

Personal Essay

"*Didi*, will you please buy 2 of these pens for 10 rupees?"

I shifted my attention to the right from the book I was reading. A girl, about a foot shorter than I, hair shabby, feet bare, now in front of me with four pens in her right hand, left hand tightly holding onto a satchel.

"Four for fifteen with a five rupee discount!" Her plaque-covered grin hopefully lingered as she stripped my wallet of fifteen rupees. My eyes followed her as she moved to her next customer, her frail figure rattling with the speeding train. She couldn't have been more than eight, just a child – three years younger than I was at the time. I had just spent the entire day before complaining about my homework, but here was someone who didn't even have the privilege to sit in a classroom. She sold pens, but they were of no use to her. I watched her rush out of the train, even before it halted, and catch the next one to a new destination. I wondered if she had a home, a family to go back to.

A raw, burning ache welled up behind my eyes, my sensitive heart unable to hold back the emotion, and before I knew it, my mother was wiping my tears off, consoling me "This is just the way of life," she said, "You can't help all of them." I could not accept that. Why couldn't we help? And why did life have to be this way?

I never forgot about her after that one-second interaction. Every time I walked into my classroom, I thought of the millions of children like her who couldn't afford to be in school getting something as basic as an education.

That moment shaped me in ways I didn't yet understand. Life shouldn't be so unfair, and I thought maybe, just maybe, I could do something about it. But again, what could an adolescent like me do anyway? How could I make things better for kids like her? All I was good at was math and science, and at the time, neither seemed like tools that could change lives. How could the Pythagoras theorem save people anyways?

It wasn't until years later, in college, that I found my answers in intensive problem-solving, which led me to the world of computer science. Lines of code and abstract math theorems suddenly became the perfect tools to bridge the gaps, and I found that channeling this passion was an instrument to empower those who had been left behind.

The journey started small, volunteering with organizations that taught coding to underrepresented kids. That's how I met Rayan, a 13-year-old with insatiable curiosity. Her father was a truck driver, and her family couldn't afford formal coding classes. I taught her how to write her first line of code, something she was very proud of. Throughout the camp, we worked together on developing a fully functional game. With each step, her confidence grew more and more. Watching Rayan discover a new world of possibilities validated my efforts.

On the last day, Rayan handed me a card that said "I want to go to college and study computer science just like you, *didi*, and maybe I'll be a game developer someday." It was a moment I'll never forget; a reminder of why I had chosen this path and of the potential that lies within every child. I had helped her see that the life she wanted was within reach. For kids like Rayan, it isn't just about learning a skill. It's about realizing that they could have a future beyond the limitations they've grown up with.

The more I worked with these kids, the more I realized the power of education, especially in technology. Teaching helped me give them the tools to create and dream of futures they might not have imagined. I wasn't solving global poverty or fixing systemic inequality, but in those classrooms, I was making a difference, one child at a time.

Computer science became more than just a subject to me. I used it to develop web applications that provided resources for those who couldn't afford to be educated. I hoped that the project would be a space for children to find others like them and also seek help. Currently, I'm working with a close friend to make the app more accessible to those in need through schools, nonprofits, and organizations similar to those I volunteered with. And every time I see a child like Rayan, curious and ambitious to learn, I think back to the girl on the train. I think about the pens she sold but couldn't use, and I remind myself that

while I can't help everyone, I can help someone, and that's a start.

University of Pittsburgh MS in Biomedical Sciences Personal Statement

Prompt 1: Describe when you first decided on a career as a physician, healthcare provider, or health scientist, and specifically how you tested your decision. Indicate which were your most meaningful experiences and how they helped you decide your path to the health sciences. You may include specifics on your interactions with patients, physicians, dentists, pharmacists, scientists or other members of the health care systems and biomedical research institutions where you volunteered or worked. The information is used in the application process and also to design the most productive individual BMP program that meets your needs.

Before I understood medicine, I understood what it cost to be without it. I was placed in my maternal grandparents' care before I was old enough to understand why, and watching them absorb responsibilities that were never meant to be theirs taught me something that has never left me: that care is often quiet, unrecognized, and deeply personal, and that when systems fail, families pay the price. Their endurance shaped how I understand responsibility not as obligation, but as service that lasts beyond a single moment of help. I could not have known then that their sacrifices would lay the foundation for my identity and shape who I am today. My challenges did not stop there and I still find myself navigating uncertainty and hardship. They showed me what it truly means to step in when systems fall short.

As a child, I was drawn to medicine long before I understood its complexity. I remember frequent trips to the hospital, times when I felt so ill and weak I could barely move, yet I would leave healed. What fascinated me was not just that I felt better, but how that happened. I watched doctors work behind screens, stretching my neck to see what they were doing, asking questions, trying to understand what was going on. There are many ways to help people, so why medicine? That question has followed me ever since.

Growing up in Nigeria, that understanding deepened. I watched people delay care not because they did not value their lives, but because survival demanded other priorities first. The population that stood out to me most were mothers and their unborn children, two lives shaped by the same circumstances, the same delays, the same gaps. Having experienced loss early in life, I understand how grief reshapes families and futures. I started asking a question I have never been able to put down: what happens to the unborn child when a mother cannot access the care she needs? That question followed me from Nigeria to the United States, where I learned these disparities cross borders, rooted not only in access, but in mistrust, research gaps, and systemic neglect.

Recognizing that intention alone was not enough, I approached my education with purpose, taking courses that taught me health is shaped as much by culture, history, and trust as by science. Outside the classroom, volunteering as a hospital ambassador showed me that sometimes presence itself is the intervention. One patient begged me not to leave, and sitting with him taught me something no lecture could. Early shadowing felt static, but when I began my clinical internship at Capital City Medical Associates, I realized those hours had quietly built a foundation I could finally act on. I moved from observing to participating, and medicine began to feel like something I was becoming part of.

Prompt 2: Describe any service-related activities and why it is important to you as a person.

Service was not something I chose. I learned it by watching my grandparents show up for me every day without being asked, absorbing what systems could not carry. That understanding has never left me.

Volunteering as a hospital ambassador at the Nashville VA Medical Center showed me what service looks like in its quietest form. My role was simply to take patients to their destinations safely. But I quickly learned that care did not end once the task was complete. What stood out to me most was how eager patients were to talk, to be seen, to feel human beyond their diagnosis. Sometimes when I picked patients up from their rooms, they would say things like, "Wow, so this is what the outside of my room looks like," and they would smile as we talked along the way. When it was time to return them, many seemed lighter, not because anything about their condition had changed, but because someone had taken the time to listen.

One patient stayed with me. He begged me not to leave; his voice filled with fear and urgency. I sat down with him, looked at him, and assured him I was there and would not leave. That moment has stayed with me because it taught me something essential: sometimes presence itself is the intervention, and when sensitivity is grounded in intention, it becomes a source of steadiness rather than a liability.

That same instinct carried into my organizational work. Through Rafiki Wa Afrika, BSU, and MAPS, I worked to create spaces where students could exist without having to explain themselves, where the path felt less isolating. Leadership, I learned, is not about having all the answers. It is about making sure the people who come after you have a clearer way forward.

Service matters to me because I know what it feels like to need someone to show up. My grandparents showed up for me. Those patients needed someone to show up for them. Those students needed the same. I carry that with me into every space I enter, and I always will.

Prompt 3: Describe a challenging problem, how you resolved it, and what you learned from it.

When I started looking for research and clinical experiences, I kept running into the same wall. Program after program listed the same requirement: U.S. citizens and permanent residents only. The ones that did not have that requirement wanted applicants who already had experience. But how was I supposed to build experience when the doors to experience kept closing before I could get in?

It keeps getting harder. Programs that used to accept international students stop due to funding, while some get cancelled. The already limited pool keeps shrinking. Meanwhile most clinical openings still went to students with family connections in healthcare, something many of us simply do not have. Each time a door closed, the frustration was real. I knew I was capable. I was motivated. But the system kept saying otherwise.

What makes this heavier is that I am navigating all of this without a financial safety net. My grandparents who raised me are sick, and the financial pressure that comes with that is ongoing. Every opportunity for me must make practical sense, not just professional sense. I learned to look differently, when something was out of reach, I asked myself what else existed and went looking for it. I stay close to faculty who sometimes know of openings I would have missed. When I found something that fit but cost was the barrier, I did not walk away. I learned to seek guidance, to find out if there was a way to make it work, and to do what was necessary to get there.

That process taught me something I carry with me. Closed doors are not always the end of the path. But navigating around them required me to stay resourceful, stay connected, and think further ahead than I had been taught to. I am still learning. I am still navigating this and still afraid sometimes that I am behind.

Prompt 4: "The ability to collaborate with a diverse range of people is important to the field of Biomedicine or healthcare because of the future interactions with diverse co-workers, patients and clients. In your academic work or personal experiences, what knowledge, insight, or expertise have you gained or shared with others on issues of race, ethnicity, gender, rural/urban and socioeconomic status, or other background issues, that limit access to medicine, dentistry, biomedical research and health care? How have you applied this knowledge or insight in the past and how do you envision applying it in BMP at the University of Pittsburgh and beyond?"

Before I could name what health equity meant, I had already seen what its absence looked like. Growing up in Nigeria, I watched people delay care not because they did not value their lives, but

because circumstances made access impossible. Coming to the United States, I assumed those realities were behind me. They were not, just differently shaped.

Being chosen by my faculty to attend the Anarcha, Lucy, and Betsey Day of Reckoning Conference in Montgomery, Alabama changed how I understood that. Standing at the Mothers of Gynecology monument and walking through the Legacy Museum, I was overcome. I had no words for what I felt. What I left with was this: the mistrust Black women carry toward medicine is not irrational. It is inherited, reinforced by centuries of being unheard, experimented on, and dismissed. That history is not separate from today's maternal mortality numbers. It is part of why they exist. I brought what I learned back to campus and shared it, because knowledge that stays with one person does not do enough work.

Navigating the pre-med journey as a first-generation international student, I am still learning how to move through a system that was not built with me in mind. Eligibility barriers closed doors I did not even know existed until I was standing in front of them. I learned to look for other ways, to seek out mentors who helped me find paths I could not have found alone, and to pursue every experience I could access fully, understanding that what I was building would serve a purpose beyond the moment. Through Rafiki and MAPS, I turned that navigation into something useful for students coming in behind me, particularly other international students arriving without a roadmap.

At Pitt, I want to keep doing both. Learning and sharing. That is how I understand collaboration, and it is how I intend to practice medicine.

Prompt 5: Self-assessment and expectations for growth and improvement in the BMP. What components or features of the Biomedical Masters Program at UPSOM attracted you to apply to the program? How do you see specifically the BMP helping you in your career growth in the health sciences?

At this stage I am not looking to simply add credentials or experiences but looking to close a real gap in how I think. I want to move beyond treating research as something adjacent to clinical care and start letting it shape how I understand disease, uncertainty, and decision-making in medicine. This is the first program I have found that seems built around exactly that — preparing students for medical school while asking them to engage deeply with science at the same time, not one after the other.

The curriculum does this intentionally rather than incidentally. Method and Logic in Biomedicine is not teaching me what to know but how to evaluate evidence and ask better questions. Comprehensive Analysis of Disease asks students to work through a disease from diagnosis to treatment collaboratively — integrative thinking I want to develop. Systems Neurophysiology connects directly to my research interests. Health Equity and Diversity Awareness connects directly to why I am here.

What I value just as much is the support structure, which doesn't assume everyone arrives with the same foundation and support system. As a first-generation international student who has navigated most of this without a roadmap, having a faculty advisor, a professional coach, and an alumni mentor alongside me is not a small thing. The MCAT preparation and career planning built into the program address gaps I need to close. The emphasis on service and experiential learning through UPMC reinforces something I already believe — that learning, research, mentorship, and service belong together.

Prompt 6: Please provide any additional information that you would like the Biomedical Masters Program to know. This can include relevant information that you believe has prepared you for continuous education, personal situations that are relevant to your present and future, and any special connections to Pittsburgh or the University of Pittsburgh.

There is one part of my preparation I have not had the chance to describe. During my junior year, I approached my neuroscience professor about designing a directed reading course together. Her research focuses on how stress affects circadian rhythms and anxiety-related behaviors in mouse models. I was interested in something adjacent but distinct, how stress experienced before pregnancy might shape postpartum vulnerability in mothers. She agreed, and what followed changed how I think about research.

Over that semester I read primary literature on pregestational stress and postpartum depression, synthesizing findings across animal models and human studies, tracing how early life stress alters the HPA axis, how hippocampal changes from adolescent stress stay quiet until pregnancy reveals them, and how this two-hit model might explain why some women do not show vulnerability until after childbirth. That work produced a literature review proposal around one central question: does the timing of stress before pregnancy determine postpartum vulnerability differently depending on the life stage?

I did not pursue it further. The resources were not there, and that period of my life carried pressures that made research difficult, but I have not let go of the question. What that experience showed me, and what I want the BMP committee to know, is that I do not wait for research questions to be handed to me. I found a gap between what is known and what matters, and I moved toward it. I intend to build what I need to eventually answer it properly.

University of Pittsburgh Center for Neuroscience PhD Program Personal Statement

Personal History and Interest in a Neuroscience PhD

Tell us about your personal history, the events that lead you to pursue a PhD in Neuroscience, and how a PhD in Neuroscience would help prepare you for a future career (up to 400 words).

I am drawn to a career in neuroscience because of my fascination with understanding the brain at the most detailed level possible. I have always been someone who focuses on the “why” questions and enjoys the process of learning and applying new information, but before conducting undergraduate research, I was uncertain if a career in academia would be right for me. I doubted my ability to master the content and detailed techniques critical to successful neuroscience research. After conducting summer research with reptile physiologist Dr. Eric Gangloff following my freshman year, however, I found myself looking for ways to connect unexpected results to mechanisms in the brain. We discovered that urban wall lizards can tolerate lead levels considered unsafe for humans without any deficit to physiological and cognitive performance (Moore et al. 2024 *Environ Res*). Bewildered by our results, I was motivated to extend the project, and I suspected that mechanisms in the brain could support resilience to lead toxicity in lizards. Specifically, because reptiles possess a widespread capacity for adult neurogenesis throughout the brain, I wondered if a reactive neurogenesis mechanism could mitigate lead-induced neuronal death. Although my limited exposure to cellular and molecular research techniques posed a challenge, I was not discouraged. Instead, I successfully applied to the summer undergraduate research program (SURP) directed by CNUP, where I worked with Dr. Claire Cheetham, who has extensive experience in studying adult neurogenesis in the mouse olfactory bulb. Under the mentorship of a postdoctoral fellow, I investigated the characterization and migration of newborn dopaminergic neurons in the olfactory bulb of transgenic mice. To my own surprise, I fell in love with procedures I previously deemed myself incapable of, including brain dissections, fluorescence microscopy, and even a few mouse surgeries. With these skills, I then developed my own research project on lizard neurogenesis under the mentorship of Dr. Gangloff.

