Orthopedic Surgery

When I was six my parents gifted me "Absolutely Best Cross-Sections Book Ever" by Stephen Biesty. I couldn't read, yet I remember poring over pages of transected diagrams. I specifically recall a scene depicting warring galleons loaded with smoking cannons and sailors scattered across the numerous layered decks, some with shrapnel-wounded limbs undergoing primitive handsaw orthopedic surgery. Not until much later did I find resemblance between a surgeon's fascination with human anatomy and a child's obsession with cross sections of a pirate ship.

My curiosity of an object's internal workings coupled with an interest in biology led me to an undergraduate degree in biomedical engineering. I first applied engineering knowledge in an orthopedic context in one of my favorite design laboratory courses. I designed an experiment dissolving chicken bones and then subjecting samples to different compressive and torsional loading forces. I quantified mineral loss by processing radiographs in MATLAB and correlated the findings with changes in bone strength. Further coursework in mechanics and biomaterials, often referencing implant design, drew me to orthopedics, a field characterized by innovation.

While in medical school, I discovered a love for surgery. Reviewing for my first total knee arthroplasty, my chief resident walked me through the various cuts we would make in the operating room. He asked, "What would happen if we made the distal femur cut too proximal? Or at an incorrect angle?" I needed to visualize the anatomy and how the knee articulates. He was asking me to predict an increased joint space, a misaligned knee and how forces related to these miscalculations would accelerate wear of the implant. This analytical problem solving felt much akin to my background in engineering.

My hobbies further my appreciation for orthopedic surgery and the mechanics of human motion. Whether plucking strings on my guitar or maintaining my footing on root-covered trails in Ann Arbor, my hobbies rely on pain-free joints offering both dexterity and stability. Albeit amateur, I consider myself a musician and a runner. My physical health allows me to exercise these aspects of my identity and are essential contributions to my quality of life. I frequently encountered athletics as a core part of one's character on a sports medicine rotation. One example was a young patient I met in clinic recovering from an ACL reconstruction, originally injured while attempting a lay-up in basketball. With each reassuring physical exam maneuver, I shared in the optimism felt by the patient and the orthopedic team. Months of healing remained, yet he was steadily improving. To him, recovery represented tryouts next season, time spent alongside his friends at school, and his identity as an athlete.

Twenty years later, a fascination reminiscent of my six-year old self emerges as I flip through "Netter's Concise Orthopaedic Anatomy." As it turns out, cross-sections books are made for adults too. My path to orthopedic surgery began as a child eager to see beyond the surface and to understand how parts within give function to the whole. This interest has since been strengthened by my experiences in engineering and is sustained by a curiosity of human mechanical design; the muscles, tendons and bones that comprise our extremities are the engines, pulleys and beams that carry us through our environment. But medicine extends beyond just living machinery. Within the complex anatomical system that comprises one's body, there is a patient with a unique identity informing goals of function. In becoming an orthopedic surgeon, I will be afforded both the opportunity to exercise my intellectual passion every day, as well as the privilege of restoring function to patients pursuing passions of their own.

OB/GYN

My journey into medicine was different than most. I am the first scientist/doctor in my family, I studied business with the hope of being a successful entrepreneur after a career as a college athlete, and I came to medicine after working as a realtor in NYC for four years.

This switch to medicine was inspired by my client, Khim, who, whilst shuttling around NYC with me looking at properties, confided in me about undergoing egg preservation. I was fascinated by her story, and I found myself envious of her doctors and the impact they had on their patients' lives. This led me to reach out and shadow a local fertility specialist on my off days. I found that I loved engaging in conversations with LGBTQ patients, helping to create new definitions of what the word "family" meant, and tackling tough conversations surrounding genetics. I was emotionally invested with the patients as they endured both loss and fertility. I finally felt like I was in the right place, fascinated by the complex intersection of science and human life and proud of what I was doing on a daily basis, a feeling I had been searching for since starting my real estate career.

