UCLA STEIN EYE INSTITUTE ANNUAL REPORT

2022-2023

UCLA Stein Eye Institute

ANNUAL REPORT

July 1, 2022–June 30, 2023

DIRECTOR

Anne L. Coleman, MD, PhD

MANAGING EDITOR

Tina-Marie Gauthier c/o Stein Eye Institute 100 Stein Plaza, UCLA Los Angeles, California 90095-7000 Tina@EyeCiteEditing.com

PUBLICATION COMMITTEE

Anthony Aldave, MD Deborah Ferrington, PhD JoAnn Giaconi, MD Marissa Goldberg Kevin Miller, MD Peter Quiros, MD Roxana Radu, MD Alfredo Sadun, MD, PhD Molly Ann Woods, CFRE

CONTRIBUTING EDITORS

Rubi Arias Leiloni Breidert Nicole Dominguez Martha Espinoza Margarita Gonzalez Peter López Darlene Villegas

CONTRIBUTING WRITER

Harlan Lebo

PHOTOGRAPHY

Reed Hutchinson Rich Schmitt Robin Weisz

DESIGN Robin Weisz/Graphic Design

To view previous Annual Reports, visit: www.uclahealth.org/Eye/annual-report.

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

©2023 by the Regents of the University of California.

All rights reserved.



1	Year in Review
11	Philanthropy
19	Eye Health Programs
27	Faculty and Colleagues
53	Research and Funding
83	About the Institute

On the cover: Wall art in the lobby of the Edie & Lew Wasserman Building showcases the signature eyewear worn by Mr. and Mrs. Wasserman and pays homage to their infinite vision and longstanding commitment to the preservation and restoration of sight.



LETTER FROM THE CHAIR

I am pleased to share with you the 2022–23 UCLA Stein Eye Institute Annual Report, which chronicles the recent activities of our physicians and vision-scientists in pursuit of our mission: to preserve sight and restore vision.

Our world-class vision-science campus is at the forefront of patient care, research, and discovery. And this year, like our years past, has seen meaning-ful collaborations and further inroads in our gaining greater understanding of the eye and in providing our patients with access to the finest care.

Noteworthy events this academic year include:

- Marking the 10-year anniversary of the historic affiliation between the UCLA Stein Eye Institute and the Doheny Eye Institute
- Stein and Doheny vision scientists receiving 97 R01 and other major competitive vision-science research grants totaling \$16,548,547 in support of innovative investigations
- Investigators transcending traditional disciplinary boundaries and conducting multidisciplinary research to uncover evidence with potential to transform diagnosis and treatment paradigms for blinding eye diseases
- Welcoming five new faculty members to our team and celebrating Trashon
 Fearington as she takes the helm as our new chief administrative officer.

Leadership in the UCLA Department of Ophthalmology has long recognized the need for expanding the diversity of our trainees and faculty. As you will see reflected in these pages, we are taking action to recruit underrepresented minority medical students to ophthalmology by providing early exposure to the field, mentorship, and resources to participate in activities that prepare them to become competitive residency applicants. In addition, we are addressing disparities in vision health and eye care, providing a framework for reducing these disparities to improve vision health, and striving toward health equity in ophthalmology.

Thank you for your interest in learning about our efforts and accomplishments this 2022–23 academic year, which are intended to ensure that people at home and around the world have the gift of sight.

Sincerely,

Cirre I Colina MD, PhT

Anne L. Coleman, MD, PhD Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology Chair, UCLA Department of Ophthalmology Director, Stein Eye Institute Affiliation Chair, Doheny Eye Institute

Welcoming Our New Director and Chair: Dr. Anne Coleman

n July 2022, Anne L. Coleman, MD, PhD, Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology, assumed leadership of the Stein Eye Institute and the UCLA Department of Ophthalmology. As director of the Institute, chair and executive medical director of the Department, and affiliation chair of the Doheny Eye Institute, Dr. Coleman brings with her a broad agenda to address the growing challenges for patient care, education, vision-science research, and community outreach.

Dr. Coleman is 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. As director of the Stein Eye Institute Center for Community Outreach and Policy and the UCLA Mobile Eye Clinic, Dr. Coleman has overseen outreach efforts to screen and treat over 180,000 medically underserved children and adults of Southern California.

A national leader in ophthalmology, Dr. Coleman has served in the highest of leadership roles, including as president of the American Academy of Ophthalmology (AAO), chair of the National Eye Institute's National Eye Health Educational Program, president of Women in Ophthalmology, president of the Council for the American Ophthalmological Society, and as associate editor of the American Journal of Ophthalmology. In recognition of her contributions to the field, Dr. Coleman has received numerous honors, including the AAO Life Achievement Award and Secretariat Award and being elected to the National Academy of Medicine.





Our three exemplary leaders who have each served as chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute: Dr. Bartly Mondino (1994–2022), Dr. Anne Coleman (2022–present), and Dr. Bradley Straatsma (1964–1994).

Historic Affiliation Marks Its 10th Anniversary

UCLA Stein Eye Institute DOHENY



he UCLA Stein Eye Institute and Doheny Eye Institute celebrated ten years as proudly affiliated partners in December 2023. The unique alliance brought together two organizations that share similar values and standards for education, patient care, and research, while preserving the distinct identity of each.

Individually both the Stein Eye and Doheny Eye Institutes have a storied history and were regarded as among the top ten institutes in the world. Now the Stein Eye and Doheny Eye Institutes are working together within a single integrated Department of Ophthalmology and have consistently been ranked by U.S. News & World Report as among the top five in the nation for ophthalmology. The Doheny Eye Institute is an independent, nonprofit research organization, and nearly the entire team of clinicians and researchers from DEI, formerly associated with the University of Southern California, transitioned to UCLA Department of Ophthalmology faculty in 2013.

With a complementary set of resources, the affiliation has created new opportunities for progress in a broader range of expertise and collaboration for patient care and research. Immediately upon affiliating, for example, Doheny Eye Centers UCLA locations opened in Arcadia, Orange County, and Pasadena, greatly broadening access to eye health services for our community. The Department also established a formal relationship with City of Hope in Duarte

providing care and consultation for cases involving cancer and the eye. And research faculty working at the Stein and Doheny Eye Institutes with cross disciplines are collaborating on multiple projects to advance vision science.

The Doheny Eye Institute recently opened its new headquarters in Pasadena. The vision-science campus features 25,000 square feet of dedicated research space, the Doheny Image Reading Center and Analysis Laboratory, as well as a conference center to enhance academic excellence. A state-of-the-art Doheny Eye Center UCLA office, located on the Pasadena campus, will begin offering patients a full spectrum of eye health care in 2024.





Doheny Eye Institute headquarters in Pasadena

Faculty Team Creates Opportunities for Leadership and Decision-Making in Ophthalmology

To expand governance and oversight of the Stein Eye Institute, a faculty leadership team was established this fiscal year to create broader involvement by the faculty in the management of the Institute, bringing faculty into the decision-making arena and in planning the future for UCLA vision-science research and care.

The members of the leadership team are:

Anthony J. Aldave, MD, Vice Chair of Academics
Anthony C. Arnold, MD, Vice Chair of Education
Joseph Caprioli, MD, Vice Chair of Quality
Sophie X. Deng, MD, PhD, Vice Chair of Justice, Equity, Diversity, and Inclusion
JoAnn A. Giaconi, MD, Vice Chair of Affiliated Hospitals
Gary N. Holland, MD, Vice Chair of Patient-Based Research
Alfredo Sadun, MD, PhD, Vice Chair of Doheny Eye Centers UCLA
Alapakkam P. Sampath, PhD, Associate Director of Research

Trashon Fearington Named Chief Administrative Officer

Trashon L. Fearington was announced as the UCLA Department of Ophthalmology's new chief administrative officer (CAO) in March 2023 in recognition of her excellent qualifications and history of leadership and success.

Since joining the Department in 2009, Trashon has directed the academic and staff personnel and payroll functions for the Department and spearheaded administrative actions following the affiliation agreement with the Doheny Eye Institute in December 2013. She was elevated to interim associate administrator in February 2020 and became interim CAO and clinical director in 2021. Trashon is respected for her wisdom, people skills, and intimate knowledge of the clinical planning and strategic priorities and objectives of the David Geffen School of Medicine, UCLA Health, and the Department.

New Faculty Appointments

Judy L. Chen, MD Assistant Professor of Ophthalmology

Greg D. Field, PhD Joan and Jerome Snyder Chair in Vision Research Associate Professor of Ophthalmology

Alex Huk, PhD

Professor of Ophthalmology Professor, Department of Psychiatry and Biobehavioral Science

Moritz S. Pettenkofer, MD Health Sciences Clinical Instructor

Kelsey A. Roelofs, MD Assistant Professor of Ophthalmology



Awards and Honors

AAO 2022 Award Recipients

The Stein Eye and Doheny Eye Institutes contributed more than 100 lectures, presentations, and exhibits at the November 2022 American Academy of Ophthalmology (AAO) Annual Meeting in Chicago, Illinois.

In addition to their educational contributions, faculty from Stein and Doheny were honored for their service to ophthalmology:

Gary N. Holland, MD, received the AAO Distinguished Service Award for his ongoing notable service to ophthalmology and the Academy.

Vikas Chopra, MD, and John A. Irvine, MD, received the AAO Senior Achievement Award for their longtime contributions to the scientific and educational programs of the Academy, and to the field of ophthalmology.

Simon Fung, MD, MA, and Edmund Tsui, MD, each received the AAO Achievement Award for their contributions to the Academy, its scientific and educational programs, and to the field of ophthalmology.

Kevin M. Miller, MD, Peter A. Quiros, MD, and Edmund Tsui, MD, received the Secretariat Award for their exceptional service to the Academy.

Stein and Doheny Vision Scientists Receive Major Grant Funding

Creating new knowledge is foundational to our quest to protect vision and end blindness, and large grants help to propel that journey. Researchers from the Stein Eye and Doheny Eye Institutes are proud recipients of National Institutes of Health Research Project Grants, known as R01 grants, and other major competitive grants supporting innovative research. Congratulations to these grant recipients:

Deborah Ferrington, PhD, chief scientific officer at the Doheny Eye Institute, received an R01 four-year grant supporting her study, Mitochondrial Defects in the Retinal Pigment Epithelium and the CFH Risk Allele for Age-Related Macular Degeneration.

SriniVas R. Sadda, MD, professor of ophthalmology, was awarded an R01 five-year grant for his study, Epidemiology of Biomarkers of AMD Progression, which includes three subawards to Case Western Research University, University of Pennsylvania, and University of Miami.

Xian-Jie Yang, PhD, professor of ophthalmology, received a \$1.3 million California Institute for Regenerative Medicine (CIRM) Quest Award to support her work developing a gene therapy for dominant optic atrophy, an inherited optic nerve disease caused by mutations in the OPA1 gene.

Yuhua Zhang, PhD, associate professor of ophthalmology, received a fouryear, R01 grant to support his study, In Vivo Characterizations of Retinal Hemodynamics.

Research to Prevent Blindness Awardees

Research to Prevent Blindness (RPB), a nonprofit organization created in 1960 by Dr. Jules Stein, supports research to develop treatments, preventives, and cures for all conditions that damage and destroy sight. We celebrate the following RPB awardees:

Kaustabh Ghosh, PhD, associate professor of ophthalmology, received the RPB/ International Retinal Research Foundation Catalyst Award for Innovative Research Approaches for Age-Related Macular Degeneration.

Victoria L. Tseng, MD, PhD, assistant professor of ophthalmology, received the RPB Career Development Award.

Megan Paul, a medical student working at the UCLA Stein Eye Institute, received the RPB Medical Student Eye Research Fellowship.

UCLA Department of Ophthalmology received an Unrestricted Grant from RPB, which supports flexibility in developing

and expanding eye research programs.

UCLA Excellence in Postdoctoral Mentoring

Award Honorees Sophie X. Deng, MD, PhD, Roxana Radu, MD, and David S. Williams, PhD, were recipients of 2022 Postdoctoral Scholars Mentor Awards, which honor

UCLA faculty members who provide outstanding mentorship while also helping postdoctoral scholars develop successful careers.

Faculty Honors

Anthony J. Aldave, MD, Walton Li Chair in Cornea and Uveitis, received the R. Townley Paton Award and presented the Paton Lecture, The Science of Sight: Addressing Corneal Blindness in the Developing World, September 30, 2022, at the Cornea and Eye Banking Forum, in Chicago, Illinois. The Paton award is the Eye Bank Association of America's highest honor for corneal physicians.

Dr. Aldave also received the Asia Cornea Foundation (ACF) Medal and gave the ACF Medal Lecture at the Asia Cornea Society biannual meeting on November 24, 2022, in Bangkok, Thailand.

Anthony C. Arnold, MD, Mary Oakley Foundation Chair in Neurodegenerative Diseases, presented the keynote lecture, Nonarteritic Anterior Ischemic Optic Neuropathy 2022: A Limited Discussion, at the 11th Asian Neuro-Ophthalmology Society Meeting in Bangkok, Thailand, on November 23, 2022.

Laura Bonelli, MD, health sciences assistant clinical professor of ophthalmology, received the Olive and Anga Lundgren Endowed Chair in Ophthalmology.

Joseph Caprioli, MD, David May II Chair in Ophthalmology, was honored with the S. Rodman Irvine Prize for his professional excellence at the UCLA Department of Ophthalmology Annual Seminar on June 2, 2023. Anne L. Coleman, MD, PhD, chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute, received the President's Award at the American Glaucoma Society (AGS) annual meeting on March 3, 2023, in recognition of "significant contributions to the glaucoma community through scientific achievements, service to the Society, and/or service to the profession as a whole."

Dr. Coleman was also appointed Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology, effective July 1, 2022, the date she assumed the position of Department chair and Institute director.

Joseph L. Demer, MD, PhD, Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology, presented the keynote lecture, Nexus of Strabismus, Myopia, and Glaucoma, at the Korean Association of Strabismus and Amblyopia meeting on October 29, 2022, in Seoul, South Korea.

Dr. Demer presented the same keynote lecture at the LV Prasad Eye Institute in Hyderabad, India, on December 3, 2022 (virtual).

Marissa Goldberg, chief executive officer of the Doheny Eye Institute, was named Nonprofit Executive of the Year by the *Los Angeles Business Journal* at the 2023 Nonprofit & Corporate Citizenship Awards ceremony on April 19, 2023, in Los Angeles, CA. Ms. Goldberg was honored for "making an indelible mark in vision care, and in affiliation with UCLA's Stein Eye Institute, helping lead Doheny's mission to further the conservation, improvement, and restoration of human eyesight." Lynn K. Gordon, MD, PhD, professor of ophthalmology emeritus, and her colleague Eve J. Higginbotham, MD, were selected by the Association of University Professors of Ophthalmology (AUPO) Board of Trustees to make recommendations on how the AUPO may best achieve equity, diversity, and inclusion (EDI) goals. Dr. Gordon was the first senior associate dean of EDI at UCLA's David Geffen School of Medicine.

Stacy L. Pineles, MD, Jerome and Joan Snyder Chair in ophthalmology, was named the chair-elect of the Pediatric Eye Disease Investigator Group (PEDIG). Dr. Pineles will serve as chair from 2024 to 2029. Sponsored by the National Eye Institute, the PEDIG network carries out large national research studies in pediatric ophthalmology.

Dr. Pineles also received the Burton Kushner, MD, Medal and presented the Burton Kushner Lecture, "Functional and systemic effects of strabismus and serous pediatric eye disease" on February 4, 2023 (remote).

Peter A. Quiros, MD, health sciences clinical professor of ophthalmology, was voted president-elect of the North-American Neuro-Ophthalmology Society in July 2022. Dr. Quiros will be president-elect for two years and president of the society from 2024 to 2026.

Roxana A. Radu, MD, assistant professor of ophthalmology, received the Vernon O. Underwood Family Chair in Ophthalmology. The Chair's purpose is to help advance knowledge in vision science so as to gain understanding of the processes that cause blindness and to develop more effective ways to prevent, diagnose, and treat eye disease. Kelsey A. Roelofs, MD, assistant professor of ophthalmology, was selected as the inaugural Dr. Allen and Charlotte Ginsburg Fellow in Precision Genomic Medicine from the UCLA Institute for Precision Health.

SriniVas R. Sadda, MD, professor of ophthalmology, was announced as president-elect of the Association for Research in Vision and Ophthalmology for 2024–25.

Alfredo A. Sadun, MD, PhD, Flora L. Thornton Endowed Chair in Vision Research, presented the neuro-ophthalmology keynote lecture, Mitochondrial Optic Neuropathies, at the European Vision and Eye Research (EVER) Meeting in Valencia, Spain, on October 14, 2022.

Dr. Sadun also presented the keynote address, "The anatomical forces underlying the pathology of LHON" on June 16, 2023, at the EUROMIT meeting in Bologna, Italy.

Victoria L. Tseng, MD, PhD, assistant professor of ophthalmology, received the Research to Prevent Blindness and American Academy of Ophthalmology Award for IRIS Registry Research. Dr. Tseng's research will focus on neovascular glaucoma and racial/ethnic disparities in the incidence, treatment patterns, and visual outcomes in patients with neovascular glaucoma.

Edmund Tsui, MD, assistant professor of ophthalmology, received the Faculty Career Development Award. His research will focus on imaging biomarkers of intraocular inflammation in children.

Dr. Tsui also received a two-year National Eye Institute R21 grant titled, "Objective quantification of vitreous inflammation using optical coherence tomography." **SriniVas Sadda, MD**, will be contributing to the grant as a co-investigator. Irena Tsui, MD, associate professor of ophthalmology, was accepted to the Alliance for Eye and Vision Research (AEVR) Emerging Vision Scientist Program. The early stage investigators exhibit results of their cutting-edge research and then advocate for research funding with Congressional delegations.

Federico G. Velez, MD, Leonard Apt Endowed Chair in Pediatric Ophthalmology, was the Keynote Speaker in November 2022 at the University of São Paulo, Brazil; Argentinian Society of Pediatric Ophthalmology 50th anniversary, in Mendoza, Argentina; Argentinian Council of Strabismus, in Mendoza, Argentina; and LV Prasad Eye Institute 25th anniversary, in Hyderabad, India.

Dr. Velez was also the Arthur Jampolsky Day Keynote Lecturer at the California Pacific Medical Center–Pacific Vision Foundation on March 6, 2023, in San Francisco, CA, and the Pediatric Ophthalmology and Strabismus Keynote Speaker at the Oregon Academy of Ophthalmology on March 10–11, 2023, in Portland, OR.

David S. Williams, PhD, Karl Kirchgessner Foundation Chair in Vision Science, was presented with the 2022 Balazs Prize for eye research by the International Society for Eye Research (ISER) at the ISER biennial conference in Queensland, Australia, in February 2023. The international prize honors a distinguished scientist whose outstanding contributions provide significant progress in the field of experimental eye research.

Education

Clinical and Research Seminar

The UCLA Department of Ophthalmology held its prestigious clinical and research seminar June 10–11, 2022, at the UCLA Stein Eye Institute. The event was highlighted by the following keynote lectures:

53rd Doheny Memorial Lecturer Joseph Caprioli, MD

David May II Professor of Ophthalmology, UCLA Stein Eye Institute

53rd Jules Stein Lecturer

Janey L. Wiggs, MD, PhD Paul Austin Chandler Professor of Ophthalmology, Massachusetts Eye & Ear Infirmary

20th Bradley R. Straatsma Lecturer

Mary E. Hartnett, MD

Michael F. Marmor MD Professor of Retinal Science and Disease, Stanford University Department of Ophthalmology

20th Thomas H. Pettit Lecturer

Mark J. Mannis, MD

Fosse Endowed Chair in Vision Science Research Professor and Chair, UC Davis Department of Ophthalmology

Educational Courses

The **26th UCLA Stein Eye and Doheny Eye Institutes Vision Science Conference** was held October 21–23, 2022, at Lake Arrowhead, CA.

The Aesthetic Eyelid and Facial Rejuvenation Course was held at the Stein Eye Institute on October 28–29, 2022. The course chair was Robert Alan Goldberg, MD.

The UCLA Stein Eye Institute and Doheny Eye Institute presented the Annual Comprehensive Ophthalmology Review Course, February 9–12, 2023, at the Stein Eye Institute in Westwood. Course directors were Drs. John Irvine and Mitra Nejad.

The 52nd **Doheny Eye Institute Annual CME Conference**, previously known as Doheny Days, was held March 25, 2023, at the Doheny Eye Institute in Pasadena.

The 13th Conference of the **Doheny Eye Institute Ryan Initiative for Macular Research (RIMR)** was held at the Beckman Center of the National Academies of Sciences, Engineering, and Medicine in Irvine, March 28–30, 2023. The program was chaired by **Dr. SriniVas Sadda**.

The International Retinal Imaging Society (IntRIS) held its Symposium on March 31–April 1, 2023, at the UCLA Meyer & Renee Luskin Conference Center. Course directors were Drs. David Sarraf, Amani Fawzi, K. Bailey Freund, and SriniVas Sadda.

The Alcon Vision Advanced Cataract Surgery Course was held Saturday April 1, 2023, at the Marriott Irvine Spectrum Hotel. The course was directed by Dr. Kevin Miller.

Graduation and Award Ceremony

Residents, fellows, and faculty were honored for excellence at the UCLA Department of Ophthalmology graduation ceremony on June 3, 2023, at UCLA's Switzer Plaza.

EXCELLENCE IN RESEARCH AWARDS

Resident Research Award Michel Sun, MD, PhD

Clinical Fellow Research Award Liane Dallalzadeh, MD

Research Fellow Research Award Massood Mohammadi, MD

Post-Doctoral Fellow Research Award Roni Hazim, PhD

Pre-Doctoral Fellow Research Award Eunice Ng

TEACHING AWARDS

Faculty Teaching Award Ekjyot S. Gill, MD

Fellowship Faculty Teaching Award Monica Khitri, MD

Resident Teaching Award Adrian Au, MD, PhD

Fellow Teaching Award Samuel Hobbs, MD

Community Outreach

Actions to Address Disparities in Eye Care

The American Academy of Ophthalmology Task Force on Disparities in Eye Care published "Disparities in Vision Health and Eye Care: Where Do We Go from Here?" in *Ophthalmology* on October 1, 2022. The white paper discusses health and health care disparities in ophthalmology in the United States. **Anne L. Coleman, MD, PhD**, chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute, is senior author of the white paper, and **Victoria L. Tseng, MD, PhD**, assistant professor of ophthalmology, is a contributing author.

The white paper examines existing racial and ethnic, socioeconomic, and other demographic differences in the diagnosis and management of several ocular conditions, along with the underlying influence of social determinants of health on these potential disparities. In addition to identifying existing disparities, the white paper provides a framework for the future of eye care to reduce disparities and strive toward health equity in ophthalmology.

Highlighted in the framework are important factors to consider, including:

- Improving access to eye care
- Increasing workforce diversity within ophthalmology
- Bettering eye care education for patients
- Creating a continuous improvement system through data
- Addressing gaps in health disparities research data in ophthalmology
- Expanding vision and collaborations within ophthalmology.

The UCLA Department of Ophthalmology and the Stein Eye Institute Center for Community Outreach and Policy are actively involved in several initiatives to address action items outlined in the white paper framework. The Department has also established other programs to further justice, equity, diversity, and inclusion in ophthalmology and to create future leaders in ophthalmology who are underrepresented in medicine.

iViva Los Dodgers!

The UCLA Mobile Eye Clinic (UMEC) care team is made up of ophthalmologists, optometrists, technicians, residents, and volunteers. Established in 1975, the UMEC delivers high-quality, free, privately funded ophthalmic care to underserved populations across Southern California.

Patients receive a visual acuity check, eye pressure check, autorefraction, and slit lamp exam by one of our volunteer ophthalmologists. Patients are provided with sunglasses and reading glasses, if needed. When UMEC staff identify individuals with eye diseases, such as cataracts and glaucoma, patients are advised on needed next steps to continue their vision care and protect their sight.

One of the events UMEC attended was Viva Los Dodgers at Dodger Stadium on July 24, 2022, where the care team provided general eye health screenings to 33 patients.





Justice, Equity, Diversity, Inclusion

Introducing Underrepresented Students in Medicine to Ophthalmology

Building on core values of **J**ustice, **E**quity, **D**iversity, and Inclusion is one of the top priorities of the UCLA Department of Ophthalmology's EyeJEDI program.

"We want to expand the diversity of our trainees and faculty, and increase those who are underrepresented in medicine (URiM)," says **Sophie X. Deng, MD, PhD**, vice chair of Justice, Equity, Diversity, and Inclusion. To help support these goals, the EyeJEDI Committee has created a pipeline to introduce undergraduate and medical school students to ophthalmology and vision science through various avenues.

Key factors identified for recruiting URiM medical students to ophthalmology are early exposure to ophthalmology, mentorship, and providing URiM students with financial support and resources to participate in research and educational activities that prepare them to become competitive residency applicants. **Karla Murillo, Ethan Osias**, and **Dominic Williams**, past UCLA URiM medical students who are interested in pursuing ophthalmology, shared their firsthand experiences with the EyeJEDI committee along with suggestions for how to further this effort.

Minority Ophthalmology Mentoring (MOM) Program

The Department also supports UCLA URIM students who have been accepted to the Minority Ophthalmology Mentoring (MOM) program established by the American Academy of Ophthalmology (AAO) in partnership with the Association of University Professors of Ophthalmology. The MOM program aims to increase diversity in ophthalmology by helping URIM students become competitive ophthalmology residency applicants. Students receive one-on-one mentorship, guidance in medical career planning, networking opportunities, and access to educational resources.

The Department provided lodging support to UCLA MOM students **Amani Carson, Tamia Williams**, and **Ricardo Oregon Guzman** so they could attend the 2022 AAO annual meeting, where they attended educational events and met with UCLA ophthalmology faculty and trainees. And three first-year UCLA medical students, **Hailey Gonzales, Stacy Piva**, and **Antonia Santos**, were accepted to the MOM Program in 2023.

Scholarship

The Underrepresented in Ophthalmology Visiting Student Scholarship is another major effort to promote diversity by attracting the most promising underrepresented students across the nation to UCLA's ophthalmology residency program. The scholarship provides two visiting students with a stipend of \$3,500 each to complete their ophthalmology elective at either the Stein Eye Institute or the Doheny Eye Centers UCLA.