My undergraduate research experiences have given me a good taste of what conducting full-time research would be like and motivated me to explore new research questions and techniques through graduate training in neuroscience. Pursuing a PhD in neuroscience through the CNUP Graduate Training Program is a crucial step toward becoming a full-time faculty member in neuroscience, which is my ultimate career goal. I can easily see myself dedicating my life to understanding the brain and would find it fulfilling to engage with students and mentees, imparting knowledge while also learning from them.

Description of Previous Research Experience

Provide a description of your previous research experience, including the institution, the faculty mentor and the time commitment (e.g., 10 h a week for 2 semesters). Describe the scientific question(s) you were trying to address, your hypothesis, your technical approach, and the significance of your findings. If your work resulted in a publication, abstract or thesis, list those here too. If you have more than one research experience, please make clear headings for each one (no limit).

Lizard Neurogenesis in Response to Lead Toxicity

Spring 2025 – Present (40 hr/week for 10 weeks during the summer; ~10 hr/week otherwise)

Mentor: Dr. Eric J. Gangloff, Ohio Wesleyan University Department of Biological Sciences

Role: Led all aspects of this project, including experimental design, funding acquisition, lead dose administration, BrdU injections, brain dissection, cryostat sectioning, immunohistochemistry, fluorescence microscopy, and data analysis.

Background & Experimental Question: Urban wall lizards can tolerate lead levels considered lethal to humans, but the mechanisms underlying this resilience are poorly understood. Unlike mammals, lizards also possess a widespread capacity for adult neurogenesis that can protect them from neurotoxins in a reactive manner. We aimed to characterize the degree to which adult neurogenesis is responsible for mitigating lead-induced neuronal death in the lizard medial cortex, a homolog to the mammalian hippocampus.

Methods: We divided lizards (N = 36) into nine treatment groups based on lead dosage (control, low, high) and time of sacrifice following the dosing period (5 days, 15 days, 30 days). We collected blood samples to quantify lead and injected lizards with BrdU (5-bromo-2'-deoxyuridine) to assess differences in rates of neurogenesis between treatment groups. Additionally, we performed TUNEL and NeuN immunohistochemistry to assess cell death in the tissues and confirm whether proliferating cells marked with BrdU had developed into neurons.

Results & Discussion: We are currently finishing immunohistochemistry, fluorescence microscopy, and data analysis. We expect that lizards with higher levels of lead will exhibit higher rates of neurogenesis in the medial cortex to compensate for neural death induced by lead. Future experiments could address the specific characterization of lead in brain tissue and other metabolic mechanisms that may confer resilience to lead toxicity.

Publications & Presentations:

- **Foster, EG, ER Holt, MD Horn, CA Vadnie, AR Gunderson, EJ Gangloff.** Adult neurogenesis and resilience to lead toxicity in urban wall lizards (*Podarcis muralis*). Abstract accepted for oral presentation at the annual meeting of the Society for Comparative and Integrative Biology, Portland, OR, January 2026.

- **Foster, EG**, ER Holt, MD Horn, CA Vadnie, AR Gunderson, EJ Gangloff. Novel resilience to lead toxicity in urban wall lizards (*Podarcis muralis*). Poster presentation at the annual meeting of the Society for Neuroscience, San Diego, CA, November 2025. Poster presentation at the OWU Connection Conference, Ohio Wesleyan University, September 2025.

Migration of Adult-born Dopaminergic Neurons in the Mouse Olfactory Bulb

Summer 2024 (40 hr/week for 10 weeks)

Mentor: Dr. Claire E. J. Cheetham, University of Pittsburgh Center for Neuroscience (CNUP)

Role: Worked under the mentorship of a postdoctoral fellow and learned how to perform mouse perfusion, brain dissection, cryostat sectioning, immunohistochemistry, and fluorescence microscopy.

Background & Experimental Question: Adult neurogenesis in the mouse olfactory bulb (OB) is responsible for the continuous proliferation and radial migration of dopaminergic (DAergic) neurons from deep OB layers. Although both transgenic DAT-Cre and TH-Cre reporter mice are readily used to characterize DAergic neurons throughout the layers of the OB, the regions in which these neurons are identified in the two strains are inconsistent. We sought to determine whether the TdTomato+ cells tagging DAergic cells in the OB of TH-Cre-Ai9 mice correctly identify DAergic neurons.

Methods: To validate the TH-Cre-Ai9 mouse strain, which expresses TdTomato, we used immunohistochemistry to stain both TH-Cre-Ai9 and wild type (C57BL/6J) OB tissues with an antibody that detects tyrosine hydroxylase (TH), the rate-limiting enzyme in dopamine production.

Results & Discussion: We found a high degree of overlap between TH+ and TdTomato+ cells in TH-Cre-Ai9 mice that validated the use of the strain to identify DAergic neurons. However, the presence of those neurons in deeper olfactory bulb layers was not consistent with the location of TH+ cells in wild type mice. Our data could be explained by the hypothesis that TdTomato expression in TH-Cre-Ai9 mice is a result of transient expression from the TH promoter during development indicative of a “pre-dopaminergic” phenotype. In future experiments, we planned to use two photon calcium imaging to observe the migration of TdTomato+ cells and identify whether pre-dopaminergic cells in deeper layers migrate to more superficial layers to replace mature DAergic neurons following loss of olfactory input induced by methimazole or naris occlusion.

Publications & Presentations:

- Sweat, SC, SPR Berg, T Kunkhyen, **EG Foster**, CEJ Cheetham (2025). Longitudinal Assessment of Fluorescence Stability Shows Fluorescence Intensity Decreases Over

Time: Implications for Fluorescence Microscopy Studies. Preprint archived on BioRxiv. <https://doi.org/10.1101/2025.10.15.682696>.

- **Foster, EG**, T Kunkhyen, CEJ Cheetham. Migration of Adult-born Dopaminergic Neurons in the Mouse Olfactory Bulb. CNUP SURP 2024 oral presentations, University of Pittsburgh, August 2024.

Effects of Lead on Performance Measures in the Common Wall Lizard

Spring 2023 – Spring 2024 (40 hr/week for 10 weeks during the summer; ~5 hr/week otherwise)

Mentor: Dr. Eric J. Gangloff, Ohio Wesleyan University Department of Biological Sciences

Role: Closely assisted an upperclassman with lizard capture, data collection, data analysis, and manuscript and presentation preparation.

Background & Experimental Question: When introduced to urban environments, organisms face exposure to harmful pollutants such as lead. We investigated the relationship between blood lead levels and balance and endurance capabilities in lizards living in Cincinnati, Ohio and hypothesized that performance deficits would be observed in lizards with greater lead levels.

Methods: We quantified blood lead levels in common wall lizards (*Podarcis muralis*) captured from various sites in Cincinnati and tested their balance (N = 41) and running endurance capabilities (N = 43). As a measure of balance, the number of slips lizards had when running along a thin balance beam were recorded. Minutes run on a small treadmill were used to quantify running endurance capabilities.

Results & Discussion: Some lizards tolerated blood lead levels considered lethal to humans. Despite this, we found no negative effect of blood lead level on performance in the balance and running endurance tasks, suggesting that lizards are especially resilient to lead toxicity.

Publications & Presentations:

- Moore, MM, **EG Foster**, A Amer, L Fraire, A Head, A Blanchette, SJ Hankison, AR Gunderson, EJ Gangloff (2025). Urban wall lizards are resilient to high levels of blood lead. *Environmental Research*, 264, 120248. <https://doi.org/10.1016/j.envres.2024.120248>.
- Moore, MM, **EG Foster**, A Amer, L Fraire, A Head, A Blanchette, AR Gunderson, EJ Gangloff. Effects of Lead on Performance Measures in the Common Wall Lizard (*Podarcis muralis*). Poster at the Annual Meeting of the Society for Integrative and Comparative Biology, Seattle, WA, January 2024. Poster at the OWU Connection Conference, Ohio Wesleyan University, September 2023.

Motivation for Applying to the University of Pittsburgh

Tell us why you would like to attend the University of Pittsburgh and list at least three CNUP training faculty members you would like to meet, along with a short rationale for your selections (up to 300 words).

The CNUP Graduate Training Program is attractive to me because it shares my value of prioritizing interdisciplinary collaborations in research. My own experience with undergraduate research has taught me how powerful interdisciplinary collaborations can be; I worked with professors from both the Biological Sciences and Psychology Departments at my university to address an environmentally-relevant question on lizard health from the lens of a neurobiologist, which would not have been possible without the expertise of faculty in both fields. My previous exposure to the cutting edge technology available at the University of Pittsburgh also makes me eager to return to the research environment at CNUP as a graduate student.

Currently, my specific research interests include investigating learning, memory, sensory processing, synaptic plasticity, or sleep using cellular and molecular neuroscience techniques. Since my research interests are wide, there are many CNUP labs in which I feel I could thrive. I would be especially enthusiastic to work with Dr. Simon Chamberland to investigate the role of hippocampal synaptic plasticity in information storage. The opportunity to study learning and memory by directly manipulating synaptic connections excites me and I would be able to build skills in optogenetics, anatomical tracing, and slice electrophysiology. I could also benefit from conducting research with Dr. Y. Kate Hong, who specializes in the neural circuitry of touch perception. In Dr. Hong's lab, I could see myself pursuing a project on the detection of familiar versus novel objects by the mouse whisker system. Investigating addiction in rodents with Dr. Mary Torregrossa is also an exciting prospect, in that it would give me the opportunity to characterize the formation of drug-associated memories using optogenetics and *in vivo* calcium imaging.

Personal Strengths

Success in scientific research requires personal qualities not measured by tests – attributes such as curiosity, creativity, adaptability, self-motivation, passion for research, conscientiousness, persistence, self-organization, grit, resilience, and integrity, just to name a few. Select one or two traits you feel are your greatest strengths and provide an example from your life experience that illustrates each trait (up to 500 words).

When I was applying to universities as a high school senior, I knew that I wanted to study at an institution with strong science programs and cutting edge research to prepare me for a future career in academia. My decision to attend Ohio Wesleyan University left me with a unique challenge: preparing for graduate training in neuroscience without access to the breadth of neuroscience courses and research offered at large, research-oriented universities. As a highly self-motivated individual, I addressed this challenge not only by taking advantage of the resources available to me at OWU, but also by creating new opportunities for myself.

Before my junior year, there were only two neuroscience professors in the Psychology Department at OWU, limiting the scope of neuroscience courses available to students. Seeking exposure to more diverse coursework, I applied to the “Psychology & Neuroscience in Europe” study abroad program at Maastricht University in the Netherlands. In Maastricht, I had the opportunity to take courses in computational neuroscience, social neuroscience, political psychology, and positive psychology—all of which employed discussion-based learning and introduced me to a large variety of topics in neuroscience literature. At OWU, I further enriched my education by taking courses in math and computer science that, while not required for my major, would be critical to success in scientific research.

My self-motivation has also served as the foundation of my independent research project, which was driven to fruition by my interest in learning research techniques that Dr. Gangloff was completely unfamiliar with through CNUP’s SURP. I was heavily involved in the experimental design of the project, grant funding acquisition, and submission of my work for presentation at national conferences. Instead of being discouraged by my position as an undergraduate student at a small liberal arts college, I pushed myself to reach the caliber of research-intensive universities.

My approach to education is also greatly strengthened by my creativity. Growing up in a musically inclined family cultivated my lifelong passion for singing and playing the cello, which I have continued to pursue as an undergraduate student. Early exposure to acting and improvisation through participation in theater productions throughout elementary and high school also taught me to think creatively. My creativity has been crucial to both the development of my independent research project and my ability to problem solve when faced with unexpected setbacks. In the future, I can also envision using my creativity as an asset in the creation and presentation of engaging course material as a neuroscience professor.

Statement of Purpose

Sometimes the act of speech itself is a barrier to communication. I remember silently observing my best friend's mother as she choked on her words and red wine while struggling over dinner plates to satisfy her son's needs. Her nonverbal autistic son engaged in bouts of rage punctuated by piercing screams and thrashing body parts to convey discontent. I was inspired by their interactions which helped me learn to better gather information about myself and my surroundings using facial expressions, gestures and prior knowledge that, in the absence of spoken words, could be used to understand the needs of another person. The prior perspectives I had on my ability to articulate began to shift as I developed a relationship with my friend's brother who helped me realize my own ability to verbalize thoughts as a privilege that can serve as a communication lifetime for non-verbal people with whom I am still able to communicate with and advocate for.

Given the societal norms favoring verbal communication—norms that leave those unable to verbalize their thoughts a distinct disadvantage—I developed a passion for advocacy that gives voice to the seemingly voiceless. As a little girl I spent countless nights watching my father, a then-prosecutor, parse through detectives' notes and all other available evidence, determined to uncover what wasn't being said. I soaked in his desire to uncover information from nonverbal cues in building a relationship with my best friend's brother. I had embarked on a lifelong mission to use my voice as a tool of advocacy for all members of our society who, whether literally or figuratively, may be structurally prevented from truly speaking up. I believe I can best serve this mission as a lawyer, where I can engage in advocacy on a broader scale.

Numerous workshops and undergraduate courses have allowed me to discover then explore writing styles such as poetry, essay, introspective narrative, and scholarly research. Each style uniquely piquing my interest. Poetry challenges my ability to apply strict and formal rules in new or unexpected ways. Constructing a narrative essay requires deep personal reflection that illuminates connections between past experiences and current behavior. I am frequently penning academic research papers designed to solve real world problems and issues across fields. My passion for literature is both innate and

Statement of Purpose

deliberate. As a writer, I think of readers who may see themselves, their lives, or thoughts reflected within my pages. I think of my best friend's brother. I ask myself, 'Who do I speak for?' because the answer is never just myself. The written word does not exist in a vacuum. My experiences in life and throughout academic pursuits have led me to always consider potential implications of communication in all forms. As a reader, I converse with authors within the margins of a novel or academic paper where my ideas can be laid out alongside theirs leading to various discoveries that are not possible without active engagement on behalf of both parties.

It seems people often view the law as a rigid construction, a set of rules that govern society. Though, I see it as much more, rather, it is an opportunity to advocate on behalf of and help those for whom such rigidity can marginalize them as members of that society. Case law I've read: *Dred Scott v. Sandford*, *Loving v. Virginia*, *Sutton v. United Air Lines, Inc.*, memoirs by Eli Clare, all exemplify how law and language constructing it can be used to amplify underheard voices. Codification is a pathway to legitimizing experiences and identities that can provide hope to those who society might leave behind. My experience in positions of leadership and collaboration, as well as advocacy for marginalized voices, my own voice included, has allowed me to negotiate speech within various settings that could be best utilized alongside formal teaching of the laws and legal writing allowing me to effectively engage these skills.

