

Daniel Rios-Doria

I was always interested in biology as I entered college and had full intentions to graduate under this curriculum. It just so happened that I needed to take pre-requisite courses in math and I did very well in introductory Calculus courses. Eventually I kept on taking more math classes than biology and I ended up switching to become a math major. Towards the end of my undergraduate career I began to think and consider my options with what I was studying. I enrolled in a new class that was being offered and it created the basis to what I would like to pursue now, Mathematical Biology. This class opened my mind to many ideas that would soon mold my future. My advisor at the time recognized my accomplishments that semester and offered me a research experience under his supervision. Over the summer of 2005, I researched a topic on why whale strandings occur in certain geographical locations through examining acoustical dead zones. After presenting my work at the school REU conference, the experience encouraged me to take more applied math courses to emphasize my mathematical abilities.

As I was graduating I applied to more REUs specifically in the field of mathematical biology and I came across a program at Arizona State University: MTBI. I was accepted and there my attendance increased my experience in the field of research as I became motivated to make this my career. During the intense 2-month period I learned a lot about different types of modeling aspects on the spread of diseases through SIRs and many other topics that eventually aided me on the selection of a project. Meeting other people with my interests we researched obsessive-compulsive disorder therapeutic dynamics using markovian-based simulations. As the summer ended I was given the opportunity to attend Arizona State University and study Mathematical Biology at a graduate level. It has since changed my life and introduced me to so many more topics of research and experiences.

In my first semester of graduate school I began my journey to attaining a PhD and I accomplished the challenge of passing my first round of qualifiers. I have also attended 2 conferences and have presented the research I worked on in the summer and I found new grounds of motivation there. Networking with scientists and other student researchers I was given a lot of advice for the future and I realized there that I was very content with my current path in science. I am now motivated to do more research and finish up the rest of my qualifiers. I hope to get published soon and in the future contribute to the scientific community as much as I can.

The opportunity to attend the Advanced Study Institute in South Africa would further increase my exposure to epidemiology and enhance my ability to conduct research in this field. At this point in my career I feel impressionable with every subject concerning mathematical biology and an experience like this one can only aid in determining a thesis research topic for the future. My goal, as in any opportunity I have been granted, is to absorb as much as I can and commit in producing the best I can in everything related to what I am doing.