In summer 2022, Oakwood University undergraduate students Celine Shields (center left) and Rashida Wilkinson (center right) conducted research studies in the Stein Eye Institute laboratories of Dr. Sophie X. Deng (left) and Dr. Jie J. Zheng (right).

The students, who were recipients of a 2022 NIH Diversity Supplement award to Dr. Deng and had no prior laboratory experience, presented their scientific work at weekly lab meetings, and participated in research seminars, conferences, and journal clubs. At the program's conclusion, they presented their research at the Neuroscience URiM Undergraduate Poster Session where Rashida won the second-place poster award, and Celine's poster was among the most visited presentations. Stemming from this experience, both women now express a strong interest in pursuing a career in medicine.

Alumni News

2022 Stein and Doheny Alumni Reception

The UCLA Department of Ophthalmology Association held its annual Stein Eye Institute and Doheny Eye Institute alumni reception on October 2, 2022, during the American Academy of Ophthalmology (AAO) meeting in Chicago, Illinois.

Dr. Anne Coleman, chair of the UCLA Department of Ophthalmology, spoke at the reception and announced the new vice chairs of the Department, recognized the achievements and contributions of our faculty at the AAO, and introduced UCLA Ophthalmology Alumni Association President **Dr. Bronwyn Bateman** and Doheny Eye Institute Professional Alumni Association President **Dr. John Irvine**.



L to R: Dr. Scott Whitcup, Dr. Bartly Mondino, and Dr. Michael Ip.



L to R: Dr. Bronwyn Bateman, Dr. Troy Elander, Dr. John Irvine, Dr. Anne Coleman, Marissa Goldberg, Dr. Lynn Gordon, and Dr. Bartly Mondino.



L to R: Dr. Ken Kitayama, Sara Emami, Ye "Samuel" Lee, Dr. Anne Coleman, Megan Paul, Yasmine Abbey, Karla Murillo, Melissa Yao, and Christian Gonzalez.



L to R: Dr. Ramesh Kekunnaya, Dr. Kevin Miller, Dr. Bronwyn Bateman, Dr. Stacy Pineles, Noemi Rosello, Dr. Federico Velez, and Dr. Vahid Mohammadzadeh.

Alumni Honored at 2022 AAO Meeting

At the November 2022 American Academy of Ophthalmology (AAO) Annual Meeting, alumni from the Stein and Doheny Eye Institutes were celebrated for their contributions to our field.

Dr. Michele C. Lim received the Senior Achievement Award; Drs. Leo A. Kim, Mario A. Meallet, and Anjali Tannan were given the Achievement Award; and Drs. Courtney E. Francis, Rahul N. Khurana, Michael A. Klufas, Gregg T. Kokame, Alpa S. Patel, Rajesh C. Rao, and Stuart Seiff, received the Secretariat Award.

Alumni Honors

Dr. David Hollander, Chief Medical Officer

David A. Hollander, MD, MBA, Stein Eye Institute cornea fellow (2004–05), was appointed chief medical officer of Revance Therapeutics, Inc., a commercial-stage biotechnology company focused on innovative aesthetic and therapeutic offerings. Dr. Hollander will lead clinical development, data science, medical affairs, scientific innovation, pharmacovigilance, and regulatory affairs. Alessandro Rabiolo, MD, Stein Eye International Fellow 2017– 18, was awarded the ARVO Foundation Early Career Clinician-Scientist Research Award at the March 2023 Research in Vision and Ophthalmology (ARVO) annual meeting.

Philanthropy



Dr. Joseph Caprioli Receives Nearly \$10M in Support of Glaucoma Research

A major bequest of over \$9.6M was given to Joseph Caprioli, MD, from his longtime patient, Ms. Kay Pick, who passed away in 2022.

Ms. Pick made the bequest to fund glaucoma research at Dr. Caprioli's direction. Dr. Caprioli, professor of ophthalmology and chief of the Glaucoma Division, has graciously designated \$2.5M of the gift to permanently endow the **Kay K. Pick Endowed Chair in Glaucoma Research**. The endowed chair will support the teaching and research activities of the current chief and future chiefs of the Glaucoma Division. The remainder of the bequest, over \$7.1M, will be designated as the **Kay K. Pick Glaucoma Research Fund**.

"Ms. Pick was a glaucoma patient of mine for over 20 years," says Dr. Caprioli. "Glaucoma is a painless and often asymptomatic disease, which if left untreated, can result in blindness. I firmly believe the compassionate and long-term comprehensive care she received from our team established a trusting relationship, which is critical to glaucoma care.

Included in his laboratory's research, Dr. Caprioli and his team have a vested interest in investigations of structural measures in glaucoma both for detection of early disease and identification of glaucoma progression. Their recent efforts to apply contemporary artificial intelligence (Al) algorithms to large patient databases of visual fields, optic disc photographs, and optical coherence imaging of the optic nerve are bearing translational fruit to enhance individualized care of patients with glaucoma.

Says Dr. Caprioli, "Ms. Pick recognized the importance of a symbiotic doctor/patient relationship in the care



of glaucoma, and she understood the importance of glaucoma research. I am forever grateful for her generous bequest toward our mutual goals of enhancing the individualized care of glaucoma patients."

The Kay K. Pick Endowed Chair in Glaucoma Research and the Kay Pick Fund for Research and Teaching in Glaucoma will support and promote translational research in glaucoma, which is vital to advancing the care of glaucoma patients worldwide, and to reduce the personal and societal burdens of this blinding disease.

With Deep Appreciation

s our esteemed team at UCLA Stein Eye Institute looks back over the past year, we are grateful for our committed philanthropic partners who have helped us break new ground in research, enhance patient care, educate the next generation of eye specialists, and expand our community engagement. Your support has been instrumental in our efforts to prevent blindness and preserve vision. So many of our accomplishments are because of these valuable partnerships with our donors who give so generously to our work. Thank you for joining us in our shared purpose.

Donations July 1, 2022–June 30, 2023

Major Gifts \$25,000 and Above:

Anonymous **BrightFocus Foundation** Bruce Ford and Anne Smith Bundy Foundation Carol and Timothy W. Hannemann Dr. James D. Shuler and Mrs. Catherine R. Shuler Estate of Vincent E. Scully Esther A. and Joseph Klingenstein Fund Heidelberg Engineering, Inc Hongbin Peng J. Bronwyn Bateman, MD Jack & Charlotte Lavery Fund Joan A. Payden Karen and Franklin Dabby Kay K. Pick Trust Kelvin and Hana Davis Knights Templar Eye Foundation, Inc. Kuen Lau Research Foundation Leidenfrost Trust Research to Prevent Blindness, Inc. Richard B. Shapiro Robert Goldberg and Jan Takasugi Family Foundation Fund Robert L. Fox and Valerie J. Fox **Revocable Trust**

Shirley and Ralph Shapiro The Simms/Mann Family Foundation The William & Margaret Fern Holmes Family Foundation VHL Alliance

Wilbur May Foundation

Individuals Recognized with a Tribute Gift

IN HONOR OF:

Allan E. Kreiger, MD Andre Giraldo Anne L. Coleman, MD, PhD Anne Papush Bartly J. Mondino, MD Batool Jafri, MD Bradley R. Straatsma, MD, JD Fred C. Askari Gary N. Holland, MD Jennie Kageyama, OD Jodi L. Milstein Joseph Caprioli, MD Joseph L. Demer, MD, PhD Kevin M. Miller, MD Robert A. Goldberg, MD Robert D. Yee, MD Robert S. Hepler, MD

Samuel D. Hobbs, MD Shawn R. Lin, MD Simon K. Law, MD, PharmD Stacy L. Pineles, MD Steven D. Schwartz, MD Tara A. McCannel, MD, PhD Vikas Chopra, MD

IN MEMORY OF:

Alice E. Taylor Arlene J. Vida Bruce K. Kawaguchi, DDS Charles G. Cullen, MD David Shultz Donald R. Heikes Genevene Vogel Harlan Huebner Howard D. Felsher Jerrold C. Bocci, MD Joan Huebner Jule Lamm, OD Katherine L. Gray Kimberly Eremic Phyllis R. Rothstein Roger P. Gray Stanley K. Rothstein Victor Roth

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

Bartly J. Mondino, MD, Endowed Chair in Ophthalmology

Established in 2022 as an administrative chair to support the position of Vice Chair of Academic Affairs in the UCLA Department of Ophthalmology and UCLA Stein Eye Institute.

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 2000–2022

Anne L. Coleman, MD, PhD 2022–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 permanentappointment chair in 2009.

Gary N. Holland, MD 1999–2004

Joseph Caprioli, MD 2004–Present

Dolly Green Chair of 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 2012–2021

Kouros Nouri-Mahdavi, MD, MSc 2021–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

Alapakkam P. Sampath, PhD 2021–Present

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.

Greg D. Field, PhD (pending) 2023–Present

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

Kay K. Pick Endowed Chair in Glaucoma Research

Established in 2023 as a permanentappointment chair for a faculty member with an expertise in glaucoma research.

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

Federico G. Velez, MD 2021–Present

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.

Laura Bonelli, MD 2022–Present

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

Rory Smith, MD, Endowed Chair

Established in 2019 by faculty alumna Dr. J. Bronwyn Bateman in honor of her late husband, Dr. Roderick "Rory" Smith, this administrative chair will be held by the director of the UCLA J. Bronwyn Bateman Center for Ocular Genetics.

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.

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 permanentappointment chair in 2009.

Joseph Caprioli, MD 1997–2004

Anne L. Coleman, MD, PhD 2004–2022

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

Roxana A. Radu, MD 2021–Present

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, Endowed Chair in Clinical Ophthalmology

John A. Irvine, MD 2014–Present

Charles Stewart Warren 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 Endowed Chair

Brian A. Francis, MD, MS 2015–Present

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

SriniVas R. Sadda, MD 2015–2020

Deborah A. Ferrington, PhD 2022–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.

Nicholas A. lafe, MD 2022–2023

Albert Liao, MD, MS 2022–2023

Nathan Pirakitikulr, MD, PhD 2022–2023

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.

Sheena Khanna, MD 2022–2023

Jiwei Sheng, MD 2022–2023

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.

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.

Ali Mahdavi Fard, MD 2022–2023

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.

David and Randi Fett Orbital and Ophthalmic Plastic Surgery Fellowship

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

Nathan Pirakitikulr, MD, PhD 2022–2023

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.

Mairghread G. Casey, MD 2022–2023

Brian W. Chou, MD, MA 2022–2023

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.

Jawad Ahmad, MD 2022–2023

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.

Daniel Choi, MD 2022–2023

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.

John and Theiline McCone Fellowship

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

Nicholas A. lafe, MD 2022–2023

Sheena Khanna, MD 2022–2023

Jules Stein Research Fellowship

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

Xiaofan Mi, MD 2022–2023

Klara Spinks Fleming Fellowship Fund

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

Daniel Choi, MD 2022–2023

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.

Liane O. Dallalzadeh, MD 2022–2023

Tiffany L. Huang, MD 2022–2023

Rosalind W. Alcott Fellowship

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

Lynn Shi, MD 2022–2023

Sanford and Erna Schulhofer Fellowship Fund

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

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.

Ali Mahdavi Fard, MD 2022–2023

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.

Albert Liao, MD, MS 2022–2023

Connie M. Sears, MD 2022–2023

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.

Mairghread G. Casey, MD 2022–2023

Endowments for Research, Education, and Patient Care

Albert Sarnoff Endowed Cataract Fund

Amalia Simon Roth and Victor and Edith Roth Endowment

Anne H. West Estate Fund

Arna Saphier Macular Degeneration Fund

Arthur Spitzer Fund

Audrey Hayden-Gradle Trust

Barbara P. Taylor Fund

Bateman Endowment

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

Harry J. Heitzer 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

Kay K. Pick Glaucoma 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

Michael Huffington Ophthalmology Scholarship Fund

Nancy Chen Endowed Research 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 boardcertified 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 stateof-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 Con**sultation 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

The light-filled waiting room at UCLA Stein Eye Center–Calabasas



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

	2021–22	2022–23	
FACULTY CONSULTATION SERVICE			
Patient visits	165,963	177,851	
INPATIENT CONSULTATION SE			
Patient evaluations	1,135	1,224	
CLINICAL LABORATORIES			
Procedures	111,322	116,972	
SURGERY SERVICES			
Number of procedures (includes laser)	25,288	25,751	
Intravitreal Injections	15,433	16,172	
UCLA MOBILE EYE CLINIC			
Number of patients	3,183	4,379	
Ocular abnormalities	67%	18%	
Number of trips	209	305	

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

UCLA Department of Ophthalmology Affiliated Teaching Hospitals and Affiliated Partners

Affiliated Teaching Hospitals

Taught by world-class faculty and experts in their field, residents in the UCLA Department of Ophthalmology gain hands-on clinical and surgical experience caring for patients in UCLA-affiliated teaching hospitals. Together with attending physicians, UCLA residents provide vital eye care services to large and diverse patient populations.

Harbor-UCLA Medical Center

1000 W. Carson St. Torrance, CA 90502

Olive View-UCLA Medical Center 14445 Olive View Dr. Sylmar, CA 91342

Veterans Affairs Greater Los Angeles Healthcare System Sepulveda 16111 Plummer St. Sepulveda, CA 91343

Veterans Affairs Greater Los Angeles Healthcare System West Los Angeles 11301 Wilshire Blvd.

Los Angeles, CA 90073

Doheny Eye Institute's new

Affiliated Partners

The UCLA Department of Ophthalmology has established formal partnerships that advance patient care, the education of ophthalmologists, and research discovery.

Doheny Eye Institute

The Doheny Eye Institute began its historic affiliation with the UCLA Department of Ophthalmology in 2014. With that action, UCLA became the only university with two eye institutes: the Stein Eye Institute and the Doheny Eye Institute. The Doheny Eye Institute, a top-ranked nonprofit organization, opened its 115,895-square-foot headquarters in Pasadena in 2022. The vision-science campus enhances Doheny's capabilities for fundamental discoveries that fuel ideas for clinical trials, new treatments, and cures. Its laboratories are equipped to accelerate research and discovery in key areas, including artificial intelligence, regenerative medicine, gene-based therapies, and imaging diagnostics. Educational programs housed in a state-of-the-art conference center enable remote collaborations to meet current demands and evolving opportunities to advance vision research and teaching.

Doheny Eye Institute

150 N. Orange Grove Blvd. Pasadena, CA 91103

City of Hope Comprehensive Cancer Center

The UCLA Department of Ophthalmology established a formal partnership with City of Hope in 2021 to provide care for some of the most challenging cases involving cancer and the eye. The Department provides subspecialty treatment, education, and vision-science support, with some UCLA Department of Ophthalmology faculty on call 24/7 for City of Hope patients, and the entire Department available for backup or consultation in all ophthalmic subspecialties. The relationship provides significant benefits for patients at City of Hope by bringing in UCLA faculty to participate in some of the most complex challenges in cancer care.

City of Hope

1500 E. Duarte Rd. Duarte, CA 91010



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
- 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 Circuits 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.

EyeMBA: 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
- Cornea and External Ocular Diseases
- Glaucoma
- Medical Retina
- Neuro-Ophthalmology
- Ophthalmic Pathology
- Orbital and Ophthalmic Plastic Surgery
- Pediatric Ophthalmology and Strabismus
- Uveitis and Inflammatory Eye 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 Lorraine Cheng, OD Carolyn Duong, OD Amanda Havens, OD Linda Hwang, OD Roxana Khorrami, 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

Optometrist Michael Baker, OD

CORNEA AND UVEITIS

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

Optometrist

Vivian Shibayama, OD

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, Department Chair Brian A. Francis, MD, Chief DEC JoAnn A. Giaconi, MD Simon K. Law, MD, PharmD Kouros Nouri-Mahdavi, MD Victoria L. Tseng, MD, PhD

Optometrist

Soluemeh Abadi, OD

NEURO-OPHTHALMOLOGY

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

OPHTHALMIC ONCOLOGY

Tara A. McCannel, 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 Kelsey A. Roelofs, MD 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 Colin A. McCannel, MD Tara A. McCannel, MD, PhD Moritz Pettenkofer, MD 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

Steven A. Barnes, PhD Suraj P. Bhat, PhD Nicholas C. Brecha, PhD Gordon L. Fain, PhD Debora B. Farber, PhD, DPhhc Deborah Ferrington, PhD, Chief Scientific Officer, DEI Greg Field, PhD Kaustabh Ghosh, PhD Ben J. Glasgow, MD Wayne L. Hubbell, PhD Alexander Huk, PhD Steven Nusinowitz, PhD Yi-Rong Peng, PhD Natik Piri, PhD Roxana A. Radu, MD Alapakkam P. Sampath, PhD, Associate Director, SEI Deming Sun, MD Hui Sun, PhD Gabriel H. Travis, MD David S. Williams, PhD Xian-Jie Yang, PhD Yuhua Zhang, PhD Jie Zheng, PhD



Anne L. Coleman, MD, PhD

Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology Chair and Executive Medical Director, UCLA Department of Ophthalmology Director, Stein Eye Institute

Affiliation Chair, Doheny Eye Institute

Professor of Epidemiology, UCLA Jonathan and Karin Fielding School of Public Health

Dr. Coleman was appointed director of the Stein Eye Institute and chair of the UCLA Department of Ophthalmology in 2022, having served as a national leader in ophthalmology, including as president of the American Academy of Ophthalmology (AAO), chair of the National Eye Institute's National Eye Health Educational Program, president of Women in Ophthalmology, president of the Council for the American Ophthalmological Society, and as associate editor of the *American Journal of Ophthalmology*. In recognition of her contributions to the field, Dr. Coleman has received numerous honors, including the AAO Life Achievement Award and Secretariat Award and being elected to the National Academy of Medicine.

Dr. Coleman has a passion for patient care, particularly for those traditionally underserved by mainstream medical systems. As director of the Stein Eye Institute Center for Community Outreach and Policy and the UCLA Mobile Eye Clinic, Dr. Coleman has overseen outreach efforts to screen and treat over 180,000 medically underserved children and adults of Southern California.

An accomplished researcher, Dr. Coleman focuses on the diagnosis, treatment, risk factors, geneenvironment interactions, and the societal impact of glaucoma, cataracts, myopia, and age-related macular degeneration. In the surgical arena, Dr. Coleman pioneered the use of the Ahmed glaucoma valve—the world's leading glaucoma drainage device—and published the first peer-reviewed article describing its safety and efficacy. She has more than 240 peer-reviewed publications and has currently received over 20 million dollars in federal/private funding.

LOCATION: UCLA Stein Eye Institute

Anthony J. Aldave, MD

Walton Li Chair in Cornea and Uveitis Professor of Ophthalmology Vice Chair of Academics Co-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.

LOCATION:

UCLA Stein Eye Institute

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. He also participates in training fellows and residents at both Harbor–UCLA Medical Center and the West Los Angeles Veterans Affairs Medical Center.

LOCATION:

UCLA Stein Eye Institute

Anthony C. Arnold, MD

Mary Oakley Foundation Chair in Neurodegenerative Diseases Professor of Clinical Ophthalmology Vice Chair of Education Chief of the Neuro-Ophthalmology Division Director of the UCLA Optic Neuropathy Center Ischemic and Inflammatory Diseases of the Optic Nerve

Dr. Arnold's clinical expertise is in neuroophthalmology, 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.

LOCATION:

UCLA Stein Eye Institute

Gavin G. Bahadur, MD

Health Sciences Assistant Clinical Professor of Ophthalmology Associate Medical Director, Stein Eye Center–Santa Monica

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. He also performs manual small incision cataract surgery (MSICS) with Surgical Eye Expeditions International.

LOCATION:

Stein Eye Center–Santa Monica

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.

LOCATION:

Doheny Eye Institute

John D. Bartlett, MD

Health Sciences Associate Clinical Professor of Ophthalmology Chief, Comprehensive Ophthalmology Division

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.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATIONS:

Doheny Eye Center UCLA offices in Orange County and Pasadena

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 generates transparency within the ocular lens and gene activity that maintains the physiological health of the RPE, which in turn sustains the neural activity in the retina that makes vision possible. VMBL is investigating single cells in an effort to delineate very early events (at the genetic and molecular level) that culminate in cataractogenesis in the ocular lens and age-related macular degeneration in the RPE.

LOCATION:

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 visual assistive mobile apps for low vision.

LOCATION:

UCLA Stein Eye Institute

Laura Bonelli, MD

Olive and Anga Lundgren Endowed Chair 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.

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 neuroophthalmology 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.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center–Santa Monica

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.

LOCATION:

UCLA Stein Eye Institute

Joseph Caprioli, MD

David May II Chair in Ophthalmology Distinguished Professor of Ophthalmology Emeritus Vice Chair of Quality Chief of the Glaucoma Division

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.

LOCATION:

UCLA Stein Eye Institute

Judy L. Chen, MD

Health Sciences Assistant Clinical Professor

Uveitis and Glaucoma

Dr. Chen specializes in the evaluation and treatment of uveitis and glaucoma. She received her MD from UCLA and completed her ophthalmology residency at the Illinois Eye and Ear Infirmary in Chicago. She pursued clinical fellowships in uveitis and inflammatory eye diseases at UCLA and a glaucoma fellowship at UC Davis. Dr. Chen is developing clinical and research programs focused on glaucoma as a complication of uveitis, with an emphasis on long-term outcomes of uveitic glaucoma among children with chronic anterior uveitis related to juvenile idiopathic arthritis.

LOCATIONS:

UCLA Stein Eye Institute Doheny Eye Center UCLA offices in Arcadia 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.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia and Pasadena

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 ocular motility disorders. He is a biomedical engineer whose research includes anatomy and imaging of the eye muscles, and the biomechanics of eye movements and optic nerve disorders. Dr. Demer employs 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. He has developed basic science and clinical imaging methods that have clarified fundamental mechanisms of eye movements and their clinical implications for diagnosis and surgery.

LOCATION:

UCLA Stein Eye Institute

Sophie X. Deng, MD, PhD

Joan and Jerome Snyder Chair in Cornea Diseases Co-Chief of the Cornea and Uveitis Division Professor of Ophthalmology Vice Chair of Justice, Equity, Diversity, and Inclusion (EyeJEDI) Member of the UCLA Jonsson Comprehensive Cancer Center Member of the UCLA Broad Stem Cell Research Center 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.

LOCATION:

UCLA Stein Eye Institute
Deborah A. Ferrington, PhD

Stephen J. Ryan-Arnold and Mabel Beckman Foundation Endowed Presidential Chair Professor of Ophthalmology Chief Scientific Officer, Doheny Eye Institute

Examining a "Personalized Medicine" Approach for Treating AMD

Dr. Ferrington's research is focused on investigating the molecular changes that occur with age-related macular degeneration (AMD), the leading cause of blindness among the elderly in the developed world. Using human donor tissue graded for the presence and severity of AMD, Dr. Ferrington's laboratory discovered that AMD has a negative impact on the energy-producing mitochondria in the retinal pigment epithelium (RPE). Notably, damaged mitochondria are present at an early stage of AMD, which provides an opportunity for early intervention. Her work is now focused on identifying and testing drugs that promote mitochondrial function using cultured primary human RPE cells and RPE differentiated from induced pluripotent stem cells (iPSC) obtained from AMD patients. The goal is to use patient-specific iPSC-RPE to develop a "personalized medicine" approach for treating AMD.

LOCATION:

Doheny Eye Institute

Greg D. Field, PhD

Joan and Jerome Snyder Chair in Vision Science (pending) Associate Professor of Ophthalmology Investigating the Retina

Dr. Field's laboratory is developing new technologies for understanding how the retina works, and how diseases of the retina can be treated and prevented. His laboratory research uncovers how the retina transforms light into electrical signals that are sent to the rest of the brain, and how the retina works both in healthy states and with diseases such as glaucoma and retinitis pigmentosa.

Dr. Field majored in physics at the University of Puget Sound in Tacoma, Washington, before receiving his PhD in physiology and biophysics from the University of Washington. He conducted his postdoctoral research at the Salk Institute for Biological Studies in La Jolla, California. He started his first laboratory at the University of Southern California in 2012, before moving to Duke University in Durham, North Carolina, in 2015.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia, Orange County, and Pasadena

Simon Fung, MD, MA, FRCOphth

Assistant Professor of Ophthalmology Cornea and Anterior Segment Specialist/Pediatric Ophthalmology

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. He has staffed the UCLA Mobile Eye Clinic since 2018.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center–Calabasas

Reza Ghaffari, MD

Health Sciences Clinical Instructor Cornea and External Ocular Disease

Dr. Ghaffari obtained his medical degree at Shahid Beheshti University of Medical Sciences. He completed his residency training in ophthalmology at Farabi Eye Hospital, Tehran University of Medical Sciences. Dr. Ghaffari then completed a fellowship in cornea and anterior seqment at Farabi Eye Hospital and an international fellowship in cornea-external ocular disease, cataract and refractive surgery research at the UCLA Stein Eye Institute. His clinical focus is cornea and external ocular disease, including corneal transplantation (full thickness and lamellar), artificial cornea, keratoconus, and management of ocular surface disease. Dr. Ghaffari has contributed to more than a dozen peer-reviewed publications in fields such as corneal imaging, outcomes of Boston keratoprosthesis implantation, and complications of cosmetic iris implants. Dr. Ghaffari's research interests include outcomes of keratoprosthesis implantation and corneal transplantation.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

Doheny Eye Institute

JoAnn A. Giaconi, MD

Health Sciences Clinical Professor of Ophthalmology

Vice Chair of Affiliated Hospitals 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.

LOCATIONS:

UCLA Stein Eye Institute 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.

LOCATION:

UCLA Stein Eye Institute

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 Center

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.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute

Gad Heilweil, MD

Health Sciences Associate 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.

