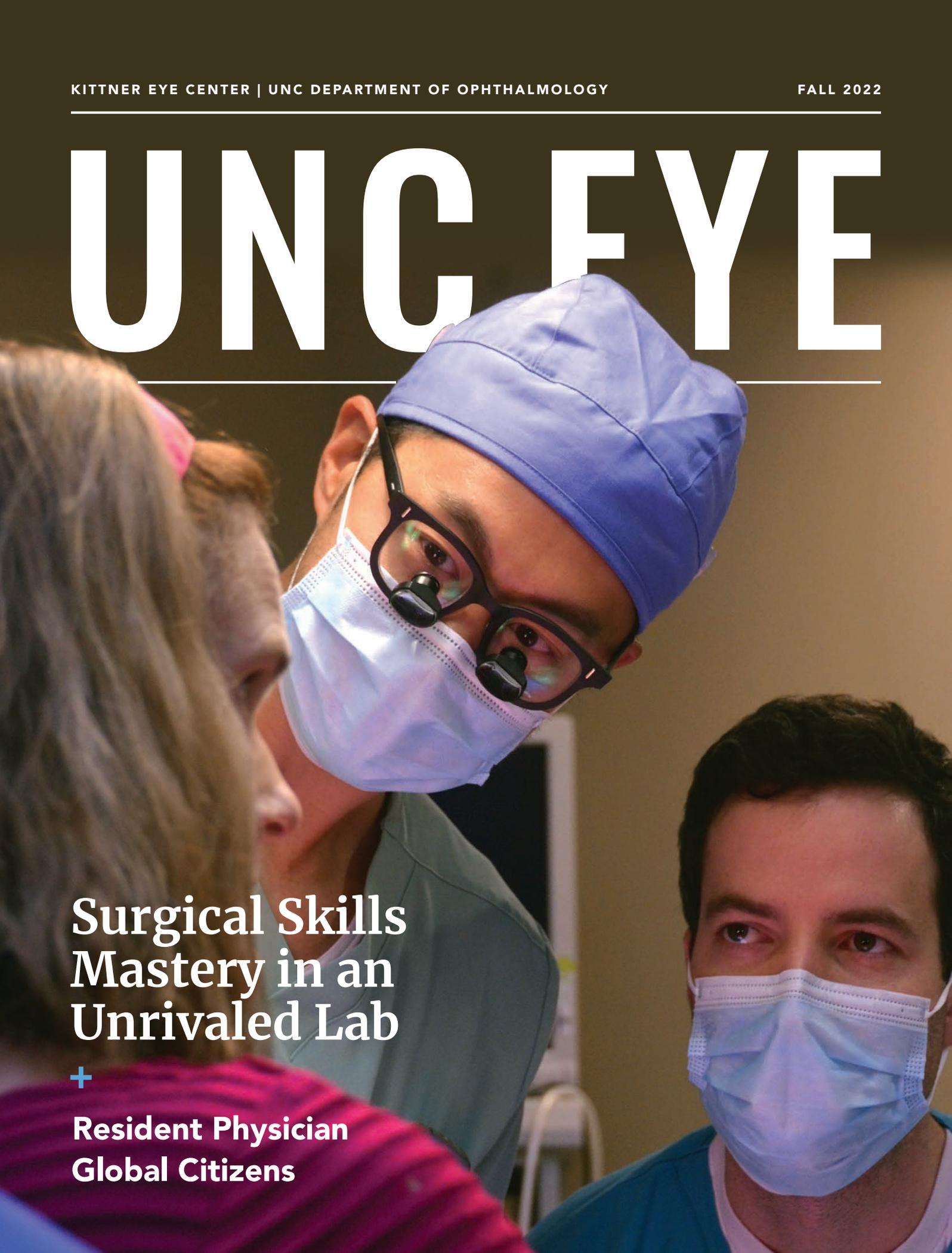


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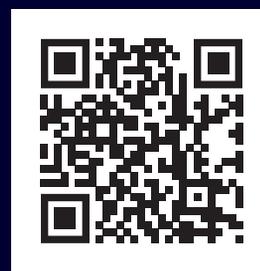
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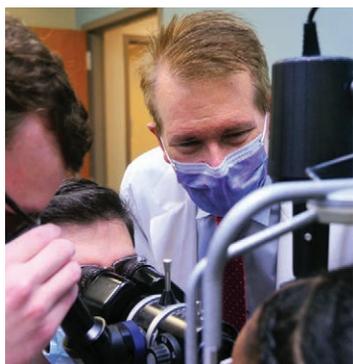
Susan & Donald Budenz, M.D.

