

Ecological succession begins with one event—one catastrophic, life-altering event. A volcano explosion wreaks havoc on peaceful pastures. An uncontained forest fire devastates the trees that once stood so tall. A lifelong softball player trips and breaks her foot. The ecosystem is wiped clean. No more trees reach towards the sky. No more pastures gently roll into the horizon. The softball player lays curled up in the dirt, clutching her foot. Everything is lost.

Three years ago, I stood on first base, one foot stealthily darting toward second. As the pitcher released a fastball right down the middle, my teammate swung, sending the ball sailing just feet in front of me.

The second baseman fielded the ball with ease and whirled around to tag me. I tried to feign to the left, but my feet tangled up, and the ground rushed toward me. CRACK! A snap echoed in my ears and an intense burning pain shot up my leg. As my coach carried me off the field, I had a gnawing feeling that my ecosystem was about to burn to the ground.

After months of misdiagnoses and doctors throwing up their hands in defeat, what began as two shattered bones morphed into Complex Regional Pain Syndrome. “Don’t Google this,” my doctor warned me when he gave me the final diagnosis. I couldn’t help myself—I Googled it.

Sitting alone on the floor of my bedroom, hunched over my computer, I found truths I have to live with for the rest of my life. CRPS has no cure or treatment. My pain will be constant. I will be disabled for the rest of my life. Virtually nothing is known about CRPS. The final fact I read made my heart drop: “CRPS is also known as the Suicide Disease.” I knew then there would be no escape from the fire in my foot.

But the articles forgot one word: misery. Misery beyond the physical pain that kept me from walking. It was misery I felt as I mourned the loss of my independence. A part of me evaporated when my sister washed dishes for me, burst into flames when my brother cooked for me, washed down the drain when my mom helped me into the shower.

Regrowing the first few plants is the most difficult step in succession—the ecosystem must be resilient. Slowly, a blade of grass peeks its head out from the debris. That one piece of green amid the expanse of dirt is perhaps the only reason to persist. Nevertheless, the ecosystem *must* persist.

I was laying in bed with my foot elevated and icing when I was introduced to calligraphy. My dad walked into the room and handed me a package. A set of markers peeked out at me. I opened the cap of one and drew a test line. It was not a normal marker—the tip was flexible and moved with pressure. My dad explained that these were calligraphy markers, and calligraphy might be something fun to try while recovering.

Once the first sprouts break through the soil, they do not stop. The shrubs are replaced by trees reaching up to the sky; the insects are joined by rabbits and deer; the sparse grasses give way to rolling fields.

I spent hours upon hours lettering my way through the pain. I blossomed as a calligrapher. I created small works of art in the school hallways to bring joy to passersby. I painted empowering quotes on the classroom walls of at-risk kids and decorated wedding invitations for my relatives.

Because of my newfound passion for art, my ecosystem was restored. I found solace in calligraphy. My ecosystem is constantly facing new threats, but calligraphy is my shield. I transformed the darkest period in my life into a creative endeavor. Because of my fall, I learned how to rise.

After I hurt my foot, the desire to know exactly what was happening inside of me was overwhelming. I've gained an insatiable thirst for knowledge about my disorder. That's why physiology is the perfect fit for me. It has the ability to explain the entire world to those who care enough to pursue it. Physiology explains why people tick, how they survive, and what makes us human.

The beauty of physiology is that I can apply my findings in a lab to the world I see on a daily basis. I'll feel a bone and think, "My manubrium is shaped just like a triangle." My arms will be sore after a difficult upper-body workout, and I'll think, "I'd better stretch my triceps brachii to repair the damage to my myofibrils." My fascination for the science of life knows no bounds, and neither does this field that analyzes life's complex mechanisms. Molecular genetics, anatomy, neuroscience—they all deepen my understanding of the world living inside of me. Studying physiology gives me the tools to reach beyond the *what* of life and delve deeper into the *why*.

My infatuation with physiology manifests in a love for medicine. Doctors are trusted with more than the responsibility of administering medicine—they distribute hope. If that power is wielded with care, the medical field has the ability to not only save lives, but to provide comfort in a time of great hardship.

Thus far, the medical field has disappointed me with a lack of treatments and hope for my disability; however, I have the capability to create that hope for myself and countless others like me. I can model to my patients how their ecosystem will eventually thrive, even after they've witnessed the desolation of their own barren fields. In the medical field, I can work every day to be representation for those who have been newly diagnosed and are terrified for their futures. As a doctor, I can draw on my own strength to be strong for others and for myself.