When I entered medical school, part of me came alive when I was in the obstetrics and gynecology environment. I found that my core values – patient care, teamwork, service, advocacy and mentorship were also core values of obstetrics and gynecology.

So much of early medical school felt like a grind until I started my first ob/gyn rotation towards the end of my clinical year. I was finally excited to come to work, waking up at 5 a.m. for labor and delivery with purpose, energized about talking to my patients and educating them about their health. I found the most routine clinical encounters to be meaningful and the patient population to be inspiring, making me want to learn and do more. Learning about the basic science and disease processes, which had been a challenge in prior rotations, was exciting and interesting, and I was energized by my daily activities.

I was filled with questions driven by patient encounters. These questions prompted me to create my own electives learning about sexual health and the broad scope of practice that is obstetrical care. I learned from an interdisciplinary team of social workers and midwives, all of whom taught me new ways to take a sexual history and help patients work through their fears when interacting with our complex medical system. I learned that inequities have inspired my passion for advocacy - as I saw patients receive substandard care while working on the women's unit in a forensic mental health facility.

While many moments have convinced me that I was choosing the right field, watching my first vaginal delivery to a multiparous patient sealed the deal. It was my first labor and delivery shift, where I met my idol—the 3rd year ob/gyn resident: running to a vaginal delivery, paging the attending, all while teaching me about the third stage of labor and how to deliver a placenta - I had to be this person! I felt like my energy, my ability to succeed in chaotic environments, and my passion for teaching were perfectly encompassed by this moment, and I wanted to do this for the rest of my life.

I look forward to the next step in my journey – getting to treat patients like family, building community, and learning how to be an outstanding physician. I hope my patients are proud to call me their doctor, medical students are excited to learn with me, residents want me on their team, and that my future community is impacted by my advocacy for their rights. I feel incredibly grateful to join the field and look forward to experiencing both joy and fulfillment from my career.

Anesthesiology

As I entered my coach's office for a difficult conversation, the squeaky wooden door swung unevenly on misaligned hinges. The tenuous, defeated door hinge mirrored my emotions as I notified my coach that I would be leaving my collegiate volleyball team. Little did I know, the despair I felt in that moment would evolve into so much more — validation of my personal values and a lesson about the type of leader and physician I intend to become.

My decision to leave the team was particularly difficult, as staying true to my personal values and maintaining integrity required breaking a commitment to my teammates. After being recruited by a coach who emphasized collaboration left before I matriculated, I was shocked and disappointed by the leadership and team dynamics that emerged when I arrived on campus. The climax came one day at practice when my new coach pitted me against my senior team captain and close friend in a running drill. He announced that if I beat her, she would lose her position as captain. Our team circled around us in disbelief. In the few seconds before the blow of his whistle, I anxiously triaged my options of how to manage each possible outcome of the lose-lose situation. Was the respect of my coach more important than preserving the precious sisterhood of my teammates? Before I could decide, my captain slowed to a jogging pace out of frustration, leaving me with a bittersweet victory. Our team culture shattered on the shiny gym floor and our sacred kinship would never be the same.

Navigating unexpected obstacles on and off the volleyball court has prepared me to deal with the types of situations I will face in the field of anesthesiology. Volleyball challenged me to react with poise and composure in difficult situations. I developed skills such as balancing performance and personal relationships, similar to the way an anesthesiologist deftly triages a decompensating patient. Anesthesiology stood out amongst other specialties because the challenges faced by an anesthesiologist are the types of situations in which I thrive. In an emergent situation, when I see an anesthesiologist delicately balance time-sensitive clinical decision-making with complex team dynamics, I see an opportunity for me to serve patients as the best version of myself. I am fascinated by anesthesiologists' craft of being both a strong leader and humble team member in the OR or ICU.

