LETTER FROM THE CHAIR

The Stein Eye Institute has been dedicated to providing equitable and inclusive eye care for almost 60 years. Through the university's affiliated hospitals, we treat at-risk patients who are uninsured, underinsured, and underserved. And the UCLA Mobile EYE Clinic program, established in 1975, delivers free, high quality ophthalmic eye care for the most vulnerable populations across the Southland.

Issues of equity, diversity, and inclusion (EDI) are central to the fulfillment of the Institute’s mission, and we recently formed the EyeEDI Committee, directed by Dr. Sophie Deng, to develop strategies complementing existing diversity initiatives within the David Geffen School of Medicine at UCLA. The intention is to further the creation of a culture that supports a diverse and inclusive Department, provides every member of our Department with an equitable opportunity for success, and ensures all patients have access to high quality health care.

Dr. Peter Quiros is also fostering EDI in ophthalmology. As a founding member of the American Academy of Ophthalmology LGBTQ+ community, Dr. Quiros and his team are increasing health equity and equality for LGBTQ+ patients and health care professionals with a multi-pronged approach that includes mentorship, education, partnership, and advocacy.

Before inclusion was a considered topic, Dr. J. Bronwyn Bateman—Stein Eye alumna, former faculty member, and current member of our volunteer faculty—broke many a glass ceiling as the first woman to serve in multiple leadership positions. She also pursued the field of ophthalmic genetics before DNA was fully harnessed, and in 2022, she presented UCLA with a $10 million gift to create the UCLA J. Bronwyn Bateman Center for Ocular Genetics at the Stein Eye Institute. One of the first major centers of its kind in the United States, the center will have a tremendous impact in advancing ocular genetics research and care.

I hope you enjoy learning about these topics and more in this issue of EYE Magazine. I thank you, and our broad community of colleagues and friends, for your continued support as we strive to fulfill our mission to preserve and restore sight.

Sincerely,

Bartly J. Mondino, MD
Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology
Director, Stein Eye Institute
Chair, UCLA Department of Ophthalmology
Affiliation Chair, Doheny Eye Institute
$10 Million Gift to Establish a Center for Ocular Genetics

Dr. J. Bronwyn Bateman’s contribution positions UCLA at the forefront of ocular genetics research, and accelerates interdisciplinary science, innovative medicine, and new technologies to the benefit of patients worldwide.

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FOCUS

RESEARCH
Using Artificial Intelligence to Improve Patient Care
UCLA vision scientists are harnessing AI computer algorithms to provide enhanced ability for physicians to predict disease progression and outcomes for their patients.

COMMUNITY OUTREACH
Providing Free Eye Care for Our Most Vulnerable
UCLA Mobile Eye Clinic programs bring access to eye care for under-resourced and medically underserved populations throughout Los Angeles County.

PATIENT PROFILE
Stein Eye Surgeon Saves Photographer’s Vision and Career
A photographer of movie stars and royalty was losing his ability to see until Dr. Mitra Nejad saved his sight and his ability to do the work he loves.

EDUCATION
Cataract Surgery Essentials
Dr. Kevin Miller and colleagues provide in-depth cataract surgery training to ophthalmologists in Southern California.

On the cover: A gently curving path leads to the Edie & Lew Wasserman Building (left) and the Jules Stein Building, which grace the Stein Eye Institute vision-science campus. Photo: Robin Weisz
When Emmanuel Williams, a student at Oakwood University in Huntsville, Alabama, came to UCLA in the summer of 2021 to conduct research on the relationship between glaucoma and exposure to steroids, the experience was the beginning of a new direction in education for the undergraduate.

“This was my first hands-on opportunity for research—it was challenging, but it opened my eyes to issues in science I hadn’t been aware of,” says Mr. Williams, a biology major.

Mr. Williams’s studies at UCLA were made possible by funding from a program coordinated by a partnership between the University of California and Historically Black Colleges and Universities (HBCU) to increase the number of African Americans in research. The grant was secured by Jie J. Zheng, PhD, professor of ophthalmology, Sophie X. Deng, MD, PhD, Joan and Jerome Snyder Chair in Cornea Diseases, and JoAnn S. Roberts, PhD, a postdoctoral fellow. In summer 2021, undergraduate students Matthew Dye and Chelsea Thomas, in addition to Emmanuel Williams, came to the Stein Eye Institute to work on original research in the laboratories of Drs. Zheng and Deng.

The UC-HBCU program is one of a broad range of initiatives that are integral to the university’s expanding programs of “EDI” (equity, diversity, and inclusion)—an initiative that is expanding Stein Eye’s already-extensive involvement in the issues of access in America.

“We are constantly reevaluating, reflecting, and reimagining how we can build a stronger sense of community based on EDI principles. We can’t just rest on our past success—we need to keep looking forward and say: what can we do now to be even better?”

LYNN K. GORDON, MD, PHD

The Institute’s initiatives for equity, diversity, and inclusion are creating new programs that address how EDI can be more integral to every level of the Institute’s work.
A heritage of inclusion
The current drive for new EDI initiatives has evolved after more than a half-century of involvement in diversity as a foundation of health care as a human right. Building on that philosophy is a thriving university-wide program to strengthen the core values of justice, equity, diversity, and inclusion as inseparable goals in health care, research, education, recruitment, and community engagement.

Although UCLA has been readdressing these issues of diversity for several years, the need to expand EDI at every level of the university was underscored more recently by the dual crises of the COVID-19 pandemic and social protests across the nation after the murder of George Floyd by a Minneapolis police officer in the spring of 2020.