LOCATIONS:

Stein Eye Institute Stein Eye Center–Calabasas Doheny Eye Center UCLA offices in Arcadia, Orange County, and Pasadena

Gary N. Holland, MD

Jack H. Skirball Chair in Ocular Inflammatory Diseases Distinguished Professor of Ophthalmology Vice Chair of Patient-Based Research 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 the evaluation and management of infectious and inflammatory diseases, including ocular toxoplasmosis, cytomegalovirus retinitis and other HIV-related eye disorders, and various non-infectious forms of uveitis, such as chronic anterior uveitis in children and the autoimmune disease birdshot chorioretinitis. Among current studies are those investigating risk factors, disease mechanisms, and response to treatment. Many of these studies are conducted in multicenter clinical trials. In addition to his clinical and research work, Dr. Holland is associate editor of the American Journal of Ophthalmology.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATIONS:

UCLA Stein Eye Institute Harbor–UCLA Medical Center

Kirk Hou, MD, PhD

Assistant Professor of Ophthalmology Vitreoretinal Diseases

Dr. Hou specializes in the evaluation and treatment of vitreoretinal diseases, including diabetic retinopathy, macular degeneration, and complex retinal detachment. He obtained his medical degree from Washington University School of Medicine in St. Louis, Missouri, during which time he also completed a PhD in computational and molecular biophysics. He conducted both his ophthalmology residency and fellowship in vitreoretinal surgery at the UCLA Stein Eye Institute. He is an interdisciplinary researcher with expertise in nanomedicine and drug delivery. He holds patents for his work developing nanoparticles for the delivery of therapeutic nucleic acids. Dr. Hou also teaches residents at Olive View–UCLA Medical Center.

LOCATIONS:

Stein Eye Institute Doheny Eye Center UCLA–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.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia, Orange County, and Pasadena

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.

LOCATION:

UCLA Stein Eye Institute

Jean-Pierre Hubschman, MD

Professor of Ophthalmology and Mechanical & Aerospace Engineering 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

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.

LOCATION:

UCLA Stein Eye Institute

Alexander Huk, PhD

Professor of Ophthalmology Professor, Department of Psychiatry and Biobehavioral Science

Vision and Visually Guided Cognition

Dr. Huk focuses on studying vision and visually guided cognition in increasingly naturalistic conditions. He was the Raymond Dickson Centennial Professor and director of the Center for Perceptual Systems at the University of Texas at Austin before coming to UCLA in 2022. He received his PhD from Stanford University and conducted behavioral and cortical studies of the human visual system there with Drs. David J. Heeger and Brian A. Wandell. His postdoctoral research was at the University of Washington in Seattle. Dr. Huk received the Young Investigator Award from the Vision Sciences Society in 2011, and he is a permanent member of a National Eye Institute focused study section.

LOCATION: UCLA Stein Eye Institute

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 NIH-funded ophthalmic clinical trials.

LOCATIONS:

Doheny Eye Institute Doheny Eye Center UCLA–Arcadia

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.

LOCATION:

Doheny Eye Institute

Justin Karlin, MD, MS

Health Sciences Assistant Clinical Professor of Ophthalmology

Orbital, Lacrimal, and Ophthalmic Plastic Surgery

Dr. Karlin's passion is attentive and personalized patient care. He specializes in orbital, lacrimal, and oculofacial plastic surgery. In 2020, he graduated from the rigorous ASOPRS fellowship at the UCLA Stein Eye and Doheny Eye Institutes.

In his research, Dr. Karlin is an innovator. He has developed artificial intelligence diagnostic tools, cartilage grafts for use in eyelid reconstruction, and novel approaches to the production of autologous plasma eye drops.

Notably, Dr. Karlin has an unwavering commitment to teaching. As a resident, he was awarded the University of Virginia "All University" Teaching Award. And he was honored with the UCLA Stein Eye Institute Fellow Teaching Award in 2019. He continues to participate actively in mentoring and teaching activities for undergraduates, medical students, residents, and fellows.

LOCATIONS:

Stein Eye Center–Calabasas Doheny Eye Center UCLA offices in Arcadia and Orange County

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. She teaches residents and fellows at Harbor–UCLA Medical Center, where she is chief of the Pediatric Ophthalmology Service.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia, Orange County, and Pasadena

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.

LOCATION:

UCLA Stein Eye Institute

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 and Refractive Surgery 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 peerreviewed 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 1,000,000 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.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center–Calabasas

Kenneth L. Lu, MD

Health Sciences Associate 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.

LOCATION:

Doheny Eye Center UCLA-Arcadia

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.

LOCATIONS:

UCLA Stein Eye Institute 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.

LOCATION: UCLA Stein Eye Institute

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.

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.

LOCATION:

UCLA Stein Eye Institute

Bartly J. Mondino, MD

Distinguished Professor of Ophthalmology Former Director, Stein Eye Institute Former Chair, UCLA Department of Ophthalmology Former Affiliation Chair, Doheny Eye Institute President, Jules and Doris Stein UCLA Support Group Member, UCLA Brain Research Institute

Cornea and Infectious Eye Diseases

Dr. Mondino served as director of the Stein Eye Institute and chair of the UCLA Department of Ophthalmology from 1994 to 2022, the culmination of a career in research and clinical care in cornea and infectious eye diseases.

As director and chair, Dr. Mondino 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.

LOCATION: UCLA Stein Eye Institute

Mitra Nejad, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Cataract and Refractive Surgery

Dr. Nejad is an assistant clinical professor in the Cataract and Refractive Division. She graduated summa cum laude from UCLA and earned her MD from the David Geffen School of Medicine (DGSOM) at UCLA. Dr. Nejad conducted her internship at Harbor–UCLA Medical Center and her ophthalmology residency at Stein Eye, where she remained on staff. She recently completed the DGSOM Medical Education Fellowship and serves as a residency assistant program director and co-director of Medical Student Education. Dr. Nejad has contributed to the cataract surgery curriculum and microsurgery wet lab curriculum, and she attends resident cataract surgery at both Stein Eye and Harbor–UCLA. She is a certified proctor in laser refractive surgery and supervises Stein Eye residents' refractive surgery cases. She also serves on the residency program evaluation and selection committees.

LOCATION:

UCLA Stein Eye Institute

Kouros Nouri-Mahdavi, MD, MSc

Ernest G. Herman Chair in Ophthalmology Professor of Ophthalmology Director of the Glaucoma Advanced Imaging Laboratory

Structural and Functional Measurements for Detection of Glaucoma and its Progression, Surgical Outcomes, and Artificial Intelligence in Glaucoma Diagnostics

Dr. Nouri-Mahdavi's areas of clinical focus are management of adult glaucoma and advanced and complex cataract surgery. His research activities currently focus on optimizing the role of structural and functional measurements for detection of glaucoma 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.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center–Calabasas

Yi-Rong Peng, PhD

Assistant Professor of Ophthalmology and Neurobiology

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.

LOCATION:

UCLA Stein Eye Institute

Moritz S. Pettenkofer, MD

Health Sciences Clinical Instructor Macular Diseases

Dr. Pettenkofer obtained his medical degree at the University of Göttingen in Germany and completed his residency training in ophthalmology at the Technical University of Munich in Germany. He then completed an international fellowship in vitreoretinal diseases at the UCLA Stein Eye Institute.

Dr. Pettenkofer joined the faculty in 2022 and specializes in macular diseases with a particular focus on agerelated macular degeneration, diabetic retinopathy, and retinal vein occlusions. He has contributed to more than a dozen peer-reviewed publications in the field of retina, and his research focuses on imaging, evaluation, and treatment of macular diseases, notably dry macular degeneration. His in-office procedures include retinal laser and intravitreal injections.

LOCATION:

UCLA Stein Eye Institute

Stacy L. Pineles, MD

Jerome and Joan Snyder Chair in Ophthalmology 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 neuro-ophthalmic diseases, as well as adult patients with amblyopia and neurologic causes of strabismus.

Dr. Pineles is the chair elect of a national research network, the Pediatric Eye Disease Investigator Group (PEDIG) sponsored by the National Institutes of Health. Dr. Pineles also serves as the residency program director for the UCLA Department of Ophthalmology.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute

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 widefield 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.

LOCATION:

Harbor–UCLA Medical Center

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 ischemic optic neuropathy; double vision and adult strabismus; eye pain, headache, and idiopathic intracranial hypertension; thyroid eye disease; orbital inflammatory syndromes; and stroke. Research includes idiopathic intracranial hypertension, headache, ocular myasthenia gravis, and ischemic optic neuropathy. He was the principal investigator for the idiopathic intracranial hypertension treatment trial. He is currently president-elect of the North-American Neuro-Ophthalmology Society and a member of the Neuro-Ophthalmology Researchers and Disease Investigators Consortium.

Dr. Quiros obtained his MD from the Yale University School of Medicine. He completed his residency training at LAC/ USC Medical Center and his fellowship training at the Doheny Eye Institute.

LOCATIONS:

UCLA Stein Eye Institute Doheny Eye Center UCLA–Pasadena

Roxana A. Radu, MD

Vernon O. Underwood Family Chair in Ophthalmology 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-lipid metabolism, mitochondria, and endolysosomal pathways in normal and immunecompromised retinal pigment epithelium cells. Her studies are supported by the NIH grants, sponsor-initiated research programs, and philanthropic funds. Dr. Radu is also actively involved in training and teaching undergraduates, pre-/ post-graduate fellows, and medical students.

LOCATION:

UCLA Stein Eye Institute

Kelsey A. Roelofs, MD

Assistant Professor of Ophthalmology and Neurosurgery

Oculofacial Plastic Surgery

Dr. Roelofs is an oculofacial plastic surgeon specializing in orbital, lacrimal, and eyelid conditions, including facial aesthetic surgery. She received her MD and completed her ophthalmology residency at the University of Alberta, Canada, followed by an ocular oncology fellowship at Moorfields Eye Hospital, London, and a two-year ophthalmic plastic and reconstructive surgery fellowship at the Stein Eye Institute.

She has published over 55 peerreviewed papers and 19 textbook chapters. Recent honors include the 2021 Bartley R. Frueh Research Award, the 2022 Fellow Teaching Award, and the 2022 Excellence in Research Award. As the 2022 Dr. Allen and Charlotte Ginsburg Fellow in Precision Genomic Medicine, she is investigating the gene expression profile of periocular basal cell carcinoma.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center offices in Calabasas and Santa Monica

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 patient-centered 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.

LOCATIONS:

Stein Eye Institute Doheny Eye Center UCLA offices in Orange County and Pasadena

SriniVas R. Sadda, MD

Professor of Ophthalmology 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 650 peer-reviewed publications and 20 book chapters, and he has given over 450 presentations worldwide. He also serves as an editorial board member of Ophthalmic Surgery, Lasers & Imaging, Retina, Ophthalmology Retina, Ophthalmology, and is editorin-chief of Graefe's. He is also the editorin-chief of the 7th edition of the Ryan's Retina textbook.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia and Pasadena

Alfredo A. Sadun, MD, PhD

Flora L. Thornton Endowed Chair in Vision Research Professor of Ophthalmology Vice Chair of 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 peer-reviewed publications and 75 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.

LOCATION:

Doheny Eye Center UCLA–Pasadena

Alapakkam P. Sampath, PhD

Grace and Walter Lantz Endowed Chair in Ophthalmology Professor of Ophthalmology and Neurobiology Associate Director of Research 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 roddriven 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.

LOCATION:

UCLA Stein Eye Institute

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*.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute Olive View–UCLA Medical Center

Deming Sun, MD

Mary D. Allen Chair in Vision Research Professor of Ophthalmology

Ocular Immunology

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

LOCATION:

Doheny Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute

Victoria L. Tseng, MD, PhD

Assistant Professor of Ophthalmology Glaucoma and Cataract

Dr. Tseng specializes in the treatment of glaucoma and cataracts at the Doheny Eye Center UCLA. Committed to the education of future ophthalmologists; she teaches ophthalmology residents at Olive View–UCLA Medical Center and is the associate director for the UCLA Ophthalmology residency program.

Dr. Tseng's research focuses on the intersection of epidemiology, disparities, and population health within ophthalmology. She is a recipient of multiple research grants and honors including the Research to Prevent Blindness Career Development Award, the Research to Prevent Blindness and American Academy of Ophthalmology (AAO) Award for IRIS Registry Research, and the American Glaucoma Society Mentoring for the Advancement of Physician Scientists Research Grant.

Dr. Tseng is involved with national ophthalmology organizations and has participated in the AAO Leadership Development Program and the Association for Research in Vision and Ophthalmology Women's Leadership Development Program.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia and Pasadena

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.

LOCATION: UCLA Stein Eye Institute

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.

LOCATION:

UCLA Stein Eye Institute Doheny Eye Center UCLA–Arcadia

Shoaib Ugradar, MD

Health Sciences Clinical Instructor Orbital and Ophthalmic Plastic Surgery

Dr. Ugradar completed his ophthalmology training at the prestigious Moorfields Eve Hospital, London, UK. He was ranked number one in the UK National Recruitment for Ophthalmology and is the recipient of numerous academic scholarship awards and honors, including the Ophthalmology Research Gold Medal UK, the Bernice Brown Fellowship Award, the Young European researcher's award in Neurology, and the Drapers' Company Prize for outstanding achievement at an undergraduate level. He has also won the American Society of Ophthalmic Plastic Reconstructive Surgery research award in 2020 and 2021, along with the American Endocrine Society research award in 2022. Dr Ugradar leads international trials in thyroid eye disease and the use of genetics to study orbital and evelid lesions. His research has led to numerous patents.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center offices in Calabasas and Santa Monica

Federico G. Velez, MD

Leonard Apt Endowed Chair in Pediatric Ophthalmology Health Sciences Clinical Professor of Ophthalmology

Strabismus and Childhood Eye Disorders

Dr. Velez is a pediatric ophthalmology specialist who studies the mechanisms of congenital and acquired forms of strabismus. In addition, Dr. Velez conducts research on artificial muscle stimulation and management of orbital fibrosis, amblyopia therapy, and medical management of thyroid eye disease.

He has participated in development of guidelines for preoperative assessment and surgical approaches to patients with convergent (esotropia), divergent (exotropia), and vertical forms of strabismus, and he has advanced techniques to treat pediatric patients with eyelid abnormalities and cataracts.

LOCATIONS:

UCLA Stein Eye Institute Stein Eye Center–Calabasas Doheny Eye Center UCLA– Orange County

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.

LOCATION:

UCLA Stein Eye Institute

Xian-Jie Yang, PhD

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 includes 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.

LOCATION:

UCLA Stein Eye Institute

Victoria H. Yom, MD

Health Sciences Assistant Clinical Professor of Ophthalmology

Cornea and External Diseases

Dr. Yom specializes in corneal and external diseases. Her expertise includes surgical and medical management of complex ocular inflammatory conditions and anterior uveitis. Procedures performed include corneal transplant surgery and cataract surgery.

Dr. Yom received her MD and Master of Science in Clinical Investigation from Washington University School of Medicine in St. Louis, where she also completed her residency. She obtained a fellowship in cornea and external diseases at the Doheny Eye Centers UCLA and has been a member of the UCLA Department of Ophthalmology since 2017. Dr. Yom enjoys introducing medical students to the field of ophthalmology during their preclinical clerkships, and she regularly lectures at educational conferences and is an active member of the American Academy of Ophthalmology. In addition, Dr. Yom heads the Graft Versus Host Disease Clinic at City of Hope Comprehensive Cancer Center in Duarte.

LOCATIONS:

Doheny Eye Center UCLA offices in Arcadia and Pasadena City of Hope–Duarte

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.

LOCATION:

Doheny Eye Institute

Jie J. Zheng, PhD

Professor of Ophthalmology Member of the Molecular Biology Institute 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.

LOCATION: UCLA Stein Eye Institute UCLA Stein Eye Institute Members Based at Other Sites

James W. Bisley, PhD

Ethel Scheibel Chair in Neuroscience 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 goaldirected 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 by Dr. Anne Coleman, provides free eyeglasses 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 conducting laboratory and clinical translational research in how melanoma responds to or resists cancer immunotherapies, and developing gene engineered adoptive cell transfer therapies. He has been instrumental in the clinical development of several agents approved by the FDA, including the first anti-PD-1 pembrolizumab (Keytruda), the anti-CTLA-4 tremelimumab (Imjudo), and two combinations of BRAF and MEK inhibitors, vemurafenib (Zelboraf) and cobimetinib (Cotellic), and dabrafenib (Tafinlar) and trametinib (Mekinist).

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 (Recall) 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.

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 Research Ophthalmologist

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.

Antonio Escudero Paniagua, PhD

Assistant Project Scientist Photoreceptor and RPE Cell Biology

Dr. Paniagua's research is primarily focused in studying the molecular mechanisms of the photoreceptor outer segment (POS) renewal. This key organelle for vision is formed as evaginations of the photoreceptor ciliary membrane and recycled in the daily ingestion of POS phagosomes by the retinal pigment epithelium. Both processes represent intrincated mechanisms affected in many types of retinal degeneration.

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.

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.

Somaye Jafari, PhD

Assistant Project Scientist

Yuekan Jiao, PhD

Research Specialist Microscopy Specialist

Dr. Jiao's work includes running and supporting the electron microscope and helping with image processing on the images from all the imaging platforms in the microscopy core. He also conducts eye research in collaboration with research labs at the Institute.

Joanna J. Kaylor, PhD

Associate Project Scientist

Visual Chromophore Regeneration in the Retina of the Eye

Dr. Kaylor's research focuses on identification of biochemical pathways essential for visual chromophore production in the retina. She previously discovered an enzymatic complex that generates visual chromophore precursor, which sustains vision in bright light. She also revealed the presence of a non-enzymatic process that occurs in photoreceptor membranes that aids in chromophore regeneration. Dr. Kaylor is currently studying an enzyme she identified that is responsible for a unique visual chromophore processing activity present in cone photoreceptors.

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

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 stem cells for molecular genetics determination.

Ala Morshedian, PhD

Assistant Project Scientist

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 steroid-induced 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

Cynthia A. Boxrud, MD

Associate Physician Diplomate Voluntary Assistant Clinical Professor

Orbital and Ophthalmic Plastic Surgery

Dr. Boxrud is a board-certified surgeon who specializes in oculofacial and reconstructive surgery, as well as orbital and ophthalmic oncology. She sees patients at the UCLA Stein Eye Center–Santa Monica.

Jane W. Chan, MD

Associate Physician Diplomate Doheny Eye Centers UCLA

Neuro-Ophthalmology

Dr. Chan has a research focus on retinal imaging biomarkers for detecting pre-Alzheimer disease before cognitive changes, and she mentors clinical research fellows. At Doheny Eye Center UCLA locations in Orange County and Pasadena, Dr. Chan specializes in diagnosing and managing patients with optic neuropathies, such as optic neuritis and ischemic optic neuropathies.

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.

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's practice interests are cataract surgery, LASIK, keratoconus, glaucoma, diabetic retinopathy, dry eye, and allergic conjunctivitis. She offers subspecialized surgical care including LASIK, refractive cataract surgery, pterygium excision, ocular surface disease management, treatment of ocular surface malignancies, implantable contact lens, corneal rransplantation, and corneal collagen crosslinking for keratoconus. She offers personalized, world-class care to all of her patients. Dr. Jafri sees patients at the Stein Eye Center in Santa Monica.

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 Assistant Clinical Professor 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.

EMERITUS FACULTY UCLA STEIN EYE 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 Emeritus (Active Recall)

Debora B. Farber, PhD, DPhhc

Distinguished Professor of Ophthalmology Emeritus (Active Recall) Doctor *honoris causa* Member of the Brain Research Institute Member of the Molecular Biology Institute

Lynn K. Gordon, MD, PhD

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

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

John A. Irvine, MD

Retired Health Sciences Clinical Professor (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

Steven Nusinowitz, PhD

Professor of Ophthalmology Emeritus (Active Recall) Co-Director of the Visual Physiology Laboratory

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 AND FELLOWS

Residents

THIRD-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

SECOND-YEAR RESIDENTS 2021–2024

Sarah Cheng, MD, PhD Kendall Goodyear, MD Robert Gunzenhauser, MD Sasha Hubschman, MD Lorenzo Maltish, MD Benjamin Margines, MD Angela Oh, MD Iris Zhuang, MD

FIRST-YEAR RESIDENTS 2022–2025

Angela Chen, MD Erika Ellis, MD, PhD Elise Ma, MD Lukas Mees, MD Yaqoob Qaseem, MD Sagar Rambhia, MD (EyeMBA) Junru Yan, MD Kelly Yom, MD

EyeSTAR Trainees

Adrian Au, MD, PhD Sarah Cheng, MD, PhD Erika Ellis, MD, PhD Ken Kitayama, MD Elise Ma, MD Michel Sun, MD, PhD

EyeMBA Trainees

Cory Hoeferlin, MD, MBA Sagar H. Rambhia, MD

EyeSTAR Genetics Trainee

Emite Vieta, MD (EyeSTAR Genetics)

Fellows

Cornea/External Ocular Diseases and Refractive Surgery

Jawad Ahmad, MD Daniel Choi, MD Ali Mahdavi Fard, MD (Doheny Eye Centers UCLA)

Glaucoma

Mamta Kanwar, MD (Doheny Eye Centers UCLA) Xiaofan Mi, MD Lynn Shi, MD

Medical Retina and Ophthalmic Genetics

Sheena Khanna, MD Jordan Sugarman, MD

Neuro-Ophthalmology

Mairghread Casey, MD Brian Chou, MD

Orbital and Ophthalmic

Plastic Surgery Nathan Pirakitikulr, MD

Connie Sears, MD
Pathology (Eye)

None

Pediatric Ophthalmology and Strabismus Liane Dallalzadeh, MD

Tiffany Huang, MD

Uveitis and Inflammatory Eye Disease None

Vitreoretinal Diseases and Surgery

Samuel D. Hobbs, MD Nicholas lafe, MD Albert Liao, MD Jiwei Sheng, MD

International Fellows

Cornea Research

Thanachaporn Kittipibul, MD *Thailand* Golshan Latifiyaghin, MD *Iran* Raul Plasencia Salini, MD *Peru*

Comprehensive Ophthalmology/ Cataract None

Glaucoma

Daniel Khaliliyeh Yarur, MD *Chile* Massood Mohammadi, MD *Iran* Ojo Perpetua Odugbo, MD *Nigeria*

Medical Retina and Ophthalmic Genetics

Ahmad Santina, MD Lebanon Shilo Voichanski, MD Israel

Neuro-Ophthalmology None

Orbital and Ophthalmic Plastic Surgery Taras Gout, MD United Kingdom

Pediatric Ophthalmology

Stephanie Suzanne Garcia, MD Philippines

Uveitis Shani Pillar, MD

Israel

Visual Physiology None

Vitreoretinal Diseases and Surgery

Aya Barzelay Wollman, MD, PhD Israel David Lozano Giral, MD Mexico

Predoctoral Research Fellows

Bita Behziz Mengzhen Chen Kevin Eden W. Blake Gilmore Khristopher Griffis Jody He Yuting Kevin Lai Seongjin Lim Eunice Ng Thao Nguyen Ali Pahlevan Katie Pohl Mia Reyes Luis Sanchez Nathan Siu Gil Torten

Postdoctoral Research Fellows

Mahesh Agarwal, PhD Sathish Baggam, PhD Paul Bonezzi, PhD Sathiskumar Chandrakumar, PhD Arpita Dave, PhD Matthew Gerber, PhD Mihir Ghosh, PhD Rajesh Goit, PhD Roni Hazim, PhD Nan Hultgren, PhD Ashutosh Kumar, PhD Pratistha Singh, PhD Chao Sui, PhD Simona Torriano, PhD Rutuja Unhale, MD Junqiang Wang, PhD Xiaoyu Wang, 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

Anthony Aldave, MD

Does COVID-19 Vaccination Increase the Risk of Corneal Transplant Rejection? Eye Bank Association of America Duration: 7/1/21–6/30/23 \$0

Diabetes Endothelial Keratoplasty Study (DEKS): Impact of Diabetes on Corneal Transplant Success and Endothelial Cell Loss JAEB Center for Health Research Duration: 1/27/22–4/30/26 \$0

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: 1/27/22–4/30/26 Total: \$17,633

Scanning and Detection at Intersections Schepens Eye Research Institute, The (AFF. w/ Harvard Univ.) Duration: 9/1/22–8/31/25 \$19,580

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 Total: \$0

Beacon Sensors and Telerehabilitation to Assess and Improve Use of Devices for Visual Functioning (BeST-AID) American Academy of Optometry Duration: 3/1/19–2/28/23 \$0

Development of a Behavioral Intervention with Socially Assistive Robots to Enhance Magnification Device Use for Reading National Eye Institute Duration: 2/1/20–1/31/23 \$0

Joseph Caprioli, MD

Clinical Research Program in Glaucoma Simms-Mann Family Foundation Duration: 7/1/22–6/30/23 \$100,000

Anne L. Coleman, MD, PhD

2019 Grant Application to the Nicholas Endowment for the UCLA Mobile Eye Clinic (UMEC) The Nicholas Endowment Duration: 12/5/19–12/31/22 \$0

Impact of Routine Eye Care Coverage on Access to Eye Care and Fall-Related Outcomes Among Low-Income Medicare Enrollees UCI/NIH-NEI Duration: 2/1/23–5/31/26 \$65,096

Impact of Routine Eye Care Coverage on Access to Eye Care and Fall-Related Outcomes among Low-Income Medicare Enrollees San Diego State University Research Foundation Duration: 6/1/22–9/30/26 \$22,842

RPB Unrestricted Grant Research to Prevent Blindness, Inc 1/1/12–12/31/23 \$115,000

Paul, Megan: Access to Eyecare Providers and Prevalence of Glaucoma on the State and National Levels Research to Prevent Blindness, Inc Duration: 1/1/23–12/31/23 \$30,000

UCLA Mobile Eye Clinic Program (UMEC) Fox Family Foundation Duration: 10/1/22–10/1/25 \$100,000

The Influence of the Luminous Environment on the Development of Myopia Cincinnati Children's Hospital Medical Center Duration: 1/1/23–12/31/23 \$40,327

Joseph L. Demer, MD, PhD

Biomechanical Analysis in Strabismus Surgery National Eye Institute Duration: 5/1/23–4/30/24 \$591,297

Data-Driven Biomechanical Simulation of Eye Movement and Strabismus National Eye Institute Sub-award from George Mason University Duration: 5/31/22–5/31/24 \$126,210

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 \$390,000

Development of Stem Cell-Based Therapies for Limbal Stem Cell Deficiency National Eye Institute Supplement Duration: 2/1/23–1/31/24 \$37,742