I spent summer afternoons at the Franklin County Court of Common Pleas, sitting in the back pews completing coloring pages of dollar-general books that would be hung in my uncle's judge's chambers. My family dedicated themselves to the practice of law rooted in justice and doing what is right. I hope to do the same through my own passion for advocacy. At eight-years-old a guardian ad litem spoke to me in my, at the time, suburban home, then carried my voice into a courtroom I was physically barred from entering. Entities from corporations to children need someone who can synthesize, communicate, and notice their needs that can be met with the help of others. Within the practice of law there is a break in communication flow that I can remedy, but I can't do it if I don't know how to engage with the unique literature and framework constructing our laws.

Strangers look me up and down, then in the eyes, and ask, “What are you?”. It is their jarring and convoluted way of inquiring about my racial identity. When I was a little girl, my mother set a precedent that “biracial, Black and white,” was the appropriate answer that I still give today. These short encounters end without any further exchange of information. Sometimes I consider calling after strangers, as they walk away, to tell them that I love writing and mac n’ cheese. I have a dog; her name is Leilou. In retellings of our interaction, I want to be described as more than ‘a biracial girl today,’ because melanin is something I have not something I am.

There is nothing new or profound for me to say about growing up in America with skin the shade of burnt butter because I am not the only human growing up in America with skin the shade of burnt butter. Being born to a white mother and Black father didn’t give me infinite wisdom or magic. I would argue that, alone, racial identities mean nothing given the vast genetic and biological similarities across racial groups. I love being biracial but the experience of living within a society that values socially constructed identities is exhausting. It has required me to develop a unique perspective on the world centering this identity that has been attributed to me. I have developed an attentiveness for the ways in which strict matters of classification can be harmful that I would likely not have if not for my racialized experiences.

I dislike the generalizing nature of preferred terms like, biracial’ or ‘mixed’. I use them for others’ convenience, though, I might use the word ‘mulatto’ if society would allow.

‘Mulatto’ is an outdated label formerly used to identify persons of both European and African descent. The term originates from a Spanish and Portuguese word, ‘Mula,’ translating to ‘Mule,’ in English. Historically, use of this term has been dehumanizing, derogatory and vile towards Black and white individuals whose bodies were gawked at and exiled. It is similar to

Statement of Perspective

outdated use of the word 'Nigger', but Black people have reclaimed that word and it is now used in socially acceptable ways among Black communities, throughout pop culture and in media.

I frequently wonder why Black people can reclaim 'Nigger', but I can't use 'Mulatto'. Aren't both forms of racialized language? Who decides this?

Labels of racial or ethnic identity are used to convey cultural values, identity, language, food, or historical experience shared by individuals coming from the same racial or ethnic background. Black, for example, is capitalized when used in a racial, ethnic, and cultural context, to acknowledge a shared history of oppression, displacement, identity, and community of Blackness within the United States and other parts of the world. Esteemed writers for *Associated Press*, *Columbia Journalism Review*, and professors at my institution tell me I must capitalize the "B" in Black and not capitalize the "w" in white. I am equally both, yet on the page those two words look different. Black is bigger and taller when the capital "b" shadows the small "w". A capital "w" in white is widely condemned for the association it has with white supremacy. I find it peculiar that historical acts of colonialization shared by many white people and their ancestors are not enough to warrant capitalization of the label. Meanwhile, the experience of being colonized and the subsequent oppression experienced by the ancestors of many Black people today, constitutes racial unification.

Humans are complex and I believe that we, as a society, should more often complicate the language used to describe and classify individuals. I cannot attribute my perspective to any one event but being biracial has illuminated unanswered questions I have about constructions of racial identity. I understand the world is not Black and white and during my pursuit of law I will engage in collaboration, discussion, and open mindedness to make room for people who are not Black or white. The study and practice of law would benefit from the unrigid perspective I have.

Bob. The patient who quickly became a reminder of why the smallest efforts are often the most important.

On my first day working as a patient care assistant, I was assigned four patients with C. Diff. It's safe to say that I got to know my patients on a very personal level that day. Among them was Bob, a six-foot-tall 68-year-old man who wore his red Ohio State baseball cap. Despite his fatigue and unfortunate circumstances, Bob and his wife, Karen, took the time to joke with me while I struggled to manage my first day jitters. Bob would pretend to adjust his sock, but he was really buying me time as I fumbled to get the sanitation wipes out of the pack so I could help him off the commode. After three days, Bob and Karen left, but I will never forget his patience and the small, thoughtful gestures that gave me enough time to take a deep breath and steady myself. That moment taught me that effective patient care begins with intentional presence.

About a month later, the patient whom I had taken my first set of vitals became my first death. Bob was readmitted for a small bowel obstruction and his condition had worsened. He had become less responsive and extremely fatigued. A fighter at heart, he needed a sitter due to complications with his NG tube. Without realizing it was Bob, I volunteered to sit with him in Room 308. As soon as I walked in, I saw his Ohio State baseball cap and Karen's pink reading glasses resting on the windowsill. It was an honor to spend his final day with him.

At first, I was unsure of how to behave because this was such a delicate and precious moment, but I decided to do for him what he had done for me: offer him comfort and laughter. We joked, played cards, and, despite everything, he got up and slow-danced with Karen and I. Early the next morning, Bob passed away unexpectedly. When I saw Karen later that day, the first thing she said was, "thank you." She and their daughter expressed their gratitude for providing Bob with such a meaningful final day.

Bob's grace in the face of uncertainty and the privilege of being present in his final hours inspired me to volunteer at a hospice clinic. I wanted to offer the same sense of companionship for others in similar stages of life because sometimes, just being there and present matters more than anything else. At the hospice facility, I have held hands during moments of fear, sat watching and talking about the birds, discussed the mundane details about the weather, and listened as people shared their most precious memories. These moments have taught me that healing can take many forms, and often, it begins with simply showing up with compassion.

I remind myself of a quote from Theodore Roosevelt often: *"No one cares how much you know until they know how much you care."* This mindset has become a core part of who I am and the kind of provider I hope to be. The physician assistant I had the privilege of shadowing embodied this philosophy in every interaction. Working as a med-surg, intensive care unit, and emergency department PA in a small, rural community, she brought both skill and heart to her patients' care. One day, a patient's blood sugar became dangerously low, stabilized, then became too low again in a matter of minutes. After helping stabilize the patient, the PA did not rush off to her next task, but instead she stayed in the room, gently talking with the patient and wiping the sweat from her brow until

she was emotionally at ease. It was not in her job description to do that, but it was who she was. And that made all the difference. Observing her clinical judgement, adaptability, and autonomy reinforced my understanding of the PA role as one that blends medical expertise with continuity of care.

Watching her work confirmed what I had come to understand through my own experiences; the most effective care happens when clinical knowledge meets human connection. As a future PA, I aspire to carry this with me into every patient encounter.

My experiences at the bedside, in hospice, and shadowing in a clinical setting have all deepened my appreciation for the physician assistant profession. I am drawn to the PA role because it allows for meaningful collaboration and working closely with all levels of medical staff and patients to provide comprehensive care. I value the balance of autonomy and teamwork, and I admire how PAs use their knowledge, not only to treat but also to connect. The ability to listen, educate, and advocate for patients while also contributing to diagnoses and treatment plans is exactly the work I hope to do.

More than anything, I feel incredibly privileged to have found a passion in medicine. Medicine challenges me to think critically, act with compassion, and constantly grow. The PA profession offers a unique space where those aspects intersect. It is not just the medical knowledge or clinical responsibilities that draw me in, but rather the opportunity to build real relationships and play a meaningful role in someone's care. I do not take that responsibility lightly. Becoming a PA means being trusted in life's most vulnerable moments, and I am ready to step into that role with dedication and purpose.

I took my first psychology class as an elective during my sophomore year of high school. I loved getting to explore what drives behavior, and how people's personalities and backgrounds can affect the way their brain functions in so many ways. I knew from then that it was a field that was super interesting to me, so I decided to continue taking various psychology courses throughout the rest of my time in high school. The more exposure I had to different kinds of psychology, the more I realized it was what I was truly passionate about, and what I wanted to focus my studies on in college. I reached out to my first psychology professor and asked her opinion on good ways to get into the field, and she recommended looking into becoming a psychiatric nurse practitioner. I had looked into a few colleges and had fallen in love with Capital University during my junior year. I was really interested in the nursing program, and all of the faculty were so welcoming and kind. I ended up going to Ohio Wesleyan University for what their Health and Human Kinetics (HHK) department had to offer as far as courses.

I took a lot of classes in both HHK and Psychology, and very quickly realized that I was drawn to the mental aspects of sport performance. I got to take a few different classes focused on coaching with Jay Martin, and he really put an emphasis on how important mental health is for athletes to be able to perform at the highest level. He made sure all his students were given tools that we could use in our lives to help us better serve the teams and groups we were a part of. Last semester, I got the opportunity to do a directed reading with Jay. I picked a book that focused a lot on goal-setting, motivation, and athlete performance. We got to discuss the role of sports psychologists, group dynamics, and client centered support, which connected a lot of what I knew from my psychology classes to athletics. Jay had me write my reflection paper about how I would use what I had learned from the book in my role as captain for OWU's cheer team.

When I considered how I could better my team based on what I had learned, I had imagined that I would take a very hands-on role in creating tangible ways for our team to improve. However, I got injured within the first two weeks of being back at school, and was out for the majority of our season. At first, I felt super lost because the ways I thought like I contributed most to the team were no longer available to me. About a month in, I realized my most significant contribution shifted from physical performance to relational support. I consistently held a non-judgmental, therapeutic space for my teammates, especially when they faced frustration or anxiety. I learned that my ability to provide unconditional positive feedback and actively listen was far more impactful than any athletic skill. Whenever someone got hit or wasn't in a stunt, they would come straight up to me. There were numerous times that I got the opportunity to be there for my teammates off the mat and show them that they were being heard. A big part of sports psychology that I got to look at with Jay was how to improve group cohesion and the "buy-in" to the program. I feel like being able to hear what the underclassmen were feeling allowed me to serve as an advocate, translating their needs to co-captains and our coach, which ultimately fostered better group cohesion and "buy-in" to the program's larger goals.

My experience in group advocacy has solidified my commitment to empowering individuals in all aspects of life, translating the concept of "performing at the highest level" from sport to career, relationships, and mental wellness. Capital University's Counselor Education program is my ideal fit because it offers a direct pathway to clinical practice. I am especially drawn to the program's focus on taking a holistic approach to health and the opportunity to take courses like Counseling Diverse Populations, as I haven't been able to take classes that dive deeper into how personalized counseling needs to be, in order to best serve the client.

Cleveland State University's Statement of Purpose

Prompt: Applicants are asked to describe their motivation for applying to the program at CSU's Levin School, their qualifications, and how the program will help them advance their career goals. This statement of purpose should be concise, ranging from one to two single-spaced pages. We encourage applicants to present their writing unassisted by ChatGPT or other large language models to ensure it truly reflects their individual voice and writing skills. If you do decide to use such a tool, please clearly acknowledge this by mentioning how you used it in your statement of purpose.

My pastor told me that, "By changing one life, you could change the whole world". This simple statement resonated with me as I have progressed through my collegiate career. I am interested in pursuing a Master's of Public Administration (MPA) at Cleveland State University. My name is Rheigna Gullatte, and I am from South Euclid, a suburb of Cleveland, Ohio. I am double-majoring in Environmental Studies and Geography and double-minoring in Sociology/Anthropology and Black World Studies at Ohio Wesleyan University. I serve on the Environment and Sustainability Board and am a member of the Honors College at Ohio Wesleyan University.

Being from the greater Cleveland area, I have witnessed various instances of environmental injustice in my own community. As an African-American woman and being invested in environmental justice issues, I want to be able to help my community exist safely, stay informed, and ultimately advocate for their lives. I am privileged enough not to be overtly affected by any environmental injustices; however, I am not oblivious to them. I want to be able to use my advantage to help other people who aren't as fortunate.

Pursuing a Master's in Public Administration prepares me to do just that. It ultimately propels me from just advocacy work to decision-making and potentially affecting policy development. My motivation for achieving an MPA is to be able to address systemic environmental injustices that impact underserved and underprivileged communities. The Maxine Goodman Levin School of Urban Affairs offers various hands-on and research opportunities that would further my experience. I look forward to learning more about nonprofit management, political and legal institution processes, economic and social systems, and more of the curriculum offered at Cleveland State.

Along with my academic background, I have held several leadership positions. I am a Resident Assistant at Ohio Wesleyan and I've been on several mission trips including a Minnesota Chippewa Native American Reservation. These are just some of the experiences that have aided in my development and shaped my character. These situations have allowed me to work with various people from different backgrounds, support various populations, and have allowed me to grow as a person. This has strengthened my organizational skills, project management, and communication skills needed to be successful in a career in Public Administration.

I became interested in protecting the environment at a young age. I have two older brothers, and like in most families, where my big brothers went, I would too. I was seven years old when my brother attended Greenview Upper Elementary School. He participated in a club called

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“Green Team,” which was the recycling and gardening club. During the summer, he was one of the garden’s caretakers. I would go to school with him and help plant, water, and nurture the garden. By the time I attended Greenview at age 9, it was only natural that I would continue participating. Our club caught the attention of Mrs. Michelle Obama because of her “Let’s Move!” healthy eating campaign. We were invited to the White House to help harvest and cook her vegetables. As a result of this experience, my love for the environment grew.

From there, I became invested in environmental humanities issues. I took a class titled Environmental Racism and Climate Justice my freshman year of college. That solidified my desire to go into environmental justice work. It combines my love of the environment, caring for people, and helping transform the world for the better. Improving the world is a huge feat, and I won’t be able to change everything; however, getting a degree at Cleveland State University would be an amazing start to achieve this goal!

I have had the good fortune to participate in research opportunities and plenty of independent studies to further my knowledge in environmental justice issues. Under the tutelage of Dr. Ashley Toenjes, I was her research assistant. Our project focused on highlighting minoritized voices in Delaware, Ohio. I was responsible for scheduling and conducting life history interviews. Additionally, I had to make the interviewee feel comfortable enough to want to share their experiences. Another piece I would like to highlight is a research project examining the harmful effects of cobalt mining in the Democratic Republic of Congo. I did extensive research on the environmental effects that mining has on its surrounding areas. More importantly, I focused on the environmental harm that affected the people. I was able to present my findings to a great deal of people.