“UCLA has always been a leader in creating a climate of diversity,” says Lynn K. Gordon, MD, PhD, professor of ophthalmology emeritus and the first senior associate dean of equity and diversity inclusion in UCLA’s David Geffen School of Medicine. “Before the pandemic and before Mr. Floyd’s death, we had already been working with campus organizations about the need for developing more targeted efforts in EDI. The spread of the pandemic and the civic unrest were pivotal milestones that amplified the need for enriching those plans.”

“Diversity and inclusion are linked directly to our institutional goals of excellence for health care, research, education, and community engagement,” Dr. Gordon says. “Our goal is leadership in eliminating health care disparities while delivering high-quality patient care, and building an inclusive environment for our faculty, staff, and residents, as we serve the diverse communities around us.”

EyeEDI: new programs to build on previous commitments
To accomplish those objectives, units across UCLA have been creating a host of new EDI initiatives.

At the Stein Eye Institute, these projects are developed by EyeEDI, a committee of faculty, residents, and staff, directed by Dr. Deng.

“Diversity, equity, and inclusion are foundational principles that are central to the fulfillment of the Institute’s mission,” says Dr. Deng. “The EyeEDI Committee is developing strategies that complement the existing diversity initiatives within the School of Medicine to build a community in the Institute that is equally diverse and inclusive.”

Five years of new milestones
The early results of the committee’s work have produced a five-year plan of programs that will increase the Institute’s engagement in its EDI commitment. Three priorities are:

- Creating a more inclusive climate and an increasingly diverse corps of residents and faculty;
- Modifying existing mentorship programs to better tailor the needs of trainees, junior faculty, and underrepresented minorities; and
- Improving the existing process to provide everyone in the Institute with equitable opportunity for growth.

“The idea is to make inclusion and equity integral to everything we do,” says Dr. Deng. “Our plans are aggressive, and we are looking at the broadest questions of how EDI can be more integral to every level of the Institute’s work.”

Emmanuel Williams investigates steroid-induced glaucoma at Stein Eye. His research poster on this topic won first place in the UCLA UC-HBCU Neuroscience Track 2021 Summer Program.
An emphasis on access to care

The Institute's efforts for EDI also extend into the role of Stein Eye services in the community.

“Our EDI agenda is expanding on issues that UCLA had taken on for years: working to improve medical care for the segments of the population that are underserved, less healthy, and have much higher percentages of chronic illness and conditions that are purely a function of lack of access,” says Dr. Deng.

Such plans for EDI are crucial to increasing the number of doctors who originally came from underserved communities, and who often return for their medical practices.

“The data show that doctors tend to return to and treat patients in the communities where they came from,” says Dr. Deng. “So it is vital to build even more aggressive programs to train ophthalmologists from underserved communities, which will have a significant impact on increasing access to eye care.”

A stronger sense of community

With many EDI programs unfolding and short-term projects already in place, the Institute's goals for EDI are evolving quickly. But the process is—and will always be—an ongoing challenge.

“We are constantly reevaluating, reflecting, and reimagining how we can build a stronger sense of community based on EDI principles,” says Dr. Gordon. “We can’t just rest on our past success—we need to keep looking forward and say: what can we do now to be even better?”

For more information about equity, diversity, and inclusion programs at the UCLA David Geffen School of Medicine and the Stein Eye Institute, visit: medschool.ucla.edu/equity-diversity-inclusion.
The issues of equity, diversity, and inclusion in health care—especially in eye care—are vividly emphasized in a study authored by Dr. Samuel Masket, UCLA Department of Ophthalmology clinical professor and volunteer faculty member, with contributions from faculty colleagues Drs. Lynn Gordon and Stacy L. Pineles, and Stein Eye residents, Drs. Anh Pham, Andrea Yonge, and Andres Parra.

The study, Impact of Race and Inequities in Eye and Health Care, published in the May 19, 2021, issue of the American Academy of Ophthalmology newsletter Scope, highlights the problems of blindness and public health—issues especially impactful in underrepresented populations and underserved regions. For example, diabetes, a primary contributor to blindness, is twice as likely to occur in the African American population compared to whites. African Americans reported a higher incidence of diabetes-related vision loss compared to whites from 2016 to 2017 (among whites, vision loss declined during that period).

Hispanics have the greatest incidence of vision impairment. African Americans reported the highest per capita overall rate of blindness and visual impairment of all racial groups in children and adolescents.

The medical issues are compounded by less access to care and fewer clinicians of color—a disparity that spills over into eye care practitioners: The data reported that approximately 6 percent of ophthalmologists in the U.S. are from underrepresented populations—one-fifth of the 31 percent of the U.S. population that is from minority groups.

One solution to supporting community eye care can be found in the Institute’s ongoing mission of supporting increased recruiting of underrepresented faculty and residents: growing numbers of minority practitioners improve access to eye care in underserved communities, because recent history shows that these physicians are likely to practice in those communities.

“Access to care improves,” noted the report, “when the physician community reflects the local population at large. Recruiting more underrepresented minority medical students to the field of ophthalmology and supporting those already in residency programs will help start to decrease health care disparities and inequities in the U.S.”

Read the full study at: aao.org/scope.

“Of all the forms of inequality, injustice in health care is the most shocking and inhuman.”

MARTIN LUTHER KING, JR.
Dr. J. Bronwyn Bateman Gives UCLA $10 Million to Establish a Center for Ocular Genetics

J. Bronwyn Bateman, MD, former professor of ophthalmology and pediatrics at the David Geffen School of Medicine at UCLA, has made a $10 million contribution to establish an ocular genetics center at the UCLA Stein Eye Institute, advancing ocular genetics research and care. The gift includes funding for center start-up costs and an endowment to support an endowed chair, future research projects, and greatest needs of the center, as determined by the center director.

