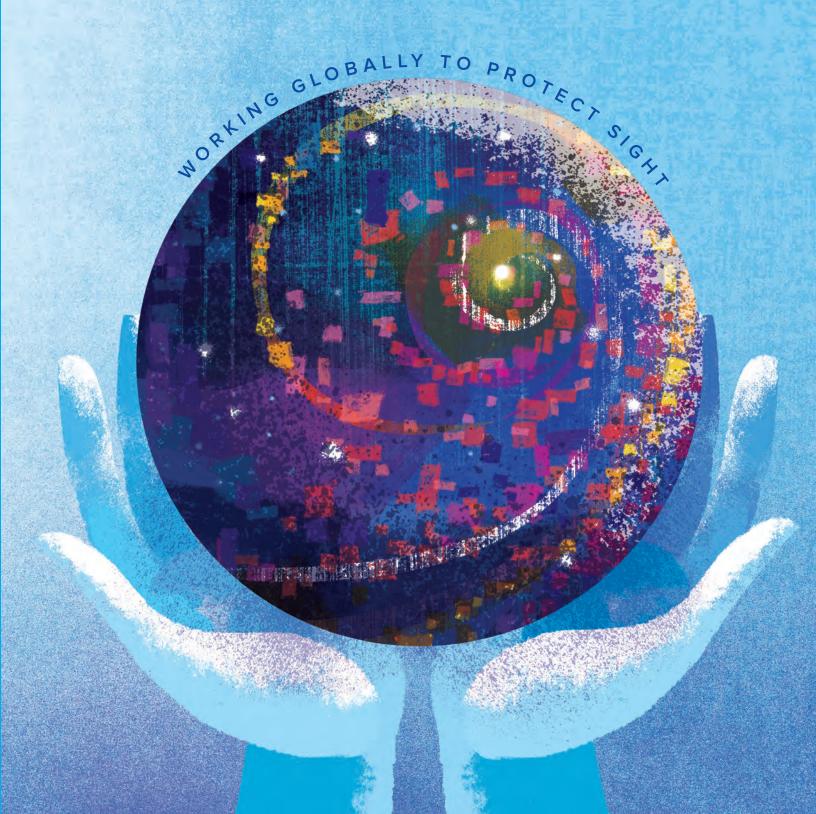
UCLA STEIN EYE INSTITUTE ANNUAL REPORT 2020-2021



UCLA Stein Eye Institute

ANNUAL REPORT

July 1, 2020-June 30, 2021

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Io view the Annual Report online, visit: www.uclahealth.org/Eye/annual-report.

For more information about the UCLA Department of Ophthalmology, see www.uclahealth.org/eye/.

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LETTER FROM THE CHAIR



As much as the coronavirus pandemic has upended our lives, it has also taught us many valuable lessons.

We learned that when scientists are challenged with a mission, remarkable things can be accomplished. We saw firsthand that "breakthroughs" are built upon the advances of others and come after years of dedication. We were also made acutely aware that while borders may separate us, we are a connected global community.

Despite the recent adversities, the Stein Eye Institute continues to march forth in its dedication to preserving and restoring vision through its global programs in innovative research, quality patient care, and multidisciplinary, integrative education.

Among this year's achievements, Stein Eye was home to a first-of-its-kind research advancement that moved science and medicine closer to individualized therapies using a patient's own stem cells. City of Hope and the UCLA Department of Ophthalmology joined forces in a formal partnership to provide care for patients facing the most challenging issues involving cancer and the eye. And our community outreach extended from caring for the most vulnerable in our own backyard, to conducting collaborative research in Vietnam with the aim of eliminating sight-threatening visual impairment, to stopping infant blindness in Sub-Saharan Africa. By uniting together both locally and globally, we can protect sight and prevent blindness.

The work of the Stein Eye Institute is made possible through the generosity of our donors, and we are especially grateful for your dedication during these unprecedented times. With your ongoing support, we will continue to make significant progress in ophthalmology to the benefit of patients worldwide.

I hope you enjoy reading this Annual Report and learning more about our activities.

Sincerely,

Bartly J. Mondino, MD

Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology Director, Stein Eye Institute Chairman, UCLA Department of Ophthalmology Affiliation Chairman, Doheny Eye Institute

Working Globally to Protect Sight

Dr. Anne Coleman 2020 President of the AAO

The American Academy of Ophthalmology (AAO) is the world's largest association of eye physicians and surgeons—a global community of 32,000 medical doctors, protecting sight and empowering lives by setting the standards for ophthalmic education and advocating for patients and the public.

Serving as 2020 president of the AAO was the Stein Eye Institute's own **Anne L. Coleman, MD, PhD**, The Fran and Ray Stark Foundation Chair in Ophthalmology. Dr. Coleman led the Academy during an unprecedented year that saw systemic racial bias in health care and the COVID-19 pandemic take focus.

The right person for the right time

A glaucoma specialist as well as a passionate leader, esteemed researcher, educator, and patient advocate, Dr. Coleman is committed to expanding access to quality eye care. She began her term as AAO president by challenging members of the Academy to make eye and vision health a societal priority, saying, "It takes thought, it takes creativity, and it takes courage—not just from a few individuals but from all of us. This year we will truly honor our mission to save sight and empower lives—not only for those who are fortunate enough to be evaluated by us, but also for the community as a whole." Unaware of how prescient her words would soon be, Dr. Coleman underscored, "The year 2020 is a year for challenge."

Among the many accomplishments of her term, Dr. Coleman and the AAO Board issued recommendations to help decrease the spread of COVID-19 and increase the safety of patients, physicians, and staff. **Gary N. Holland, MD**, Jack H. Skirball Chair in Ocular Inflammatory Diseases, and two other infectious disease specialists—**James Chodosh, MD, MPH**, of Harvard University, and **Steven Yeh, MD**, of Emory University—were tasked with formulating guidelines for prevention of COVID-19 virus transmission during eye examinations and ophthalmic procedures and providing patients and Academy members with continually updated information on the AAO website to reflect changing statistics about the pandemic and to conform to Centers for Disease Control and other quidelines, as they evolved.

WORKING GLOBALLY TO PROTECT SIGHT

Following the death of George Floyd, Dr. Coleman and the Board reconfirmed the Academy's commitment to inclusion, to the richness of a diverse society, and to the principles of human dignity and societal equality. They called on law enforcement to end the use of rubber bullets to control crowds of nonviolent protesters, noting that projectiles were responsible for significant visual injury or blindness.

Dr. Coleman and the Academy approved a white paper on the global problem of myopia, and created two task forces, one on Reducing Disparities in Eye Care and the second on Organizational Diversity and Inclusion.

Dr. Coleman also presided over the 2020 AAO annual meeting, which was held virtually due to the ongoing pandemic. "AAO 2020 Virtual" ran efficiently and gave members one-year, online access to Subspecialty Day meetings, instruction courses, and skills transfer labs.

Stein Eye Takes Center Stage at AAO Annual Meeting

Leaders from the Stein Eye Institute were selected as Guests of Honor at the 2020 AAO annual meeting and lauded for their contributions to ophthalmology and for effecting real change, both here at home and abroad.

AAO President Dr. Anne Coleman recognized **Bartly J. Mondino, MD**, director of Stein Eye and chair of the UCLA Department of Ophthalmology, as "a true leader with unparalleled wisdom and knowledge." Dr. Mondino has transformed the Institute into a vision-science campus at UCLA, advanced Institute programs, forged a historic affiliation with the Doheny Eye Institute, and broadened access to eye care with the opening of Stein Eye and Doheny Eye Centers UCLA locations across the Southland.

Dr. Coleman paid tribute to **Bradley R. Straatsma, MD, JD**, as a renowned trailblazer "whose legacy has influenced ophthalmology at the local, national, and international levels." As founding director of the Stein Eye Institute, founding chair of the UCLA Department of Ophthalmology, and past president of distinguished ophthalmology organizations, Dr. Straatsma has been and continues to be instrumental in revolutionizing and broadening the field of ophthalmology worldwide.

As her third honoree, Dr. Coleman extolled **M. Roy Wilson, MD**, as a catalyst who has "shaped ophthalmology, academic medicine, public health, and education by inspiring individuals, transforming campuses, and guiding the profession at national and international levels." Dr. Wilson, an accomplished researcher, has led an exemplary academic career, including being a former faculty member of the Stein Eye Institute. He is now president of Wayne State University.

WORKING GLOBALLY TO PROTECT SIGHT

A Sight-Saving Intervention



Maeyli Guadalupe Siomara Ramos Toj is a 13-year-old girl who dreams of becoming a teacher. She lives with her parents and siblings in a small village in Santa María Ixhuatán, Santa Rosa, Guatemala.

In May 2017, Maeyli began experiencing redness and irritation in her right eye and was told she had conjunctivitis (pink eye). Despite treatment with multiple eye drops, her condition worsened and her right eye gradually became more prominent and painful. Diagnostic imaging revealed an orbital tumor, an abnormal growth of tissue in the eye socket. Maeyli was admitted to the hospital and underwent treatment with steroids and pain medication, but her symptoms progressed. For two years, Maeyli and her family met with oncologists, ophthalmologists, and neurosurgeons looking for answers. A biopsy, scheduled for November 2020, was cancelled when it was determined the risk of bleeding would be too high.

Maeyli's situation ultimately found its way to Robert Alan

Goldberg, MD, Bert O. Levy Endowed Chair in Orbital and Ophthalmic Plastic Surgery and chief of the Orbital and Ophthalmic Plastic Surgery Division. Dr. Goldberg and **Liza M. Cohen, MD**, his clinical fellow, reviewed Maeyli's medical records and determined that while her orbital tumor would be challenging to remove, they were willing to try.

With financial support provided by the Indigent Children and Families Ophthalmic Care Program developed by the UCLA Department of Ophthalmology under the direction of Department Chair, Bartly J. Mondino, MD, Maeyli and her mother arrived in Los Angeles and met with Drs. Cohen and Goldberg on January 4 at the Stein Eye Institute. The examination revealed that Maeyli's right eye was 10 mm proptotic (protruding forward), and the surface was significantly dry, putting Maeyli at risk of continued eye pain and infection. Though Maeyli had normal vision, her optic nerve was swollen, indicating she would likely lose her sight without treatment. Her MRI showed a large orbital vascular malformation, and surgery was planned for later that week.

On January 6 Maeyli underwent a right orbitotomy with biopsy and debulking of the tumor. The biopsy confirmed what the doctors suspected, specifically a benign venolymphatic malformation. The tumor was extensive and involved numerous critical structures in the deep orbit, so removing the tumor entirely carried significant risk of vision loss. The surgery went smoothly, and Drs. Cohen, Goldberg, and the team were able to successfully remove the vast majority of the tumor without

significant bleeding. The small amount remaining was injected with bleomycin and bevacizumab to shrink the tumor and prevent future growth.

At her final postoperative appointment two weeks later, Maeyli's healing was going extremely well with improvement in proptosis and no vision loss. Maeyli and her mother returned home to Guatemala, grateful for the care and hospitality they received at UCLA.



Following her surgery, Maeyli's long-term prognosis looks bright. She has happily returned to school and playing with her siblings and friends.

WORKING GLOBALLY TO PROTECT SIGHT

Stopping Infant Blindness in Sub-Saharan Africa

There is an epidemic of blind babies in Sub-Saharan Africa from retinopathy of prematurity (ROP), and Sherwin J. Isenberg, MD, UCLA Professor of Ophthalmology and Pediatrics Emeritus, is leading the charge to prevent and end this upsurge. The Stop Infant Blindness in Africa (SIBA) initiative, co-chaired by Dr. Isenberg, was formed under the mandate, "We must act now to stop it."

ROP is an eye disorder caused by abnormal development of retinal blood vessels in premature infants. Due to their immature lungs, premature babies are often given supplemental oxygen, but if this oxygen is not carefully regulated, ROP can worsen and lead to blindness. The impact of childhood blindness is also an issue of child mortality. Experts estimate that roughly half of children in low-income countries who go blind will die within a few years of diagnosis, so the imperative to stop blindness from ROP is critical.

This premature newborn is receiving unregulated oxygen, which puts her at risk of developing retinopathy of prematurity and blindness.

In 2014, it was estimated there were 4.2 million preterm births in Sub-Saharan Africa accounting for 28 percent of the total preterm births globally. To address the immi-

> nent threat of blind babies in Sub-Saharan Africa, SIBA has developed three pilot sites in Nigeria, Uganda, and Rwanda to provide neonatologists/ pediatricians and ophthalmologists with the tools and training they need for preventing, screening, and treating ROP. "These sites will become centers for education where neonatal providers from throughout Sub-Saharan Africa will learn proper oxygen management for premature infants and screening/treatment for ROP," says Dr. Isenberg.

The International Pediatric Ophthalmology & Strabismus Council, which was founded by Dr. Isenberg and others, created the SIBA initiative in partnership with the Children's Eye Foundation of the American Association for Pediatric Ophthalmology. Learn more at: childrenseyefoundation. org/what-we-do/africa-rop.



A physician in Sub-Saharan Africa screens a newborn infant for retinopathy of prematurity (ROP), an eye disorder that can occur in babies who are born too early. ROP is caused by abnormal development of retinal blood vessels, and it can lead to blindness.

Advancing Global Health Research in Vietnam

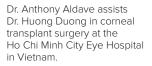
Anthony J. Aldave, MD, chief of the Cornea and Uveitis Division, is committed to world health and the belief that everyone has a right to sight. He is an active member of the UCLA Center for World Health and works on its Global Surgery Initiative to improve access to and delivery of surgical care through program development, research, and education. In addition, Dr. Aldave is the founder of the nonprofit organization Visionaries International, which is dedicated to eliminating corneal blindness worldwide.

In April 2021, Dr. Aldave was awarded \$50,000 from the UCLA Global Health Seed Grant Program to conduct innovative research in a global setting. Dr. Aldave and researchers at UCLA are collaborating with investigators at Ho Chi Minh City Eye Hospital (HCMCEH) to evaluate the efficacy of long-term preserved corneas in managing perforated corneal ulcers, a common ophthalmic condition in Vietnam.

Corneal ulceration can lead to significant visual impairment and sight-threatening complications, including corneal perforation. At HCMCEH, there are on average 20,000 outpatient visits annually for infectious keratitis, with over 20 percent of these cases progressing to impending or actual perforation. Therapeutic penetrating keratoplasty (TPK) is an effective treatment for corneal perforation, but it requires the availability of donor corneal tissue. Almost all donor corneal tissue in Vietnam, however, is imported from the United States, which delays surgical management and results in progression of infection, and in some cases, expulsion of the intraocular contents.

Dr. Aldave and his co-investigators are evaluating VisionGraft, a sterile gamma-irradiated cornea preserved in albumin that can be stored at room temperature for up to two years. Its extended shelf life makes it an ideal solution for urgent TPK in regions like Vietnam without readily available fresh cadaveric donor tissue. Its acellular characteristics also minimize inflammatory reactions and the risk of rejection.

For this study, Dr. Aldave is also working with two early career investigators: **Huong Duong, MD**, an international fellow at Stein Eye from 2017–2018, who is now a consultant at HCMCEH, and **Simon Fung, MD**, assistant professor of ophthalmology at UCLA. The grant will serve as a mechanism for Drs. Fung and Duong to gain research experience under Dr. Aldave's mentorship.





Institute News



Here We Grow Again! Opening of Stein Eye Center in Calabasas

The UCLA Stein Eye Institute has once again expanded its patient reach with the opening of the Institute's first location in the San Fernando Valley. The Stein Eye Center—Calabasas is a full-service eye care treatment and surgical center that creates new options in eye health for people living north of Los Angeles.

Convenient for residents of the valley and outlying communities, such as Westlake Village and Thousand Oaks, the Stein Eye Center–Calabasas offers subspecialty care, including cataract and LASIK surgery, diabetic retinopathy, glaucoma, macular degeneration, and functional and cosmetic oculoplastics. In addition, a full range of diagnostic testing is available.

"With the addition of the Calabasas location, most residents of greater Los Angeles now live less than a half-hour from our network of eye care centers that are ranked among the top in the nation," says **Bartly J. Mondino, MD**, director of the Stein Eye Institute and chair of the UCLA Department of Ophthalmology.

In addition to convenience, another primary strength of the Stein Eye Centers in Calabasas and Santa Monica—along with the Doheny Eye Centers UCLA in Arcadia, Orange County, and Pasadena—is that they are staffed by UCLA Department of Ophthalmology faculty.

"The Stein Eye Center–Calabasas is a fully equipped satellite location that brings Stein Eye experience and expertise to the San Fernando Valley," says **Shawn R. Lin, MD**, the Center's medical director. "UCLA Department of Ophthalmology physicians can treat almost all of our patients' principal eye health needs in our Calabasas location—even our surgical procedures are performed here."

Stein Eye Center–Calabasas is located at 26585 W. Agoura Rd., Suite 330, Calabasas, CA 91302. Parking is free. To contact the Center, call (310) 825-5000.



A Unique Collaboration with City of Hope

The UCLA Department of Ophthalmology and City of Hope have joined in a formal partnership that provides care for some of the most challenging cases involving cancer and the eye.

"City of Hope specializes in treating cancer patients; cancer can impact the eye, and the cancer treatment itself can also affect vision," explains John A. Irvine, MD, medical director of the Doheny Eye Centers UCLA, who is also serving as the medical director overseeing the combined effort. "Our collaboration with City of Hope occurred because of the complex nature of the eye care issues experienced by many of its patients, and the need for both specialized care and a more coordinated approach to dealing with these questions."

The agreement calls for the Department to provide subspecialty treatment, education, and vision-science support. Dr. Irvine and **Phillip Le, MD, PhD**, associate physician diplomate, are on call 24/7 for City of Hope patients, and the entire Department is available for backup or consultation in all of the ophthalmic subspecialties.

City of Hope also recognized the need for coordinated education in other areas of their work affecting the eye, including diabetes control for ophthalmic issues such as diabetic retinopathy. Dr. Le has established a diabetic retinopathy screening protocol whereby City of Hope patients with diabetes have routine retina photos that are reviewed for two purposes: to diagnose diabetic disease in the retina and to teach City of Hope's endocrinology fellows the types of changes that diabetes can produce in the retina.

"The UCLA Department of Ophthalmology is City of Hope's crucial link to ophthalmic care and consultation," says **Bartly J. Mondino, MD**, director of the Stein Eye Institute and chair of the Department. "This is a developing relationship that is providing significant benefits for patients at City of Hope by bringing in our faculty to participate in some of the most complex challenges in cancer care. Our mutual intent is to ultimately have a Division of Ophthalmology at City of Hope."



Photo Credit: City of Hope

Research Focus



Sophie X. Deng, MD, PhD

Stem Cell Therapy for Limbal Stem Cell Deficiency

Sophie X. Deng MD, PhD, Joan and Jerome Snyder Chair in Cornea Diseases, performed a successful cultivated autologous limbal stem cell (cLSC) transplant at the UCLA Stein Eye Institute in October 2020. This revolutionary advancement was the first of its type, and it moves science and medicine closer to the goal of individualized therapies using the patient's own stem cells. Dr. Deng and her team are collecting preliminary information on the safety, efficacy, and feasibility of cLSC transplantation in a phase 1 cLSC clinical trial.

The limbus is the margin between the cornea, the front surface of the eye, and the conjunctiva, the white of the eye. Limbal stem cell deficiency (LSCD) causes clouding of the corneal epithelium by replacing normal transparent epithelial cells with conjunctival cells—a process known as conjunctivalization. Other signs of LSCD include epithelial defects, inflammation, scarring, and new blood vessel formation (neovascularization). LSCD is not a disease unto itself but has many underlying causes. It may be hereditary, or it may be acquired, occurring as the result of an injury, surgery, or an autoimmune condition. Regardless of the underlying cause, LSCD symptoms include vision loss and eye pain. The ultimate treatment goal is to clear the cloudy cornea and relieve discomfort.

Traditional corneal transplants are unsuccessful at treating LSCD because the corneal graft will fail without a healthy corneal surface. When using animal cells in the cultivation process there is the risk of cross-contamination. The ideal scenario is an autologous transplant—which was achieved by Dr. Deng—whereby the donor is also the transplant recipient, eliminating the immune rejection of the tissue.

Learn more about this study, including how to participate in Dr. Deng's phase I clinical trial, in the Fall 2021 issue of *EYE* magazine at: uclahealth.org/eye/eye-newsletter.

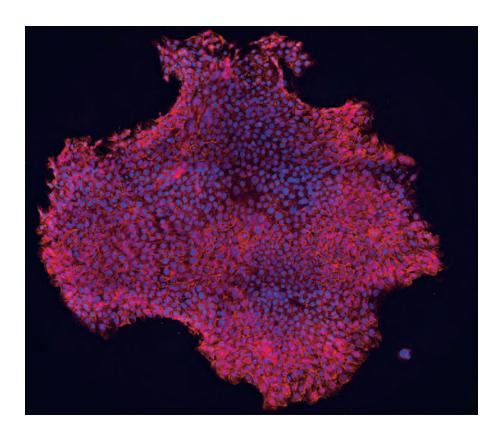


Image shows the staining of limbal stem cells cultured in a dish. The blue color highlights the nucleus of the cells, and the red color locates proteins that the stem cells express.

Awards and Honors

2020 AAO Award Recipients

Faculty and alumni from the Stein Eye Institute (SEI) and the Doheny Eye Institute (DEI)—the two prestigious entities that form the UCLA Department of Ophthalmology—were honored for their contributions to the profession at the November 13–15, 2020, American Academy of Ophthalmology annual meeting in Las Vegas, Nevada.

Senior Achievement Award

Darrell WuDunn, MD, PhD, DEI alumnus

Achievement Award

Michael B. Gorin, MD, PhD, UCLA faculty

David A. Hollander, MD, SEI alumnus Ehsan Rahimy, MD, SEI alumnus Tina Rutar, MD, SEI alumna

Secretariat Award

Amani Fawzi, MD, SEI alumna Rahul Khurana, MD, DEI alumnus Randall J. Olson, MD, SEI alumnus Stacy L. Pineles, MD, UCLA faculty Alfredo A. Sadun, MD, PhD, UCLA faculty

Michael T. Trese, MD, SEI alumnus James C. Tsai, MD, MBA, DEI alumnus

2021 ARVO Award Recipients

UCLA Department of Ophthalmology faculty were honored by the Association for Research in Vision and Ophthalmology (ARVO) for their work advancing research worldwide to better understand the visual system and to prevent, treat, and cure its disorders.

2021 ARVO Gold Fellows

SriniVas R. Sadda, MD Alfredo A. Sadun, MD, PhD

2021 ARVO Silver Fellows

Anthony J. Aldave, MD Xian-Jie Yang, PhD

Faculty Honors

Anthony J. Aldave, MD, Walton Li Chair in Cornea and Uveitis, was announced as a 2021 UCLA Global Health Seed Grant Program recipient. The \$50,000 funding opportunity, co-sponsored by the Global Health Program and International Health Services, is for innovative research in global settings. Dr. Aldave is studying the use of long-term preserved corneas for perforated corneal ulcer in Vietnam.

Anne L. Coleman, MD, PhD, The Fran and Ray Stark Foundation Chair in Ophthalmology and vice chair of ophthalmology at the UCLA Stein Eye Institute, was recognized by UCLA for her influence and achievements in a "Salute to 100 Trailblazing Women of UCLA Health." Dr. Coleman is internationally known for her research and clinical expertise in the fields of glaucoma and cataract surgery. She was elected to the National Academy of Medicine in 2016, and her recent leadership activities include serving as president of the American Academy of Ophthalmology in 2020.

Joseph L. Demer, MD, PhD, Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology, received the Bielschowsky Medal and presented the associated lectureship at the International Strabismological Association (virtual) meeting in Paris, France, April 24–25, 2021. The Bielschowksy Lecture is given every four years by a senior strabismologist who has received worldwide recognition for their work.

JoAnn A. Giaconi, MD, health sciences clinical professor of ophthalmology, was chair of the inaugural American Glaucoma Society Symposium "AGS Glaucoma Update" at AAO 2020 Virtual on November 14, 2020, in Las Vegas, Nevada. Dr. Giaconi was also nominated to be the next secretary of the American Glaucoma Society.

Alex Huang, MD, PhD, assistant professor of ophthalmology, is the recipient of the 2021 Pfizer Ophthalmics Carl Camras Translational Research Award.

In addition, Dr. Huang presented the keynote lecture "Imaging where the Aqueous is Flowing" (virtual) at the Duke University 32nd Annual Glaucoma Symposium on September 26, 2020, in Durham, North Carolina.

Yirong Peng, PhD, assistant professor of ophthalmology, was awarded a \$40,000 Genentech AMD Basic Research Fellowship. The Fellowship, established by the Association for Research in Vision and Ophthalmology Foundation, will help support Dr. Peng's project, "Molecular and Evolutionary Underpinnings of Foveal Formation." The ultimate aim of Dr. Peng's research is to elucidate the structural basis for human vision and visual defects.

Peter A. Quiros, MD, health sciences associate clinical professor of ophthalmology, was selected as a UCLA David Geffen School of Medicine (DGSOM) Educator for Excellence. In this capacity, Dr. Quiros is taking on a key role in medical education leadership.

SriniVas R. Sadda, MD, Stephen J. Ryan-Arnold and Mabel Beckman Foundation Endowed Presidential Chair, was selected to the Association for Research in Vision and Ophthalmology (ARVO) Board of Trustees, Retina Section, May 2020–May 2025.

Dr. Sadda also presented the keynote Asia-Pacific Ocular Imaging Society inaugural 1st webinar "Future of Ophthalmic Imaging in the Post COVID-19" (virtual) on July 18, 2020, in Hong Kong.

Alfredo A. Sadun, MD, PhD, Flora L. Thornton Endowed Chair in Vision Research and vice chair, Doheny Eye Centers UCLA, presented the keynote lecture "Optic Neuropathy in Alzheimer's Disease" (virtual) at the University of Bologna, Department of Neurology, on October 2, 2020, in Bologna, Italy.

Dr. Sadun also organized and chaired the symposium "Artificial Intelligence, the Promise and the Peril: Ophthalmology, Medicine and Beyond" at AAO 2020 Virtual on November 14, 2020, in Las Vegas, Nevada.

David Sarraf, MD, health sciences clinical professor of ophthalmology, presented the Canadian Journal of Ophthalmology keynote lecture (virtual) at the Canadian Ophthalmological Society meeting on June 25–28, 2020, in Vancouver, British Columbia. In addition, Dr. Sarraf gave two keynote lectures (virtual) at the October 2020 Cleveland Ophthalmological Society meeting: "OCT Angiography of the Macula in COVID-19 Patients: Is the Retina a Coronavirus Target?" and "Pentosan Maculopathy: Screening Guidelines and Spectrum of Disease Based on Prospective Multimodal Imaging Analysis."

Edmund Tsui, MD, assistant professor of ophthalmology, received the Early Career Award from the Thrasher Research Fund for his study "Discovery of Quantitative Imaging Biomarkers in Juvenile Idiopathic Arthritis-associated Uveitis." The fund encourages development of medical research in child health by awarding grants to new researchers, helping them gain a foothold in this important area.

Shoaib Ugradar, MD, health sciences clinical instructor, and Jonathan Hoenig, MD, Stein Eye clinical fellow alumnus (1995) and volunteer clinical faculty member, received the 2020 American Society of Ophthalmic Plastic & Reconstructive Surgery (ASOPRS) research award for their study "Measurement of the Force Required by Blunt-Tipped Microcannulas to Perforate the Facial Artery."

Faculty Appointments

The 2020-2021 Academic Year welcomed new faculty to the UCLA Department of Ophthalmology. For detailed information about each faculty member, please refer to the Faculty and Colleagues section of this Annual Report.

Justin Karlin, MD, MS

Health Sciences Assistant Clinical Professor

Mitra Nejad, MD

Health Sciences Assistant Clinical Professor

Victoria L. Tseng, MD, PhD

Assistant Professor of Ophthalmology

New EyeSTAR Track: Residency with Medical **Genetics Certification**

In a national first, the UCLA Department of Ophthalmology is introducing a Medical Genetics track to the Stein Eye Institute's Specialty Training and Advanced Research (EyeSTAR) program. This new track offers ophthalmology residency training in tandem with training by the UCLA Intercampus Medical Genetics Training Program leading to Clinical Genetics and Genomics certification by the American Board of Medical Genetics and Genomics. The Program was established under the direction of Drs. J. Bronwyn Bateman and Michael B. Gorin, both UCLA residency alumni. The EyeSTAR Committee is chaired by Joseph L. Demer, MD, PhD, Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology.

For detailed information about EyeSTAR and its Medical Genetics track—as well as EyeMBA, which combines ophthalmology residency training with a master's degree in business administration—go to: steinresidents.com/eyestar-eyemba.



Education

Resident and Fellow Graduation and Award Ceremony

Residents, fellows, and faculty were honored for excellence at the UCLA Department of Ophthalmology graduation on June 16, 2021. The ceremony was held in the Research to Prevent Blindness Auditorium located on the Stein Eye Institute's vision-science campus in Westwood.

Clinical Fellow Research Award Liza Cohen, MD

Research Fellow Research Award Vahid Mohammadzadeh, MD

Postdoctoral Fellow Research Award Matthew J. Gerber, PhD

Faculty Teaching Award Uday Devgan, MD

Fellowship Faculty Teaching Award Daniel Rootman, MD

Fellow Teaching Award Kirk Hou, MD, PhD

Resident Teaching Award Ernest Puckett, MD

Resident Award for Medical Student Teaching

Ravin Sajnani, MD Clinical Rotation Teaching

Gio Campagna, MD Lower Division Pre-Clinical Teaching

Annual Comprehensive Ophthalmology Review Course

The Stein Eye Institute and the Doheny Eye Institute presented the annual Comprehensive Ophthalmology Review Course on February 18–21, 2021, virtually and on-demand.

The four-day event reviewed the clinical essentials of each subspecialty in ophthalmology, and prepared the attendees for upcoming ophthalmology examinations and required continuing medical education recertification. The 2021 course was directed by **Drs. John Irvine** and **Mitra Nejad**.

Aesthetic Eyelid and Facial Rejuvenation Course

The UCLA Stein Eye Institute held its Aesthetic Eyelid and Facial Rejuvenation Course on March 20, 2021. The live, virtual event combined cadaver dissection, small group discussion, short practical videos, and lectures by local, national, and international speakers.

The course had 180 registrants, hailing from 20 states and 33 countries. It was directed by Drs. Robert Goldberg and Daniel Rootman, with Dr. Steven Leibowitz serving as principal lecturer.

International Retinal Imaging Symposium

The International Retinal Imaging Society (IntRIS) presented their International Retinal Imaging Symposium virtually on June 4 and June 5, 2021.

Highlighting new technologies and applications of retinal imaging, the meeting showcased the integral importance of innovative retinal imaging in the evaluation and management of retinal disease. Course directors were Drs. K. Bailey Freund, SriniVas Sadda, and David Sarraf.

Clinical and Research Seminar

The Stein Eye Institute's most prestigious educational event, the UCLA Department of Ophthalmology Clinical and Research Seminar, was held June 11, 2021, as a virtual live program.

Honored at the seminar was **J. Bronwyn Bateman, MD**, who was selected as the 2021 Irvine Laureate. The S. Rodman Irvine Prize recognizes a UCLA Department of Ophthalmology faculty member who exemplifies excellence in the profession.