After witnessing this masterful balance first-hand, I knew anesthesiology was for me. I have come to appreciate the invaluable leadership role an anesthesiologist plays, fostering teamwork, positive communication, and mutual support. My past experiences in team sports have taught me to cherish the value of a strong, decisive leader when complex team dynamics are at play. Observing this skill in anesthesiologists reminded me how powerful it can be when done well.

Life as an anesthesiologist is defined by the delicate balance of integrity, teamwork, and meaningful patient impact – this seems to me like the epitome of the art of medicine. I can hardly wait to continue to develop my craft as a team player and leader as I pursue a career in anesthesiology.

Plastic Surgery

At a young age, if you would have asked me what I wanted to be when I grew up, I would have never answered "a doctor". Health care facilities were not places that evoked positive emotions for me. In contrast, the harsh memories of my parent dying and the painful emotions that accompanied that tragedy were far more prominent. Then, during high school, my grandfather was diagnosed with the same brain cancer that my parent had died from years before. Fortunately, my grandfather received his diagnosis at a much earlier stage of the disease. By observing the doctors caring for him, as well as becoming part of the team that took care of him at the end of his life, I learned how doctors have the unique honor of being entrusted to take care of patients in their most vulnerable moments.

Although these early experiences were the impetus for me pursuing a career as a physician, it was not until I shadowed a plastic surgeon that I felt like I had found my true calling within medicine. On one particularly influential day in the operating room, I scrubbed in on three operations that transformed each patient's life: an oncoplastic breast reconstruction, a gender-affirming chest masculinization, and a tendon repair of the hand. In each of these surgeries, I saw how plastic surgeons have the profound privilege of impacting their patient's physical *and* mental health. Furthermore, during my clinical rotations, I continued to experience professional fulfillment in the clinic. One encounter stands out in particular when caring for a young mother who was seeking an abdominoplasty. She confided in me that she experienced relentless embarrassment, shame, and depression after diet and exercise alone could not rid her excess abdominal tissue. Through situations like these, I discovered a strength of mine is fostering safe and welcoming spaces that encourages patients to engage in deeply personal conversations with me regarding their most personal health concerns. I aspire to transform my patients' lives through highly skilled surgical care rooted in compassion so that they may ultimately become their most authentic selves.

My pursuit of a career in plastic surgery also ignited a new passion of mine – gender-affirming medical care. While working with transgender patients, I again observed the impact that plastic surgeons have on their patients' health by transforming their lives for the better. However, I also learned how transgender individuals experience discrimination in healthcare and face barriers in accessing care. Based on these stark and unacceptable realizations, throughout medical school, I have intentionally chosen to pursue research opportunities in gender affirmation surgery. In addition to becoming a technically skilled and clinically adept plastic surgeon, I aim to pursue a career in academic medicine where I can contribute to research that serves marginalized populations and lessens disparities in healthcare.

My family's experience with cancer initially motivated me to enter the medical field, where I would have the honor of taking care of patients at their most vulnerable moments. During medical school, I found my passion for plastic surgery as I came to understand how profoundly plastic surgeons transform the lives of their patients. By using fundamental surgical principles paired with compassionate communication, plastic surgeons have the unique opportunity to help individual patients become their most authentic selves. I cannot think of a more rewarding career path where I will have the opportunity to address my patients' most personal concerns. Although my current academic interest is gender affirmation surgery, my ultimate goal is to join a residency program that prepares me to become the best plastic and reconstructive surgeon possible. I am committed to bringing enthusiasm for learning, hard work, integrity, and a drive to succeed to benefit my future program, my future colleagues, and, most importantly, my future patients.

Anesthesiology

Over the last decade, I have devoted my life to gaining a deeper understanding of the content and context that define human health and disease. As I reflect on my experiences and what they mean for the coming decade, an African proverb I've come to revere rings loudly. "If you want to go fast, go alone. If you want to go far, go together." With the next frontier of my journey in becoming a physician scientist on the horizon, entering a field of medicine that captures what it means to travel "together" has become a priority. To this end, it gives me immense excitement to apply for a residency position in Anesthesiology.