“As a long-standing partner of Stein Eye, Bronwyn has helped advance many of our vision programs,” says Bartly J. Mondino, MD, director of the Stein Eye Institute and chair of the Department of Ophthalmology. “We are grateful for this contribution, which will help position UCLA at the forefront of ocular genetics research and accelerate interdisciplinary science, innovative medicine, and new technologies to benefit patients worldwide.”
Many genetic disorders affect the eyes and can be complex. Ocular genetics, a priority area for the Stein Eye Institute and for the David Geffen School of Medicine, addresses the genetic contribution to ophthalmic disease and includes studies to understand the patterns and risks of inheritance, accurate diagnosis and prognosis, and the development of therapies to treat genetic abnormalities. The center, to be named the UCLA J. Bronwyn Bateman Center for Ocular Genetics in honor of Dr. Bateman’s gift, will advance the clinical and translational science in this area of ophthalmology. “As one of the first major centers of its kind in the United States, the UCLA J. Bronwyn Bateman Center for Ocular Genetics will be a basis for growth and will make a significant impact,” says Dr. Mondino.

“Through collaborations across the UCLA campus, the new center will leverage the study of ocular genetics and precision medicine to drive breakthroughs,” says Dr. Bateman. “It will complement the UCLA Stein Eye Institute’s overall mission to preserve and restore vision through the prevention and treatment of eye disease, eradicate preventable blindness, and train the next generation of exceptional vision specialists. The funding will further the work of key UCLA faculty researching ocular genetics and provide for the recruitment of a center director.”

Dr. Bateman and Stein Eye faculty colleagues, Drs. Joseph L. Demer and Michael B. Gorin, as well as Drs. Wayne Grody (Departments of Pathology & Laboratory Medicine, Pediatrics, and Human Genetics) and Derek Wong (Department of Pediatrics), advanced steps in this direction in 2021 with introduction of a medical genetics track in the Stein Eye Institute’s Specialty Training and Advanced Research (EyeSTAR) program. This new track offers ophthalmology residency training in tandem with training by the UCLA Intercampus Medical Genetics Training Program, leading to Clinical Genetics and Genomics certification by the American Board of Medical Genetics and Genomics.

As an early achievement, Dr. Bateman marched as a majorette in the Rose Parade with the Long Beach High School Band. She started her career at Hody’s Restaurant in Long Beach as a carhop. She then attended the University of California, Berkeley for her BA degree and Columbia University College of Physicians and Surgeons for her medical degree. She did an internal medicine internship at UCLA and subsequently her residency at the Stein Eye Institute and fellowships in pediatric ophthalmology (UCLA Drs. Leonard Apt and Arthur Rosenbaum, and National Children’s Medical Center with Dr. Marshall Parks). She did an additional fellowship in ophthalmic genetics with Dr. Irene Maumenee at the Wilmer Eye Institute and subsequently became board-certified in clinical genetics. Returning to UCLA, she became a professor of ophthalmology and pediatrics and then moved to the University of Colorado School of Medicine in 1995 as chair of the Department of Ophthalmology, the first woman chair in any department. Dr. Bateman raised funding to build the Rocky Mountain Lions Eye Institute at the University of Colorado and to establish an endowed professorship. She became the first woman president of the Association of University Professors of Ophthalmology and served as president of the Pan American Association of Ophthalmology. She is also a member of the American Ophthalmological Society.

Dr. Bateman has a long-standing interest in Nicaragua and served as the Honorary Consul from Nicaragua to the state of Colorado for many years.

As a young resident at the Stein Eye Institute, Dr. Bateman faced tragedy when her husband, Roderick K. Smith, was diagnosed with mesothelioma, an asbestos-related cancer, during his residency in orthopedics at UCLA. He died after an 11-month battle with the disease, during which Stein Eye provided a great sense of community for Dr. Bateman. She credits the professional opportunities offered by Bradley R. Straatsma, MD, JD, founding director of the Stein Eye Institute and founding chair of the Department of Ophthalmology, and Dr. Mondino as pivotal in her career. Her previous gifts to Stein Eye include an endowed chair in her mother and grandmother’s names, as well as an endowed chair in her husband’s name “to give him the legacy he could not create.” Dr. Bateman, a UCLA alumna resident and fellow, currently serves as a volunteer faculty member and as president of the UCLA Ophthalmology Alumni Association.
Since the 1940s, when British mathematician and computer scientist Alan Turing developed what became known as the Turing Test to determine whether computers could mimic human responses to questions, the concept of teaching machines to “think” like people has held enormous potential. In recent years, breakthroughs in computer processing have turned the promise of artificial intelligence (AI) into reality, with applications already beginning to transform fields as wide-ranging as marketing, finance, agriculture, and health care.

Within medicine, ophthalmology has been a leader in the development of AI for clinical use, leveraging the advances in computing power and the ability to develop multilayered networks that can generalize to disparate data sets. The first two AI algorithms cleared by the U.S. Food and Drug Administration (FDA) were for diabetic retinopathy screening, including one in which the UCLA Department of Ophthalmology played a prominent role.

“The progress we have seen in recent years using AI algorithms in ophthalmology has shown us what is possible as this area of research continues to develop,” says Bartly J. Mondino, MD, chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute. “Through the expertise of top vision scientists, such as those at UCLA, AI will figure prominently in future advances in the diagnosis and treatment of eye diseases.”

“AI can make us all better doctors,” says SriniVas R. Sadda, MD, UCLA professor of ophthalmology and director of artificial intelligence and imaging research at the Doheny Eye Institute. “Computer algorithms will support better-informed decision making. We can train a computer on 10,000 examples of a disease that I, as a clinician, might have only seen 10 or 100 examples of, amassing all of the knowledge that has been captured from different sources to provide a physician-assist tool that will make us better diagnosticians and prognosticators for our patients.”