The annual seminar, designed as an update course covering current clinical and research aspects of each of the ophthalmic subspecialties, was highlighted by the following keynote lectures:

51st Jules Stein Lecturer

Emily Y. Chew, MD

Director, Division of Epidemiology and Clinical Applications National Eye Institute/ National Institutes of Health

51st Doheny Memorial Lecturer

Jennifer I. Lim, MD

Marion H. Schenk Esq. Chair and Professor of Ophthalmology Director of Retina Service Vice Chair for Diversity and Inclusion University of Illinois at Chicago

18th Bradley R. Straatsma Lecturer

Adnan Tufail, MD

Professor, University College London Consultant Ophthalmologist Moorfields Eye Hospital London Claremont Clinic

18th Thomas H. Pettit Lecturer

John G. Ladas, MD, PhD
Surgeon/Director
Maryland Eye Consultants
and Surgeons
Assistant Professor of Ophthalmology
Wilmer Eye Institute
Founder, Advanced Euclidean
Solutions

Community Outreach

UCLA Mobile Eye Clinic: Providing Care Throughout Los Angeles

The Stein Eye Institute Center for Community Outreach and Policy's UCLA Mobile Eye Clinic (UMEC) program, directed by Anne L. Coleman, MD, PhD, screened and/or examined 1,055 children and adults this fiscal year, diagnosed 611 ocular abnormalities (60 percent of patients seen), and made 122 trips throughout Los Angeles County bringing eye care to under-resourced and vulnerable populations. Our adult program provided exams, eyeglasses, and referrals for those lacking access to adequate vision care for reasons such as cost, transportation, and insurance. And through the preschool vision program, our youngest patients received eye health care resulting in good vision that has helped them better navigate the increase in screen time due to distance learning.

Despite these powerful results, the impact of COVID-19 has been significant. Due to the pandemic, Stein Eye suspended all community outreach operations in March 2020. However, with the rapidly mounting number of unemployed, uninsured, and at-risk individuals in need of vision care and eyeglasses in Los Angeles, a protocol was developed and approved by UCLA Health to offer

limited clinics in the community and keep everyone as safe as possible. Personal protective equipment and cleaning supplies were secured to keep patients, faculty, and staff protected. Following approval from the UCLA COVID-19 Command Center, UMEC resumed community outreach activities in mid-August 2020.

In January 2021, UMEC resumed monthly night clinics with the Mobile Clinic Project and the David Geffen School of Medicine (DGSOM) medical students to help more people experiencing homelessness receive a free eye exam and eyeglasses. Recognizing the increase of people in our communities experiencing homelessness, UMEC is collaborating with homeless service agencies and shelters, such as St. Margaret's Center, The Salvation Army, and the Center of Hollywood. Through these long-standing partnerships, UMEC has been able to offer vision services to 209 of these patients in the past year.

UMEC conducted its preschool vision program during the 2020–2021 school year but in a reduced capacity due to school closures: 166 preschoolers were screened and examined and 126 eyeglasses were provided to preschoolers in

low-income communities in Los Angeles. UMEC also referred 23 preschoolers to partner specialists for further specialized medical or surgical treatments.

In terms of mentoring students, UMEC has had seven medical students from UCLA and other national and international universities assist with research projects. The medical students also helped with providing free vision care and shadowed the ophthalmologists on the UMEC once they were allowed by DGSOM to participate in clinical care. The UMEC Student Leadership Club, founded by UMEC undergraduate volunteers to assist UMEC with providing vision care to vulnerable populations, made great progress during the past fiscal year as well. Despite their activities being predominately virtual due to the pandemic. the group was able to raise over \$13,000 in UCLA grants to purchase clinical items such as artificial tears, reading glasses, and brochures for patients. Additionally, the club's president was recognized as a finalist for the prestigious UCLA Charles E. Young Humanitarian Award, an accolade designated to only 10 undergraduates who have performed outstanding public service. They used Zoom conferencing to host two successful health care career panels in collaboration with another undergraduate club Dr. Coleman supervises, Bruin Vision Project. They also drafted a Diversity and Inclusion Statement to continue building a volunteer community whose members have diverse cultures, backgrounds, and life experiences. Furthermore, 13 of the 32 undergraduate interns and volunteers received recommendation letters from UMEC to apply for medical school or other professional programs after graduation.

Through our efforts this past year, it is clear that The Center for Community Outreach and Policy is committed to providing compassionate, culturally aligned care and has had a significant impact on the Los Angeles community.



Rene Galvan, an ophthalmic technician with the UMEC, helps a preschooler select her new eyeglass frames.

Alumni News

The UCLA Ophthalmology Alumni Association has a new name to incorporate our Doheny Eye Institute members. The Association has also been converted to an officially recognized UCLA Support Group.

The Association's primary objectives are to promote the social and professional relations of its members and alumni, and to advance the academic interests of the UCLA Department of Ophthalmology, as well as the Stein Eye and Doheny Eye Institutes.

All graduates, residents, fellows, faculty, and volunteer clinical faculty are members of the UCLA Ophthalmology Alumni Association. Annual membership dues are nominal and partially underwrite the Resident Research Grant Awards, the Stein Eye Institute Excellence in Research Graduation Awards for Residents and Fellows, and the annual receptions at the American Academy of Ophthalmology (AAO) and Association for Research in Vision and Ophthalmology (ARVO).



Dr. J. Bronwyn Bateman, President UCLA Ophthalmology Alumni Association

Dr. J. Bronwyn Bateman, the Association's president (Residency class of '78, Fellowship class of '79) notes, "The Association's annual gatherings at AAO and ARVO allow us to reconnect with friends and colleagues from across the country and around the world. We sorely missed the opportunity to connect with colleagues and faculty at our alumni events this past year. We look forward to celebrating our camaraderie and loyalty to UCLA in person at upcoming annual AAO and ARVO receptions, as well as welcoming our newest alumni.

To support our mission, please pay UCLA Ophthalmology Alumni Association dues at: giving.ucla.edu/ seialumnidues. Credit card payments are accepted.



Dr. Gregg T. Kokame

Gregg T. Kokame, MD, Stein Eye resident '87 and 2013 Thomas H. Pettit Lecturer. received the Gass Medal at the Macula Society Virtual Meeting on February 6, 2021. The award recognizes outstanding contributions in the study of macular diseases and was presented by Harry W. Flynn, Jr., MD, The J. Donald M. Gass Distinguished Chair in Ophthalmology at the Bascom Palmer Eye Institute.

Jonathan Hoenig, MD, Stein Eye clinical fellow alumnus '95 and volunteer clinical faculty member, and Shoaib Ugradar, MD, health sciences clinical instructor, received the 2020 American Society of Ophthalmic Plastic & Reconstructive Surgery (ASOPRS) research award for their study "Measurement of the Force Required by Blunt-Tipped Microcannulas to Perforate the Facial Artery."

Milestones

Dr. Lynn Gordon Retires Following an Impactful Career



An award-winning leader in her field, Lynn K. Gordon, MD, PhD, Vernon O. Underwood Family Chair of Ophthalmology, has also been a catalyst for change throughout her professional life—empowering women and ensuring the core values of diversity and inclusion are inseparable from UCLA's institutional goals of excellence in all tenets of healthcare, research, education, and community engagement.

Dr. Gordon, who retired December 31, 2020, has been widely extolled for her accomplishments as a neuro-ophthalmologist, researcher, teacher, inventor, and advocate for diversity. Her roles include professor of ophthalmology at the Stein Eye Institute, chair of the College of Applied Anatomy at the UCLA David Geffen School of Medicine (DGSOM), and senior associate dean for Equity, Diversity, and Inclusion at DGSOM.

Attesting to Dr. Gordon's notable influence, Bradley R. Straatsma, MD, JD, founding director of the Stein Eye Institute and founding chair of the UCLA Department of Ophthalmology, notes, "Throughout her career, Dr. Gordon has been outstanding as an ophthalmology resident, skilled faculty member, and national leader of the American Academy of Ophthalmology Council."

After graduating with honors from Stanford University, Dr. Gordon received her MD and PhD at Harvard University. She conducted her residency and fellowship training at Stein Eye when there was only a single building on what has since become a vision-science campus at UCLA. As a faculty member, Dr. Gordon led the ophthalmology section of the Greater Los Angeles VA Healthcare System for a decade before joining the deans' office.

Dr. Gordon's research is focused on inflammatory eye disease, and her work has resulted in federal and foundation funding, multiple patents, and more than 100 publications, book chapters, and reviews. She has served on numerous editorial boards, lectured throughout the world, and has held significant leadership positions, including past president of Women in Ophthalmology, the Stein Eye Institute Department of Ophthalmology Association, the Los Angeles Eye Society, and the California Academy of Eye Physicians and Surgeons. Dr. Gordon's many honors include the Stein Eye Faculty Teaching Award, the Suzanne Véronneau-Troutman Award from Women in Ophthalmology, the DGSOM Award for Excellence in Education, the Senior Achievement Award from the American Academy of Ophthalmology, the Women in Ophthalmology Champion of

Change Award, and the Distinguished Service Award from the California Academy of Eye Physicians and Surgeons.

Dr. Gordon is a national expert on implicit bias, cultural humility, sexual harassment in academic medicine, work-life balance, micro-aggressions, and achieving equity. She was the first associate dean for Diversity Affairs from 2009-2014 and has been senior associate dean since 2014. She has led DGSOM efforts in equity, diversity and inclusion (EDI) and social justice, and her activities include leadership of the EDI committee; consultative liaison to department chairs on EDI issues and development of departmental diversity statistics; mentorship and guidance for faculty members; representation of DGSOM in campus and national EDI activities; local stewardship of the Faculty Forward Engagement Survey; major EDI innovations in undergraduate and graduate medical education; development and leadership of the junior faculty lecture series; oversight of faculty search committee training; service as DGSOM EDI representative to the campus and university; and development of DGSOM travel childcare awards.

"It is my belief these activities help the institution to grow, to become more aware of the critical importance of equity and inclusion," says Dr. Gordon. "The DGSOM Cultural North Star has three high-level goals: Do What's Right, Make Things Better, and Be Kind. My hope is that through the efforts in the DGSOM EDI Office, we have lived up to those goals."

Bartly J. Mondino, MD, director of the Stein Eye Institute and chair of the UCLA Department of Ophthalmology, notes, "Dr. Gordon's contributions to ophthalmology and UCLA are impossible to quantify. Through her dedication, she has inspired young clinicians and researchers, cared for our most vulnerable, and has been a champion for equality and inclusion. On behalf of her UCLA family, we thank Dr. Gordon for her service."

In Memoriam

Leland Michael Garrison, MD, (1927–2020) who served as clinical professor of ophthalmology and held other positions at the UCLA Stein Eye Institute for 36 years, died July 29, 2020. Learn about Dr. Garrison's life and legacy in the Spring 2021 issue of *EYE* magazine at: uclahealth.org/eye/eye-newsletter.

Roger William Sorenson, MD (1929–2020) was a volunteer faculty member at the UCLA Stein Eye Institute. In addition to serving as the 1978–79 president of the UCLA Stein Eye Institute Alumni Association, Dr. Sorenson received the Institute's S. Rodman Irvine Prize in 2000 in recognition of his excellence in professional actions and dedication to teaching future generations of ophthalmologists.



Philanthropy

The Generosity of Few is the Hope of Many

Gerald H. Oppenheimer 1922–2021

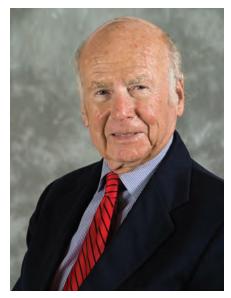
Executive, philanthropist, and community leader, Gerald H. "Jerry" Oppenheimer died peacefully surrounded by friends and family on May 4, 2021. He was 98.

For almost six decades, the UCLA Stein Eye Institute has been the recipient of Jerry's knowledge, skill, and philanthropic giving.

After the death of his stepfather, Dr. Jules Stein, and his mother, Doris Stein, Jerry took an active role in promoting their legacy at UCLA. He helped establish both the Doris Stein Eye Research Center and the Edie & Lew Wasserman Building, which transformed the Stein Eye Institute into a vision-science campus at UCLA. He was a hands-on member of the Stein Eye family, guiding the Jules and Doris Stein UCLA Support Group and serving as consultant to the Board of Trustees.

"Jerry was dedicated to advancing the goal of a lifetime of good eyesight for everyone. He was beloved by all and known for his cordial, friendly, and supportive personality. He brought out the best in everyone," says Bartly J. Mondino, MD, chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute. "In addition, Jerry's remarkable altruism and vision created unique programs that have jumpstarted hundreds of investigations."

As president of the Gerald Oppenheimer Family Foundation, Jerry assumed a leadership role in shaping and supporting the future of medical research at both UCLA and Stein Eye. The Stein Eye Center for the Prevention of Eye Disease, established in 2002 with a \$3.1 million pledge from the Foundation, is committed to the discovery of agents and methods to prevent ophthalmic disease. And more than 320 young scientists are advancing medicine with seed funding from the Stein/Oppenheimer Endowment Fund, which has provided over \$542.5 million in research grants.



Gerald H. "Jerry" Oppenheimer

"Jerry's focused support has helped ensure we remain at the forefront of scientific breakthroughs and maintain our worldwide preeminence in patient care, education, and research," says **Bradley R. Straatsma, MD, JD**, founding chair of the Department and founding director of the Institute.

Jerry's patronage also benefited the most vulnerable in our community. In 2007, the Gerald Oppenheimer Family Foundation Center for the Prevention of Eye Disease directed a significant contribution to the Indigent Children and Families Ophthalmic Care Program, which provides much-needed ophthalmic medical care to economically disadvantaged children and adults.

Jerry was born in Kansas City, Missouri, on July 11, 1922. He began his career at 18, founding an aviation components business that counted Lockheed Martin and North American Aviation among its clients. During the Korean War, Jerry piloted F-84 jets for the Strategic Air Command, flying 21 combat missions.

He found later success in the banking, automotive, and software technology industries.

Jerry began actively supporting non-profit organizations in the early 1980s. In addition to his advocacy on behalf of the Stein Eye Institute, pioneering research is being conducted through multi-year Oppenheimer grants to promote clinical and education efforts through the UCLA Medical Center in Complementary, Alternative and Integrative Medicine programs, and ongoing research in mind-body interactions is being accomplished at the Gail and Jerry Oppenheimer Center for the Neurobiology of Stress at UCLA and at the Center for East-West Medicine.

Jerry served on the UCLA Foundation Board of Trustees and Board of Governors. He was a Life Member of the Alumni Association and received the University Service Award in 1989. Among his honors, Jerry was the recipient of the Blind Children's Center Humanitarian Award; the California Institute for Cancer Research Lifetime Achievement Award; the Children's Bureau of Southern California Tradition of Caring Award; and the International Research Foundation for Children's Eyecare Vision of Light Award.

Jerry is survived by his wife Gail, his sons Bill and Mark, stepchildren Britt, Pablo, and Alyce, along with 10 grand-children, 13 great-grandchildren, and one great-great grandchild.

Our Gratitude

he work of UCLA Stein Eye Institute is made possible through the generosity of our donors, and in a year filled with challenges, we are especially grateful for your dedication. Despite the many setbacks of the COVID-19 pandemic, we were able to advance innovative research, exceptional clinical care, and important initiatives in community outreach and education—thanks in no small part to your ongoing support. We appreciate your partnership, and together we will continue to make significant progress in ophthalmology to benefit patients everywhere.

Donations July 1, 2020-June 30, 2021

Major Gifts \$25,000 and Above:

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Boban A. Joseph, MD

BrightFocus Foundation

Bruce Ford and Anne Smith Bundy

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J. Bronwyn Bateman, MD

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Joan A. Payden and William R. Payden

Knights Templar Eye Foundation, Inc.

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Rosalind W. Alcott Trust

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Scripps Clinic & Research Foundation

The Arthur & Patricia Price Foundation

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The Foundation Fighting Blindness

The Karl Kirchgessner Foundation

The Simms/Mann Family Foundation

The William & Margaret Fern Holmes

Family Foundation

Theo and Wendy Kolokotrones

VHL Alliance

Individuals Recognized with a Tribute Gift

IN HONOR OF:

Allan E. Kreiger, MD

Anthony J. Aldave, MD

Bartly J. Mondino, MD

Bradley R. Straatsma, MD, JD

Gary N. Holland, MD

Jean-Pierre Hubschman, MD

Jim McKenzie

John D. Bartlett, MD

Joseph Caprioli, MD

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Saba K. Al-Hashimi, MD

Stacy L. Pineles, MD

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Tara A. McCannel, MD, PhD

Victoria L. Steele, PhD

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IN MEMORY OF:

Dolores Zeiter

Dr. Leland Mike Garrison

Emanuel Green

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Paul Monash

Peggy L. Giambrocco

Roger P. Gray

Shirley Green

Susan Lieberman

Sy Ivar

Sylvia Jacobson

Stein Eye Institute Endowed Chairs Supporting Department of Ophthalmology Faculty

Receiving an endowed chair is the highest accolade for faculty—a tradition dating back to Sir Isaac Newton. It demonstrates UCLA's utmost respect for their thought leadership and entails financial support to the chair holder. Endowed chairs provide extra incentive to recruit and retain top faculty and are vital to the Department of Ophthalmology's continued preeminence.

Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology

Established in 2007 by Mr. and Mrs. Gottlieb as an administrative chair for the Division of Pediatric Ophthalmology and Strabismus in honor of the late Dr. Arthur L. Rosenbaum. The chair was originally named the Brindell and Milton Gottlieb Chair in Pediatric Ophthalmology.

Arthur L. Rosenbaum, MD 2008–June 2010

Joseph L. Demer, MD, PhD 2015–Present

Bert O. Levy Endowed Chair in Orbital and Ophthalmic Plastic Surgery

Established in 2019 as a permanentappointment chair by Mr. Bert Levy to support the teaching and research activities of an outstanding, academic orbital and ophthalmic plastic surgeon.

Robert Alan Goldberg, MD 2019–Present

Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology

Established in 1994 to honor founding director of the Stein Eye Institute, Bradley R. Straatsma, MD, JD.

Bartly J. Mondino, MD 2000–Present

Charles Kenneth Feldman Chair in Ophthalmology

Established in 1982 by various donors in memory of Charles Kenneth Feldman, an entertainment industry executive.

Robert D. Yee, MD Professor 1984–1987

Hilel Lewis, MD Scholar 1989–1993

Gabriel H. Travis, MD 2001–Present

David May II Chair in Ophthalmology

Established in 1998 as a termappointment chair by the family of Mr. David May II, a founding member of the Institute's Board of Trustees, to perpetuate, in memoriam, Mr. May's association with the Stein Eye Institute; after an additional pledge from the Wilbur May Foundation, it was converted to a permanent-appointment chair in 2009.

Gary N. Holland, MD 1999–2004

Joseph Caprioli, MD 2004–Present

Dolly Green Chair in Ophthalmology

Established in 1980 by Ms. Dorothy (Dolly) Green.

Dean Bok, PhD 1984–2013

Dolly Green Chair in Clinical Research

Established in 2021 to support an endowed chair in clinical research.

Dolly Green Chair in Vision Science

Established in 2021 to support an endowed chair in vision science.

Ernest G. Herman Chair in Ophthalmology

Established in 2008 by Mr. Ernest G. Herman to support a vision scientist or a clinician-investigator.

Xian-Jie Yang, PhD 2012–Present

Grace and Walter Lantz Endowed Chair in Ophthalmology

Established in 1991 as a termappointment chair by Mr. and Mrs. Lantz and, with an additional pledge, it was converted to a permanentappointment chair in 2010.

J. Bronwyn Bateman, MD Grace and Walter Lantz Scholar 1993–1995

Sherwin J. Isenberg, MD Grace and Walter Lantz Scholar 1993–1995 Professor 1996–2004

Joseph L. Demer, MD, PhD Professor 2004–2005

Harold and Pauline Price Chair in Ophthalmology

Established in 2000 by the Louis and Harold Price Foundation and, with an additional pledge, it was converted to a permanent-appointment chair in 2006.

Michael B. Gorin, MD, PhD 2006–Present

Hilel Lewis Family Chair in Ophthalmology

Established at UCLA in 2020 in collaboration with Dr. Hilel Lewis via Columbia University to support an outstanding clinician-investigator in retina.

Jack H. Skirball Chair in Ocular Inflammatory Diseases

Initiated in 2008 by The Skirball Foundation in honor of Mr. Jack H. Skirball's long-standing friendship with Dr. Jules Stein and Mr. Lew Wasserman.

Gary N. Holland, MD 2009–Present

Jerome and Joan Snyder Chair in Ophthalmology

Established in 2008 by Mr. and Mrs. Snyder to support the activities of a distinguished faculty member who directs the ophthalmology residency program, ensuring that UCLA's accredited program continues to offer rigorous and comprehensive instruction for individuals of the highest caliber.

Anthony C. Arnold, MD 2008-2017

Stacy L. Pineles, MD 2017-Present

Joan and Jerome Snyder Chair in Cornea Diseases

Established in 2013 by Mr. and Mrs. Snyder to support the activities of a distinguished faculty member in the area of corneal diseases and research.

Sophie X. Deng, MD, PhD 2019-Present

Joan and Jerome Snyder Chair in Vision Science

Established in 2018 by Mr. and Mrs. Snyder, this term chair will support the teaching and research activities of an excellent scientist and faculty member in the Vision-Science Division.

Jules Stein Chair in Ophthalmology

Established in 1982 as a memorial tribute to Dr. Jules Stein by his many friends, with the leadership of Mr. Samuel Goldwyn, Jr.

Wayne L. Hubbell, PhD 1983-Present

Karen and Frank Dabby Endowed Chair in Ophthalmology

Established in 2007 by Dr. and Mrs. Dabby as a term chair to support the activities of a distinguished faculty member in the area of orbital disease.

Robert Alan Goldberg, MD 2008-2018

Daniel B. Rootman, MD, MS 2019-Present

Karl Kirchgessner Foundation Chair in Vision Science

Established in 2001 as a termappointment chair by a colleague of Dr. Jules Stein to promote basicscience research initiatives.

Debora B. Farber, PhD, DPhhc 2001-2018

David S. Williams, PhD 2019-Present

Kolokotrones Chair in Ophthalmology

Established in 2004 by Wendy and Theo Kolokotrones to support the teaching and research of a cataract surgeon and scientist.

Kevin M. Miller, MD 2005-Present

Laraine and David Gerber Chair in Ophthalmology

Established in 1998 as a termappointment chair by Mr. and Mrs. Gerber and, with an additional pledge, converted to a permanentappointment chair in 2009.

Joseph L. Demer, MD, PhD 2000-2004

Sherwin J. Isenberg, MD 2004-2019

Leonard Apt Endowed Chair in Pediatric Ophthalmology

Established in 2004 by Professor Emeritus of Ophthalmology and Founding Director of the Division of Pediatric Ophthalmology and Strabismus, Dr. Leonard Apt, with a gift from the trust of Frederic G. Rappaport, Dr. Apt's nephew.

Joseph L. Demer, MD, PhD 2005-2015

Mary Oakley Foundation Chair in Neurodegenerative Diseases

Established in 2013 by The Mary Oakley Foundation to support neurodegenerative diseases.

Anthony C. Arnold, MD 2017-Present

Olive and Anga Lundgren **Endowed Chair**

Established in 2020 by faculty alumna Dr. J. Bronwyn Bateman in the memory of her mother, Olive Anga Lundgren, MD, and grandmother, Anga Lundgren. This administrative chair supports the Director of Consultations overseeing inpatient and emergency care.

Oppenheimer Brothers Chair

Established in 2002 as a term chair by the Oppenheimer Brothers Foundation.

Joseph Horwitz, PhD 2003-2017

Suraj P. Bhat, PhD 2019-Present

Shuler Family Endowed Chair in Comprehensive Ophthalmology

Established in 2020 by Dr. and Mrs. James D. Shuler as an administrative chair for the Comprehensive Ophthalmology Division Chief to further research, education, and clinical care programs.

Rory Smith, MD, and Family **Endowed Chair**

Established in 2019 by faculty alumna Dr. J. Bronwyn Bateman in honor of her late husband, Dr. Roderick "Rory" Smith.

Smotrich Family Optometric Clinician-Scientist Chair

Established in 2016 to support an optometric clinician-scientist at the UCLA Stein Eye Institute and will fund the appointee's education and research programs.

Ava K. Bittner, OD, PhD 2019-Present

The Ahmanson Chair in Ophthalmology

Established in 2006 by The Ahmanson Foundation as an administrative chair for the Retina Division Chief to further research, education, and clinical care programs.

Steven D. Schwartz, MD 2007-Present

The Fran and Ray Stark Foundation Chair in Ophthalmology

Established in 1992 as a termappointment chair by the Fran and Ray Stark Foundation, and with an additional commitment, it was converted to a permanent-appointment chair in 2009.

Joseph Caprioli, MD 1997–2004

Anne L. Coleman, MD, PhD 2004–Present

The Wasserman Professor of Ophthalmology

Established in 1977 by Edie and Lew Wasserman to honor Dr. Jules Stein.

Manfred Spitznas, MD 1979–1981

Bartly J. Mondino, MD Scholar 1984–1988 Professor 1988–2000

Ben J. Glasgow, MD 2003–Present

Vernon O. Underwood Family Chair in Ophthalmology

Established in 1995 as a termappointment chair by Mrs. Adrienne Underwood Pingree in memory of her late husband, Mr. Vernon O. Underwood.

John R. Heckenlively, MD 1997–2004

Gary N. Holland, MD 2004–2009

Lynn K. Gordon, MD, PhD 2012–2020

Walton Li Chair in Cornea and Uveitis

Established in 2013 by Walton W. Li, MD, as an administrative chair for the Cornea and Uveitis Division to further research and teaching activities.

Anthony J. Aldave, MD 2014–Present

Doheny Eye Institute Endowed Chairs Supporting Department of Ophthalmology Faculty

A. Ray Irvine, Jr., MD, Chair in Clinical Ophthalmology

John A. Irvine, MD 2014–Present

Charles Stewart and Hildegard Warren Endowed Research Chair

Vikas Chopra, MD 2017–Present

Flora L. Thornton Endowed Chair in Vision Research

Alfredo A. Sadun, MD, PhD 2014—Present

Gavin S. Herbert Endowed Chair for Macular Degeneration

Michael S. Ip, MD 2019–Present

Mary D. Allen Chair in Vision Research

Deming Sun, MD 2015–Present

Rupert and Gertrude I. Steiger Vision Research Chair

Brian A. Francis, MD, MS 2015–Present

Stephen J. Ryan-Arnold and Mabel Beckman Foundation Endowed Presidential Chair

SriniVas R. Sadda, MD 2015–Present

Stein Eye Institute Fellowship Funds and Endowments

Abe Meyer Memorial Fellowship Fund

Established in 1969 by various donors to support clinical fellows at the Institute.

Mohamed Sharaby, MD 2020–2021

Adelaide Stein Miller Research Fellowship

Established in 1977 by Mr. Charles Miller as a tribute to his wife, Adelaide Stein Miller. Dr. Jules Stein's sister.

Jeffrey Eng, MD 2020–2021

Patrick J. Pham, MD 2020–2021

Aramont Fellowship Fund

Established in 2020 by the Aramont Charitable Foundation to enable a domestic fellow in the Division of Orbital and Ophthalmic Plastic Surgery to pursue advanced training under the mentorship of Dr. Robert Alan Goldberg.

Liza M. Cohen, MD 2020–2021

Audrey and Jack Skirball Ocular Inflammatory Disease Fellowship

Established in 2011 by The Skirball Foundation to support the training of fellows specializing in ocular inflammatory disease.

Judy L. Chen, MD 2020–2021

Bert Levy Research Fellowship Fund

Established in 1995 by Mr. Bert Levy to enhance the educational opportunities of vision-science scholars and advance research in neuro-ophthalmology.

Cooperman Fellowship Fund

Established in 1988 by the Coopermans to support eye research and education, with emphasis on clinical ophthalmology.

Alice Wong, DO 2020–2021

David and Randi Fett Orbital and Ophthalmic Plastic Surgery Fellowship Endowment

Established in 2013 by Dr. David R. Fett and Ms. Randi Levine to support fellows in the Orbital and Ophthalmic Plastic Surgery Division.

Justin Karlin, MD, MS 2020–2021

Kelsey A. Roelofs, MD 2020–2021

David May II Fellowship Fund

Established in 1992 by the family of Mr. David May II to support advanced study and research in ophthalmology and vision science.

Tieu Vy Nguyen, MD 2020–2021

Adam J. Weiner, MD 2020–2021

Dr. Jack Rubin Memorial Fellowship

Established in 1987 by the family of Dr. Jack Rubin to support postdoctoral fellows.

Elsa and Louis Kelton Fellowship

Endowed by the Keltons in 1982 to support postdoctoral research and training.

Kirk Hou, MD, PhD 2020–2021

Frances Howard Goldwyn Fellowship

Established in 1977 by Mr. Samuel Goldwyn, Jr., with gifts from Mrs. Goldwyn's estate and Dr. and Mrs. Jules Stein.

Arpine Barsegian, MD 2020–2021

Alexander Juhn, MD 2020–2021

Frederic G. Rappaport Endowed Fellowship in Retina/Oncology

Established in 2004 by Mrs. Jeanne A. Rappaport as a memorial to her son Frederic.

Jerome Comet Klein, MD, Fellowship and Lecture Fund

Established in 2007 by the Irving & Estelle Levy Foundation to provide fellowship and lecture support in the areas of orbital and ophthalmic plastic surgery.

Kelsey A. Roelofs, MD 2020–2021

John and Theiline McCone Fellowship

Established in 1989 by the McCones to support and enhance education programs and fellowship training in macular disease.

Greg Budoff, MD 2020–2021

Alexander B. Dillon, MD, MBA 2020–2021

Jules Stein Research Fellowship

Established in 1982 by various donors to honor the memory of Charles Kenneth Feldman.

Arpine Barsegian, MD 2020–2021

Alice Wong, DO 2020–2021

Klara Spinks Fleming Fellowship Fund

Established in 1985 by Klara Spinks Fleming to support cataract research.

Leonard Apt Endowed Fellowship in Pediatric Ophthalmology

Established in 2002 by founding chief of the Pediatric Ophthalmology and Strabismus Division, Leonard Apt, MD, to support outstanding clinical fellows in the field of pediatric ophthalmology and strabismus.

Leonard Apt, MD, Pediatric Fellowship Fund

Established in 2015 by the trust of Leonard Apt, MD, founding chief of the Pediatric Ophthalmology and Strabismus Division, to support pediatric ophthalmology fellowships.

Harshad P. Patel, MD 2020–2021

Rosalind W. Alcott Fellowship

Established in 1978 by the Rosalind W. Alcott Charitable Remainder Trust for the training of outstanding postdoctoral fellows.

Daniel Kornberg, MD 2020–2021

Sanford and Erna Schulhofer Fellowship Fund

Established in 1986 by Mr. Sanford Schulhofer to support postdoctoral research and training in vision science.

Patrick J. Pham, MD 2020–2021

The Harold and Pauline Price Fellowship

Established in 1987 by the Louis and Harold Price Foundation to support research and education in ophthalmology and vision care.