My top three strengths are empathy, being an activator, and adaptability. Empathy is such a needed trait in this field of work. So many people have been negatively impacted by environmental issues. I will value people and hold them in high regard. Activators turn thought into action. When I am passionate about something, there is nothing I will not do to achieve this. For example, I have been planning an independent study researching gentrification because of the Cleveland Clinic. When I first thought of the idea, I immediately began planning how I would achieve my goal. This research will be completed in the spring of 2026. Finally, adaptability is equally important. There are incidents that may happen that are out of my control. As a result, you cannot get flustered, but must remain tenacious and keep moving forward. These projects are all under the umbrella of the environmental justice field. Pursuing an MPA would allow me to take these projects to the next level by giving me the power, decision-making skills, and credibility to make great changes.

My long-term goal is to have a career in environmental justice. Whether it is working in a nonprofit organization or working in the government, an MPA will equip me with the knowledge and skills to change the systems that produce harm. The Public Administration program will teach me to effectively and efficiently engage as well as interact with government officials, policymakers, and community members to change the system. I am eager to contribute my knowledge, skills, and background to the school and public service as a whole.

My ultimate goal is being able to do environmental justice work in Cleveland, Ohio. I want to give my hometown the knowledge to help fight back against environmental injustices. I know that Cleveland State University can help me become a well-rounded and better informed

scholar to handle these issues. The program will undeniably provide me with leadership development, foundations in public service, administration, management skills, and more to have a successful career.

Essay for WashU Hunter Merit Scholarship (Mechanical Engineering)

Prompt: Upload an original essay that you have written which describes why you wish to obtain an engineering degree, the engineering career path you would like to pursue, and why you would like to earn your degree from Washington University in St. Louis. The essay should be typed, single-spaced and be no more than three total pages. Be sure to include your name at the top of each page of your essay. (Scholarship is looking for well rounded engineering students)

When I saw a simulation of electrons flowing across a microscopic channel for the first time, bright threads flowing purposefully across a grid, I watched invisible theory take on a tangible form. At that moment, the abstract equations that I studied came alive as forces shaping something real: a functioning system that could someday power devices, data centers, or entire cities. That transformation, from solving formulas to seeing their impact, captivated me. Studying physics revealed the beauty of fundamental laws, while engineering showed me the responsibility and creativity needed to apply them. This shifted desire of understanding how the world works to designing how it should, drives me to pursue a BS and MS in Mechanical Engineering. Through this program, I intend to deepen my technological knowledge and develop the skills necessary to create complex, efficient, and sustainable systems that build modern infrastructure.

My education in physics and engineering has prepared me to evaluate critically, but it has also revealed the limitations of depending solely on theory. My course experience in classical mechanics, thermodynamics, electromagnetism, and differential equations boosted my mathematical intuition. However, my most valuable experiences came from tackling real engineering challenges. While working at a research lab sponsored by Intel at The Ohio State University, I focused on simulations to optimize electron conduction inside two-dimensional semiconductor transistors. By successive modeling of the transistor with a variety of metals and adjusting the respective parameters, I predicted the optimal metal choice for a MoS₂ bridge in a transistor under normal operating conditions. This modeling required care and patience to learn the new knowledge crucial for successful trials, but, most importantly, it demanded that I consider how small properties affect overall performance and durability. I started to see engineering as a means of connecting different domains, linking materials, energy, and motion into functional systems.

Additionally, my technological perspective grew during my Technical Innovation Internship with Vertiv. I evaluated technologies for data center operations, including power, cooling, and energy storage systems. Seeing the way thermal management, electrical systems, and material constraints interact in high-performance settings increased my interest in mechanical engineering. Data centers and advanced computing systems count on effective mechanical design, heat transfer, fluid-flow optimization, structural strength, and sustainable energy use. My work with Vertiv made me realise that those challenges are not simply technical; they are systemic. Therefore, I am especially driven to work in thermal-fluid sciences and advanced energy systems, designing mechanical solutions that increase efficiency and lessen environmental impact.

As a mechanical engineer, my long-term goal is to contribute to research and development in energy-efficient mechanical systems. I want to work at the intersection of sustainable energy, advanced materials, and high-performance mechanical infrastructure. Whether I'm creating more efficient cooling systems for future-generation processors, refining energy storage technologies, or developing sustainable mechanical designs for large facilities, I intend to improve performance and accountability. Eventually, I hope to lead diverse engineering teams that see innovation not as a single invention but as purposeful integration, weighing technical quality with lasting societal benefit.

Washington University in St. Louis is an excellent place to help me to contribute to this vision. The university's focus on strong fundamentals, combined with cross-disciplinary collaboration, fits with how I approach engineering problems. I admire that mechanical engineering at WashU is not isolated; it connects with materials science, electrical engineering, and applied physics in ways that represent the complexity of applied engineering systems. I am especially intrigued by the Thermal Management Research Lab, where Professor Shantanu Chakraborty's work on microscale heat transfer and state-of-the-art cooling systems matches my interest in improving the efficiency of data center operations. Participating in research with such a group would allow me to develop expertise in the very areas I hope to impact. The chance to pursue a combined BS and MS is especially appealing because it offers the continuous intellectual engagement needed to solidify my mechanical engineering education. This program will allow me to be involved in research questions ranging from fundamental concepts through advanced research.

I am especially attracted to WashU's focus on accessible research and close faculty mentorship. Meaningful engineering innovation goes beyond coursework. Immersion in labs, tackling open-ended questions, and freely testing ideas, all offered at WashU, are, what I believe, key to encouraging engineering innovation. My past experiences have shown me how powerful scientific settings can be. However, throughout my undergraduate studies, I just scratched the surface of these essential parts of an engineering education. At WashU, I want to participate in projects in thermal sciences, energy systems, and advanced mechanical design, using my background while deepening my scientific competence. The cooperative research culture will help me sharpen my reasoning skills and my ability to work across several fields.

Beyond the academic realm, I appreciate environments that promote leadership, social involvement, and technical excellence. Throughout my scholastic journey, I have held leadership positions, such as serving as the student body president at OWU, that required strong communication, organization, and accountability. These roles have taught me that engineering, just like any challenge, is inherently a team effort. My experiences in these positions gave me the skills necessary to work collaboratively in the engineering field. Complex systems are not created in isolation; they develop through teams that rely on one another's skills and judgment. I am excited to be part of WashU's engineering community, not only as a researcher but also as a peer mentor and an active participant in campus life. I plan to get involved in the Society of Women Engineers and Engineers Without Borders, as both cultivate teamwork, problem-solving, and outreach in technical settings. I also hope to participate in the Student Union Engineering Council to help organize student-driven initiatives and mentoring programs. Working with these organizations will allow me to build connections, share my experience, and contribute to WashU's collaborative and leadership focused environment.

My pursuit of an engineering degree is grounded in both inquisitiveness and accountability. Curiosity drives me to grasp the mechanics of energy transfer, fluid dynamics, and material dynamics. Accountability reminds me that the systems engineers design, such as electric grids, cooling systems, and transportation infrastructure, affect environmental outcomes and user experiences. Mechanical engineering is at the heart of these problems. It offers tools to create efficient, resilient, and sustainable systems. I want to earn my engineering degree not just to become an engineer, but to become one who builds thoughtfully, innovates wisely, and leads boldly.

Receiving my degree from Washington University in St. Louis means more than simply an academic achievement; it prepares me for a career focused on invention and impact. The combination of solid theory, practical research, interdisciplinary teamwork, and a structured BS/MS pathway makes WashU the perfect place for me to grow from an engineering student into a contributor to its future. Engineering, to me, is about creating what does not yet exist; it involves turning knowledge into progress. I am ready to broaden my knowledge, challenge my beliefs, and commit to the rewarding work of building systems that matter.

Personal Statement Prompts:

The *Statement of Purpose* should include a description of your past experiences and your educational and professional background, including your interest and experience in genetics; the program's core knowledge areas of most interest to you; and your educational objectives and career goals. The admissions committee will use your essay to evaluate your writing, thinking, and editing skills, as well as to understand your academic priorities and your ability to think across disciplines.

The *Personal History Statement* is meant to give you the opportunity to provide a narrative about your lived experiences, obstacles you may have overcome, and how these have guided you towards public health. Your Personal History Statement can include information about who you are as a person; your family or background; socioeconomic conditions; and experiences growing up, including successes, challenges, and moments of learning and growth. This question is not intended to ask you to share personal information you are not comfortable providing.

One of the most unfair truths of existence is that each person only gets one body, one chance to be born into a vessel naturally equipped to meet their needs. This is second only to the fact that one's given body and mind are not always in congruence. These are harsh truths I endure every day as a transgender and disabled individual. From an outside perspective, I am viewed as a strange, nonconforming societal subspecies due to the combined output of being visibly genderqueer and often invisibly disabled. When considering the internal struggles I face every day, even the social difficulties of rejection from external forces cannot compare. As demanding as this life is, I am partially grateful for existing as I am – these experiences have pointed me in a direction I would never have considered otherwise. I have always held a strong desire to become a scientist to discover the secrets of the world we live in. As I grew up and my

conditions became progressively hindering, my negative experiences with healthcare carved a caveat into my innate wishes: alongside my long-term career goals of being a medical research geneticist, I want to foster mutual understanding between the general public, healthcare providers, and the disability community.

Unfortunately, my own conditions impede my journey towards this goal every step of the way, whether it be social ostracization hindering my networking opportunities, blinding physical pain preventing my full mental presence during important lectures and exams, or misfiring neurons shifting my brain into survival mode in response to the sensory stimuli of everyday life. However, the silver lining of living in my given body is the forced acquisition of practical skills. Through my difficulties with individual interactions, I worked to develop a hard outer shell and the ability to shake off setbacks and rejections. As a result of frequently missing key information, I have put significant effort into time management, self-teaching skillsets, and dismissing the fear of asking for help. My work towards helping my brain handle both new and everyday situations has given me patience, resilience, and perseverance, even in trying times. These experiences have guided me towards pursuing higher education at any cost.

Over the course of my academic career, I have participated in two major research experiences that have reinforced my plan to pursue a graduate degree: one in high school and one in college. These experiences differ vastly in the type of research, my level of involvement, and the benefit I gained, so they will be discussed separately.

My very first experience with proper research fell in between my junior and senior years of high school, as part of a six-week internship at the local branch of Clemson University. The study focused on identifying Georgia peanut plants with naturally reduced immunogenicity, with the end goal of producing a line that could be safely consumed by those with severe allergies, without the use of genetic engineering. My role in this project was to screen each imported plant using a variety of standard protein identification and isolation techniques, including gel

electrophoresis, Bradford assays, and chromatography. Alongside these duties, I also had a few administrative responsibilities, such as creating and implementing changes to established procedures to maximize long-term efficiency and tracking inventory. At the end of every week, I would give a brief oral presentation on my findings and plans for the upcoming week. In short, I was doing grunt work for six weeks. However, I remained motivated throughout the project by keeping my focus on the overall benefit, as this work allowed me to practice lab management: a skill that cannot be gained through typical lab coursework. During my time there, I identified several lines with weak allergen content and strong potential for mass production, all of which could ultimately provide a safer environment for people with severe peanut allergies. Small as it was, this role sparked my interest in utilizing genetic research to have a real impact on human health and changed the course of my academic career.

My second foundational experience with academic research is an ongoing project with a professor at Ohio Wesleyan University researching the biogeographical phylogenetics of newly described members of the plant genus *Xylopia*. This has been my most satisfying and most challenging research experience to date. Our goal in this project is to uncover the evolutionary and geospatial history of the genus and the connection to its better-studied family, Annonaceae. This research affects our understanding of global ecosystems and Earth's history as it evolved alongside living organisms. At the beginning of the project, I chose the primary research approach of drawing preliminary connections between new and existing species before tailoring the remaining biogeographical and statistical analysis to those findings. My current responsibilities involve writing R code and utilizing phylogenetic software to mine geospatial data, reconstruct ancestral climatic conditions, and generate phylogenetic trees. Over the course of the project, I have created a poster for our research, presented at a symposium, and co-authored two papers. Though the topic of this study is not directly aligned with my research interests, it is an incredible opportunity to gain experience with taking a larger role in a project,

handling big data, writing my own code, and authoring a research paper. This experience has been meaningful and satisfying, as it has provided me with a safe environment to stretch my analytical legs and explore different methods of scientific inquiry without the fear of physical consequences, such as chemical explosions or accidentally losing a tube's worth of mutated fruit flies.

My ongoing research project has provided me with many unique challenges over the years. However, the most significant occurred during the first few weeks, borne from the circumstances of my onboarding; due to a significant uptick in technological improvements in the field, my supervisor was behind in learning the newest techniques for most digital aspects of the job. As such, I was expected to explain each technique and its purpose right after learning them myself. This provided the challenge of understanding a new topic well enough to teach it to someone else, which requires a very different approach to learning than typical classroom memorization. My most successful strategy for handling this new roadblock was to trace the software back to its source, where I would usually find a research paper describing its uses and functionality, then decide what parts were useful for the project and prioritize learning those sections. Afterwards, I would follow citation trails to find papers in the field that used the program. This was often a long, tedious process with a significant learning curve, but it was the most effective way to self-teach the use of multiple programs while ensuring I understood them thoroughly. The adversities I have encountered throughout this experience have taught me how to teach myself effectively, seek out information, and create new methods from scratch.

My overall career objective is to spend my life strengthening connections between genetic research and public health. My research interests include developing therapeutics for diseases caused by mutations in mitochondrial DNA. The challenges associated with acquired mutation heteroplasmy in patient outcomes are of particular interest to me. I also carry a strong passion for scientific communication to the general public, especially in this new age of

anti-vaccination and distrust in science. I see the widespread misinformation about genetically modified foods, vaccine development, and gene therapy spread further and further from the truth, with the rift between the general public and scientists getting wider every day. I am motivated to bridge that gap by conducting research that can provide large-scale improvements to the health of humanity while focusing on science communication. I already have the lab skills and experience with big-data projects required for this goal, but that is only half the battle; My goal is interdisciplinary by nature and will require significant, lifelong collaboration with scientists in both the genetics and public health fields. I need to meet scientists who do work outside of my field to succeed in bringing science to the public while also actively researching new therapies. This will become increasingly difficult as I finish my degrees and advance into my career, especially when I am expected to teach classes at a university alongside my research. My reason for completing a Master's, beyond simply receiving training to prepare me for an academic career, is to make early connections that will help achieve this goal. The University of Glasgow has an incredible diversity of research projects within the Medicine, Dentistry, & Nursing department alone. These integrated discipline areas will help me build the interdisciplinary connections I need on a larger scale than is possible at other universities, as coursework and thesis writing only provide access to a few select faculty members in a specific field of research. The Medical Genetics & Genomics program has built-in connections with local hospitals that allow students to observe real-time genetic research and diagnostics, an incredible privilege that most universities cannot offer. Pursuing this degree at the University of Glasgow will provide me with access to hands-on experience that will further my academic prowess and prepare me for my future career. I want to complete my Master's at the University of Glasgow because the school's unique network of opportunities will allow me to tailor my experience to fit my goals in a way that I have not seen anywhere else.