Dr. Sadda leads a research team that is harnessing AI to automate the image-analysis process in ophthalmology. His group’s image-reading center is intended to use AI to bring greater efficiency and more detailed information to the process of analyzing ophthalmologic images in the context of clinical trials. Recently, Dr. Sadda and his colleagues have moved to automation for other applications, including diabetic retinopathy screening. A series of National Institutes of Health-sponsored grants, in collaboration with Eyenuk, Inc., culminated in the 2020 FDA clearance of the company’s EyeArt system using AI for autonomous detection of referral-warranted diabetic retinopathy, which is now being deployed in various screening environments in the United States and worldwide.

Currently, Dr. Sadda’s group is working with researchers in UCLA’s Department of Computational Medicine to take image data that has been collected and analyzed by human experts and use it to support the development of an automated system for detecting biomarkers and other factors that can predict disease progression and outcomes for patients. In Dr. Sadda’s main focus area of age-related macular degeneration, he and his colleagues have identified a number of markers that can predict which patients are at risk of progressing to advanced disease and losing vision, and have begun training an AI system to make the same predictions.

“For something like diabetic retinopathy screening, the advantage of training AI algorithms to replicate the performance of human experts is that it allows us to bring this expertise anywhere, including in communities without a retina specialist,” Dr. Sadda explains. “But there’s no question that we can also learn novel things in applying AI to images that, even as experts, we might not have recognized.”

AI can also provide decision support for clinicians at top vision centers such as the UCLA Stein Eye Institute and the Doheny Eye Centers UCLA. Shawn R. Lin, MD, medical director of Stein Eye Center–Calabasas
and assistant clinical professor of ophthalmology, is conducting research aiming to eliminate as much of the unknown as possible from cataract surgery in order to improve on the accuracy of results. “90 percent of the outcome of cataract surgery is within the surgeon’s control, but 10 percent is not, and part of that involves not being able to predict how patients will heal,” Dr. Lin explains.

During his training, Dr. Lin began developing AI-driven lens power formulas. As a faculty member, he has led a team that has continued to refine those formulas. His goal is to make the data open source. “Most of these lens formulas have been developed by people who have a lot of data,” Dr. Lin says. “But there hasn’t been a standard benchmark against which these formulas can be compared. We hope to assemble a massive database of lens-power data and outcomes from those surgeries, and make it freely available.” Among other things, this would allow top minds, even outside the field of ophthalmology, to work on these formulas. Moreover, Dr. Lin explains, with a public database, anyone developing a formula could use the benchmark to enhance their own algorithms.

At a 2021 UCLA panel on AI, Eleazar Eskin, PhD, professor and chair of UCLA’s Department of Computational Medicine, which is collaborating with the Department of Ophthalmology on AI studies, said that ultimately AI promises to help researchers quickly interpret massive amounts of data, pointing to important public health trends so as to better inform research and clinical priorities. A leading institution such as UCLA is well positioned to capitalize. Dr. Eskin noted that within the UCLA Health System, there are 2 million individuals with electronic health records and tens of thousands of patient DNA samples, along with 1,500 imaging studies collected every day. This creates exciting opportunities to apply AI technologies to improving patient care.

“Computer algorithms will support better-informed decision making. We can train a computer on 10,000 examples of a disease that I, as a clinician, might have only seen 10 or 100 examples of, amassing all of the knowledge that has been captured from different sources to provide a physician-assist tool that will make us better diagnosticians and prognosticators for our patients.”

SRINIVAS R. SADDA, MD

Dr. Lin foresees two categories of advances that AI can drive. “One is essentially doing something as good as, or ideally even better than, a human being,” he says. “But the other is doing things that humans can’t do. For example, there was a Google study showing that AI could predict with a high degree of certainty whether someone is a smoker, or their sex, from a photo of their retina. Humans can’t currently do that, but AI can offer some clues as to how that’s done. If AI can determine the status of someone’s systemic hypertension from an image, for example, then we know it’s possible and we can start looking for the key markers that give us that information. “So in some ways, we develop AI, and in some ways AI can help to develop us.”
Community Outreach

Providing Free Eye Care for Our Most Vulnerable

The Stein Eye Institute Center for Community Outreach and Policy’s UCLA Mobile Eye Clinic (UMEC) program, directed by Anne L. Coleman, MD, PhD, The Fran and Ray Stark Foundation Chair in Ophthalmology, screened and/or examined 1,734 children and adults from July 1–November 17, 2021, and made 96 trips to bring access to eye care for under-resourced and medically underserved populations throughout Los Angeles County.

Los Angeles Dodgers Foundation
In the first half of fiscal year 2021–22, UMEC collaborated with influential organizations, including the Los Angeles Dodgers Foundation where they attended four events and provided free vision care services for 106 patrons. UMEC is participating in Los Angeles Dodgers events in spring and summer 2022, performing eye health screenings for a third year.

Health fairs
In the first half of the fiscal year, UMEC attended six health fairs serving 149 patients. UMEC found 73 cases of refractive error, 30 cataracts, 11 glaucoma suspects, and 40+ other diagnoses where further care or treatment is needed. For these health fairs, UMEC collaborated with a variety of student, government, and community organizations, such as UCLA Filipinos for Community Health, American University for Health Sciences Foundation, and the City of Maywood. We are passionate about providing compassionate and culturally aligned care with a significant impact throughout the Los Angeles community.

