Mia Ayer, Summer 2019 Internship at the Smithsonian Institution, Museum of Natural History

During my internship experience at the Smithsonian, I had the opportunity to work with Dr. Sabrina Sholts, Dr. Andrea Eller, and Rita Austin in collecting data for a larger ongoing project called EMPHASIS (Environmental Mismatches in Primates and Humans: Anthropogenic Settings and Impacts Survey). This study largely focuses on how both humans and nonhuman primates are impacted by their environments, assessing differences in observed paleopathological markers across age, sex, and pathology categories. With the help of my wonderful supervisor Rita Austin and the collections manager Dave Hunt in the Museum Support Center, I was able to discern and recognize bony pathologies and gain a better general understanding of human anatomy in over 1200 individuals in the human Biological Anthropology collections, all of whom were from ~1200-1500 CE, pre-Spanish contact Peru. Using the collected data, I developed my own research questions to pursue and develop into a poster project, which I plan to continue researching as part of a thesis project. The project under the guidance of my mentors at the Smithsonian revolved around a bony pathology of the skull within the ear, called external auditory exostosis (EAE), which was relatively frequent in the Peruvian collections I surveyed. Specifically, I explored whether the pathological etiology aligned with previous studies asserting EAE is solely associated with water temperature, and analyzed my findings within a biocultural framework. Through this experience I was able to not only greatly round out my knowledge in biological anthropology, but open so many new doors and opportunities which pushed me to engage in the discipline in ways I had not considered before. The total immersion into such a driven and supportive team of people who are excited about anthropology really intensified my passion for the discipline- the relationships built during my time there will be lifelong.