Among the largest problems facing the public health field today is the disconnect between patient and provider. The fact is, with today's education models, most people who are capable of making it through medical school, residencies, and student loans will not understand the perspective and struggles of their most vulnerable patients. I want to bridge that gap and help my fellow disabled siblings who live with complex and chronic conditions. My participation in the Medical Genetics & Genomics program will help me address this disparity by furthering my knowledge of both public health policies and medical practices. This training will put me in contact with professionals already in the field, where we will mutually benefit from each other's knowledge and worldviews. I will use my time at the University of Glasgow to address the problem at its root by providing perspective to future healthcare providers and policymakers; through this, I will help my fellow students pave the way for a more equitable and understanding healthcare system.

The hard-earned skills I have gained throughout my personal life and academic career are critical to success in higher education, especially thesis- and research-based graduate programs. Students are expected to balance coursework, data collection, large-scale analysis, and thesis writing simultaneously. It is a given that graduate students will face repeated failure; I do not delude myself into thinking I am an exception. My struggles with existing in a disabled body have prepared me for the equally arduous and rewarding journey of completing a master's degree at the University of Glasgow, and further for the path towards fulfilling my lifelong goals.

You Should Listen To Your Mother

Prompt: Please tell us how your studies at the University of Glasgow will contribute to tackling local, national, or global challenges (Max 200 words).

Ecosystems across the globe rest on the precarious edge of oblivion. Rapid urbanization, overconsumption, and general carelessness have threatened the beautiful and delicate balance of our natural world. However, pessimistically viewing mankind as invaders fails to recognize the beauty of our own existence. How miraculous it is that systems too old to fathom, shaped by countless living things, have coalesced to make it so that I can see my friends smile, pet my dog, and watch birds fly over a sunset. Despite the lack of respect we've shown Mother Earth, at the end of the day we are still her children. Our health cannot be removed from the health of the world and the creatures around us. In my time studying in Kenya, I learned the value of listening to unique perspectives and want to work on conservation projects not to speak over others but elevate the voices that aren't being heard. The skills I get in the Applied Conservation Science program at the University of Glasgow would allow me to work in communities across the world, working alongside local stakeholders to build an equitable future for people and wildlife to share.

Personal Statement Essay: Doctorate of Physical Therapy Program Admittance

Prompt: *Every applicant is unique in their own way, possessing individual qualities, abilities, and backgrounds. What unique traits will you bring to the physical therapy profession that will help you to be successful?*

Growing up as a young girl in the 'girls in STEM' era, I would always say that I wanted to be an engineer when people asked me what I wanted to do when I grew up. As I grew older, I told people I specifically wanted to be a biomedical engineer. What pushed me to the specialty of biomedical engineering was my love for the human body. Anatomy and physiology classes were always my favorite and I loved that I was able to learn about a structure or function and then be able to palpate or visualize them outside of the classroom on myself or a classmate. While it certainly seemed right for me to pursue this degree, I never actually knew why. I continued on this track, taking extra science classes in middle and high school, securing a research internship, and beginning my college career studying engineering. After a few semesters and taking engineering classes, I began to have a change of heart. I switched my major to exercise science, and fell in love with the courses and the profession of physical therapy.

I believe that I have the work ethic and the determination to be a successful physical therapist in the future. While I have not always known that I wanted to be a physical therapist, there is no doubt in my mind that this is the career path for me. Since discovering this passion, I have thrown myself into different experiences and opportunities to understand where this path can take me. I see how physical therapists can turn someone's day around with a visit, making a patient feel better in so many different aspects outside of their physical health. I see how physical therapists create an environment where patients can feel like it is okay to take steps out of their comfort zone and work to create a better lifestyle for themselves. I believe that I have the dedication and perseverance to create this space for patients in the future as a physical therapist.

I believe that I have the compassion to be a successful physical therapist. One thing that has held true throughout my life is my love for others. I build deep connections with individuals, creating a multitude of relationships in my life with family, friends, and strangers. One of the things that I love most about the physical therapy profession is the relationships that I have seen between physical therapists and patients. I believe that I can be not just a clinician, but a person that a patient can trust during times of hardship. Taking steps to take care of one's health can be difficult and requires vulnerability from a patient. I believe that I can be a trusted individual that patients will feel safe and taken care of.

In conclusion, I wanted to be an engineer growing up because I wanted to be able to build products from scratch and allow my creative side to take control. As a physical therapist, I will be able to create in a different way. I will create impactful

relationships, helping patients daily and being not just a physical therapist, but another shoulder to lean on in times of hardship. I will help create more able and more adaptable bodies, helping patients return to previous levels of activity and possibly even enabling them to complete more taxing tasks. While creation is a great aspect of both physical therapy and biomedical engineering, pursuing physical therapy will allow me to commit to the craft of caring for not only the patient that walks into a clinic, but the human being within.

Statement of Purpose

In 750 words or less, address the factors that have encouraged you to seek an education from Penn GSE. You may also wish to address your background, significant personal and professional experiences related to your program of study, important aspects of your academic record, and your professional goals upon completion of your desired program.

I left college in January 2016 because I realized I wasn't fully ready to be there yet.

My academic performance, especially in fall 2015, reflected that reality. At the time, I lacked the discipline and self-awareness required to succeed in a demanding academic environment, and my GPA suffered as a result. Stepping away wasn't easy, but it was honest. I needed distance from formal study to understand how I learn, how I respond to pressure, and what kind of responsibility I was prepared to take on.

What followed was nearly nine years of full-time work in international education. I entered the field as a young teacher and essay editor with energy and confidence, but little structure. Early on, I relied heavily on effort and intuition rather than pedagogy or reflection. Becoming TEFL-certified marked an early turning point, pushing me to think more carefully about how language learners process information and how instruction should be structured. Applying theory in practice took time, and growth came through repeated situations in which my decisions were tested, particularly when conversations with students or parents grew tense or when expectations conflicted with institutional realities.

My comfort level navigating these situations was shaped long before my professional career began. Having attended a Canadian high school, I was exposed to an educational environment influenced by multiple cultural perspectives from an early age. Adjusting to different academic expectations felt familiar rather than intimidating, and that experience later informed how I approached teaching and advising across educational systems.

As my work expanded, so did the demands. Teaching English writing and presentations to business professionals forced me to move beyond fluency and focus on judgment, while advising students brought a different kind of pressure, much of it driven by parents. I worked primarily with Chinese families, as well as American, Canadian, and Japanese families, each with different assumptions about education and success. These differences often surfaced during peak application seasons, when deadlines overlapped and emotions ran high. One recurring challenge involved managing expectations when ambitions outpaced institutional realities. Agreeing would have been easier under time pressure. Instead, I learned how to slow conversations down, explain trade-offs clearly, and prioritize student fit over prestige.

The workload during those periods was intense. I often balanced teaching, advising multiple students at once, and coordinating with colleagues across time zones. I learned to structure my time carefully, decide what required immediate attention, and accept that effectiveness sometimes meant letting go of perfection. I also learned that stepping back was necessary to remain effective. During breaks between positions, I traveled extensively to recalibrate, spending significant time in Japan, and deliberately improving my spoken Japanese placed me back in the role of a learner and reinforced how effortful real communication can be.

What never changed throughout these years was my refusal to become complacent. Proficiency in English writing, speaking, or teaching never felt like an endpoint. I've come to see education as a process of continuous recalibration, especially in cross-cultural contexts where assumptions rarely hold.

Returning to undergraduate study in January 2025 made clear how much I had changed. At 30, I'm aware that my path makes me an unconventional applicant to a graduate education program, but I don't see that as a disadvantage. Since my return,

I've maintained a GPA above 3.0 and was placed on the Dean's List in fall 2025 because, this time around, I knew how to learn and study with discipline, intention, and effective time management, without losing focus.

This readiness is what draws me to the Higher Education M.S.ED. program at UPenn. My years in the education field have given me practical judgment, but they've also revealed the limits of experience without theory. I'm seeking a program that integrates international teaching with leadership development and prepares educators to lead across cultural and institutional boundaries. UPenn offers that balance.

In sum, I'm pursuing this degree not to reinvent myself, but to refine the educator and leader I've already become. I bring experience shaped by pressure, difference, and responsibility, and I'm ready to examine that experience critically. UPenn GSE provides the essential academic framework, resources, training, and global perspective to turn lived practice into informed, well-rounded leadership.

Tulane University Neuroscience PhD Program - Statement of Purpose

Prompt: Please submit a 500-word statement reflecting on your reasons for participating in this program and how you plan to use your PhD in your future career.

While taking college classes, my interests shifted multiple times. I took a wide array of natural science courses, including neuroscience. I always wanted to be in a field that would allow me to never stop exploring, learning, and where I would be able to help others. I felt that neuroscience would be exactly what I was looking for. I understood that this field could lead me to contribute to something important to the world and become a scientist. Such a career did not seem attainable to me until then.

My background as an international first-generation student has served as a foundation to my determination to achieve this goal. I began looking for opportunities that would allow me to explore more about neuroscience and possible future directions. I was eventually able to join Dr. Vadnie's Lab at Ohio Wesleyan University. Thanks to this experience, I was subsequently able to secure an internship position at Abigail Wexner Research Institute (AWRI) at Nationwide Children's Hospital in Columbus, OH. There, I have been participating, and will continue to do so until May 2026, in research regarding development of therapeutic approaches to rare, pediatric, neurodegenerative disorders.

This experience has played a major role in me eventually deciding to pursue a Neuroscience PhD. While I have had a plethora of mentors and professors who have played a crucial positive role in my interest in a career in science and research, many people have warned me about the difficulty of being a PhD student. However, working with many graduate students at the AWRI on a daily basis, learning about their research, their journey, motivations, I could see myself in their place, and I knew that was the career I wanted to strive for.

When I decided that I would pursue a PhD in Neuroscience, and began exploring programs which I could attend, I first learned about Tulane University from one of my professors at Ohio Wesleyan University. I instantly became interested, especially by the Tulane Primate Research Center and the open-minded atmosphere I was told I would find at Tulane. To learn more about the program, I visited the program's table at this year's Society for Neuroscience (SfN) meeting in San Diego, as well as one of the posters, where I was able to speak to the student about being a graduate student at Tulane. These encounters made me that much more interested in studying at Tulane, especially experiencing the welcoming atmosphere.

During my last year of undergraduate studies and first year of graduate studies, I am hoping to continue exploring and to learn more about possible neuroscience-related careers in research. After finishing my PhD studies, my goal is to become a professor, start my own research lab, and open doors to future students, similarly to how my professors have supported me and opened the doors for me for a career I never thought I would be able to pursue.

I spent my sophomore season of collegiate track & field working overtime to regain the muscle, skill and confidence I had lost during a struggle with exertional compartment syndrome. I finished that season as an NCAC Conference Championship finalist with a plaque awarded to me during the team banquet that read, "Most Inspirational." Recognition I have received for my writing, grade point average, and varsity sports participation, exemplifies some innate leadership skills I possess and always carry with me. I am not easily overwhelmed. I can adequately handle several tasks at one time. Other skills I have learned and cultivated throughout undergraduate studies, such as the ability to accept as well as provide constructive feedback to others in ways that are both respectful and honest. Amazing people I have met during undergraduate classes and programs have taught me the value in listening to understand not just respond. It seems trivial to say that I have grown but I have, and during this process my leadership style has grown as well.

In attending the 2025-26 Leadership in Action Seminar through the Global Liberal Arts Alliance, I practiced deep self-reflection that illuminated core values that are central to my understanding and practice of leadership. One of these values being honesty.

The greatest contributions I have made to my community and life are as an honest individual. In my pursuit of leadership, I practice honesty first with myself by acknowledging limits, knowing when to ask for help. Next, I practice honesty with others by being transparent with my team about my limits or shortcomings and encouraging them to do the same. I have found that honesty breeds communication that carves space for collaboration. At times, being honest with myself has forced me to notice there is a need for collaboration. For example, in recent months, I have been developing an initiative on my university's campus to address accessibility barriers that Black students face when trying to care for their hair by finding braiders, products or tools. After months of planning, I realized that, without a way for my initiative to be recurring or

self-sustaining, the resources I could provide would be limited and fleeting. I was honest with myself about what little value a one-time-solution to an ongoing problem had. Now, I have collaborated with a Black female student run organization on my campus to carry out this initiative that is no longer my own. Rather, it is a larger project that is part of Sisters United, and part of the college campus. Although I call the initiative mine, the outcries of my community breathed life into it. I understand that my work as the head of this initiative is not done until the Black community on my campus feels that their concerns have been acknowledged and addressed.

I do not set out to lead people. I set out to affect needed changes within communities. In practice of honesty, it feels pertinent to mention that I do not yet know what direct change I could bring about Moritz College of Law. I will not pretend to hold solutions for problems I am unaware of. Though, I can provide assurance that I will make a recurring effort to form community connections in active, engaging ways. I am not, nor do I intend to be, passive.

I have made a conscious effort to acknowledge and recognize the needs of my campus community, track & field team, and Delaware community. I view leadership as a living concept that requires change depending on shared identity and goals for a community or organization. And while I am constantly learning, growing and cultivating my leadership skills, community impact is always at the forefront of my mind.

Personal Statement: Masters in Dietetics and Nutrition
Ohio State University Admittance

Prompt: *A statement of Intent - A statement should include a summary of the applicant's relevant educational, professional and research experiences, as well as, the applicant's career and professional goals. The statement will be reviewed for writing quality and fit of the applicant's stated goals with the program's purpose and scope.*

When I started college, I thought I had a perfect picture of what the next four years would look like. I was sure I would major in communications, write for local newspapers, and eventually become a broadcaster. I came in confident about my academic path and excited to compete as a student-athlete on the women's soccer team, knowing that I thrive in team environments and love the game. But very quickly, I realized that the plan I had walked in with didn't match the person I was becoming.

During my first semester, I found myself dragging my feet to my Intro to Journalism class. No matter how much I told myself I should enjoy it, the content was boring and extremely unfulfilling. At the same time, I couldn't wait to go to my Intro to Nutrition class. I would leave class excited about what I learned, repeating new facts to my teammates at practice, and even applying the lessons to my everyday life. Even then, I didn't let myself think too much about the shift happening inside me because I had arrived as a communications major and felt I needed to stick to that plan.

Everything changed when my grandma unexpectedly needed emergency intestinal surgery due to Crohn's disease. When she finally returned home, and I visited her, I could see how much she was struggling mentally and physically. She showed me the diet the doctors had prescribed for her, and I immediately understood why she felt discouraged. It was bland, very restrictive, and not even close to any of the foods she enjoyed. But because of the Intro to Nutrition class I was in at the time, I also understood why her diet needed to be that way.

