

# 2021-2022

## Belize

### McMaster Fellow

Nady El-Zayaty, Ph. D., Assistant Professor of Business - This project is a continuation of work performed over the course of several years, assessing data from visual acuity screenings of school-age children in North Central Belize. The data collected will provide the Belize Council for the Visually Impaired with information that will facilitate the best use of their resources and have the greatest benefit to children in need of eye care.

### McMaster Associate Fellows

Steven Engel, Assistant Professor of English

Nicole Hoffman, Financial Literacy Education Coordinator

### McMaster Scholars

Logan Gray, Sophomore, Social Work - This project focuses on domestic and gender-based violence in rural Belize. Under the guidance of UNICEF, a training program will be developed and implemented educating women on domestic and gender-based violence and how to appropriately react in violent situations.

Michael Joseph, Sophomore, Middle Childhood Education/K-12 Intervention Specialist - This project will facilitate the continued training of teachers in primary schools in Belize to utilize the principles of the Universal Design for Learning (UDL) in order to appropriately teach students with different learning styles using alternative methods.

Dylan King, Junior, Mathematics - By conducting a Non-Invasive Poverty Index (NIPI) in the village of San Carlos, this project will gauge the economic standing of the village and provide context for writing a set of by-laws for a community-based bank.

Alivia Kruczkowski, Junior, Exercise Science - This project is centered on developmental diversity in the Orange Walk District of Belize. After meeting with board members of the Orange Walk District Education Center to discuss prevalent disabilities in the community and schools, community events will be created to educate and celebrate developmental diversity in the area.

Sophia Moller, Senior, Early Childhood Education/K-12 Intervention Specialist w/ Autism Studies Minor - This project focuses on fine motor, phonological, and nutritional development of preschool-age children in Belizean communities. Through this research, tools and interventions to cultivate these developmental areas will be introduced to the teachers in rural Belize.

Olivia Rayk, Sophomore, Forensic Science – This project will continue testing and research from previous years regarding the content of nitrates, dissolved oxygen, and biological contaminants in the water in Belize. Low levels of dissolved oxygen can lead to the death of aquatic wildlife, while biological contaminants threaten the lives of members of the community.

Jaylen Redd, Junior, Social Work w/ Business Minor – This project will use extracurricular athletic activities to help reduce the rate of adolescent aggression as a result of domestic violence and gang affiliation. Activities will focus on unity and teamwork instead of athletic ability, giving youth the opportunity to form community, giving them an alternative to gang affiliation and an outlet for aggression.

Autumn Saddler, Junior, Molecular Biology – Alongside members of Programme for Belize and Friends of the New River, this project will collect data through water testing for phosphates, nitrates, pH, dissolved oxygen, turbidity, salinity, temperature, and the presence of algal blooms. The data will be compared to that of previous years, in hopes of identifying the contributing factors to decreased water quality.

Kelsie Shafer, Senior, AYA Social Studies and Intervention – In conjunction with the Orange Walk District Education Office, this project consists of a one-day learning camp focused on agricultural practices and the importance of healthy living. Students at August Pine Ridge Primary School will complete hands-on activities associated with agriculture that incorporate natural resources that are easily accessible in rural Belizean communities.