**UCSD**

**1. This should be a true autobiographical statement. Topics to be included are family, childhood, primary and secondary school years, undergraduate years, and, if applicable, what you've done since completing your bachelor's degree. You should also discuss the motivational factors which led you to a career in medicine including any disadvantages or obstacles which might put your accomplishments into context. A repeat of your AMCAS statement will not be acceptable. (6000 char)**

For me, it all started with science. Bill Nye the Science Guy and the Discovery Channel babysat me every day after school for years, wowing me with awesome explanations for all types of scientific phenomena. I remember conducting my own ridiculous experiments in the kitchen when I was just tall enough to reach over the counter, soaking our leftover chicken bones in vinegar and checking their increasing pliability night after night. In summer, when my working parents couldn’t send me to school for the day, I ended up at summer camps where I amazed my arts and crafts teachers by creating mechanically functional, rubber band-powered, hand-held fans out of scrap paper and empty cans.

When I was fourteen, I took a summer class that channeled my love of science into medicine: an Introduction to Biomedical Sciences. I marveled at how viruses, with just a few strands of DNA or RNA, could wreak havoc in an entire organism; how my heart, which was only the size of my fist, pumped enough blood to fuel my entire body with oxygen and nutrients from food; and how my brain, just three pounds of whitish fat, stored all of my memories and coordinated all of the processes in my body. I clung to every word my teacher said and remembered every detail effortlessly. I felt like I was born to study human physiology and mechanisms of disease.

During a break in one of our evening sessions, we were all playing frisbee outside when we suddenly heard a loud cry. My friend Zoe had been walking around on the grass barefoot and accidentally stepped on a bee! Despite my fear of bees, I rushed to her aid upon hearing her outburst. I was able to calm her down from her frantic jumping and crying. Fear in her eyes, even though she had never been stung. Realized it was actually because she had never been stung: it was a fear of the unknown and unfamiliar. looking her straight in the eye and asking her if I could check her foot for her. I carefully squeezed the stinger out of her foot, careful not to disturb the venom sac. At just fourteen years old, I aspired to be a doctor because I loved the science behind the human body, and I wanted to use my knowledge to understand and treat diseases.

The next summer, I set off for Johns Hopkins for three weeks to continue my pursuit of medical knowledge and study the most mysterious and magnificent part of the human body: the brain. And mysterious it was--by the end, I had learned so much about the functionality of individual neurons and the burden of neurological diseases, but the brain’s underlying mechanisms still remained a puzzle. Instead of being discouraged by our lack of understanding, however, I was excited that maybe I could explore these uncharted seas. So, rather than volunteering with my high school friends at the hospital, I chose to make my entrance into academia, taking a crack at the mechanisms behind learning and memory through research at UCI.

By the time I entered college, I was proficient in many molecular biology lab techniques, but I was no closer to finding out how the brain learns or makes memories. I was conflicted--while I really enjoyed research and still possessed my original passion for science, I wanted my research to make a real impact on medicine. I felt like my work was so far removed from medical practice that I wouldn't even make a scratch.

I reevaluated my goals and branched out to the clinical side of medicine, looking for ways to get involved in the medical field in addition to research. While shadowing Dr. A, an orthopedic surgeon at Stanford Hospital,

Flu crew-convincing people

Arbor-diabetic woman

Arbor-Chinese woman

Arbor-bipolar man

Usvh-mr E

Usvh-mr N

Usvh-mr L

Usvh-Al

Sims-Janet, skin and bones, had part of her right clavicle removed, had remission of her cancer twice already. Was currently cancer free, came in for a checkup. Talked through her pains and worries, dr A assured her that they were normal and explained carefully so she wouldn't worry. It was clear she looked those things up and got a little paranoid/worked up. After dr a talked through each issue with her, she left looking relieved, happy even. Learned how therapeutic active listening could be for a patient--when they can be sure that you understand their worries from their perspective,

When dr A adjusted his

Sims-Laura, sitting up in bed, really aggressive. Been through a lot, described in gory detail. Trust issues--but dr a told her a little about himself, the origin of his name and its meaning, bringer of good news. She was superstitious

Before college, my experience with clinical medicine was only as a patient; I was the one seeking help from a doctor, someone whom I could trust intimately when I was most vulnerable. Now, as a volunteer, I was on the receiving end of that trust, and with that trust came a sense of great responsibility. I realized that even though I lacked the medical expertise to treat patients' diseases, I had the power as a fellow human being to heal patients emotionally, to address and alleviate their concerns and to comfort them when they most needed reassurance. I healed patients in a way that science could not.