I was able to explain to her the purpose of each restriction and how it would help her digestive system recover. Over time, she was able to expand the foods she could eat and tolerate, lifting her mood. She would come to me with questions, trust my explanations, and I was able to watch her relationship with food begin to flourish again. Seeing that transformation and knowing that simply helping her understand why she was eating a certain way could change how she felt finally made something click for me. That was the moment I knew I needed to switch to nutrition. I realized I wanted to make that kind of difference for other people, using food as a tool for healing instead of something that goes unnoticed.

From that point forward, I began building a strong foundation in the field of nutrition whenever I had the chance. Taking challenging organic chemistry, biochemistry, and metabolism courses has helped me understand the mechanisms that influence our health at the molecular level. My global food systems course pushed me to look beyond individual nutrition and explore

food from a broader perspective. Traveling to Cuba to study its food system firsthand and compare it to the United States strengthened my ability to look beyond the classroom and ask more complex questions. This experience gave me the skills to present my own research at the OWU spring symposium and to communicate complex ideas clearly to an audience that may not know much about the given topic.

Throughout my college experience, soccer also shaped who I am. Moving from non-starter to starter to captain taught me commitment, selflessness, and leadership in different forms. I learned how to push myself for the good of the team, how to lead quietly or loudly depending on the moment, and how to put the team's collective goals ahead of my personal ones.

This past fall tested me more than any other season. After working endlessly to prepare for my senior year and to play alongside my sister, who had just joined the team, I suffered what was thought to be a season-ending injury just eight minutes into our first scrimmage. Overnight, everything I had built my routine around disappeared. At the same time, I was stretched thin academically, tutoring other students, and applying to graduate programs. It felt like everything was happening at once.

But with time, I found my footing. I committed to physical therapy outside of practice, stayed up late to keep my grades up, and continued supporting the tutees who relied on me. I discovered a new role on my team, not as a starter, but as someone teammates came to for encouragement and support. And eventually, I worked my way back onto the field for three games. To some, three games might seem insignificant. To me, they were a reminder that setbacks do not define you, but that your response to them does.

I recovered from my injury thanks to all the skills that I learned while spending countless hours with my team year-round. By committing to 6 am lifts and late-night conditioning, I found a way to prioritize hours for my challenging chemistry classes while also balancing my time to gain communication and problem-solving skills from tutoring. My days were long, but they taught me how to balance and prioritize what was important to me and what I thought would help me the most in the future.

As I look towards the next step in my academic journey, I aim to be in an environment that challenges, motivates, and pushes me to grow to the best version of myself. The Ohio State University is a school that I have admired for a long time, and that aligns with my values. It is supported by excellent scholars, rigorous science built by collaborative learning, and has a drive for excellence. The OSU Masters of Dietetics and Nutrition program provides opportunities to participate in research and observe patients with complex and challenging medical conditions while learning from passionate scholars. This aligns with my curiosity about Crohn's disease, as it's what has had a huge impact on my grandma's life and why I decided to pursue nutrition. OSU will also provide opportunities for me to gain lifelong connections that will help me after I

complete my degree. My experiences in research, leadership, travel, academics, and athletics at OSU have prepared me for this next level of learning.

Earning a Master's in Dietetics and Nutrition at OSU is not just the next step on my career path; it is a way to continue my desire to help people understand food in a way that improves their quality of life and gives them control over their health. With OSU's guidance, I believe I can become a dietitian who can educate, empower, and make a difference in people's lives, one meal and one conversation at a time.

Ohio State University Biomedical Sciences Graduate Program (BSGP) - Personal Statement

Prompt: There are no specific requirements for the personal statement. You are encouraged to discuss research opportunities you have had, and you are encouraged to discuss your vision for your training and eventual career.

Growing up in Czechia to parents who pushed me to chase my passions gave me the freedom to collect a plethora of interests and hobbies, yet nothing felt like the right direction. My parents encouraged me to attend college despite never attending college themselves, which led me to come to America for adventure, experiences, and education.

Through exploring career possibilities during my high school and undergraduate studies, I developed as a person and academic, with skillsets broader than most students. My interest in theater improved my communication skills and teamwork, my athletic background strengthened my mental resilience, and working a multitude of jobs since I was fifteen made me adaptable and a capable problem solver. While taking college classes, my interests shifted multiple times. I took a wide array of natural science courses, including neuroscience. I always wanted to be in a field that would allow me to never stop exploring, learning, and where I would be able to help others. When I took my first neuroscience class, I felt that neuroscience would be exactly what I was looking for. Learning about working with mice models was fulfilling, I understood that this field could lead me to contribute to something important to the world and become a scientist. Such a career did not seem attainable to me until then.

My background as an international first-generation student has served as a foundation to my determination to achieve this goal. When I was taking Biochemistry my first semester at Ohio Wesleyan University (OWU), I was close to failing, but through intensive and focused study sessions, I persevered. Biochemistry is now my major, as I have taken a great liking to the field, and it has strengthened my interest in research and deepened my interest in neuroscience. These kinds of experiences helped me become resilient and determined to find my path even through the difficult parts of science, such as the challenges encountered during my research. I have been able to face these challenges as a fun puzzle, helping me figure out how to improve a behavioral paradigm by trying different approaches.

Taking on this path and slowly finding my interest has helped me ensure that there is nothing I strive for more in life than to obtain a PhD in Neuroscience. While I have had fewer years of actual research experience than most, the diverse experiences and vast career exploration contributed to my tenacity. My initial lack of exposure to research was partially due to me starting my academic journey at a community college, where there were not any opportunities to join a research lab. Additionally, as a first-generation student, I did not realize how available and valuable undergraduate research can be. However, after coming to OWU, I joined Dr. Vadnie's lab to study the effects of adolescent stress on the brain and behavior in adulthood this past summer. It was an exciting opportunity for me, as I was able to participate in research that could have real-world implications. Stress is a major risk factor for the development of anxiety and mood disorders, and our study could help understand the underlying mechanisms. We stressed mice during early adolescence, and then assessed anxiety-like, depressive-like, and cognitive behaviors. Having a lab partner with research experience, and being given freedom in both planning the project and the lab work helped me develop crucial skills, including analysis of primary scientific literature, critical thinking, and mice handling. Additionally, I was able to present our findings at multiple local symposia. I will also be helping write a manuscript over the winter break to publish our findings, which we presented at Society for Neuroscience (SfN) meeting 2025.

I sought to deepen my training in neuroscience by continuing the project with several classmates. Previous students had identified stress decreased RNA transcription of the GABA_A $\alpha 3$ receptor subunit. To build on this work, we developed a grant proposal, which was recently approved, to examine how adolescent stress influences the protein expression of the GABA_A $\alpha 3$ receptor subunit in the medial prefrontal cortex during the spring semester. We will assess the protein levels using immunohistochemistry.

Beyond my research at OWU, I also have an internship position in Bradbury Lab at the Abigail Wexner Research Institute at Nationwide Children's Hospital (NCH) in Columbus, OH, where I am currently working on two projects that are developing gene therapy treatments for rare neurodegenerative pediatric disorders - Vanishing White Matter (VWM) disease and tubulin folding cofactor D (TBCD) deficiency. To do this, we first aim to understand the pathology using patient-derived organoids and *in vivo* mouse models. Then the goal is to assess the efficacy of different gene therapies we develop using behavioral assays, clinical assessments, and histological analyses. My main responsibilities in the lab include genotyping the mouse models using TaqMan SNP assays or gel electrophoresis, running behavioral assays to assess motor function (e.g. hang-cage or catwalk), tissue embedding, and performing statistical analysis through GraphPad Prism.

Since joining the Bradbury Lab, I have had the opportunity to work alongside many of the Graduate students from the OSU BSGP. Being able to work with them on a regular basis for the past 6 months has shown me what pursuing PhD at OSU would be like, and I have become greatly interested in this opportunity. Seeing their determination, love for their projects, motivations, attending different NCH and OSU events and symposia, I soon knew this is exactly what I would want from my graduate studies. During this time, I have come to realize that one of the most important aspects of the graduate program that I would look for is support and overall friendly atmosphere, as I was able to experience this in the Bradbury Lab. The main reason for why this has been the best opportunity of my life is the fact that the environment has allowed me to prosper, I was always listened to, helped when needed, I could shadow any of the graduate students if interested, and was given trust in the lab with my responsibilities. Working in this environment has made it the best work experience in my life, and I believe this same environment that I would find eventually being a BSGP student would allow me to become a well-rounded researcher.

Personal Statement

Prompt: The personal statement (~500 words) gives you a place to discuss your personal history in some depth, especially as it relates to your academic development. Some programs will ask that you write about specific topics; be sure to make the necessary adjustments to your personal statement if need be.

History, experiences and aspirations: How your upbringing, personal experiences, hardships, and/or mentors have influenced your academic development, intellectual interests, and your desire to pursue graduate studies.

Demonstrate leadership, contributions and commitment to diversity in your work, volunteer, and/or student experiences. Explain how these relate to your development or research interests.

Discuss and resolve discrepancies/limitations in your academic record, if necessary.

Connect your personal experiences to your development (and not only to your successes).

Be honest about mistakes or shortcomings, but don't let them overshadow your accomplishments. Show how you responded and move on.

My Great Grandmother, affectionately known as Great-Great, told me, "To Whom much is given, much is required". When I was younger, I didn't understand what she meant, but I listened attentively. Eventually, I came to understand that since I come from an affectionate, intelligent, and hard-working family that we hold ourselves to higher standards. Education is

valued in my family and I was taught that possessing numerous skills would contribute to my success.

I am from South Euclid, which is a middle-class suburb just outside of Cleveland, Ohio. My school system, community, and family exposed me to a plethora of enriching opportunities. I've always been involved in school affairs and volunteer work. I've participated in National Honor Society from elementary to high school, participated in band for 12 years, and marching band for 8 years. Additionally, I've been on several mission trips including to a Minnesota Chippewa Native American Reservation and impoverished communities in West Virginia. These are just some of the experiences that have aided in my development and shaped my character. I am double-majoring in Environmental Studies and Geography and double-minoring in Sociology/Anthropology and Black World Studies. I am on the Environment and Sustainability Board and in the Honors College at Ohio Wesleyan University.

I became interested in protecting the environment at a young age. I have two older brothers and like in most families, where my big brothers went, I would too. I was seven years old when my brother attended Greenview Upper Elementary School. He participated in a club called "Green Team," which was the recycling and gardening club. During the summer, he was one of the garden's caretakers. I would go to school with him and help plant, water, and nurture the garden. By the time I attended Greenview at age 9, it was only natural that I would continue participating. Our club caught the attention of Mrs. Michelle Obama because of her "Let's Move!" healthy eating campaign. We were invited to the White House to help harvest and cook her vegetables. As a result of this experience, my love for the environment grew. Flint, Michigan was one of the first instances of environmental racism that I learned about in fifth grade. My

school raised money to deliver water bottles to the community. From there, I became invested in environmental humanities issues. I took a class called Environmental Racism and Climate Justice my freshman year of college. That solidified my desire to go into environmental justice work. It combines my love of the environment, caring for people, and helping transform the world for the better. Improving the world is a huge feat and I won't be able to change everything, however, getting a degree at the University of Michigan would be an amazing start to achieve this goal!

Pursuing a degree at the University of Michigan would help me begin to fulfill my goals of making the world a fair and equitable place for all people concerning the environment.

Statement of Purpose

My name is {Name} and I am writing to express my interest in the Climate and Society Master of Professional Science track at the Rosenstiel School. I am currently a senior at Ohio Wesleyan University preparing to graduate this May. I am a double major in Environmental Studies and Geography with a minor in Communications. My passion lies within meteorology, however my university does not offer that specific major. I have learned much of what I know from advanced ongoing research with a mentor and various summer experiences. With the flexibility and help of my university, I have been able to create opportunities for myself in order to continue learning in this field.

The research project I have been working on since fall of 2023 has allowed me to hone many different skills. I learned how to use Matlab to synthesize large arrays of data into concise and interpretable values. I had the opportunity to create and present several posters, strengthening my science communication skills. I have been lucky enough to attend the American Association of Geographers (AAG) Annual Meeting and presented research at both the East Lakes and West Lakes Division of the American Association of Geographers (ELDAAG) Annual Meeting and the American Meteorological Society (AMS) Annual Meeting. Currently, my mentor and I are working on a manuscript to submit before my graduation. I am so grateful that I had the opportunity to engage in this type of work. My undergraduate experience would be wildly different if I never became involved in this research.

In addition to my academic research, this past summer (2025), I interned at the Alaska Climate Research Center (ACRC) with State Climatologist Dr. Martin Stuefer. I had to get creative to find this opportunity, emailing almost every state climatologist in the country. During

my time there, I was tasked with creating a presentation for Dr. Stuefer to deliver at the Annual State Climatologists meeting. In addition, I updated the climate change section of the ACRC website by processing precipitation and temperature data into clear tables. Completing these tasks helped me to gain an understanding of the important work done at the ACRC, and Alaska's climate in general.

Alongside these experiences, another that I've found gratifying was being a grader and tutor for two courses: Earth Science and Weather & Climate. I greatly enjoyed taking these courses in the first place, so being a TA for them felt as if I was taking them all over again! The grading is tedious, but the tutoring was my favorite part. I felt lucky that I had wonderful professors when I took those courses, and I did my best to incorporate those teaching skills and strategies when I tutored. I enjoyed helping fellow students make connections within the content and have that "aha" moment on tricky subjects.

I find myself in a unique position because I feel quite knowledgeable about my specific research on synoptic patterns driving anomalous warm events in Greenland, but I would like to expand my knowledge. I find the Rosenstiel School particularly appealing to me because of this situation I am in. I believe the flexibility of the Climate and Society track will allow me to curate my graduate school experience to my personal interests so that I can make the most out of my time. There is *so much more* out there for me to learn, and I think the Rosenstiel School is the perfect opportunity for me to do that.

Furthermore, I appreciate the way that the Climate and Society track incorporates the connection between science and humans. With the state of our climate, accurately and effectively communicating with the general public is crucial, and I believe the Rosenstiel school will help me craft the skills to succeed in doing this post-graduation. When I enter the workforce, I plan to

do something where I can interact with people daily, continue learning, and foster real and meaningful change. The program's interdisciplinary approach and emphasis on real-world experiences will no doubt help me prepare and find the career that is right for me.

As identified in my application, the Weather Forecasting track is my second choice. When I took Weather & Climate my freshman year, I knew this field was for me. I have always been curious about how things work—keys, pianos, plumbing, rivers, erasers, etc. So, once I began to learn about how larger systems work: adiabatic lapse rate, storm formation, the Coriolis effect, etc.—I was fascinated and had a strong desire to learn more. The Weather Forecasting track would fulfill this educational hunger.

Ultimately, I am eager to learn more. I envision myself building on my professional and academic experiences through the MSP program at the Rosenstiel School. The Climate and Society track aligns with my desire to engage in real-world experiences, deepen my passion for atmospheric science, and strengthen the connection between climate research and society. I am excited by the prospect of expanding my knowledge, contributing to meaningful work, and taking the next step towards a career in climate and atmospheric science.