Jeffrey Eng, MD 2020–2021

Thelma and William Brand Director's Fund

Established in 2004 with a trust from Mr. William F. Brand to benefit worthy students at the Stein Eye Institute.

The Mae and Lee Sherman Fellowship Fund

Established in 1981 by the Sherman family to support postdoctoral fellows.

Kelsey A. Roelofs, MD 2020–2021

Wilbur D. May Fellowship

Established in 2013 by the May family as a tribute to Mr. Wilbur D. May, the beloved uncle of Mr. David May II.

Judy L. Chen, MD 2020–2021

Endowments for Research, Education, and Patient Care

Albert Sarnoff Endowed Cataract Fund

Amalia Simon Roth Endowment

Anne H. West Estate Fund

Arna Saphier Macular Degeneration

Fund

Arthur Spitzer Fund

Audrey Hayden-Gradle Trust

Barbara P. Taylor Fund

Bradley R. Straatsma Research Fund

Chesley Jack Mills Trust

Edward and Hannah Carter Fund

Elsa and Louis Kelton Scholarship

Elsie B. Ballantyne Regents Fund

Elsie B. Ballantyne UCLA Foundation

Fund

Emilia B. Gillespie Jules Stein

Eye Institute Fund

Emily G. Plumb Estate and Trust

Endowment for Children with Uveitis

Esther Shandler Research Fund

Gerald Oppenheimer Family Foundation Center for the Prevention of Eye Disease Endowment Fund

Harold B. and Bernice L. Belfer Fund

Henry I. Baylis, MD, Endowed Fund in Orbital and Ophthalmic Plastic Surgery

Herb Ritts, Jr., Memorial Vision Fund

Herman King Fund

Hintze Glaucoma Research Fund

J. Richard Armstrong and Ardis Armstrong Fund

Jerome T. Pearlman, MD, Fund

John and Theiline McCone Macular Disease Research Fund

JSEI Maintenance Fund

Katherine L. Gardner Research Fund

Levin Family Contact Lens Endowment Fund Louis and Annette Kaufman Fund

Maggi Kelly Vision Fund

Marie and Jerry Hornstein Family Endowed Macular Degeneration Research Fund

rescurent una

Michael Huffington Ophthalmology

Scholarship Fund

Pat and Joe Yzurdiaga Endowed Cataract Fund

Patricia and Joseph Yzurdiaga Endowed Vision Science Research Fund

Patricia Pearl Morrison Research Fund

Paul J. Vicari Endowed Cataract Research Fund

Raymond and Ruth Stotter
Vision Science Research Fund

Richard B. Shapiro Vision Fund

Sara Kolb Memorial Fund

Stella F. Joseph Fund

The Annenberg Foundation Fund

The Karl Kirchgessner Foundation Ophthalmology Endowment Fund

The Leonard Apt, MD, Pediatric EyeSTAR Residency Training Fund

The Leonard Apt, MD, Pediatric Ophthalmology Fund

The Skirball Foundation Fund

Thelma and William Brand Director's Fund for the Jules Stein Eye Institute

UCLA Center for Eye Epidemiology

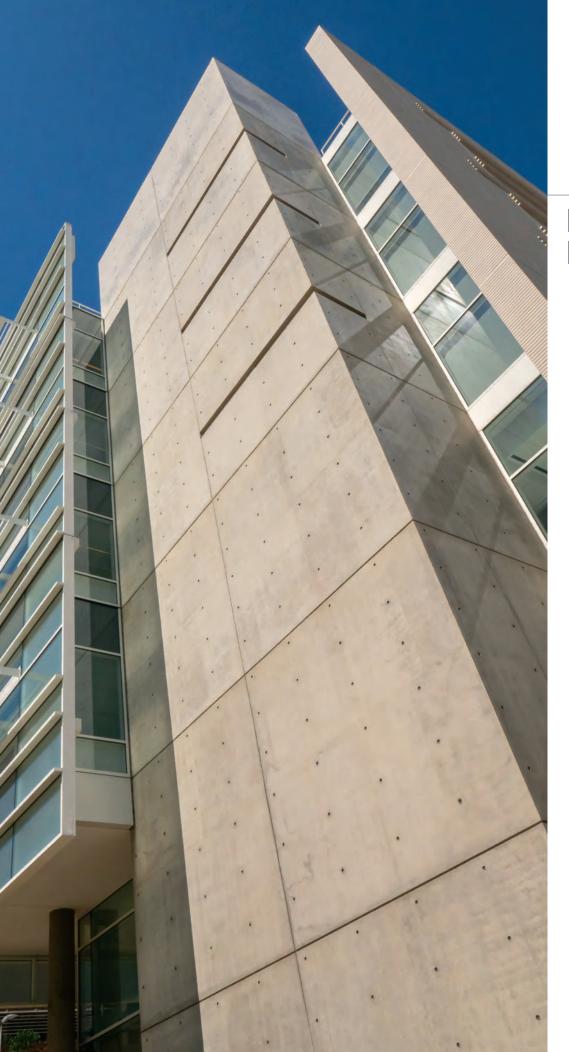
Uncle Claude Fund

Virginia Burns Oppenheimer Endowment Fund

Wickham Retina Research Fund

William R. Payden Fund for Glaucoma Research

William, Richard, & Roger Meyer Fund



Eye Health Programs

Patient Care Services

Committed to advancing eye health, UCLA Department of Ophthalmology board-certified faculty provide services ranging from routine eye examinations to complex sight-saving procedures.

Designated as a tertiary referral center, doctors and hospitals throughout the United States, as well as Mexico, direct patients with the most challenging ophthalmic issues to the Stein Eye Institute.

The Stein Eye Institute and its affiliation partner, the Doheny Eye Institute, are ranked among the top in the nation for ophthalmology. Patients and referring physicians alike trust UCLA Department of Ophthalmology faculty to provide the highest level of care across every subspecialty. Premier services are available at the Stein Eye Institute vision-science campus in Westwood, as well as at the UCLA Stein Eye Centers and Doheny Eye Centers UCLA locations across Los Angeles and south to Orange County.



UCLA Department of Ophthalmology

Los Angeles and Beyond

Learn more about our LOCATIONS, PROVIDERS, and SERVICES at:

www.uclahealth.org/eye/our-locations.

UCLA Stein Eye Institute

The Stein Eye Institute vision-science campus in Westwood is home to state-of-the-art clinics and laboratories, as well as the Stein Eye Institute's Outpatient Surgical Center.

Direct consultation and treatment, including emerging therapies, is available through the **Ophthalmology Faculty Consultation Service**. Faculty members have extensive and advanced training in ophthalmic subspecialties and are a valuable resource for referring physicians and patients with complex eye problems. In addition, wide-ranging and subspecialty eye care in all medical and surgical areas of ophthalmology is offered through the **Comprehensive Ophthalmology Division**, which is staffed by members of the UCLA Medical Group.

The Institute's Outpatient Surgical Center, housed in the award-winning Edie & Lew Wasserman Building, is equipped with advanced tools for precision surgery and sets the standard for excellence in patient care and medical progress. Ophthalmic surgery of every kind—from cataract extraction and laser vision-correction surgeries to removal of ocular tumors—is performed. Faculty members and skilled medical specialists, including subspecialty fellows, medical residents, anesthesiologists, nurses, and technicians, ensure that each patient receives the highest quality preoperative, intraoperative, and postoperative care possible.

The Ophthalmology Inpatient Consultation Service, operating 24 hours a day through the Ronald Reagan UCLA Medical Center and UCLA Medical Center Santa Monica, provides ophthalmic consultation and treatment to pediatric and adult patients who are admitted to the medical centers for inpatient care. The consultation team consists of physician-residents at the Stein Eye Institute, with subspecialty coverage provided by UCLA Department of Ophthalmology faculty.

100 Stein Plaza, UCLA Los Angeles, CA 90095 Referral Service: (310) 825-5000 Emergency Service: (310) 825-3090 After-Hours Emergency Service: (310) 825-2111

UCLA Stein Eye Centers

The UCLA Stein Eye Centers provide excellence in clinical care combined with neighborhood convenience. At each Center, UCLA Department of Ophthalmology faculty provide subspecialty care, surgical services, and diagnostic testing.

Stein Eye Center-Calabasas

The Stein Eye Center–Calabasas provides patients in the San Fernando Valley and nearby communities with subspecialty care, including cataract and LASIK surgery, diabetic retinopathy, glaucoma, macular degeneration, and functional and cosmetic oculoplastics. Visual field testing, corneal mapping (corneal topography), intraocular lens measurement, fluorescein angiography, spectral domain optical coherence tomography, and additional diagnostic retinal imaging techniques are available.

The Stein Eye Center–Calabasas has free on-site parking and is located in the UCLA Health Building immediately adjacent to the 101 Freeway, between the Las Virgenes Road and Lost Hills Road exits.

26585 W. Agoura Rd., Suite 330 Calabasas, CA 91302 Telephone: (310) 825-5000 Fax: (310) 825-9246

Stein Eye Center-Santa Monica

The Stein Eve Center-Santa Monica offers the comprehensive and subspecialty eye care of the UCLA Stein Eye Institute in an easily accessible Westside locale. UCLA faculty provide evaluation and treatment for a range of subspecialties, including eyelid and other oculoplastic surgery, pediatric eye care, and neuro-ophthalmology. A wide range of ocular assessment is available, including visual field testing, corneal mapping (corneal topography), intraocular lens measurement, fluorescein angiography, spectral domain optical coherence tomography, and other diagnostic retinal imaging techniques.

In addition to on-site parking, the Stein Eye Center—Santa Monica has an in-house optical shop with a comprehensive selection of eyeglasses and contact lenses.

1807 Wilshire Blvd., Suite 203 Santa Monica, CA 90403 Telephone: (310) 829-0160 Fax: (310) 829-0170



Doheny Eye Centers UCLA

The Doheny Eye Centers UCLA support neighborhoods northeast of downtown Los Angeles and south to Orange County. UCLA Department of Ophthalmology faculty provide the finest clinical care, surgical services, diagnostic testing, and treatment available.

Doheny Eye Center UCLA-Arcadia

The Doheny Eye Center UCLA—Arcadia expands the Department's reach by caring for patients in the San Gabriel Valley. The renovated office includes 12 exam rooms, dedicated diagnostic equipment, and attractive patient areas. The Center provides comprehensive ophthalmology, and a broad range of subspecialty services, including complex cataracts and secondary intraocular lenses, cornea and external diseases, glaucoma, neuro-ophthalmic disorders, pediatric eye disease, as well as vitreoretinal diseases and disorders.

The Doheny Eye Center–Arcadia is easily accessible from two freeways and provides free, on-site parking.

622 W. Duarte Rd., Suite 101 Arcadia, CA 91007 Telephone: (626) 254-9010 Fax: (626) 254-9019

Doheny Eye Center UCLA-Orange County

The Doheny Eye Center UCLA—Orange County broadens the scope of the UCLA Department of Ophthalmology south to Orange County. The Center is located in the Orange Coast Memorial Medical Center, and it offers comprehensive ophthalmology and extensive subspecialty services, including complex cataracts and secondary intraocular lenses, cornea and external diseases, glaucoma, neuro-ophthalmic disorders, pediatric eye disease, as well as vitreoretinal diseases and disorders.

Situated just south of the 210 freeway, the Doheny Eye Center UCLA— Orange County includes 12 exam rooms and dedicated diagnostic equipment.

Orange Coast Memorial Medical Center 18111 Brookhurst St., Suite 6400 Fountain Valley, CA 92708 Telephone: (714) 963-1444 Fax: (714) 963-1234



UCLA Department of Ophthalmology Summary of Patient Care Statistics

	2019–2020	2020–2021
FACULTY CONSULTATION SERVICE Patient visits	140,963	153,602
INPATIENT CONSULTATION SERVICE Patient evaluations	581	559
CLINICAL LABORATORIES Procedures	84,837	96,674
SURGERY SERVICES ¹		
Number of procedures	16,417	23,036
Intravitreal Injections	12,633	14,207
UCLA MOBILE EYE CLINIC ²		
Number of patients	7,930	1,055
Ocular abnormalities	29%	1%
Number of trips	308	122

¹Includes lasers

²Due to COVID-19, UCLA Mobile Eye Clinic numbers in the 2020–2021 academic year were down.

Doheny Eye Center UCLA-Pasadena

The Doheny Eye Center UCLA-Pasadena is the primary hub of the Doheny Eye Centers UCLA. Located on the second floor of the Huntington Pavilion, the Center provides expanded vision care services and clinics devoted to comprehensive ophthalmology, cornea and external diseases, glaucoma, neuro-ophthalmology, oculoplastics, ophthalmic oncology, pediatric ophthalmology and strabismus, as well as retinal and macular diseases. Each subspecialty clinic has dedicated, state-ofthe-art diagnostic laser suites, as well as in-office procedure rooms. Complex procedures are performed at the Huntington Pavilion Surgical Suites, located on the building's third floor.

The Huntington Pavilion is home to a wide variety of medical practices, which provides substantial convenience. Patients can see all their doctors and have all their medical services in one location, and physicians can easily refer patients who require specialized eye care.

Huntington Pavilion 625 S. Fair Oaks Blvd., 2nd Floor Pasadena, CA 91105 Telephone: (626) 817-4747 Fax: (626) 817-4748

Centers and Laboratories

Research and Treatment Centers

The Research and Treatment Centers provide subspecialty care from faculty physicians who are actively involved in related research, enabling emerging and experimental treatment options to be developed for a gamut of eye disorders. In addition to comprehensive treatment, the centers provide both patients and physicians with expert diagnostic and consultation services for diseases that are difficult to identify and treat. Ophthalmology faculty work closely with other specialists, both within the Stein Eye Institute and in other UCLA clinical departments, to create a multidisciplinary team customized for each patient's unique medical needs.

- Aesthetic Center
- Center for Community Outreach and Policy
 - UCLA Center for Eye Epidemiology
 - UCLA Mobile Eye Clinic
- Center to Prevent Childhood Blindness
- Center for Regenerative Medicine in Ophthalmology
- ► Clinical Research Center
- Contact Lens Center
- Diabetic Eye Disease and Retinal Vascular Center
- Eye Trauma and Emergency Center
- Gerald Oppenheimer Family Foundation Center for the Prevention of Eye Disease
- ► Glaucoma Center for Excellence in Care and Research
- Macular Disease Center
- Ocular Inflammatory Disease Center
- Ophthalmic Oncology Center
- Optic Neuropathy Center
- Orbital Disease Center
- UCLA Laser Refractive Center
- Vision Genetics Center
- Vision Proteomics Center
- Vision Rehabilitation Center

Diagnostic Services

Ophthalmology diagnostic services provide testing that offers precise measurements, photographs, and quantitative studies of the eye and the visual system. Diagnostic testing increases the accuracy of diagnosis and further augments the effectiveness of disease management. Our diagnostic services are available to eye care physicians in the community.

- Anterior Segment Diagnostic Laboratory
- Corneal Diagnostics
- Glaucoma Imaging Laboratory
- Medical Photography/Ultrasound
- Ocular Motility Clinical and Basic Science Laboratory
- Visual Field Laboratory
- Visual Physiology Diagnostic Laboratory

Research Laboratories

The Stein Eye Institute has specially equipped laboratories to support vision-science investigations. Laboratory-based research, also referred to as basic vision-science research, forms the foundation for the clinical research, education, and patient care that are the visible hallmarks of the UCLA Stein Eye Institute. Organized around the interests of the research faculty, these distinct laboratories offer unique opportunities for students, physicians, and fellows to become involved in nationally and internationally renowned scientific study.

- Advanced Robotic Eye Surgery
- Biology and Genetics of Retinal Disease
- Cornea Biology Laboratory
- Cornea Genetics Laboratory
- Developmental Neurobiology Laboratory
- ► Glaucoma Advanced Imaging Laboratory
- Lens Biophysics Laboratory
- Molecular Biology of Retinal Ganglion Cells Laboratory
- Ophthalmic Biophysical Chemistry Laboratory
- Ophthalmic Pathology Laboratory
- Photoreceptor Biochemistry Laboratory
- Photoreceptor/RPE Cell Biology
- Retina Biochemistry and Clinical Disease Modeling Laboratory
- Retinal Biochemistry Laboratory
- Retinal Function and Dysfunction Laboratory
- Retinal Neurophysiology Laboratory
- Therapeutic Development in Ophthalmology Laboratory
- Vision Molecular Biology Laboratory
- Visual Physiology Laboratory

Find out more about our RESEARCH LABORATORIES at:

www.uclahealth.org/eye/research-laboratories.

Training Programs

The UCLA Department of Ophthalmology provides comprehensive training in ophthalmology and vision science to medical students and residents, as well as to clinical and research fellows. Training programs encompass the gamut of ophthalmic and vision-science education, incorporating a full range of subjects in the study of the eye. Residents and clinical fellows serve a large patient population with diverse vision problems that offer innumerable training opportunities. In addition, a wide range of research laboratories ensures a broad choice of vision-science projects for all trainees. Predoctoral and postdoctoral research fellows benefit from the wealth of new and unfolding research generated by UCLA Department of Ophthalmology vision scientists.

Medical Students

The UCLA Department of Ophthalmology extends instruction to UCLA medical students in their second, third, and fourth years of instruction through the UCLA Medical Student Program. With lectures, small group discussions, and clinical experience, all students have numerous training sessions from which to gain knowledge about the eye and eye diseases, and they are taught eye examination skills that should be known by all physicians, regardless of their specialties. Students who are interested in ophthalmology as a career have additional learning opportunities in elective courses.

Medical Student Research Program in Ophthalmology

The UCLA Medical Student Research Program provides select medical students with a year-long opportunity to participate in laboratory or clinical research in the field of ophthalmology. The goal of the program is to encourage medical students to pursue careers in academic ophthalmology.

Residents

The UCLA Department of Ophthalmology Residency Program is ranked one of the top in the country and covers the full breadth of ophthalmology training from general ophthalmology to ophthalmic subspecialties. The accredited three-year residency program trains 24 residents with eight new residents beginning the program each July.

Training incorporates the resources of the UCLA Stein Eye Institute, Harbor-UCLA Medical Center, Olive View-UCLA Medical Center, and the Veterans Affairs Greater Los Angeles Healthcare System at West Los Angeles and Sepulveda. Through their clinical rotations, every resident has exposure to each medical center and gains clinical experience with a broad range of ophthalmic problems and patient populations. Certification by the American Board of Ophthalmology is a natural objective of the program.

EveMBA: Innovation in **Medical Education**

Recognizing that future leaders in ophthalmology will need the financial, management, and measurement skills that are at the core of an MBA curriculum, the Stein Eye Institute created a national first for medical education with EyeMBA—a master's of business administration degree that is earned in tandem with an ophthalmology residency.

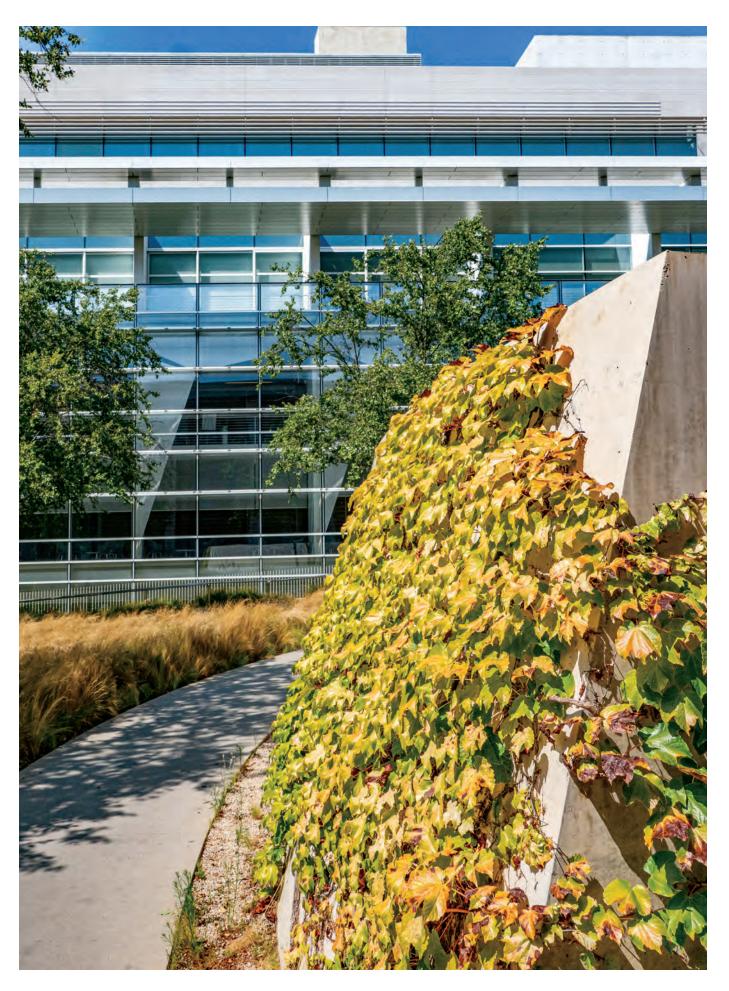
The only joint program of its kind, the Stein Eye Institute developed EyeMBA with the David Geffen School of Medicine at UCLA and the UCLA Anderson School of Management. Residents in the EyeMBA program gain skills that are broadly applicable to ophthalmologic leadership in academia, translational research, health system management, health care delivery, and the biomedical industry.

EyeSTAR: Combining Basic Science Research with Clinical Practice

For physicians interested in academic careers and professional leadership as clinician-scientists, the Stein Eye Institute offers the Ophthalmology Specialty Training and Advanced Research Program, referred to as EyeSTAR, which offers vision-science training combined with an ophthalmology residency. Appointees complete a residency program leading to certification in ophthalmology, as well as laboratory research experience leading to a doctorate, or postdoctoral training in the event that the trainee already has a doctorate. EyeSTAR trainees work under the guidance of a faculty advisory panel representing the clinical and research interests of each trainee.

In 2021, the UCLA Department of Ophthalmology introduced a new EyeSTAR track combining ophthalmology residency training with medical genetics certification. This opportunity provides ophthalmology residency training in tandem with training by the UCLA Intercampus Medical Genetics Training Program and leads to Clinical Genetics and Genomics Certification by the American Board of Medical Genetics and Genomics.

EyeSTAR is recognized by the National Eye Institute and the Association of University Professors of Ophthalmology as a model training program for clinician-scientists in ophthalmology.



Fellows

The UCLA Department of Ophthalmology offers well-qualified persons the opportunity to receive fellowship training in vision-science research or specific areas of clinical ophthalmology.

Vision Science Fellowship Training

Vision science fellowship training is laboratory based and offers both predoctoral and postdoctoral opportunities to trainees in specific areas of vision science that encompass a wide range of topics. Trainees work under the supervision of UCLA Department of Ophthalmology faculty members who are engaged in basic-science research and have active laboratories. The predoctoral or postdoctoral trainee and his/her faculty mentor develop the scope and nature of the training program.

An integrated program is also offered under the auspices of a National Eye Institute Vision Science Training Grant for predoctoral and postdoctoral fellows. The grant provides trainees with coordinated and organized exposure to a wide range of techniques, giving each fellow the broadest possible background in ophthalmology and the basic sciences.

Clinical Fellowship Training

Following successful completion of the residency program, clinical fellowship training combines outpatient, inpatient, and surgical experience in an ophthalmic subspecialty. The fellow assumes increasing responsibility for patient care under the supervision of faculty members responsible for the program. In addition to receiving training from faculty, the fellow instructs medical students and residents. Research is an important aspect of specialty training and a major prerequisite for assimilating future developments in ophthalmology. Fellows are expected to undertake independent investigation or to participate in ongoing research projects in a field related to their specialty.

The UCLA Department of Ophthalmology offers clinical fellowships in the following subspecialty areas:

- Cornea and External Ocular
 Diseases and Refractive Surgery
 (UCLA Stein Eye Institute)
- Cornea and External Ocular Diseases (Doheny Eye Centers UCLA)
- ▶ Glaucoma
- Medical Retina
- Neuro-Ophthalmology
- Ophthalmic Pathology
- Orbital and Ophthalmic Plastic Surgery
- Pediatric Ophthalmology and Strabismus
- Uveitis and Inflammatory Eve Disease
- Vitreoretinal Diseases and Surgery

International Fellowship Training

To promote and encourage research and education interaction with ophthalmology institutions throughout the world, the Stein Eye Institute offers an International Ophthalmology Fellowship and Exchange Program consisting of one-year to two-year fellowships under the supervision of specific Institute faculty. Candidates for these fellowships are nominated by prestigious institutions outside the United States and often hold academic positions within their own countries. Fellows participate in the clinical and research activities of ophthalmic subspecialties according to their training needs.

Find detailed information about our TRAINING PROGRAMS at: https://www.uclahealth.org/ eye/training-programs.



Faculty and Colleagues

UCLA Department of Ophthalmology

Academic Divisions at Stein Eye Institute (SEI) and Doheny Eye Centers UCLA (DEC)

CATARACT AND REFRACTIVE SURGERY

John D. Bartlett, MD Shawn Lin, MD Kenneth L. Lu, MD Kevin M. Miller, MD, Chief SEI Mitra Nejad, MD

Optometrists

Tony Chan, OD Carolyn Duong, OD Amanda P. Havens, OD Linda Hwang, OD Mark Landig, OD

COMPREHENSIVE OPHTHALMOLOGY

Gavin G. Bahadur, MD
John D. Bartlett, MD, Chief SEI
Rachel Feit-Leichman, MD
Tania Onclinx, MD
Susan S. Ransome, MD
Meryl L. Shapiro-Tuchin, MD
Ronald J. Smith, MD
Shoaib Ugradar, MD
Victoria Yom, MD

Optometrists

Michael Baker, OD Benjamin Graham, OD Vivian Shibayama, OD

CORNEA AND UVEITIS

Anthony J. Aldave, MD, Chief SEI
Saba Al-Hashimi, MD
Benjamin B. Bert, MD
Sophie X. Deng, MD, PhD
Gary N. Holland, MD
Hugo Y. Hsu, MD, Chief DEC
John A. Irvine, MD
Batool Jafri, MD
Bartly J. Mondino, MD, Department Chair
Edmund Tsui, MD

Find out more about our ACADEMIC DIVISIONS and FACULTY at:

www.uclahealth.org/eye/academic-divisions.

GLAUCOMA

Joseph Caprioli, MD, Chief SEI
Vikas Chopra, MD
Anne L. Coleman, MD, PhD
Brian A. Francis, MD, Chief DEC
JoAnn A. Giaconi, MD
Alex A. Huang, MD, PhD
Simon K. Law, MD, PharmD
Kouros Nouri-Mahdavi, MD
Victoria Tseng, MD, PhD

NEURO-OPHTHALMOLOGY

Anthony C. Arnold, MD, Chief SEI Laura Bonelli, MD Lynn K. Gordon, MD, PhD Stacy L. Pineles, MD Peter A. Quiros, MD Alfredo A. Sadun, MD, PhD, Chief DEC

OPHTHALMIC ONCOLOGY

Tara McCannell, MD, PhD

OPHTHALMIC PATHOLOGY

Ben J. Glasgow, MD, Chief SEI

ORBITAL AND OPHTHALMIC PLASTIC SURGERY

Cynthia A. Boxrud, MD Robert Alan Goldberg, MD, Chief SEI Justin Karlin, MD, MS Daniel B. Rootman, MD, MS

PEDIATRIC OPHTHALMOLOGY AND STRABISMUS

Joseph L. Demer, MD, PhD, Chief SEI Simon Fung, MD Monica R. Khitri, MD Stacy L. Pineles, MD Soh Youn Suh, MD Laura Syniuta, MD Federico G. Velez, MD

Optometrist

Laura Robbins, OD

RETINA

Gad Heilweil, MD
Hamid Hosseini, MD
Jean-Pierre Hubschman, MD
Michael S. Ip, MD, Chief DEC
Allan E. Kreiger, MD
Tara A. McCannel, MD, PhD
Pradeep S. Prasad, MD, MBA
Steven D. Schwartz, MD, Chief SEI
Irena Tsui, MD

Optometrists

Melissa W. Chun, OD Jennie Kageyama, OD

RETINAL DISEASES AND OPHTHALMIC GENETICS

Michael B. Gorin, MD, PhD, Chief SEI Phillip Le, MD, PhD Colin A. McCannel, MD Steven Nusinowitz, PhD SriniVas R. Sadda, MD David Sarraf, MD

VISION SCIENCE

Yuhua Zhang, PhD

Jie Zheng, PhD

Steven A. Barnes, PhD Suraj P. Bhat, PhD Nicholas C. Brecha, PhD Gordon L. Fain, PhD Debora B. Farber, PhD, DPhhc Kaustabh Ghosh, PhD Ben J. Glasgow, MD Joseph Horwitz, PhD Wayne L. Hubbell, PhD Steven Nusinowitz, PhD Yirong Peng, PhD Natik Piri, PhD Roxana A. Radu, MD Alapakkam P. Sampath, PhD, Chief SEI Deming Sun, MD Hui Sun, PhD Gabriel H. Travis, MD David S. Williams, PhD Xian-Jie Yang, PhD



Bartly J. Mondino, MD

Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology

Distinguished Professor of Ophthalmology

Chair, UCLA Department of Ophthalmology

Director, Stein Eye Institute

Affiliation Chair, Doheny Eye Institute

Board of Directors, Stein Eye Institute

Board of Directors (Observer), Doheny Eye Institute

Board of Directors, National Alliance for Eye and Vision Research/ Alliance for Eye and Vision Research

Member, UCLA Brain Research Institute

Member, Medical Advisory Board, Braille Institute

Dr. Mondino was named director of the Stein Eye Institute and chair of the UCLA Department of Ophthalmology in 1994, the culmination of a career in research and clinical care in cornea and infectious eye diseases.

As director and chair, Dr. Mondino has expanded the Stein Eye Institute's pillar programs; increased faculty support through the creation of endowed chairs; forged a historic affiliation with the Doheny Eye Institute; and broadened access to eye care with the opening of Stein and Doheny Eye Center UCLA locations across the Southland.

Through development and completion of the Edie & Lew Wasserman Building in 2014, redesign of Stein Plaza in 2015, as well as seismic upgrade and renovation of the Jules Stein Building in 2017, Dr. Mondino transformed the Stein Eye Institute into a vision-science campus at UCLA, creating a focal point for patient care, vision research, education, and community outreach at home and abroad.

FACULTY UCLA STEIN EYE INSTITUTE



Anthony J. Aldave, MD

Walton Li Chair in Cornea and Uveitis
Professor of Ophthalmology
Chief of the Cornea and Uveitis Division

Discovering the Genetic Basis of the Corneal Dystrophies

Dr. Aldave's clinical specialties are cornea and external disease. His laboratory research focuses on the molecular genetics of the corneal dystrophies, a group of inherited disorders that affect corneal clarity and constitute one of the primary indications for corneal transplantation.

Dr. Aldave provides clinical care at the Stein Eye Institute in Westwood.



Saba Al-Hashimi, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Cornea, External Disease, and Refractive Surgery Specialist

Dr. Al-Hashimi is a clinician with a research interest in keratoconus and corneal crosslinking. His research focus involves halting the progression of corneal disease by using light and chemicals to strengthen the cornea.

Dr. Al-Hashimi provides clinical care at the Stein Eye Institute in Westwood. He also participates in training fellows and residents at both Harbor-UCLA Medical Center and the West Los Angeles Veterans Affairs Medical Center.



