



Creating a Path to Equity in Ophthalmology

Progress and challenges as ophthalmologists work toward a more inclusive profession.

By Lorena Blas, Contributing Writer

PETER A. QUIROS, MD, PROFESSOR OF Ophthalmology at the David Geffen School of Medicine at the University of California Los Angeles (UCLA), is passionate about inclusion and diversity in ophthalmology. But developing confidence took time. He waited until he was comfortable as a senior resident before sharing that he is gay.

“I went into ophthalmology despite being gay. I certainly wasn’t out in my residency application because I was afraid of discrimination,” he said. “I had to wait until I had proven myself. Otherwise, I just felt that everything I did or said was going to be interpreted in a different light.”

Now Dr. Quiros advocates for LGBTQ+ and other colleagues who are underrepresented in ophthalmology. “Once I did come out, I felt that I needed to represent others by speaking out so that people like me could follow,” he said.

Diversity, equity, inclusion, and accessibility are all essential elements for the vitality and success of ophthalmology, according to the Academy’s Task Force on Disparities in Visual Health and Eye Care.¹ And a diverse and inclusive ophthalmic professional community where members support and recognize each others’ professional needs can foster better educational programs, improve mentoring opportunities and experiences, and build stronger partnerships. Ultimately, these tenets can lead to a more comprehensive under-

standing of eye diseases, advancing more effective treatments and improved patient outcomes, wrote experts from Harvard, Johns Hopkins University, the National Eye Institute, UCLA, the University of North Carolina, and Virginia Commonwealth University in a 2022 report in *Ophthalmology*, “Enhancing Diversity in the Ophthalmology Workforce.”²

The report was part of a collection of seminal papers published by the Academy’s Task Force on Disparities in Visual Health and Eye Care in 2022. It noted that underrepresentation is one of ophthalmology’s biggest hurdles and it provided data on underrepresentation of women, Black ophthalmologists, LGBTQ+ individuals, and some age groups within the profession. Two years after the publication of the papers, members involved in efforts to address diversity and inclusion discuss the profession’s progress and pain points. But first, some background on how ophthalmology compares to other medical specialties.

The State of Ophthalmology

A 2021 study indicated that ophthalmology departments remain among the least diverse in U.S. medical schools. When compared with 17 other clinical departments, ophthalmology ranked third-lowest in underrepresented minority faculty (6.8%). Only radiology (6.7%) and orthopedic surgery (6.1%) had a smaller percentage of under-

represented minority faculty. Departments with the greatest percentage of underrepresented minorities among faculty—that ranked in the top third of the list—included obstetrics (15.7%), public health and preventive medicine (14.3%), and pediatrics (11.1%).³

Another report in 2021, from the Association of American Medical Colleges, listed the number of active physicians who identified as Black or African American in each of 48 medical specialty categories and found that ophthalmology placed forty-third.⁴

Workforce diversity. While all medical specialties struggle to attract a diverse workforce, a 2022 Academy member snapshot of ophthalmologists willing to self-identify provided a more nuanced view of the field: 26% were women, 4.1% were Hispanic, and 2.7% were Black. The Academy represents 92% of U.S. practicing ophthalmologists, and the data from the survey were voluntary information provided by members.⁵

More Information on Education and Professional Development

Resources are available to support ophthalmology students and professionals—from medical school and residency to fellowship and mid- to late-career.

- The Academy's Diversity, Equity, Inclusion, and Accessibility information at [aao.org/diversity-equity-and-inclusion](https://www.aao.org/diversity-equity-and-inclusion)
- The Academy's 2022 collection of seminal papers on visual health and eye care at aajournal.org/deia
- The Academy's Minority Ophthalmology Mentoring program at aao.org/minority-mentoring
- Accreditation Council for Graduate Medical Education's "ACGME Equity Matters" at www.acgme.org/initiatives/diversity-equity-and-inclusion/ACGME-Equity-Matters/
- American Hospital Association's "Strengthening the Health Care Workforce" at www.aha.org/workforce-strategies
- American Medical Association's Health Equity Education Center at www.ama-assn.org/about/ama-center-health-equity
- Association of American Medical Colleges' "Advancing Diversity, Equity, and Inclusion in Medical Education" at www.aamc.org/about-us/equity-diversity-inclusion/advancing-diversity-equity-and-inclusion-medical-education
- National Medical Association's Rabb-Venable Excellence in Ophthalmology program at www.rabbvenable.com
- U.S. Department of Labor diversity and inclusion information at www.dol.gov/agencies/odep/program-areas/employers/diversity-inclusion
- Women in Ophthalmology at www.wioonline.org