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A Letter From the Chair



Donald L. Budenz, MD, MPH

Kittner Family Distinguished
Professor and Chair

UNC Department of Ophthalmology

UNC OPHTHALMOLOGY RESIDENCY PROGRAM

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678

APPLICATIONS

represents a 25% increase
in applications since 2016.

**FOUR MATCHED AS
CLASS OF 2026!**

Dear Friends, Alumni and Patients of UNC Ophthalmology,

It has been two years since we have published and mailed UNC Eye Magazine. Thank you for your patience as we navigated the pandemic together. So much has changed in the way we provide patient care and education, hopefully for the better.

This issue of UNC Eye Magazine focuses on the education mission of the Department of Ophthalmology. Established in 1952 as the Division of Ophthalmology, we have provided training for 70 years to medical students and we remain committed to educating the next generation of ophthalmologists.

We currently train four residents per year for four years. UNC's training program is exceptionally competitive. We received 678 applications for our four residency spots for the Class of 2026. Residency interviews have been held virtually for the past two years and this format will continue as we interview the class of 2027.

At the heart of our training program is a commitment to graduate residents who are medically, surgically and culturally competent. Fortunately, the pandemic did not affect our mission. Clinical and surgical training continued despite a few slowdowns related to COVID-19 transmission concerns and hospital staff shortages.

Our didactic teaching sessions with trainees were offered entirely online during the pandemic, which increased participation among our learners and faculty. We continue to hold early morning teaching sessions virtually for this reason. In the past two months, we have welcomed visiting professors to the clinic and hosted the UNC Annual Eye Symposium (which dates back to the early 1950s) in person.

In addition to rigorous medical and surgical skills training, our residents participate in an international service rotation. These medical missions, which took a necessary hiatus for two years during the pandemic, resumed this spring. Service is a key component of the experience at UNC and we find that the international medical service is invigorating and often life changing.

I hope you enjoy this issue of our magazine. Educating the next generation of ophthalmic physicians and surgeons is at the core of our very existence and we are eager to share exciting stories and pictures about this remarkable group of young physicians and the training that they receive.

Donald L. Budenz, MD, MPH

Kittner Family Distinguished Professor
Chair, UNC Department of Ophthalmology

Logged in, Camera On, Good Morning, Nice to “See” You!

Interview Day the Virtual Way at UNC Ophthalmology



Over three years, UNC Ophthalmology residents are immersed in continuity clinic training at the high-volume UNC Kittner Eye Center. Residents develop graduated autonomy treating common and complex ophthalmic conditions in a diverse patient population under the direct supervision of faculty attendings and fellows. Resident learning ranges from observation to consulting attendings on patient cases to hands-on practice in treating and managing ocular disease.

Interview platforms ... video tours ... Zoom links ... Q&A breakout rooms. In 2020, Ophthalmology residency programs nationwide pivoted from planning onsite recruitment and entered the uncharted territory of simulating in-person interviews virtually. The Department’s all-hands-in efforts paid off. UNC Ophthalmology’s high-appeal virtual platform enabled faculty and residents to carry out meaningful, information-rich interviews over two recruitment seasons. When interviews concluded, there was no looking back for those who envisioned themselves

entering residency at UNC. On Match Day 2021 and 2022, the Department enthusiastically welcomed four high-achieving candidates as the newest members of UNC Ophthalmology’s residency family.

Led by Program Director Dr. Alice Zhang, UNC Ophthalmology’s recruitment committee developed a residency recruitment video sharing with candidates what they most wanted to hear – UNC Ophthalmology residency is a no-regrets decision. In advance of each interview day, a 7-minute video introduced candidates

to faculty leaders who related UNC Ophthalmology's dedication to the education pillar of academic medicine and its core mission of graduating clinically skilled, culturally competent physicians who are ready for independent practice. Residents additionally shared how fortunate they felt that well-equipped UNC training facilities like the state-of-the-art Miracles in Sight Surgical Skills Laboratory enabled them to master all core procedural techniques within a simulated surgery environment before taking on their first patient case.

Over a two-week period, 2:1 faculty-candidate interviews enabled all parties to make acquaintances and present themselves with ease. Zoom breakout rooms facilitated a Q&A forum and virtual "lounge" for UNC Ophthalmology residents to share with interviewing peers their experiences within a program rich in diversity and career interests. Over two virtual recruitment seasons, the silver lining of the pandemic enabled faculty and residents to share with candidates how the global-to-local impact of a crisis in medicine renewed UNC Ophthalmology's commitment to teamwork, common goals, flexibility and empathy.

