

The Language of Anatomy

“You can read up on anatomy of the body anywhere; in a classroom, in a library, at home, etc.” said Bianca Maron, a fellow undergraduate at Davis, who also took anatomy and was kind enough to share her views. “Similarly you can learn a language in a class room, from Rosetta Stone, studying books, watching movies, listening to radios, etc.” The language of anatomy is a series of words. Sure, these words have specific meanings, and yes, it can be a difficult language to learn. You have to apply the meanings and the words to specific parts of a human, and recognize how all of these words come together to form a coherent language that only a fraction of the population knows. It is no different than learning any other language, be it Spanish, French, German, emojis, or the newest acronyms, none of which I’ve ever been able to grasp. The difference between learning anatomy and experiencing anatomy is no different than going to a foreign country. Maron compared it to “studying Spanish in a class; you don’t become entirely fluent until you’ve spent time in a Spanish speaking country.” To become completely fluent in the Spanish language you can learn a lot of the basics in a classroom, you can read about the proper verb tenses and how to construct sentences. However, any native Spanish speaker will immediately be able to recognize that you are not fluent in Spanish.

The language of anatomy is truly no different. Sure, I can list off a bunch of words, you’ve probably heard some of them. Lats (Latissimus dorsi), Pecs (pectoralis major), Bis (biceps brachii [short and long head]), Delts (Deltoids), Quads (quadriceps femoris, or the vastus lateralis, medialis or intermedius), lungs, liver, larynx. You can probably even point to these on your body, you may have even gone a step further and taken a physiology class so you start to have an idea how the systems are all working together. Don’t get me wrong, anatomy is not the entire body. There are nuclei, neurons, axons, and so many other things that are not covered in a Human Gross Anatomy class that are important to the body’s overall function. However, knowing that stimulation of the neurons of the paraventricular nucleus leads to hormone release from the anterior pituitary is less relatable to

everyday life. It will probably interest far fewer people unless they are specifically interested in that field or have a background in which they know the subject matter you are speaking about. The interesting things you encounter daily are generally the muscles, possibly the bones. The organs occasionally are mentioned, and the nerves are almost completely ignored.

Now, sure you know that your lungs bring oxygen into your body. You may even know this process as your lungs providing a gas exchange surface between the outside environmental air and your blood. You may have even been told or read in a book that there are muscles that contract causing pressure differences, which is how respiration occurs. However, until you have actually held a lung, seen the hilum (the area that the bronchi [the distal (part furthest from its beginning) portion of the trachea after it splits] enters the lung), lungs are just something that you need to keep you alive.

“Anatomy lab is where it all takes place,” said Maron. “It doesn’t become real, you don’t fully understand anatomy until you’re in the [anatomy] lab, fully immersed in the language of anatomy.”

The UC Davis anatomy lab in the back of Haring hall is secluded, there is no entrance from the rest of the building. Maron described the room as a “large room, sterile, grey, cold and gross.” “Sterile as in uninviting, but once you were working it was messy and anything but,” which is an apt description of the room. It looks clean at the conclusion of any day. All of the metal gurneys are wiped down, the floors swept. The white board lining the front wall as well as the four on wheels throughout the room are erased. The articulated human skeletons are rolled into the south east corner of the room. While the classes were in session though, the tables were “slimed,” the term loving gave to the mixture of cadaver juices and wetting solution that seemed to cover everything. The wetting solution was used to preserve the cadavers, some of which were up to fifteen years old, and was primarily composed of downy fabric softener; to this day, the smell still reminds me of the anatomy lab. You have to remember, these are all donated bodies and the utmost respect is maintained for the bodies, to respect the donors as well as the families of those who donated the bodies. For this reason, the room was

carefully maintained at the end of every day. The anatomy lab is held so near and dear to the people who successfully pass the Gross Anatomy Lab class, because it is where “the full experience happened; everything I studied could be explored, touched and fully comprehended”. And while the room itself was cold, grey and sterile, Maron pointed out “the people made it lively, which is ironic because half of them were dead.”

On the first day of class, the instructors went over specific instructions for how to handle the cadavers, as well as what to do if you felt uncomfortable at any time. If anyone felt at all lightheaded, they were instructed to sit down on the floor to minimize risk due to fainting, or to step outside and get fresh air. You do have to remember that you are examining a real human cadaver. Certain aspects of the body are more likely to make individuals uncomfortable, specifically the face and the hands since these are what our mind draws the most human qualities to. In both the class that I learned in, and then later taught, I never noticed anyone have issue. I was at the first station in which the students saw a face, and while some were initially nervous about viewing the face, no one had to step outside due to being uncomfortable.

The instructors of anatomy conveyed this special language in a way that made it more than just memorizing parts of a body. Because of my instructors’ enthusiasm, I wanted to become an instructor as well, and pass along the language to future students. The individuals who were generous enough to donate their bodies gave the instructors, and myself, a medium for passing along this language in a way which made it real, rather than just more lessons out of a text book. This made the anatomy lab the most tangible portion of the anatomy class. It was in this room that we were able to experience the language, surrounded by others who were learning or fluent, and be “fully immersed in the language of anatomy.”