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 \$1,449,999

Rashida Wilkinson: Activation of Wnt Signaling to Improve In Vitro Human Limbal Stem Cell Maintenance National Eye Institute Diversity Supplement Duration: 6/20/22–12/31/22 \$0

Celine Shields: Effect of Inhibition of Wnt Signaling Using Small Molecules in Human Limbal Epithelial National Eye Institute Diversity Supplement Duration: 6/20/22–12/31/22 \$0

Gordon L. Fain, PhD

Physiology of Photoreceptors National Eye Institute Duration: 1/1/22–12/31/26 \$351,000

Greg D. Field, PhD

Visual Signaling from Retina to Superior Colliculus NIH-NEI National Eye Institute Duration: 5/1/23–4/30/24 \$524,104

Receptive Field Coordination Across Mosiacs of Diverse Retinal Ganglion Cell Types in the Mammalian Retina NIH-NEI National Eye Institute Duration: 4/1/23–3/31/24 \$87,691

Simon Fung, MD

Discovery of Tear Film Biomarkers in Pediatric Blepharokeratoconjunctivitis Knights Templar Eye Foundation, Inc. Duration:7/1/22–6/30/24 \$70,000

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 \$0

Intraocular Robotic Interventional and Surgical System for Automated Cataract Surgery National Eye Institute Duration: 9/30/19–8/31/23 \$0

A Natural History of Macular (Parafoveal) Telangiectasia Lowy Medical Research Institute Duration: 9/1/05–12/31/21 \$0

Michael Ip, MD

The SCORE 2 Long-Term Follow-Up (SCORE2 LTF) National Eye Institute Sub-award from Pennsylvania State University Duration: 4/1/19–3/31/23 \$0

John A. Irvine, MD

CAM-101-01 Cambium Medical Technologies LLC Duration: 7/10/19–7/9/23 \$0

Colin A. McCannel, MD

Ranbizumab with Neovascular Degeneration: GR40549 Genentech, Inc. Duration: 11/26/16–12/31/22 \$0 ADX-2191-PVR-001 Alderya Therapeutics, Inc. Duration: 2/14/20–2/13/24 \$0

Kevin M. Miller, MD

NXGT-202-QROS Johnson & Johnson Duration: 9/10/20–9/10/24 \$0

Kouros Nouri-Mahdavi, MD

Detection of Disease Progression in Advanced Glaucoma National Eye Institute Duration: 3/1/23–2/29/24 \$387,500

Yi-Rong Peng, PhD

Deciphering the Molecular Underpinnings of Foveal Formation Research to Prevent Blindness, Inc Career Development Award Duration: 1/1/22–12/31/26 \$75,000

Molecular and Evolutionary Mapping of Neural-Circuit Specialization in High-Acuity Vision Klingenstein-Simon Fellowship Award in Neuroscience Duration: 7/1/23–6/30/24 \$75,000

Transcriptomic and Genetic Dissection of Foveal Formation and Malformation Knights Templar Eye Foundation Career Starter Grant Duration: 7/1/23–6/30/24 \$90,000

Stacy L. Pineles, MD

Pediatric Eye Disease Investigator Group (PEDIG) JAEB Center for Health Research Duration: 1/1/19–12/31/23 \$132,797

Pediatric Eye Disease Investigator Group (PEDIG) JAEB Center for Health Research Duration: 1/1/19–12/31/23 \$0

Roxana A. Radu, MD

CDA20221314: Gene Therapy Candidate for Preclinical Studies Replay Holdings, Inc. Duration: 9/17/21–9/16/22 Non-monetary Agreement

CDA20224708: Complement Inhibition in Stargardt Animal Disease Alexion Pharmaceuticals, Inc. Duration: 4/5/22–4/5/24 Non-monetary Agreement Pre-clinical Proof of Concept Study of ABCA4 Gene Therapy in Albino ABCA4-/-Mouse Model of Stargardt Disease Eudora Therapeutics, Inc. Duration: 1/1/23–7/1/24 \$389,423

Alapakkam P. Sampath, PhD

Analyses of Retinal Circuits After Rod Rescue in a Mouse Model of Human Blindness National Eye Institute (Multi-PI award with University of Southern California) Duration: 9/1/16–8/31/22 \$0

Vision Science Training Program National Eye Institute Duration: 9/1/22–8/31/23 \$172,794

Molecular Mechanisms of Photoreceptor Adaptation National Eye Institute Duration: 2/1/23–1/31/24 \$417,380

Instrumentation Grant for Stein Eye Investigators Bruce Ford and Anne Smith Bundy Foundation Duration: 8/16/11–8/15/22 \$0

David Sarraf, MD

In Vivo Ultrastructure of Chorioretinal Disease National Eye Institute Sub-award from Doheny Eye Institute Duration: 9/30/21–8/31/24 \$21,146

In Vivo Characterization of Retinal Hemodynamics National Eye Institute Sub-award from Doheny Eye Institute 9/30/22–7/31/23 \$73,975

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: 1/1/20–12/31/23 \$430,727 Functional Characterization of the ABCA4 Transporter in Photoreceptors from a Zebrafish Model of Recessive Stargardt Disease Research to Prevent Blindness, Inc. Stein Innovation Award Duration: 7/1/21–6/30/24 \$150,000

Victoria L. Tseng, MD, PhD

Social Vulnerability and Incidence of Glaucoma Surgery in the California Medicare Population American Glaucoma Society Duration: 11/30/21–12/1/22 \$0

Neovascular Glaucoma: Individual and Neighborhood-Level Associations with Incidence and Outcomes in the California Medicare Population Research to Prevent Blindness, Inc. 1/1/23–12/31/27 \$150,000

Edmund Tsui, MD

Discovery of Quantitative Imaging Biomarkers in Juvenile Idiopathic Arthritis-Associated Uveitis Thrasher Research Fund Duration: 7/1/20–6/30/23 \$0

Imaging Biomarkers in Juvenile Idiopathic Arthritis-Associated Uveitis Pfizer Health Solutions, Inc. Duration: 6/16/21–6/30/23 \$0

Ocular Pathogen and Transcriptome Investigation using Comprehensive Sequencing (OPTICS) UCSF-RPB Duration: 7/1/22–12/31/23 \$9,500

Objective Measures of Intraocular Inflammation in Pediatric Anterior Uveitis NIH-National Eye Institute Duration: 9/1/21–7/31/26 \$246,583

Objective Quantification of Vitreous Inflammation Using Optical Coherence Tomography NIH-National Eye Institute Duration: 2/1/23–1/31/24 \$249,988

Irena Tsui, MD

Retinal and Choroidal Vasculature Changes in Healthy and High-Risk Pregnancies National Eye Institute Duration: 2/1/20–1/31/23 \$0

Federico G. Velez, MD

DDO001F12201 Novartis Pharmaceuticals Corporation Duration: 6/1/21–3/31/24 \$0

David S. Williams, PhD

Vision Research Core at UCLA National Eye Institute Duration: 9/1/20–6/30/25 \$779,998

Cellular Mechanisms of Photoreceptor Disk Morphogenesis NIH-NEI National Eye Institute Duration: 4/1/23–3/31/24 \$458,936

Cellular Mechanisms of Disease in Patient-Specific RPE Cells Foundation Fighting Blindness Sub-award from University of California, San Francisco Duration: 6/1/17–5/31/23 \$0

RPE Cell Biology, Aging, and Disease National Eye Institute Duration: 9/1/17–5/31/23 \$0

Test of Readthrough Drug Treatment for UGA PTC in the Usher 1B Gene Foundation Fighting Blindness Duration: 1/1/20–12/31/22 \$0

Antonio Escudero Paniagua, PhD (Dr. David Williams, mentor)

(Postdoctoral Fellow) Addressing the Link About Impairment in Phagosomes Degradation and AMD BrightFocus Foundation Duration: 7/1/21–6/30/23 \$0

Nan Hultgren, PhD (Dr. David Williams, mentor)

(Postdoctoral Fellow) Investigating the Role of Mitochondrial Dynamics in Retinal Pigment Epithelium National Eye Institute Duration: 9/1/20–11/30/23 \$72,302 Exploring the Relationship of Water Flow Across the RPE and Mutant-MYO7A/Usher 1B National Eye Institute Duration: 1/1/20–12/31/22 \$0

Xian-Jie Yang, PhD

Neuroprotection Mechanism for Photoreceptors National Eye Institute Duration: 5/1/16–4/30/22 \$0

Metabolism and Neuronal Viability of the Retina NIH-NEI National Eye Institute Duration: 9/30/22–7/31/23 \$390,000

Developing Recombinant AAV-Based Gene Therapy for Dominant Optic Atrophy Caused by OPA1 Mutations CA-California Institute for Regenerative Medicine (CIRM) Duration: 9/1/22–8/31/24 \$1,345,691

Katherine Pohl

(Dr. Xian-Jie Yang, mentor)

Understanding OPA1 Mutation-Driven Dominant Optic Atrophy Using Human PSC-Derived Retinal Ganglion Cells National Eye Institute Duration: 9/30/21–9/29/23 \$92,072

Yuhua Zhang, PhD

In Vivo Characterization of Metabolic Function of Photoreceptors and Retinal Pigment Epithelium Cells in Age-Related Macular Degeneration Research to Prevent Blindness, Inc. Duration: 1/1/22–12/31/24 \$0

Jie J. Zheng, PhD

Development of Small-Molecule Wnt Mimetics for Corneal Epithelial Cell Regeneration National Eye Institute (Multi-Pl with Sophie Deng, MD, PhD) Duration: 9/30/18–8/31/23 \$0

Professional Research Series

Doug Chung, PhD

Elucidating the Role of SLC4A11 in Congenital Hereditary Endothelial Dystrophy Knights Templar Eye Foundation, Inc. Duration: 7/1/21–12/31/22 \$0

Characterizing the Transcriptomic Profiles of Cultured Ex Vivo Corneal Endothelial Cells Treated with Mitochondria-Targeted Antioxidants During Cell Expansion Eye Bank Association of America Duration: 7/1/23–6/30/24

Matthias Elgeti, PhD

Exploring the Conformational Landscape of G Protein Coupled Receptors National Institute of General Medical Sciences Duration: 4/1/21–3/31/23 \$0

Anna Matynia, PhD

Molecular, Cellular, Anatomical, and Neurobiological Investigation of Melanopsin-Expressing Corneal Innervation, and Its Role in Pain and Photophobia National Eye Institute Duration: 1/1/23–12/31/23 \$390,000

Blink, Lacrimation, and Nociception: Precision Mapping and Integrated Atlas Generation of Corneal Trigeminal Afferents in Mice and Humans Duke University Duration: 9/30/22–8/31/23 \$612,908

Microglia Function in Pathogenesis of Retinal Hemangioblastomas Associated with Von Hippel-Lindau Disease VHL Alliance Duration: 11/15/19–2/14/23 \$0

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: 7/22/20–7/21/23 \$110,000

Deborah Ferrington, PhD

Role of Immunoproteasome in Airway Viral Infection National Jewish Health Sub-award on NIAID Grant AI50082 Duration: 5/1/22–4/30/25 \$83,999

Deciphering Mechanisms Associated With High-Risk AMD Genotypes for ARMS/HTRA1 and Complement Factor H National Eye Institute Duration: 9/30/22–8/31/25 \$294,633

Mitochondrial Defects in the Retinal Pigment Epithelium and the CFH Risk Allele for Age-Related Macular Degeneration National Eye Institute Duration: 9/30/22–6/30/26 \$504,612

Kaustabh Ghosh, PhD

Role of Retinal Capillary Stiffness in Diabetic Retinopathy National Eye Institute Duration: 9/1/17–6/30/23 \$284,460 (No-Cost Extension)

Ram Kannan, PhD

Novel Mechanism of Subretinal Fibrosis in Age-Related Macular Degeneration National Eye Institute Duration: 5/1/20–4/30/24 \$309,041

Therapeutic Strategies for Mitochondrial-Based Optic Diseases via Upregulation of OPA1 Expression and Mitochondrial Function in RPE using Antisense Oligonucleotides Stoke Therapeutics, Inc. Duration: 9/13/22–3/31/23 \$62,048

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 \$158,464

Discovery and Validation of AMD Biomarkers for Progression Using Deep Learning National Eye Institute Duration: 8/1/19–7/31/23 \$125,000 (No-Cost Extension) Artificial Intelligence for Assessment of Stargardt Macular Atrophy National Eye Institute Duration: 1/1/20–12/31/23 \$121,250 (No-Cost Extension)

Fully-Automated Lesion Characterization in Ultrawide-Field Retinal Images Eyenuk, Inc. Sub-award on NEI Grant EY028081 Duration: 9/1/20–8/31/23 \$22,293

Epidemiology of Biomarkers of AMD Progression National Eye Institute Duration: 9/30/21–8/31/27 \$492,368

iSafe/VCCM NASA/KBR Wyle Sub-award on NASA Prime Duration: 10/1/19–9/30/26 \$17,873

NASA and SANSA NASA Sub-award from University of California, San Diego Duration: 8/22/22–8/21/25 \$32,416

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 \$270,547

Yuhua Zhang, PhD

In Vivo Ultrastructure of Chorioretinal Disease National Eye Institute Duration: 1/1/19–12/31/24 \$205,809

In Vivo Imaging Retinal Pigment Epithelium Cells and Blood Flow in the Choriocapillaries in Age-Related Macular Degeneration Carl and Mildred Reeves Foundation Duration: 11/8/21–8/31/23 \$50,000

In Vivo Characterizations of Retinal Hemodynamics National Eye Institute Duration: 9/30/22–7/31/26 \$268,474

Clinical Research Active Funding

ADMINISTERED BY UCLA

Anthony J. Aldave, MD

A Phase IIa, Randomized, Double-Masked, Placebo-Controlled, Parallel-Group, Multicenter Study Assessing the Efficacy and Safety of STN1010904 Ophthalmic Suspension 0.03% and 0.1% Compared with Vehicle in Subjects with Fuchs Endothelial Corneal Dystrophy (FECD) PHANTOM Study Duration: 2/3/23–2/2/27 \$144,089

A Phase 2, Multicenter, Randomized, Controlled, Double-Masked, Clinical Trial to Evaluate the Efficacy and Safety of OC-01 (Varenicline) Nasal Spray in Subjects with Neurotrophic Keratopathy (the Olympia Study) (Protocol# OPP-102) Oyster Point Pharma, Inc. Duration: 8/11/21–8/10/25 \$0

A Phase 2, Randomized, Prospective, Double-Masked, Vehicle-Controlled Study to Assess the Efficacy and Safety of Nexagon® (NEXAGON) Applied Topically in Subjects with Corneal Persistent Epithelial Defects (PED) Resulting from Severe Ocular Chemical and Orthermal Injuries (Protocol# NEX-PED-005) OcuNexus Therapeutics, Inc. Duration: 3/8/22–3/7/26 \$0

Benjamin B. Bert, MD

Treatment of Ocular Discomfort in Glaucoma Patients Using Multiple Topical Medications Novartis Pharmaceuticals Duration: 3/31/20–9/1/24 \$2,197

Observational Study of Conjunctivitis of Dupixent Treatment for Atopic Dermatitis Regeneron Pharmaceuticals, Inc. Duration: 3/11/21–3/10/26 \$0

Joseph Caprioli, MD

INN-005-EXT InnFocus, Inc Duration: 4/29/20–4/28/25 \$0

Sophie X. Deng, MD, PhD K-321-201 Kowa Research Institute, Inc. Duration: 6/17/20–6/17/24 \$0

A Multi-Center, Randomized, Double-Masked, Vehicle-Controlled, Parallel-Group, Study to Evaluate the Safety and Efficacy of CSB-001 Ophthalmic Solution 0.1% in Stage 2 and 3 Neurotrophic Keratitis Subjects Claris Biotherapeutics, Inc. Duration: 9/9/21–9/8/25 \$95,196

Brian A. Francis, MD, MS

Field Test of Glaucoma Outcomes Survey Emmes Corporation Duration: 2/15/21–2/14/23 \$0

A Prospective, Multicenter Clinical Study to Evaluate the Safety and Effectiveness of Ab Externo Implantation of Glaucoma Gel Stent AbbVie Inc Duration: 5/9/23–12/31/25 \$181,974

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 \$0

An Observational, Multicenter Study of the Prevalence of CTX Retrophin, Inc. Duration: 1/6/16–10/29/22 \$0

Michael B. Gorin, MD, PhD

Vieta-Ferrer, Emile: Ascertaining Ethnic/Racial Disparities in Inherited Retinal Dystrophies Testing, and the Socio-Economic Factors that May Contribute to These American College of Medical Genetics and Genomics Duration: 7/1/22–12/31/23 \$75,000

Xolaris Biogen, Inc Duration: 9/28/17–4/1/22 \$0 ALK-001

Alkeus Pharmaceuticals Duration: 5/23/16–12/20/23 \$57,395

ARIS

Greater Baltimore Medical Center; funded by National Eye Institute Duration: 5/1/19–6/1/24 \$0

SOLSTICE Biogen, Inc Duration: 11/17/20–11/16/25 \$0

Gary N. Holland, MD ZEDS New York University Duration: 4/3/17–7/31/22 \$0

ADalimumab Versus Conventional ImmunoSupprEssion for Uveitis (ADVISE) Trial National Eye Institute Sub-award from Johns Hopkins University Duration: 9/30/18–8/31/23 \$0

Predicting Uveitis Onset in Children with Juvenile Idiopathic Arthritis National Eye Institute Sub-award from Cincinnati Children's Hospital Duration: 7/1/22–6/30/23 \$0

Hugo Y. Hsu, MD ST266-PED-202 Noveome Biotherapeutics, Inc. Duration 3/4/22–3/3/26 \$0

Alex A. Huang, MD, PhD DE-126 Santen, Inc. Duration: 2/17/21–2/16/25 \$0

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 \$68,658

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 \$0 Efficacy and Safety of High Dose Aflibercept in Patients with Neovascular AMD Bayer Healthcare LLC Duration: 10/20/20–10/20/25 \$0

Michael Ip, MD

ADV-022-11 Adverum Biotechnologies Duration: 10/26/22–10/25/26 \$210,189

ALXN2040-GA-201 Alexion Pharmaceuticals, Inc. Duration: 11/21/22-11/20/26 \$297,870

APL2-304 Apellis Pharmaceuticals Duration: 5/9/19–5/8/23 \$0

AR13503 Aerie Pharmaceuticals, Inc. Duration: 7/24/19–7/23/23 \$0

GR40398 Genentech, Inc. Duration: 3/5/19–3/5/23 \$0

GR40550 Genentech Foundation Duration: 1/17/20–1/16/24 \$0

ISEE2008 IVERIC Bio, Inc. Duration: 7/1/20–7/1/24 \$0

ISEE2009 IVERIC Bio, Inc. Duration: 6/9/23–6/8/27 \$104,643

OTT166-201 OcuTerra Therapeutics, Inc. Duration: 12/20/22–12/19/26 \$221,534

OPT1039 Clinical Evaluation of the P200xe Indy Optos PLC Duration: 4/17/20–4/16/24 \$0

RGX-314-2104 REGENXBIO Inc. Duration: 12/2/21–12/1/25 \$395,430

KS301P103 Kodiak Sciences, Inc. Duration: 9/22/21–9/21/25 \$0 KS301P105 Kodiak Sciences, Inc. Duration: 9/23/21–9/23/25 \$0

APL2-GA-305 Apellis Pharmaceuticals Duration: 11/4/21–11/3/25 \$364,425

RGX-314-2104 REGENXBIO, Inc. Duration: 12/2/21–12/1/25 \$395,430

John A. Irvine, MD CAM-101-01 Cambium Medical Technologies LLC Duration: 7/10/19–7/9/23 \$0

Colin A. McCannel, MD GR40549 Genentech, Inc. Duration: 11/26/18–12/31/22

GR40550 Genentech, Inc. Duration: 1/13/20–1/12/24 \$0

\$0

ADX-2191-PVR-001 Aldeyra Therapeutics, Inc. Duration: 2/14/20–2/13/24 \$0

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 \$0

Kevin M. Miller, MD STEELE Johnson & Johnson Duration: 9/10/21–9/10/24 \$0

Daniel B. Rootman, MD RVT-1401-2001 Immunovant, Inc. Duration: 5/14/19–5/13/23 \$0

SriniVas R. Sadda, MD ARIS Greater Baltimore Medical Center Funded by National Eye Institute Duration: 7/1/19–6/1/24 \$0

Alfredo A. Sadun, MD, PhD

GS-LHON-CLIN-06 GenSight Biologics Duration: 1/3/18–9/12/22 \$0

GS-LHON-CLIN-05 GenSight Biologics Duration: 8/23/18–12/14/22 \$0

David Sarraf, MD

GR40973 Genentech, Inc. Duration: 8/2/19–10/31/22 \$0

GR42558 Genentech, Inc. Duration: 8/12/21-8/11/24 \$4,232

Steve D. Schwartz, MD

ALXN2040-GA-201 Alexion Pharmaceuticals, Inc. 2/28/23–2/27/27 \$314,163

7317-CL-0003

Astellas Institute for Regenerative Medicine Duration: 8/22/18–11/01/23 \$0

OPH2005 Ophthotech Corporation Duration: 4/10/18–8/10/22 \$0

NGM621-GA-201 NGM Biopharmaceuticals, Inc. Duration: 1/21/21–1/24/25 \$12,368

ISEE2008 IVERIC Bio, Inc. Duration: 7/1/20–7/1/24 \$0

GR41675 Genentech, Inc. Duration: 7/21/20–7/20/24 \$0

Victoria L. Tseng, MD, PhD

Social Vulnerability and Incidence of Glaucoma Surgery American Glaucoma Society Duration: 11/30/21–12/01/22 \$0

Edmund Tsui, MD

Kowa FM-700 Kowa Research Institute, Inc. Duration: 2/1/20–12/31/22 \$0

21103 Acelyrin, Inc. Duration: 9/27/22–9/26/26 \$251,971

The LEOPARD Study: Efficacy and Safety of Dexamethasone Ophthalmic Suspension Eye Drops in Uveitic and Post-Surgical Macular Edema Global Ophthalmic Research Center Duration: 5/20/23–5/19/25 \$472,634

GR44277 Genentech, Inc. Duration: 2/22/23–2/22/27 \$435,299

PVT-2201-201 Priovant Therapeutics, Inc. Duration: 2/14/23–2/13/27 \$92,378

Imaging Biomarkers in Juvenile Idopathic Arthritis-Associated Uveitis Pfizer Health Solutions Inc. Duration: 6/16/21–6/30/24 \$150,000

Comparison of Biometry Measurements Using Cylite HP-OCT and Argos SS-OCT in Dense Cataracts Cylite Duration: 1/18/21–1/17/26 \$0

Clinical Research Studies

Clinical Trials

RECRUITING IN FISCAL YEAR 2023

Acelyrin Non-infectious Intermediate Uveitis, Posterior Uveitis or Panuveitis Phase 2 Study of Izokibep

A Phase 2 Dose-finding Study to Evaluate the Efficacy, Safety, and Immunogenicity of Izokibep in Subjects with With Non-infectious Intermediate Uveitis, Posterior Uveitis or Panuveitis. Investigators: Edmund Tsui, MD, Gary Holland, MD, Judy Lynn Chen, 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

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: Edmund Tsui, MD, Gary N. Holland, MD, and Colin A. McCannel, MD

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

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

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, and 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

Phantom Trial FECD

A Phase IIa, Randomized, Double-Masked, Placebo-Controlled, Parallel-Group, Multicenter Study Assessing the Efficacy and Safety of STN1010904 Ophthalmic Suspension 0.03% and 0.1% Compared with Vehicle in Subjects with Fuchs Endothelial Corneal Dystrophy (FECD). Investigators: Anthony Aldave, MD, Saba Al-Hashimi, MD, Sophie Deng, MD, Simon Fung, MD, and Reza Ghaffari, MD

Priovant NEPTUNE study

A Phase 2 Randomized, Double-Masked, Dose-Ranging Study to Investigate the Safety and Efficacy of Oral Brepocitinib in Adults with Active Non-Infectious Intermediate-, Posterior-, and Panuveitis. Investigators: Edmund Tsui, MD, and Judy Lynn Chen, MD.

Pulsar

Randomized, double-masked, activecontrolled, 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

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

XEN45 Abbvie study

A Prospective, Multicenter Clinical Study to Evaluate the Safety and Effectiveness of Ab Externo Implantation of Glaucoma Gel Stent. Investigators: Brian Francis, MD, and Victoria Tseng, 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

Clinical Trials

NOT RECRUITING IN FISCAL YEAR 2023

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, and Colin A. McCannel, MD

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

DE-126 Ophthalmic Solution

A phase 2b, randomized, doublemasked, active-controlled, parallelgroup, multicenter study assessing the efficacy and safety of DE-126 ophthalmic 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

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

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 Corneal Cross-Linking Keratoprosthesis Carrier Tissue

This clinical trial evaluates the safety and efficacy of corneal collagen crosslinking 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

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, and 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

IAI-OCTA Study

This study is utilizing a new, FDA approved, non-standard of care technology (optical coherence tomographyangiography 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

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

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 lessfrequent 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

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

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

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

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 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 Kageyama, OD

Discovery of Tear Film Biomarkers in Pediatric Blepharokeratoconjunctivitis

Then study will recruit healthy children and children with pediatric BKC and analyze their tear film for surrogate markers of inflammation. Investigators: Simon Fung, MD, Joseph Demer, MD, Stacy Pineles, MD, Vivian Shibayama, MD, and Federico Velez, MD

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 Eye 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 childhood 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 MAO9-hRPE cellular therapy in subjects with advanced dry AMD from one to five years following the surgical procedure to implant the MAO9-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 electrophysiological 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
2022–2023 Publications of the Full-Time Faculty

Robust peer review subjects an investigator's scholarly work to the scrutiny of experts in the field, which is vital to ensuring scientific excellence. Listed are the peer-reviewed articles, scientific books, and book chapters published by our full-time faculty this academic year.

July 2022

Kashani AH, Koronyo-Hamaoui M, Sadun AA. Retinal Manifestations of Neurodegeneration: A focus on Alzheimer Disease. In Retina Part II (Basic Science and Translation), Section II Chapter 31 pp 1–12., SJ Ryan, S VasSadda (eds.), CV Mosby, St. Louis, 2022.