Another study showed that when it comes to the age of those in practice, the distribution of ophthalmologists skews toward the older end of the spectrum, with approximately 38% of ophthalmologists over age 60 in 2021.⁶

The representation of LGBTQ+ individuals in ophthalmology remains largely unknown due to a lack of comprehensive data collection.⁷

Putting Equity Into Practice Early

Ophthalmology could benefit from a multifaceted strategy that strengthens a diversity-centered approach to recruitment and training, pay equity, and research opportunities, and that normalizes the visibility of diverse experts, said Leon W. Herndon, MD, Professor of Ophthalmology and Glaucoma Division Chief at Duke Eye Center, in Durham, North Carolina.

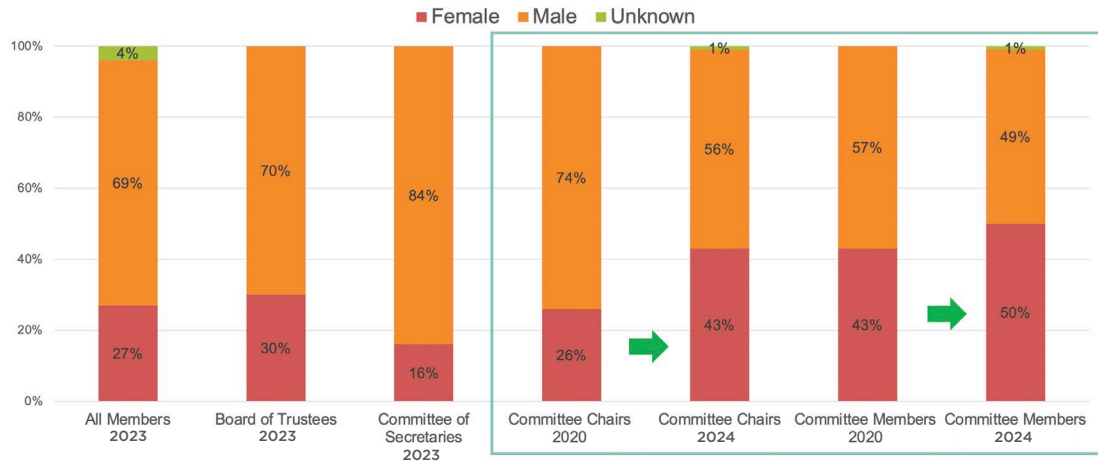
He has hope for the profession. "Over the past four or five years, there has been a significant increase in interest in ophthalmology among African-American and underrepresented minority trainees, and it's a positive trend," said Dr. Herndon.

At Duke's residency training program, Dr. Herndon said leadership is focusing on diversity and inclusion by building advisory boards that reflect diverse backgrounds. Duke's ophthalmology residency participates in the National Medical Association's Rabb-Venable Excellence in Ophthalmology Program, which selects top medical students, residents, and fellows from U.S. medical schools and ophthalmology residency programs to present their research in ophthalmology at the National Medical Association Annual Assembly. The program, named after pioneering Black ophthalmologists Maurice Rabb Jr., MD, ScD, and Howard Phillip Venable, MD, also offers travel grants.⁸

When underrepresented minority medical residents feel seen, ophthalmology thrives, said Dr. Herndon. "We need to make sure that trainees are comfortable that they're going to be respected."