25% INCREASE IN APPLICATIONS OVER 5 YEARS!

The numbers speak for themselves. Two years of virtual recruitment did not hinder UNC Ophthalmology's upward trend in residency applications.



Since 2020, Residency Program Director Alice Zhang, MD, has served as faculty lead for recruiting top-performing applicants and ensuring graduating residents are ready for independent practice.



2021-2022 Co-Chief Resident Basil Mathews, MD, shares resident insights and program strengths in UNC Ophthalmology's resident recruitment video.



Hands-On Learning in an Unrivaled Surgical Skills Laboratory

A Dress Rehearsal for Performing Surgery on the Human Eye

How does a surgical specialty train residents on procedural techniques safely, yet with ample volume to ensure that trainees master each skill in their discipline? At UNC Ophthalmology, preparing residents relies on commencing skills instruction early and investing time in reinforcement skills through repetitive practice. Intensive surgical skills training equips residents with the procedural knowledge and manual skill set to operate on patients early in training. Through self-directed practice and step-by-step clinical mentoring in a state-of-the-art microsurgical skills lab, UNC Ophthalmology residents master the core surgical skills they will use in future practice.

In 2013, a \$1M gift from the North Carolina Eye Bank fully equipped the UNC School of Medicine (SOM)'s Miracles in Sight Surgical Skills Laboratory. Shared by UNC's Departments of Ophthalmology, Otolaryngology and Urology, this state-of-the-art laboratory is unrivaled

at any academic institution in the U.S. During "weekly Wednesdays" at the facility, UNC Ophthalmology residents learn and refine procedural skills at individual lab stations instructed by faculty and fellows, as well as through self-direction.

Residency Program Director Alice Zhang, MD, noted: "Before our residents even head to the operating room, this million-dollar lab allows them to practice basic techniques. Weekly lab time ensures they are facile and skilled before they are in front of a patient. It improves patient safety and builds confidence in our residents."

Department Chair Dr. Donald Budenz stated: "This type of lab allows our program to ensure residents learn each step and master each skill in a common or complex procedure before even touching a live human eye."

Third-year resident and Co-Chief resident Jessica Duddlestone stated: "UNC's Surgical Skills Lab is unlike

any other. Our program's weekly, intensive guided instruction on pig eyes is well-balanced with self-study and additional practice at the lab. Industry-sponsored educational events expand on our wet lab instruction and introduce us to the new technology and pharmaceuticals used in the procedures we're learning."

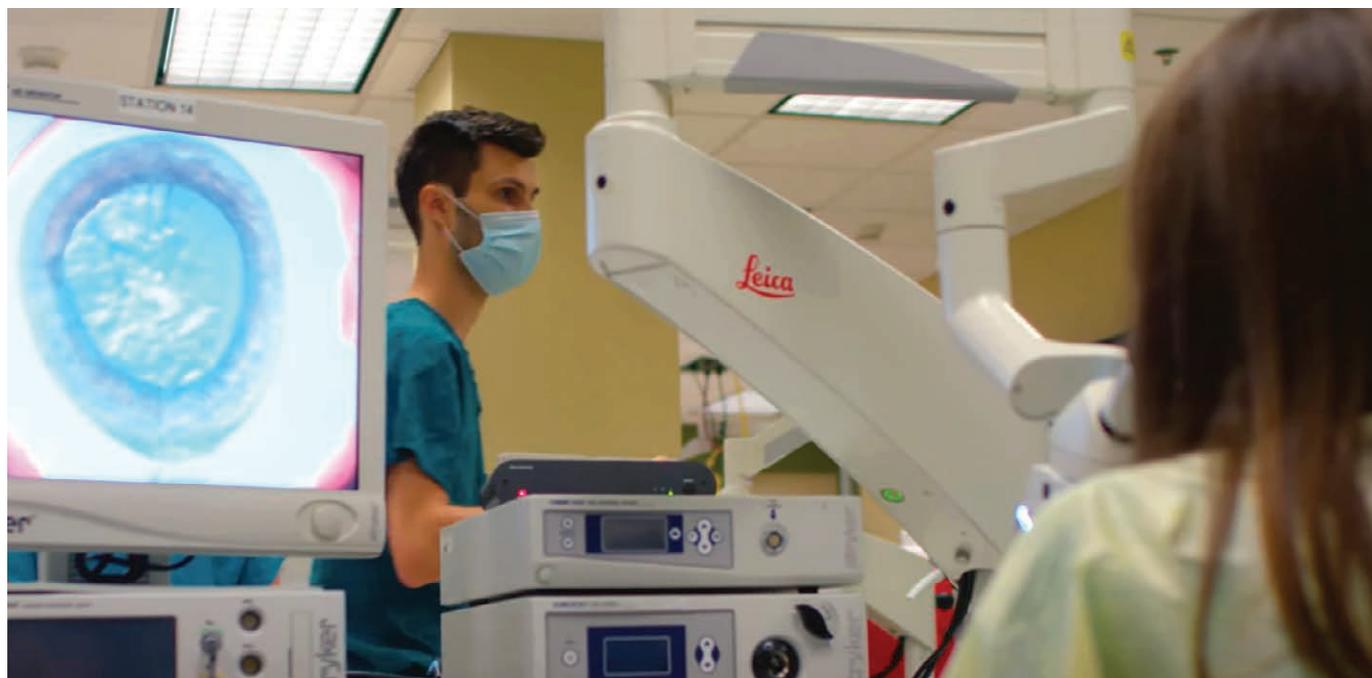
UNC Ophthalmology annually hosts a multi-institutional technical skills conference at the Miracles in Sight Surgical Skills Lab, training its own residents alongside peers from regional programs. Since 2013, residents from UNC, Wake Forest University, Duke University, Medical University of South Carolina (MUSC) and University of South Carolina (USC) have learned advanced anterior segment surgical skills from these one-day workshops.