Campagna GA, Chew L, **Pettenkofer M**, Nicoletti E, Schwartz JD, Choi G, Fernandes AO, Terrazas D, Kohn DB, **Tsui I**. Findings on Optical Coherence Tomography in Malignant Infantile Osteopetrosis. Ophthalmic Surg Lasers Imaging Retina. 2022 Jul; 53(7):398–402. doi: 10.3928/ 23258160-20220613-01. Epub 2022 Jul 1. PMID: 35858232.

Chew EY, Clemons TE, Agrón E, Domalpally A, Keenan TDL, Vitale S, Weber C, Smith DC, Christen W; AREDS2 Research Group (**Gorin MB**). Long-term Outcomes of Adding Lutein/ Zeaxanthin and ω -3 Fatty Acids to the AREDS Supplements on Age-Related Macular Degeneration Progression: AREDS2 Report 28. JAMA Ophthalmol. 2022 Jul 1;140(7):692–698. doi: 10.1001/ jamaophthalmol.2022.1640. PMID: 35653117.

Corvi F, Juhn A, Corradetti G, Nguyen TV, Fawzi AA, **Sarraf D, Sadda SR**. Multimodal imaging of crb1 retinitis pigmentosa with a peripheral retinal tumor. Retin Cases Brief Rep. 2022 Jul 1;16(4): 407–410.

Dow ER, **Tsui I**, **Sarraf D**. Macular infarction in a patient with sickle cell trait. Retin Cases Brief Rep. 2022 Jul 1;16(4):486–489. doi: 10.1097/ ICB.0000000000001014. PMID: 32541442. Ramtohul P, Freund KB, **Sarraf D**. Branch retinal artery occlusion with paracentral acute middle maculopathy presumably related to heavy cannabis use. Retin Cases Brief Rep. 2022 Jul 1;16(4):403–406. doi: 10.1097/ ICB.000000000001051. PMID: 32947368.

Tseng VL, Topouzis F, Yu F, Keskini C, Pappas T, Founti P, Anastasopoulos E, Harris A, Wilson MR, Coleman AL. Association between Dietary Salt Intake and Open Angle Glaucoma in the Thessaloniki Eye Study. [Epub ahead of print] J Glaucoma. 2022 Jul 1; 31(7):494–502. PMID: 35474047doi: 10.1097/IJG.000000000002044.

Mohammadzadeh V, Cheng M, Zadeh SH, Edalati K, Yalzadeh D, **Caprioli J**, Yadav S, Kadas EM, Brandt AU, **Nouri-Mahdavi K**. Central Macular Topographic and Volumetric Measures: New Biomarkers for Detection of Glaucoma. Transl Vis Sci Technol. 2022 Jul 8;11(7):25. doi: 10.1167/tvst.11.7.25.

Osterman MD, Song YE, Nittala M, Sadda SR, Scott WK, Stambolian D, Pericak-Vance MA, Haines JL. Genomewide Association Study of Retinal Traits in the Amish Reveals Loci Influencing Drusen Development and Link to Age-Related Macular Degeneration. Invest Ophthalmol Vis Sci. 2022 Jul 8;63(8):17. doi: 10.1167/ iovs.63.8.17. PMID: 35857289; PMCID: PMC9315071.

Oncel D, Manafi N, Nittala MG, Velaga SB, Stambolian D, Pericak-Vance MA, Haines JL, **Sadda SR**. Effect of OCT B-Scan Density on Sensitivity for Detection of Intraretinal Hyperreflective Foci in Eyes with Age-Related Macular Degeneration. Curr Eye Res. 2022 Sep;47(9):1294–1299. doi: 10.1080/02713683.2022.2081981. Epub 2022 Jul 12. PMID: 35603911.

Saffari PS, **Rootman DB**, **Karlin JN**. Glue Embolization Without Surgical Resection for Orbital Venolymphatic Malformation. J Craniofac Surg. 2022 Jul–Aug 01;33(5):e538–e541. doi: 10.1097/SCS.000000000008650. Epub 2022 Jul 12.

Kianian R, Hulbert SW, **Law SK**, **Giaconi** J. Effectiveness of Topical p-Kinase Inhibitors in Veterans with Severe Glaucoma on Maximally Tolerated Medical Therapy. Optom Vis Sci. 2022 Aug 1;99(8):626–631. doi: 10.1097/ OPX.00000000001925. Epub 2022 Jul 14. PMID: 35848984.

Cale M, Roelofs KA, Goldberg RA, Leibowitz S, Glasgow BJ, Rootman DB. Hyperostosis associated with orbital vascular malformation. Orbit. 2022 Jul 19:1–4.

Chen T, **Roelofs K**, **Rootman DB**. Allergic conjunctivitis and contact dermatitis following silicone tube intubation. Can J Ophthalmol. 2023 Feb;58(1):e36–e38. doi: 10.1016/j. jcjo.2022.06.017. Epub 2022 Jul 19.

Danese A, Patergnani S, Maresca A, Peron C, Raimondi A, Caporali L, Marchi S, La Morgia C, Del Dotto V, Zanna C, Iannielli A, Segnali A, Di Meo I, Cavaliere A, Martinuzzi A, Moraes-Filho MN, Salomao SR, Berezovsky A, Belfort R, Buser C, Ross-Cisneros FN, **Sadun AA**, Tacchetti C, Broccoli V, Giorgi C, Tiranti V, Carelli V, Pinton P. Pathological mitophagy disrupts mitochondrial homeostasis in Leber's hereditary optic neuropathy. Cell Rep. 2022 Jul 19;40(3):111124. doi: 10.1016/j.celrep. 2022.111124. Ramírez-Pardo I, Villarejo-Zori B, Jiménez-Loygorri JI, Sierra-Filardi E, Alonso-Gil S, Mariño G, de la Villa P, Fitze PS, Fuentes JM, García-Escudero R, **Ferrington DA**, Gomez-Sintes R, Boya P. *Ambra1* haploinsufficiency in CD1 mice results in metabolic alterations and exacerbates age-associated retinal degeneration. Autophagy. 2023 Mar;19(3):784–804. doi: 10.1080/ 15548627.2022.2103307. Epub 2022 Jul 24. PMID: 35875981.

Ferrington DA, Kannan R, DeMint J. David Ralph Hinton, MD, FARVO - In Memoriam (1954–2022). Exp Eye Res. 2022 Nov;224:109244. doi: 10.1016/ j.exer.2022.109244. Epub 2022 Sep 6. PMID: 36084728 No abstract available.

Fogel Levin M, Santina A, Corradetti G, Au A, Lu A, Abraham N, Somisetty S, Romero Morales V, Wong A, **Sadda S**, **Sarraf D**. Pentosan Polysulfate Sodium-Associated Maculopathy: Early Detection Using OCT Angiography and Choriocapillaris Flow Deficit Analysis. Am J Ophthalmol. 2022 Jul 25;244: 38–47. doi: 10.1016/j.ajo.2022.07.015. Epub ahead of print. PMID: 35901995.

Ugradar S, Goldberg RA, Douglas RS. Changing the face of thyroid eye disease. Eye (Lond). 2023:197–199. Epub 2022 Jul 26.

Gu L, **Caprioli J, Piri N**. Rbfox1 expression in amacrine cells is restricted to GABAergic and VGlut3 glycinergic cells. Biosci Rep. 2022 Jul 29; 42(7):BSR20220497. doi: 10.1042/BSR20220497.PMID: 35730583.

August 2022

Bittner AK, Yoshinaga PD, Shepherd JD, Kaminski JE, Malkin AG, Chun MW, Chan TL, Deemer AD, Ross NC, and the BeST-AID study team. Acceptability of Telerehabilitation for Low Vision Aids Using Various Approaches to Facilitate Accessibility. Transl Vis Sci Technol. 2022 Aug 1;11(8):4. doi: 10.1167/ tvst.11.8.4.

Kianian R, Hulbert SW, **Law SK**, Giaconi J. Effectiveness of Topical p-Kinase Inhibitors in Veterans with Severe Glaucoma on Maximally Tolerated Medical Therapy. Optom Vis Sci. 2022 Aug 1;99(8):626–631. Zhao X, Li N, Yang N, Mi B, Dang W, Sun D, Ma S, Nian H, Wei R. Thymosin β 4 Alleviates Autoimmune Dacryoadenitis via Suppressing Th17 Cell Response. Invest Ophthalmol Vis Sci. 2023 Aug 1;64(11):3. doi: 10.1167/ iovs.64.11.3.PMID: 37531112.

Budoff G, **Schwartz SD**, **Hubschman JP**. Post-Retinal Detachment Repair Diffuse Tractional Retinoschisis Sparing Region of Internal Limiting Membrane Peel. Ophthalmol Retina. 2022 Sep;6(9):785. doi: 10.1016/j.oret. 2022.06.012. Epub 2022 Aug 2. PMID: 35931642 No abstract available.

Jung JJ, Lim SY, Chan X, **Sadda SR**, Hoang QV. Correlation of Diabetic Disease Severity to Degree of Quadrant Asymmetry in En Face OCTA Metrics. Invest Ophthalmol Vis Sci. 2022 Aug 2;63(9):12. doi: 10.1167/ iovs.63.9.12. PMID: 35943732; PMCID: PMC9379327.

Pereira A, Ballios BG, **Sarraf D**, Yan P. Full-Thickness Macular Hole Due to Choroidal Neovascularization in the Setting of Pathologic Myopia. J Vitreoretin Dis. 2022 Aug 8;7(1):65– 69. doi: 10.1177/24741264221104592. eCollection 2023 Jan–Feb.

Sharma A, Stan MN, **Rootman DB**. Measuring Health-Related Quality of Life in Thyroid Eye Disease. J Clin Endocrinol Metab. J Clin Endocrinol Metab. 2022 Aug 8;107(Suppl_1):S27– S35. doi: 10.1210/clinem/dgac230.

Bansal A, Lee WW, **Sarraf D, Sadda SR**, Berger AR, Wong DT, Kertes PJ, Kohly RP, Hillier RJ, Muni RH. Persistent Subfoveal Fluid in Pneumatic Retinopexy Versus Pars Plana Vitrectomy for Rhegmatogenous Retinal Detachment: Posthoc Analysis of the PIVOT Randomised Trial. Br J Ophthalmol. 2022 Aug 11:bjophthalmol-2021-320981. doi: 10.1136/bjo-2021-320981. Epub ahead of print. PMID: 35953261.

Verma A, Magesan K, Amose T, Alagorie AR, Gnanaraj R, **Sadda SR**, Sen P. Age-related assessment of foveal avascular zone and surrounding capillary networks with swept source optical coherence tomography angiography in healthy eyes. Eye (Lond). 2022 Oct;36(10):1857–1864. doi: 10.1038/s41433-022-02146-8. Epub 2022 Aug 11. PMID: 35948688; PMCID: PMC9500041. Sacconi R, Fragiotta S, **Sarraf D, Sadda SR**, Freund KB, Parravano M, Corradetti G, Cabral D, Capuano V, Miere A, Costanzo E, Bandello F, Souied E, Querques G. Towards a better understanding of non-exudative choroidal and macular neovascularization. Prog Retin Eye Res. 2023 Jan;92:101113. doi: 10.1016/j.preteyeres.2022.101113. Epub 2022 Aug 13. PMID: 35970724 Review.

Cavuoto KM, Chang MY, Heidary G, Morrison DG, Trivedi RH, Binenbaum G, Kim SJ, **Pineles SL**. Effectiveness of Laser Refractive Surgery to Address Anisometropic Amblyogenic Refractive Error in Children: A Report by the American Academy of Ophthalmology. Ophthalmology. 2022; 129(11):1323–31. Epub 2022 Aug 18.

Chiang JN, Corradetti G, Nittala MG, Corvi F, Rakocz N, Rudas A, Durmus B, An U, Sankararaman S, Chiu A, Halperin E, **Sadda SR**. Automated Identification of Incomplete and Complete Retinal Epithelial Pigment and Outer Retinal Atrophy Using Machine Learning. Ophthalmol Retina. 2022 Aug 19:S2468-6530(22)00392-X. doi: 10.1016/j.oret.2022.08.016. Epub ahead of print. PMID: 35995411.

Bonnet C, Onishi AC, **Aldave AJ**. Infectious Crystalline Keratopathy Secondary to Mycobacterium chelonae. Cornea. 2023 Jan 1;42(1):116–117. doi: 10.1097/ICO.000000000003125. Epub 2022 Aug 24. PMID: 36036693.

Wong BM, Bonnet C, **Ghaffari R**, Houser K, DeMatteo J, Lau N, **Aldave AJ**. Fungal Infection After Descemet Membrane Endothelial Keratoplasty: Incidence and Outcomes. Cornea. 2023 Jun 1;42(6):687–698. doi: 10.1097/ ICO.000000000003102. Epub 2022 Aug 24. PMID: 36731080.

Dimasuay KG, Schaunaman N, Berg B, Cervantes D, Kruger E, Heppner FL, **Ferrington DA**, Chu HW. Airway epithelial immunoproteasome subunit LMP7 protects against rhinovirus infection. Sci Rep. 2022 Aug 25;12(1):14507. doi: 10.1038/s41598-022-18807-3.PMID: 36008456. Anegondi N, Gao SS, Steffen V, Spaide RF, **Sadda SR**, Holz FG, Rabe C, Honigberg L, Newton EM, Cluceru J, Kawczynski MG, Bengtsson T, Ferrara D, Yang Q. Deep Learning to Predict Geographic Atrophy Area and Growth Rate from Multimodal Imaging. Ophthalmol Retina. 2022 Aug 28:S2468-6530(22)00426-2. doi: 10.1016/j.oret.2022.08.018. Epub ahead of print. PMID: 36038116.

Francis BA, Dentone P, Heilweil G, Chopra V, Nassiri N. Endoscopic Visualization for Atypical Uveitis Glaucoma Hyphema Syndrome Management. J Glaucoma. 2023 Feb 1;32(2):e3–e10. doi: 10.1097/IJG. 00000000002117. Epub 2022 Aug 29. PMID: 36222877.

Tsui E, Crowell EL, Gangaputra S, Moussa K, Shantha JG, Shusko AJ, Thompson IA, Pham DC, Jackson NJ, Venkat AG. Current Landscape of Uveitis Specialists in the United States. J Acad Ophthalmol (2017). 2022 Aug 29;14(2):e187–e192. doi: 10.1055/ s-0042-1755581. PMID: 37388168; PMCID: PMC9928062.

Scalabrino ML, Thapa M, Chew LA, Zhang E, Xu J, **Sampath AP**, Chen J, **Field GD**. Robust cone-mediated signaling persists late into rod photoreceptor degeneration. Elife. 2022 Aug 30;11:e80271. doi: 10.7554/ eLife.80271.

Singh RB, Parmar UPS, Kahale F, Agarwal A, **Tsui E**. Vaccine-Associated Uveitis after COVID-19 Vaccination: Vaccine Adverse Event Reporting System Database Analysis. Ophthalmology. 2023 Feb;130(2):179–186. doi: 10.1016/j.ophtha.2022.08.027. Epub 2022 Aug 31. PMID: 36055601; PMCID: PMC9428109.

September 2022

De Gainza A, Morales E, Rabiolo A, Yu F, Afifi AA, **Nouri-Mahdavi K**, **Caprioli J**. A Metascore of Multiple Imaging Methods to Measure Long-Term Glaucoma Structural Progression. Transl Vis Sci Technol. 2022 Sep 1; 11(9):15. doi: 10.1167/tvst.11.9.15. PMID: 36129700. Elam AR, **Tseng VL**, **Coleman AL**. Disparities in vision health and eye care: Where do we go from here? Ophthalmology. 2022 Oct;129(10): 1077–1078. doi: 10.1016/j.ophtha.2022. 06.029. Epub 2022 Sep 1.

Pole C, Hosseini H, Prasad P. Multimodal Imaging of Recurrent Cystoid Macular Edema Associated with POEMS Syndrome Responsive to Intravitreal Dexamethasone Implant. Retin Cases Brief Rep. 2022 Sep 1;16(5):565–568. doi: 10.1097/ ICB.000000000001056. PMID: 32969981.

Wada I, Nakao S, Arima M, Ishikawa K, Yamaguchi M, Kaizu Y, Sekiryu H, Mori K, Kiyohara K, Takeda A, Ishibashi T, **Sadda SR**, Sonoda KH. Hyperreflective Membrane at the Vitreoretinal Interface in Diabetic Macular Edema: A Finding in Ultra-High-Resolution Optical Coherence Tomography. Transl Vis Sci Technol. 2022 Sep 1;11(9):21. doi: 10.1167/tvst.11.9.21. PMID: 36149646; PMCID: PMC9520517.

Wei Q, Clark RA, **Demer JL**. Can Binocular Alignment Distinguish Hypertropia in Sagging Eye Syndrome From Superior Oblique Palsy? Invest Ophthalmol Vis Sci. 2022 Sep 1;63(10):13.

Bittner AK, Kaminski JE, Ross NC, Shepherd JD, Thoene SJ, Bui SZ, Yoshinaga PD, and the BeST-AID study team. Telerehabilitation training to facilitate improved reading acuity with new magnification devices for low vision. Optom Vis Sci. 2022 Oct 1;99(10):743–749. doi: 10.1097/ OPX.00000000001944. Epub 2022 Sep 6.

Karlin J, Gai L, LaPierre N, Danesh K, Farajzadeh J, Palileo B, Taraszka K, Zheng J, Wei Wang W, Eskin E, Rootman D. Ensemble neural network model for detecting thyroid eye disease using external photographs. Br J Ophthalmol 2022 Sep 8; bjophthalmol-2022-321833.

Merani R, Johnson MW, **McCannel CA**, Flynn HW Jr, Scott IU, Hunyor AP. Clinical Practice Update: Management of Infectious Endophthalmitis After Intravitreal Anti-VEGF Injection. J Vitreoretin Dis. 2022 Sep 8;6(6):443– 451. doi: 10.1177/24741264221116487. eCollection 2022 Nov–Dec. PMID: 37009541. Review. Ho TC, Maamari RN, Kossler AL, Sears CM, Freitag SK, Reshef R, Shinder R, Rootman DB, Diniz SB, Kahana A, Schlachter D, Do TH, Kally P, Turner S, Mokhtarzadeh A, Harrison AR, Hwang CJ, Kim HJ, Avila SA, Thomas DA, Magazin M, Wester ST, Lee WW, Clauss KD, Holds JB, Sniegowski M, Compton CJ, Briggs C, Malik AI, Lucarelli MJ, Burkat CN, Patel LG. Couch SM. Outcomes of Patients with Thyroid Eye Disease Partially Treated with Teprotumumab. Ophthalmic Plast Reconstr Surg 2023 Mar-Apr;39(2):150-155. doi: 10.1097/ IOP.000000000002267. Epub 2022 Sep 9.

Borrelli E, Berni A, Mastropasqua L, Querques G, **Sadda SR**, **Sarraf D**, Bandello F. Pushing Retinal Imaging Forward: Innovations and their Clinical Meaning. The 2022 Ophthalmologica Lecture. Ophthalmologica. 2023 Sep 13. doi: 10.1159/000533910. Online ahead of print. PMID: 37703839 Review.

den Hollander Al, Mullins RF, Orozco LD, Voigt AP, Chen HH, Strunz T, Grassmann F, Haines JL, Kuiper JJW, Tumminia SJ, Allikmets R, Hageman GS, Stambolian D, Klaver CCW, Boeke JD, Chen H, Honigberg L, Katti S, Frazer KA, Weber BHF, **Gorin MB**. Systems genomics in age-related macular degeneration. Exp Eye Res. 2022 Dec;225:109248. doi: 10.1016/j. exer.2022.109248. Epub 2022 Sep 13. PMID: 36108770.

Santina A, Romero-Morales V, Abraham N, Somisetty S, Fogel-Levin M, Bousquet E, Nudleman E, Sadda S, **Sarraf D**. Non-neovascular fluid in age-related macular degeneration: observe-and-extend regimen in a case-series study. Can J Ophthalmol. 2022 Sep 13:S0008-4182(22)00251-4. doi: 10.1016/j.jcjo.2022.08.005. Online ahead of print. PMID: 36108790.

Cheng BT, Kim AB, Nadimpalli S, **Pineles SL**, Kurup SP. Association of Pediatric Strabismus and Functional Impairment: A Cross-sectional Nationwide Analysis. J Pediatr Ophthalmol Strabismus. 2022 Sep 14:1–9. Online ahead of print.

Scala M, Nishikawa M, Ito H, Tabata H, Khan T, Accogli A, Davids L, Ruiz A, Chiurazzi P, Cericola G, Schulte B, Monaghan KG, Begtrup A, Torella A, Pinelli M. Denomm-Pichon AS. Vitobello A, Racine C, Mancardi MM, Kiss C, Guerin A, Wu W, Gabau Vila E, Mak BC, Martinez-Agosto JA, Gorin MB, Duz B, Bayram Y, Carvalho CMB, Vengoechea JE, Chitayat D, Tan TY, Callewaert B, Kruse B, Bird LM, Faivre L, Zollino M, Biskup S; Undiagnosed Diseases Network; Telethon Undiagnosed Diseases Program; Striano P, Nigro V, Severino M, Capra V, Costain G, Nagata KI. Variant-specific changes in RAC3 function disrupt corticogenesis in neurodevelopmental phenotypes. Brain. 2022 Sep 14;145(9):3308-3327. doi: 10.1093/ brain/awac106. PMID: 35851598.

Manta AI, Jackson NJ, Dan J, Tran A, **Rootman DB**. Effect of external eyelid weighting on eyelid and eyebrow position in normal and ptosis patients. Graefes Arch Clin Exp Ophthalmol. 2023 Mar;261(3):849–855. doi: 10.1007/ s00417-022-05825-0. Epub 2022 Sep 16.

Stoddard-Bennett T, Jackson NJ, Robbins L, Villanueva P, **Suh SY, Demer JL, Pineles SL, Fung SSM**. Agreement of iCare IC200 tonometry with Perkins applanation tonometry in healthy children. J AAPOS. 2022 Oct;26(5):235. e1–235.e5. Epub 2022 Sep 17.

Hsieh T, Gundlach BS, Ashrafzadeh S, Sarraf D, Tsui I. Effects of COVID-19 on Intravitreal Injection Clinic After Lockdown. Clin Ophthalmol. 2022 Sep 19;16:3089–3096. doi: 10.2147/ OPTH.S358239. PMID: 36160732; PMCID: PMC9507280.

Hsieh T, Gundlach BS, Ashrafzadeh S, Sarraf D, Tsui I. Effects of COVID-19 on Intravitreal Injection Clinic After Lockdown. Clin Ophthalmol. 2022 Sep 19;16:3089–3096. doi: 10.2147/ OPTH.S358239. eCollection 2022. PMID: 36160732.

Margines JB, Yu F, Mehravaran S, **Coleman AL**. Non-Cycloplegic and Cycloplegic Autorefraction with Retinomax: An Agreement Study in Preschoolers in Los Angeles, California. [Epub ahead of print] Ophthalmic Epidemiol. 2022 Sep 27; 1–7. PMID: 36168672. doi: 10.1080/ 09286586.2022.2127786. Budoff G, **Tsui E**. Systemic Lupus Erythematosus Presenting as Unilateral Frosted Branch Angiitis. Ophthalmology. 2023 Aug;130(8):836. doi: 10.1016/j.ophtha.2022.08.021. Epub 2022 Sep 29. PMID: 36184434.

Lim JI, Regillo CD, **Sadda SR**, Ipp E, Bhaskaranand M, Ramachandra C, Solanki K. Artificial Intelligence Detection of Diabetic Retinopathy: Subgroup Comparison of the EyeArt System with Ophthalmologists' Dilated Examinations. Ophthalmol Sci. 2022 Sep 30;3(1):100228. doi: 10.1016/j.xops. 2022.100228. PMID: 36345378; PMCID: PMC9636573.

October 2022

Fan W, Fleming A, Hemert JV, Wykoff CC, Brown DM, Robertson G, Wang K, Falavarjani KG, **Sadda SR**, Ip M. Retinal Vascular Bed Area in Eyes With Retinal Vein Occlusion on Ultra-Widefield Fluorescein Angiography: Wave Study. Retina. 2022 Oct 1;42(10):1883–1888. doi: 10.1097/IAE.00000000003549. PMID: 35976232.

Kadomoto S, Nanegrungsunk O, Nittala MG, Karamat A, **Sadda SR**. Enhanced Detection of Reticular Pseudodrusen on Color Fundus Photos by Image Embossing. Curr Eye Res. 2022 Nov;47(11):1547–1552. doi: 10.1080/02713683.2022.2126860. Epub 2022 Oct 2. PMID: 36183241.

Au A, Santina A, Abraham N, Levin MF, Corradetti G, **Sadda S**, **Sarraf D**. Relationship Between Drusen Height and OCT Biomarkers of Atrophy in Non-Neovascular AMD. Invest Ophthalmol Vis Sci. 2022 Oct 3;63(11):24. doi: 10.1167/iovs. 63.11.24. PMID: 36306145; PMCID: PMC9624265.

Hirabayashi K, Yu HJ, Wakatsuki Y, Marion KM, Wykoff CC, **Sadda SR**. Optical Coherence Tomography Risk Factors for Development of Atrophy in Eyes with Intermediate Age-related Macular Degeneration. Ophthalmol Retina. 2022 Oct 5:S2468-6530(22)00486-9. doi: 10.1016/j.oret. 2022.09.007. Epub ahead of print. PMID: 36208726. Dinh RH, **Tsui E**, Wieder MS, Barash A, Park MM, Rahimy E, Mruthyunjaya P, Lu LJ, Michalak SM, Shah RJ, Sierpina D, Winter TW, Shields RA, Uchiyama E, Lee GD, Komati R, Lee E, Kasi SK, Do BK. Acute Macular Neuroretinopathy and Coronavirus Disease 2019. Ophthalmol Retina. 2023 Feb;7(2):198– 200. doi: 10.1016/j.oret.2022.09.005. Epub 2022 Oct 8. PMID: 36216223; PMCID: PMC9546455.

