With my notebook in hand and fitted with a surgical mask, booties, and a hair net, I eagerly followed the veterinarian into the operating room. As she began to perform the spay on the Labrador retriever, I inched closer to get an unobstructed view. I was transfixed as I watched the surgeon's quick and skillful hands incise and then suture. I was only one week into my summer shadowing experience at a veterinary clinic for small and exotic animals, and I had already observed veterinarians diagnose cancer in a hedgehog, remove a pair of overgrown incisors from a rabbit's mouth, and neuter an entire group of squirrelly sugar gliders. I enjoyed the experience so much that I returned the following summer. After that, I knew I wanted to pursue veterinary science in college—and also that I didn't want to wait until college to learn more.

Searching online for programs that gave high school students experience in the veterinary field, I found Cornell Summer College, which offers three-week programs in veterinary medicine and animal science. I applied to two of them: one focusing on small animal veterinary practice and the other on equine veterinary medicine.

I actually jumped up and down when I received notification of my acceptance to both programs. I was going to study veterinary medicine for six weeks at one of the best vet schools in the country!

**Small Animal Practice**

I arrived at Cornell in June and was both excited and terrified as I watched my mom drive away. But within the first week, I perfected the art of walking up to random people and introducing myself. The friends I made were fun and bright, and together we organized study groups and celebrated test scores with ice cream.

Every morning, we attended three lectures, which covered subjects ranging from physical exams to the differences between the numerous cranial nerves. Lectures were a great opportunity to learn from our amazing teachers, Dr. Phillip Maza and Dr. Allison Miller, who are both professors in the Department of Biomedical Sciences at Cornell's College of Veterinary Medicine. We also attended lectures by our TAs, who were current Cornell veterinary students, as well as guest lectures by specialists such as veterinary ophthalmologist Dr. Nita Irby. All of our lecturers conveyed the material with an enthusiasm that made our discussions interesting and memorable, and we were encouraged to ask as many questions as we needed to understand the subjects in greater depth.

In the afternoon, we headed to lab, usually the gross anatomy lab, where we worked with cadaver specimens. We probed a dog's abdomen, studied a sagittal section of a dog's head, and examined a dog's hind limb, heart, and lungs. In addition, we had weekly labs with living dogs, on which we practiced skills such as cranial nerve tests, auscultation (listening to the heart and lungs), and bandaging.

Just as fun and fascinating as the labs were tutorial cases, which we investigated in groups of about 10 students with one of the TAs. Each group received a packet containing minimal information about a case of an injured animal. For instance, the first page of one packet explained that a dog had been hit by a car and was unwilling or unable to stand. We wrote the information we were given on a whiteboard and generated reasons the dog might be displaying these clinical signs: Was there a fracture or nerve damage? If so, where would this injury most likely be? We also determined which tests, such as radiographs or blood tests, could help us diagnose the ailment. After learning the results of any tests (provided on subsequent pages), we diagnosed the condition and made a plan for the patient's treatment and recovery.

By the time the program ended, I had learned an incredible amount about anatomy and physiology and the common issues vets see in small animal practice. I was sad to say goodbye to the friends I made, but I was looking forward to spending the next three weeks focusing on my favorite large animal: horses.
As in the small animal program, we attended morning lectures and participated in afternoon labs. Lectures were delivered primarily by Dr. Miller, but we also heard from guest lecturers on topics including nutrition, breeding, surgery, and, the most interesting to me, farriery—the practice of trimming, balancing, and applying shoes to horses' hooves. We heard from Steve Kraus, Cornell's head farrier, and watched him and a few of his students make a horseshoe from a bar of metal and put a specialized horse shoe on one of the horses at Cornell’s animal hospital. I had always considered farriery important, but I hadn’t realized how critical a role farriery can play in a horse’s health: it can prevent injury, compensate for faulty limb action, or help improve an existing condition.

In addition to observing experts in the field, we also worked directly with horses at Cornell’s Equine Park during lab. We performed different components of a physical exam (auscultated heart and lungs, and listened to borborygmi (gut sounds)), and, feeling along their bodies, identified different parts of the musculoskeletal system. We also visited the Cornell Large Animal Hospital, where we learned how to perform a lameness exam and apply a Modified Robert Jones bandage, and watched Dr. Miller pass a nasogastric tube to treat a horse for colic.

My six weeks at Cornell passed too quickly, but I left with great memories and a ton of new knowledge. I look forward to studying biology in college and seeking out additional research experiences. Although I don’t yet know what area of veterinary medicine I want to focus on, I know for certain that this career—where I can apply my favorite subject, biology, to make a difference in the lives of animals—is the right one for me.

Madison Luker is a senior at the Orange County School of the Arts, where she studies in the Music & Theatre Conservatory. She is co-president of an apologetics club and competes as an equestrian athlete in jumping equitation classes.

Learn more about the Cornell Summer College at sce.cornell.edu/sc/programs.