Percent Pledge and Dexcom
UMEC had an exciting collaboration with Percent Pledge and Dexcom over summer 2021. Percent Pledge creates customized workplace charity programs so companies can donate to any charity and/or volunteer in their local communities. One of Percent Pledge’s newest companies, Dexcom, makes continuous glucose monitoring systems for diabetes management. With UMEC and Percent Pledge’s help, Dexcom planned a volunteer project for their summer interns. Knowing that diabetes is one of the leading causes of blindness, the Dexcom interns created valuable educational materials for children and adults in multiple languages about diabetes and how it affects the eye. Resources included pamphlets, flyers, healthy cooking recipes, and even 3D models of diabetic retinopathy.

Stein Eye faculty and staff participate in a free vision-screening event at Dodger Stadium.

In addition to being a mobile eye clinic, UMEC serves as a training ground for first-year David Geffen School of Medicine students to have an immersive and real-life clinical and community experience. This learning opportunity helps medical students become more informed and empathetic health care providers.
Early Authentic Clinical Experience (EACE) Program

We are excited to announce a new academic program in collaboration with the David Geffen School of Medicine at UCLA. The EACE program engages first-year DGSOM students in an immersive and real-life clinical and community experience. The on-site component of EACE consists of 12 visits on the UMEC from October 2021–July 2022. The goal of EACE is to have students add value to their site by working collaboratively with the site team to advance the health and health care goals of the underrepresented and vulnerable communities UMEC serves.

Through experiential learning with UMEC, students learn to be compassionate, knowledgeable, and self-aware care providers with the skills and personal strengths necessary to deliver collaborative care with cultural humility. This experience gives students a firsthand introduction into the important eye care services provided to underserved groups of great need in our local Los Angeles community, while also giving them opportunities to interact with potential future mentors. Because UMEC also has ongoing partnerships with community organizations providing services to individuals experiencing housing insecurities throughout Los Angeles County, there will also be experiences available to assess social determinants of health as they relate to eye diseases that cause vision impairment and blindness.

For information about upcoming UMEC events and how to participate, email: community@jsei.ucla.edu.

From July 1–November 17, 2021, UMEC screened and/or examined 1,734 children and adults, and made 96 trips to bring access to eye care for under-resourced and medically underserved populations throughout Los Angeles County.

UMEC provides free eye care screenings at events across the Southland, including Dodger Stadium, health fairs, schools, senior centers, and homeless shelters.
AAO 2021 Award Recipients

Faculty and alumni from the UCLA Department of Ophthalmology were honored for their contributions to the profession at the November 12–15, 2021, American Academy of Ophthalmology annual meeting in New Orleans, Louisiana.

Senior Achievement Award
Kam Lung Kelvin Chong, MD, International Fellow 2008–10

Achievement Award
Elena Bitrian, MD, International Fellow 2008–11
Allen Chiang, MD, Resident 2006–09
Helen L. Kornmann, MD, PhD, Resident 2007–13
Erin B. Lessner, MD, Fellow 2014–16
Alpa S. Patel, MD, Fellow 2000–01
Lucy Q. Shen, MD, Resident 2005–08 and Fellow 2008–09

Secretariat Award
Gary N. Holland, MD, Faculty
Catherine J. Hwang, MD, Volunteer Faculty

Dr. Michael Trese Honored with AAO Laureate Award
Stein Eye resident alumnus (1977–80) Michael T. Trese, MD, received the 2021 Laureate Award, the Academy’s highest honor. It is bestowed for exceptional contributions to the prevention of blindness or restoration of sight and has been given only 21 times in the Academy’s history. (Stein Eye founder, Bradley R. Straatsma, MD, JD, was recipient of the Laureate Award in 2010, and Stephen J. Ryan, MD, past president of the Doheny Eye Institute, was honored in 2012.)

Dr. Trese is considered as “the father of modern pediatric retinal surgery,” said Academy CEO, David W. Parke II, MD, adding that the work of Dr. Trese has led to a profound change in the management of retinal detachments in children, saving the sight of thousands throughout the world who suffered from retinal detachments due to retinopathy of prematurity.

Recognized as a “Living Legend in Ophthalmology” in the August 2021 Indian Journal of Ophthalmology, Dr. Trese is described as among the most impactful retinologists of our time—a beloved innovator and translational scientist who has helped train leading pediatric surgeons worldwide.

Faculty Honors
Anthony J. Aldave, MD, Walton Li Chair in Cornea and Uveitis, gave the Hustead Memorial Lecture at the 35th annual Ophthalmic Anesthesia Society Scientific Conference in Chicago, Illinois, on September 11, 2021.


Dr. Demer was also elected and is now serving as ARVO Trustee for Eye Movements, Strabismus, Amblyopia, and Neuro-ophthalmology, 2021–26.

Simon Fung, MD, assistant professor of Ophthalmology, was a group recipient of the 2021 American Academy of Ophthalmology Special Recognition Award. The prize was presented to the AAO Young Ophthalmologist Committee for outstanding service that improves the quality of eye care.

Robert Alan Goldberg, MD, Bert O. Levy Endowed Chair in Orbital and Ophthalmic Plastic Surgery, Justin Karlin, MD, MS, health sciences assistant clinical professor, and Shoaib Ugradar, MD, health sciences clinical instructor, were recipients of the American Society of Ophthalmic Plastic and Reconstructive Surgery research award on November 12, 2021, for their contributions to the scientific paper “Photochemical Collagen Cross-Linking Reverses Elastase-Induced Mechanical Degradation of Upper Eyelid Tarsus.”

Kevin M. Miller, MD, Kolokotrones Chair in Ophthalmology, gave the keynote lecture “Artificial Lens Implantation” at the All Gujarat Ophthalmological Conference on October 10, 2021, in Gujarat, Mehsana, India.

Bartly J. Mondino, MD, Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology, director of the Stein Eye Institute, and chair of the UCLA Department of Ophthalmology, was formally recognized by The Karl Kirchgessner Foundation on December 20, 2021, for his contributions to the Foundation’s charitable activities over the past quarter of a century.