Pathway challenges. Pathway challenges—meaning the conditions and problems that keep a diverse population of individuals from pursuing medicine—need to be addressed because they are critical to improving

Diversity by Gender Among Academy Leadership



LEADERSHIP AND GENDER. The graph illustrates the breakdown by gender among the Academy’s membership, the Board of Trustees, and the Committee of Secretaries in 2023. It also provides data on committee chairs and committee members between 2020 and 2024.

workforce diversity in ophthalmology, said Lisa D. Kelly, MD, MEd, Professor and Director of Medical Student Education in Ophthalmology and the Taylor Asbury, MD Endowed Chair in Comprehensive Ophthalmology at the University of Cincinnati and the University of Cincinnati College of Medicine, in Ohio.

Efforts should start early, in medical school, Dr. Kelly said. Yet, the *AMA Journal of Ethics* reports traditional metrics like grades and standardized test results may introduce biases, favoring medical school candidates with social power or specific educational backgrounds.⁹

Ophthalmology’s optics problem. Ophthalmology’s reputation and its limited visibility in medical school may discourage students from pursuing it. “The perception of ophthalmology as an extremely competitive field discourages underrepresented medical students from pursuing it, even before they have the opportunity to explore its many rewards,” said Dr. Kelly, who is Director of Medical Student Education in Ophthalmology at the University of Cincinnati and Chair of the Executive Committee of the Minority Ophthalmology Mentoring program, a partnership between the Association of University Professors of Ophthalmology and the Academy (see “The Minority Ophthalmology Mentoring Program,” next page).

She said the ophthalmology residency application process and the specialty’s smaller footprint in medical education—fewer mandatory courses compared with other specialties and limited speaker events, for example—discourage explor-

ation and perpetuate diversity problems.

“My job is to find people early in their medical school career and make sure that I get ophthalmology in front of them. I never want anybody to go through medical school and think ‘that would have been such a great specialty for me, but no one ever presented it to me,’” Dr. Kelly said.

In her role as Chair of the Executive Committee of the Minority Ophthalmology Mentoring program, Dr. Kelly assesses the metrics to refine the program and focuses on efforts to expand it.

She said that certain strategies can help encourage more medical students to pursue ophthalmology, including one-on-one counseling and mentoring encounters like those she organizes, or lobbying schools to host more lectures about the field.

Reaching medical students who are interested in helping underserved communities is also important. “We need to highlight that ophthalmology offers a meaningful space for those interested in health disparities and serving underserved communities,” said Elizabeth A. Fairless, MD, Chief Resident Physician in Ophthalmology at the Dean McGee Eye Institute at the University of Oklahoma, in Oklahoma City.

“While minority physicians can often be drawn to primary care and family medicine, we must show them that they can make a significant impact in ophthalmology, addressing the needs of their communities within this field as well,” said Dr. Fairless, a member of the Choctaw Nation of Oklahoma and an alumnus of the Minority Ophthalmology Mentoring program.¹⁰

Examining Unconscious Bias and Structural Racism

Unconscious bias and structural racism play profound roles in perpetuating health care disparities, and they can also deeply affect a medical professional's training and work. Unconscious bias, or implicit bias, is the automatic and often unintentional association and stereotype that someone can believe about a certain group of people.^{11,12} These biases can influence decision-making in health care settings between physicians and between doctors and their patients, and can lead to disparities in treatment recommendations, referrals, and patient interactions. Unconscious bias can manifest in various ways and, left unaddressed at the professional level, it touches every area of vision care, said Dr. Herndon.

“Leading organizations such as the Academy and academic medical centers should require that individuals who serve on selection or search committees be trained to mitigate implicit or unconscious bias during the selection process,” wrote Fasika A. Woreta, MD, MPH, Director of the Ophthalmology Residency Program and Associate Professor of Ophthalmology at Wilmer Eye Institute, at Johns Hopkins University School of Medicine, in Baltimore, and colleagues in one of the Academy's 2022 seminal reports.¹³

Unconscious bias can include mislabeling people, said Dr. Fairless, who has experienced this. “I've had people describe my background incorrectly because they assumed rather than asked,” she said. “I describe myself as White and Native American, more specifically a citizen of the Choctaw Nation.”