Anthony C. Arnold, MD

Mary Oakley Foundation Chair in Neurodegenerative Diseases

Professor of Clinical Ophthalmology

Chief of the Neuro-Ophthalmology Division

Director of the UCLA Optic Neuropathy Center

Vice Chair, Education

Ischemic and Inflammatory Diseases of the Optic Nerve

Dr. Arnold's clinical expertise is in neuro-ophthalmology, with a special emphasis on ischemic and inflammatory optic neuropathies and manifestations of tumors, stroke, and inflammation of the central nervous system. His research has focused on advanced imaging techniques to identify optic nerve circulatory diseases and to investigate their causes.

Dr. Arnold provides clinical care at the Stein Eye Institute in Westwood.



Gavin G. Bahadur, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Cataract Surgery Outcomes and Glaucoma Detection

Dr. Bahadur's clinical specialties are comprehensive ophthalmology including cataract, pterygium, and glaucoma. His research activities include machinelearning algorithms for cataract surgery outcomes and glaucoma detection.

Dr. Bahadur provides clinical care at the Stein Eye Center-Santa Monica. He also performs manual small incision cataract surgery (MSICS) with Surgical Eye Expeditions International.



John D. Bartlett, MD

Health Sciences Associate Clinical Professor of Ophthalmology

Cataract and Refractive Surgery, **Clinical Informatics**

Dr. Bartlett's clinical interest is cataract and refractive cataract surgery, with the goal to improve the focus of the eyes, reduce dependence on glasses, and restore vision potential. He teaches Stein Eye residents, training the next generation of eye surgeons to deal with challenging cases.

Dr. Bartlett is a UCLA physician informaticist and is involved in the implementation and optimization of electronic health records (EHRs) to promote effective organization, analysis, management, and use of clinical information. He is interested in using EHRs to enhance patient care, improve population health, and decrease health care costs.

Dr. Bartlett provides clinical care at the Stein Eye Institute in Westwood.



Suraj P. Bhat, PhD

Oppenheimer Brothers Chair Professor of Ophthalmology Member of the Molecular Biology Institute

Molecular Biology of Vision

Dr. Suraj Bhat's research impacts two important areas of vision: the ocular lens in the anterior eye and the retinal pigment epithelium (RPE) in the posterior eye. His laboratory, the Vision Molecular Biology Laboratory (VMBL) investigates gene activity that sustains transparency within the ocular lens and gene activity that sustains the physiological health of the RPE, which in turn sustains the neural activity in the retina that makes vision possible. VMBL is involved in delineating very early events (at the genomic and molecular level) that culminate in cataractogenesis in the ocular lens and age-related macular degeneration in the RPE.

FACULTY UCLA STEIN EYE INSTITUTE



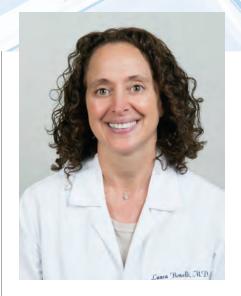
Ava K. Bittner, OD, PhD

Smotrich Family Optometric Clinician-Scientist Chair Chief of Optometric Services Associate Professor of Ophthalmology

Low Vision Rehabilitation

Dr. Bittner's specialty is low vision rehabilitation. Her research activities include clinical trials to assess the use of novel approaches and technologies to improve access to low vision rehabilitation care and reading ability with visual assistive aids. Specifically, she is evaluating tele-rehabilitation, Bluetooth low energy beacon sensors, socially assistive robots, and wearable electronic visual enhancement devices for low vision.

Dr. Bittner provides clinical care at the Stein Eye Institute's Vision Rehabilitation Center located in the Doris Stein Building.



Laura Bonelli, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Neuro-Ophthalmology

Dr. Bonelli completed her residency in ophthalmology, as well as fellowships in neuro-ophthalmology and oculoplastics, at the Hospital de Clínicas, University of Buenos Aires, Argentina.

Joining the UCLA Department of Ophthalmology in 2008, Dr. Bonelli specializes in comprehensive ophthalmology and neuro-ophthalmology. She sees patients at the Stein Eye Institute in Westwood and the Stein Eye Center-Santa Monica.

A committed educator, Dr. Bonelli teaches medical student courses at the David Geffen School of Medicine, regularly lectures at educational conferences, and instructs residents and neuro-ophthalmology fellows in the Department. She is the director of inpatient consultation services for the Ronald Reagan UCLA Medical Center and UCLA Medical Center, Santa Monica, where she oversaw a broad reorganization to improve services and to provide more efficient patient care. In recognition of her work with ophthalmology residents on the consultation services. Dr. Bonelli received the Stein Eye Institute Faculty Teaching Award in 2014.



Nicholas C. Brecha, PhD

Distinguished Professor of Neurobiology, Ophthalmology, and Medicine

Member of the Brain Research Institute

Member of CURE: Center for **Digestive Diseases**

Member of the California NanoSystems Institute

Functional and Structural Organization of the Mammalian Retina

Dr. Brecha is a visual system neuroscientist whose expertise includes retinal neurochemistry, transmitters, synaptic and cellular structure, and neuronal circuitry regulating visual function.

His current research studies are furthering the understanding of 1) fundamental synaptic inhibitory processes mediating early vision in the outer retina and 2) neuronal cell structure and function mediating visual processing in the inner retina.

His studies are a prerequisite for understanding normal retinal function, and the impact on the development of therapeutic approaches and diagnostic tools essential for the treatment, prevention, and restoration of vision loss due to retinal injury and disease.



Joseph Caprioli, MD

David May II Chair in Ophthalmology Distinguished Professor of Ophthalmology

Chief of the Glaucoma Division

Director, Clinical and Research Glaucoma Fellowship

Chair, Ophthalmology Quality Improvement Committee

Causes and New Treatments for Glaucoma

Dr. Caprioli's clinical specialties are glaucoma, cataract, and anterior segment surgery. His long-term objectives in clinical and basic research are to identify those individuals at greatest risk for visual loss and to implement new treatment through effective neuroprotective strategies. Laboratory work focuses on mechanisms of retinal ganglion cell damage in glaucoma, with special emphasis on early detection through accurate assessment of the optic nerve and nerve fiber layer to measure the rate of progressive damage.

Dr. Caprioli provides clinical care at the Stein Eye Institute in Westwood.



Anne L. Coleman, MD, PhD

The Fran and Ray Stark Foundation Chair in Ophthalmology

Professor of Ophthalmology

Professor of Epidemiology, UCLA Fielding School of Public Health

Director of the Stein Eye Institute Centers for Community Outreach and Policy, Eye Epidemiology, and the UCLA Mobile Eye Clinic

Vice Chair of Academic Affairs, **UCLA** Department of Ophthalmology

Glaucoma Adult and Pediatric Public Health

Dr. Coleman's clinical specialties are glaucoma, anterior segment, and cataract surgery. Her research focuses on the etiology, diagnosis, treatment, and societal impact of glaucoma, cataracts, and pediatric eye diseases. It also encompasses the interface of eye care and public health focusing on underserved areas and vulnerable populations.

Dr. Coleman provides clinical care at the Stein Eye Institute in Westwood.



Joseph L. Demer, MD, PhD

Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology

Professor of Ophthalmology

Professor of Neurology

Chief, Pediatric Ophthalmology and Strabismus Division

Director, Fellowship in Pediatric Ophthalmology and Strabismus

Director, Ocular Motility Laboratories

Chair, EyeSTAR Residency PhD/PostDoc Program in Ophthalmology and Visual Science

Motility and Vision

Dr. Demer's clinical specialties include pediatric ophthalmology, adult strabismus, and other disorders of ocular motility such as nystagmus. He is a biomedical engineer whose federally funded research includes anatomy and imaging of the eye muscles, and the biomechanics of eye movements and optic nerve disorders. His career aim has been to employ modern scientific and engineering techniques to understand the basis and consequences of disorders of ocular motility, in order to save ocular function and promote normal binocular vision.

Dr. Demer provides clinical care and ophthalmic surgery at the Stein Eye Institute in Westwood.

FACULTY UCLA STEIN EYE INSTITUTE



Sophie X. Deng, MD, PhD

Joan and Jerome Snyder Chair in Cornea Diseases

Professor of Ophthalmology

Member of the UCLA Jonsson Comprehensive Cancer Center

Member of the UCLA Broad Stem Cell Research Center

Chair, Equity, Diversity and Inclusion Committee, Department of Ophthalmology, UCLA

Co-Director of Center of Regenerative Medicine in Ophthalmology

Stem Cell-Based Therapies for **Corneal Diseases**

Dr. Deng specializes in corneal and external ocular diseases, and cataracts. Her surgical areas include endothelial keratoplasty (DSEK and DMEK), deep anterior lamellar keratoplasty (DALK), penetrating keratoplasty, limbal stem cell transplantation, artificial cornea, and cataract.

Dr. Deng is the director of the Cornea Biology Laboratory at Stein Eye. Her research focuses on corneal epithelial stem cell regulation, deficiency, and regeneration. She aims to improve the current treatment for patients with limbal stem cell deficiency and corneal scars by using stem cell based therapy to restore vision. Dr. Deng also conducts clinical studies to develop new diagnostic tests using live imaging techniques.



Debora B. Farber, PhD, **DPhhc**

Distinguished Professor of Ophthalmology

Doctor honoris causa

Member of the Brain Research Institute

Member of the Molecular Biology Institute

Retinal Biochemistry, Molecular Biology, Genetics of Retinal Degenerations, and Studies on **Embryonic Stem Cell-Derived** Extracellular Vesicles

Dr. Farber's research focuses on the characterization of genes encoding key proteins in vision that when mutated cause blinding diseases. Examples: β -PDE gene (diseases in mice, dogs, and human RP), RP1 gene (dominant RP), rd7 gene (Enhanced S-Cone syndrome), and ZBED4 and RHBDD2 genes (arCRD and arRP, respectively). In addition, Dr. Farber studies ocular albinism resulting from mutations in the OA1 gene, and the components of the OA1 cascade controlling RPE melanosomes' biogenesis as well as guidance of ganglion cell axons through the brain's optic chiasm. Lastly, Dr. Farber investigates the use of microvesicles released from embryonic stem cells for the rescue of damaged retinas.



Simon Fung, MD

Assistant Professor of Ophthalmology

Cornea and Anterior Segment **Specialist**

Dr. Fung specializes in cornea, anterior segment diseases, with a particular focus on those occurring among children and adolescents. His areas of surgical expertise include corneal transplantations in adults and in children using modern strategies, such as lamellar keratoplasty techniques, as well as pediatric anterior eye conditions including cataracts and glaucoma. His research focuses on the evaluation and treatment of complex ocular surface conditions, notably neurotrophic keratopathy and phlyctenular keratoconjunctivitis.

Dr. Fung provides clinical care at the Stein Eye Institute in Westwood and the Stein Eye Center-Calabasas. He has staffed the UCLA Mobile Eye Clinic since 2018.



JoAnn A. Giaconi, MD

Health Sciences Clinical Professor of Ophthalmology

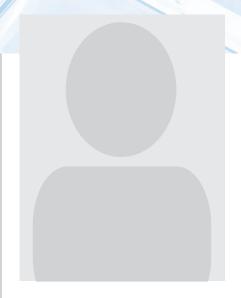
Chief of the Ophthalmology Section at the Greater Los Angeles VA Healthcare System

Co-Director of Medical Student Education at the David Geffen School of Medicine, UCLA

Adult and Pediatric Glaucoma

Dr. Giaconi's areas of clinical specialty are adult and pediatric glaucoma and cataract surgery. Her research interests are in the outcomes of glaucoma surgery. She also has a strong interest in medical education.

Dr. Giaconi provides clinical care at the Stein Eye Institute in Westwood and at the Veterans Administration Eye Clinic West Los Angeles campus.



Ben J. Glasgow, MD

The Wasserman Professor of Ophthalmology

Professor of Pathology and Laboratory Medicine

Chief of the Ophthalmic Pathology Division

Ophthalmic Pathology

Dr. Glasgow specializes in ophthalmic pathology, and his research focus is the role of human lacrimal gland proteins in the protection and maintenance of the eye. His laboratory is investigating the structure-function relationship of tear lipocalin. By studying the molecular mechanisms of tear proteins, Dr. Glasgow is seeking to learn the normal functions of tear lipocalin and its role in maintaining the health of the ocular surface and in the prevention of dry eye diseases. Ideally this research will lead to new treatments for dry eye and have broad application to numerous other members of this protein family that transport small, insoluble molecules through the body.



Robert Alan Goldberg, MD

Bert O. Levy Endowed Chair in Orbital and Ophthalmic Plastic Surgery

Professor of Ophthalmology

Chief of the Orbital and Ophthalmic Plastic Surgery Division

Director of the UCLA Orbital Disease

Co-Director of the UCLA Aesthetic Center

Diseases and Therapy of the **Eyelid and Orbit**

Dr. Goldberg is an internationally recognized surgeon, researcher, and teacher. He has developed surgical procedures that are now globally taught and practiced, including less invasive treatments for eye and orbit cancers, new surgeries for thyroid eye disease, and innovative surgical techniques for tearing problems. His research into orbital and eyelid anatomy is resulting in improved techniques and approaches to deep orbital disease. He has had leadership and executive positions in the American Society of Ophthalmic Plastic and Reconstructive Surgery, the American Academy of Cosmetic Surgery, and the American College of Surgeons.

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Michael B. Gorin, MD, PhD

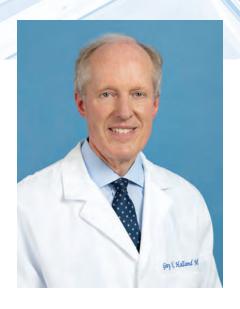
Harold and Pauline Price Chair in Ophthalmology Professor of Ophthalmology Professor of Human Genetics

Chief of the Division of Retinal Disorders and Ophthalmic Genetics

Hereditable Eye Disorders and Molecular Genetics of Age-Related Maculopathy

Dr. Gorin's clinical expertise is in medical retina and ophthalmic genetic disorders. He has both a basic and translation research program that address the genetics of inherited retinal dystrophies and age-related macular degeneration, the biological basis of pain caused by light exposure, the study of von Hippel Lindau disease, etiology of central serous chorioretinopathy, drug and autoimmune-related retinopathies, genetics-based therapies for disease, and late-life morbidities associated with retinopathy of prematurity.

Dr. Gorin was among the first UCLA physicians to be boarded in Clinical Informatics, and he is exploring the use and analysis of clinical datasets to better understand disease and clinical outcomes



Gary N. Holland, MD

Jack H. Skirball Chair in Ocular Inflammatory Diseases

Professor of Ophthalmology

Director of the Ocular Inflammatory
Disease Center, UCLA Stein Eye Institute

Director of the UCLA Department of Ophthalmology Clinical Research Center

Co-Director of Medical Student Education, UCLA Department of Ophthalmology

Uveitis and Cornea-External Ocular Diseases

Dr. Holland specializes in uveitis and other inflammatory diseases of the eye.

His research activities focus on risk factors for, and clinical characteristics of, various infectious and inflammatory diseases, including ocular toxoplasmosis, cytomegalovirus retinitis, and chronic anterior uveitis in children. In addition to his clinical and research work, Dr. Holland is associate editor of the *American Journal of Ophthalmology*.

Dr. Holland provides clinical care at the Stein Eye Institute in Westwood.



Hamid Hosseini, MD

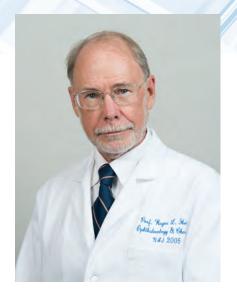
Assistant Professor of Ophthalmology

Retinal and Macular Conditions

Dr. Hosseini specializes in retinal and macular conditions, such as macular degeneration, diabetic retinopathy, and retinal detachment.

Dr. Hosseini completed two fellowships at the UCLA Stein Eye Institute, the first in glaucoma and the second in retina. He participates in all activities of the Retina Division, including research, education, and clinical care.

He sees patients at the Stein Eye Institute in Westwood and Harbor-UCLA Medical Center.



Wayne L. Hubbell, PhD

Jules Stein Chair in Ophthalmology
Distinguished Professor
of Ophthalmology

Distinguished Professor of Chemistry and Biochemistry

Molecular Basis of Phototransduction in the Vertebrate Retina

Dr. Hubbell's research is focused on understanding the relationship between molecular structure, plasticity, and conformational changes that control protein function in the visual system. Of particular interest are proteins that behave as "molecular switches." The overall goal is to determine the structure of these proteins in their native environment, monitor the changes in structure that accompany the transition to an active state, and to understand the role of protein flexibility in function.

To investigate these and other proteins, Dr. Hubbell's laboratory has developed the technique of site-directed spin labeling, a novel and powerful approach to the exploration of protein structure and dynamics.



Jean-Pierre Hubschman, MD

Associate Professor of Ophthalmology Chief of Retina at Olive View-UCLA Medical Center

Director of the Advanced Robotic Eye Surgery Laboratory

Member of the Center for Advanced Surgical and Interventional Technology

Member of the California NanoSystems Institute

UCLA Professor of Engineering

Advanced Vitreoretinal Surgical Interventions and Robotics

Dr. Hubschman's clinical research focuses on the development and evaluation of new vitreoretinal surgical techniques and robotics for ophthalmic surgery. Automated surgery utilizing robotics promises to increase surgical precision and accuracy, as well as improve access to medical care. Dr. Hubschman's publications include research papers on the development of a new retinal patch for the treatment of retinal detachment, on the feasibility of robotic surgery in ophthalmology, and results of various clinical trials. Currently, he is also investigating the use of the terahertz laser for the evaluation of ocular tissue hydration.

Dr. Hubschman provides clinical care at the Stein Eye Institute in Westwood.



Justin Karlin, MD, MS

Health Sciences Assistant Clinical Professor

Orbital, Lacrimal, and Ophthalmic Plastic Surgery

Dr. Karlin is a specialist in orbital, lacrimal, and ophthalmic plastic surgery. He trained in ophthalmology at the University of Virginia, and he completed the David and Randi Fett Orbital and Ophthalmic Plastic Surgery Fellowship at the UCLA Stein Eye and Doheny Eye Institutes.

Dr. Karlin's research is focused on using artificial intelligence to improve diagnostic accuracy. He is also interested in medical device design and was invited to participate in the UCLA Faculty Innovation Fellowship program in 2021.

Deeply committed to teaching, as a resident, Dr. Karlin was awarded the University of Virginia School of Medicine Resident Teaching Award, and as a fellow, he received the UCLA Department of Ophthalmology Fellow Teaching Award.

He sees patients at the Stein Eye Center–Calabasas and the Doheny Eye Center UCLA–Orange County.

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Simon K. Law, MD, PharmD

Health Sciences Clinical Professor of Ophthalmology

Optic Disc Evaluation

Dr. Law's clinical specialties are glaucoma and cataract. His research activities include evaluation of the optic nerve in different racial groups and ocular pathologies, different patterns of glaucomatous visual function decline, outcomes of different glaucoma surgical procedures and medications in eye pressure control and vision restoration, and alternative therapy in glaucoma care.

Dr. Law provides clinical care at the Stein Eye Institute in Westwood.



Shawn R. Lin, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Medical Director, Stein Eye Center-Calabasas

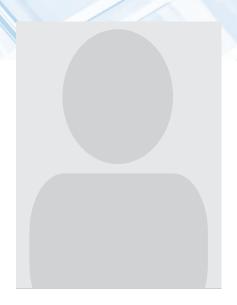
Cataract and Refractive Surgery

Specializing in cataract and refractive surgery, Dr. Lin obtained his MD and MBA from Stanford University. He conducted his ophthalmology residency at the UCLA Stein Eye Institute, and he completed a Heed Cornea Fellowship at the Massachusetts Eye and Ear Infirmary at Harvard University.

Dr. Lin's research is focused on combining human and artificial intelligence to deliver exceptional surgical results. He has authored more than a dozen peer-reviewed publications in leading ophthalmology journals, has written chapters on ophthalmology and cornea for textbooks, and has delivered keynote presentations at international scientific meetings.

Dr. Lin founded EyeGuru, an online educational platform visited more than 300,000 times a year by ophthalmologists from 125 countries. In this role, Dr. Lin helps to advance knowledge in the field and train the next generation of ophthalmologists.

Dr. Lin sees patients at the Stein Eye Institute in Westwood and the Stein Eye Center-Calabasas.



Colin A. McCannel, MD

Professor of Clinical Ophthalmology Medical Director, Stein Eye Center-Santa Monica

Vitreoretinal Surgery

Dr. McCannel has a longstanding interest in the management of vitreoretinal conditions, particularly complex retinal detachments, complications of diabetic retinopathy, macular holes and epimacular membranes, and age-related macular degeneration. His clinical research efforts are directed at the improvement of vitreoretinal surgical techniques and outcomes, including the prevention of endophthalmitis following intravitreal injections.

Dr. McCannel devotes time to educational research as well. Currently, he is investigating the utility of virtual reality surgery simulation in teaching ophthalmic surgery. He has several ongoing protocols that assess ophthalmic surgical simulation in surgical teaching.

Dr. McCannel provides clinical care at the Stein Eye Institute in Westwood and the Stein Eye Center-Santa Monica.



Tara A. McCannel, MD, PhD

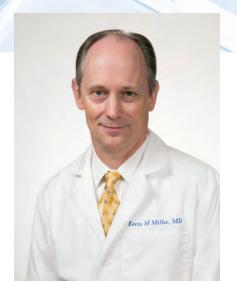
Health Sciences Clinical Professor of Ophthalmology

Director of the Ophthalmic Oncology Center

Metastatic Ocular Melanoma and Diseases of the Retina and Vitreous

Dr. McCannel is an ophthalmic oncologist, as well as a vitreoretinal surgeon. Dr. McCannel's Ophthalmic Oncology Laboratory is studying molecular markers in ocular melanoma to provide prognostic information to patients and advance understanding of metastatic disease. Discovery of candidate genes from tissue of patients undergoing surgical treatment for ocular melanoma is being explored. This information will be important to establish a better understanding of the biology of metastatic ocular melanoma and help develop better treatments for this cancer. New modalities are being investigated to predict, detect, and ultimately treat choroidal melanoma metastasis.

Dr. McCannel provides clinical care at the Stein Eye Institute in Westwood.



Kevin M. Miller, MD

Kolokotrones Chair in Ophthalmology Professor of Clinical Ophthalmology Chief of the Cataract and Refractive Surgery Division

Director of the Anterior Segment Diagnostic Laboratory

Cataract and Refractive Surgery

Dr. Miller is chief of the Cataract and Refractive Surgery Division and director of the Anterior Segment Diagnostic Laboratory. His research interests include devices and implants used in cataract and refractive surgery, outcomes of surgical procedures, astigmatism management, and artificial iris implantation.

Dr. Miller provides patient care in the Cataract and Refractive Surgery Suite on the second floor of the Edie and Lew Wasserman Building at the Stein Eye Institute. He specializes in refractive cataract surgery, intraoperative refractive guidance, LASIK, PRK, SMILE, artificial iris implantation, and complex anterior segment surgery.

Dr. Miller serves in leadership roles at the American Academy of Ophthalmology and the American Society of Cataract and Refractive Surgery.



Mitra Nejad, MD

Health Sciences Assistant Clinical Professor

Cataract and Refractive Surgery

Dr. Nejad practices comprehensive ophthalmology with a focus on cataract and refractive surgery. She graduated summa cum laude from UCLA and earned her MD from the David Geffen School of Medicine at UCLA. Dr. Nejad conducted her internship at Harbor-UCLA Medical Center and her ophthalmology residency at Stein Eye, where she remained on staff.

Dr. Nejad utilizes the latest technology for treatment of cataracts. She is a certified proctor in laser refractive surgery and supervises Stein Eye residents' refractive surgery cases. Dr. Nejad has contributed to the residency cataract surgery curriculum and microsurgery wet lab curriculum, and she attends resident cataract surgery at both Stein Eye and Harbor-UCLA.

Dr. Nejad teaches medical student courses at the David Geffen School of Medicine, serves as medical student preceptor, and lectures at educational conferences. She also serves on the residency program evaluation and selection committees.

Dr. Nejad sees patients at the Stein Eye Institute vision-science campus in Westwood.

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Kouros Nouri-Mahdavi, MD, MSc

Associate Professor of Ophthalmology Director of the Glaucoma Advanced Imaging Laboratory

Role of Structural and Functional Measurements for Detection of Glaucoma and Its Progression

Dr. Nouri-Mahdavi's areas of clinical interest are management of adult glaucoma and complex cataract surgery. His research activities include optimizing the role of structural and functional measurements for detection of glaucoma and its progression with an emphasis on advanced disease and macular optical coherence tomography imaging. More recently, his research laboratory has been exploring the use of artificial intelligence in glaucoma diagnostics. Another area of interest is the study of glaucoma surgical outcomes.

Dr. Nouri-Mahdavi provides clinical care at the Stein Eye Institute in Westwood, as well as the Stein Eye Center-Calabasas and the Stein Eye Center-Santa Monica.



Steven Nusinowitz, PhD

Professor of Ophthalmology Co-Director of the Visual Physiology Laboratory

Director of the Live Imaging and Functional Evaluation (LIFE) Core

Mechanisms of Retinal Degeneration

Dr. Nusinowitz is a visual physiologist whose primary research interest is the study of the sites and mechanisms of disease action in inherited eye diseases. He is focused on understanding the cellular contributions to noninvasive measures of visual function and defining the sites and mechanisms of disease action in inherited retinal and visual pathway disorders. By testing hypotheses about the underlying pathophysiology in human disease, Dr. Nusinowitz hopes to provide a mechanism for the development of specific diagnostic tools that are sufficiently sensitive for early detection and better diagnosis of clinical disease.



Yirong Peng, PhD

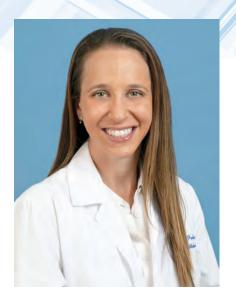
Assistant Professor of Ophthalmology

Pathogenesis of Retinal Diseases

Dr. Peng is a neuroscientist whose research focuses on large-scale transcriptomic profiling of retinal cells in healthy and pathological conditions to understand human vision and provide insights for the study of ocular diseases.

Dr. Peng received her PhD in neurobiology from the Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China. Her doctoral research examined the role of functional interactions between inhibitory and excitatory synapses that maintain the stability of neural networks. Dr. Peng then joined the laboratory of Dr. Joshua Sanes at Harvard University as a postdoctoral fellow, where she leveraged high throughput single-cell transcriptomic methods to uncover key transcriptional factors that control the specification of retinal cell types.

At Stein Eye, Dr. Peng is continuing her development of state-of-the-art transcriptomic and genomic tools to reveal the molecular underpinnings of the formation of retinal circuits and the pathogenesis of retinal diseases.



Stacy L. Pineles, MD

Jerome and Joan Snyder Chair in Ophthalmology

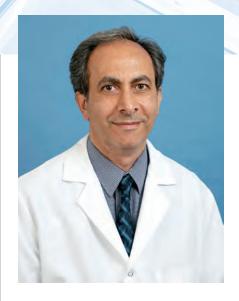
Associate Professor of Ophthalmology

Residency Director, Department of Ophthalmology

Pediatric Neuro-Ophthalmology, Amblyopia, and Neurologic Causes of Strabismus

Dr. Pineles' research interests include evaluating the surgical outcomes of strabismus surgery and studying pediatric optic nerve diseases. With her dual training in pediatric ophthalmology and neuro-ophthalmology, she has a special interest in pediatric neuroophthalmic diseases, as well as adult patients with amblyopia and neurologic causes of strabismus. Dr. Pineles is the chair of a national prospective study of pediatric optic neuritis and runs an NIH-supported research group evaluating systemic outcomes of pediatric eye disease. Dr. Pineles also serves as the Residency Program Director for the UCLA Department of Ophthalmology.

Dr. Pineles provides clinical care at the Stein Eye Institute in Westwood.



Natik Piri, PhD

Professor of Ophthalmology

Retinal Ganglion Cell Biology, Glaucomatous Neurodegeneration, and Neuroprotection

Dr. Piri's primary research is defining the mechanisms leading to retinal ganglion cell (RGC) degeneration in glaucomatous neuropathy; developing strategies for preserving RGCs against neurodegeneration; and identifying and characterizing the genes critical for RGC function and integrity. Characterization of RGC-expressed genes is fundamental to a better understanding of normal RGC physiology and pathophysiology.

Dr. Piri also focuses on understanding the degeneration of RGCs and their axons, which is a hallmark of glaucoma. He is also studying the involvement of oxidative stress and proteins of the thioredoxin system, particularly in RGC degeneration in the glaucoma model, and the neuroprotective effects of these proteins against glaucomatous RGC death.



Pradeep S. Prasad, MD, MBA

Health Sciences Associate Clinical Professor of Ophthalmology

Chief, Division of Ophthalmology, Harbor-UCLA Medical Center

Vitreoretinal Surgery and Disease Management

Dr. Prasad specializes in the medical and surgical management of diseases of the retina and vitreous. His research is focused on teleretinal screening for diabetic retinopathy, applications of wide-field fundus photography for retinal vascular disease, and health care delivery for low-income populations.

Dr. Prasad serves as the chief of the Division of Ophthalmology at Harbor-UCLA Medical Center where he provides clinical supervision and instruction to UCLA medical students as well as to Stein Eye residents and vitreoretinal fellows.



Roxana A. Radu, MD

Assistant Professor of Ophthalmology

Retina Biochemistry and Clinical Disease Modeling Laboratory

Dr. Radu's scientific interest is to understand the mechanism of photoreceptor cell degeneration by integrating genetic, biochemical, cellular, and molecular approaches. Dr. Radu's research focuses on the formation and pathogenic role of bisretinoids in retinopathies such as recessive Stargardt disease and age-dependent macular degeneration. Her group has developed both mouse and human disease cell-based models to identify fundamental biological processes at the intersection between the complement system, retinoid metabolism, mitochondria, and endolysosomal pathways in normal and immune-compromised retinal pigment epithelium cells. Her studies are supported by the NIH, private foundations, and philanthropic funds.

Dr. Radu is also actively involved in training and teaching undergraduates, pre-/postgraduate fellows, and medical students.



Alapakkam P. Sampath, PhD

Professor of Ophthalmology and Neurobiology Associate Director, Stein Eye Institute Chief, Vision Science Division

Molecular Mechanisms Underlying Early Visual Processing

The Sampath laboratory is interested in understanding the molecular mechanisms underlying early visual processing. In particular, the focus of laboratory researchers has been on elucidating mechanisms that set the sensitivity of night vision. Night blindness, or nyctalopia, is a condition that results from abnormal signaling by the rod photoreceptors, or the retinal circuits that process rod-driven signals. Using physiological and genetic methods, the laboratory studies signal transmission in these retinal rod pathways to identify how these processes are optimized to allow our exquisite visual sensitivity.