Last year, the Department hosted its first one-day cataract surgery course sponsored by U.S.-based non-profit HelpMeSee at the Miracles in Sight Surgical Skills Lab. HelpMeSee trains eye surgery specialists to perform cataract surgery via simulation with the mission of reducing incidence of vision loss across the globe due to cataracts. In a day-long course in June 2021, UNC Ophthalmology residents learned to perform Manual Small Incision Cataract Surgery (MSICS) using the HelpMeSee Eye Surgical Simulator.

UNC Ophthalmology third-year resident Dr. Jessica Duddleston noted: "Last year's HelpMeSee course focused on manual sutureless cataract surgery, an invaluable surgical skill for very dense cataracts. This technique is rarely used, but when you need it, you need to know how to perform it well."

In his last year of training, third-year resident Dr. Basil Mathews cited the Miracles in Sight Surgical Skills Laboratory as UNC Ophthalmology's greatest investment in residents to prepare them to perform surgery independently and begin their careers as highly competent eye surgery specialists.

Dr. Mathews concluded: "It was amazing to start Week One of my program in a state-of-the-art surgical skills laboratory, working side by side with classmates practicing surgical techniques with our hands under the microscope. Our program takes pride that this laboratory has the stations to accommodate all residents together each week, enabling attending surgeons to guide us through learning incisional steps as we advance through our surgical curriculum. It's something most other programs simply don't offer. There is no doubt in my mind that this method of teaching residents produces better and safer eye surgeons."



At UNC's Miracles in Sight Surgical Skills Lab, UNC Ophthalmology residents practice core procedural skills via step-by-step instruction and self-direction at learner stations.

Physician Global Citizens: Advancing Ophthalmic Care in the Developing World



Third-year resident Dr. Jessica Duddleston conducts a diagnostic exam at Tema Christian Eye Center in Ghana.

In 2019, UNC Ophthalmology Class of 2021 graduate Dr. Bryan Strelow traveled to Thailand on a two-week medical mission trip. At an urban university hospital, academic peers shared with him the challenges of access to adequate ophthalmology care in a resource-limited country. In a rural farming community, Dr. Strelow participated in patient care at a high-volume clinic staffed by just one ophthalmologist. Returning home to work in a resource-rich healthcare system, Dr. Strelow reflected on the difference he could make joining next-generation ophthalmologists who answer the call to volunteer the clinical expertise they are fast learning in under-resourced areas where gaps in specialized medicine exist.

Dr. Strelow noted: “Away from American culture and the U.S. healthcare system, I gained a unique perspective on the practice of ophthalmology internationally and an enriched sense of living as a global citizen. The cross-cultural exchange was humbling.”