The collegiality, selflessness, academic insight, and initiative displayed by frontline anesthesiologists during the height of the COVID-19 pandemic was truly awe-inspiring. *Together*, alongside internists, academicians, and medical students, they flattened the COVID-19 curve at Michigan Medicine within three months of the census hitting its peak. While the pandemic provided an opportunity for anesthesiologists to showcase these qualities in a more public fashion, travelling *together* is an elemental attribute that makes the field of Anesthesiology perfect for an aspiring physician scientist. There is no better setting to enhance clinical acumen or identify areas for academic immersion than behind the curtain of an operating room, made possible by close coordination with multidisciplinary teams focused on delivering high quality care during complex cases. The capacity to make a difference for the critically ill as an intensivist offers an additional avenue to work *together* with like-minded individuals on academic pursuits that seek to improve outcomes in the patients we serve. Physician scientists adept at complex case and critical care management will be invaluable to health systems overburdened by the silent global pandemic of chronic disease. I hope to synthesize my background in medicine, research, global health, and entrepreneurship towards building a career in Anesthesiology aimed at flattening the chronic illness curve worldwide.

Reflecting on how my career will shape the next decade of my life reveals a desire to find harmony. Specifically, I hope to find harmony between the breadth of experiences that have drawn me towards applying into Anesthesiology. Be it academic discovery, medicine, entrepreneurship, global health, pandemic relief efforts, or mentorship, the common thread that holds it all *together* is human interaction. Between collaborators discussing data, providers weighing treatment plans, board members debating next steps, international partners skyping weekly, programmers troubleshooting code, or advisors protecting mentees, the human interaction is what I hold most dear. It is the harmony between these interactions, embodied within one individual, that I hope to harness when engaging anesthesia technologists, nurses, surgeons, administrators, and medical students during a residency in Anesthesiology.

"My name is _____ and I am the resident anesthesiologist on staff. It's nice to meet you; our team will take great care of you." It is my hope that these words will serve as the foundation for a successful future career in Anesthesiology. I am excited to embark on the next phase of my journey towards becoming a physician scientist, and look forward to the training, mentorship, and opportunities available during residency. The capacity to clinically interface with nearly every department in a modern academic hospital presents the rising academic anesthesiologist with the necessary critical mass to bring multidisciplinary teams *together* around pushing the frontiers of the practice as far as the imagination will allow. I am confident that pursuing a residency in Anesthesiology will help me fulfill my life's mission of guiding humanity *together* towards the improved health and wellness for all.

General Surgery

The T-Rex high-fives the US Navy parachute team member who just landed on the football field, adjusts the mouthpiece in her trumpet, steps up to the microphone, and belts out the opening melody solo of the national anthem in front of nearly 50,000 fans gathered to see Stanford play Oregon. The T-Rex was me, dressed as a character from the movie Toy Story like my fellow section leaders in the Stanford Marching Band. Performing under pressure, working with teams, and being relied on to get the job done are skills I've cultivated for a long time. They will also make me a great surgeon.

I've been drawn to surgery in many ways during medical school. The need to practice skills on your own parallels hours I've spent rehearsing music, shooting free throws, or taekwondo training for my third-degree black belt. I love surgery's focus on efficiency. I love that feedback from surgeons is often direct, blunt, and necessary for improving, like a kick to the head in the ring. I love that the perpetuation of surgery requires the experienced to teach the next generation. Even the simple acts of showing someone how to suture, read music, or tie on their white belt can mean a lot to a new student. Being in a profession that puts a strong emphasis on teaching is important to me. I love that being a surgeon requires a team. Many sustaining moments in my life have come from working in teams, such as marching in the Rose Parade three times, competing with my taekwondo club at collegiate nationals, and planning a medical school-wide "Olympics" competition with my classmates. I love that many surgical patients improve to the point that they never need a follow up visit, but I also feel fulfilled when I've been trusted to comfort and explain pathology to patients and families in cancer clinic or the SICU. I love that being a surgeon sometimes means taking care of the sickest patients in the hospital.