David Sarraf, MD

Health Sciences Clinical Professor of Ophthalmology

Age-Related Macular Degeneration and Retinal Imaging

Dr. David Sarraf is clinical professor of ophthalmology at the UCLA Stein Eye Institute and member of the Retinal Disorders and Ophthalmic Genetics Division. He has published close to 300 peer-reviewed research papers, case reports, and reviews and has authored 22 book chapters. He is co-author for the second edition of the Retina Atlas and will be section editor for the 7th edition of Ryan Retina. Dr. Sarraf is a world leader in the field of advanced retinal imaging and has delivered over 300 invited lectures at various meetings worldwide, including close to a dozen endowed and keynote lectures.

Dr. Sarraf is associate editor for the British Journal of Ophthalmology and Ophthalmology Science, and he is section editor of the Ocular Imaging Section for the Canadian Journal of Ophthalmology. He is also associate editor for the journal Retinal Cases and Brief Reports and editorial board member of the journals Retina and OSLI Retina.



Steven D. Schwartz, MD

The Ahmanson Chair in Ophthalmology Professor of Ophthalmology Chief of the Retina Division Director of the UCLA Diabetic Eye Disease and Retinal Vascular Center Director of the Macula Center

Retinal Diseases and Stem Cell Research

Dr. Schwartz's primary areas of research include early diagnosis and treatment of diseases such as retinopathy of prematurity, diabetic eye disease, and macular degeneration. Dr. Schwartz's research includes evaluation of methods to measure optic nerve damage, and the role of structural and functional measurements for detection of glaucoma and its progression. Dr. Schwartz also leads clinical trials testing the use of stem cells to address vision loss from Stargardt macular dystrophy and dry age-related macular degeneration.

Dr. Schwartz provides clinical care at the Stein Eye Institute in Westwood.



Soh Youn Suh, MD

Assistant Professor of Ophthalmology

Pediatric Ophthalmology and Adult Strabismus

Dr. Suh's clinical specialties are pediatric ophthalmology and adult strabismus. Her research interests include evaluating strain on the optic nerve head and globe displacement during horizontal ductions in patients and normal controls using magnetic resonance imaging and optical coherence tomography.

Dr. Suh provides clinical care at the Stein Eye Institute in Westwood and Olive View-UCLA Medical Center.



Hui Sun, PhD

Professor of Physiology and Ophthalmology

Member of Jonsson Comprehensive Cancer Center

Molecular Mechanism of Vitamin A Transport for Vision; Identification of New Therapeutic Targets for **Blinding Diseases**

Dr. Sun's laboratory aims to identify new therapeutic targets to treat still incurable human diseases, to study their molecular mechanisms, and to develop novel therapies based on the mechanisms. Through many years of research efforts, his laboratory has identified the cell-surface receptors for the most potent endogenous inhibitor of angiogenesis, developed novel techniques to screen for drugs that target these receptors, and developed the first small molecule drug candidates that specifically suppress pathogenic angiogenesis in diverse vision diseases and in cancer. These molecules have achieved therapeutic effects that no existing drugs can achieve and are being prepared for clinical trials.

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Gabriel H. Travis, MD

Charles Kenneth Feldman Chair in Ophthalmology

Professor of Ophthalmology

Biochemistry of Vertebrate Photoreceptors and Mechanisms of **Retinal Degeneration**

Dr. Travis' laboratory uses biochemical and genetic approaches to study the visual cycle and its role in retinal and macular degenerations. Vision in vertebrates is mediated by two types of light-sensitive cells: rods and cones. These cells contain light-detecting molecules called opsin pigments. Detection of a single light particle bleaches the opsin pigment. Restoring light sensitivity to a bleached opsin involves an enzymatic pathway called the visual cycle. Mutations in the genes for many proteins of the visual cycle cause inherited blinding diseases.



Edmund Tsui, MD

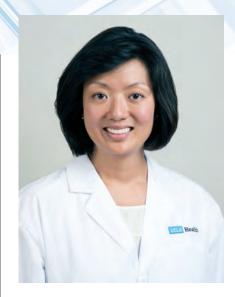
Assistant Professor of Ophthalmology

Uveitis and Ocular Inflammatory Diseases

Dr. Tsui specializes in the management of uveitis and ocular inflammatory diseases. He completed his medical training at Dartmouth Medical School followed by an ophthalmology residency at the New York University School of Medicine. He completed his fellowship in uveitis and ocular inflammatory disease at the Francis I. Proctor Foundation at the University of California, San Francisco.

Dr. Tsui's research focuses on the evaluation of imaging biomarkers to measure and quantify intraocular inflammation with optical coherence tomography and laser flare photometry. He serves on the Association for Research in Vision and Ophthalmology Continuing Medical Education Committee and the Professional Development and Education Committee. He is also a social media editor for the journals Ophthalmology, Ophthalmology Retina, and Ophthalmology Glaucoma.

Dr. Tsui provides care to patients at the Stein Eye Institute in Westwood.



Irena Tsui, MD

Associate Professor of Ophthalmology

Clinical Vitreoretinal Research

Dr. Tsui's clinical activities include adult and pediatric vitreoretinal diseases. Her research interests focus on retinopathy of prematurity and Zika virus eye abnormalities. Dr. Tsui teaches ophthalmology trainees and serves veterans at the Greater Los Angeles VA Healthcare System.

Dr. Tsui provides clinical care at the Stein Eye Institute in Westwood and the Doheny Eye Center UCLA-Arcadia.



Shoaib Ugradar, MD

Health Sciences Clinical Instructor

Orbital and Ophthalmic **Plastic Surgery**

Dr. Ugradar came to Stein Eye from London, England, as an international fellow specializing in orbital and ophthalmic plastic surgery. He conducted his ophthalmology residency at Moorfields Eye Hospital, where he is still an honorary research fellow. Dr. Ugradar was ranked number one in the UK National Recruitment for Ophthalmology and is the recipient of numerous academic scholarship awards and honors for his research, including the Ophthalmology Research Gold Medal UK, the Bernice Brown Fellowship Award, the Young European researcher's award, and the Drapers' Company Prize for outstanding achievement at an undergraduate level. Dr. Ugradar regularly presents at international conferences and is a reviewer for multiple journals in the field of oculoplastics. His research has led to inventions that are currently under patent.

Dr. Ugradar sees patients at the Stein Eye Institute in Westwood, as well as the Stein Eye Center-Calabasas and the Stein Eye Center-Santa Monica.



David S. Williams, PhD

Karl Kirchgessner Foundation Chair in Vision Science

Professor of Ophthalmology and Neurobiology

Cell Biology of the Retina and Inherited Retinal Disease

Dr. Williams' laboratory focuses on the cell biology of photoreceptor and retinal pigment epithelium cells. His group is especially interested in proteins that function in transport and compartmentalization within these cells. These proteins include those that underlie Usher syndrome and macular degeneration. Translational areas of his research involve gene therapy experiments aimed at preventing the blindness that ensues from Usher syndrome type 1B and studies on stem cell-derived RPE cells, which may be transplanted into retinas afflicted by macular degeneration.



Xian-Jie Yang, PhD

Ernest G. Herman Chair in Ophthalmology

Professor of Ophthalmology

Member of the Molecular Biology Institute

Member of the Brain Research Institute

Member of the UCLA Broad Stem Cell Research Center

Director of the Gene and Cell Delivery Core for Vision Research

Development and Repair of the Retina

Dr. Yang obtained her PhD at Cornell University and received postdoctoral training at Harvard University and Harvard Medical School before joining UCLA Stein Eye Institute as a faculty member. Dr. Yang's research is focused on molecular and cellular mechanisms underlying retina development and repair. Her research approaches include using genetically engineered retinal degeneration models and recombinant virus-mediated gene delivery to study neuroprotection mechanisms. In addition, her research team has established stem cell-based retinal organoid models to derive human retinal neurons, simulate retinal diseases, and develop gene editing and replacement therapies.

FACULTY DOHENY EYE CENTERS UCLA



Jie J. Zheng, PhD

Professor of Ophthalmology

Member of the Molecular Biology

Institute

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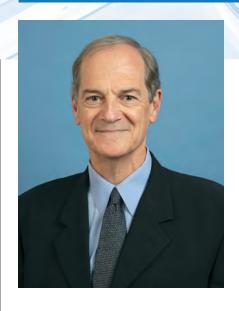
Member of the Jonsson Comprehensive Cancer Center

Member of the Brain Research Institute Member of the California NanoSystems Institute

Therapeutic Development in Ophthalmology

Dr. Zheng's research is at the interface of biochemistry, computational biology, systems pharmacology, and drug discovery with an emphasis on therapeutic development in ophthalmology.

His laboratory is currently developing proteins and small molecules that can modulate signal transduction pathways, such as Wnt, Hedgehog, BMP, and Hippo pathways, in an effort to better understand the biological functions of these signaling pathways and to explore the therapeutic potential of these compounds and proteins. Aiming to establish new translational research within the scientific community at UCLA, Dr. Zheng's goal is to develop novel therapies for retinal degenerative diseases, glaucoma, and corneal disorders.



Steven A. Barnes, PhD

Professor of Ophthalmology and Neurobiology

Ion Channel Function in Retinal Neurons

Dr. Barnes is a biophysically oriented neurobiologist interested in how the retinal milieu in healthy and stressed states affects ion channels that mediate signaling within and between retinal neurons. The activity of ion channel proteins in retinal neurons governs how the retinal network optimizes image processing. Dr. Barnes seeks to define cellular targets that could aid precision interventions with early detection and by slowing or preventing vision loss in diseases such as glaucoma and macular degeneration. Important questions concern the limits that the bioenergetic environment imposes on photoreceptor and ganglion cell sensitivity and signaling, as well as how early stages of bioenergetic dysfunction are manifested.



Benjamin B. Bert, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Cornea-External Ocular Disease and Refractive Surgery

Dr. Bert provides comprehensive ophthalmic care and is a subspecialist in cornea/external disease. His areas of expertise include: dry eye/blepharitis, conjunctivitis, uveitis, acute corneal injury, and genetic corneal disorders, as well as cataract surgery with advanced intraocular lenses and refractive surgery.

Dr. Bert sees patients at the Doheny Eye Center UCLA offices in Orange County and Pasadena.



Vikas Chopra, MD

Charles Stewart Warren and Hildegard Warren Endowed Research Chair

Health Sciences Associate Clinical Professor of Ophthalmology

Medical Director, Doheny Eye Center UCLA–Pasadena

Glaucoma

Specializing in glaucoma, Dr. Chopra's research activities include advanced optic nerve and retinal nerve fiber layer imaging for early glaucoma detection, as well as development and validation of novel parameters for use in anterior segment optical coherence tomography devices as principal investigator at the Doheny Image Reading Center. Dr. Chopra also evaluates laser and surgical techniques for the management of glaucoma.

Dr. Chopra provides patient care at the Doheny Eye Center UCLA locations in Arcadia and Pasadena.



Brian A. Francis, MD, MS

Rupert and Gertrude I. Stieger Vision Research Chair

Health Sciences Clinical Professor of Ophthalmology

Director of Glaucoma Services, Doheny Eye Centers UCLA

Medical Director, Doheny Eye Center UCLA–Orange County

Glaucoma

Dr. Francis' clinical specialties are glaucoma and complex cataract. His research activities include: innovative glaucoma surgeries, minimally invasive glaucoma surgery, novel visual field techniques, glaucoma diagnostic and functional imaging, anterior segment imaging (ultrasound biomicroscopy and Fourier domain optical coherence tomography), and glaucoma laser surgery.

Dr. Francis sees patients at the Doheny Eye Center UCLA locations in Arcadia, Orange County, and Pasadena.



Kaustabh Ghosh, PhD

Associate Professor of Ophthalmology

Vascular Inflammation, Mechanobiology, Bioengineering, and Nanomedicine

Dr. Ghosh is an interdisciplinary researcher with expertise in vascular inflammation, mechanobiology, bioengineering, and nanomedicine.

He obtained his undergraduate degree in chemical engineering from the National Institute of Technology, India; his PhD in biomedical engineering from Stony Brook University, New York; and conducted his postdoctoral fellowship in the Vascular Biology Program at Boston Children's Hospital and Harvard Medical School.

Dr. Ghosh was associate professor of bioengineering at the University of California, Riverside (UCR), and participating faculty in the UCR Division of Biomedical Sciences, Stem Cell Center, and the Program in Cell, Molecular and Developmental Biology. The Ghosh Research Group at UCR focused on leveraging the principles of mechanobiology to examine and treat inflammation-mediated vascular degeneration associated with diabetic retinopathy and age-related macular degeneration.

Dr. Ghosh has active R01 grants from the National Eye Institute and was recently honored as Featured Scientist by the BrightFocus Foundation.

FACULTY DOHENY EYE CENTERS UCLA



Gad Heilweil, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Degenerative Retinal Disease

Dr. Heilweil's research activities include stem-cell therapy for degenerative retinal disease; retinal and uveal drug toxicity; and pharmacokinetics of intravitreal drugs.

In addition to providing patient care at the Stein Eye Institute in Westwood and the Stein Eye Center-Calabasas, Dr. Heilweil sees patients at the Doheny Eye Center UCLA locations in Arcadia, Orange County, and Pasadena.



Hugo Y. Hsu, MD

Health Sciences Clinical Professor of Ophthalmology

Cornea and External Diseases

Dr. Hsu specializes in corneal infection and inflammation, corneal transplantation, anterior segment reconstruction, and cataract surgery. His research interests include corneal and ocular infections and ophthalmic antibiotics.

Dr. Hsu sees patients at the Doheny Eye Center UCLA locations in Arcadia, Orange County, and Pasadena.



Alex A. Huang, MD, PhD

Associate Professor of Ophthalmology

Glaucoma

Dr. Huang's clinical specialties are in complex cataract and glaucoma surgery. His research is dedicated to understanding fluid flow in the eye to improve and customize glaucoma surgery. He also studies ocular changes that American astronauts experience in Space.

Dr. Huang provides clinical care at the Doheny Eye Center UCLA-Pasadena.



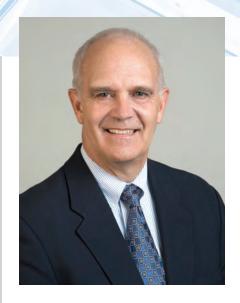
Michael S. Ip, MD

Gavin S. Herbert Endowed Chair for Macular Degeneration Professor of Ophthalmology Service Chief, Doheny Retina Division Medical Director, Doheny Image Reading Center

Vitreoretinal Disease

Dr. Ip is the chief of the Vitreoretinal Surgery Service at the Doheny Eye Centers UCLA. His practice concentrates on the surgical management of complex retinal detachment, complications of diabetic retinopathy, macular holes, epiretinal membranes, and other vitreoretinal diseases amenable to surgical intervention.

Dr. Ip's research focuses on the design and conduct of clinical trials investigating treatments for diabetic retinopathy, age-related macular degeneration, and retinal venous occlusive disease. As medical director for the Doheny Image Reading Center, endpoint analysis for clinical trials is an additional area of research focus. In addition, Dr. Ip has served as the national director for numerous NIHfunded ophthalmic clinical trials.



John A. Irvine, MD

A. Ray Irvine, Jr., MD, Chair in Clinical Ophthalmology Health Sciences Clinical Professor of Ophthalmology Medical Director,

Cornea and External Diseases

Doheny Eye Centers UCLA

Dr. Irvine's clinical specialties are cornea and external diseases (eg, tumors, infections), anterior segment surgical consultation, and prosthetic replacement of the ocular surface ecosystem (PROSE). His research activities focus on ocular infections.

Dr. Irvine provides patient care at the Doheny Eye Center UCLA locations in Arcadia, Orange County, and Pasadena.



Ram Kannan, PhD

Adjunct Professor of Ophthalmology

Eye Physiology and Pathology

Dr. Kannan's research focuses on eye physiology and pathology. He currently investigates age-related macular degeneration, a leading cause of blindness in high-resource countries.



Monica R. Khitri, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Pediatric Ophthalmic Diseases and Strabismus

Dr. Khitri specializes in the evaluation and treatment of pediatric ophthalmic diseases, including pediatric cataracts, nasolacrimal duct obstructions, amblyopia, and retinopathy of prematurity. She also treats and operates on strabismus in both children and adults.

She received her medical degree from the David Geffen School of Medicine at UCLA and completed her residency in ophthalmology at the Stein Eye Institute, followed by a fellowship in pediatric ophthalmology and strabismus at the Children's Hospital of Philadelphia.

Dr. Khitri is also a medical educator, researcher, and winner of over two dozen academic and professional awards, including the 2018 Faculty Teaching Award for the Stein Eye Institute ophthalmology residency program.

Dr. Khitri sees patients at the Doheny Eye Center UCLA locations in Arcadia, Pasadena, and Orange County. She also teaches residents and fellows at Harbor-UCLA Medical Center, where she is chief of the Pediatric Ophthalmology Service.



Kenneth L. Lu, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Medical Director, Doheny Eye Center UCLA–Arcadia

Cataract and Refractive Surgery

Dr. Lu specializes in cataract and refractive surgery, and his research activities are focused in the same areas.

Dr. Lu sees patients at the Doheny Eye Center UCLA–Arcadia.



Peter A. Quiros, MD

Health Sciences Clinical Professor of Ophthalmology

Neuro-Ophthalmology

A neuro-ophthalmologist, Dr. Quiros specializes in optic nerve disease, including optic neuritis and multiple sclerosis; double vision and adult strabismus; eye pain, headache, and idiopathic intracranial hypertension; Graves disease; orbital inflammatory syndromes; and stroke. Research includes idiopathic intracranial hypertension, headache, ocular myasthenia gravis, Graves disease, optic neuritis and multiple sclerosis, and visual rehabilitation after stroke. He was the principal investigator for the idiopathic intracranial hypertension treatment trial and is the principal investigator for the longitudinal idiopathic intracranial hypertension treatment trial. He is a member of the Neuro-Ophthalmology Researcher and Disease Investigators Consortium.

Dr. Quiros sees patients at the Doheny Eye Center UCLA locations in Orange County and Pasadena.



Daniel B. Rootman, MD, MS

Karen and Frank Dabby Endowed Chair in Ophthalmology

Associate Professor of Ophthalmology

Orbit and Ophthalmic **Plastic Surgery**

Dr. Rootman is an orbit and ophthalmic plastic surgery specialist with expertise in Graves disease, orbital surgery, orbital tumors, ptosis, lacrimal disorders, blepharoplasty, blepharospasm, Botox®, cosmetic dermal fillers, endoscopic eyebrow lift, eyelid surgery, eyelid tumors, and trauma. His research is developing and refining patientcentered outcome measures for surgical care; randomized clinical trials in surgery, including ptosis, Graves orbitopathy and lacrimal disease; health economics of eyelid and facial surgery; sociodemographics of facial trauma; physiology and pathobiology of ptosis; new approaches to surgery; and measurement and assessment in medical education.

Dr. Rootman sees patients at the Stein Eye Institute in Westwood and the Doheny Eye Center UCLA locations in Orange County and Pasadena.



SriniVas R. Sadda, MD

Stephen J. Ryan-Arnold and Mabel Beckman Foundation **Endowed Presidential Chair**

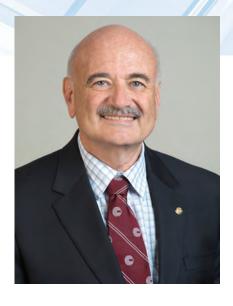
Professor of Ophthalmology

President and Chief Scientific Officer, Doheny Eye Institute

Retinal and Macular Diseases

Dr. Sadda received his MD from Johns Hopkins University, where he also completed his ophthalmology residency and neuro-ophthalmology and medical retina fellowships. His clinical interests are macular degeneration and diabetic retinopathy and his research includes automated retinal image analysis and advanced retinal imaging technologies. He has more than 550 peer-reviewed publications and 20 book chapters, and has given over 450 presentations worldwide. He also serves as an editorial board member of Ophthalmic Surgery, Lasers & Imaging, Retina, Graefe's, Ophthalmology Retina, and Ophthalmology. He is also an editor of the 5th edition of the Ryan's Retina textbook.

Dr. Sadda provides clinical care at the Doheny Eye Center UCLA in Pasadena and Arcadia.



Alfredo A. Sadun, MD, PhD

Flora L. Thornton Endowed Chair in Vision Research

Professor of Ophthalmology

Vice Chair, Doheny Eye Centers UCLA

Neuro-Ophthalmology

Dr. Sadun conducted his ophthalmology residency and fellowship in neuroophthalmology at Massachusetts Eye and Ear, Harvard Medical School. His clinical interests are diseases of the optic nerve, and more particularly, Leber hereditary optic neuropathy, toxic and nutritional optic neuropathies, and anterior and posterior ischemic optic neuropathies. He conducts research in these areas, as well as the assessment of the retina and optic nerve in Alzheimer disease and other neuro-degenerations. Dr. Sadun has authored approximately 400 peerreviewed publications and 25 book chapters. His research activities focus on human visual neuro-anatomy; retinal ganglion cell degeneration and regeneration; and axon populations in the human optic nerve in development, aging, and disease. He has six clinical trials involving treatment of optic nerve diseases, and most particularly, mitochondrial impairments as a cause of optic nerve disease.

Dr. Sadun sees patients at the Doheny Eye Center UCLA-Pasadena.

FACULTY DOHENY EYE CENTERS, UCLA



Deming Sun, MD

Mary D. Allen Chair in Vision Research Professor of Ophthalmology

Ocular Immunology

Dr. Sun's laboratory studies pathogenesis of immunology and inflammation-related ocular diseases. Current research focuses on investigating pathogenic mechanism of inflammation and the regulatory role of a specific T cell subset—γδ T cells—on IL-17+ autoreactive T cells, a newly identified pathogenic T cell.



Victoria L. Tseng, MD, PhD

Assistant Professor of Ophthalmology

Evaluation and Treatment of Glaucoma and Cataracts

Dr. Tseng specializes in the evaluation and treatment of glaucoma and cataract, and she has research expertise in the epidemiology of eye diseases.

She received her medical degree at the Warren Alpert Medical School of Brown University in Providence, Rhode Island, and she received a PhD in epidemiology at the UCLA Fielding School of Public Health. Dr. Tseng conducted her ophthalmology residency at the UCLA Stein Eye Institute as a member of the prestigious EyeSTAR program, followed by a glaucoma fellowship at Stein Eye.

Dr. Tseng has received numerous awards and honors, including induction into the Alpha Omega Alpha and Delta Omega honor societies, and selection as a Heed Fellow. She has published manuscripts in leading journals and also serves as a reviewer for several journals.

Dr. Tseng sees patients at Doheny Eye Center UCLA locations in Pasadena and Arcadia, and she teaches ophthalmology residents at Olive-View UCLA Medical Center.



Yuhua Zhang, PhD

Associate Professor of Ophthalmology

Retinal Imaging

Dr. Zhang is an optical engineer and retinal imaging specialist, whose research encompasses state-of-the-art tools to study blinding eye disorders, including next-generation 3-D imaging technology for viewing the retina in patients with age-related macular degeneration at the cellular level.

His technology integrates adaptive optics, scanning laser ophthalmoscopy, and optical coherence tomography to study the vision-producing cells and tiniest blood vessels of the eye. Understanding their interplay will help answer questions about causes of vision loss, improve prognoses for patients, and lead to directed treatments to slow or prevent vision loss.

Stein Eve Institute Members Based at Other Sites

James W. Bisley, PhD

Professor of Neurobiology and Psychology

Member of the Brain Research Institute

Cognitive Processing of Visual Information

Dr. Bisley's research revolves around understanding the neural mechanisms underlying the cognitive processing of visual information. These cognitive processes include visual perception, visual memory, visual attention, and the visual guidance of eye movements. Recent work has focused on how the responses of neurons in the posterior parietal cortex and prefrontal cortex are involved in the allocation of visual attention and how they guide eye movements in goal-directed visual search.

Patrick T. Dowling, MD, MPH

Chair, UCLA Department of Family Medicine

The Kaiser Endowed Professor of Community Medicine

Health Care Policy and Access for **Underserved Populations**

For 20 years, Dr. Dowling has received funding to link medical education to underserved neighborhoods. For a decade, several departments from UCLA have volunteered in the yearly event known as "Care Harbor," providing 3,500 individuals with free medical, dental, and eye care. The UCLA Mobile Eye Clinic, led Dr. Anne Coleman, provides free evealasses made onsite to low income families and the homeless in LA County.

Antoni Ribas, MD, PhD

Professor of Medicine, Surgery, and Molecular and Medical Pharmacology

Malignant Melanoma

Dr. Ribas is a physician-scientist who conducts laboratory and clinical research in malignant melanoma, focusing on gene engineered adoptive cell transfer (ACT) therapies, anti-CTLA4 antibodies, anti-PD-1 antibodies, and BRAF and MEK inhibitors.

Dario L. Ringach, PhD

Professor of Neurobiology and Psychology, Biomedical Engineering Program

Visual Perception and Neurophysiology

Dr. Ringach's research focuses on the relationship between eye movements and visual perception, as well as how motor planning and execution, such as reaching, grasping, navigating, and adjusting body posture, is influenced by visual information and impaired vision. In collaboration with a team of neurosurgeons at UCLA, Dr. Ringach's laboratory is also recording the brain activity of patients with epilepsy who are undergoing clinical evaluation for surgical treatment, shedding new light into the processes involved in object recognition and perception.

Professional Research Series

Christian Altenbach, PhD

Research Ophthalmologist

Structure and Function of Rhodopsin

The membrane protein rhodopsin is a critical first step in visual transduction, converting light energy into a chemical form in the photoreceptor cell of the eye. To understand this process on a detailed molecular level. Dr. Altenbach is using site-directed spin labeling and electron paramagnetic resonance spectroscopy to study the structure of rhodopsin in the absence of light, as well as the changes in structure caused by light.

Michael Bridges, PhD

Assistant Project Scientist

Paramagnetic Resonance Methodologies

Dr. Bridges' research in the laboratory of Dr. Wayne Hubbell is centered on the development and application of new pulsed electron paramagnetic resonance methodologies. Protein conformational dynamics and structural relaxation are his central focus with the goal of characterizing the timescales and motional amplitudes of functional activation.

Barry L. Burgess, BS

Research Specialist

Degenerative Retinal Disease Research

Mr. Burgess provides research support for the Photoreceptor/RPE Cell Biology Laboratory of Dr. David Williams. Research interests include production of differentiated RPE cells from human stem cell precursors and developing in vitro models of oxidative stress involved in degenerative retinal disease progression.

Abhishek Chada, PhD

Assistant Project Scientist

Doug Chung, PhD

Assistant Project Scientist

Corneal Endothelial Biology and Disease

Dr. Chung's research focus includes investigating the biology of the corneal endothelium, determining the utility of ex vivo expansion of human corneal endothelial cells for transplantation, and elucidating the mechanisms involved in the pathogenesis of inherited corneal endothelial dystrophies in an effort to develop novel therapeutic approaches.

Matthias Elgeti, PhD

Assistant Project Scientist

Development of Common Structure/Function Relationships of GPCR Activation Based on the Rhodopsin Model System

Dr. Elgeti's work focuses on the activation mechanisms of G protein coupled receptors (GPCRs), which are involved in many cellular signaling processes and represent major drug targets. He addresses his questions by comparing visual rhodopsin with other prototypical GPCRs using site-directed spin labeling (SDSL) and electron paramagnetic resonance (EPR) spectroscopy.

Rikard Frederiksen, PhD

Assistant Research Ophthalmologist

Adaptation

Dr. Frederiksen's main research interest is adaptation, specifically how the rods and cones in the retina adapt to different light intensities.

Rajendra Gangalum, PhD

Assistant Research Specialist

Function and Regulation of Small Heat Shock Protein aB-crystallin in Health and Disease

Dr. Gangalum's research seeks to gain understanding of the physiological function of aB-crystallin in the developing ocular lens and non-ocular tissues. aB-crystallin has been shown to associate with pathologies such as cataracts, cancer, age-related macular degeneration, and various neurodegenerative diseases.

Sheyla Gonzalez Garrido, PhD

Associate Project Scientist

Limbal Stem Cells

Dr. Garrido's research aims to improve the ex vivo expansion of limbal epithelial stem cells (LSCs) by modulating Notch signaling in individuals suffering from limbal stem cell deficiency. The identification of niche factors could help to improve the in vitro production of LSCs for transplantation.

Sonia Guha, PhD

Assistant Project Scientist

Unraveling New Therapeutic Targets for Ocular Albinism

Dr. Guha studies genes that may be associated with the misrouting of retinal ganglion cell (RGC) axons at the brain's optic chiasm in individuals affected with X-linked ocular albinism type 1 (OA1). This disease is also characterized by hypopigmentation and presence of macromelanosomes in the RPE. How the reduced pigmentation of OA1 RPE exerts its effects on the RGCs to influence the misrouting of their axons at the optic chiasm remains unsolved, and Dr. Guha's findings have the potential to unravel new therapeutic targets for OA1.

Joanna J. Kaylor, PhD

Associate Project Scientist

Visual Chromophore Regeneration in the Retina of the Eye

Dr. Kaylor has discovered that light plays a vital role in regeneration of visual chromophore in the retina. She recently identified a non-enzymatic process that generates visual pigment in photoreceptor membranes in light. Her research now focuses on the function of retinal G-protein coupled receptor (RGR).

Jacky M. K. Kwong, PhD

Research Ophthalmologist

Degeneration of Retinal Ganglion Cells and Neuronal Recuses

Dr. Kwong identifies novel neuroprotective and regenerative therapies for glaucoma that preserve and restore the nerve cells. He utilizes animal models related to optic nerve injury and proteomic analysis to understand the progression of retinal ganglion cell degeneration, and pharmacologic techniques and functional assessments to evaluate therapies.

Anna Matynia, PhD

Associate Research Ophthalmologist

Mechanisms Underlying Photoallodynia and Inherited **Retinal Diseases**

Dr. Matynia's research investigates the mechanisms underlying photoallodynia, a condition in which normal levels of light produce or enhance ocular or headache pain. Using behavioral, molecular, genetic, and cellular approaches, the laboratory focuses on corneal, retinal, and central mechanisms from dry eye injury, achromatopsia, and migraine, respectively. Dr. Matynia is also investigating mechanisms of hemangioblastoma formation associated with von Hippel-Lindau disease, and genetics of inherited retinal disease, using patient-derived induced pluripotent stems cells for molecular genetics determination.

Alejandra Young, PhD

Assistant Project Scientist

Ocular Albinism

Dr. Young's research is focused on the study of the molecular mechanisms that cause ocular albinism type 1 (OA1), a disease caused by mutations in the OA1 gene and characterized by hypopigmentation of the retinal pigment epithelium and abnormal crossing of the optic axons at the optic chiasm. In addition, she investigates the potential therapeutic use of engineered human embryonic stem cell-derived extracellular vesicles for the treatment of ocular albinism.

Chi Zhang, PhD

Assistant Project Scientist

Study of Steroid Treatments for Glaucoma

Dr. Zhang's research focuses on the study of steroid treatments, including the use of dexamethasone (Dex), which mediates the increase of intraocular pressure (IOP) and the risk of ocular hypertension leading to steroidinduced glaucoma. Dex treatment can lead to irregular trabecular meshwork (TM) structure and potentially reduce outward flow of intraocular fluid through altering Wnt signaling. In addition, Dr. Zhang uses novel Wnt small molecule regulators to investigate whether these modulators would affect Dex-mediated phenotype on primary human TM cells.