Chen JJ, Flanagan EP, Bhatti MT, et al [Arnold AC]. Details and outcomes of a large cohort of MOG-IgG associated optic neuritis. Mult Scler Relat Disord. 2022 Dec;68:104237. Doi:10.1016/j. msard.2022.104237. Epub 2022 Oct 10. PMID: 36252317.

Gunasekeran DV, Zheng F, Lim GYS, Chong CCY, Zhang S, Ng WY, Keel S, Xiang Y, Park KH, Park SJ, Chandra A, Wu L, Campbel JP, Lee AY, Keane PA, Denniston A, Lam DSC, Fung AT, Chan PRV, Sadda SR, Loewenstein A, Grzybowski A, Fong KCS, Wu WC, Bachmann LM, Zhang X, Yam JC, Cheung CY, Pongsachareonnont P, Ruamviboonsuk P, Raman R, Sakamoto T, Habash R, Girard M, Milea D, Ang M, Tan GSW, Schmetterer L, Cheng CY, Lamoureux E, Lin H, van Wijngaarden P, Wong TY, Ting DSW. Acceptance and Perception of Artificial Intelligence Usability in Eye Care (APPRAISE) for Ophthalmologists: A Multinational Perspective. Front Med (Lausanne). 2022 Oct 13;9:875242. doi: 10.3389/ fmed.2022.875242. PMID: 36314006; PMCID: PMC9612721.

Li X, Qu J, Su G, Yu S, **Zhang Y, Sadda SV**; STAR Study Group. The comparison of two different strategies of intravitreal conbercept for polypoidal choroidal vasculopathy in Chinese patients results from a 48-week randomized phase 4 study: STAR study. Acta Ophthalmol. 2023 May;101(3):e327– e337. doi: 10.1111/aos.15272. Epub 2022 Oct 18. PMID: 36259089.

Arnold AC. The vascular supply of the optic nerve head: implications for optic disc ischaemia. Br J Ophthalmol. 2023 May;107(5):595–599. doi: 10.1136/bjo-2022-322254. Epub 2022 Oct 19.

Gu L, Kwong JMK, **Caprioli J, Piri N**. Visual Function and Survival of Injured Retinal Ganglion Cells in Aged Rbfox1 Knockout Animals. Cells. 2022 Oct 27;11(21):3401. doi: 10.3390/ cells11213401. PMID: 36359797; PMCID: PMC9654481.

Grosso A, Yannuzzi LA, Tsang SH, Ceruti P, **Sarraf D**, Zamir E, Kaminska K, Quinodoz M, Amoroso A, Deaglio S, Francis JH, Fioretto M, Rivolta C, Calzetti G. A Unique Presentation of Bilateral Chorioretinal Atrophy. Asia Pac J Ophthalmol (Phila). 2022 Oct 28. doi: 10.1097/APO.000000000000563. Online ahead of print. PMID: 36650090 No abstract available.

Spiegel SJ, **Sadun AA**. Solutions to a Radical Problem: Overview of Current and Future Treatment Strategies in Leber's Hereditary Opic Neuropathy. Int J Mol Sci. 2022 Oct 30;23(21):13205. doi: 10.3390/ijms232113205. PMID: 36361994 Review.

November 2022

Corvi F, Corradetti G, Wong A, Pulido JS, Shields CL, Freund KB, **Sarraf D**, **Sadda SR**. Multimodal imaging of a choroidal nevus with caverns in the setting of pachychoroid disease. Retin Cases Brief Rep. 2022 Nov 1;16(6):670–673. doi: 10.1097/ ICB.000000000001138. PMID: 33653986.

Gillespie TC, Kim ES, Grogan T, **Tsui I**, Chu A, Calkins KL. Decreased Levels of Erythrocyte Membrane Arachidonic and Docosahexaenoic Acids Are Associated with Retinopathy of Prematurity. Invest Ophthalmol Vis Sci. 2022 Nov 1; 63(12):23. doi: 10.1167/iovs.63.12.23.

Ramtohul P, Cabral D, Sadda S, Freund KB, **Sarraf D**. The OCT angular sign of Henle fiber layer (HFL) hyperreflectivity (ASHH) and the pathoanatomy of the HFL in macular disease. Prog Retin Eye Res. 2023 Jul;95:101135. doi: 10.1016/ j.preteyeres.2022.101135. Epub 2022 Nov 1. PMID: 36333227 Review.

Dos Santos A, Lyu N, Balayan A, Knight R, Zhuo K, Sun Y, Xu J, Funderburgh M, Funderburgh J, **Deng S**. Generation of Functional Immortalized Human Corneal Stromal Stem Cells. Int J Mol Sci. 2022 Nov 2;23(21):13399. doi: 10.3390/ ijms232113399. PMID: 36362184; PMCID: PMC9657819. Lu L, Ausayakhun S, Ausayakuhn S, Khunsongkiet P, Apivatthakakul A, Sun CQ, Kim TN, Lee M, **Tsui E**, Sutra P, Keenan JD. Diagnostic accuracy of handheld fundus photography: A comparative study of three commercially available cameras. PLOS Digit Health. 2022 Nov 2;1(11):e0000131. doi: 10.1371/ journal.pdig.0000131. PMID: 36812561; PMCID: PMC9931246.

Ng ESY, Kady N, Hu J, Dave A, Jiang Z, Pei J, **Gorin MB**, Matynia A, **Radu RA**. Membrane Attack Complex Mediates Retinal Pigment Epithelium Cell Death in Stargardt Macular Degeneration. Cells. 2022 Nov 2;11(21):3462. doi: 10.3390/cells11213462. PMID: 36359858.

Agarwal A, Corvi F, Kumar Menia N, Aggarwal K, Erckens RJ, Berendschot TTJM, Webers CAB, Invernizzi A, Gupta V, **Sadda S**. Choriocapillaris Flow Deficit in Tubercular Serpiginous-Like Choroiditis with and without Paradoxical Worsening. Ocul Immunol Inflamm. 2022 Nov 3:1–7. doi: 10.1080/ 09273948.2022.2140296. Epub ahead of print. PMID: 36328764.

Rasheed HA, Davis T, Morales E, Fei Z, Grassi L, De Gainza A, **Nouri-Mahdavi K, Caprioli J**. RimNet: A Deep Neural Network Pipeline for Automated Identification of the Optic Disc Rim. Ophthalmol Sci. 2022 Nov 3;3(1):100244. doi: 10.1016/j. xops.2022.100244. PMID: 36545262; PMCID: PMC9762186.

Zhang Z, Ng Ming Sheng S, Kempen JH, Fabiani C, Arora A, Gupta V, **Tsui E**, Cimino L, Symes RJ, Dell J, Finger RP, Heinz C, Agrawal R. Uveitis Registries - A Digital Tool for Patient Care, Education, Research, and Collaboration. Ocul Immunol Inflamm. 2022 Nov 3:1–11. doi: 10.1080/ 09273948.2022.2140062. Epub ahead of print. PMID: 36328530.

Park J, Shin A, **Demer JL**. Finite element modeling of effects of tissue property variation on human optic nerve tethering during adduction. Sci Rep. 2022 Nov 8;12(1):18985. He Y, Verma A, Nittala MG, Velaga SB, Esmaeilkhanian H, Li X, Su L, Li X, Jayadev C, **Tsui I, Prasad P, Sadda SR**. Ethnic Variation in Diabetic Retinopathy Lesion Distribution on Ultra-widefield Imaging. Am J Ophthalmol. 2023 Mar; 247:61–69. doi: 10.1016/j.ajo.2022. 10.023. Epub 2022 Nov 9. PMID: 36368347.

Newman NJ, Yu-Wai-Man P, Subramanian PS, Moster ML, Wang AG, Donahue SP, Leroy BP, Carelli V, Biousse V, Vignal-Clermont C, Sergott RC, **Sadun AA**, Fernández GR, Chwalisz BK, Banik R, Bazin F, Roux M, Cox ED, Taiel M, Sahel JA; LHON REFLECT Study Group. Randomized trial of bilateral gene therapy injection for m.11778G>A MT-ND4 Leber optic neuropathy. Brain. 2022 Nov 9: awac421. doi: 10.1093/brain/awac421.

Staurenghi G, Cozzi M, **Sadda S**, Hill L, Gune S. Characteristics that Correlate with Macular Atrophy in Ranibizumab-Treated Patients with Neovascular Age-Related Macular Degeneration. Ophthalmol Retina. 2023 Apr;7(4):300– 306. doi: 10.1016/j.oret.2022.11.002. Epub 2022 Nov 11. PMID: 36372347.

Rasheed HA, Davis T, Morales E, Fei Z, Grassi L, De Gainza A, **Nouri-Mahdavi K**, **Caprioli J**. DDLSNet: A Novel Deep Learning-Based System for Grading Funduscopic Images for Glaucomatous Damage. Ophthalmol Sci. 2022 Nov 12;3(2):100255. doi: 10.1016/j.xops. 2022.100255. PMID: 36619716; PMCID: PMC9813574.

Sun M, Cherian N, Liu L, Chan AM, Aguirre B, Chu A, Strawbridge J, Kim ES, Lin MC, **Tsui I**, Gordon LK, Wadehra M. Epithelial membrane protein 2 (EMP2) regulates hypoxia-induced angiogenesis in the adult retinal pigment epithelial cell lines. Sci Rep. 2022 Nov 12;12(1):19432. doi: 10.1038/s41598-022-22696-x. PMID: 36371458; PMCID: PMC9653491.

Karunadharma PP, Kapphahn RJ, Stahl MR, Olsen TW, **Ferrington DA**. Dissecting Regulators of Aging and Age-Related Macular Degeneration in the Retinal Pigment Epithelium. Oxid Med Cell Longev. 2022 Nov 16; 2022:6009787. doi: 10.1155/2022/ 6009787. eCollection 2022. PMID: 36439688. Rhee KD, Wang Y, ten Hoeve J, Stiles L, Nguyen TTT, Zhang X, Vergnes L, Reue K, Shirihai O, **Bok D, Yang XJ**. Ciliary neurotrophic factor-mediated neuroprotection involves enhanced glycolysis and anabolism in degenerating mouse retinas. Nat Commun. 2022 Nov 17;13(1):7037. doi: 10.1038/ s41467-022-34443-x.

Chang MY, Binenbaum G, Heidar G, Cavuoto KM, Morrison DG, Trivedi RH, Kim SJ, **Pineles SL**. Surgical treatments to improve visual acuity in infantile nystagmus syndrome: a report by the American Academy of Ophthalmology. Ophthalmology. 2023 Mar;130(3):331– 344. doi: 10.1016/j.ophtha.2022.10.006. Epub 2022 Nov 24.

Wang X, Sadda SR, Ip MS, Sarraf D, Zhang Y. In Vivo Longitudinal Measurement of Cone Photoreceptor Density in Intermediate Age-Related Macular Degeneration. Am J Ophthalmol. 2023 Apr;248:60–75. doi: 10.1016/j.ajo.2022.11.020. Epub 2022 Nov 24. PMID: 36436549; PMCID: PMC10038851.

Wang X, Sadda SR, Ip MS, Sarraf D, Zhang Y. In Vivo Longitudinal Measurement of Cone Photoreceptor Density in Intermediate Age-Related Macular Degeneration. Am J Ophthalmol. 2023 Apr;248:60–75. doi: 10.1016/ j.ajo.2022.11.020. Epub 2022 Nov 24. PMID: 36436549.

Oh AJ, Singh P, Pirakitikulr N, **Roelofs K**, **Glasgow BJ**, **Rootman DB**. Lowgrade fibromyxoid sarcoma of the orbit. Orbit. 2022 Nov 28:1–5. doi: 10.1080/01676830.2022.2149820. Online ahead of print. PMID: 36437749.

Kim W, Ghodrati F, Mozaffari K, Samarage HM, Zhang AB, Pradhan A, Lee JT, **Goldberg RA**, Yang I. Endoscopic endonasal approach for resection of a recurrent sphenoorbital meningioma resulting in complete resolution of visual symptoms: A case report and review of literature. J Neurooncol. 2022;160(3):545–553. Epub 2022 Nov 29. Carelli V, Newman NJ, Yu-Wai-Man P, Biousse V, Moster ML, Subramanian PS, Vignal-Clermont C, Wang AG, Donahue SP, Leroy BP, Sergott RC, Klopstock T, Sadun AA, Rebolleda Fernández G, Chwalisz BK, Banik R, Girmens JF, La Morgia C, DeBusk AA, Jurkute N, Priglinger C, Karanjia R, Josse C, Salzmann J, Montestruc F, Roux M, Taiel M, Sahel JA; the LHON Study Group. Indirect Comparison of Lenadogene Nolparvovec Gene Therapy Versus Natural History in Patients with Leber Hereditary Optic Neuropathy Carrying the m.11778G>A MT-ND4 Mutation. Ophthalmol Ther. 2022 Nov 30. doi: 10.1007/ s40123-022-00611-x.

December 2022

Jun NY, **Field GD**, Pearson M. Efficient Coding, channel capacity, and the emergence of retinal mosaics. Adv Neural Inf Process Sys. 2022 Dec; 23:32311–32324. PMID: 37168261.

Nanegrungsunk O, Au A, **Sarraf D**, **Sadda SR**. New frontiers of retinal therapeutic intervention: a critical analysis of novel approaches. Ann Med. 2022 Dec;54(1):1067–1080. doi: 10.1080/ 07853890.2022.2066169. PMID: 35467460; PMCID: PMC9045775.

Cabral D, Ramtohul P, Zatreanu L, Galhoz D, Leitao M, Nogueira V, **Sarraf D**, Freund KB. Deep Capillary Plexus Features in Acute Macular Neuroretinopathy: Novel Insights Based on the Anatomy of Henle Fiber Layer. Invest Ophthalmol Vis Sci. 2022 Dec 1;63(13):4. doi: 10.1167/iovs.63.13.4. PMID: 36469026.

Bousquet E, Lee BA, Santina A, **Sadda S**, **Sarraf D**. Type 3 macular neovascularization in a patient with pentosan polysulfate maculopathy. Am J Ophthalmol Case Rep. 2022 Dec 5; 29:101771. doi: 10.1016/j.ajoc.2022. 101771. PMID: 36561881; PMCID: PMC9763375.

Cohen LM, Ponce Mejia LL, Duckwiler GR, **Goldberg RA**, **Rootman DB**. External carotid artery to ophthalmic artery flow associated with internal carotid artery stenosis. Orbit. 2022 Dec 5:1–7. Lyu N, Knight R, Robertson SYT, Dos Santos A, Zhang C, Ma C, Xu J, **Zheng J**, **Deng SX**. Stability and Function of Extracellular Vesicles Derived from Immortalized Human Corneal Stromal Stem Cells: A Proof of Concept Study. AAPS J, 2022 Dec 5;25(1):8.

Agrón E, Domalpally A, Cukras CA, Clemons TE, Chen Q, Swaroop A, Lu Z, Chew EY, Keenan TDL; AREDS and AREDS2 Research Groups (**Gorin MB**). Reticular Pseudodrusen Status, ARMS2/HTRA1 Genotype, and Geographic Atrophy Enlargement: Age-Related Eye Disease Study 2 Report 32. Ophthalmology. 2023 May;130(5):488–500. doi: 10.1016/ j.ophtha.2022.11.026. Epub 2022 Dec 6. PMID: 36481221.

Araya J, Araya C, Conrads T, **Sadun A**, Seleme N. Leber Hereditary Optic Neuropathy Conversion in a Patient with Idiopathic Intracranial Hypertension. J Neuroophthalmol. 2022 Dec 6. doi: 10.1097/WNO.000000000001572. Online ahead of print.

Vignal-Clermont C, Yu-Wai-Man P, Newman NJ, Carelli V, Moster ML, Biousse V, Subramanian PS, Wang AG, Donahue SP, Leroy BP, **Sadun AA**, Klopstock T, Sergott RC, Fernández GR, Chwalisz BK, Banik R, Taiel M, Roux M, Sahel JA; LHON Study Group. Safety of lenadogene nolparvovec gene therapy over 5 years in 189 patients with Leber hereditary optic neuropathy. Am J Ophthalmol. 2022 Dec 7:S0002-9394(22)00464-0. doi: 10.1016/j.ajo.2022.11.026.

Chang D, Hu J, **Miller KM**, Zhao W, Vilupuru V. Post-market Evaluation of Rotational Stability and Visual Performance of a New Toric Intraocular Lens with Frosted Haptics. Clin Ophthalmol 2022 Dec 10;16:4055–4064.

Mohammadi M, Su E, Chew L, Mohammadzadeh V, **Caprioli J**, Weiss RE, **Nouri-Mahdavi K**. Comparison of Ganglion Cell Layer and Inner Plexiform Layer Rates of Change in Suspected and Established Glaucoma. Am J Ophthalmol. 2023 May;249:12–20. doi: 10.1016/j.ajo.2022.12.008. Epub 2022 Dec 11. PMID: 36516918; PMCID: PMC10106372. Sadda SR. Charting a research agenda for macular degeneration: Reviews from the Ryan Initiative for Macular Research. Exp Eye Res. 2023 Jan;226:109348. doi: 10.1016/j.exer. 2022.109348. Epub 2022 Dec 14. PMID: 36526002.

Sit AJ, Chen TC, Takusagawa HL, Rosdahl JA, Hoguet A, **Chopra V**, Richter GM, Ou Y, Kim SJ, WuDunn D. Corneal Hysteresis for the Diagnosis of Glaucoma and Assessment of Progression Risk: A Report by the American Academy of Ophthalmology. Ophthalmology. 2023 Apr;130(4):433– 442. doi: 10.1016/j.ophtha.2022.11.009. Epub 2022 Dec 16. PMID: 36529572 Review.

Barboni P, La Morgia C, Cascavilla ML, Hong EH, Battista M, Majander A, Caporali L, Starace V, Amore G, Renzo AD, Carbonelli M, Nucci P, Jurkute N, Chen BS, Panebianco R, De Negri AM, Sadun F, Parisi V, Bandello F, **Sadun AA**, Carelli V, Yu-Wai-Man P. Childhood-Onset Leber Hereditary Optic Neuropathy - Clinical and Prognostic Insights. Am J Ophthalmol. 2022 Dec 18: S0002-9394(22)00501-3. doi: 10.1016/j.ajo.2022.12.014.

Helm CJ, **Glasgow BJ**. Inadvertent Viscoelastic Separation of the Pre-Descemet (Dua) Layer in Deep Anterior Lamellar Keratoplasty With Structural Features Revealed by Polarization Microscopy. BJ.Cornea. 2023 Apr 1;42(4):482–486. doi: 10.1097/ ICO.00000000003216. Epub 2022 Dec 19. PMID: 36633937.

Ruixue Liu, Xiaolin Wang, Sujin Hoshi, Yuhua Zhang. High-speed adaptive optics ophthalmoscopy for investigation of retinal hemodynamics in the living human eye. Proc. SPIE 12320, Optics in Health Care and Biomedical Optics XII, 1232019. 19 December 2022.

Williams D, Chung DD, Hovakimyan A, Davtyan A, **Glasgow BJ**, Aldave AJ. Novel DCN Mutation in Armenian Family With Congenital Stromal Corneal Dystrophy. Cornea. 2023 Apr 1;42(4):464–469. doi: 10.1097/ICO. 00000000003167. Epub 2022 Dec 19. PMID: 36534610. Eichenbaum D, Brown DM, **Ip**, **MS**, Khanani AM, Figueroa MS, McAllister IL, Laude A, Tang S, Gmeiner B, Clemens A, Souied E. Impact of retinal fluid-free months on outcomes in nAMD: a treatment agnostic analysis of the HAWK and HARRIER studies. Retina:10.1097/ IAE.00000000003699, December 20, 2022. DOI: 10.1097/ IAE.00000000003699.

Bilateral disc Edema, Could It Be Syphillis? Oh AJ, Fensterwald MR, Spiegel S, **Quiros P**. J Neuroophthalmol. 2022 Dec 21. doi: 10.1097/ WNO.0000000000001754. Online ahead of print. PMID: 36648115.

Garg N, Cohen E, **Tsui E**, LaMattina KC. The Effect of Leflunomide as Adjunctive Therapy With a TNF Inhibitor in Pediatric Patients With Uveitis. J Pediatr Ophthalmol Strabismus. 2022 Dec 22:1–4. doi: 10.3928/01913913-20221118-03. Epub ahead of print. PMID: 36546781.

Gunzenhauser RC, Lee YH, **Tsui I**. Rhegmatogenous retinal detachment after retinopathy of prematurity laser treatment. Am J Ophthalmol Case Rep. 2022 Dec 22;29:101785. doi: 10.1016/ j.ajoc.2022.101785. PMID: 36605183; PMCID: PMC9807741.

Oh AJ, Fensterwald MR, Spiegel S, **Quiros P**. Bilateral Disc Edema: Could It Be Syphilis? J Neuroophthalmol. 2022 Dec 21. doi: 10.1097/WNO. 000000000001754. Online ahead of print. PMID: 36648115 No abstract available.

Sreekumar PG, Su F, Spee C, Araujo E, Nusinowitz S, Reddy ST, Kannan R. Oxidative Stress and Lipid Accumulation Augments Cell Death in LDLR-Deficient RPE Cells and Ldlr^{-/-} Mice. Cells. 2022 Dec 22;12(1):43.

De Arrigunaga S, Akpek EK, **Aldave AJ**, Mian SI, Zurakowski D, Ciolino JB; Boston Keratoprosthesis Crosslinking Study Group. Prospective, Randomized, Multicenter, Double-Masked, Clinical Trial of Corneal Cross-Linking for Boston Keratoprosthesis Carrier Tissue. Am J Ophthalmol. 2023 May;249:39–48. doi: 10.1016/j.ajo. 2022.12.017. Epub 2022 Dec 26. PMID: 36581190. Scott IU, Oden NL, VanVeldhuisen PC, **Ip MS**, Blodi BA; SCORE2 Investigator Group. SCORE2 Report 20: Relationship of Treatment Discontinuation With Visual Acuity and Central Subfield Thickness Outcomes. Am J Ophthalmol. 2022 Dec 28;248:157–163. doi: 10.1016/j. ajo.2022.12.026. Epub ahead of print. PMID: 36584835.

Teo KYC, Fujimoto S, **Sadda SR**, Kokame G, Gomi F, Kim JE, Cheng MFS, Corradetti G, Amornpetchsathaporn A, Chainakul M, Lee WK, Lai TYY, Ruamviboonsuk P, Cheung CMG. Geographic Atrophy Phenotypes in Subjects of Different Ethnicity: Asia-Pacific Ocular Imaging Society Work Group Report 3. Ophthalmol Retina. 2022 Dec 28:S2468-6530(22)00639-X. doi: 10.1016/j.oret.2022.12.013. Epub ahead of print. PMID: 36586466.

Wang S, Wang Z, Vejalla S, Ganegoda A, Nittala MG, **Sadda SR**, Hu ZJ. Reverse engineering for reconstructing baseline features of dry age-related macular degeneration in optical coherence tomography. Sci Rep. 2022 Dec 31;12(1):22620. doi: 10.1038/s41598-022-27140-8. PMID: 36587062; PMCID: PMC9805430.

January 2023

Agrawal M, **Fung SSM**, Mireskandari K, Ali A. Pediatric Ocular Graft-Versus-Host Disease and Dry Eye Disease. In: Traish A, Douglas VP (eds.) Pediatric Ocular Surface Disease. Springer, Cham., 2023.

Chan, JW, Mejia-Vegaro, AJ, Karanjia, R, **Sadun, AA**. Mitochondrial Optic Neuropathies. In Ophthalmology 6th ed. Chapter 9.9 835–839. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Chea PD, Zeidenweber DA, **Fung SSM**. Pediatric Neurotrophic Keratopathy. In: Traish A, Douglas VP (eds.) Pediatric Ocular Surface Disease. Springer, Cham., 2023. Cheng S, **Roelofs K**. Direct and endoscopic approaches to the lateral orbit. Endoscopic Surgery of the Orbit and Anterior Skull Base: A Multidisciplinary Approach Springer, 2023. Daneshvar R, **Nouri-Mahdavi K**. Novelties in functional testing: the role of contrast sensitivity, electrophysiology, and color vision. The Science of Glaucoma Management. Mansouri and Gillman (Editors). Elsevier, 2023.

Ghaffari R, Massoudi A. Chapter 14: Keratoprosthesis. In: Edmund Tsui, Simon SM Fung, Rohan Bir Singh, eds. Current Advances in Ocular Surgery. Springer; 2023: 241–268.

Hubschman S, Oh A, Grafmiller KT, **Roelofs K**. Endoscopic Access to the Pterygopalatine Fossa. Endoscopic Surgery of the Orbit and Anterior Skull Base: A Multidisciplinary Approach Springer, 2023.

Park JJ, **Miller KM**. Iris Implants. In **Fung SSM**, **Tsui E**, Singh RB. Current Advances in Ocular Surgery. Singapore: Springer Nature, 2023.

Pettey J, Seibel BS, **Miller KM**, Garg S. Advanced Principles of Phacoemulsification Platforms. In Garg S, Koch DD. Steinert's Cataract Surgery, 4th edition. Philadelphia, PA: Elsevier, 2023. **Tsui E, Fung SSM**, Singh RB. Current Advances in Ocular Surgery. Springer, Cham., 2023.

Rubin, RM, **Sadun, AA**, Piva, AP. Lesions of the Optic Chiasm, Parasellar Region and Pituitary Fossa. In Ophthalmology 6th ed. Chapter 9.12 847–855. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Rubin, RM, Wang, MY, **Sadun, AA**. Ocular Myopathies. In Ophthalmology 6th ed. Chapter 9.18 889–893. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Saadati HG, **Sadun, AA**. Tumors, Infections, Inflammations and Neurodegenerations. In Ophthalmology 6th ed. Chapter 9.22 920–926. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Sadun, AA. Anatomy and Physiology of the Afferent Visual System. In Ophthalmology 6th ed. Chapter 9.3 812–814. M Yanoff and J Duker (eds.). Elsevier, London, 2023. Sadun, AA. Differentiation of Optic Nerve from Macular Retinal Disease. In Ophthalmology 6th ed. Chapter 9.4 815–816. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Sadun, AA, Wang, MY. Papilledema and Raised Intracranial Pressure. In Ophthalmology 6th ed. Chapter 9.6 821–824. M Yanoff and J Duker (eds.). Elsevier, London, 2023.

