Belize (2017-2018)

McMaster Fellow

Mary Ann Studer, Dean, McMaster School for Advancing Humanities — 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 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 Lagoon at various depths.

McMaster Associate Fellows

Rena Rager, Administrative Assistant — This project will be focused on Breast Cancer awareness. In addition to informing women about Breast Cancer screening, informational packets and posters will be created to leave in medical centers where self-breast exams occur.

Brad Harsha, Assistant Dean, McMaster School for Advancing Humanity

Matt Lundin, Assistant Professor of Athletic Training

McMaster Scholars

Corey Davis, Sophomore, Intervention Specialist Mild/Moderate— This project will provide training to help teachers set up lesson plans with the skills that incorporate Universal Design for Learning. The goal of this project is to help the teachers come up with teaching techniques that will keep them enthused as a teacher, but also providing multiple ways to engage their students.

Mackenzie Durdak, Junior, Forensic Science and Molecular Biology — In this project water testing will be completed to determine the levels of pH, nitrate, ammonia, chlorine, phosphorous, and biological contaminants in potable water sources in remote rural villages in Belize.

Taylor Gillig, Junior, Early Childhood Education: Mathematics and Language Arts— This project will work to improve functional literacy for both children and adults. A main part of her project will be focusing on creating “All about Me” book that will describe who they are and what they want to become, while the adult books will work with a functional literacy tool that is in both Spanish and English.

Ely King, Junior, Business Administration and Mathematics — In this project will work to develop a small women's cooperative in the village of Rancho Dolores. While goods are already being produced the women cannot access markets to sell them. This project will give them the knowledge to form an effective collective that providing them the opportunity to take their business venture outside the village.

Nicholas Kleptz, Senior, Molecular Biology — This project will be addressing much needed health education, including emergency response, prevention of mosquito borne disease and clean water hygiene through training and classroom lessons.

Kaitlyn Kuhn, Senior, Early Childhood Education— This project will consist of providing teachers with information on various learning styles and to conduct a two-day science camp where hands-on applications will be taught. Microscopes will not only be used for the experiments, but will be left at the school for them to use in future in-class activities.

Kassandra Memmer, Senior, Athletic Training — This project will include emergency response training in both head trauma and long-term eye health. The latter part of this project will work in tandem with the visual acuity screenings conducted by the team while onsite.

Blake Newman, Sophomore, Psychology — In this project a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis will be conducted in several small villages in northern Belize. In addition a non-invasive poverty index (NIPI) assessment will be conducted to help gauge the communities' poverty level and assess need.

Logan Scott, Senior, Molecular Biology— This project will assess surface water quality in both the New River and the New River Lagoon contributing to the base line data accumulated by previous McMaster teams.

Alyson Seibert, Junior, Athletic Training— This project will teach aspects and benefits of healthier lifestyles to the women of Rancho Dolores. Included in this project is information about nutrition, meal planning and the importance of balanced meals along with exercises to improve back strength and balance for aging populations.