Professional Clinical Series

Jane W. Chan, MD

Associate Physician Diplomate Doheny Eye Centers UCLA

Melissa W. Chun, OD, FAAO

Associate Clinical Professor of Ophthalmology

Director of the UCLA Vision Rehabilitation Center

Vision Rehabilitation

Dr. Chun is a low-vision specialist providing patient care and resident teaching during their subspecialty clinical rotation. She is involved in clinical trials to assess and improve visual function by utilizing telerehabilitation to train individuals with low vision to effectively use magnification devices for reading and to assess the effect of mobile applications in improving independence and self-sufficiency for older adults with a wide range of visual impairment.



Uday Devgan, MD, FACS, FRCS

Clinical Professor of Ophthalmology Chief of Ophthalmology, Olive View-UCLA Medical Center

Dr. Devgan is a cataract and refractive surgery specialist who has taught ophthalmic surgery in more than 50 countries. He has been actively involved in resident teaching for more than two decades, and he has mentored more than 180 residents over the course of thousands of ocular surgeries, including advising former residents after the culmination of their training. Passionate about teaching the next generation of ophthalmologists, Dr. Devgan publishes the cataract surgery teaching website CataractCoach.com, and he has been honored with the ophthalmology Faculty Teaching Award an unprecedented five times

Rachel Feit-Leichman, MD

Associate Physician Diplomate

Cataract Surgery

Dr. Feit-Leichman divides her time between supervising residents and providing patient care at the Stein Eye Institute's Urgent Care Clinic, and teaching cataract surgery and overseeing residents at the ophthalmology clinic of the Harbor-UCLA Medical Center. Dr. Feit-Leichman is also active in striving to improve patient access to eye care in the greater Los Angeles County Healthcare System.

Batool Jafri, MD

Associate Physician Diplomate Assistant Clinical Professor of Ophthalmology

Cornea/External Disease/ Refractive Surgery

Dr. Jafri provides patient care as well as supervision to resident physicians and cornea fellows. Her focus is medical and surgical treatment of diseases of the cornea, external disease, and refractive conditions like near and far sightedness. Dr. Jafri provides general ophthalmic care and offers cataract surgery with premium intraocular lens implants at the Stein Eye Center—Santa Monica.

Boban A. Joseph, MD

Associate Physician Diplomate Doheny Eye Centers UCLA

Phillip Le, MD, PhD

Associate Physician Diplomate

Retinal and Macular Diseases

Dr. Le is a comprehensive ophthalmologist who specializes in retinal and macular diseases. He sees patients at the Doheny Eye Center UCLA—Pasadena.

Christine V. Nguyen, MD

Associate Physician Diplomate
Doheny Eye Centers UCLA

Tania Onclinx, MD

Associate Physician Diplomate

Clinical Instructor of Ophthalmology

Urgent Care and Clinical Supervision

Dr. Onclinx attends at the Urgent Care Walk-In service at the Stein Eye Institute, and she teaches resident physicians and medical students at the Stein Eye Institute during their subspecialty clinical rotation. She also provides clinical supervision to resident physicians at Ronald Reagan UCLA Medical Center and UCLA Medical Center, Santa Monica.

Susan S. Ransome, MD

Associate Physician Diplomate
Clinical Instructor of Ophthalmology

HIV and Diabetic Retinopathy

Dr. Ransome is participating in a clinical research study involving HIV-infected patients who have diabetes to see whether there is increased risk of development or progression of diabetic retinopathy when subjects are treated for abdominal lipodystrophy with Egrifta (tesamorelin).

Meryl L. Shapiro-Tuchin, MD

Associate Physician Diplomate

Assistant Clinical Professor of Ophthalmology

Co-Director of the Ophthalmology Inpatient Consultation Service

Comprehensive Ophthalmology

Dr. Shapiro-Tuchin provides clinical supervision to resident physicians. She functions as co-director of the Ophthalmology Inpatient Consultation Service, assisting resident physicians in their evaluation of inpatients admitted to the Ronald Reagan UCLA Medical Center and the UCLA Medical Center, Santa Monica.

Ronald J. Smith, MD

Associate Physician Diplomate

Associate Clinical Professor of Ophthalmology

Objective Assessment of Surgical Technique and Training

Dr. Smith's research interest is the objective assessment of surgical technique and development of evidence-based surgical training for residents to improve patient care. In addition to teaching residents at the Veterans Affairs Greater Los Angeles Healthcare System and in the UCLA Microsurgery Laboratory, Dr. Smith provides cornea and comprehensive eye care to patients at the Stein Eye Center–Santa Monica.

Laura A. Syniuta, MD

Associate Physician Diplomate

Pediatric Ophthalmology and Strabismus

Dr. Syniuta completed her fellowship training in pediatric ophthalmology and strabismus at the Stein Eye Institute in 1999. With children's eye and learning disorders being her passion, she sees patients at the Stein Eye Center—Santa Monica and has staffed the UCLA Mobile Eye Clinic since 2011.

Federico G. Velez, MD

Associate Physician Diplomate

Strabismus and Childhood Eye Disorders

Dr. Velez's primary research interest is studying the mechanisms of congenital and acquired forms of strabismus. He has participated in the development of guidelines for preoperative assessment and surgical approaches to patients with convergent (esotropia), divergent (exotropia), and vertical forms of strabismus, and has developed new techniques to treat pediatric patients with eyelid abnormalities and cataracts.

Victoria Yom, MD

Associate Physician Diplomate

Cornea and External Diseases

Dr. Yom provides comprehensive ophthalmic care and is a subspecialist in cornea/external disease. Her areas of interest include: dry eye, blepharitis, conjunctivitis, uveitis, as well as cataract surgery with advanced intraocular lenses and corneal transplantation. Dr. Yom provides clinical care at the UCLA Stein Eye Institute in Westwood and the Doheny Eye Center UCLA locations in Arcadia and Pasadena.

LECTURER

Kathleen L. Boldy, VMD

Lecturer in Ophthalmology

Volunteer Faculty

CLINICAL PROFESSORS OF OPHTHALMOLOGY

J. Bronwyn Bateman, MD

Bruce B. Becker, MD, PC

Michael S. Berlin, MD

William P. Chen, MD

Michael Colvard, MD

Paul Deiter, MD (Senior Status)

Uday Devgan, MD, FACS, FRCS

Chief of Ophthalmology

Olive View-UCLA Medical Center

Donald Dickerson, MD (Senior Status)

Donald S. Fong, MD, MPH

Ronald Gaster, MD

Thomas A. Hanscom, MD

Dale Heuer, MD

John D. Hofbauer, MD

Kenneth J. Hoffer, MD

C. Richard Hulquist, MD

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Roger A. Kohn, MD

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Benjamin C. Kwan, MD

Jeremy Levenson, MD (Senior Status)

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Jerry Sebag, MD

Alan L. Shabo, MD

Norman Shorr, MD

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Alan Norton, MD (Senior Status)

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Michael Reynard, MD

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David E. Savar, MD

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Kayur Shah, MD

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James D. Shuler, MD

Yossi Sidikaro, MD, PhD

Matthew Sloan, MD

Ronald J. Smith, MD

Alfred Solish, MD, MS

Kenneth D. Steinsapir, MD

Sadiqa Stelzner, MD, MA, FACS

William C. Stivelman, MD (Senior Status)

Hector L. Sulit, MD

Kamal A. Zakka, MD

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Malvin B. Anders, MD

Richard K. Apt, MD

Reginald G. Ariyasu, MD, PhD

Arthur A. Astorino, MD

Mark A. Baskin, MD

Arthur Benjamin, MD

Katherine L. Bergwerk, MD

Betsy E. Blechman, MD

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Amarpreet S. Brar, MD

Almira W. Cann, MD, PhD

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Candice Chen, MD

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Milton W. Chu, MD

Robert A. Clark, MD

Charles A. Cooper, MD

Hajir Dadgostar, MD

Yadavinder P. Dang, MD

Jonathan M. Davidorf, MD

John L. Davidson, MD

Sanford S. Davidson, MD

Louise Cooley Davis, MD

Farid Eghbali, OD

Troy R. Elander, MD

Naomi L. Ellenhorn, MD

Calvin T. Eng, MD

Doreen T. Fazio, MD

Sanford G. Feldman, MD

Laura E. Fox, MD

Ronald P. Gallemore, MD

George H. Garcia, MD

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W. James Gealy, Jr., MD

Damien Goldberg, MD

Lawrence "Tim" Goodwin, MD

Lawrence H. Green, MD (Senior Status)

Richard Havunjian, MD

Man M. Singh Hayreh, MD

Matthew L. Hecht, MD

David A. Hollander, MD

Jeffrey Hong, MD

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Morton P. Israel, MD

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Batool Jafri, MD

Aarchan Joshi, MD

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Jason Jun, MD

Ganesha Kandavel, MD

J. David Karlin, MD

David S. Katzin, MD

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Craig H. Kliger, MD

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Joanne E. Low, MD

Bryant J. Lum, MD

Michael C. Lynch, MD

M. Polly McKinstry, MD

Ashish M. Mehta, MD

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Roger L. Novack, MD, PhD

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Alpa A.S. Patel, MD

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Gilbert Perlman, MD (Senior Status)

Cheryl J. Powell, MD

John R. Privett, MD (Senior Status)

Laurence N. Roer, MD

Gerald Sanders, MD (Senior Status)

Aaron M. Savar, MD

Barry S. Seibel, MD

Meryl Shapiro-Tuchin, MD

David M. Shultz, MD

Eliot B. Siegel, MD

Lance M. Siegel, MD

John D. Slaney, MD

Robert J. Smyth, MD

Kenneth O. Sparks, MD

Mehryar "Ray" Taban, MD, FACS

Homayoun Tabandeh, MD

Robert C. Tarter, MD

Debra G. Tennen, MD

Teddy Y. Tona, MD

Sterling M. Trenberth, MD

(Senior Status)

Robert C. Tudor, MD (Senior Status)

Henry E. Ullman, MD

Tay J. Weinman, MD (Senior Status)

Irwin S. Weiss, MD (Senior Status)

Sidney J. Weiss, MD

Jon D. Wender, MD

Scott Whitcup, MD

David L. Williams, MD (Senior Status)

Jeffrey V. Winston, MD

David M. Winters, MD (Senior Status)

David L. Wirta, MD

Barry J. Wolstan, MD

Wilson C. Wu, MD, PhD

Michael C. Yang, MD

Patrick C. Yeh, MD

Richard H. Yook, MD (Senior Status)

Andrew Young, MD

Peter D. Zeegen, MD (Senior Status)

CLINICAL INSTRUCTORS IN OPHTHALMOLOGY

Michael L. Baker, OD

Eduardo Besser, MD

Maria Braun, MD

Stephen S. Bylsma, MD

Andrew Caster, MD

John J. Darin, MD (Senior Status)

Paul J. Dougherty, MD

Sean Dumars, MD

Daniel Ebroon, MD

Brad S. Elkins, MD

Nicole Fram, MD

Benjamin Graham, OD

Pamela Golchet, MD

Satvinder Gujral, MD

Lawrence M. Hopp, MD, MS

Anisha J. Judge, MD

Ganesha Kandavel, MD

Michael Kapamajian, MD

Douglas Katsev, MD

Rajesh Khanna, MD

Julie A. King, MD

Mark H. Kramar, MD

Daniel Krivoy, MD

Mark Landig, OD

Amir Marvasti, MD

Laurie C. McCall, MD

Mitra Nejad, MD

Jayantkumar Patel, MD

Susan S. Ransome, MD

Steven H. Rauchman, MD

Richard H. Roe, MD

Christian Sanfilippo, MD

Louis M. Savar, MD

Vivian Shibayama, OD

Mark Silverberg, MD Abraham Soroudi, MD

Sharon N. Spooner-Dailey, MD

Laura A. Syniuta, MD

Rosalind Vo, MD

Mark Volpicelli, MD

Ye Elaine Wang, MD

Mathew Wang, MD

Peter H. Win, MD

Robert W. Baloh, MD

Professor of Neurology and Surgery (Head and Neck)

Ferdinand V. Coroniti, PhD

Professor, Department of Physics and Astronomy

David Eisenberg, DPhil

Investigator, Howard Hughes Medical Institute

Paul D. Boyer Professor of Biochemistry and Molecular Biology

Professor, Departments of Chemistry and Biochemistry, and Biological Chemistry

Molecular Biology Institute

Alan M. Fogelman, MD

Castera Professor and Executive Chair Department of Medicine

Alan D. Grinnell, PhD

Professor of Physiology and Physiological Science

Director, Jerry Lewis Neuromuscular Research Center

Director, Ahmanson Laboratory of Neurobiology

C. Kumar Patel, PhD

Professor, Department of Physics and Astronomy

Peter C. Whybrow, MD

Judson Braun Professor and Executive Chair Department of Psychiatry and Biobehavioral Sciences

Director and Physician in Chief Neuropsychiatric Institute

Dean Bok, PhD

Dolly Green Chair of Ophthalmology

Professor of Ophthalmology Emeritus

Distinguished Research Professor of Neurobiology

Member of the Brain Research Institute

Richard Casey, MD

Health Sciences Clinical Professor Emeritus

Gordon L. Fain, PhD

Distinguished Professor of the Departments of Integrative Biology/ Physiology Emeritus

Professor of Ophthalmology (Active Recall)

Lynn K. Gordon, MD, PhD

Professor of Ophthalmology Emeritus

Emeritus Senior Associate Dean for Equity and Diversity Inclusion (Active Recall)

Michael O. Hall, PhD

Professor of Ophthalmology Emeritus

Founding Member of the Stein Eye Institute

Robert S. Hepler, MD

Professor of Ophthalmology Emeritus

Founding Chief, Neuro-Ophthalmology Division

Joseph Horwitz, PhD

Distinguished Professor of Ophthalmology Emeritus (Active Recall)

Sherwin D. Isenberg, MD

Professor of Ophthalmology and Pediatrics Emeritus

Allan E. Kreiger, MD

Professor of Ophthalmology Emeritus (Active Recall)

Founding Chief, Retina Division

Ralph D. Levinson, MD

Health Sciences Clinical Professor of Ophthalmology Emeritus



Bradley R. Straatsma, MD, JD

Professor of Ophthalmology Emeritus

Founding Chair, Department of Ophthalmology

Founding Director, Stein Eye Institute

Barry A. Weissman, OD, PhD

Professor of Ophthalmology Emeritus

Marc O. Yoshizumi, MD

Professor of Ophthalmology Emeritus

Residents

THIRD-YEAR RESIDENTS 2018-2021

Michael DaSilva, MD Eliot Dow, MD Nicholas Iafe, MD Jaffer Kattan, MD Anh Pham, MD, PhD (EyeSTAR) Ernest Puckett, MD Austin Woolley, MD Andrea Yonge, MD

SECOND-YEAR RESIDENTS 2019–2022

Abhinav Golla, MD, MPH
Terry Hseih, MD, PhD
Yoon Lee, MD
Justin Park, MD
Andres Parra, MD
Ravin Sajnani, MD
Lynn Shih, MD
Claire Smith, MD, MFA

FIRST-YEAR RESIDENTS 2020–2023

Adrian Au, MD, PhD (EyeSTAR)
Giovani Campagna, MD
Teresa Chen, MD
Cory Hoeferlin, MD, MBA (EyeMBA)
Amanda Lu, MD
Michael Mathison, MD
Alex Onishi, MD

EyeSTAR Trainees

Adrian Au, MD, PhD Sarah Cheng, MD Erika Ellis, MD Ken Kitayama, MD Elise Ma, MD Anh H. Pham, MD, PhD Michel Sun, MD, PhD

EyeMBA Trainee

Cory Hoeferlin, MD, MBA

Fellows

Cornea/External Ocular Diseases and Refractive Surgery

Daniel L. Kornberg, MD Patrick J. Pham, MD (Doheny Eye Centers UCLA)

Glaucoma

Arpine Barsegian, MD Mohamad Sharaby, MD

Medical Retina and Ophthalmic Genetics

Jeffrey Eng, MD Alice Wong, DO

Neuro-Ophthalmology

None

Orbital and Ophthalmic Plastic Surgery

Liza Cohen, MD Kelsey Roelofs, MD

Pathology (Eye)

None

Pediatric Ophthalmology and Strabismus

Harshad P. Patel, MD

Uveitis and Inflammatory Eye Disease

Judy L. Chen, MD

Vitreoretinal Diseases and Surgery

Greg Budoff, MD Alexander Dillon, MD Kirk Hou, MD, PhD Adam Weiner, MD

International Fellows

Cornea Research

Clémence Bonnet, MD France Seyed Reza Ghaffari Dehkharghani, MD Iran Rutuja Unhale, MD India

Comprehensive Ophthalmology/ Cataract

None

Glaucoma

Golnoush Mahmoudi Nezhad, MD Iran Vahid Mohammadzadeh, MD Iran Teakkwan Rhee, MD

Korea

Medical Retina and Ophthalmic Genetics

Neda Abraham, MSc France Meira Fogel Levin, MD Israel Ahmad Santina, MD Lebanon

Neuro-Ophthalmology

None

Orbital and Ophthalmic Plastic Surgery

Stefania Diniz, MD Brazil

Pediatric Ophthalmology

None

Uveitis

None

Visual Physiology

None

Vitreoretinal Diseases and Surgery

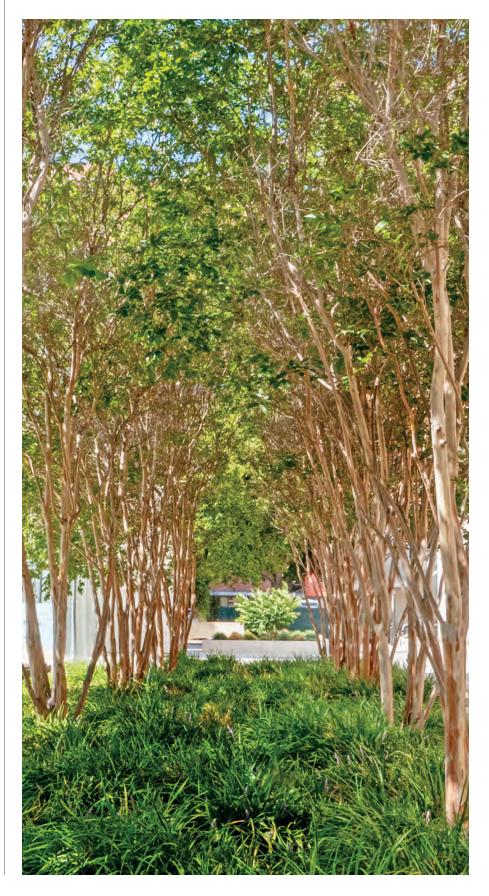
Frederic Gunnemann, MD Germany Moritz Pettenkofer, MD Germany Mercedes Rodriguez, MD Argentina

Predoctoral Research Fellows

Angela Chen
Mengzhen Chen
Kevin Eden
W. Blake Gilmore
Khristopher Griffis
Jody He
Seongjin Lim
Eunice Ng
Thao Nguyen
Joseph Park
Katie Pohl
Luis Sanchez
Gil Torten

Postdoctoral Research Fellows

Mahesh Agarwal, PhD Paul Bonezzi, PhD Abhishek Chadha, PhD Sathiskumar Chandrakumar, PhD Arpita Dave, PhD Antonio Escudero Paniagua, PhD Matthew Gerber, PhD Mihir Ghosh, PhD Roni Hazim, PhD Nan Hultgren, PhD Somaye Jafari, PhD Robert Knight, PhD Chao Ma, PhD Ala Morshedian, PhD Joann Roberts, PhD Sarah Robertson, PhD Maxime Ruiz, PhD Sophie Skarlatou, PhD Carlos Torets Serrano, PhD Simona Torriano, PhD Chi Zhang, PhD Lin Zhang, PhD Wenlin Zhang, MD, PhD





Research and Funding

Research and Funding

Vision-Science Research Active Funding

ADMINISTERED BY THE STEIN EYE INSTITUTE

Faculty

Ava K. Bittner, OD, PhD

CARE Study: Community Access Through Remote Eyesight Administration for Community Living Sub-award from New England College of Optometry Duration: 9/30/19–9/29/22 \$85,283

Joseph Caprioli, MD

Clinical Research Program in Glaucoma Simms-Mann Family Foundation Duration: 7/1/14–6/30/22 \$50,000

Anne L. Coleman, MD, PhD

2019 Grant Application to the Nicholas Endowment for the UCLA Mobile Eye Clinic (UMEC) The Nicholas Endowment Duration: 12/5/19–12/31/21 \$75,000

Joseph L. Demer, MD, PhD

Biomechanical Analysis in Strabismus Surgery National Eye Institute Duration: 5/1/20–4/30/24 \$405,075

Data-Driven Biomechanical Simulation of Eye Movement and Strabismus National Eye Institute
Sub-award from
George Mason University
Duration: 6/1/19–5/30/23
\$102,831

Sophie X. Deng, MD, PhD

Development of Stem Cell-Based Therapies for Limbal Stem Cell Deficiency National Eye Institute Duration: 2/1/19–1/31/24 \$250,000 Development of Small-Molecule Wnt Mimetics for Corneal Epithelial Cell Regeneration National Eye Institute (Multi-Pl with Jie J. Zheng, PhD) Duration: 9/30/18–8/31/22 \$418.703

Gordon L. Fain, PhD

Physiology of Photoreceptors National Eye Institute Duration: 8/1/17–7/31/22 \$250,000

Visual Integration in the Retina of the Sea Lamprey *Petromyzon Marinus* Great Lakes Fishery Commission Duration: 1/1/19–12/31/21 \$73,562

Debora B. Farber, PhD, DPhhc

Patient-Derived iPSCs, CRISPR/Cas and RPE-Derived Exosomes for the Treatment of Ocular Albinism Vision of Children Duration: 6/1/16–12/31/20

\$163.783

Gary N. Holland, MD

Systemic Immunosuppressive Therapy for Eye Diseases Cohort Study (SITE) University of Pittsburgh Duration: 3/2/16–3/2/21 Non-monetary Contract

Systemic Immunosuppressive Therapy for Eye Disease (Cancer Surveillance and Research Branch/CCR)
University of Pittsburgh
Duration: 3/2/16—3/2/21

Duration: 3/2/16–3/2/21 Non-monetary Contract

Jean-Pierre Hubschman, MD

Vitreoretinal Surgery via Robotic Microsurgical System with Image Guidance, Force Feedback, Virtual Fixture, and Augmented Reality National Eye Institute Duration: 2/1/19–1/31/24 \$267.801

Intraocular Robotic Interventional and Surgical System for Automated Cataract Surgery National Eye Institute Duration: 9/30/19–8/31/23 \$397,757 A Natural History of Macular (Parafoveal) Telangiectasia Lowy Medical Research Institute Duration: 9/1/05–12/31/21 \$72,650

Michael Ip, MD

The SCORE 2 Long-Term Follow-Up (SCORE2 LTF)
National Eye Institute
Sub-award from
Pennsylvania State University
Duration: 4/1/19–3/31/22
\$29,579

Bartly J. Mondino, MD

RPB Unrestricted Grant Research to Prevent Blindness, Inc. Duration: 1/1/12–12/31/21 \$115.000

Kouros Nouri-Mahdavi, MD

Detection of Disease Progression in Advanced Glaucoma National Eye Institute Duration: 3/1/20–2/28/25 \$253,655

Vahid Mohammadzadeh, MD (Postdoctoral Fellow)
Prediction of Central Functional
Measurements with Macular OCT
Imaging in Glaucoma: An Al Approach
Fight for Sight
Duration: 8/1/20–7/31/21
\$22,500

Yirong Peng, PhD

Molecular and Evolutionary Underpinnings of Foveal Formation ARVO Foundation for Eye Research Duration: 1/1/21–12/31/21 \$40,000

Modeling the Fovea in 3-D Human Retinal Organoids Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA Duration: 7/1/20–6/30/21 \$50,000

Stacy L. Pineles, MD

Physical Injuries in Patients with Pediatric Eye Diseases National Eye Institute Duration: 1/1/19–12/31/21 \$125,000

Roxana Radu, MD

The Role of Complement in Recessive Stargardt Disease National Eye Institute Duration: 8/1/15–7/31/21 \$250.000

Gemini Therapeutics Inc.

CDA20214570: Discussion with Gemini

Duration: 4/7/21–4/6/22 Non-monetary Agreement

Analysis of Bisretinoids in the Abca4-/- Mouse Eyes Biogen Research Corporation Duration: 2/25/20–8/25/20 \$32,525

Alapakkam P. Sampath, PhD

Molecular Basis of Photoreceptor Wiring National Eye Institute (Multi-Pl award with Scripps Clinic and Research Foundation) Duration: 5/1/17–4/30/22 \$90.760

Analyses of Retinal Circuits After Rod Rescue in a Mouse Model of Human Blindness National Eye Institute (Multi-Pl award with University of Southern California) Duration: 9/1/16–8/31/21 \$95,673

Vision Science Training Program National Eye Institute Duration: 9/1/17–8/31/22 \$229,426

Molecular Mechanisms of Photoreceptor Adaptation National Eye Institute Duration: 2/1/19–1/31/24 \$267,551

Instrumentation Grant for Stein Eye Investigators Bruce Ford and Anne Smith Bundy Foundation Duration: 8/16/11–8/15/20

\$100,000

David Sarraf, MD

In Vivo Ultrastructure of Chorioretinal Disease National Eye Institute Sub-award from Doheny Eye Institute Duration: 1/3/19–12/31/21 \$16.515 Gabriel H. Travis, MD

Mechanisms for Light-Driven Chromophore Synthesis by Müller Cells to Regenerate Cone Opsin and Maintain Cone Sensitivity National Eye Institute Duration: 1/1/20–12/31/24 \$248,496

Edmund Tsui, MD

Discovery of Quantitative Imaging Biomarkers in Juvenile Idiopathic Arthritis-Associated Uveitis Thrasher Research Fund Duration: 7/1/20–6/30/21 \$10.876

Imaging Biomarkers in Juvenile Idiopathic Arthritis-Associated Uveitis Pfizer Health Solutions, Inc. Duration: 6/16/21–6/30/23 \$117,188

Irena Tsui, MD

Retinal and Choroidal Vasculature Changes in Healthy and High-Risk Pregnancies National Eye Institute Duration: 2/1/20–1/31/22 \$136,043

David S. Williams, PhD

Vision Research Core at UCLA National Eye Institute Duration: 9/1/20–6/30/25 \$500,000

Cellular Mechanisms of Disease in Patient-Specific RPE Cells Foundation Fighting Blindness Sub-award from University of California, San Francisco Duration: 6/1/17–5/31/21 \$164,930

RPE Cell Biology, Aging, and Disease National Eye Institute Duration: 9/1/17–5/31/22 \$296,846

Test of Readthrough Drug Treatment for UGA PTC in the Usher 1B Gene Foundation Fighting Blindness Duration: 1/1/19–12/31/21

\$180,615

Antonio Escudero Paniagua, PhD (Postdoctoral Fellow)
Addressing the Link About Impairment in Phagosomes Degradation and AMD BrightFocus Foundation
Duration: 7/1/21–6/30/23
\$100,000

Nan Hultgren, PhD (Postdoctoral Fellow) Investigating the Role of Mitochondrial Dynamics in Retinal Pigment Epithelium National Eye Institute Duration: 9/1/20–8/31/23 \$64.926

Exploring the Relationship of Water Flow Across the RPE and Mutant-MYO7A/Usher 1B National Eye Institute Duration: 1/1/20–12/31/21 \$121.250

Understanding Mitochondrial Defects in Choroideremia RPE Choroideremia Research Foundation Duration: 2/1/20–1/31/21 \$61,079

Xian-Jie Yang, PhD

Neuroprotection Mechanism for Photoreceptors National Eye Institute Duration: 5/1/16–4/30/22 \$366,660

Jie J. Zheng, PhD

Development of Small-Molecule Wht Mimetics for Corneal Epithelial Cell Regeneration National Eye Institute (Multi-Pl with Sophie Deng, MD, PhD) Duration: 9/30/18–8/31/22 \$418.703

Vision Science Summer Research Program University of California-Historically Black Colleges and Universities Initiative (UC-HBCU) Duration: 12/1/20–11/30/21 \$27,000

Professional Research Series

Doug Chung, PhD

Elucidating the Role of SLC4A11 in Congenital Hereditary Endothelial Dystrophy Knights Templar Eye Foundation, Inc. Duration: 7/1/19-12/31/22

\$70,000

Matthias Elgeti, PhD

Exploring the Conformational Landscape of G Protein Coupled Receptors National Institute of General Medical Sciences Duration: 4/1/21-12/31/25 \$250.000

Sonia Guha, PhD

Role of Doublecortin in Axonal Misrouting in OA1 -/- Mice Vision of Children Duration: 7/1/14-11/12/20 \$159,848

Anna Matynia, PhD

Molecular, Cellular, Anatomical, and Neurobiological Investigation of Melanopsin-Expressing Corneal Innervation, and Its Role in Pain and Photophobia National Eve Institute Duration: 2/1/20-12/31/24 \$250,000

Microglia Function in Pathogenesis of Retinal Hemangioblastomas Associated with Von Hippel-Lindau Disease VHL Alliance

Duration: 11/15/19-11/14/22

\$50.000

Alejandra Young, PhD

Identification of the OA1 Molecule Partners Critical for Axonal Guidance of **RGCs Growth Cones** (Proposal Continuation of Grant #20142326) Vision of Children Duration: 11/1/13-11/30/20 \$215,566

Vision-Science Research **Active Funding**

ADMINISTERED BY THE **DOHENY EYE INSTITUTE**

Faculty

Steven Barnes, PhD

Visual Processing by GABA-pH Hybrid Feedback at the Photoreceptor Synapse The Plum Foundation Duration: 7/22/20-7/21/21 \$50,000

Kaustabh Ghosh, PhD

Role of Retinal Capillary Stiffness in Diabetic Retinopathy National Eye Institute Duration: 9/1/17-6/30/22 \$284,460

Alex A. Huang, MD, PhD

Dynamic Variable Aqueous Humor Outflow and Glaucoma Therapies in the Human Eve National Eye Institute Duration: 5/1/20-4/30/25 \$321,955

Investigating Subconjunctival Lymphatics for the Treatment of Glaucoma and Eye Disorders Glaucoma Research Foundation

Shaffer Grant

Duration: 2/1/20-1/31/22

\$50,000

Venous Congestion Countermeasure (VCCM)/Investigating the Structure and

Function of the Eye (iSafe)

KBR Wyle/NASA

Duration: 10/1/20-9/30/26

\$20,489

Exercise Countermeasure to Prevent Ocular Structural and Functional Changes in a Terrestrial Model of SANS NASA

Duration: 7/1/20-6/30/23

\$196,603

Ram Kannan, PhD

Novel Mechanism of Subretinal Fibrosis in Age-Related Macular Degeneration National Eye Institute Duration: 5/1/20-4/30/24

\$296,929

SriniVas R. Sadda, MD

Functionally Validated Structural Endpoints for Early AMD University of Alabama at Birmingham Sub-award on NEI Grant EY029595 Duration: 5/1/19-2/29/24 \$198.222

Discovery and Validation of AMD Biomarkers for Progression Using Deep Learning National Eye Institute Duration: 8/1/19-7/31/22 \$125.000

Artificial Intelligence for Assessment of Stargardt Macular Atrophy National Eye Institute Duration: 1/1/20-12/31/21 \$121,250