Dr. Kelly said ophthalmologists who work with medical students and residents should ask themselves questions such as: Do all residents presenting cases get the same level of attention and respect? When an underrepresented minority resident presents, are they interrupted more frequently with questions and comments compared with their peers? Are they mislabeled or described incorrectly when introduced? Such instances can be subtle manifestations of unconscious bias, she said.

Structural racism—the systemic and deeply ingrained policies, practices, and norms that perpetuate racial and ethnic disparities—can be an obstacle for underrepresented minorities. It can influence cost of education and subjective admissions processes, and can manifest in recruiting and hiring practices that favor certain groups.¹⁴ For example, 18.7% of the U.S. population is made up of Hispanic individuals, yet only 6.2% of accepted medical school applicants are Hispanic, Latino, or of Spanish origin. When the Academy surveyed

practicing members, half shared personal demographics—only 4.1% identified themselves as Hispanic.¹⁵

Developing cultural competency. To address unconscious bias and structural racism, “cultural competency and implicit bias training should be mandatory for all ophthalmologists, with curricula beginning early in medical education during medical school and residency,” wrote Ugochi T. Aguwa, MD, at the time a medical student at Johns Hopkins University School of Medicine, and colleagues in a 2021 *American Journal of Ophthalmology* editorial.¹⁶

Cultural competence can be defined in many ways, but generally, it means being able to respect values, attitudes, beliefs, behaviors, and traditions

The Minority Ophthalmology Mentoring Program

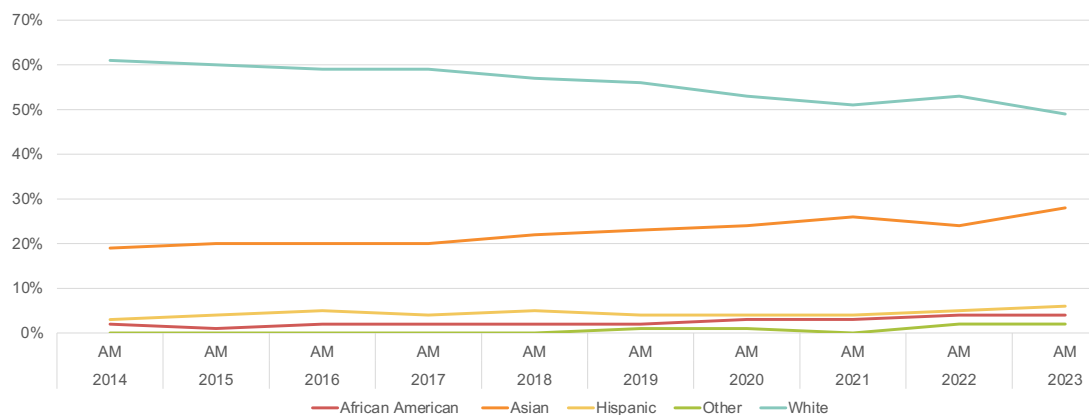
The Minority Ophthalmology Mentoring program is a partnership between the Academy and the Association of University Professors of Ophthalmology. The goal is to increase diversity in ophthalmology by helping underrepresented in medicine students become competitive ophthalmology residency applicants. Students receive mentorship, networking opportunities, and access to educational resources. In 2024, the program had its largest cohort of students applying for the match, and 27 students successfully matched into ophthalmology residency programs. The program consistently exceeds the national match rate for U.S. graduates. Since its inception, 67 students have successfully matched into 42 U.S. ophthalmology residency programs.

Learn more about the Minority Ophthalmology Mentoring program at aao.org/minority-mentoring.



IT'S A MATCH. In March 2024, Tiffani Spaulding celebrated her match to the University of Chicago. She participated in the Minority Ophthalmology Mentoring program.

Annual Meeting Speakers by Race and Ethnicity 2014-2023



LEADERSHIP AND ETHNICITY. *The Academy has tracked data on speakers by ethnicity at American Academy of Ophthalmology annual meetings from 2014 to 2023 in an effort to improve diversity.*

that vary across cultures, and to consider and respond appropriately to these differences, according to Georgetown University’s National Center for Cultural Competence.¹⁷

Dr. Quiros also emphasized the need for cultural competency in medical training and professional environments to address the unconscious biases that influence decisions or creep into conversations and other interactions between colleagues, patients, and students.

