

From my first experience at the slit lamp in a student-led eye clinic, I recognized in ophthalmology the rare combination of intellectual challenge, technical precision, fascinating pathology, and immediate impact on patients' lives. I have long sought a career that unites complex surgery, rigorous outcomes research, and a deep commitment to teaching and mentorship. A career as an academic vitreoretinal surgeon perfectly embodies that vision.

My commitment to research began early. As an undergraduate research assistant in a molecular pharmaceuticals laboratory, I studied immune responses to PEGylated drug carriers and helped develop an intervention to mitigate anti-PEG antibodies. I later spent a gap year at the Duke Clinical Research Institute, where I worked with pediatric cardiac intensivists investigating outcomes after congenital heart surgery. Those experiences taught me to think critically about study design, data interpretation, and answering meaningful clinical questions through research, sparking my interest in an academic clinician-scientist career.

In medical school at the University of North Carolina, I intentionally focused my efforts on ophthalmic outcomes research. With the guidance of outstanding mentors, I developed skills in study design, statistical analysis, coding, and large database research. I led projects identifying heritable anatomic predictors of angle closure, conducted multiple IRIS Registry studies of glaucoma surgical outcomes and disparities in care, and conducted a multicenter investigation of endogenous endophthalmitis. Through these experiences, I saw firsthand how thoughtful research can directly improve patient care and became certain that ophthalmology was the field in which I wanted to build an academic career.

My residency training at the Wilmer Eye Institute has been both demanding and deeply rewarding. I have cared for patients with time-sensitive retinal detachments, devastating ocular trauma, and other urgent conditions in which prompt intervention can preserve vision and profoundly alter quality of life. Whether through surgical repair, panretinal photocoagulation, or intravitreal therapy, I have witnessed how decisive retinal care impacts lives. Residency has also strengthened my love of teaching. Helping junior residents develop clinical judgment and procedural skills has been one of the most meaningful aspects of training, and I was honored to be selected as co-administrative chief resident for next year in recognition of these efforts. I have also continued to expand my research portfolio. I received a Vitreoretinal Research Society Foundation grant for work examining retinal morphologic outcomes after internal limiting membrane removal surgery, and I have grown our multicenter endogenous endophthalmitis collaboration to include Johns Hopkins and worked alongside seven additional institutions to enable robust analyses of this rare and complex disease. These projects have reinforced my desire to build a career that integrates surgical excellence with impactful clinical investigation.

Vitreoretinal surgery appeals to me on multiple levels. Surgically, it demands meticulous technique, sustained concentration, and creative problem-solving to restore or preserve sight in patients facing profound visual loss. These qualities resonate with my background as a ballet dancer. At fourteen, I left home to attend a pre-professional ballet program, where years of disciplined training cultivated focus, spatial awareness, resilience, and continual self-improvement. Those habits translate naturally to the operating room. Clinically, retinal disease carries immense unmet need, and timely intervention can preserve independence and quality of life. Scientifically, the field is advancing rapidly through refined surgical techniques, novel pharmacotherapies, and emerging gene and targeted drug-delivery therapies that create extraordinary opportunities for innovation and research.

These experiences have shaped my academic goals. First, I hope to lead clinically relevant outcomes research that informs surgical decision-making and improves patient care through

multicenter collaborations, large registries, and imaging analyses. Second, I am deeply committed to education and mentorship and hope to teach residents and fellows in both the clinic and the operating room while taking on a leadership role within a residency training program. Finally, I aspire to become an outstanding vitreoretinal surgeon capable of managing complex surgical cases while providing thoughtful, compassionate, and comprehensive care to every patient.

The Heed Fellowship Retreat would be invaluable in accelerating these goals. Exposure to accomplished academic ophthalmologists, mentorship from leaders in the field, and practical guidance in leadership and career development would help prepare me to build a productive, high-impact academic vitreoretinal career. I am eager to devote my career to combining technical excellence, rigorous research, and dedicated mentorship to improve vision and patients' lives.