Danielle Long

Masters Student Graduated Spring 2014

Danielle Long, a native of Titusville, PA, studied Biology and Chemistry at Mercyhurst University. After receiving her undergraduate degree in Biology with a concentration in Ecosystem Restoration, Danielle came to the University of Toledo to pursue a Masters' degree in the Department of Environmental Sciences. She began her graduate career in the fall of 2011 working with Dr. Daryl Dwyer. In Dr. Dwyer's lab, Danielle mastered many microbiological and environmental restoration techniques. After her first semester of classes, Danielle began working on her Masters' thesis project. Her research was focused on the microbial impact that biosolids, from a waste water treatment plant, can have on agricultural fields when it is used as a



fertilizer. Danielle addressed this problem by testing the efficiency in which microbes derived from biosolids could transport through agricultural soils. This project gave Danielle the opportunity to do research in a microbiology lab on UT's main campus and field research at the Stranahan Arboretum. She

"The DES department at UT became like a family to me during my time there. The professors and other graduate researchers were supportive, encouraging, and motivating. This department, unlike many others, was unparalleled in its ability to bring out the best in each student without compromising the hard work and integrity of the sciences it was built upon. I am a proud graduate of this department and I encourage others to follow suit."

was extremely dedicated to her work and was often in the laboratory or in the field well after dark. During her second year in graduate school Danielle was honored to become a graduate teaching fellow with the Gk-12 program here at the University of Toledo. This gave Danielle the opportunity to partner with a local high school teacher and provide students with a hands-on look at our local environment while encouraging the students to pursue careers in the STEM fields. She was very successful as a role model for high school students and was nominated the Most Outstanding Gk-12 Fellow in 2013. Along with all of her other activities Danielle managed to present her research at a number of conferences including: Midwest Graduate Research Symposium, Ohio Academy of Science and the Sustainable U Conference. On Wednesday, November 6th, Danielle successfully defended her Masters' thesis titled: "The Role of Retention Time and Soil Depth on the Survival and Transport of *Escherichia coli* and *Enterococcus spp.* in Biosolid-amended Agricultural Soil". That spring she received her diploma and graduated from the University of Toledo. Danielle was offered a job almost immediately after she graduated to work as an Environmental Scientist for the Advanced Environmental Management Group in Plymouth, MI. She currently works and resides there with her new fiancé, Patrick McLain, and their dog Sophie.