Shared responsibility. Dr. Fairless noted the concept of a “minority tax,” which refers to the additional responsibilities often placed on underrepresented faculty members in order to support their institution’s diversity, equity, inclusion, and accessibility efforts. “For example, you’re suddenly asked to be on this committee, do that task, and to mentor all the students,” in addition to a regular physician’s duties, she said. Dr. Fairless suggests that ophthalmology departments ensure a fair distribution of responsibilities among all faculty.

Ophthalmologists should be able to choose the initiatives, if any, they wish to participate in or lead, said Dr. Quiros, who taught an instruction course about LGBTQ+ cultural competency at AAO 2023 titled “Ophthalmology and the LGBTQ+ Community.” It covered multiple topics, including how to create an inclusive work environment.¹⁸ For example, asking someone about their “partner,” instead of their “wife” or “husband,” is more inclusive. He said, “Sometimes, people commit errors out of ignorance rather than malice.”

The Importance of Role Models and Mentors in Ophthalmology

A major challenge that aspiring ophthalmologists

face is a lack of role models who look like them, said Sally L. Baxter, MD, MSc, Assistant Professor and Division Chief for Ophthalmology Informatics and Data Science at the Shiley Eye Institute at the University of California San Diego (UCSD).

“Although the number of women in training is increasing, overall, the majority of practicing ophthalmologists are men. Also, many racial and ethnic groups are not well-represented among senior ophthalmologists. This can make it difficult for aspiring ophthalmologists to envision themselves in the field and can discourage them from pursuing this rewarding career,” said Dr. Baxter.

Dr. Fairless said her mentors were a driving force in her decision to become an ophthalmologist. Her interest in eye health is rooted in life experiences and a stint at an optometrist’s office early in her life. But during medical school—grappling with the decision of whether ophthalmology aligned with her commitment to address health disparities facing Native Americans—Dr. Fairless said she found a compass in her mentor Kristen H. Nwanyanwu, MD, MBA, MHS, Associate Professor of Ophthalmology and Visual Science at Yale School of Medicine, in New Haven, Connecticut.

“She is very passionate about and interested in issues around health disparities as well and was an example of how that interest does fit within the field,” said Dr. Fairless.

Relationships with mentors can become a lasting source of support and can lead to professional collaborations. Drs. Fairless and Nwanyanwu co-authored a 2021 *Ophthalmology* report that looked at diversity in medical school ophthalmology departments.¹⁹

Dr. Baxter said, “I was fortunate to have diverse

role models throughout my training, both at the University of Pennsylvania and here at UC San Diego.” She said, “Seeing strong women in leadership positions inspired me to pursue my own career in ophthalmology. I was very lucky to have several role models. I feel like East Asians are probably one of the more well-represented groups in ophthalmology.”

Dr. Baxter is optimistic, noting the impact of mentoring and training initiatives. “I’ve been a faculty mentor with the Minority Ophthalmology Mentoring program for several years,” she said. “Students get a lot of support when preparing for standardized exams. They have a whole program at the annual meeting where they get to do wet labs and have guided tours through different research sessions and [engage in] small group discussions with ophthalmology leaders in different areas. Last year, all of the applicants matched to an ophthalmology residency. So, I think that’s a huge success story.”