Ohio University, MPA Personal Statement

My decision to pursue a graduate degree occurred when I was studying abroad in Geneva, Switzerland, during my junior year of undergrad. As part of my International Studies program, I was required to have an off-campus experience that would help me hone in on my career aspirations and connect with my class discussions. I chose Geneva, Switzerland, as it would not only allow me to practice my beginner French but also expose me to a new culture. While in Geneva, I had professors from all over the world, some of whom also worked at the United Nations. I have always wanted to be a part of something that was wide-reaching, that provided you with tangible results, and I always believed that this meant being a part of an NGO or international organization. When I went to the U.N. to listen to the International Security Conference at the convention center, I couldn't stop thinking that while there are hardships all over the world, there are people within my own city I could be helping instead. As that realization hit me, I started researching programs that would help me prepare for a career within policy-making or nonprofit organizations. This led me to the Master of Public Administration at Ohio University. Although it took me traveling across the world to realize how much I wanted to be a force for change in my own home city, I am glad it did.

When I was researching the MPA program at OU, I realized that it has everything I need to prepare for my future career. A few of the courses in particular stood out to me, such as Nonprofit Leadership and Governance, Public Budgeting, and Policy Analysis. It was exciting to find out I could learn more about nonprofits within the MPA program, especially as it has been a growing interest for me over the past year. During this past summer, I participated in a Dension Edge course and received a badge, the Business: Fundraising for Nonprofits Accelerator. This summer course taught me what fundraising for nonprofits entails, as well as how to foster viable

relationships with donors, so that donations are consistent rather than single occurrences. The Public Budgeting course stood out to me because it is something that I believe will be useful regardless of what career I dive into, as knowing how to budget is a vital tool for everyone. Additionally, I am interested in the Policy Analysis course because it will allow me to understand the ins and outs of policies and how I can help innovate change, whether or not I am the one creating these policies.

While the courses I am most excited about will help advance my professional goals, all of the courses within the MPA program will help me delve deeper into policy making, budgeting, management, and more. Although I have taken courses on statistics, international political economy, international politics, and environmental policy, I believe that the MPA program at OU will help to polish my skills and act as the transitional step into a professional career. For the longest time, I believed that moving abroad and working with a major organization to help people all over the world was the best path for me. While there is nothing wrong with this plan, I now know I would much rather use my time and skills helping people within my own city, where I can see the results of ensuring people are being fed, housed, or taught. I believe that if you have the means to help others, then you should, and by furthering my education and bettering myself, I will be able to improve situations for others.

If accepted into the MPA program at the Voinovich School of Leadership and Public Service, I hope to bring forth my skills to the coursework and prepare myself for the challenges of a professional career. In the future, I intend to use the newfound knowledge from the MPA program in a nonprofit organization or within the public sector to foster change within my community and be a driving force for change that is tangible and long-lasting.

Statement of Purpose University of Utah

Prompt: What are your personal, creative, and career goals, and how will an M.F.A. degree from University of Utah's Film and Media Arts Department help you to reach those goals? Who are you as an individual and how do your unique experiences, values, and world views shape who you are as a filmmaker and artistic collaborator? This essay should help us to get to know you beyond your resume and professional accomplishments. Please submit 750 words or less.

Growing up in Brazil, I have experienced constant change, like moving from my birthplace, São Paulo, to Salvador at six, switching schools, and moving from apartment to apartment. But one thing remained constant in my life: *novelas*. Brazilian *novelas* were such a core part of my daily life, starting every day at 6 pm and going all the way to 9 pm, when the last one would air. They have been my safe space growing up, and they keep bringing me back home to this day. *Novelas* were my entrance gate to storytelling, and they led me to films. From renting a DVD at my neighborhood Blockbuster every weekend to making amateur short films with my friends, consuming and telling stories have been my passion for as long as I can remember.

I want to be an independent filmmaker and screenwriter, while also exploring mainstream media and narrative television. I am drawn to stories that explore the deepest desires of people who are outsiders in the world. As an introverted queer theatre kid and international student, I have always felt like an outsider. During college, I've learned to embrace these identities. For example, working in theatre, both on the tech and performance sides, has given me a holistic perspective on the performing arts. When I act, I'm aware of the importance of taking care of my props. When I direct, I'm aware of how draining acting can be. Working as Assistant Director for

Macbeth this Fall, I understood the meaning of trusting others to do their work; and that theatre, just like film, is truly a collaborative art form.

Additionally, being an international student has made me grow closer to my Brazilian nationality and to appreciate multicultural perspectives. From being one of two people on campus who speak Portuguese to having friends from all around the globe, it is increasingly important to me to bring a multicultural perspective into my film projects. For instance, I started the *Around the Globe Film Fest* on campus this Fall, where I screened two queer coming-of-age films, one from Brazil and one from France. I was happy to expose students to different perspectives and demystify subtitles; and I felt most accomplished when people came to me and said that they were going to consume more foreign movies after the festival.

I want to make films that combine mediums, genres and sub-genres (i.e. coming-of-age and sci-fi), explore my identity, and dissect the world I'm in through non-conventional approaches. I've done that in my short film *The City*, combining dark comedy and Regency-period aesthetics. Moving on, I aim to start exploring more character-driven stories. I am especially drawn to coming-of-age stories, mostly because I believe that we are going through constant transitions in life, and I think there's a lot of beauty in figuring out who we are. For instance, I'm currently working on a script, *Robin*, about a girl dealing with a dead bird inside her washer while handling her post-graduate life.

The MFA Film and Media Arts program at the University of Utah is what I am looking for in order to move forward with my filmmaking goals. Ohio Wesleyan provided me countless resources to explore my film aspirations, but it lacked a production component that I strive to master. University of Utah's course offerings excite me; courses like *16mm Cinematography* will

challenge me and help give my character-driven stories the organic look I want for them, and *The Foreign Eye, Exile, Diasporic, and Border Cinema* will allow me to explore multicultural stories. I am eager to work with professors like Emily Mkrtichian, whose interests in identity, multimedia projects, and pushing the boundaries of genres, such as sci-fi, highly align with my aspirations. In addition, University of Utah's focus on independent cinema is a major draw. I wish to be part of a vibrant film community by attending Film Festivals like Sundance and Salt Lake City's LGBT Film Festival, volunteering as a grad student and hopefully screening my own films. And I hope to contribute to the program by bringing my Brazilian and multicultural identity, my theatre collaborative values and experience, and my passion for storytelling.

What started with Brazilian novelas has shaped me into the filmmaker I am today. I aim to create audiovisual art that is deep, personal, uncomfortable, and that generates connection. And with a graduate education at the University of Utah, I will gain the skills and knowledge to reach my full creative potential in the craft of filmmaking.

I unexpectedly became homeless during my first year of undergraduate studies where I lost contact with my family and previous support systems. That first year of college was the roughest time I have gone through, and often there were times I often felt like I wouldn't be able to continue my education, regardless of how much I wanted for it to continue. Throughout this time, I met the friends that would continue to be my support system throughout undergrad, and through their support I began putting the pieces of my life back together. At the end of freshman year, I moved in with my friend's family and worked 12-hour shifts throughout the summer in order to continue funding my education. I realized that the only one that was going to save me was myself and that if my education was something that I truly wanted, then I was going to have to work hard to make my dreams a reality. With my friend and their family's support I filed as a homeless independent student and was able to return the following semester as a financially independent student. I worked part time that semester, and with the money I had saved the previous summer I was able to solely focus on my education for a while. I soon realized however that I was going to have to work even harder than before to continue my education at my university.

Since spring semester of my sophomore year, I have worked full time alongside being a full-time college student, which has allowed me to open many doors I could've never allowed myself to imagine prior. That following summer I worked for my university in management affairs and continued working with my university into the following school year. Last spring I became a Residential Assistant and have since learned how to effectively manage my role and responsibilities alongside my jobs and educational workload. Through these obstacles I have found a resilience within myself that has propelled me through the connections and educational opportunities I've been able to experience. Last summer I worked an alumni partner internship in Atlanta, GA where I moved alone into my first apartment in a new state. Through this experience I met many people that shared their own life stories and showed me everything I could accomplish within my post-grad life.

When I came back to campus this fall, I gained a new perspective on every obstacle I have overcome. These obstacles have shown me exactly how I embody the OSU shared value of Inclusion and Equity. Throughout every step of my undergraduate career one thing has remained the same; strength that community brings to every one of us. Within each obstacle I prioritized keeping an open mind of not only my circumstances but other lived experiences within my community. Prioritizing learning and understanding of diverse lived experiences allows me to continue advocating for access and opportunity within institutional and societal structures that otherwise may bar others from success.

Statement of Purpose

In a tightly contested match during my time as a Division III volleyball team captain, I called a timeout after a series of miscommunications had shifted momentum away from us. The gym was loud, the score was close, and tension was high, but what stood out to me most was not the scoreboard. It was the silence within our huddle. In that moment, I realized that communication is not simply about speaking louder or giving instructions; it is about restoring trust, clarity, and belief under pressure. That understanding has shaped both my academic focus and my leadership identity, and it is the foundation for my decision to pursue graduate study at John Carroll University in 2027 as a graduate assistant in athletics.

Throughout my undergraduate experience at Ohio Wesleyan University, I have built my education around the intersection of communication, leadership, and sport. As a four-year member of the volleyball program and a two-year team captain, I learned that leadership is defined less by title and more by consistency, how you communicate in moments of pressure, how you respond to setbacks, and how you elevate those around you. Competing simultaneously as a walk-on on the swim team further reinforced my discipline and adaptability, teaching me how to perform and contribute in environments that demand both individual accountability and team cohesion.

Beyond competition, I have embraced leadership roles that have allowed me to engage with athletics on a broader institutional level. As President of the North Coast Athletic Conference Student Athlete Advisory Committee and President of the Ohio Wesleyan Athletic Council, I have represented student-athlete voices in conversations with administrators, advocated for improvements in the student-athlete experience, and helped facilitate communication between leadership groups. These roles have strengthened my ability to listen intentionally, navigate differing perspectives, and lead with both confidence and empathy.

My professional experiences in athletics communications and sports operations have further shaped my career direction. As a Sports Marketing Intern at Florida Atlantic University Athletics, I contributed to community outreach initiatives, assisted during Fall Sports Media Days, and created digital content designed to increase engagement and visibility for athletic programs. At Ohio Wesleyan Athletics, I have supported live game-day operations including announcing, statistics tracking, and camera operation for streaming broadcasts, giving me firsthand insight into the coordination required behind every athletic event. My work as a Social Media Intern for the North Coast Athletic Conference has further developed my ability to create strategic content, analyze engagement trends, and maintain a consistent brand voice.

Additionally, my role with the Columbus Fury National Broadcast Team has allowed me to communicate live statistics to CBS Sports during televised volleyball matches, reinforcing the importance of accuracy, composure, and clarity in high-pressure, real-time environments. Shadowing the Columbus Blue Jackets communications department provided exposure to professional-level athletic operations and confirmed my interest in pursuing a career in sports communication and athletic administration.

These experiences have led me to a clear academic and professional direction. I am especially interested in how communication systems shape athletic culture, how teams build trust, how leadership is developed, and how messaging impacts performance both on and off the field. Serving as a graduate assistant at John Carroll University represents the ideal next step in this progression. It would allow me to contribute directly to an athletic program while continuing to develop the skills necessary to lead and communicate effectively in collegiate athletics.

My long-term goal is to work in sports communication and athletic administration, where I can help shape intentional team cultures, strengthen communication systems within athletic departments, and improve the overall student-athlete experience. I am particularly drawn to environments that value leadership development, accountability, and holistic athlete growth.

Pursuing a graduate degree at John Carroll University is a deliberate step toward refining the experiences I have built as a student-athlete, leader, and emerging sports communicator. I am prepared to contribute meaningfully as a graduate assistant while continuing to grow into a thoughtful, strategic, and impactful leader in collegiate athletics.

Medical School Personal Statement

“How’s the weather down there?” “Do you need help reaching that?” “You’re the same size as my fourth grader.” What people remember is my 5-foot height, but I learned early on that leadership does not come from being the biggest person in the room: It comes from being patient, trustworthy, and responsible. As a first-generation college student, I learned how to navigate unfamiliar spaces by paying attention, asking questions, and showing up when people needed me. That personal growth ensured my success as a camp counselor, a team captain, and eventually in healthcare, where being trusted mattered far more than being noticed. I pride myself in trying to do more than I ever thought possible, and a quote I revisit repeatedly in my life is: *You are braver than you believe, stronger than you seem, and smarter than you think.* I fell in love with medicine back in high school. A class called “Principles of Biomedical Science” transformed my thinking. I was made aware of career paths in medicine, and through my academic studies, I solidified my desire to pursue medical school.

The kind of physician I hope to become is one whom patients trust - not because I speak the loudest - but because I listen and show up fully. As an EMT, you do not know who your patient is or what complications they may bring until you are face-to-face. A few months ago, when I walked into the ER, I saw a small, older Black woman sitting on the edge of the bed, her head hanging low, feet crossed, hands clasped tightly together. I took my time. I explained where we would be transporting her, gathered her belongings, tied her gown, helped her stand, and gently secured her on the cot. She remained quiet throughout, her gaze fixed downward. As we rolled her into the hallway, my partner stepped away to grab extra blankets. Standing beside her, she finally looked up at me and smiled. “I didn’t realize you were so short, sweetie.” I laughed softly. She paused again, then said, “I’ve never felt so safe with someone. Thank you.” I stood there for a moment, certain of what I felt. In that quiet exchange, I realized that safety in medicine is not defined by stature or strength, but by presence, patience, and trust.

Medicine is not always chaos and crisis. As a physician, I want my patients to understand their treatment and feel confident in the decisions being made, not confused or anxious once they leave the hospital or pharmacy. I learned this while working as a pharmacy technician, where care often happens in quieter moments through questions, medication instructions, or simple reassurance. Many patients came in to fill prescriptions without fully understanding what those medications were doing in their bodies, and that uncertainty was often where their frustration began. My job was never just to hand someone their medication and move on. It required patience, listening, and learning as I went. I spent time helping patients work through insurance issues, explaining how to take their medications, and easing the stress of people who felt overwhelmed before they even reached the counter. Over time, I realized how much trust patients place in the people helping them navigate their care. I recognized the limits of my role as a

Pharmacy Technician; I could advocate for my patients when something felt wrong, but I could not always fix the problem myself. A desire to do more for my patients stayed with me.

