

# growing

## SERVICE-BASED RESEARCH

*Through the McMaster School for Advancing Humanity,  
DC students can conduct research worldwide*

*by Kathy Punches, Director of Public Relations; Gretchen Rust, Receptionist Clerk*

With each passing year, the body of service-based research conducted by Defiance College students and faculty through the McMaster School for Advancing Humanity continues to grow. McMaster Faculty Fellows work with Student Scholars to develop research-based projects that provide a community benefit, as well as produce valuable, life-changing experiences.

During the 2007-08 academic year, 26 student scholars, five faculty fellows and seven associate fellows traveled to Belize, Cambodia and New Orleans for their McMaster projects. Each group studied and worked within its own learning community, developing and carrying out original research in response to community-identified needs. Their projects in domestic and international locations are often supported by planning and research conducted by fellow students

on campus. Here is a sampling of this year's projects:

### **BELIZE**

Senior forensic science major Pamela Gibson conducted a survey of intestinal parasites in rural wells and cisterns on the periphery of the Rio Bravo Conservation and Management Area in Belize. This project repeated the protocol of Eric Dix, a McMaster Scholar to Belize in 2005. Eric had surveyed for intestinal parasites in the New River Lagoon and its tributaries. During that trip, the learning community made its first visit to the small village of San Carlos, an indigenous village of 95 percent Maya/Mestizo directly positioned on the shores of the New River Lagoon. While students and faculty worked with the farmers and talked to teachers in the school, Eric spontaneously decided to show the children how his pumping equipment worked and ran some water from one of the village wells through

the apparatus. Upon returning to campus, it was discovered that *Balantidium coli* was present in the sample from the open well in San Carlos Village.

This prompted Pamela Gibson to focus her study two years later on those water sources that were directly used by the people in this region – wells and cisterns. Eric was instrumental in mentoring Pam through the project both in its initial phase pre-trip preparation and in the post-trip preparation of slides and analysis. Fortunately, Pam's results were negative for all sources tested. No intestinal parasites were found. She left a legacy however, for the project to be continued by further detailing the protocol for another scholar to use. And she developed the needed contacts on the ground to continue this project in a manner that focuses on getting to those locations that pose the greatest risk to the people.

Part of Pam's plan includes Associate Fellow Steve Smith's idea to develop a system for villagers to filter their own water. Working with Potters for Peace, local potters will be able to make low-cost ceramic filtration systems for the villagers.

### **CAMBODIA**

For Kelsey Huff, participation in the Cambodia Learning Community brought some valuable, and potentially lifesaving information to the forefront for doctors in Cambodia. Her research project intended to address the problem of tuberculosis in Cambodia by collecting new vaccine development and methods of testing, revealed exciting medical information on T cell energy, a genetic mutation that affects almost 40 percent of the Cambodian population and makes the usual PPD test for tuberculosis ineffective.

Cambodians who get a negative response on this skin test are often sent away without



*Pam Gibson and Professor Steve Smith conduct water testing in Belize.*



*Jennifer Creighton creates cyclebeads with Cambodian women.*

treatment even though they have symptoms of tuberculosis. According to the World Health Organization, each person that remains untreated will go on to infect 10 to 15 more individuals each year. Kelsey collected medical journals that explained this phenomenon and created a booklet to give to doctors in Cambodia. She also presented the information to doctors and pulmonary physicians in Phnom Penh and in the rural area of Baah Prey.

She says that the language barrier was a tremendous challenge in Cambodia, trying to translate many scientific terms from English to Khmer. “I had to reword many things and make sure the translator understood exactly the message I was trying to relay.”

And the experience gave her greater self-confidence. “I had to present the information as an undergraduate student to doctors, and in a culture where a female at my age is not expected to be educated.”

Junior international studies major Jennifer Creighton was also part of the Cambodia Learning Community. She researched natural methods of birth control to present to the staff and women in the Cambodian Women’s Crisis Center. “The two methods I presented are the Standard Days Method (SDM) and the Two Day Method, both from Georgetown University,” said Creighton. “I hoped to give them the tools to be able to plan their future pregnancies and to better understand their bodies.” To teach the standard days method, Jennifer made “cyclebeads,” color-coded strings of beads that enable women to track their menstrual cycle.

This project was not without its difficulties, according to Creighton. “I had to change my presentation a few times in order for it to be successful. I learned that being able to adapt is key to success, no matter how much you feel you are prepared for what is ahead.”

No matter how many struggles though, Creighton felt the trip was a success. “We really did, in our own small way, change lives. I also realized from this trip that I do not want to do this work for any selfish or self-fulfilling reason; I want to do it because I can, and therefore I have a responsibility to others.”

#### NEW ORLEANS

Junior historian Brenda Delarber conducted her McMaster Scholar project on independent archives, specifically the Amistad Research Center in New Orleans. Brenda, along with professor Lisa Crumit-Hancock and Dr. Michelle Tabit, spent several days at the Center which has suffered significant staff reductions as a result of Hurricanes Katrina, Wilma and Rita. Its mission is to preserve African American history.

Brenda and her fellow DC historians archived the collection of the late Thomas C. Dent, writer and civil rights activist. They sorted and assembled a large collection of audiocassettes

that Dent taped as he conducted research for his book *Southern Journey: A Return to the Civil Rights Movement*. They also prepared a scope of collection, a written record of what is contained in the collection. Dent’s collection in the Amistad Research Center includes 40 linear feet of information including tapes, newspaper articles, magazines, and diaries.

Brenda’s research also delved into the value of independent archives and oral histories, those histories of everyday people who have contributed to the well-being of their communities.

She received an award for her project and paper presented at a Phi Alpha Theta regional conference held at Kent State University this spring. She and Dr. Tabit also gave a presentation about the project at the Common Grounds conference held in Philadelphia.

A history major, Brenda has already been accepted as a McMaster Scholar for her senior year. She plans to conduct oral histories of clergy involved in Churches Supporting Churches, a movement to assist African American churches in New Orleans destroyed or damaged by Hurricane Katrina. Her transcribed interviews will be presented to the Amistad Research Center so that the archives can begin to track the history of the organization. ♦



*Brenda Delarber catalogs tapes at the Amistad Research Center in New Orleans.*