Automated End-to-End Retinal Screening System with Robotic Image Capture and Deep Learning Eyenuk, Inc. Sub-award on NEI Grant EY029652 Duration: 9/30/19-9/29/20

\$9.554

Fully-Automated Lesion Characterization in Ultrawide-Field Retinal Images Eyenuk, Inc. Sub-award on NEI Grant EY028081 Duration: 9/1/20-8/31/22

\$63,694

Deming Sun, MD

Role of IL-17+ Autoreactive T Cells in Experimental Autoimmune Uveitis (EAU) National Eye Institute Duration: 1/1/20-12/31/23 \$291,590

Determination of the Role of Adenosine Deaminase on Two Major Pathogenic (IFN-y+ and IL-17+) T Cells Responses Leadiant Biosciences

Duration: 1/1/20-12/31/20

\$32,738

Yuhua Zhang, PhD

In Vivo Ultrastructure of Chorioretinal Disease National Eye Institute Duration: 1/1/19-12/31/21

\$239,899

Clinical Research Active Funding

ADMINISTERED BY UCLA

Anthony J. Aldave, MD

Vision Restoration with a
Collagen Crosslinked Boston
Keratoprosthesis Unit
Department of Defense
Sub-award from
Massachusetts Eye and Ear Infirmary
Duration: 9/1/15–8/31/21
\$81,011

Benjamin B. Bert, MD

Treatment of Ocular Discomfort in Glaucoma Patients Using Multiple Topical Medications Novartis Pharmaceuticals Duration: 3/31/20–12/31/21 \$83,553

Observational Study of Conjunctivitis of Dupixent Treatment for Atopic Dermatitis
Regeneron Pharmaceuticals, Inc.
Duration: 3/11/21–3/10/26
\$137,064

Ava K. Bittner, OD, PhD

Beacon Sensors and Telerehabilitation to Assess and Improve Use of Devices for Visual Functioning (BeST-AID) National Eye Institute Duration: 9/1/19–8/31/22 \$469,937

Development of a Behavioral Intervention with Socially Assistive Robots to Enhance Magnification Device Use for Reading National Eye Institute Duration: 2/1/20–1/31/22 \$412.927

Beacon Sensors and Telerehabilitation to Assess and Improve Use of Devices for Visual Functioning (BeST-AID) American Academy of Optometry Duration: 3/1/19–2/28/22 \$100.000

CARE Study: Community Access through Remote Eyesight DHHS-ACL Administration for Community Living Sub-award from New England College of Optometry Duration: 9/30/20–9/29/21 \$133,041

Joseph Caprioli, MD

Protocol INN-005 InnFocus, Inc Duration: 2/4/16-11/13/20

INN-005-EXT InnFocus, Inc

\$435,556

Duration: 4/29/20-4/28/25

\$63,388

Sophie X. Deng, MD, PhD

Safety and Feasibility of Cultivated Autologous Limbal Stem Cells for Limbal Stem Cell Deficiency California Institute for Regenerative Medicine (CIRM) Duration: 12/1/19–11/20/23 \$3,250,000

K-321-201 Kowa Research Institute, Inc. Duration: 6/17/20–6/17/24

\$1,341,428

Brian A. Francis, MD, MS

MED-MA-EYE-0635 Allergan Sales LLC Duration: 4/1/20–12/31/20 \$37.350

Field Test of Glaucoma Outcomes Survey Emmes Corporation Duration: 2/15/21–2/14/23

\$49,300

Simon Fung, MD

Structural and Functional Changes of Corneal Innervation After Treatment with Cenegermin Dompé S.p.A. Duration: 3/12/20–1/1/25 \$287,946

Michael B. Gorin, MD, PhD

Xolaris Biogen, Inc Duration: 9/28/17–4/1/22 \$135,770

Φ133,770

ALK-001 Alkeus Pharmaceuticals Duration: 5/23/16–12/31/21 \$46,070

ARIS

Greater Baltimore Medical Center; funded by National Eye Institute Duration: 5/1/19–6/1/24

\$80,000

STAR Biogen, Inc

Duration: 6/13/18-6/13/21

\$96,333

SOLSTICE Biogen, Inc

Duration: 11/17/20-11/16/25

\$304,950

Gary N. Holland, MD

META-MUST National Eye Institute Sub-award from Johns Hopkins University Duration: 9/30/14–1/31/22 \$39.180

ZEDS

New York University Duration: 4/3/17–7/31/22 \$345.545

ADalimumab Versus Conventional ImmunoSupprEssion for Uveitis (ADVISE) Trial National Eye Institute Sub-award from

Johns Hopkins University Duration: 9/30/18–8/31/23

\$23,785

Predicting Uveitis Onset in Children with Juvenile Idiopathic Arthritis National Eye Institute Sub-award from Cincinnati Children's Hospital Duration: 9/20/19–6/30/21

\$98,280

Alex A. Huang, MD, PhD

DE-126 Santen, Inc. Duration: 2/17/21–2/16/25 \$133,245

Jean-Pierre Hubschman, MD

Extension Study of NT-501 Ciliary Neurotrophic Factor (CNTF) Implant for Macular Telangiectasia (MacTel) Lowy Medical Research Institute Duration: 8/14/17–6/30/22 \$53,145

A Phase 3 Multicenter Randomized, Sham-Controlled Study to Determine the Safety and Efficacy of Renexus® in Macular Telangiectasia Type 2 Lowy Medical Research Institute Duration: 2/26/18–12/31/22 \$290,150

A Natural History of Macular (Parafoveal) Telangiectasia Lowy Medical Research Institute Duration: 9/1/05–12/31/21 \$185,695 Efficacy and Safety of High Dose Aflibercept in Patients with Neovascular AMD Bayer Healthcare LLC Duration: 10/20/20–10/20/25

\$393,839

Michael Ip, MD

APL2-304

Apellis Pharmaceuticals Duration: 5/9/19-5/8/23

\$420,429

AR13503

Aerie Pharmaceuticals Inc. Duration: 7/24/19-7/23/23 \$1.389.358

GR40550

Genentech Foundation Duration: 1/17/20–1/16/24

\$1,427,007

OPT1039 Clinical Evaluation of the

P200xe Indy Optos PLC

Duration: 4/17/20-4/16/24

\$238,060

John A. Irvine, MD

CAM-101-01

Cambium Medical Technologies LLC

Duration: 7/10/19-7/9/23

\$74,572

Rustum Karanjia, MD, PhD

Photopic Negative Response (PhNR) as an Objective Outcome Measure in Mitochondrial Disease

United Mitochondrial Disease

Foundation

Duration: 12/1/17-11/20/20

\$100,000

Colin A. McCannel, MD

GR40548

Genentech Inc.

Duration: 11/15/18-11/15/21

\$455,806

GR40549

Genentech Inc.

Duration: 11/26/18-1/26/22

\$453,341

GR40550

Genentech Inc.

Duration: 1/13/20-1/12/24

\$1,427,007

ADX-2191-PVR-001

Aldeyra Therapeutics Inc. Duration: 2/14/20–2/13/24

\$108,913

Tara A. McCannel, MD, PhD

AU-011-101

Aura Biosciences Inc. Duration: 6/15/20–1/2/30

\$107,566

AU-011-202

Aura Biosciences Inc. Duration: 4/16/21–4/15/25

\$268,788

Kevin Miller, MD

STEELE

Johnson & Johnson Duration: 9/10/21–9/10/24

\$196,030

Kouros Nouri-Mahdavi, MD

High-Rate High-Resolution Chip-Scale Ranging: A Paradigm Shift in Optical

Coherence Tomography Alcon Laboratories Inc. Duration: 7/1/19–6/30/21

Detection of Disease Progression in

Advanced Glaucoma National Eye Institute Duration: 3/1/20–2/28/21

\$401,500

Stacy L. Pineles, MD

Pediatric Eye Disease Investigator Group (PEDIG)

Jaeb Center for Health Research

Duration: 1/1/19-12/31/23

\$28,499

Luminopia VR Device Amblyopia Study

Luminopia Inc.

Duration: 11/28/18-11/28/21

\$52,103

Peter A. Quiros, MD

RGN-ON-002

Regenera Pharma Ltd. Duration: 1/2/19–1/2/22

\$232,016

Daniel B. Rootman, MD

RVT-1401-2001 Immunovant Inc.

Duration: 5/14/19-5/13/23

\$292,758

SriniVas R. Sadda, MD

BIRC-01

Boston Image Reading Center Duration: 2/1/18–2/28/21

\$42,520

ARIS

Greater Baltimore Medical Center; Funded by National Eye Institute

Duration: 5/1/19-6/1/24 \$80.000

Alfredo A. Sadun, MD, PhD

EPI-743

Edison Pharmaceuticals Inc. Duration: 10/17/14–9/24/21 \$55.860

SPILH-2010

Stealth BioTherapeutics Inc. Duration: 2/12/16–4/13/22

\$415.909

Reality LHON Registry GenSight Biologics Duration: 1/16/18–10/31/20

\$45,810

GS-LHON-CLIN-06 GenSight Biologics Duration: 1/3/18–9/20/21

\$474.754

GS-LHON-CLIN-05 GenSight Biologics Duration: 8/23/18–8/23/21

\$214,091

David Sarraf, MD

The IAI-OCTA Study Regeneron Pharmaceuticals Inc. Duration: 3/28/17–5/26/22

\$211,609

GR40973 Genentech Inc.

Duration: 8/2/19-10/31/22

\$207,624

In Vivo Ultrastructure of Chorioretinal Disease National Eye Institute Sub-award from

University of California Riverside

Duration: 1/3/19-12/31/21

\$25,763

Steve D. Schwartz, MD

MA09-hRPE-001 Astellas Institute for Regenerative Medicine Duration: 4/5/11–12/31/20

ACT MA09-hRPE 001(SMD) LTFU

Astellas Institute for Regenerative Medicine Duration: 4/5/11–11/13/20

\$661,734

\$734,750

7317-CL-0003 Astellas Institute for Regenerative Medicine

Duration: 8/22/18-8/22/21

\$680,530

OPH2005

Ophthotech Corporation Duration: 4/10/18–4/10/21 \$305,751

NGM621-GA-201

NGM Biopharmaceuticals Inc. Duration: 1/21/21–1/24/25 \$136,147

ISEE2008

Iveric Bio Inc.

Duration: 7/1/20-7/1/24

\$232,530

GR41675 Genentech Inc.

Duration: 7/21/20-7/20/24

\$778,024

Edmund Tsui, MD

Kowa FM-700 Kowa Research Institute Inc. Duration: 2/1/20–2/1/22 \$249,600

Discovery of Quantitative Imaging Biomarkers in Pediatric Anterior Uveitis Knights Templar Eye Foundation Inc. Duration: 7/1/20–6/30/22 \$70,000

Comparison of Biometry Measurements Using Cylite HP-OCT and Argos SS-OCT in Dense Cataracts Cylite

Duration: 1/18/21-1/17/26

\$10,577

Irena Tsui, MD

Retinal and Choroidal Vasculature Changes in Healthy and High-Risk Pregnancies National Eye Institute Duration: 2/1/20–1/31/22 \$249,063



Clinical Research Studies

Clinical Trials

RECRUITING IN FISCAL YEAR 2021

ABP 938

A randomized, double-masked, phase 3 study of ABP 938 efficacy and safety compared to aflibercept (Eylea®) in subjects with neovascular age-related macular degeneration. Investigators: David Sarraf, MD, Michael B. Gorin, MD, PhD, Colin A. McCannel, MD

Comparing Three Delivery Methods of Mitomycin C for Trabeculectomy Surgery

In this pilot explorative study, investigators are going to estimate and compare the outcomes of three different delivery methods of MMC for trabeculectomy: a subconjunctival injection at the site of future trabeculectomy two to four weeks before the surgery, a subconjunctival injection intraoperatively, and topical sponge applied intraoperatively (typical use) in patients with primary open angle glaucoma who did not have any prior filtering surgeries. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, JoAnn A. Giaconi, MD. Simon K. Law. MD. PharmD. and Kouros Nouri-Mahdavi, MD

Corneal Nerves After Cenegermin

This study is to determine the structural and functional effects of cenegermin on the cornea, using noninvasive technologies, including the Ocular Surface Disease Index, corneal sensitivity testing, tear film testing, imaging and confocal microscopy. Investigators: Simon Fung, MD, Anthony J. Aldave, MD, Saba Al-Hashimi, MD, and Sophie X. Deng, MD, PhD

DE-126 Ophthalmic Solution

A phase 2b, randomized, double-masked, active-controlled, parallel-group, multicenter study assessing the efficacy and safety of DE-126 ophthal-mic solution 0.002% compared with timolol maleate ophthalmic solution 0.5% in subjects with primary open angle glaucoma or ocular hypertension. Investigator: Alex A. Huang, MD, PhD

Determining the Safety and Efficacy of Renexus in Macular Telangiectasia Type 2

This study is assessing the safety of the NT-501 implant in patients with macular telangiectasia type 2. The implant, a small capsule of cells that is placed inside the eye, allows a controlled, sustained release of CNTF directly to the retina. Investigators: Jean-Pierre Hubschman, MD, Steven D. Schwartz, MD, and Hamid Hosseini, MD

Evaluating the Use of an Implant for Patients with Macular Degeneration (PAGODA)

This clinical trial determines the efficacy, safety, and pharmacokinetics of ranibizumab delivered through the implant using three ranibizumabformulation arms compared with the control arm in patients with subfoveal neovascular (wet) age-related macular degeneration. The study also evaluates the safety of the ranibizumab port delivery system combination product. Investigators: Colin A. McCannel, MD, Tara A. McCannel, MD, PhD, Pradeep S. Prasad, MD, MBA, Michael B. Gorin, MD, PhD, David Sarraf, MD, Michael S. Ip, MD, Phillip Le, MD, PhD, Gad Heilweil, MD, and SriniVas R. Sadda, MD

Evaluation of a New Drug for Stargardt Disease

The study purpose is to find out whether a new drug for Stargardt disease is safe and effective. There are currently no proven treatments for Stargardt disease, a disease that leads to blindness in almost all cases. Investigators: Michael B. Gorin, MD, PhD, and Steven Nusinowitz, PhD

Gallego

The purpose of this study is to compare the safety and efficacy of FHTR2163 versus a simulated injection on patients with geographic atrophy secondary to age-related macular degeneration. Investigators: David Sarraf, MD, Michael B. Gorin, MD, PhD, Colin A. McCannel, MD, Pradeep S. Prasad, MD, MBA

Guard Trial

A multicenter, randomized, controlled, prospective, adaptive phase 3 clinical trial of repeated intravitreal injections of ADX-2191 versus standard-ofcare for the prevention of proliferative vitreoretinopathy. Investigators: Colin McCannel, MD, Jean-Pierre Hubschman, MD, Pradeep S. Prasad, MD, MBA, and Irena Tsui, MD

ISEE2008

The objectives of this study are to evaluate the safety and efficacy of Zimura intravitreal administration in patients with geographic atrophy secondary to dry age-related macular degeneration. Investigators: Michael Ip, MD, Steven D. Schwartz, MD, Gad Heilwell, MD, and Philip Le, MD, PhD.

K-321-201

A double-masked, randomized, placebo-controlled, parallel-group, 12-week, phase 2 study to investigate the safety and efficacy of ripasudil (K-321) eye drops after descemetorhexis in patients with Fuchs endothelial corneal dystrophy. Investigators: Sophie X. Deng, MD, PhD, Anthony J. Aldave, MD

Macular Edema Ranibizumab Versus Intravitreal Anti-inflammatory Therapy (MERIT) Trial

The MERIT Trial was designed to determine which intravitreal therapy offers the best balance of effectiveness and tolerability in treating persistent uveitic macular edema in eyes with controlled uveitis but persistent macular edema, specifically by comparing the relative efficacy and safety of intravitreal ranibizumab (Lucentis®) and intravitreal methotrexate to intravitreal dexamethasone implant (Ozurdex®). Investigators: Gary N. Holland, MD, Colin A. McCannel, MD, and Pradeep S. Prasad, MD

NGM621

A phase 2 multicenter, randomized, double-masked, sham-controlled study of the safety and efficacy of intravitreal injections of NGM621 in subjects with geographic atrophy (GA) secondary to age-related macular degeneration (AMD). Investigators: Steven D. Schwartz, MD, Jean-Pierre Hubschman, MD, Pradeep S. Prasad, MD, MBA, Hamid Hosseini, MD, and Irena Tsui, MD

Pavilion

A phase 3, multicenter, randomized study of efficacy, safety, and pharmacokinetics of the port delivery system with ranibizumab in patients with diabetic retinopathy. Investigators: Steven D. Schwartz, MD, Colin A. McCannel, MD, Jean-Pierre Hubschman, MD, Pradeep S. Prasad, MD, MBA, Hamid Hosseini, MD, and Irena Tsui, MD

Pulsar

Randomized, double-masked, active-controlled, phase 3 study of efficacy and safety of high dose aflibercept in patients with neovascular age-related macular degeneration. Investigators: Jean-Pierre Hubschman, MD, Steven D. Schwartz, MD, Pradeep S. Prasad, MD, MBA, Hamid Hosseini, MD, and Irena Tsui, MD

RVT-1401 for the Treatment of Patients with Active, Moderate-to-Severe Graves Ophthalmopathy

The purpose of this phase 2b, multicenter, randomized, double-blind, placebo-controlled study is to assess the efficacy and safety/tolerability of three dose regimens of RVT-1401 in the treatment of patients with active, moderate-to-severe Graves ophthalmopathy. In addition, the study is designed to characterize RVT-1401 exposure to reduction in anti-TSHR IgG. Investigators: Daniel B. Rootman, MD, MS, and Robert Alan Goldberg, MD

Safety and Feasibility of Cultivated Autologous Limbal Stem Cells (LSCs) for Limbal Stem Cell Deficiency

Cell therapy using cultivated autologous LSCs has been developed as a potentially better alternative to various direct transplantation methods of limbal tissues; it greatly lowers the risk of damage to the donor eye by decreasing the amount of tissues that need to be harvested from the donor. Investigators: Sophie X. Deng, MD, Anthony J. Aldave, MD, and Vivian Shibayama, OD

Steele

The purpose of this clinical study is to evaluate the rotational stability of the TECNIS Toric II IOL. Investigators: Kevin M. Miller, MD, John D. Bartlett, MD, Shawn R. Lin, MD, and Mitra Nejad, MD

Xiidra Study

This is a prospective study evaluating the benefit of Xiidra in treating patients currently using one or more topical glaucoma antihypertensives and who self-describe symptoms of ocular surface irritation. Investigators: Benjamin B. Bert, MD, and Brian A. Francis, MD, MS

Zoster Eye Disease Study (ZEDS)

The purpose of this study is to find out whether one year of a low dose of valacyclovir reduces complications of shingles affecting the eye. The study will involve two groups of participants who have eye problems due to shingles. One group will receive daily valacyclovir medication and the other group will receive a placebo. Investigators: Gary N. Holland, MD, Anthony J. Aldave, MD, Sophie X. Deng, MD, PhD, and John A. Irvine, MD

Clinical Trials

NOT RECRUITING IN FISCAL YEAR 2021

Comparing the Efficacy and Safety of Intravitreal APL-2 Therapy with Sham Injections in Patients with Geographic Atrophy (GA) Secondary to Age-Related Macular Degeneration (AMD)

This phase 3 study is to evaluate the efficacy of APL-2 compared to sham injection in patients with GA secondary to AMD, which is assessed by change in the total area of GA lesions from baseline as measured by fundus autofluorescence imaging. Investigators: Michael S. Ip, MD, SriniVas R. Sadda, MD, Gad Heilweil, MD, Mohammed Khan, MD, and Phillip Le, MD, PhD

Corticosteroids for Uveitic Macular Edema (ADVISE)

This research study compares three treatments for macular edema in patients who have uveitis. Macular edema is swelling of the retina at the back of the eye, and it can cause vision loss. The standard treatment is to inject corticosteroid drugs next to the eye or directly into the eye. Investigators: Gary N. Holland, MD, and Colin A. McCannel, MD

Efficacy, Safety, and Pharmacokinetics of the Port Delivery System with Ranibizumab in Patients with Neovascular Age-Related Macular Degeneration (ARCHWAY)

The primary objective of this phase 3 study is to evaluate the non-inferiority and equivalence in efficacy of ranibizumab delivered via the PDS Q24W with the 100mg/mL formulation compared with that of 10mg/mL Q4W intravitreal ranibizumab injections. Investigators: Colin A. McCannel, MD, Pradeep S. Prasad, MD, MBA, and David Sarraf, MD

Evaluating the Efficacy of a Single Intravitreal Injection for Patients with Leber Hereditary Optic Neuropathy

This clinical trial is to assess the effectiveness of a gene therapy in improving the visual outcome in patients with Leber Hereditary Optic Neuropathy (LHON) due to a mitochondrial mutation. Investigator: Alfredo A. Sadun, MD, PhD

Evaluation of Corneal Cross-Linking Keratoprosthesis Carrier Tissue

This clinical trial evaluates the safety and efficacy of corneal collagen cross-linking the keratoprosthesis carrier tissue in subjects who are candidates for high-risk keratoprosthesis implantation because of a history of corneal melts, sterile corneal ulcers, or autoimmune diseases (eg, Stevens-Johnson syndrome, ocular cicatricial pemphigoid). Investigators: Anthony J. Aldave, MD, and Sophie X. Deng, MD, PhD

IAI-OCTA Study

This study is utilizing a new, FDA approved, non-standard of care technology (optical coherence tomography-angiography by Optovue) to image and evaluate the treatment outcomes of using standard of care intravitreal Aflibercept injections for their approved use in patients diagnosed with neovascular age-related macular degeneration who are naive to previous Anti-VEGF therapies. Investigator: David Sarraf, MD

Multicenter, Open-Label Extension Study to Evaluate the Long-Term Safety and Tolerability of the Port Delivery System with Ranibizumab in Patients with Neovascular Age-Related Macular Degeneration (PORTAL)

Continuous delivery of ranibizumab from the implant, with a prolonged fixed period between refills, is a novel approach that may result in less-frequent need for retreatment than monthly dosing and patient monitoring. Investigators: Colin A. McCannel, MD, Pradeep S. Prasad, MD, MBA, and David Sarraf, MD

NT-501 Ciliary Neurotrophic Factor Implant for Macular Telangiectasia

The primary objective of this extension study is to investigate long-term safety and efficacy of the NT-501 implant in participants previously enrolled in NTMT protocols. Investigators: Jean-Pierre Hubschman, MD, Steven D. Schwartz, MD, and Hamid Hosseini, MD

Protocol to Follow-up with Patients on Emergency Administration of EPI-743 with Leber Hereditary Optic Neuropathy

EPI-743, a form of vitamin E that has been changed to a new compound in the laboratory, is an experimental drug that may improve mitochondrial function. Mitochondrial disease manifestations appeared to improve when the EPI-743 was given to cells from a patient with Leber hereditary optic neuropathy that were grown in the laboratory. Investigator: Alfredo A. Sadun, MD, PhD

Research with Retinal Cells Derived from Stem Cells for Stargardt Macular Dystrophy

This study evaluates the long-term safety and tolerability of MA09-hRPE cellular therapy in subjects with advanced Stargardt macular dystrophy from one to five years following the surgical procedure to implant the MA09-hRPE cells. Investigators: Steven D. Schwartz, MD, Hamid Hosseini, MD, Jean-Pierre Hubschman, MD, Pradeep Prasad, MD, and Irena Tsui, MD

Retinal Gene Therapy for Choroideremia

The objective of this phase 3 clinical trial is to evaluate the efficacy and safety of a single subretinal injection of AAV2-REP1 in subjects with choroideremia. Investigator: Michael B. Gorin, MD, PhD

Clinical Studies

AMD Ryan Initiative Study— Longitudinal Study of Early AMD and Reticular Pseudodrusen

The primary objectives of the study are to enroll participants with early AMD to assess rate of change in drusen volume and progression rates to large drusen, and associate these morphologic changes with psychophysical changes, including visual acuity and dark adaptation. Investigators: Michael B. Gorin, MD, PhD, and SriniVas R. Sadda, MD

Analysis of the Corneal and Limbal Epithelial Changes in Limbal Stem Cell Deficiency Using In Vivo Confocal Microscopy

Investigators are working to establish a system for diagnosing limbal stem cell deficiency at a cellular level by correlating the information from impression cytology tests, confocal microscopy pictures, and medical records. Investigators: Anthony J. Aldave, MD, and Sophie X. Deng, MD, PhD

Anterior Chamber Flare Measurements

The evaluation and detection of inflammation is critical in management of uveitis. Flare, which is one of the commonly assessed ocular inflammation parameters, is the appearance of light reflected from solutes in the anterior chamber. This study seeks to compare two platforms of laser flare photometry and to evaluate the reproducibility of these measurements. Investigators: Edmund Tsui, MD and Gary N. Holland, MD

Anterior Imaging of Ocular Muscles

Presbyopia is poorly understood and may be due to the lens in the eye becoming harder or the muscles that help focus vision for reading becoming weaker with age. The aim of this study is to utilize OCT imaging technology to better understand and develop therapies to combat presbyopia. Investigator: Alex A. Huang, MD, PhD

Arm-Mounted Heidelberg OCT-A for Noninvasive Vascular Zone Imaging in Infants with Retinopathy of Prematurity (ROP)

This study evaluates OCT-A imaging data on preterm infants who are screened and/or treated for ROP, especially evaluating the potentially beneficial effects of anti-VEGF treatment on foveal development and visual outcomes. Investigators: Alex A. Huang, MD, PhD, and Irena Tsui, MD

Beacon Sensors and Telerehabilitation

The primary goal of this project is to refine the methods and procedures for implementing innovative technologies for low vision rehabilitation, in order to develop future protocols for randomized controlled trials. Investigators: Ava K. Bittner, OD, PhD, Melissa Chun, OD, and Jennie Kageyama, OD

Biomechanical Analysis in Strabismus Surgery

This study aims to develop new diagnostic tests and computer models that will lead to improvements in strabismus surgery. Tests of binocular alignment and eye movements, as well as magnetic resonance imaging of the extraocular muscles, are being performed in the Institute's Clinical and Basic Science Ocular Motility Laboratory before and after strabismus surgery. To date, this research has fundamentally contributed to the knowledge of the functional anatomy of the extraocular muscles and connective tissues, and allowed discovery of causes of common strabismus and development of new types of surgeries. Investigator: Joseph L. Demer, MD, PhD

Characteristics of the Brow-Eyelid Margin Relationship

The study purpose is to determine if changing the effect of gravity has an effect on eyelid position. Investigators: Robert Alan Goldberg, MD, and Daniel B. Rootman, MD, MS

Choroideremia Health Outcomes

The purpose of this observational study is to gather information on patient and caregiver experience with choroideremia. Investigator: Michael Gorin, MD, PhD

Clinical Measurements of the Optic Nerve in Glaucoma

The goal of this study is to develop novel structural measures of the optic nerve and nerve fiber layer, which are sensitive and specific for early and progressive glaucomatous optic nerve damage. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, and Simon K. Law, MD, PharmD

Comparison of MHz OCT to Standard OCT imaging

This study will test a new MHz OCT system developed by engineering collaborators and compare the performance of this new OCT system to a standard clinical OCT device. The newly designed OCT system will be five to 10 times faster, leading to a marked improvement in resolution and significant reduction of artifacts. Investigator: Kouros Nouri-Mahdavi, MD

COVaRiPAD

This proposal seeks to understand the vigor of immune responses in patients taking immunosuppressive medications to treat autoimmune diseases, along with characterizing and quantifying any adverse events related to the administration of the SARS-CoV-2 vaccine. Investigator: Edmund Tsui, MD

COVID Vaccine-Associated Ocular Inflammation Registry

The study is interested in collecting data from three groups of patients with vitreoretinal disease and/or uveitis: 1) Those with new inflammation after COVID-19 vaccinations; 2) Those with pre-existing inactive uveitis and that present with inflammation after COVID-19 vaccinations; and 3) Those with inactive uveitis who did not flare after COVID-19 vaccination. Investigator: Edmund Tsui, MD

Development of a Behavioral Intervention with Socially Assistive Robots to Enhance Magnification Device Use for Reading

The primary goals of this research are to perform the initial development and preliminary evaluation of a prototype socially assistive robot specifically for low vision rehabilitation involving reading with magnifiers, in order to develop future protocols for larger scale clinical trials. Investigators: Ava K. Bittner, OD, PhD, Melissa Chun, OD, and Jennie Kaqeyama, OD

Effect of External Eyelid Weighting on Lid Position in Normal and Ptosis Patients

This investigation compares the ability of normal and ptotic patients to maintain eyelid position by adapting to acute and dramatic changes in protracting forces by using eyelid weights. This project will help elucidate the physiology of the eyelid position maintenance system, and provide insight into its ability to respond to changes in disease. Investigator: Daniel B. Rootman, MD, MS

Effect of Glaucoma Drainage Devices on the Cornea in Comparison to Filtering Surgery with Antimetabolites in Cases of Glaucoma

This study aims to evaluate the endothelial cell number in patients undergoing glaucoma drainage device implantation as part of their regular eye care in comparison to the endothelial cell number in patients having filtering surgery with antimetabolites or medical treatment. Investigators: JoAnn A. Giaconi, MD, Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, Simon K. Law, MD, PharmD, and Kouros Nouri-Mahdavi, MD

Effect of Yoga on Glaucoma

The purpose of this study is to examine the practice of yoga and its ability to improve a patient's vision by relieving stress and reducing eye pressure. Investigator: Anne L. Coleman, MD, PhD

Evaluating a Microshunt for the Treatment of Glaucoma

This study is to assess the safety and efficacy of a microshunt when used to lower intraocular pressure (IOP) in subjects with primary open angle glaucoma whose IOP is not controlled when using maximum-tolerated glaucoma medications. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, JoAnn A. Giaconi, MD, Simon K. Law, MD, PharmD, and Brian A. Francis, MD, MS

Extended-Use Program of Elamipretide Topical Ophthalmic Solution for Patients with Leber Hereditary Optic Neuropathy (LHON)

This extended-use program is to provide elamipretide to patients with LHON previously enrolled in the SPILH-201 clinical trial who are still benefitting from treatment per the discretion of the treating physician. Investigators: Alfredo A. Sadun, MD, and Rustum Karanjia, MD

Eye DMI

Epidemiological study to evaluate the prevalence and progression of diabetic macular ischemia in patients with diabetic retinopathy treated with panretinal photocoagulation. Investigator: David Sarraf, MD

Eye Health Imaging Study

The purpose of this study is to expand the normative database for the Heidelberg Spectralis OCT by collecting ophthalmic data from healthy eyes of people of Hispanic/Latino, Asian, and African American descent. Investigators: Kouros Nouri-Mahdavi, MD, and Joseph Caprioli, MD

Field Test of Glaucoma Outcomes Survey (GOS)

The American Glaucoma Society is interested to learn how quality of life improves for patients after minimally invasive glaucoma surgery combined with cataract surgery. They have designed a questionnaire and are conducting research to find out how reliable the questionnaire is as a tool for measuring patient quality of life after surgery. Investigator: Brian A. Francis. MD

Genetic and Anatomic Studies of Eye Movement Disorders

This study is conducting magnetic resonance imaging of the extraocular muscles. This procedure clarifies the phenotypes and mechanisms of congenital cranial dysinnervation syndromes whose hereditary properties have been characterized using modern molecular genetics. Patients with these syndromes have severe forms of strabismus. Investigator: Joseph L. Demer, MD, PhD

