

2018-2019

Belize

McMaster Fellow

Mary Ann Studer, Dean of the McMaster for Advancing Humanity - This project consists of two components: (1) assessing data from visual acuity screenings of school-age children in north central Belize in order to provide BCVI with information that will facilitate the best use of their resources and have the greatest benefit to the children in need of eye care; and (2) conduct nitrate, pH, and dissolved oxygen assays in the New River and New River Lagoon sub-surface waters – this study was piloted in 2011-2012 to explore possible source or pattern of nitrate contaminants including specifically targeted locations including feeder springs and tributaries that drain marshlands into the New River Lagoon; and has been continuing to contribute to a better understanding levels of dissolved oxygen and the chemical composition of water in the River and Lagoon at various depths.

McMaster Associate Fellow

Rena Rager, Administrative Assistant - This project focuses on Breast Cancer awareness and training women to regularly conduct breast self-exams. In addition informational packets and posters will be distributed to raise awareness of the value of early detection and treatment.

McMaster Scholars

Hayden Clingaman, Sophomore, Accounting - Working with farmers and restaurant owners in the village of San Carlos and a women's group in Rancho Dolores this project will teach basic bookkeeping skills to enable these emerging entrepreneurs to better understand their finances.

Corey Davis, Junior, Education-Intervention Specialist — The goal of this project is to improve the interest and success of student learning in the sciences in schools of the Orange Walk District. Continuing a project of a former scholar a day-long science camp will be staged in several rural schools that will incorporate the use of UDL strategies in teaching science.

Mackenzie Durdak, Senior, Forensic Science and Molecular Biology — This project will contribute data to the baseline data McMaster Scholars have previously compiled. Water will be collected in the villages of San Carlos and Rancho Dolores as well as in the New River and New River Lagoon. The water samples will be tested for pH, nitrates, ammonia, phosphorus, chlorine, DO, and bacterial contamination. This data will be analyzed and compiled for our

community partners Programme for Belize, in San Carlos, and in Rancho Dolores. An education program will be given on water safety to both school children and the women of the villages.

Malia Ferry, Junior, Early Childhood Education/K-12 Intervention Specialist with Autism Studies Minor — Pre-school lessons will be created for the librarian and mothers in the village of San Carlos. Training will be provided on how to run the lessons and assess what educational gaps there are for students transitioning from Infant 1 to Infant 2.

Jordan Furko, Sophomore, Forensic Science — This project will continue collecting data on possible contaminants in both surface water and potable water in Belize. This data will be used to educate the community on the long-term effects of contaminated water and provide alternative methods to improve their drinking water quality.

Ely King, Senior, Mathematics and Business Administration— There has been an expressed need from the women in the communities of San Carlos and Rancho Dolores to learn how to market their restaurant and businesses effectively. Instructing the women of Belize how to use the resources they have to market their business ventures in several ways can help them increase customers and maximize the sales of their business. A training session will be created and implemented on the topics of business and marketing.

Madeleine McMaster, Junior, Social Work – Gender-based violence happens most often in low socioeconomic status households, and this project will work to inform women in remote villages in northern Belize about gender-based violence as well as collaborate with them to develop a pipeline to seek help.

Blake Newman, Junior, Psychology and Social Work – This project's focus is centered around the community's well-being and narrows in on the individual's well-being and rights, within the community and the country of Belize. A Non-Invasive Poverty Index (NIPI) Survey will be completed to assess the level of poverty within the community of San Carlos. In the rural areas of Belize, the topic of gender-based violence and human trafficking will be discussed to provide a better understanding for the communities.

Lauren Oglesbee, Junior, Athletic Training – This project will continue training of CPR and education in first-aid and head trauma. The topic of poison control will be shared with residents to learn about how to take care of chemicals that are toxic and unsafe.

Rachel Wehrman, Senior, Middle Childhood Education for Math and Science – Lessons will be created to implement a math portion to the science camp that McMaster Scholars Corey Davis is putting together. Universal design for learning techniques will be incorporated so that all students will be able to understand the material that will be taught at various ages.