The honor reflects Dr. Mondino’s stewardship of the UCLA Mobile Eye Clinic, which has provided vision services to over one hundred thousand economically disadvantaged patients during his tenure; Dr. Mondino’s establishment and administration of the Basic Vision Research Project, which provides support to young researchers; and Dr. Mondino’s establishment and administration of the Karl Kirchgessner Foundation Chair in Vision Sciences, which promotes basic-science research initiatives.

Stacy L. Pineles, MD, Jerome and Joan Snyder Chair in Ophthalmology, presented the keynote address at the annual Kaye Symposium on September 17, 2021, in Saskatoon, Saskatchewan.
Gary H. Travis, MD.
Charles Kenneth Feldman Chair in Ophthalmology, received the 2021 RPB Stein Innovation Award. Funding will allow Dr. Travis to create a new zebrafish model for Stargardt disease (the most commonly inherited single gene retinal disease) in order to assess the role of the gene's encoded protein on photoreceptor function, which is essential for sight.

Edmund Tsui, MD, assistant professor of ophthalmology, received a K23 Career Development Award on September 1, 2021, from the National Eye Institute. The award provides $1.2 million over five years in support of Dr. Tsui’s research on “Objective Measures of Intraocular Inflammation in Pediatric Anterior Uveitis.”

Dr. Tsui also received a Pfizer Competitive Research Program Award on September 12, 2021, for funding of $150,000 over two years for his project “Imaging Biomarkers in Juvenile Idiopathic Arthritis-Associated Uveitis.”

In addition, Dr. Tsui was selected as an Emerging Vision Scientist (EVS) by the National Alliance for Eye and Vision Research. He participated in the EVS Day program on September 22, 2021, a vital component of professional development as it trains the next generation of vision research advocates.

**Enhancing Residency Training in Vietnam**

Simon Fung, MD, assistant professor of ophthalmology, is taking the lead in advancing the education of young ophthalmologists in Vietnam.

A cornea and anterior segment specialist, Dr. Fung is a staff ophthalmologist for the UCLA Mobile Eye Clinic and an active member of ophthalmic societies. He also volunteers with Visionaries International (VI), a non-profit organization founded by Anthony J. Aldave, MD, Walton Li Chair in Cornea and Uveitis, training ophthalmic surgeons in basic and advanced forms of corneal transplant surgery.

Shortly after his first mission with VI at Ho Chi Minh City Eye Hospital (HCMCEH) in Vietnam, Dr. Fung realized that access to ophthalmic training is not a guarantee for residents and early career ophthalmologists in other countries. This inspired him to collaborate with faculty members at HCMCEH and the nearby University of Medicine and Pharmacy to redesign the HCMCEH residency curriculum in cornea and external diseases to provide residents with skill sets tailored to local needs.

Phase 1 in the curriculum’s development is detailing clinical knowledge and surgical ability residents would attain during their rotation. With recommendations from the International Council of Ophthalmology, the curriculum also incorporates wet-lab evaluation tools and prerecorded lectures by Stein Eye faculty.

In phase 2, Dr. Fung will deliver wet-lab training sessions and assess residents’ corneal surgical skills with assistance from local ophthalmic educators. He will also assess and refine the curriculum to further the ophthalmic residency-training program at HCMCEH.

For this work, Dr. Fung received a 2021 Young Eye Surgeon International Service Award from the American Society of Cataract and Refractive Surgeons. The award provides essential funding for procurement of surgical-training instruments and video-recording systems integral to the curriculum and the evolution of residency training in this region.
IN MEMORIAM

Gail Oppenheimer
1938–2021

Gail Oppenheimer, a longtime friend and supporter of the UCLA Stein Eye Institute, died peacefully at home on October 6, 2021. Gail and her husband of 23 years Gerald H. Oppenheimer, who passed away in 2021, were engaged philanthropists who contributed to innovative science at UCLA. The Oppenheimers established the Stein Eye Center for the Prevention of Eye Disease in 2002 with a $3.1 million pledge from the Gerald Oppenheimer Family Foundation. Seed funding from the Stein/Oppenheimer Endowment Fund has provided over $542.5 million in grants and helped more than 320 young scientists advance medicine. Mind-brain-body interactions are being explored at the Gail and Gerald Oppenheimer Center for Neurobiology of Stress and Resilience, where researchers are studying the biological mechanisms underlying the effectiveness of mind-body therapies.

“Gail and Gerald’s altruism have created exceptional programs that have jump-started hundreds of scientific investigations,” says Bartly J. Mondino, MD, chair of the Department of Ophthalmology and director of the Stein Eye Institute.

A native Californian, Gail graduated from Stanford University with a BA in English Literature. She loved art and travel and worked closely with her second husband, Charles Feingarten, in the operation of his gallery that housed a collection of master paintings and sculpture. Gail ran the Feingarten Galleries following Mr. Feingarten’s death in 1980 and until its closing in 2019.

Gail is survived by her children from her first marriage, Pablo and Alyce Woodward, and her stepsons Bill and Mark Oppenheimer.

Gail and Gerald Oppenheimer

Advocating for the LGBTQ+ Community

Peter A. Quiros, MD, is a founding member and leading voice of the American Academy of Ophthalmology (AAO) LGBTQ+ community. The group supports LGBTQ+ members in ophthalmology and is committed to advancing health equity and equality for patients and health care professionals.

“With the support of the Academy, our goal is to encourage discourse, build community, and create a space to connect around mentorship, research, and advocacy,” says Dr. Quiros, UCLA health sciences clinical professor of ophthalmology.

