I spent my time abroad in Sri Lanka, a small country to the south of India. Specifically, I lived and worked in Galle, Sri Lanka. Duke has had a research collaboration with the University of Ruhuna’s Faculty of Medicine since 2006. The collaboration came about as a result of the 2004 tsunami, which had a great impact on Galle, Sri Lanka. This collaboration has focused on several projects since its inception, including emerging infectious diseases, aging, occupational health, and mental health research. Within the Duke-Ruhuna collaboration, I was given the opportunity to conduct an independent field research project. This project was used to fulfill the field research requirement for my Master of Science in Global Health degree program.

My project was broadly aimed at antimicrobial resistance. Specifically, we looked at carbapenem-resistant gram-negative bacterial infections. Carbapenems are a class of antibiotics that are typically used for suspected multidrug-resistant bacterial infections. Therefore, the emergence of resistance to these highly effective antibiotics has raised global concerns. Our project had four main objectives: determine the prevalence of carbapenem resistance among gram-negative bacterial infections, identifying the sociodemographic and clinical risk factors for these resistant infections among patients, identify the molecular epidemiology of carbapenem resistance, and assess the outcomes of patients with carbapenem-resistant gram-negative bacterial infections. With this data we hoped to contribute to the data on antimicrobial resistance in Sri Lanka and fill a gap in surveillance efforts for carbapenem-resistant infections. Furthermore, we wanted to provide data to the ministry of health that could be used to combat the rise of resistance to carbapenems.

In my day-to-day activities, I spent much of my time working in microbiology labs at the University of Ruhuna’s Faculty of Medicine and at Teaching Hospital Karapitiya, the largest tertiary care center in Sri Lanka’s Southern Province and the main training facility for the University of Ruhuna’s Faculty of Medicine. Both settings gave me the opportunity to engage with local doctors, nurses, and lab staff. Typically, I began my day in the hospital laboratory to collect the new bacterial samples and screen for study eligibility. Once I identified samples to include in the study, I would take the samples to the university microbiology lab for processing and storage while my research assistant would go to the wards to interview patients and collect data from the clinical charts. In this way, we could collect sociodemographic and clinical data at the same time we prepared samples for molecular testing. This data collection plan allowed us to tackle all four objectives of the study.

Overall, my research experience in Sri Lanka reinforced several important skills and competencies. Working in a different country clearly exposed me to a completely new culture that I had never engaged with before. The biggest takeaway for me when working and living in another culture will always be humility. While I can read and learn as much about a culture beforehand as I would like, I always need to be cognizant of the fact that I will not know or understand everything. Therefore, I needed to be willing to learn and grow through my interactions with others. My time in Sri Lanka was no different, and the experience was invaluable in regards to expanding my worldview. While my interaction with this new culture
was overwhelmingly positive, I did experience a few challenges due to cultural differences. Between a lab staff strike that lasted several weeks and overall differences in work ethic, I encountered barriers to completing my data collection and research project. Although these challenges arose during the course of my project, these barriers to data collection were expected and served as a way to strengthen several important skills, including perseverance, flexibility, and patience. At the end of my time in Sri Lanka, I felt that my experience solidified classroom teachings from my degree program and gave me applicable real world experience that I can carry into my future professional career.