Contreras D, Garcia G Jr, Jones MK, Martinez LE, Jayakarunakaran A, Gangalapudi V, Tang J, Wu Y, Zhao JJ, Chen Z, Ramaiah A, **Tsui I**, Kumar A, Nielsen-Saines K, Wang S, Arumugaswami V. Differential Susceptibility of Fetal Retinal Pigment Epithelial Cells, hiPSC-Retinal Stem Cells, and Retinal Organoids to Zika Virus Infection. Viruses. 2023 Jan 1; 15(1):142. doi: 10.3390/v15010142. PMID: 36680182; PMCID: PMC9864143.

Corvi F, Nguyen TV, Juhn A, Corradetti G, Al-Sheikh M, Zweifel SA, **Sadda SR**. Optic disk pit associated with an unusual outer retinal hole and nasal peripheral retinoschisis. Retin Cases Brief Rep. 2023 Jan 1;17(1):1–4. doi: 10.1097/ICB.000000000001110. PMID: 33394960.

Niruthisard D, Bonnet C, Tanasugarn L, Le B, **Deng S**. Autologous Serum Eye Drops in the Management of Limbal Stem Cell Deficiency Associated with Glaucoma Surgery, Eye Contact Lens. 2023 Jan 1;49(1):19–24.

Burroughs J, Hwang CJ, Nakra T, **Rootman DB**, Wulc A, Woodward J. Aesthetic Abstracts. Ophthalmic Plast Reconstr Surg. 2023 Jan–Feb 01; 39(1):100–102. doi: 10.1097/IOP. 000000000002333. Epub 2023 Jan 2.

Roelofs K, Margines JB, Chen T, Goodyear K, Goldberg R, Rootman D. Optimizing management of asymmetric ptosis: A comparison of three posterior approach resection algorithms. Ophthalmic Plast Reconstr Surg. 2023 Jan–Feb;39(1):72–75. doi: 10.1097/IOP. 000000000002246. Epub 2023 Jan 2. Schmetterer L, Scholl H, Garhöfer G, Janeschitz-Kriegl L, Corvi F, **Sadda SR**, Medeiros FA. Endpoints for clinical trials in ophthalmology. Prog Retin Eye Res. 2023 Jan 2:101160. doi: 10.1016/ j.preteyeres.2022.101160. Epub ahead of print. PMID: 36599784.

Abraham N, Bousquet E, Santina A, Somisetty S, Romero-Morales V, **Sarraf D**. Successful Treatment of Severe Peripapillary Pachychoroid Syndrome with Anti VEGF Therapy. Retin Cases Brief Rep. 2023 Jan 3. doi: 10.1097/ ICB.000000000001405. Online ahead of print. PMID: 36800535.

Teodorescu R, Liu H, **Sadun AA**. Pembrolizumab-Associated Optic Neuritis with an Unusual Manifestation of Monocular Optic Disc Edema. J Neuroophthalmol. 2023 Jan 4. doi: 10.1097/WNO.000000000001798. Online ahead of print.

Sarrasin E, Malclès A, **Sarraf D**. Acute macular neuroretinopathy secondary to central retinal artery occlusion. Am J Ophthalmol Case Rep. 2023 Jan 5;29:101793. doi: 10.1016/ j.ajoc.2023.101793. eCollection 2023 Mar. PMID: 36686264.

Tauscher R, Haynie M, **Pineles SL**, **Velez FG**. A Potentially Adjustable Modification of the Nishida Procedure. J Binocul Vis Ocul Motil. 2023 Apr–Jun; 73(2):40–42. Epub 2023 Jan 13. PMID: 36638316.

Corradetti G, Corvi F, **Sadda SR**. Retromode imaging of gravitational subretinal fluid associated with optic disc pit maculopathy with extensive retinal schisis in a young myopic patient. Can J Ophthalmol. 2023 Jan 16:S0008-4182(22)00377-5. doi: 10.1016/j.jcjo. 2022.12.006. Epub ahead of print. PMID: 36657486.

Bansal A, Hamli H, Lee WW, **Sarraf D**, **Sadda S**, Berger AR, Wong DT, Kertes PJ, Kohly RP, Hillier RJ, Muni RH. En Face OCT in Diagnosis of Persistent Subretinal Fluid and Outer Retinal Folds after Rhegmatogenous Retinal Detachment Repair. Ophthalmol Retina. 2023 Jan 19:S2468-6530(23)00025-8. doi: 10.1016/j.oret.2023.01.011. Epub ahead of print. PMID: 36681191. Bonnet C, Ruiz M, Gonzalez S, Tseng CH, Bourges J, Behar-Cohen F, **Deng S**, Single mRNA detection of Wnt signaling pathway in the human limbus. Exp Eye Res. 2023 Apr;229:109337. doi: 10.1016/j.exer.2022.109337. Epub 2023 Jan 23.

Liu A., Milner ES, **Peng YR**, Blume HA, Brown MC, Bryman GS, Emanuel AJ, Morquette P, Viet NM, Sanes JR, Gamlin PD, Do MTH. Encoding of environmental illumination by primate melanopsin neurons. Science. 2023 Jan 27; 379(6630):376–381.

Zamora-de La Cruz D, **Bartlett J**, Gutierrez M, Ng SM. Trifocal intraocular lenses versus bifocal intraocular lenses after cataract extraction among participants with presbyopia. Cochrane Database Syst Rev. 2023 Jan 27;1(1):CD012648. doi: 10.1002/ 14651858.CD012648.pub3. PMID: 36705482; PMCID: PMC9881452.

lovino C, Ramtohul P, Au A, Romero-Morales V, **Sadda S**, Freund KB, **Sarraf D**. Vitelliform maculopathy: Diverse etiologies originating from one common pathway. Surv Ophthalmol. 2023 Jan 30:S0039-6257(23)00008-5. doi: 10.1016/j.survophthal.2023.01.009. Epub ahead of print. PMID: 36720370.

February 2023

Boxrud CA, Householder NA, Kim DK, Kugler KM, Harris CS, Benjamin BP, Panrudkevich AH, **Bahadur GG**. Inferior altitudinal visual loss and maskwearing practices: A case series. Indian J Ophthalmol. 2023 Feb;71(2):657–660. doi: 10.4103/ijo.IJO_934_22. PMID: 36727382.

Hollister JCP, Rodriguez M, Hosseini H, Papour A, **Hubschman JP**, Kavehpour HP. Ultrasonic Vitrectomy Performance Assessment Using Micro-Extensional Rheology. Transl Vis Sci Technol. 2023 Feb 1;12(2):24. doi: 10.1167/tvst.12.2.24. PMID: 36790819.

Strawbridge JC, Chu A, Dammann O, Hanson J, Janzen C, **Tsui I**. Prenatal maternal characteristics associated with retinopathy of prematurity. Retina. 2023 Feb 1;43(2):230–237. doi: 10.1097/ IAE.00000000003674. PMID: 36695795. Sacconi R, **Sarraf D, Sadda SR**, Freund KB, Servillo A, Fogel Levin MM, Costanzo E, Corradetti G, Cabral D, Zur D, Trivizki O, Parravano M, Bandello F, Loewenstein A, Querques G. Nascent Geographic Atrophy as a Predictor of Type 3 Macular Neovascularization Development. Ophthalmol Retina. 2023 Feb 2:S2468-6530(23)00038-6. doi: 10.1016/j.oret.2023.01.019. Epub ahead of print. PMID: 36736896.

Bouris E, Davis T, Morales E, Grassi L, Salazar Vega D, **Caprioli** J. A Neural Network for Automated Image Quality Assessment of Optic Disc Photographs. Journal of Clinical Medicine. J Clin Med. 2023 Feb 3;12(3):1217. doi: 10.3390/jcm12031217.

Mohammadzadeh V, Su E, Mohammadi M, Law SK, Coleman AL, Caprioli J, Weiss RE, Nouri-Mahdavi K. Association of Blood Pressure With Rates of Macular Ganglion Cell Complex Thinning in Patients With Glaucoma. JAMA Ophthalmol. 2023 Feb 9:e226092. doi: 10.1001/jamaophthalmol.2022.6092. Epub ahead of print. PMID: 36757702; PMCID: PMC9912170.

Strauss RW, Ho A, Jha A, Fujinami K, Michaelides M, Cideciyan AV, Audo I, Birch DG, **Sadda S, Ip M**, West S, Schönbach EM, Kong X, Scholl HPN; Progstar Study Group. Progression of Stargardt Disease as Determined by Fundus Autofluorescence Over a 24-Month Period (ProgStar Report No. 17). Am J Ophthalmol. 2023 Feb 9;250:157–170. doi: 10.1016/j.ajo. 2023.02.003. Epub ahead of print. PMID: 36764427.

Rudas A, Chiang JN, Corradetti G, Rakocz N, Avram O, Halperin E, **Sadda SR**. Automated large-scale prediction of exudative AMD progression using machine-read OCT biomarkers. PLOS Digit Health. 2023 Feb 15; 2(2):e0000106. doi: 10.1371/journal. pdig.0000106. PMID: 36812608; PMCID: PMC9931262.

Velaga SB, Nittala MG, Alagorie AR, Marram J, Hu ZJ, Wang Z, Ciulla TA, Kapik B, **Sadda SR**, **Ip M**. OCT outcomes as biomarkers for disease status, visual function, and prognosis in diabetic macular edema. Can J Ophthalmol. 2023 Feb 16:S0008-4182(23)00032-7. doi: 10.1016/j.jcjo. 2023.01.012. Epub ahead of print. PMID: 36803932. Pillar S, **Chen JL**, **Tsui E**. Imaging of anterior vitreous inflammation with swept-source anterior segment OCT. Am J Ophthalmol. 2023 May;249:e1. doi: 10.1016/j.ajo.2023.02.009. Epub 2023 Feb 18. PMID: 36801381; PMCID: PMC10292666.

Sharma A, Holz FG, Regillo CD, Freund KB, Sarraf D, Khanani AM, Baumal C, Holekamp N, Tadayoni R, Kumar N, Parachuri N, Kuppermann BD; International Retina Biosimilar Study Group (Inter BIOS Group); International Retina Biosimilar Study Group (Inter BIOS Group); Bandello F, Querques G, Loewenstein A, Özdek Ş, Rezai K, Laurent K, Bilgic A, Lanzetta P, Zur D, Yannuzzi N, Corradetti G, Kaiser P, Hilely A, Boyer D, Rachitskaya A, Chakravarthy U, Wintergerst M, Sarao V, Parolini B, Mruthyunjaya P, Nguyen QD, Do D, Keane PA, Hassan T, Sridhar J, Eichenbaum D, Grewal D, Splitzer M. Biosimilars for retinal diseases: United States-Europe awareness survey (Bio-USER - survey). Expert Opin Biol Ther. 2023 Jul-Dec;23(8):851-859. doi: 10.1080/14712598.2023.2176218. Epub 2023 Feb 19. PMID: 36726203.

McIntosh S, Yu M, Estabrook M, **Bittner AK**. New Insights into Visually Impaired Patients' Preferred Reading Illumination and Home-based Reading Speed with New Task-lighting. Ophthalmic Physiol Opt. 2023 Jul;43(4):640–648. doi: 10.1111/opo.13111. Epub 2023 Feb 20.

Chen JJ, Flanagan EP, Pittock SJ, et al [**Arnold AC**]. Visual Outcomes Following Plasma Exchange for Optic Neuritis: An International Multicenter Retrospective Analysis of 395 Optic Neuritis Attacks. Am J Ophthalmol. 2023 Feb 21:S0002-9394(23)00066-1. doi: 10.1016/j.ajo.2023.02.013. Online ahead of print. PMID: 36822570.

Lee T, **Velez FG**, Galoyan N, Prasad VK, El-Dairi MA. Optical Coherence Tomography Findings in Cherry-Red Spot: Implications for Understanding Pathophysiology and Visual Prognosis. J Pediatr Ophthalmol Strabismus. 2023 Feb 21:1–6. doi: 10.3928/01913913-20230123-01. Epub ahead of print. PMID: 36803241. Rasheed HA, Rasheed YS, Syed-Quadri S, **Tsui E**. A Thematic Analysis of Online Uveitis Support Groups. Ocul Immunol Inflamm. 2023 Feb 21:1–6. doi: 10.1080/ 09273948.2023.2178937. Epub ahead of print. PMID: 36809240.

Vagge A, Roda M, Valsecchi N, Capo H, Schiavi C, **Velez FG**; AAPOS Adult Strabismus Committee: AAPOS Adult Strabismus Committee's Report on the Status of Adult Strabismus Telemedicine. J Pediatr Ophthalmol Strabismus. 2023 Feb 21:1–4. doi: 10.3928/01913913-20221219-02. Epub ahead of print. PMID: 36803245.

Smith BJ, McHugh CF, Hirano AA, Brecha NC, Barnes S. Transient and sustained ganglion cell light responses are differentially modulated by the intrinsic production of reactive oxygen species acting upon specific voltage-gated Na⁺ channel isoforms. J Neurosci. 2023 Mar 29;43(13):2291-2304. doi: 10.1523/ JNEUROSCI.1723-22.2023. Epub 2023 Feb 24.

Sugarman JA, **Sarraf D, Tsui E**. Bacillary Layer Detachment in Hypertensive Retinopathy. Ophthalmol Retina. 2023 Jun;7(6):526. doi: 10.1016/ j.oret.2023.01.017. Epub 2023 Feb 26.

Lim S, Tran A, Garcia SS, **Demer JL**. Optical Coherence Tomography Angiography Demonstrates Strain and Volume Effects on Optic Disk and Peripapillary Vasculature Caused by Horizontal Duction. Curr Eye Res. 2023 May;48(5):518–527. Epub 2023 Feb 27.

March 2023

He D, Huang S, Uppal K, **Coleman AL**, Walker DD, Ritz B, Jones DP, Heck JE. Biomarkers of Maternal Smoking and the Risk of Retinoblastoma in Offspring. [Epub ahead of print] Retina. 2023 Mar 1;43(3):481–489. PMID: 36730579. doi: 10.1097/IAE.00000000003678.

Jeltsch BM, **Sarraf D**, Madjdpour D, Hanson JVM, Pfiffner FK, Koller S, Berger W, Barthelmes D, Al-Sheikh M. Rapid onset hydroxychloroquine toxicity. Retin Cases Brief Rep. 2023 Mar 1. doi: 10.1097/ICB.000000000001393. Online ahead of print. PMID: 36857194. Khaliliyeh D, De Gainza A, Morales E, **Caprioli J**. Long-Term Visual Field Outcomes after Ahmed Glaucoma Valve Implantation. Am J Ophthalmol. 2023 Mar 1:S0002-9394(23)00083-1. doi: 10.1016/j.ajo.2023.02.021. Epub ahead of print. PMID: 36868342.

Mohammadzadeh V, Su E, Mohammadi M, Law SK, Coleman AL, Caprioli J, Weiss RE, Nouri-Mahdavi K. Association of Blood Pressure With Rates of Macular Ganglion Cell Complex Thinning in Patients With Glaucoma. JAMA Ophthalmol. 2023 Mar 1;141(3):251–257. doi: 10.1001/ jamaophthalmol.2022.6092. PMID: 36757702; PMCID: PMC9912170.

Burroughs J, Hwang CJ, Nakra T, **Rootman DB**, Wulc A, Woodward JA. Aesthetic Oculofacial Abstracts. Ophthalmic Plast Reconstr Surg. 2023 Mar–Apr 01;39(2):198–200. doi: 10.1097/IOP.000000000002368. Epub 2023 Mar 2.

Oh AJ, **Bonelli L**, Spiegel SJ. Miller Fisher, Mydriasis and Moderna. J Neuroophthalmol. 2023 Mar 2.

Goodyear K, **Roelofs KA**, **Goldberg RA**. Banking Autologous Tarsus: A Simple Technique for Maximizing Preservation of Healthy Tissue. Ophthalmic Plast Reconstr Surg. 2023; 39(3):e82–e84. Epub 2023 Mar 3.

VanderBeek BL, Yu Y, Oden N, VanVeldhuisen P, Blodi B, **Ip MS**, Scott IU. Visit Adherence and Visual Acuity in Study of COmparative Treatments for REtinal Vein Occlusion 2 (SCORE2). Ophthalmic Epidemiol. 2023 Mar 8:1–6. doi: 10.1080/09286586.2023.2187070. Epub ahead of print. PMID: 36883723.

Song D, Lim S, Park J, **Demer JL**. Linear viscoelasticity of human sclera and posterior ocular tissues during tensile creep. J Biomech. 2023 Apr;151:111530. Epub 2023 Mar 11.

Ganesh D, Chiang JN, Corradetti G, Zaitlen N, Halperin E, **Sadda SR**. Effect of statins on the age of onset of agerelated macular degeneration. Graefes Arch Clin Exp Ophthalmol. 2023 Mar 14. doi: 10.1007/s00417-023-06017-0. Epub ahead of print. PMID: 36917316. Ng SMS, Low R, Pak C, Lai S, Lee B, McCluskey P, Symes R, Invernizzi A, **Tsui E**, Sitaula RK, Kharel M, Khatri A, Utami AN, La Distia Nora R, Putera I, Sen A, Agarwal M, Mahendradas P, Biswas J, Pavesio C, Cimino L, Sobrin L, Kempen JH, Gupta V, Agrawal R; OASIS Study Group. The role of a multicentre data repository in ocular inflammation: The Ocular Autoimmune Systemic Inflammatory Infectious Study (OASIS). Eye (Lond). 2023 Mar 14. doi: 10.1038/s41433-023-02472-5. Epub ahead of print. PMID: 36918629.

Ruamviboonsuk P, Lai TYY, Chen SJ, Yanagi Y, Wong TY, Chen Y, Gemmy Cheung CM, Teo KYC, **Sadda S**, Gomi F, Chaikitmongkol V, Chang A, Lee WK, Kokame G, Koh A, Guymer R, Lai CC, Kim JE, Ogura Y, Chainakul M, Arjkongharn N, Hong Chan H, Lam DSC. Polypoidal Choroidal Vasculopathy: Updates on Risk Factors, Diagnosis, and Treatments. Asia Pac J Ophthalmol (Phila). 2023 Mar–Apr 01; 12(2):184–195. doi: 10.1097/APO. 00000000000573. Epub 2023 Mar 14. PMID: 36728294.

Paul ME, **Tseng VL**, Kitayama K, Yu F, **Coleman AL**. Evaluating Discrepancies in Self-Reported Glaucoma and Electronic Health Records in the National Institutes Health All of Us Database. Ophthalmol Glaucoma. 2023 Mar 15;S2589-4196(23)00061-3. doi: 10.1016/j.ogla.2023.03.003. Online ahead of print.

González-Andrades M, **Fung S**, Potic J, Chidambaram J, Karimi A, Quigley C, Pontoppidan-Toms R, Scott A, Rassmussen ML. Harmonizing ophthalmic residency surgical training across Europe: A proposed surgical curriculum. Eye (Lond). 2023 Mar 17. doi: 10.1038/s41433-023-02502-2. Online ahead of print. PMID: 36932160.

Bouris E, de Gainza A, Barsegian A, **Caprioli J**. The Success Rate of Glaucoma Drainage Device Revision. J Glaucoma. 2023 Jun 1;32(6):489–496. doi: 10.1097/IJG.0000000000002217. Epub 2023 Mar 20. PMID: 36946978.

Keenan TDL, Agrón E, Chew EY; AREDS and AREDS2 Research Groups (Gorin MB). Dietary nutrient intake and cognitive function in the Age-Related Eye Disease Studies 1 and 2. Alzheimers Dement. 2023 Mar 20. doi: 10.1002/alz.13033. Online ahead of print. PMID: 36939084. Lee SY, **Tseng VL**, Kitayama K, Avallone TJ, Yu F, Pan D, **Caprioli J**, **Coleman AL**. Associations Between Niacin Intake and Glaucoma in the National Health and Nutrition Examination Survey. J Glaucoma. 2023 Jun 1;32(6):443–450. doi: 10.1097/IJG. 000000000002216. Epub 2023 Mar 20. PMID: 36946914.

He JZ, **Chopra V**. Unusual Presentations of Low-Tension Glaucoma. Case Rep Ophthalmol. 2023 Mar 22;14(1): 115–120. doi: 10.1159/000529666. eCollection 2023 Jan–Dec. PMID: 36968809.

Kaminski JE, Yoshinaga PD, Chun MW, Yu M, Shepherd JD, Chan TL, Deemer AD, **Bittner AK**, and the BeST-AID study team. Value of Handheld Optical Illuminated Magnifiers for Sustained Silent Reading by Visually Impaired Adults. Optom Vis Sci. 2023 May 1; 100(5):312–318. doi: 10.1097/OPX. 000000000002013. Epub 2023 Mar 22.

Kadomoto S, Muraoka Y, **Sadda S**. Split-detection adaptive optics imaging for cytoid body-like materials in a cotton wool spot. Can J Ophthalmol. 2023 Mar 23:S0008-4182(23)00078-9. doi: 10.1016/j.jcjo.2023.03.002. Epub ahead of print. PMID: 36966816.

Horie S, Giulia C, Esmaeilkhanian H, **Sadda SR**, Cheung CMG, Ham Y, Chang A, Takahashi T, Ohno-Matsui K. Microperimetry in Retinal Diseases. Asia Pac J Ophthalmol (Phila). 2023 Mar–Apr 01;12(2):211–227. doi: 10.1097/ APO.00000000000597. Epub 2023 Mar 24. PMID: 36971707.

Somisetty S, Santina A, **Sarraf D**, Mieler WF. The Impact of Systemic Medications on Retinal Function. Asia Pac J Ophthalmol (Phila). 2023 Mar–Apr 01;12(2):115–157. doi: 10.1097/ APO.000000000000605. Epub 2023 Mar 24. PMID: 36971705.

Cheng S, **Roelofs K**, Pirakitikulr N, **Rootman D**. Orbital Vascular Malformations: Relationship Between Enophthalmos and Clinically Apparent Distensibility with Valsalva. Ophthalmic Plast Reconstr Surg. 2023 Sep–Oct;39(5):487–491. doi: 10.1097/ IOP.00000000002377. Epub 2023 Mar 27. Ellis EM, Paniagua AE, Scalabrino ML, Thapa M, Rathinavelu J, Jiao Y, Williams DS, Field GD, Fain GL, Sampath AP. Cones and cone pathways remain functional in advanced retinal degeneration. Curr Biol. 2023 Apr 24;33(8):1513–1522.e4. doi: 10.1016/ j.cub.2023.03.007. Epub 2023 Mar 27. PMID: 36977418.

Fouad YA, Santina A, Bousquet E, **Sadda SR, Sarraf D**. Pathways of Fluid Leakage in Age Related Macular Degeneration. Retina. 2023 Mar 28. doi: 10.1097/IAE.000000000003798. Epub ahead of print. PMID: 36996458.

Fouad YA, Santina A, Bousquet E, **Sadda SR, Sarraf D**. Pathways of Fluid Leakage in Age Related Macular Degeneration. Retina. 2023 Mar 28. doi: 10.1097/IAE.000000000003798. Online ahead of print. PMID: 36996458.

Osias E, Cale M, Saffari P, Barbosa Diniz S, Singh P, **Rootman DB**. Clinical and demographic predictors of buccal fat pad volume in thyroid eye disease. Orbit. 2023 Mar 28;1–6.

Smith BJ, McHugh, CF, Hirano AA, **Brecha NC, Barnes S**. Transient and sustained ganglion cell light responses are differentially modulated by their intrinsic production of reactive oxygen species acting at specific voltagegated Na+ channel isoforms. Journal of Neuroscience. 2023 Mar 29; 43:2291– 2304. PMCID: PMC10072295.

Anaya-Alaminos R, Rassmussen ML, Fung SSM, Potic J, González-Andrades M. Comparative analysis of European residency programs: benchmarking and harmonizing ophthalmology training in Europe. Eye (Lond). 2023 Mar;37(4):725–731. doi: 10.1038/s41433-022-02040-3. Epub 2022 Mar 30.

April 2023

Oh A, **Glasgow BJ**. Dendritic Melanocytic Hyperplasia in Pterygia: A Potential Source of Diagnostic Confusion with Primary Acquired Melanosis. Ocul Oncol Pathol. 2023 April; 9 (1–2): 48–55. Bachmeier I, Armendariz BG, Yu S, Jäger RJ, Ebneter A, Glittenberg C, Pauleikhoff D, **Sadda SR**, Chakravarthy U, Fauser S. Fibrosis in neovascular age-related macular degeneration: A review of definitions based on clinical imaging. Surv Ophthalmol. 2023 Apr 4:S0039-6257(23)00049-8. doi: 10.1016/j.survophthal.2023.03.004. Epub ahead of print. PMID: 37023894.

Dunker L, Ruda KM, **Field GD**, Pillow JW. Scalable variational inference for low-rank spatio-temporal receptive fields. Neural Comput. Apr 6;1–33. doi: 10.1162/neco_a_01584. PMID: 37037043.

Oncel D, Corradetti G, **Sadda SR**. Extensive temporal subretinal drusenoid deposits as an early manifestation of late-onset retinal degeneration. Can J Ophthalmol. 2023 Apr 8:S0008-4182(23)00098-4. doi: 10.1016/j.jcjo.2023.03.012. Epub ahead of print. PMID: 37040866.

Scalabrino ML, Thapa M, Wang T, Sampath AP, Chen J, Field GD. Late gene therapy limits the restoration of retinal function in a mouse model of retinitis pigmentosa. bioRxiv. 2023 Apr 8:2023.04.07.536035. doi: 10.1101/2023.04.07.536035. Preprint. PMID: 37066264.

Nanji K, Sarohia GS, Xie J, Patil NS, Phillips M, Zeraatkar D, Thabane L, Guymer RH, Kaiser PK, Sivaprasad S, **Sadda SR**, Wykoff CC, Chaudhary V. Anti-vascular endothelial growth factor therapy and retinal non-perfusion in diabetic retinopathy: A meta-analysis of randomised trials. Acta Ophthalmol. 2023 Apr 12. doi: 10.1111/aos.15673. Epub ahead of print. PMID: 37042340.

Liu R, Wang X, Hoshi S, **Zhang Y**. Highspeed measurement of retinal arterial blood flow in the living human eye with adaptive optics ophthalmoscopy. Opt Lett. 2023 Apr 15;48(8):1994–1997.