The community’s multi-pronged approach includes working in areas consisting of:

- **MENTORSHIP**: Connecting young ophthalmic trainees with more-senior LGBTQ+ mentors to help navigate challenges that might be encountered in an ophthalmic career.

- **EDUCATION**: Improving health care by educating colleagues about the LGBTQ+ community—chipping away at the health disparities and stigmas the population faces.

- **PARTNERSHIP**: The Minority Ophthalmology Mentoring program is a partnership between the AAO and Association of University Professors of Ophthalmology. The Program increases diversity, equity, and inclusion by connecting underrepresented students with mentorship, career planning, networking opportunities, and educational resources.

- **ADVOCACY**: The AAO current task forces addressing discrepancies include the Task Force on Disparities in Eye Care and the Task Force on Organizational Diversity and Inclusion.

The seed for this effort was planted by Anne L. Coleman, MD, PhD, The Fran and Ray Stark Foundation Chair in Ophthalmology, who served as 2020 president of the AAO. “I understand the importance of having every ophthalmologist, resident, and medical student feel welcome and supported by the AAO,” says Dr. Coleman. “It must be our goal to ensure we recognize and support their contributions to the field of ophthalmology and they are provided a safe forum to voice and advocate for issues specific to them. Under the leadership of Dr. Quiros, I expect this group to be a huge success.”
Institute News

New Faculty Appointments

Kirk Hou, MD, PhD
Assistant Professor of Ophthalmology

Dr. Hou specializes in the evaluation and treatment of vitreoretinal diseases including diabetic retinopathy, macular degeneration, and complex retinal detachment. He obtained his MD 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 a fellowship in vitreoretinal surgery at the UCLA Stein Eye Institute.

Dr. Hou has authored over 20 peer-reviewed publications and multiple book chapters. 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 has received multiple awards including the prestigious Heed Fellowship and the 2021 Fellow Teaching Award for the Stein Eye Institute ophthalmology residency program.

Dr. Hou teaches residents at Olive View–UCLA Medical Center and sees patients at the Doheny Eye Center UCLA–Pasadena.

Federico G. Velez, MD
Leonard Apt Endowed Chair in Pediatric Ophthalmology
Health Sciences Clinical Professor of Ophthalmology

Dr. Velez is a pediatric ophthalmology specialist who studies the mechanisms of congenital and acquired forms of strabismus. In addition, Dr. Velez conducts innovative 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.

Dr. Velez sees patients at the UCLA Stein Eye Institute in Westwood, the Stein Eye Center–Calabasas, and the Doheny Eye Center UCLA–Orange County.

Victoria H. Yom, MD
Health Sciences Assistant Clinical Professor of Ophthalmology

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. She regularly lectures at educational conferences and is an active member of the American Academy of Ophthalmology.

Dr. Yom provides care at the Doheny Eye Centers UCLA in Arcadia and Pasadena, and heads the Graft Versus Host Disease Clinic at City of Hope Comprehensive Cancer Center in Duarte.
Stein Eye Surgeon Saves Photographer’s Vision and Career

Thanks to two women: his wife, Pam Sennet, a nurse at Ronald Reagan UCLA Medical Center, and Mitra Nejad, MD, the UCLA eye surgeon whom Pam insisted her husband see, Mr. Sennet’s vision has returned to 20/20.

Dr. Nejad confirmed it was cataracts and not glaucoma affecting Mr. Sennet’s eyesight, and therefore, his vision loss was not irreversible. She performed two surgeries to remove the cataracts clouding Mr. Sennet’s eyes.

“I love caring for photographers because they really appreciate how colors and contrast vividly improve after cataract surgery,” said Dr. Nejad, assistant clinical professor of ophthalmology. “Mark didn’t like wearing glasses during shoots, so I also managed his astigmatism, enabling him to focus better when taking photos.”

In appreciation to his surgeon for restoring his vision and career, Mr. Sennet auctioned off his most legendary images, including Dudley Moore, Steven Spielberg, and Mohammad Ali, and donated the proceeds to the UCLA Stein Eye Institute at a virtual event in 2021.

“I love caring for photographers because they really appreciate how colors and contrast vividly improve after cataract surgery.”

MITRA NEJAD, MD
Education

Cataract Surgery Essentials

To meet the demand for cataract surgery, Kevin M. Miller, MD, Kolokotrones Chair in Ophthalmology and chief of the UCLA Department of Ophthalmology Cataract and Refractive Surgery Division, presented the annual Cataract Surgery Essentials Course for Southern California residents and fellows.

Approximately 30 UCLA faculty and volunteer faculty members provided young ophthalmologists with a broad range of instruction, including a phacoemulsification wet lab and affiliated technologies dry lab. The course was sponsored by Alcon and held in-person at the JW Marriot Resort in Anaheim, California, on October 9, 2021.

The cataract surgery course has an almost 30-year history that has been made possible through industry support. For the first 20 years, Dr. Miller—who is also chair of the Cataract Clinical Committee for the American Society of Cataract and Refractive Surgery and co-chair of the American Academy of Ophthalmology Preferred Practice Patterns Committee, Anterior Segment Panel—organized yearly phacoemulsification courses for Stein Eye residents. Ten years ago, Dr. Miller joined forces with then UC Irvine Department of Ophthalmology Chair, Roger Steinert, MD, and other faculty at UCI, to offer a combined residency cataract surgery course, which was the birth of the current program offering both basic and advanced training. To date, 800 to 1,000 trainees have attended the courses, and many of the past attendees are now current course faculty.

Dr. Kevin Miller welcomes residents, fellows, and UCLA faculty instructors to the 2021 Cataract Surgery Essentials Course.
All in the “Stein Eye” Family

In addition to being on the cusp of new discovery, Stein Eye Institute laboratories also serve as a petri dish of a sort in fostering development of future leaders in medicine.