My clinical experiences have taught me that doctors can heal patients with more than just science, that

remember what it was like to be a patient. not only able to put myself in the patient’s shoes, but also discovered what it was like to be in the doctor’s. Learned ?? Treating not only diseases, but more importantly, treating the people themselves, addressing their concerns, comforting them when they most need reassurance, and teaching them so they are not afraid of the unknown. or angry with the inexplicable.

Process of diagnosis - learned that it requires not only medical expertise, but also extensive knowledge of people and diverse backgrounds. Dr. L’s cultural literacy allowed him to \_\_\_. Suggestion of treatment - learned that part of the treatment occurs in the visit itself, and that treatment is a healing of the patient’s sense of violation.

Scratch work

Describe patient interaction in which I felt out of my depth, in which I was in adequately prepared to face a situation with a patient (bipolar? Listening. ) describe X factor that physician provides beyond a prescription or diagnosis

This was when I realized that scientific research could only do so much for real patients; while pharmaceuticals could cure certain diseases, there was no textbook remedy for healing someone emotionally. Science could carry medicine only so far.

personal experience with a patient

Two different ways to answer, "why do I have this disease?" Scientific answer- mutation in a tumor repressor gene, or dietary habits led to decline in insulin production. But the other answer is more complicated. As highly social creatures, we are surrounded by people who live the same way we do, with similar circumstances and habits. When a person in this environment contracts a disease, he or she has been singled out and violated--begin to wonder, why do I have this disease? Why me?

Why do I **HAVE** the disease vs why do **I** have the disease

Beyond disrupting biological processes, diseases can also degrade an individual. Science can only go so far as fixing the biology; medicine should strive to fix both.

Moving forward, comp bio--want to work on personalizing medicine both scientifically though bioinformatics and clinically through an understanding of individual. Ehhh

What made volunteering enjoyable?

-always learning

-after understanding some of people's real problems, from disease to money to family, I get the satisfaction of improving someone's life by helping to alleviate disease

-the product of my efforts in volunteering gave me a different kind of satisfaction from the product of my efforts in lab.

Childhood – I was curious about everything. Ceramics, sailing, gymnastics, AYSO soccer, tennis, legos, paper sculptures, wire sculptures, piano, flute cello, national parks, museums. Love to understand how and why things happen. (example? Gas compression – can of vapor into ice implodes. Web programming – html.) Ultimately, I gravitated towards science bc of this (Bill Nye, Discover Channel, Mad Science camp).

Middle/high school – turning point = CTY, intro to biomedical sciences. Really loved the subject, loved learning about how my own body worked. Marveled at how the kidney could filter my blood to keep it balanced, how my heart, which was only the size of my fist, pumped enough blood to fuel my entire body with oxygen and nutrients from food, etc

My friend Zoe stepped on a bee during camp; despite my fear of bees, I immediately came to her aid upon hearing her distress. I was able to calm her down from her frantic jumping and crying. Fear in her eyes, even though she had never been stung. Realized it was actually because she had never been stung: it was a fear of the unknown and unfamiliar. looking her straight in the eye and asking her if I could check her foot for her. I carefully squeezed the stinger out of her foot, careful not to disturb the venom sac.

She was my first patient. I decided that I wanted to be a doctor, someone who could use their knowledge to help people in their time of need, when they are most vulnerable and could use the most help. (sound weird?)

Even though both of my parents worked full time, they miraculously made time to explore the world with my sister and me; they took us to over twenty National Parks and several world-renowned museums, and managed to drive us to every sports practice and music lesson. They were huge proponents of my education and personal growth, giving me chances to do things that they never could as immigrants. I was fascinated learning about how things worked and why things happened, so I naturally gravitated towards science when I was still just a kid.