Ramtohul P, Cicinelli MV, Dolz-Marco R, Gal-Or O, Mrejen S, García-Martínez JR, Goldberg A, Cunha de Souza E, Miserocchi E, Cunningham ET Jr, Yannuzzi LA, Freund KB, **Tsui E**. The Chrysanthemum Phenotype of Idiopathic Multifocal Choroiditis. Retina. 2023 Apr 17. doi: 10.1097/IAE. 00000000003815. Epub ahead of print. PMID: 37071923. Al-Sheikh M, Govetto A, Phasukkijwatana N, Matteucci M, Repetto R, Romano MR, Virgili G, Zweifel S, Barthelmes D, Bailey Freund K, **Sadda SR, Sarraf D**. Myopic macular schisis: Insights into distinct morphological subtypes and novel biomechanical hypothesis. Eur J Ophthalmol. 2023 Apr 18:11206721231166164. doi: 10.1177/11206721231166164. Epub ahead of print. PMID: 37073079.

Schließleder G, Kalitzeos A, Kasilian M, Singh N, Wang Z, Hu Z, Großpötzl M, **Sadda S**, Wedrich A, Michaelides M, Strauss RW. Deep phenotyping of PROM1-associated retinal degeneration. Br J Ophthalmol. 2023 Apr 20: bjo-2022-322036. doi: 10.1136/bjo-2022-322036. Epub ahead of print. PMID: 37080590.

Chen TH, **Roelofs KA**, Goh T, Pullarkat S, **Goldberg RA**, **Rootman DB**. Orbital Involvement in Acute Adult Leukemias: Case Series and Review of Literature. Ophthalmic Plast Reconstr Surg. 2023; 39(4):e107–e111. Epub 2023 Apr 21.

MacCumber MW, Wykoff CC, Karcher H, Adiguzel E, Sinha SB, Vishwakarma S, LaPrise A, Igwe F, Freitas R, **Ip MS**, Zarbin MA. One-Year Brolucizumab Outcomes in Neovascular Age-Related Macular Degeneration from a Large United States Cohort in the IRIS Registry. Ophthalmology. 2023 Apr 21:S0161-6420(23)00277-4. doi: 10.1016/j.ophtha.2023.04.012. Epub ahead of print. PMID: 37086857.

Roy S, Wang D, Rudzite AM, Perry B, Scalabrino ML, Gong YY, Sher A, **Field GD**. Large scale interrogation of retinal cell function by 1-photon light sheet microscopy. Cell Rep Meth. Apr 24;3(4):100453. PMID: 37159670.

Yao M, Kitayama K, Yu F, **Tseng VL**, **Coleman AL**. Association Between Myopia and Primary Open-Angle Glaucoma by Race and Ethnicity in Older Adults in the California Medicare Population. JAMA Ophthalmol. 2023 Apr 27: e231007. doi: 10.1001/jamaophthalmol. 2023.1007. Epub ahead of print. PMID: 37103940; PMCID: PMC10141276. Williams D, Onyia O, Chung DD, Kirakosyan A, Hovakimyan A, Payne C, Moshirfar M, **Aldave AJ**. Identification of a novel partial deletion of STS associated with pre-Descemet corneal dystrophy and X-linked ichthyosis. Mol Vis. 2023 Apr 29;29:25–30. PMID: 37287641; PMCID: PMC10243677.

Zhao J, Elgeti M, O'Brien ES, Sár CP, Daibani AE, Heng J, Sun X, Che T, **Hubbell WL**, Kobilka BK, Chen C. Conformational dynamics of the μ -opioid receptor determine ligand intrinsic efficacy. bioRxiv. 2023 Apr 29:2023.04.28.538657. doi: 10.1101/ 2023.04.28.538657. PMID: 37163120.

Fehlhaber KE, Majumder A, Boyd KK, Griffis KG, Artemyev NO, **Fain GL**, **Sampath AP**. A Novel Role for UNC119 as an Enhancer of Synaptic Transmission. Int J Mol Sci. 2023 Apr 30; 24(9):8106. doi: 10.3390/ijms24098106. PMID: 37175812.

May 2023

Lee J, Knight R, **Deng S**. Future regenerative therapies for corneal disease, Curr Opin Ophthalmol. 2023 May 1; 34(3):267–272.

Muller KS, Matthis J, Bonnen K, Cormack LK, **Huk AC**, Hayhoe M. Retinal motion statistics during natural locomotion. **Elife**. 2023 May 3; 12:e82410. doi: 10.7554/eLife.82410.

Oncel D, Corradetti G, Wakatsuki Y, Nittala MG, Velaga SB, Stambolian D, Pericak-Vance MA, Haines JL, **Sadda SR**. Drusen morphometrics on optical coherence tomography in eyes with age-related macular degeneration and normal aging. Graefes Arch Clin Exp Ophthalmol. 2023 May 3. doi: 10.1007/ s00417-023-06088-z. Epub ahead of print. PMID: 37133500.

Hyafil A., de la Rocha J, Pericas C, Katz LN, **Huk AC**, Pillow JW. Temporal integration is a robust feature of perceptual decisions. **Elife**. 2023 May 4;12:e84045. doi: 10.7554/eLife.84045.

Khan S, Moon J, Martin CA, Bowden E, Chen J, **Tsui E**, Crowell E. Readability and Suitability of Online Uveitis Patient Education Materials. Ocul Immunol Inflamm. 2023 May 5:1–5. doi: 10.1080/09273948.2023.2203759. Epub ahead of print. PMID: 37145033. Shi L, Mohammadi M,

Mohammadzadeh V, Su E, Weiss RE, **Caprioli J, Nouri-Mahdavi K**. Comparing Rates of Change in Moderate to Advanced Glaucoma: Retinal Nerve Fiber Layer vs. Bruch's Membrane Opening-Minimum Rim Width. Am J Ophthalmol. 2023 May 5:S0002-9394(23)00198-8. doi: 10.1016/j.ajo. 2023.05.003. Epub ahead of print. PMID: 37150336.

Wu Z, Schmitz-Valckenberg S, Blodi BA, Holz FG, Jaffe GJ, Liakopoulos S, **Sadda SR**, Bonse M, Brown T, Choong J, Clifton B, Corradetti G, Corvi F, Dieu AC, Dooling V, Pak JW, Saßmannshausen M, Skalak C, Thiele S, Guymer RH. Reticular Pseudodrusen: Interreader Agreement of Evaluation on OCT Imaging in Age-Related Macular Degeneration. Ophthalmol Sci. 2023 May 5;3(4):100325. doi: 10.1016/ j.xops.2023.100325. PMID: 37292179; PMCID: PMC10244688.

Shi L, Mohammadi M,

Mohammadzadeh V, Su E, Weiss RE, **Caprioli J, Nouri-Mahdavi K**. Comparing Rates of Change in Moderate to Advanced Glaucoma: Retinal Nerve Fiber Layer Versus Bruch Membrane Opening-Minimum Rim Width. Am J Ophthalmol. 2023 May 6;253:181–188. doi: 10.1016/j.ajo.2023.05.003. Epub ahead of print. PMID: 37150336.

Attiku Y, Nittala MG, Velaga SB, Ramachandra C, **Bhat S**, Solanki K, Jayadev C, Choudhry N, Orr SMA, Jiang S, He Y, **Sadda SR**. Comparison of diabetic retinopathy severity grading on ETDRS 7-field versus ultrawidefield assessment. Eye (Lond). 2023 May 10. doi: 10.1038/s41433-023-02445-8. Epub ahead of print. PMID: 37165011.

Kymes SM, Oden NL, VanVeldhuisen PC, Scott IU, **Ip MS**, Blodi BA, King J; SCORE2 Investigator Group. Cost-Utility Comparison of Bevacizumab and Aflibercept in the Treatment of Central or Hemiretinal Vein Occlusion in the SCORE2 Trial. JAMA Ophthalmol. 2023 May 11:e231463. doi: 10.1001/ jamaophthalmol.2023.1463.

Umfress AC, Glaser TS, Ploysangam P, Enyedi LB, Pineles S, **Velez FG**. Unilateral four muscle surgery for extra-large monocular exotropia. Arch Soc Esp Oftalmol (Engl Ed). 2023 Jul; 98(7):404–409. doi: 10.1016/j.oftale. 2023.05.002. Epub 2023 May 11. PMID: 37178786. Menean M, Sacconi R, Vujosevic S, Kesim C, Quarta A, Ribarich N, Bottazzi L, Hilely A, Capuano V, Souied EH, **Sarraf D**, Bandello F, Querques G. Subretinal Pseudocysts: A Comprehensive Analysis of this Novel OCT Finding. Ophthalmol Ther. 2023 Aug; 12(4):2035–2048. doi: 10.1007/s40123-023-00727-8. Epub 2023 May 17. PMID: 37198519.

Chen JL, Tessema R, Emami-Naeini P, Lim MC. A vascular syphilitic iris lesion. Am J Ophthalmol Case Rep. 2023 May 18;31:101858.

Magesan K, Gnanaraj R, Tojjar J, Amose T, Alagorie AR, Mahalingam M, Sen P, Verma A, **Sadda SR**. Fractal analysis of the macular region in healthy eyes using swept-source optical coherence tomography angiography. Graefes Arch Clin Exp Ophthalmol. 2023 May 18. doi: 10.1007/s00417-023-06117-x. Epub ahead of print. PMID: 37199803.

Oncel D, Corradetti G, He Y, Ashrafkhorasani M, Nittala MG, Stambolian D, Pericak-Vance MA, Haines JL, **Sadda SR**. Assessment of intraretinal hyperreflective foci using multimodal imaging in eyes with agerelated macular degeneration. Acta Ophthalmol. 2023 May 18. doi: 10.1111/ aos.15708. Epub ahead of print. PMID: 37199278.

Weschta M, **Pettenkofer M**, Klaas JE, Feucht N, Lohmann CP, Maier M. Microstructural morphology and visual acuity outcome in eyes with epiretinal membrane before, during, and after membrane peeling in intraoperative optical coherence tomography assisted macular surgery. Int J Ophthalmol. 2023 May 18;16(5):748– 754. doi: 10.18240/ijo.2023.05.12. PMID: 37206168; PMCID: PMC10172097.

Griffis KG, Fehlhaber KE, Rieke F, Sampath AP. Light Adaptation of Retinal Rod Bipolar Cells. J Neurosci. 2023 Jun 14;43(24):4379–4389. doi: 10.1523/JNEUROSCI.0444-23.2023. Epub 2023 May 19. PMID: 37208176. Tseng VL, Kitayama K, Yu F, Pan D, Coleman AL. Social Vulnerability, Prevalence of Glaucoma, and Incidence of Glaucoma Surgery in the California Medicare Population. Ophthalmol Glaucoma. 2023 May 19: S2589-4196(23)00084-4. doi: 10.1016/ j.ogla.2023.05.005. Epub ahead of print. PMID: 37211091.

Clark A, Souverein EA, **Rootman DB**, Yang D, **Kreiger AE**, Nagiel A. Macular Sling: A Customizable Method for Macular Buckling using Available Elements. Retin Cases Brief Rep. 2023 May 22. doi: 10.1097/ICB.00000000001438. Online ahead of print.

Ganesh D, Corradetti G, **Sadda SR**. Macular Neovascularization in a Case of Late-Onset Retinal Degeneration Treated with Aflibercept. Retin Cases Brief Rep. 2023 May 22. doi: 10.1097/ ICB.000000000001439. Epub ahead of print. PMID: 37224477.

Santina A, Bousquet E, Somisetty S, Fogel-Levin M, **Tsui E**, Freund KB, **Sarraf D**. Recurrent Anterior Uveitis Associated with Major Fluctuations in Choroidal Thickness in Patient with Pachychoroid Disorder. Retin Cases Brief Rep. 2023 May 23. doi: 10.1097/ ICB.000000000001437. Epub ahead of print. PMID: 37229756.

Zhang C, Tannous E, Thomas A, Jung N, Ma E and **Zheng JJ**. Dexamethasone Modulates the Dynamics of Wnt Signaling in Human Trabecular Meshwork Cells. Vision (Basel). 2023 May 25;7(2): 43.

Chan JW, Liu H, Ma EL, Sadun AA, Sadda SR. Peripapillary Vitreous Traction Syndrome: Expanding the Spectrum of Anterior Optic Neuropathies. J Neuroophthalmol. 2023 May 29. doi: 10.1097/WNO.000000000001874. Epub ahead of print. PMID: 37247230.

Nassiri N, **Tseng VL**, Kim C, Dentone P, Francis NM, Chopra AL, Huang A, **Francis BA**. Outcomes of MicroPulse Transscleral Laser Therapy in Eyes with Prior Glaucoma Aqueous Tube Shunt. In press, Graefes Arch Clin Exp Ophthalmol. 2023 May 29.

Wickline S, **Hou KK**, Pan H. Peptidebased nanoparticles for systemic extrahepatic delivery of therapeutic nucleotides. Int J Mol Sci. 2023 May 29;24(11):9455. doi: 10.3390/ ijms24119455.

June 2023

Lee Y, **Tseng VL**, Kitayama K, Avallone TJ, Yu F, **Caprioli J**, **Coleman AL**. Associations between Niacin Intake and Glaucoma in the National Health and Nutrition Examination Survey. J Glaucoma 2023 June 1;32:443–445. Selected as "Paper of the Month" by the World Glaucoma Association.

Mehta N, Patil S, Modi V, Vardi R, Liu K, Singh RP, **Sarraf D**, Oden NL, VanVeldhuisen PC, Scott IU, **Ip MS**, Blodi BA, Modi Y. High Variation in Inner Retinal Reflectivity Predicts Poor Visual Outcome in Patients With Central Retinal Vein Occlusion: SCORE2 Report 21. Transl Vis Sci Technol. 2023 Jun 1;12(6):21. doi: 10.1167/tvst.12.6.21. PMID: 37367722.

Romero-Morales VA, Peiris TJ, Somisetty S, Santina A, Lu A, **Sarraf D**. A middle-aged patient with bilateral vision loss and nyctalopia. Retin Cases Brief Rep. 2023 Jun 1;17(4S):S19–S22. doi: 10.1097/ICB.0000000000001315. PMID: 36007183.

Yao M, Kitayama K, Yu F, **Tseng VL**, **Coleman AL**. Association between Myopia and Primary Open-Angle Glaucoma Among Minorities in California Medicare Beneficiaries. JAMA Ophthalmol 2023 Jun 1;141: 525–532.

Qureshi A, Lim S, **Suh SY**, Mutawak B, Chitnis PV, **Demer JL**, Wei Q. Deep-Learning-Based Segmentation of Extraocular Muscles from Magnetic Resonance Images. Bioengineering (Basel). 2023 Jun 8;10(6):699.

Woo SJ, Bradvica M, Vajas A, Sagong M, Ernest J, Studnicka J, Veith M, Wylegala E, Patel S, Yun C, Orski M, Astakhov S, Tóth-Molnár E, Csutak A, Enyedi L, Kim T, Oh I, Jang H, **Sadda SR**. Efficacy and Safety of the Aflibercept Biosimilar SB15 in Neovascular Age-Related Macular Degeneration: A Phase 3 Randomized Clinical Trial. JAMA Ophthalmol. 2023 Jun 8:e232260. doi: 10.1001/ jamaophthalmol.2023.2260. Epub ahead of print. PMID: 37289448. Chang DS, Callaway NF, Steffen V, Csaky K, Guymer RH, Birch DG, Patel PJ, **Ip MS**, Gao SS, Briggs J, Honigberg L, Lai P, Ferrara D, Sepah YJ. Macular Sensitivity Endpoints in Geographic Atrophy: Exploratory Analysis of Chroma and Spectri Clinical Trials. Ophthalmology Science. Published online June 12, 2023. https://doi.org/ 10.1016/j.xops.2023.100351.

Freedman SF, Del Monte MA, Diva U, Donahue SP, Drack AV, Dutta R, **Fung SSM**, Imperiale M, Jordan CO, Lenhart PD, Lim ME, McCourt EA, Nihalani BR, Sabahi T, Stahl ED, Miraldi Utz VA, Wilson ME Jr, Yen KG, Vanderveen DK. Prevalence of Cerebrotendinous Xanthomatosis (CTX) Among Patients Diagnosed With Early-Onset Idiopathic Bilateral Cataracts: Final Analysis. J AAPOS. 2023 Jun 13:S1091-8531(23)00119-2. doi: 10.1016/j.jaapos.2023.04.013. Epub ahead of print. PMID: 37321343.

Somisetty S, Santina A, Au A, Romero-Morales V, Bousquet E, **Sarraf D**. Progression of Pentosan Polysulfate Sodium Maculopathy in a Prospective Cohort. Am J Ophthalmol. 2023 Jun 15;255:57–67. doi: 10.1016/ j.ajo.2023.05.021. Online ahead of print. PMID: 37327961.

Advani J, Corso-Diaz X, Kwicklis M, van Asten F, Ratnapriya R, Mehta P, Hamel A, Mahrotra S, Segrè A, Kiel C, Strunz T, Weber B, Chew E, Hernandez D, Montezuma S, **Ferrington D**, Swaroop A. QTL mapping of human retina DNA methylation identifies 87 geneepigenome interactions in age-related macular degeneration. Res Sq. 2023 Jun 16:rs.3.rs-3011096. doi: 10.21203/ rs.3.rs-3011096/v1. Preprint. PMID: 37398472.

Na B, Wang AC, Watterson CT, Martinez-Agosto J, Saitta S, Dutra-Clarke M, Bhansali F, **Pineles SL**, Chang VY, Shah VS, de Blank P. An unusual presentation of bilateral optic pathway glioma in Crouzon Syndrome. Pediatr Hematol Oncol. 2023 Jun 19: 1–7. Oh AJ, Javaheri M, Hosseini H, Prasad PS. Purtscher-like retinopathy in a 19-year-old with maturity-onset diabetes of the young: a case report. J Med Case Rep. 2023 Jun 19;17(1):255. doi: 10.1186/s13256-023-03985-z. PMID: 37331978; PMCID: PMC10278244.

Park J, Moon S, Lim S, **Demer JL**. Scanning Laser Ophthalmoscopy Demonstrates Disc and Peripapillary Strain During Horizontal Eye Rotation in Adults. Am J Ophthalmol. 2023 Jun 19:S0002-9394(23)00241-6.

Al-Lozi A, Koo EB, Lambert SR, Levin MH, **Velez FG**, Do DV, Shue A. Anterior segment ischemia following strabismus surgery in a young adult using gender-affirming estrogen hormone therapy. J AAPOS. 2023 Jun 23:S1091-8531(23)00128-3. doi: 10.1016/j.jaapos. 2023.05.004. Epub ahead of print. PMID: 37355012.

Grassi L, Salazar Vega D, De Gainza A, Bouris E, Morales E, **Caprioli J**. Phenotypic expressions of the optic disc in primary open-angle glaucoma. Eye (Lond). 2023 Jun 24. doi: 10.1038/ s41433-023-02627-4. Epub ahead of print. PMID: 37355755.

Prasad PS. The Patient, their Environment, and the Importance of Diversity in Clinical Research. Ophthalmol Retina. 2023 Jun 27:S2468-6530(23)00284-1. doi: 10.1016/j.oret. 2023.06.016. Epub ahead of print. PMID: 37379885.

Tenney AP, Di Gioia SA, Webb BD, Chan WM, de Boer E, Garnai SJ, Barry BJ, Ray T, Kosicki M, Robson CD, Zhang Z, Collins TE, Gelber A, Pratt BM, Fujiwara Y, Varshney A, Lek M, Warburton PE, Van Ryzin C, Lehky TJ, Zalewski C, King KA, Brewer CC, Thurm A, Snow J, Facio FM, Narisu N, Bonnycastle LL, Swift A, Chines PS, Bell JL, Mohan S, Whitman MC, Staffieri SE, Elder JE, Demer JL, Torres A, Rachid E, Al-Haddad C, Boustany RM, Mackey DA, Brady AF, Fenollar-Cortés M, Fradin M, Kleefstra T, Padberg GW, Raskin S, Sato MT, Orkin SH, Parker SCJ, Hadlock TA, Vissers LELM, van Bokhoven H, Jabs EW, Collins FS, Pennacchio LA, Manoli I, Engle EC. Noncoding variants alter GATA2 expression in rhombomere 4 motor neurons and cause dominant hereditary congenital facial paresis. Nat Genet. 2023 Jun 29.

Mahmud F, Karmouta R, Strawbridge JC, **Prasad P**, Chu A, **Khitri M**, **Tsui I**. A Multi-Center Study of Retinopathy of Prematurity Follow-Up Adherence. Retina. 2023 Jun 30. doi: 10.1097/IAE. 000000000003875. Epub ahead of print. PMID: 37399574.

Read RW, Denniston A, Holland GN. Cataracts, Corticosteroids, and Canaries in the Coal Mine. Am J Ophthalmol. 2023 Jun 30:S0002-9394(23)00260-X. doi: 10.1016/j.ajo. 2023.06.022. Online ahead of print. PMID: 37393973 No abstract available.

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 from 1994 to June 30, 2022, the Institute's core pillars were developed and a broad agenda of program-building and expansion was implemented. Dr. Mondino also forged a historic partnership—a first of its kind—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.

Anne L. Coleman, MD, PhD, assumed leadership of the Stein Eye Institute and UCLA Department of Ophthalmology in July 2022, bringing with her a broad agenda to address the growing challenges for patient care, education, vision-science research, and community outreach.

And today, 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.

Patients across the Southland have access to the finest vision care at Stein Eye Institute in Westwood; UCLA Stein Eye Centers in Calabasas and Santa Monica; Doheny Eye Centers UCLA in Arcadia, Orange County, and Pasadena; and UCLAaffiliated 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

Anne L. Coleman, MD, PhD

Chair, UCLA Department of Ophthalmology Director, UCLA Stein Eye Institute 2022–present

Charles T. Foscue

President and Chief Executive Officer HAI Financial, Inc. 2020–present

Ronald L. Olson, Esq.

Partner Munger, Tolles & Olson 1995–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.

Anne L. Coleman, MD, PhD Director, Stein Eye Institute Chair, UCLA Department of Ophthalmology Affiliation Chair, Doheny Eye Institute

Anthony J. Aldave, MD Vice Chair of Academics

Anthony C. Arnold, MD Vice Chair of Education

Joseph Caprioli, MD Vice Chair of Quality

Sophie X. Deng, MD, PhD Vice Chair of Justice, Equity, Diversity, and Inclusion

Trashon Fearington Chief Administrative Officer, Stein Eye Institute JoAnn A. Giaconi, MD Vice Chair of Affiliated Hospitals

Marissa Goldberg Executive Director and Chief Financial Officer Doheny Eye Institute

Gary N. Holland, MD Vice Chair of Patient-Based Research

Alfredo Sadun, MD, PhD Vice Chair of Doheny Eye Centers UCLA

Alapakkam P. Sampath, PhD Associate Director of Research

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, vision scientists at UCLA Stein Eye Institute have extended the boundaries of current knowledge to pursue the goal of a lifetime of good vision for everyone. This noble undertaking has significantly benefited from a strong tradition of private philanthropy.

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. Stein Eye 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 vitally important and provide Stein Eye with immediate resources, increasing the impact of these gifts.

Please make checks payable to **UC Regents**.

Endowments

Establishing an endowment is a visionary and generous act that honors the present and empowers the future. Endowments provide permanent resources that continue to grow. A portion of the annual investment income is used to support clinical, educational, and scientific initiatives, while the remaining investment yield is returned to principal. Thus, over the years, an endowment provides steady, reliable funding.

An endowment serves as an enduring legacy and can be named in honor of the donor, their family, loved ones, or another name of the donor's choosing. Giving opportunities exist for endowed chairs, endowed fellowships, and endowed funds for research, education, and patient care. These funds can be made payable over a period of up to five years.

Pledges

A pledge is a 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 a donor's 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 makes it easier for donors to give higher amounts than they may have originally considered.

Securities and Wires

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 does not cause a taxable event for the donor.

Matching Gifts

The easiest way to double—or even triple—a contribution is for the donor to request a match from their employer. Thousands of companies nationwide support their workforce by making such gifts to the organizations and institutions their employees care about.

Real Estate

Real estate (primary residence, vacation home, commercial property, or land) is an asset that donors can leverage in a variety of ways to support UCLA Stein Eye Institute, while reducing taxes and eliminating the burden of maintaining or selling the property. A donor also can use real estate to fund gifts that provide an income stream for life.

For residential properties, it is possible to arrange a sizable tax deduction by deeding a home to Stein Eye Institute, while continuing to occupy the property for life.

Bequests

Making a gift through a will or living trust offers the immediate satisfaction of creating a lasting and personal legacy that ensures Stein Eye's future and costs nothing now.

Charitable Gift Annuity

Donors may transfer money, securities, or real estate in trust to Stein Eye Institute and receive income for themselves or another for life. Donors may receive immediate tax benefits and, ultimately, Stein Eye receives the trust property.

Qualified Retirement Plans

Naming The UCLA Foundation as a beneficiary of some or all of a qualified retirement plan may help donors minimize taxes and maximize philanthropic impact.

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 Stein Eye.

YOUR GIFT CAN MAKE A DIFFERENCE

In whatever way you choose to support UCLA Stein Eye Institute, you will be embarking on a partnership with one of the world's preeminent eye research centers. Such an investment will significantly expand Stein Eye's understanding of the causes of eye diseases and help develop alternative treatment options, with the ultimate goal to prevent blindness.

For information on how to incorporate UCLA Stein Eye Institute into your estate and retirement planning, or to make a gift of any kind, please contact:

Susan Lee DeRemer, CFRE Director of Development UCLA Stein Eye Institute Development Office 100 Stein Plaza, Room 1-124 Los Angeles, CA 90095-7000 Phone: (310) 206-6035 Cell/Text: (424) 325-9076 giving@jsei.ucla.edu



For 34 consecutive years, UCLA Health has been recognized on the U.S. News & World Report national honor roll of best hospitals. UCLA Stein Eye and Doheny Eye Institutes are ranked #1 in California and top five in the nation for ophthalmology.





UCLA DEPARTMENT OF OPHTHALMOLOGY DAVID GEFFEN SCHOOL OF MEDICINE AT UCLA