A \$2,000 Department stipend, combined with funding from UNC School of Medicine (SOM)’s Office of Global Health Education and the Lions Club of Durham, has enabled Department residents to pursue service travel to under-resourced areas in countries like Ghana, China, India, Vietnam and Thailand. On time-limited trips, participants accompany Department faculty and other ophthalmologists with

global health interests to partnering healthcare facilities worldwide, where full clinic days await them in treating patients with high-incidence ocular disease and performing complex surgeries. Contributing an advanced medical skill set in a clinical setting of multiple ophthalmic needs, these trips are career-defining experiences that reinforce service-driven opportunities.

UNC Ophthalmology Department Chair Don Budenz, MD, MPH, is well-recognized across ophthalmology’s global health community for his humanitarian service in expanding infrastructure and patient care, building training and teaching partnerships, and advancing glaucoma research in Ghana. In 2019, Dr. Budenz led a cross-disciplinary investigative team that found this West African nation has the highest glaucoma incidence worldwide.

Dr. Budenz stated: “Ophthalmology faculty have a strong commitment to global health. Having residents join faculty-led medical missions gives them a vision for the good that they can do beyond their practice in the U.S. throughout their career.”

In March 2022, third-year resident Basil Mathews, MD, traveled with Alyson Hall, MD, founder of The Glaucoma Center PC (Bowie, MD), to the Tema Christian Eye Center in Ghana, West Africa. While observing

Dr. Hall perform 50 glaucoma and cataract surgeries, Dr. Mathews learned a comprehensive range of glaucoma and cataract clinical procedures to restore and prevent vision loss in patients.

Dr. Mathews noted: "The sheer volume of complex cases we treated showed me how common advanced glaucoma pathology is in Ghana. There is limited access to care and high prevalence of glaucoma. Spending a week at the Tema Christian Eye Center made me aware of the need for highly trained surgeons, both to educate and train local practitioners and to provide sustainable access to care for the local population."

In May 2022, third-year resident Jessica Duddleston, MD, traveled to Tema with Dr. Budenz and Arvind Neel, MD, a glaucoma and cataract surgeon from Texas who trained with Dr. Budenz as a fellow at Bascom-Palmer Eye Institute (Miami,

FL). At Tema's busy clinic, Jessica independently provided diagnostic care to patients and helped Drs. Budenz and Neel keep pace in a high-volume setting. She drew from her experience providing ophthalmic care to low-resource patients at UNC School of Medicine (SOM)'s Student Health Action Coalition (SHAC) clinic.

Jessica noted: "At Tema Christian Eye Center, we clinically and surgically managed blinding conditions including cataracts and glaucoma. While doing so, we taught the Ghanaian eye care staff how to manage these conditions during the post-operative period. Understanding the barriers to health care in West Africa gave me an appreciation for accessibility to health care and more importantly, taught me the power of giving time and talent to those in need and the everlasting impact I could have."

Ophthalmology Department faculty member Nik Ulrich, MD, traveled to

China for seven consecutive years (2013–2019) in coordination with Lifeline Express, a Chinese non-profit that provides free cataract surgery in rural parts of China to reduce rates of blindness. As a participant in the program hosting international ophthalmology subspecialists, Dr. Ulrich has traveled to several rural Chinese provinces, teaching vitreoretinal surgery courses in rural hospitals and large academic teaching centers. On occasion trainees join him, including former resident and 2021–2022 Vitreoretinal Surgery Fellow Dr. John Deans.

Dr. Ulrich noted: "The experience was ideal for a resident in training to observe the differences in medical systems between the U.S. and a developing country. This experience cultivated Dr. Deans' interest in volunteering as a practicing ophthalmologist on future medical service trips."

Dr. Budenz concluded: "Role models are very influential during training. In academic medicine, residents learn from role models who take excellent care of patients, do clinical research, and take the time to teach.

At UNC Ophthalmology, our faculty are role models by virtue of their service as academic physicians and their heavy involvement in global health. Having faculty who take residents on medical service trips where they teach in parts of the world where there is no subspecialty training adds a dimension to our residency program. We need more ophthalmologists doing this work and hope that residents who have traveled with our faculty will incorporate medical missions into their careers."



Third-year resident Dr. Basil Mathews and glaucoma expert Dr. Alyson Hall performed trabeculectomy and tube-shunt surgeries while in Ghana to drain fluid and relieve eye pressure in glaucoma patients.

Residency Class of 2026: "Why UNC Ophthalmology?"

On Match Day 2022, four high-achieving candidates became the newest members of UNC Ophthalmology's residency family.