My parents quickly recognized my love of science. They let me go to science summer camps so I could get out of the house and make slime, code my first website, and build rockets. At one of these camps, in the summer after eighth grade, I took a class that became one of the most influential courses in my life: an introduction to biomedical sciences. I marveled at how viruses could wreak havoc in an entire organism, just with a few strands of DNA or RNA; how my heart, which was only the size of my fist, pumped enough blood to fuel my entire body with oxygen and nutrients from food; and how my brain, just three pounds of whitish fat, stored all of my memories and coordinated all of the processes in my body. I clung to every word my teacher said and remembered every detail effortlessly. I felt that medicine was my calling--I wanted to be a doctor so that I could explore mechanisms of disease and human physiology for the rest of my life.

Inspired to learn more about the human body, I took my first neuroscience class the next year. I loved learning about the brain! (new sentence) The course was different than the previous class; instead of just teaching us current knowledge of the subject, it also \_\_\_(verb here: described, outlined, detailed, ...) the theories and perspectives that neuroscientists formed throughout history and (\_\_\_) the scientific research that . My teacher even admitted that the contents of our current neuroscience textbook could be proven wrong in a few years because there was still so much ongoing research on the brain.

Next session of CTY, fulfilled my desire to learn more about the human body by taking a neuroscience class. The brain is awesome! First exposure to medical education where they admitted that there was still so much to solve about the brain. This was when I first recognized that there was room for me to make new discoveries, to map uncharted seas.

Instead of volunteering at Saddleback Hospital to help patients with my friends, I couldn’t get my neuroscience class out of my head, so, in soph summer of high school, joined a research group at UCI and investigated learning and memory in Aplysia.

Got pretty good at bio research – became more independent, blah.

College, enjoyed research but something was still missing; I enjoyed what I did, but I had a hard time feeling like I was actually helping people with my work because it was so far removed from actual clinical practice. So, became curious about how medical practice actually worked, in practice. Sought out activities in which I could interact with doctors and patients to get a glimpse of the other side of the hill—where research was applied to actually helping people.

Came to realize that while research was an essential part of curing diseases, healing came from the person. I didn’t have an antidote to Zoe’s pain, but I helped her overcome a moment of crisis emotionally and in that way, I healed her. Flu crew – hold woman’s hand, comfort. Shadowing experiences – draw parallel?

Clinical experiences became a motivating factor for my research, not just curiosity or academic zeal. I met the people who would benefit from my research face to face and saw how it could change their lives. (?? example) Decided that I wanted to do a two-pronged attack on disease: to cure people using science and to heal them using medicine (???).

Science prong: got deep into fMRI neuroscience research. Published two papers, felt like I was really fulfilling my dream of adding to the knowledge pool in neuroscience, even if it was just a little piece.

Example of inadequate exp, unable to empathize because I lacked the personal experience (Arbor, bipolar? Diabetic woman?). Wanted to expand my horizons in terms of learning to work with people. While I cherished the feeling of helping another person, I realized that my experiences in the world were limited and that it affected my ability to relate to others’ experiences. I had never experienced poverty, or isolation, etc. I had no problems treating others the way I wanted to be treated, but … how did *they* want to be treated? How could I treat them to help them alleviate their stress, their sense of violation by a disease, or their depression? Was it possible for me to learn how to confront these difficult situations? There wasn’t exactly a class on what to do when….???

Realized that academics was only half of my education, at most, and saw that the people around me provided the rest. I wanted to enrich my education more—so I went abroad, to try to learn another culture and language, to get lost,  ??? some transition into studying abroad.

Learned about difficulty of affording to eat well. Learned about not fitting in. Colorblindness.

Led to me taking a gender studies class, something I had never really had interest in until I became a computer scientist and noticed severe differences in gender. Learned about gender identity, performativity, LGBTQ, hijras, drag queens, stigmas, oppression, etc.

… maybe the transition to abroad/gender studies was not the best. Rethink the reason why and work back into medical practice.

Wrap up. Goals in academic medicine formed because of ??. Prepared because of ??. Ideal for me because 1) curiosity in science, desire to deepen my search for explanations and cures, and 2) desire to give people what they need, in full--not just the biology, but also the emotional support and reassurance that can heal someone in different, impossible to scientifically reason ways.

clinical speculation? surgery observations; surgery turned out to be way less scientific and systematic than I thought. A lot of guesswork and on the spot determination of best course of action based on small details in biological variation, or patients’ wishes etc. Arbor experience - chinese lady, copper IUD. Diagnosis based not just on physical exam alone, but on cultural knowledge of patient’s background.