Glaucoma Imaging Study

This study is evaluating different imaging techniques and their use in improving open-angle glaucoma detection.
Investigators: Kouros Nouri-Mahdavi,
MD, and Joseph Caprioli, MD

Hyaluronic Acid Gels for Upper Lid Retraction in Active State Thyroid Eve Disease

This study is to determine if hyaluronic acid gel (HAG) can be used to correct upper eyelid retraction, improve dry eye related symptoms, aesthetic appearance, and quality of life in active-stage thyroid eye disease (TED). The study also aims to determine the long-term outcome of TED and how long the effects of HAG can last. Investigator: Daniel B. Rootman, MD, MS

Identifying Novel Genes for Fuchs Corneal Endothelial Dystrophy

Investigators are working to identify the gene(s) responsible for Fuchs corneal endothelial dystrophy, an inherited disorder that may result in irreversible corneal swelling and loss of vision. Investigators: Anthony J. Aldave, MD, Gary N. Holland, MD, and Bartly J. Mondino, MD

Imaging of Intraocular Inflammation

The aim of this proposed research is to longitudinally monitor intraocular inflammation in patients with uveitis. Investigators: Edmund Tsui, MD, Simon Fung, MD, and Gary N. Holland, MD

In-Vivo Ultrastructure of Chorioretinal Diseases

The study will utilize a novel adaptive optics (AO) imaging instrument that integrates scanning laser ophthalmoscopy and optical coherence tomography (AO-SLO-OCT), allowing for in-vivo ultrastructure assessment of RPD and individual photoreceptors in both en face and cross-sectional planes. The study will use the AO imaging to monitor the progression of the RPD and their impact on overlying photoreceptors. Investigators: David Sarraf, MD, and Yuhua Zhang, PhD

Long-term Follow-up of ND4 LHON Subjects Treated with GS010 Ocular Gene Therapy in the RESCUE or REVERSE

To assess the long-term safety of intravitreal GS010 administration up to five years post treatment in subjects who were treated in the RESCUE or REVERSE studies. Investigators: Alfredo A. Sadun, MD, and Rustum Karanjia, MD

Low Vision Patients' Preferences for Illumination During Near Reading

This prospective longitudinal study aims to evaluate low vision patients' reading performance and level of difficulty when using additional preferred lighting for near reading as provided by a commercially available desk lamp or a bulb placed in a generic gooseneck desk lamp specified according to the patient's preferred settings with a lighting assessment tool. Investigators: Ava K. Bittner, OD, PhD, Melissa Chun, OD, and Jennie Kageyama, OD

Molecular and Cytogenetic Studies of Ocular Melanoma

This research is to study ocular melanoma tumor tissue and to identify key molecular and genetic features that could help predict those patients who may be at high risk for metastasis. Investigators: Lynn K. Gordon, MD, PhD, Tara A. McCannel, MD, PhD, and Bradley R. Straatsma, MD, JD

Natural History Study of Leber Hereditary Optic Neuropathy

Leber hereditary optic neuropathy (LHON) is one of the diseases where the mitochondria of the retina cells are not functioning correctly, which can lead to loss of vision. This study is to obtain electroretinography (ERG) data and optical coherence tomography (OCT) data from patients who carry the Leber hereditary optic neuropathy gene. Investigator: Alfredo A. Sadun, MD, PhD

Natural History Study of Macular Telangiectasia

The primary study objective is to develop a registry of participants with MacTel Type 2 (as confirmed by the Reading Center) who may agree to be contacted for inclusion in future clinical trials. Investigators: Jean-Pierre Hubschman, MD, Hamid Hosseini, MD, Allan E. Kreiger, MD, Tara A. McCannel, MD, PhD, Pradeep S. Prasad, MD, MBA, Irena Tsui, MD, and Steven D. Schwartz, MD

Natural History of the Progression of Choroideremia

This study characterizes the visual function and retinal structural changes associated with X-linked choroideremia with the intention of determining the best means of measuring disease progression and the rate of natural progression for this condition. Investigators: Michael B. Gorin, MD, PhD, and Steven Nusinowitz, PhD

Natural History of the Progression of X-Linked Retinitis Pigmentosa

This study is to characterize the visual function and retinal structural changes associated with X-linked retinitis pigmentosa to determine the best means of measuring disease progression and the rate of natural progression for this condition. Investigator: Michael B. Gorin, MD, PhD

Neuroendocrine Tumor Metastases in the Eye and Orbit

The purpose of this study is to understand the diversity in presentation of carcinoid tumors of the orbit, as well as to identify, stage, and grade related factors that may affect prognosis and thus treatment decisions. Also considered will be if there are features of carcinoid tumor presentations in the orbit that can predict outcome and thus guide therapeutic decision-making. Investigator: Daniel B. Rootman, MD. MS

Nonexudative Age-Related Macular Degeneration Imaged with Swept Source OCT

OCT imaging with SS-OCTA will be utilized to study the natural history of disease. Investigator: SriniVas R. Sadda, MD

Noninvasive Methods for Early Detection of Alzheimer Disease

The purpose of this study is to obtain electroretinography data and optical coherence tomography data from patients with Alzheimer disease, with the aim of permitting earlier intervention and improved disease monitoring. Investigator: Alfredo A. Sadun, MD. PhD

Observational Study of Conjunctivitis in the Setting of Dupixent Treatment

The primary objective of the study is to characterize the clinical phenotype(s) of DUPIXENT®-associated conjunctivitis events. Investigator: Benjamin B. Bert, MD

Observational Study of Patients Diagnosed with Idiopathic Bilateral Cataracts

The purpose of this study is to understand better how many people who have been diagnosed with early-onset idiopathic bilateral cataracts may have a rare but treatable disease called cerebrotendinous xanthomatosis (CTX). Often one of the first signs of CTX is cataract from an unknown cause at an early age. Investigators: Federico G. Velez, MD, Stacy L. Pineles, MD, and Joseph L. Demer, MD, PhD

OCT-A and Visual Acuity in Human Immunodeficiency Virus Associated Neuroretinal Disorder

This study aims to characterize the microvascular abnormalities in patients with HIV via OCT-A and investigate the relationships between capillary density, nerve fiber layer thickness, and other measures of visual function (visual acuity, contrast sensitivity, color vision, visual fields). In addition, to compare the OCT-A data in HIV-positive patients versus controls to evaluate the hypothesis that HIV-positive patients have significant differences in microvascular flow compared to normal eyes. Investigators: Gary N. Holland, MD, and David Sarraf, MD

Ocular Biometric Measurements in Angle-Closure Glaucoma

The purpose of this study is to determine the potential contributing factors in angle-closure patients of different ethnicities and to determine predictive factors for this type of glaucoma. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, Simon K. Law, MD, PharmD, and Kouros Nouri-Mahdavi, MD

Ocular Hypertension Treatment Study

Since topical hypotensive medications are safe and effective in delaying or preventing primary open angle glaucoma, this study is examining whether other forms of treatment can be deferred with little or no penalty. Investigator: Anne L. Coleman, MD, PhD

Ocular Imaging Study

This study is about improving existing anterior and posterior segment imaging using optical coherence tomography (OCT) instruments and/or other imaging devices. Investigators would like to know if different imaging devices can improve the quality of images and visualization of imaged tissues. Investigators: SriniVas R. Sadda, MD, Anthony C. Arnold, MD, Vikas Chopra, MD, Brian A. Francis, MD, MS, Gad Heilweil, MD, Hugo Y. Hsu, MD, Alex S. Huang, MD, PhD, Michael S. Ip, MD, John A. Irvine, MD, Phillip Le, MD, Alfredo A. Sadun, MD, PhD, David Sarraf, MD, James C. Tan, MD, PhD, and Irena Tsui, MD

Ocular Protrusion in Sitting and Supine Positions

The aim of this study is to compare the degree of ocular protrusion in normal individuals and patients with thyroid eye disease between sitting and lying (supine) positions. Investigators: Robert Alan Goldberg, MD, and Daniel B. Rootman, MD, MS

Ocular Surface Microbiome Study

This study aims to investigate and understand the normal ecosystem of microbes that live on the eye's surface and how their ecological system changes and responds to routine eye care and treatments. Investigators: Hugo Hsu, MD, Vikas Chopra, MD, and Gad Heilweil, MD

Oculoplastic Registry

Many orbital and ophthalmic plastic surgical diseases are not well studied in the medical literature. The purpose of this study is to contribute to a large database of electronic measurements from medical records that allow us to study diseases in a way that was difficult or impossible before. Investigators: Robert Alan Goldberg, MD, and Daniel B. Rootman, MD, MS

Optic Nerve Appearance in Age-Related Macular Degeneration

In order to evaluate the relationship between macular degeneration and optic nerve change, digital imaging technology and photography are being used to assess the structural appearance of the optic nerve in patients with age-related macular degeneration. Investigator: Simon K. Law, MD, PharmD

Optical Coherence Tomography Angiography Images of Pregnant Women

This study aims to identify changes that occur in the retina as a result of gestational associated diseases (eg, gestational diabetes, high blood pressure, increased myopia) and unknown changes that may affect the eyes during gestation and in the two to three months following birth. Investigator: Irena Tsui, MD

Optical Coherence Tomography Angiography of Foveal Avascular Zone in Premature Children

This prospective study evaluates blood vessel development in children and adults who are born early and compares them with children and adults who were not born early, by getting optical coherence tomography (OCT), OCT-angiography, color pictures, refraction, and axial length on subjects with retinopathy of prematurity and without retinopathy of prematurity. Investigators: Irena Tsui, MD, Stacy L. Pineles, MD, and Federico G. Velez, MD

Optic Nerve in Amblyopia

Amblyopia is a major cause of child-hood visual loss. This study uses high resolution, surface-coil magnetic resonance imaging to study optic nerve size in amblyopia. It tests the theory that the optic nerve is smaller than normal in amblyopia and that optic nerve size may be a limiting factor in restoration of vision by amblyopia treatment. Investigator: Joseph L. Demer, MD, PhD

Pediatric Cataract Surgery Outcomes Registry

The study aim is to collect core clinical data on children and teens undergoing surgery for cataracts in order to conduct analyses and generate hypotheses. Clinical outcomes data will be collected from affected subjects after cataract surgery has been performed. Investigators: Stacy L. Pineles, MD, and Federico G. Velez, MD

Pediatric Cornea and Anterior Segment Diseases Registry

Pediatric cornea and anterior segment diseases are rarely encountered by ophthalmologists. As such, details on the causes, features, and optimal treatment for these conditions are inadequately described. The information on this registry would allow us to study these diseases. Investigator: Simon Fung, MD

Pediatric Optic Neuritis Prospective Outcomes Study (PON1)

Optic neuritis is an acute inflammatory disease of the optic nerve. The purpose of this study is to collect information about children who have optic neuritis and what happens to their eyesight. Investigator: Stacy L. Pineles, MD

PET/CT Imaging for Early Detection of Ocular Melanoma

This research involves the use of combined positron emission tomography (PET)/computed tomography (CT) scans in subjects with ocular melanoma to ideally develop better ways of monitoring for tumor spread and allow for early treatment if metastasis is found. Investigators: Tara A. McCannel, MD, PhD, and Bradley R. Straatsma, MD, JD

Predicting Eye Disease in Childhood Arthritis-Uveitis Study (PEDIA-U)

The purpose of this study is to further the understanding of juvenile idiopathic arthritis and uveitis (JIA-U). Investigators: Gary N. Holland, MD, and Edmund Tsui, MD

Pro-Inflammatory Cytokines, Dry Eye, and Thyroid Eye Disease

This study is to determine whether there are specific inflammatory proteins in tears of patients with active-stage thyroid eye disease (TED). If these inflammatory proteins exist, the study aims to determine whether they can be used to predict dry eye symptomatology and TED activity. Investigators: Robert Alan Goldberg, MD, and Daniel B. Rootman, MD, MS

Prospective Study Examining Pentosan Retinal Toxicity

Patients will be evaluated for the dose and treatment duration of Pentosan. The goal is to determine the risk and toxic profile of Pentosan, as well as the incidence of interstitial cystitis, in an effort to establish clinical guidelines for retinal toxicity screening. Investigator: David Sarraf, MD

Ptosis Surgery Outcomes Scale

This investigation is to define and validate a universal measure for ptosis outcomes that can be used in defining both value and efficacy in ptosis surgery. Investigator: Daniel B. Rootman, MD, MS

Research to Evaluate Latest Improvements with Electronic Visual Enhancement Devices (RELIEVED)

This prospective study aims to evaluate patient preferences for wearable electronic visual aids for low vision rehabilitation and changes in visual functioning with these devices. Investigators: Ava K. Bittner, OD, PhD, Melissa Chun, OD, and Jennie Kageyama, OD

Research with Retinal Cells Derived from Stem Cells for Dry Age-Related Macular Degeneration (AMD)

This study evaluates the long-term safety and tolerability of MA09-hRPE cellular therapy in subjects with advanced dry AMD from one to five years following the surgical procedure to implant the MA09-hRPE cells. Investigators: Steven D. Schwartz, MD, Hamid Hosseini, MD, Jean-Pierre Hubschman, MD, Pradeep S. Prasad, MD, MBA, and Irena Tsui, MD

Role of Pattern Electroretinogram (PERG) in Glaucoma

This study is researching the electro-physiological test, pattern electroretinogram (PERG) to determine the role of PERG in estimating the risk of future glaucoma progression and the reversibility of glaucomatous damage after treatment. The latter could help clinicians better determine to what extent eye pressure needs to be lowered to prevent disease progression. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, JoAnn A. Giaconi, MD, Simon K. Law, MD, PharmD, and Kouros Nouri-Mahdavi, MD

Solstice

This long-term follow-up study evaluates the safety and efficacy of retinal gene therapy in subjects with choroideremia previously treated with adenoassociated viral vector encoding Rab escort protein-1 (AAV2-REP1) and in subjects with x-linked retinitis pigmentosa previously treated with adenoassociated viral vector encoding RPGR (AAV8-RPGR). Investigator: Michael B. Gorin, MD, PhD

Studies on Tissue in Autoimmune Diseases

This study aims to determine the cause of eye problems in Graves disease and other autoimmune diseases. Examination is being done of material removed from orbits during surgical therapy for Graves disease or other problems requiring surgery on the tissue surrounding the eyes, of thyroid tissue removed during the course of surgical therapy, or of blood drawn for laboratory tests. Investigator: Robert Alan Goldberg, MD

Study of Macular Disease Using Spectral Domain Optical Coherence Tomography Angiography (SD-OCTA)

The RTVue XR 100 Avanti with SSADA will be used to screen patients with macular disease as detected with clinical examination or ancillary testing, such as with standard OCT, color fundus photography, fluorescein angiography, or fundus autofluorescence. Investigators: Michael B. Gorin, MD, PhD, Colin A. McCannel, MD, David Sarraf, MD, and Steven D. Schwartz, MD

Study of Ocular Disease Using Hyper Parallel Optical Coherence Tomography

A novel imaging technology termed hyper parallel OCT (HP-OCT) will be used to evaluate patients with cataracts, corneal disease, macular disease, optic nerve disease, and iris changes that may occur from associated ocular diseases and procedures, as well as uveitic diseases as detected with clinical examination or ancillary testing, such as with standard OCT. Investigators: Edmund Tsui, MD, and Saba Al-Hashimi, MD

Study of Ocular Disease Using Hyper Parallel Optical Coherence Tomography (HP-OCT)

This study will investigate the utility of a novel instrument. HP-OCT. This instrument provides high-speed 3D volumetric imaging and has the potential to perform numerous simultaneous measurements all in a single instrument. Investigators: Edmund Tsui, MD, Saba Al-Hashimi, MD, and Simon Fung, MD

Tear Collections for Patients with Limbal Stem Cell Deficiency

The purpose of this study is to find markers specific to limbal stem cell deficiency not present in normal or dry eye diseased eyes. These markers could become additional diagnostic markers to confirm the disease and possibly targets for drug development. Investigator: Sophie X. Deng, MD, PhD

Temporal Fossa in Different Ethnicities

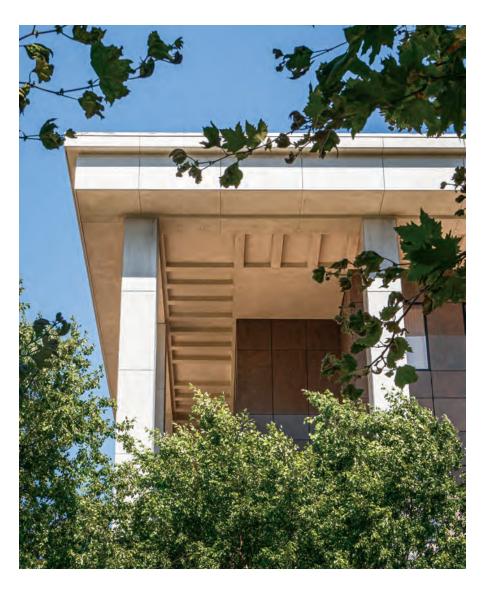
The aim of this study is to investigate differences in anatomy of temporal fossa between different ethnicities using three-dimensional CT scan images. Better knowledge of these differences is important for cosmetic procedures to achieve better results and fewer complications. Investigators: Robert Alan Goldberg, MD, and Catherine J. Hwang, MD

Understanding the Genetics of Inherited Eye Disorders

This study searches for the gene(s) responsible for inherited disorders that are either specific to the eye or are part of the medical condition. The study provides for the clinical characterization of affected individuals and at-risk family members, in conjunction with molecular genetic testing, to identify the causative genes and mutations. Investigators: Anthony J. Aldave, MD, and Michael B. Gorin, MD, PhD

Vision-Related Quality of Life and **Ocular Dominance**

This study is designed to evaluate how quality of life is impacted by glaucoma in relation to eye dominance. It aims to determine whether quality of life is affected more by glaucoma if it primarily affects the dominant eye. Investigators: Joseph Caprioli, MD, Anne L. Coleman, MD, PhD, JoAnn A. Giaconi, MD, and Simon K. Law, MD, PharmD



2020–2021 Publications of the Full-Time Faculty

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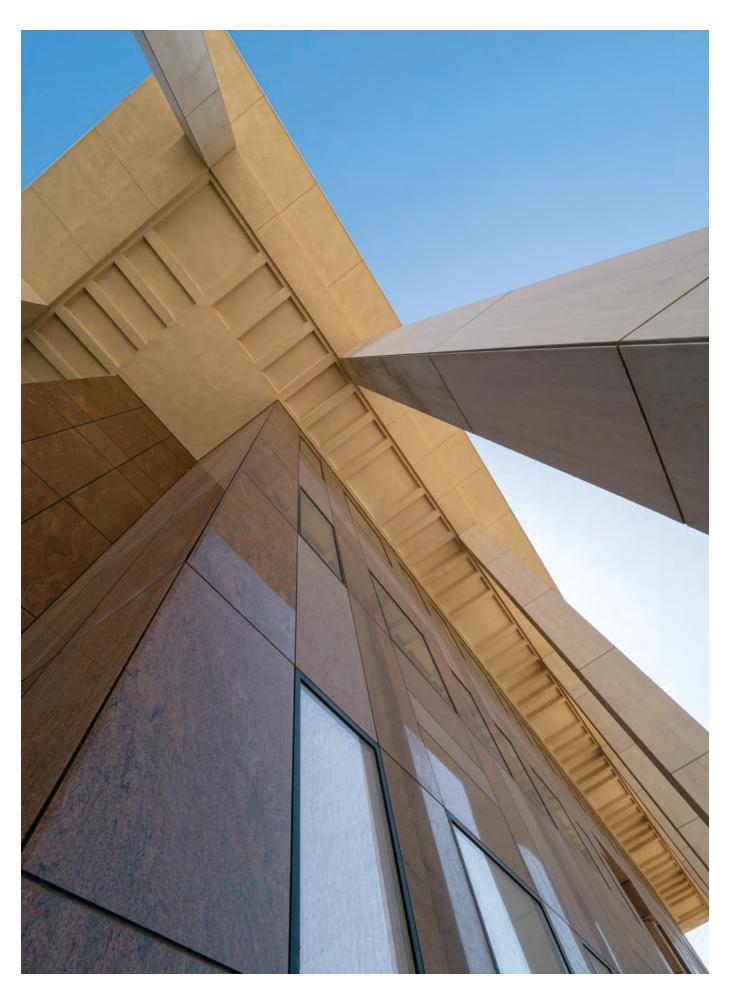
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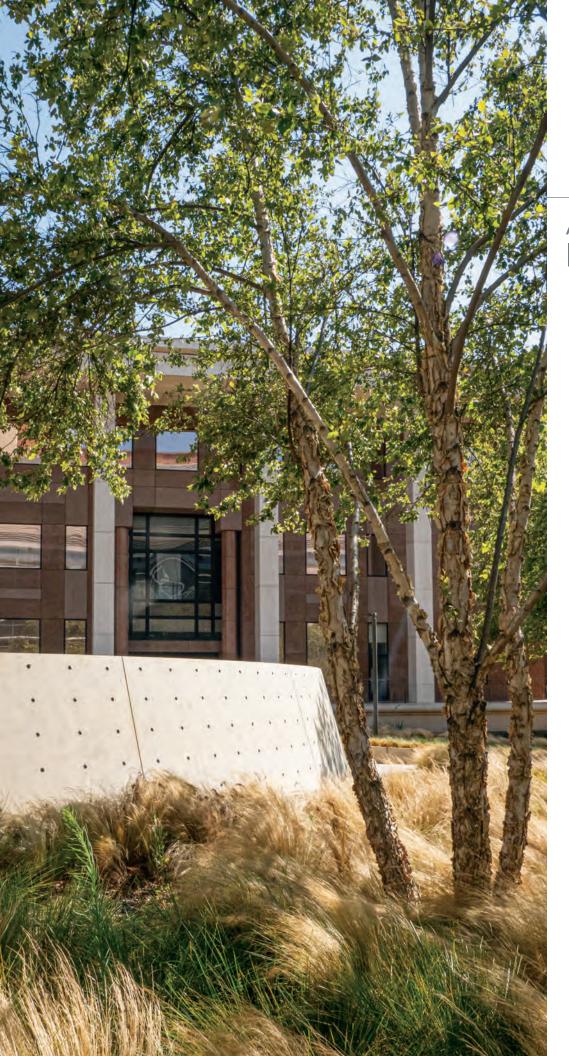
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About the Institute

About the Institute



The bronze bust of Dr. Jules Stein was created by renowned Cubist sculptor Jacques Lipchitz.

stablished in 1966, the UCLA Stein Eye Institute vision-science campus is the - fulfillment of a dream—an ambitious plan developed by Jules Stein, MD, to prevent blindness by transforming the quality of vision research, education, patient care, and community outreach.

The Institute exists because of Dr. Stein, one of the most influential executives in entertainment who returned to his roots as a medical doctor to become a national advocate for vision science; and Bradley R. Straatsma, MD, JD, founding director of the Stein Eye Institute and founding chair of the UCLA Department of Ophthalmology, who created a bold plan for building the scope of ophthalmology in the UCLA School of Medicine. Together Drs. Stein and Straatsma ensured the Institute would take a central role in transforming vision science as a powerful platform for discovery and patient care to eradicate one of the great scourges of human existence: blindness.

Under the leadership of Bartly J. Mondino, MD, director and chair since 1994, the Institute's core pillars have been increasingly developed and a broad agenda of program-building and expansion has been implemented.

The original dream for ophthalmology at UCLA has evolved into the Institute's bold transformation to a vision-science campus—an interconnected community of facilities and people that merge research, training for new ophthalmologists, premier patient care, community outreach programs, and ongoing education for doctors worldwide.

A historic partnership—a first of its kind—was forged with the Doheny Eye Institute in 2013, creating the nation's preeminent organization for ophthalmic care and vision research under the banner of the UCLA Department of Ophthalmology.

And today, patients across the Southland have access to the finest vision care at the Stein Eye Institute in Westwood; the UCLA Stein Eye Centers in Calabasas and Santa Monica; the Doheny Eye Centers UCLA in Arcadia, Orange County, and Pasadena; and UCLA-affiliated hospitals in Sylmar, Torrance, and West Los Angeles/Sepulveda.

Since its opening on November 3, 1966, the Institute's original mandate remains paramount: the relentless drive for excellence and the constant search for new possibilities in the treatment of the eye. The Institute's decades of accomplishments may have even exceeded the original soaring expectations of Dr. Stein who at the dedication ceremony defined his own prophecy for the Institute and the medical field he loved:

"The men and women who will occupy this building and use its resources will share in future achievements that will outstrip any that have been seen; for science today is moving ahead with fantastic speed, and we must be sure that eye research moves with it. The history of this Institute begins with this dedication. I am confident that it will be a proud history."

"If I am remembered for anything, it will not be for anything I did in show business, but for what I did to prevent blindness."

DR. JULES STEIN



Doris and Jules Stein

The legacy of Dr. and Mrs. Jules Stein arises from their role in the 20th century as visionaries. Through brilliance and beneficence, they created a multitude of programs aimed specifically at one goal: preserving and restoring eyesight. They approached this task dauntlessly, integrating the worlds of business, medicine, and philanthropy in such a way as to enhance each and leave in trust the promise of limitless accomplishment in the advancement of eye research and treatment. The Stein Eye Institute was established as a result of their philanthropy.

Board of Trustees

The Board of Trustees, established in 1977, ensures the Institute's orderly growth and development. The Board meets regularly during the year, with each trustee providing his/her unique counsel. Collectively, their invaluable contributions have included fiscal planning for the Institute, adoption of measures to facilitate recruitment of the world's finest vision scientists, allocation of funds for the purchase of vision research equipment, and recommendations for expansion programs.



Norman Abrams, Esq.
Distinguished Professor
of Law Emeritus
Acting Chancellor Emeritus
UCLA
2015—present



Charles T. Foscue President and Chief Executive Officer HAI Financial, Inc. 2020—present



Bartly J. Mondino, MD Director Stein Eye Institute 1994–present



Ronald L. Olson, Esq. Partner Munger, Tolles & Olson 1995–present



Nelson C. Rising, Esq. Chair and Chief Executive Officer Rising Realty Partners 2011–present



Katrina vanden Heuvel Publisher and Editor *The Nation* 1984–present



Casey Wasserman
President and
Chief Executive Officer
The Wasserman Foundation
1998–present



Bart H. Williams, Esq. Partner Proskauer Rose LLP 2021–Present



Marissa Goldberg
OBSERVER
Executive Director and
Chief Financial Officer
Doheny Eye Institute
2015—present

Executive Committee

The Executive Committee of the Stein Eye Institute and UCLA Department of Ophthalmology meets regularly during the year, with each member providing their unique expertise. The Committee ensures the orderly growth and development of the Institute and Department. It is involved in fiscal planning, expansion, recruitment, program development, and resolution of interdivisional issues.

Bartly J. Mondino, MD

Director, Stein Eye Institute Chair, UCLA Department of Ophthalmology Affiliation Chair, Doheny Eye Institute

Anthony C. Arnold, MD

Vice Chair, Education

Anne L. Coleman, MD, PhD

Vice Chair of Academic Affairs, UCLA Department of Ophthalmology

SriniVas R. Sadda, MD

President and Chief Scientific Officer, Doheny Eye Institute

Alfredo A. Sadun, MD, PhD

Vice Chair, Doheny Eye Centers UCLA

Alapakkam P. Sampath, PhD

Associate Director, Stein Eye Institute

Jonathan D. Smith

Chief Administrative Officer, Stein Eye Institute

Gabriel H. Travis, MD

Special Advisor

Mission Statement

The UCLA Stein Eye Institute is a vision-science campus dedicated to the preservation and restoration of vision through its global programs in innovative research, quality patient care, and multidisciplinary, integrative education, all with community outreach.

Giving Opportunities

For more than half a century, UCLA's vision scientists have extended the boundaries of current knowledge to reach the goal of a lifetime of good vision for everyone. This noble undertaking has been due in large part to a strong tradition of philanthropy from private sources.

Contributions from individuals, foundations, and corporations help underwrite priority needs, which uphold scientific innovation, patient care, training and education, and a strong commitment to community engagement. The Institute offers a variety of giving options to those who wish to promote and participate in this tradition of excellence.

Ways to Give

Direct Gifts

Direct gifts—whether by cash, check, or credit card—are critically important to Stein Eye because the gifts can be put to work immediately, increasing their impact and extending their reach.

Endowments

A gift of an endowment demonstrates a long-term commitment, since the fund is maintained in perpetuity. A portion of the annual investment income is used to support clinical, educational, and scientific initiatives and the remaining investment yield is returned to principal, thus, over the years, the fund can grow and provide continuous support.

An endowment serves as an enduring legacy as it can bear the donor's name or honor a loved one. Giving opportunities exist for endowed chairs, endowed fellowships, and endowed funds for research, education, and patient care. These funds can be made payable for up to five years.

Pledges

A pledge is a formal statement of intention to make a gift. Donors who seek to defer the bulk of their giving until a future date, or who want to give via installments over time, may use this giving strategy. A pledge may be followed by an immediate gift or may simply confirm your intention to make a gift in the future. Pledges are typically made in concert with a preliminary first installment and provide a source of consistent and dependable funding. This method often allows donors to give more generously than they may have originally considered.

Securities

Gifts of appreciated securities are tax deductible at their full market value. In most cases, appreciation in the value of the security benefits the University and is not taxable to the donor.

Matching Gifts

Many corporations have demonstrated their support by matching or multiplying their employees' gifts up to a set amount. Before making a gift, you may want to ask whether your employer participates in a matching gift program. Certain restrictions apply to matching gifts. Please consult your company's personnel office.

Real Estate

Real estate (your primary residence, vacation home, commercial property, or land) is an asset that you can leverage in a variety of ways to support the Institute while reducing taxes and eliminating the burden of maintaining or selling your property. You can also use real estate to fund gifts that provide you with an income stream for life.

Bequests

Making a gift through your will or living trust gives you the immediate satisfaction of creating a lasting and personal legacy that ensures Stein Eye's future and costs nothing now.

Charitable Gift Annuity

In exchange for a gift of cash or appreciated securities, you can receive fixed income for life and an immediate charitable income tax deduction. In addition, a portion of the annuity payments is tax-free.

Qualified Retirement Plans

Naming The UCLA Foundation as a beneficiary of some or all of your qualified retirement plan may help you minimize taxes and maximize your philanthropic impact, while leaving to your loved ones, assets that are less taxed.

Tribute Gifts

Contributions may be made in memory, honor, or celebration of a loved one, or to commemorate a special occasion. Donations can be used for unrestricted program support or be directed to any area of the Institute.

Your Gift Can Make a Difference

However you choose to support the Institute, you will be embarking on a partnership with one of the world's preeminent eye research centers. Such an investment will greatly expand our understanding of the causes of eye diseases, expose alternative treatment options, and ultimately prevent blindness.

For information on how to incorporate the UCLA Stein Eye Institute into your estate and retirement planning, or to make a gift of any kind, please contact:

Leiloni Breidert UCLA Stein Eye Institute Development Office 100 Stein Plaza, Room 1-124 Los Angeles, California 90095-7000 Phone: (310) 206-6035 Fax: (310) 794-1665 giving@jsei.ucla.edu