My experiences in different forms of medicine have shown me that it is best to work as a team. Similarly, rugby taught me how pressure changes you and how much easier it is when you don't have to do it alone. During a final goal-line stand late in the game, our entire team was pressed together, working in unison to stop the opposing team from scoring. I was knocked down in the pile, briefly losing my footing, before teammates pulled me back up without hesitation. The only thing that mattered was supporting my team in that moment. Together, we held the line, and that stand sent us to nationals for the first time. The win felt great, but the true victory was being able to trust others to support me when I fell, and being relied upon to give everything I had left.

Life is about the experiences we live through, and our future is based on what those experiences teach us. For me, they have shaped my desire to become a physician, not for recognition or authority, but for responsibility. I want to be the person patients trust to guide them through uncertainty, explain their care clearly, and advocate for them long after the immediate crisis has passed. What my experiences have shown me, however, is that presence matters far more than stature. As an EMT, I learned how trust is built in moments of vulnerability. As a pharmacy technician, I learned how easily patients can feel lost once they leave the clinical setting. As a team captain, I learned how to show up for others under pressure. Somewhere along the way, I earned the nickname "Smalls." What began as a comment on my height became a reminder of the kind of physician I hope to be: steady, prepared, and fully present. I may be small, but I am ready to take on the responsibility of medicine as a physician and to care for patients with the same patience, grit, and trust that have defined my path.

The First Step Back to Independence

OTCAs Personal Statement for Graduate School

On the first day I ever job shadowed, I met a patient who had recently lost his leg due to an infection. Our task that day was to help him rise from a seated position and balance on one leg. Despite his nerves and uncertainty, he managed not only to stand but also to take a few steps using a walker and the support of the occupational therapists. Watching his determination and the therapists' compassion in guiding him through such a vulnerable moment deeply impacted me. It was then that I recognized how quickly one's independence can be altered and how powerful it is to help someone regain it. That experience solidified my decision to pursue occupational therapy, a profession that embodies my values of empathy, resilience, and holistic care.

Following that initial shadowing experience, I sought out every opportunity to deepen my understanding of occupational therapy and the broader field of rehabilitation. Through my undergraduate coursework in biology and psychology, I developed a strong foundation in human anatomy, physiology, cognitive psychology, and abnormal behavior which helped me better understand the physical and emotional challenges patients face. I also continue to volunteer and shadow in various settings, including Grady Memorial Hospital, OhioHealth Neurological and Pediatric Rehab, and The Ohio State University Wexner Medical Center. These experiences demonstrate how occupational therapists tailor interventions to each individual's unique needs and environment, emphasizing creativity, adaptability, and person-centered care. They also reinforce my belief that meaningful progress is built not only on clinical skill, but also on empathy, patience, and effective communication.

In addition to my academic and shadowing experiences, I have pursued hands-on opportunities that strengthened my practical skills and reinforced my commitment to occupational therapy. Over the past three summers, I have worked at Joint Township District Memorial Hospital as a Patient Care Technician, providing direct support to patients in both pediatric and general family medicine settings. In this role, I assisted with daily living activities, monitored patient progress, and collaborated closely with nurses, physicians, and other members of the care team. Working with children and adults taught me how to adapt my communication and approach to meet each patient's unique needs, while reinforcing the importance of empathy, patience, and creativity in promoting independence. In addition to my clinical experiences, competing as a collegiate basketball player at Ohio Wesleyan University for the past four years has profoundly influenced my growth as a person, athlete, and student. The sport has taught me how to persevere through challenges, communicate effectively within a team, and remain disciplined, which are all skills that mirror the collaboration and adaptability essential for occupational therapy. These experiences gave me firsthand insight into how individualized care through instrumental activities of daily life can improve a patient's quality of life and solidified my commitment to pursuing this field.

My experiences shadowing, volunteering, and working as a Patient Care Technician have shown me the profound impact occupational therapy can have on individuals' independence, confidence, and overall well-being. These experiences have strengthened my empathy, adaptability, and problem-solving skills, and have reinforced my desire to support patients through meaningful, individualized care. I am eager to continue developing these skills in graduate school, where I can learn advanced therapeutic techniques, contribute to

interdisciplinary teams, and ultimately help patients of all ages achieve greater autonomy in their daily lives. Pursuing a career in occupational therapy aligns with both my personal values and professional goals, and I am committed to bringing dedication, compassion, and creativity to every step of my journey as a future occupational therapist.

My long-term career goal is to be at the forefront of research and development efforts in the renewable energy sector, ideally at a national laboratory or within an industry focused on advanced photovoltaics. To do so, I believe a Ph.D. at Texas Christian University is the next step.

Dr. Yuri Strzhemechny's research on doping titanium dioxide is of specific interest to me. His work focusing on modifying the electronic bandgap by introducing additional energy levels to enable visible-light photocatalysis aligns with my goal of enhancing solar energy efficiency. I am particularly eager to learn how the lab's versatile in-situ characterization tools, such as surface photovoltage spectroscopy, are used to correlate these atomic-scale surface modifications with macroscopic performance. Contributing to this line of inquiry would allow me to apply my skills to a critical challenge: transforming a UV-sensitive material into a viable, efficient component for sustainable solar technologies.

My time at Ohio Wesleyan University has been rich with research opportunities. I am currently exploring the dynamics of rotating microcylinders to study the generation of complex flow patterns, allowing for simulation of biological systems such as swimming microorganisms. In the summer, I worked with Dr. Brad Trees. Our focus was on SQUID arrays – superconducting quantum interference devices consisting of Josephson junctions which allow for quantum tunneling. We derived a set of differential equations which could predict the behavior of two SQUIDS attached in series. Parameters which allow for a boundary of synchronization were successfully captured and I presented our results at the APS Eastern Great Lakes Section (EGLS) meeting.

Last summer, I worked with Dr. Hana Dobrovolny as part of the REU group. I was tasked with modelling an oncolytic virus that Elsner et al. (2024) had re-engineered to house mutations that kept it from replicating in non-cancerous cells. I employed a differential equation model to represent the virus' behavior and utilized Python to replicate actual tumor growth data alongside my computed parameter values. Results were presented to the TCU Physics & Astronomy department as well as at the APS EGLS meeting.

The motivation for pursuing a Ph.D. and hopefully going on to work in photovoltaics comes from my time growing up in Pakistan. There, power outages are a part of every summer day, every summer day being hotter than Fort Worth. With power being gone for up to 12 hours a day, many people feel the need to turn to alternate solutions; I believe solar energy to be a much more agreeable alternative to burning out the finite and environmentally-unfriendly supply of fossil fuels. Therefore, working towards this goal of progressing research for renewable energy is how I want to contribute to the mission of science.

Apart from keeping up with my coursework, I enjoy cooking, which I taught myself the summer I was at TCU. I also enjoy learning new languages, and am semi-fluent in Japanese and Spanish.

Statement of Purpose for University of California, Riverside

Prompt: Write a statement of purpose for the PhD entomology program at the University of California, Riverside

Traveling through the Peruvian Amazon Rainforest at night is not for the faint of heart. Sitting there in the dark, I recall many different calls from the dark, a cockroach scrambling underneath my shirt, and a pair of glowing eyes peering back at me before disappearing into the undergrowth. Research on moths is no easy task, and having to do it within the mysteries of the rainforest only adds to the challenge. However, I loved and thrived for every second of it. The calls from the dark made me want to explore further, and the cockroach in my shirt only sparked my curiosity, but the eyes looking at me... were a little frightening. Nonetheless, getting to spend a semester abroad in Peru was an amazing opportunity where I gained invaluable experience working with indigenous communities, improvising field methods, and adapting to difficult environments. I took classes on political and tropical ecology, and participated in research to examine how indigenous agriculture might be impacting local moth populations. These classes took me on trips ranging from the entire Amazon River Basin, from the high grasslands and cloud forests of the Andes mountains to the flooded forests along the bank of the Amazon River itself. Throughout these regions, we looked at local biodiversity and how it changes within a habitat, how human impacts have influenced an area, and what conservation strategies or studies are currently being conducted. My research there took me to an indigenous community named Chirikyacu, where I got to converse with local people about their agriculture and sustainability practices. With that knowledge me and a few other students did a moth biodiversity survey of microhabitats to compare how agriculture may have influenced the environment. After analyzing the data, we returned to the community and shared our results with them, which was an amazing moment where we firsthand got to see the impacts of outreach and how science can create positive change to inform people. I have made countless stories and memories during this journey that have truly continued to ignite my passion for contributing to science that can help impact the environment. I believe that most of the impactful work done to help the environment occurs through the work of interdisciplinary scientists collaborating to gain a better understanding of the natural world and provide a foundation for other initiatives to create more effective change.

I am currently working on a project studying the distribution of mites within the nests of Northern House Wrens (*Troglodytes aedon*). Leading this study has helped me build on my previous experience and develop independence as a researcher. My experience with research began in high school, studying the habitat usage of Markhorns (*Capra falconeri*) at the Columbus Zoo and Aquarium. That project set the foundation of skills that I have been building on ever since. Observing those mountain goats daily, even in snow or rain, taught me patience and the excitement of uncovering small behavioural insights. Collaborating with zookeepers deepened my appreciation for how research supports animal care - an experience that confirmed my desire

to pursue zoology. My next opportunity arose at the Watters Aquatic Conservation Center (WACC), where I worked on propagation techniques for native freshwater mussels. I found this research particularly interesting because so few people have heard of these animals, despite their status as the most endangered group of animals in North America and as keystone species in our waterways. I worked in a sterile environment using cell culture media to transform glochidia (larval mussels) into juveniles, with the goal of improving future propagation for conservation of endangered species and building my own skills within the lab as well. My contribution as a co-author to this study, now in press at the journal *Hereditas*, strengthened my understanding of molecular and conservation biology. Working at the WACC made me realize that there are so many more animals in the world than most people know about, and that those animals are just as important as the charismatic vertebrates that people typically think of. This experience has developed my research interests towards working with more of the understudied species that have unrecognised importance, inspiring the study that I am conducting today.

My work with mites was inspired by my interest in invertebrates and my advisor's experience in ornithology. Over the past summer, I have spent most of my time in the field collecting nests of wrens and removing the mites from them in the lab. I am currently analyzing the samples to identify and count the mites while writing a manuscript that I hope to publish before I graduate. This research has been exciting because I have been able to develop my own study that reflects my unique interests, and discovering something new has been my dream for a long time. Knowing that I am taking a new perspective on parasitic mite and wren research is thrilling and motivates me even when the work becomes a bit monotonous or gross! Leading this project, I have finalized that this is the meaningful work that I want to do. My passion lies in contributing to the scientific community, no matter how big or small an impact I may have. I also know that I want to make my impact specifically within the entomological community, a decision that was formed during my time in Peru. While there, I was constantly surrounded by different species of bugs, beetles, and ants, and I found all of them to be incredibly interesting. Each species has adapted to its specific niche and has its own unique role in the ecosystem. Many of my peers were unwilling to interact with these animals, even though they are such vital parts of our environment. However, even getting stung by a bullet ant has not deterred me in the slightest. Entomology has proven to be the perfect opportunity for me to contribute my efforts where not many people are willing to.

I hope that my participation in research will not just contribute to a greater understanding of insects but will also inspire others to pursue research in ways that they might not otherwise expect. I plan to achieve this goal by working in academia after earning my doctorate degree. Helping teach and inspire others while also diving into my own interests is a dream of mine, and I know that going to UCR is a vital step in my journey. Riverside provides the perfect opportunity to meet my goals by having a structured PhD program guided by not just one advisor but a whole committee dedicated to helping ensure that I succeed. Having this reliable guidance throughout my first year while conducting my research makes me confident that I will be able to build all the skills necessary to pursue my passions. At UCR, I would like to dive into my

interest in insect ecology and morphology. Riverside is the perfect place for this due to the wide variety of environments located close to the school. From deserts to mountains, cities to agricultural landscapes, there is a huge diversity in the different habitats for animals to live in. By comparing these different ecological niches, we can learn about evolutionary adaptations, human impacts on wildlife, and shifts in the range of many insects.

When considering the faculty at UCR, I have taken an interest in the work of Dr. Murillo with veterinary entomology. Ectoparasites have been known to cause hundreds of millions in losses each year in the livestock industry. Her research provides the opportunity to learn more about how precisely parasites are impacting poultry and possible preventative measures. Looking at the ecology of these insects and mites can help provide farmers with the tools they need to protect their livelihood and have implications worldwide. I can relate this research back to the work I did in Peru with moths and agriculture. Part of our biodiversity survey was looking into how certain pest moths may have had higher prevalence in areas of agriculture. Although the research was inconclusive in that area, we learned about how insect pests can impact a community and the importance of this area of research. After meeting with Dr. Murillo, we discussed an upcoming project on the reemergence of screwworm (*Cochliomyia hominivorax*) and detection efforts, as the pest has been spreading northward in the past few years. This pest poses a significant threat to the livestock industry because the larvae of this fly feed on the flesh of live warm-blooded animals, mainly cows and livestock but has been spotted in a few zoonotic cases. Participating in this research would provide me with the opportunity to build my skills as a scientist while also making a positive impact at the same time.

Statement of Purpose – University of Chicago

I am a multidisciplinary scholar with research interests lying somewhere between performance, 19th-century literature, and gender studies. In undergrad, I expected that my double major in English education and music would take up all of my time. However, my passion for theatre spills over into my academic pursuits and my teaching experience. I have a notorious reputation for incorporating performance studies into all my essays. Likewise, I worked as the student dramaturg for a production of *Macbeth*, and I realized that dramaturgical work provides a consummate means of synthesizing my love of education, literature, and performance.

A class called “The Victorians” was particularly formative to my research interest. Likely, the opening lecture will stick with me until I die. We analyzed Arnold’s “Dover Beach,” a poem so beloved by me that I committed it to memory a few years prior, and our professor posited the idea that *we are still dealing with Victorian problems*. Wealth disparities, crises of faith, and cultural performativity affects contemporary society as much as it did two-hundred years ago.

Such an increased proximity to performance has led me to consider performativity more broadly. My nonbinary identity also plays a role in my interest in the subject. Legibility of one’s performance of gender, with regard to Butler’s theory of gender performativity, is as relevant to theatre and literature in the 19th-century as it is now, and I feel excited at the opportunity to research anything at this intersection.

I also have experience teaching high-school English. It brings me joy to connect with students about literature, writing, and communication in general. My lessons also frequently feature the study of sociology, theatre, and performance. However, before committing myself to a teaching career, I must satisfy my urge to research topics like gender theory and queer performativity that are well above the scope of a high-school classroom.

As I consider the next step in my academic journey, the University of Chicago stands out as my top choice. I struggle to fit my research interests into a neat box, so pursuing an MA in the humanities will allow me to refine my academic skills without excluding my interdisciplinary interests. Long-term, I am interested in staying on board for a PhD, pursuing a career in academia, working in higher-ed, and generally furthering research. I am dedicated to a lifelong career of learning and teaching. I sincerely hope my academic voice can find a home at the University of Chicago.