing sabbaticals" to islands of the South Pacific. Don is an avid sportsman, enjoying hunting, fishing, horses, cycling, and hiking. The couple has three children and six grandchildren.



THAT MAN MAY SEE

SIGHTINGS

VISION AWARDS AND SCIENTIFIC SYMPOSIUM











1 Catherine Pyke and Will Hearst from the William Randolph Hearst Foundation accept the









5 Honorary board member **Brooks Crawford**, MD, with board member **John de Benedetti**

Christie Hastings Vision Award.

2 Ted and Betty Tight receive the Vision Award for Leadership Longevity.



3 Yvonne Ou, MD, with John and

6 Mary Austin with Laura Wolter

7 Stephen McLeod, MD, with Mani and Nita Subramanian

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, educational opportunities for residents and fellows, and community service.

To make a gift of cash or securities, go to www.thatmanmaysee.org/donate or call 415.476.4016 or email tmms@vision.ucsf.edu. Checks are payable to That Man May See.

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Help save sight and save lives.



It's a Wonderful Life

David Hwang, MD, sees family and ophthalmology as two ways to care for others. At home, he and his ophthalmologist wife Janet help their three boys discover their own passions. Swimming, basketball, competitive chess, and the outdoors top their lists.

Sight Challenges that Inspire

As UCSF's Co-Director of the Cornea Service and Director of Refractive Surgery, Dr. Hwang works with patients who struggle with some of the most complex corneal conditions imaginable. He cares deeply about the relationships he builds with these patients. Untreatable cases push Dr. Hwang to innovate. "When I don't have the answer, I want to come back in the future and say 'Yes, there is something I can do to help you," he says. His surgical refinements to corneal transplantation have restored sight in ways not previously possible.

Interestingly, new miniaturized tools and ever more delicate procedures test the limits of human hand control. Vision-correcting laser surgery, a very different part of Dr. Hwang's practice, uses robotics and lasers to achieve what is not possible with a hand-held scalpel. Its precision contributes to consistently excellent results and has made the LASIK procedure safer and widely available.

Reinventing Eye Surgery

so many aspects of our lives," he says, yet eye surgery continues to be a craft learned only through years of apprenticeship and experience. Globally, demand for cataract surgery far outstrips availability. In many countries, lack of trained surgeons is one reason that blinding conditions often go untreated. Innovation could help save more sight worldwide.

Center for Innovative Eye Surgery

Dr. Hwang has a dream of establishing a Center for Innovative Eye Surgery at UCSF. His plan includes an endowed chair and investments for developing a computer-driven ophthalmology microsurgery workstation with real-time, three-dimensional visualization. This integration of state-of-the-art microelectronics, microcomputing, robotics, and nanotechnology would open the way for software-based procedures, protocols, simulations, remote training – and even remote surgery.

"The Bay Area's strong biomedical and tech communities make this the perfect place to build a first-of-its-kind center that lets us prove the merits of this approach," he says.

Like Father Like Mother Like Sons?

With two ophthalmologist parents, all of the Hwangs' sons are ready to sign up for medical school. "Right now they all want to be ophthalmologists, but we are trying to broaden their horizons," says Dr. Hwang with a smile. "We love what we do, and we want the same for them."

Dr. David Hwang and his wife Dr. Janet Hwang treasure their time with Steven, age 7; Daniel, age 9; and Jonathan, age 4.

Dr. Hwang is eager to create a more effective, technology-based platform for a range of eye procedures beyond LASIK. "Technology has transformed