

Address the following questions in an essay of 750 words or less. (Please use double-spacing and Times New Roman 12 pt font)

- a) Why are you interested in the REU at the Smithsonian Tropical Research Institute? Please provide examples or describe a situation that has prepared you to live and work in a tropical environment
- b) Describe your research interests and how they are linked to the project (s) you would like to work on during the REU program (Highlight particular interest in tropical research).
- c) How does participation in the REU relate to your academic or professional development and goals?
- d) Describe any challenges you have faced prior to or during your undergraduate career.

Being from Costa Rica has had an enormous impact in shaping who I am today, and as a “Tico,” I try and live my life by our national motto and phrase “Pura Vida.” It means pure life, but it has many significances and uses. Growing up and living in the United States has made my own interpretation of this phrase a key instrument in connecting me back to my roots and guiding my interests in tropical wildlife. As early I can remember, my family has traveled annually to Costa Rica to visit family. My favorite part of these trips has always been our excursions to the national parks, which have instilled an interest in learning about their vast biodiversity. These Costa Rican National Park experiences have fostered my love and passion for tropical ecology. A large part of this interest was also due to my uncle who worked as a park ranger in Costa Rica. His stories and experiences filled my adventurous mind with hopes and dreams to work in the rainforest among the wildlife.

Since then, I have chosen to pursue a B.S. in Ecology, Behavior, and Evolution Biology at UC San Diego, where my work as a student has provided me with valuable experiences that have helped shape my passions. Studying at UCSD has given me various opportunities to increase my research experience and further develop my knowledge through courses in ecology, animal behavior, biodiversity, and many others. One such opportunity was volunteering in Jon Shurin’s aquatic ecology lab. This position gave me my first exposure to research in an ecology lab. My responsibilities included assisting Ph.D. student Akana Noto with tasks such as insect identification, sorting invertebrates from salt marsh samples, and setting up insect traps in the field. Additionally, I assisted in setting up and sampling a common garden experiment which studied plant interactions and the effect of environmental variability. Through this experience I learned about good experimental design, data management and plant biology methodology. Last summer I was a research intern working on mountain lake foodwebs in Yosemite National Park working on my own research project while assisting Ph.D. student Celia Symons. My tasks included setting up large-scale experiments, collecting data from the field, analyzing data in the lab, and other various extraneous field tasks. We lived at a research station for 3 months while sampling both a mesocosm experiment and conducting field surveys of lakes. Moreover, I have worked at Petsmart as a reptile, fish, bird, and small mammal specialist throughout my college career. This job has given me valuable work experience and opportunities to work with live animals. In addition to being an avid camper, hiker, outdoorsman, and having ample experience working with livestock, pets, and wild animals in and out of the tropics, working in the mountains of the Sierra gave me skills needed to perform formal scientific research in a truly wild setting.

Other than the tremendous diversity and wildlife I have experienced firsthand in the tropics, the various medicinal, taxonomical, and conservational discoveries and developments there have also motivated me to work in this field. But the strongest driving force fostering my interest in tropical biology is my desire to incorporate my experiences of my second home into a form of biological research. After my research experience in Yosemite, I was left with an eagerness to continue working in the field. I have always known that my real passion is tropical ecology and ethology, and working alongside mentors such as Karen Warkentin, Rachel Page, or Ximena Bernal would tremendously benefit me as I pursue my dreams of doing tropical research biology. I remember the first time I saw red-eyed treefrogs and glassfrogs in Costa Rica and my feelings of amazement and curiosity. Similarly,

and in awe. In working with any one of these mentors I have the chance to further develop my skills in tropical ecology, which would greatly benefit me in my pursuit of a Ph.D. in tropical ecology/ethology.

My career goals are closely tied to my life goals. I want to become successful in the sense that I want to be happy in what I do and contribute to the world, and I want the chance to experience various countries and their cultures while studying the local organisms and ecosystems. To do this, I will continue my studies in the hopes of receiving a M.S. in Biology either at UCSD or another institution and thereafter, join a tropical ethology or ecology Ph.D. program that matches my interests. The opportunity to participate in this specific REU at the Smithsonian Tropical Research Institute would most benefit me as I strive to gain research experience in tropical ecology and ethology. Thank you for this opportunity.