Bryce DeChamplain, MD – Medical University of South Carolina

"UNC stood out as the most exceptional among residency programs that interviewed me, and my overall impressions led me to rank UNC #1. Faculty and residents came across as an amazing and smart clinical team who worked happily together. UNC's program has such a wealth of global health and funded resident research opportunities that fit my interests as an aspiring ophthalmologist. I'm hoping to pursue global health research during residency in areas that generate evidence supporting advancement of higher-level care in a diversity of settings worldwide."



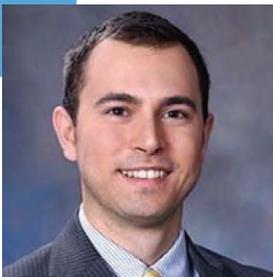
Pooja Shah, MD – Wake Forest School of Medicine

"I was drawn to UNC for its quality surgical curriculum and the opportunity to serve patients of all ages, backgrounds, and socioeconomic status both globally and across North Carolina. During my interview, I recognized how program leaders help each resident to grow into a compassionate and highly competent physician within a humanistic culture. I am grateful to pursue my ophthalmology residency in a department with renowned faculty leadership, a culture of compassion, and excellent research opportunities at an institution that is a 'leader in public health.'"



Vincent Tang, MD – University of California, Davis School of Medicine

"I absolutely loved my interview day at UNC. I felt that I fit in and connected well with the program culture and my interviewers. Dr. Zhang shared with me the strong mission she felt in fostering competent, ethical and compassionate physicians. UNC Ophthalmology's diversity in educational experiences for residents, like international rotations and exposure to translational research, greatly appealed to me. UNC's ideal balance of academic medicine and exceptional clinical training confirmed that a great college town like Chapel Hill is the perfect place to train over four years of residency!"



Jason Zehden, MD – Baylor College of Medicine

"I was confident that if I were lucky enough to train at UNC, I would receive excellent clinical and surgical training. I knew that learning ophthalmology through treating the diverse patient population at a large teaching hospital like UNC would enhance my provider skills in working with underserved patients. I wanted to train in a program that surrounded me with the great faculty who had already made a positive impact on my life teaching me as a medical student."



UNC OPHTHALMOLOGY WELCOMES DR. STEVEN FLYNN



In May 2022, Professor of Ophthalmology Steven Flynn, MD, PhD, joined the UNC Ophthalmology faculty team as a comprehensive ophthalmologist. Dr. Flynn earned his medical degree from LSU Health Sciences Center Shreveport, LA, where he also completed a residency in ophthalmology. Prior to joining UNC Ophthalmology, Dr. Flynn was Service Chief of Ophthalmology at the Ochsner-LSU Monroe Medical Center in Monroe, LA. At UNC, Dr. Flynn will provide comprehensive clinical eye care, as well as work with residents in the clinic, OR, and classroom.

To schedule an appointment with Dr. Flynn at the UNC Kittner Eye Center, call 984-974-2020.

FRIENDS OF EDUCATION

Long-time Chapel Hill residents Charlie and Gail Nottingham have supported the patient care, education, and research interests of the UNC Department of Ophthalmology over the years. The Nottinghams have served on UNC Ophthalmology’s Advisory Board since 2018, and they have a passion for supporting residency education and supplemental learning opportunities.

“We support UNC’s Ophthalmology Education Fund because we are impressed with the skills and knowledge that visiting professors bring to the residents. The outside expertise, collaboration, and networking produces top quality ophthalmologists for North Carolina and beyond. It’s a privilege for us to make a philanthropic investment that impacts so many people.”

– Gail (BA '76) and Charlie Nottingham

APRIL 2022 EIFRIG LECTURE



The annual David E. Eifrig Lecture in Ophthalmology honors Dr. David E. Eifrig, the first Chair of UNC Ophthalmology (1977–2000).

Each year, an esteemed clinician or researcher in the field of ophthalmology who embodies Dr. Eifrig’s spirit of devotion to patients and a passion for advancing ocular disease research, is invited to deliver the David E. Eifrig Lecture. In April 2022, University of Miami Health System John G. Clarkson Chair in Ophthalmology Steven J. Gedde, MD, delivered the Eifrig Lecture as keynote speaker.



(L to R): David E. Eifrig, MD, first Chair of UNC Department of Ophthalmology. Steven J. Gedde, MD, the 2022 David E. Eifrig Lecture guest speaker.



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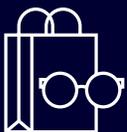
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