And I like that it's hard.

As a surgical resident, I will lead by example and finish projects, just as I have in medical school. I am one of four students helping my medical school get re-accredited through the LCME, a nearly two-year process that began during the end of my clinical year. I've completed research that let me explore everything from chart review to rating surgeons' OR teaching ability, to paying concussed kids to read comics, and I plan to do more. I restarted a surgical skills and research program for first year medical students that had its highest enrollment ever at over 80 students and 21 faculty, filling a void in our school's curriculum. I want to leave whatever training program I join better off than when I started. Additionally, coordinating events around student and faculty schedules has made me adept at organization, a skill I will bring to any program I join.

In the future, I see myself as a surgeon invested in both research and clinical care. One day, I plan to apply my interest in surgical education as a medical school surgery clerkship director. Above all, I will to continue to perform in stressful situations where the outcome, though not as apparent as the cheers of thousands of fans before a football kick-off, will ultimately be the most rewarding years of my life.

Pediatrics

"You have ten seconds or I'm calling the police." The door slammed in my face. As a grassroots organizer for a nonprofit advocating for healthier food systems, I knocked on thousands of such doors. When they slammed, it was not easy to continue. I took a deep breath and envisioned what I was fighting for: a world in which an apple costs less than a Twinkie and all children have access to nutritious food. Emboldened and determined, I strode to the next door.

I am becoming a pediatrician in order to become an advocate: for my patients and for society's children. My interest in children's health emerged after college, when I worked for several years on environmental health campaigns. Standing outside a coal plant in rural New England with a father whose four-year-old asthmatic daughter couldn't catch her breath, I learned firsthand how environmental and social circumstances profoundly affect health. Walking past a row of fast food joints on Chicago's South Side with a mother whose sixth-grade son had developed Type II diabetes, I realized that although big-picture campaigns were my initial motivation, I also wanted a career in which I could improve the health of her son as well as other individual children. In medical school, pediatric clinical care has enchanted me: the miraculous physiology of healthy children, the intellectual challenge of complex diseases, the importance of strong relationships with families, the joyful resilience of pediatric patients.

For me, pediatrics embodies the meaning of medicine. Pediatricians care for patients holistically, because to improve a child's health, one must consider not only pathophysiology, but also social and environmental circumstances. Pediatricians fight for equality by giving all children the best possible care despite the inequity of their circumstances. Pediatricians advocate for those who cannot advocate for themselves. Pediatricians embrace the adventure of the insatiable curiosity of childhood and the beauty of how children find magic in things that adults overlook as ordinary. Pediatricians help patients and families to heal. I feel honored and humbled to be joining a profession whose values reflect the heart of what it means to me to become a doctor.

While my main focus in medical school has been developing a strong foundation of clinical knowledge and skills, I am still passionate about leading teams to create systemic change. I have directed some of my grass-roots organizing skills to improve medical education. My interest in equipping my fellow medical learners to become effective change-agents led to developing several workshops for my peers, including goal-setting, advocacy-writing and resilience-building, and to creating the program content for the first AMA Student-Led Conference on Leadership. I have also explored the medical humanities, particularly the intersection of storytelling and advocacy. By using creative writing to connect patient and physician stories to the broader healthcare system, I hope to inspire positive change.

As a pediatrician, I will aim to improve environmental and social determinants of children's health on both an individual patient level and a societal level. I am particularly drawn to pediatric rheumatology because I enjoy diagnostic challenges, am interested in the psychosocial aspects of caring for children with chronic diseases, and am intrigued by interactions between the environment and the immune system. I hope to join an academic residency program with a collaborative and vibrant educational environment. I will commit myself as a physician, advocate and leader to providing the best healthcare for my patients while striving to enhance health equality for all children.