Affinity groups. Efforts beyond training environments are valuable, too. Dr. Baxter noted the importance of affinity groups, professional safe spaces for creating a more inclusive and equitable culture within a community. They support professional growth and leadership training, too.²⁰

In 2023, the University of Washington Medicine Office of Healthcare Equity hosted affinity groups on a quarterly (and for some, monthly) basis.²¹ At Duke Health, numerous affinity groups are offered, including one for mothers, a group for military members, and BLACKtivate, an affinity group with the goal to engage and retain Black talent. “The group is focused on providing a safe space where Black team members are seen, heard, and valued,” states the Duke website.²²

“These efforts are actively creating a more inclusive and supportive environment for everyone within the profession,” said Dr. Quiros, who added that colleagues with similar life experiences can learn from each other and share strategies for overcoming obstacles. Resources include an online network of LGBTQ+ individuals and allies who work in ophthalmology.²³

Raising profiles of women and other under-represented individuals. Leaders of some professional ophthalmology associations are recognizing gaps and working to address them. For example, one of the efforts the Academy Task Force on Organizational Diversity and Inclusion focuses on is assessing diversity in the organization’s physician leadership, committees, recognition programs, and presenters on the podium at Academy events. They collect data and use the information to rec-

ommend and develop strategies in which diversity and inclusion can be enhanced over time.

On the podium. The Academy Annual Meeting Program Committee and Subspecialty Day Advisory Committee developed Subspecialty Day and AAO 2023 programs with an increase in diversity in mind. Progress is happening. In 2023, 40% of speakers identified as female and 60% identified as male compared to 2014 figures, when 27% identified as female and 73% identified as male.²⁴

The Academy has also collected data on speakers by ethnicity at the Academy’s annual meetings over the past decade. The percentage of speakers who identify as Asian increased between 2014 and 2023 (from 19% to 28%). However, the percentage among speakers who identify as Hispanic, Black, and other has remained relatively flat.

The Jackson Memorial Lecture given by Eve J. Higginbotham, MD, during the AAO 2023 opening session was titled “Striving Toward Better Eye Health Beyond Our Waiting Rooms.” Other sessions at last year’s annual meeting included: “Walking Over a Flat Earth—A Jump Toward Diversity, Equity, and Inclusion”; “Glaucoma Care for All: Opportunities and Pitfalls of Artificial Intelligence”; and “Global Leaders in Ophthalmology: Lessons from the Sisterhood.”

As for overall membership, the Academy reported in 2024 that there’s increased diversity in membership and on many of its committees (see “Diversity by Gender Among Academy Leadership,” page 43). Overall Academy membership in 2023 was 69% male, 27% female, and 4% unknown compared to 76.5% male, 23% female, and 0.5% unknown in 2014.

As the American Glaucoma Society (AGS) put together the program for its annual meeting in March 2023, organizers were intentional about diversity as well. “We needed to have more young people, more underrepresented minorities, and more women on the stage,” said Dr. Herndon, AGS immediate Past President. “The speakers we want to have on our programs represent us. Every organization has to look at itself and see if its values and members are reflected by its programs.”

Empowering More Ophthalmologists

Technology is helping to dismantle walls that keep some ophthalmologists and trainees from important professional opportunities. Online medical meetings and trainings allow those working in remote, low resource communities to participate and learn when travel, cost, and time issues make it difficult for them to attend these opportunities in person. And language translation software and

voice-to-text programs allow medical students and physicians to “read” research and other documents that are not in their primary language. Telecommunication between rural physicians and urban specialists is also critical for those in rural practices.²⁵

More Than a Gesture

Dr. Quiros said, “A diverse team is more likely to solve a problem and likely to solve it faster and more efficiently, coming up with a better solution. And that’s true for all types of diversity, not just racial and gender and sexual orientation.”

Dr. Kelly highlighted an initiative at her medical school addressing health disparities that ended up bonding the team that treated patients. Ophthalmologists identified “silent zip codes” where there were barriers hindering patients from seeking care in Cincinnati. Recognizing the disparities faced by individuals in underserved neighborhoods, the ophthalmology team proactively went out into the communities, establishing satellites to bring care closer to patients. This effort improved access to care and fostered trust among ophthalmology department medical staff as well as the patients.

“I strongly believe that inclusivity should be part of everything that we do,” Dr. Kelly said of the practice of ophthalmology. “If there are barriers, whether due to trust issues or other reasons, we have an obligation to remove them to ensure that everyone can benefit.”

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Meet the Experts



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Relevant financial disclosures: None.



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Relevant financial disclosures: None.



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