As an example, researchers in the Therapeutic Development in Ophthalmology Laboratory of Jie J. Zheng, PhD, professor of ophthalmology, had two papers published in winter 2021. The uniqueness of these two publications is that the lead authors of both were UCLA undergraduate students—participants in the Student Research Program, lower division courses that allow students to conduct independent research under the guidance of a faculty member.

Tarin Tanji, first author of the article “Age at Glaucoma Diagnosis in Germline Myocilin Mutation Patients: Associations with Polymorphisms in Protein Stabilities” published November 16, 2021, in Genes, and the article’s second author, Emily Cohen, are continuing their work in science. Tarin returned home to Hawai’i and is pursuing a Master of Public Health degree at the University of Hawai’i at Mānoa. (Tarin’s father, Dr. Troy Tanji, is an ophthalmologist who conducted his glaucoma fellowship at the Doheny Eye Institute, the Stein Eye Institute’s affiliate partner.) Emily is a medical student at Weill Cornell Medicine–Cornell Medical School.

Kim Graybeal, first author of “Characterizing the Metabolic Profile of Dexamethasone Treated Human Trabecular Meshwork Cells,” published December 9, 2021, in Experimental Eye Research, is a medical student at Albert Einstein College of Medicine.
S. Rodman Irvine Prize

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

Dr. Bateman has a long and valued history with the Department. She conducted her residency and clinical fellowship at the Stein Eye Institute and was a faculty member as a professor of ophthalmology and pediatrics. She now serves as a member of our volunteer clinical faculty and is president of the UCLA Ophthalmology Alumni Association.

Dr. Bateman has broken barriers in our profession. She specializes in ophthalmic genetics, a field she pursued before DNA was fully harnessed, to identify gene defects in hereditary diseases. She was chair of the Department of Ophthalmology at the University of Colorado School of Medicine—the first woman chair in any department. She raised the funds and built the Rocky Mountain Lions Eye Institute, and she served as the first director. In addition to being past president of the Pan-American Association of Ophthalmology, Dr. Bateman was the first woman president of the Association of University Professors in Ophthalmology. She is advancing her legacy at UCLA with two endowed chairs and establishment of the UCLA J. Bronwyn Bateman Center for Ocular Genetics at the Stein Eye Institute.

In Memoriam

Brian Ward, MD, PhD, FRCOphth, fellow alumnus (1978–79), died December 23, 2021, surrounded by family.

Dr. Ward founded the Retinal Diagnostic Center in 1980, with offices and clinics in Central and Northern California. He was born in Yorkshire, UK, where he received his primary and college education. He was awarded a Fulbright Scholarship for advanced studies and research at Indiana University and obtained his Master’s and PhD degrees in physiological optics. He taught in London for two years before becoming involved in aerospace medical research in Texas. He completed his MD degree at the University of Texas Medical Center in San Antonio.

Dr. Ward was a resident in the Department of Ophthalmology at Stanford University Medical Center and conducted a vitreoretinal diseases and surgery fellowship at the UCLA Stein Eye Institute. He was a Fellow of the American Academy of Ophthalmology, the Royal College of Ophthalmologists, and the Royal Society of Medicine of London, England.

Dr. Bronwyn Bateman was the first woman chair of the Association of University Professors in Ophthalmology (AUPO). Along with Dr. Bateman, also featured in this 2000 photo of the AUPO Board of Trustees is Dr. Bartly Mondino (back row, far right).
2021 Stein and Doheny Alumni Reception

Alumni from the Stein and Doheny Eye Institutes attended an in-person reception in New Orleans, Louisiana, on November 14, 2021. The UCLA Ophthalmology Alumni Association hosted the joint reception, which is held annually during the American Academy of Ophthalmology meeting.

Bartly J. Mondino, chair of the UCLA Department of Ophthalmology, director of the Stein Eye Institute, and affiliation chair of the Doheny Eye Institute, was honored at the reception for his years of service.

(L to r): Dr. Bronwyn Bateman, president of the UCLA Ophthalmology Alumni Association and Stein Eye Institute alumna, meets up with alumni colleagues Drs. Francisco Rodriguez and David Lozano-Rechy.

(L to r): Drs. Joseph Demer and Federico Velez join Stein Eye colleague Dr. Anne Coleman.

(L to r): Drs. Alfredo Sadun, Bartly Mondino, and Michael Ip welcome friends and alumni of the Stein and Doheny Eye Institutes.

Doheny Eye Institute alumnus Dr. Sanjiv Kumar and his wife Roma Kumar.

Dr. Bartly Mondino greets Stein Eye alumnus and 1993–94 Alumni Association President Dr. George Rajacich.
(L to r): Dr. Stacy Pineles, residency director, gives a warm embrace to 2005–08 Stein Eye resident Dr. Yvonne Ou.

(L to r): Drs. Jonathan Young, Victoria Tseng, Alex Huang, and Siva Balasubramanian share a love of vision-science research.

(L to r): Dr. Peter Quiros, Alice Kim, Guy Jirawuthiworavong, and Sam Spiegel enjoy the evening’s festivities.

(L to r): Drs. Lynn Shi, Terry Hsieh, Abhinav Golla, and Gio Campagne spend time with a favorite faculty instructor, Dr. Uday Devgan.

(L to r): Dr. Bradley Straatsma, founding chair of the UCLA Department of Ophthalmology and founding director of the Stein Eye Institute, toasts the achievements of Dr. Bartly Mondino, current chair of the UCLA Department of Ophthalmology and director of the Stein Eye Institute.

Doheny Eye Institute resident and fellow alumnus Dr. Timothy Stout and his wife Ann Stout.