The University of Texas at El Paso, Minority Health International Research Training (MHIRT), a program funded by the National Institute on Minority Health and Health Disparities, trains students pursuing health sciences and sciences careers in health disparities research. Students conduct supervised research at partner research institutes in Latin America. This summer, six students are in training at Universidad de Costa Rica in San Jose, Costa Rica and two more are at the Instituto de Investigaciones Científicas y Servicios de Alta Tecnologia (INDICASAT-AIP) in Panama City, Panama.

**Biology student Miriam Aragonez** is conducting a research project to identify viral contaminants in water from Los Chiles River in Costa Rica. This week, Miriam filtered water samples in order to concentrate potential viruses found using the simple layer method used to analyze bacteriophages. Miriam became familiar with laboratory instruments such as the photometer, incubator, and centrifuge. One of Miriam’s highlights of this week was gaining the courage to turn on the Bunsen burner by herself using a flint spark torch igniter.

**Social Work student Anna M. Gonzalez** is conducting a project that assesses behaviors among individuals at risk for HIV who have received nutrition education at the HIV clinic in Colon City, Panama. This week, Anna attended the HIV Clinic in Colon, Panama and began interviewing participants. Anna discovered that each patient has a unique story, and the hardships that often go unseen. As part of her project, Anna conducts presentations on nutrition education on healthy eating. While doing so, she realized that buying groceries is expensive in Panama, so sometimes buying healthier food is not an option.

**Social Work student Melissa Gutierrez** is working on a study that seeks to determine risk factors influencing lifestyles, social participation and family structure of the elderly persons living in Los Guidos de Desamparados, Costa Rica. This week, Melissa interviewed some community members. They shared about their family structure, how they were raised and how they had to go through challenges to survive. Melissa realized that they all had hard lives, but they showed a great level of resilience. These interviews will continue throughout July.

**Maria Jose Ibarra, a Biology student,** is conducting a study to identify somatic coliphages capable of infecting multi-resistant bacteria. This week Maria Jose started analyzing water samples by following the protocol learned during week one. She filtered ten samples and later on, she did an amplification of bacteriophages utilizing the single layer method. Two of the ten samples suggested the presence of bacteriophages. Further confirmatory tests will be conducted in the upcoming weeks.

**Sociology student Andrea Daniella Mata** is conducting a study that identifies biomarkers indicative of cognitive impairment and dementia in the elderly population. This past week, Andrea conducted preliminary data analysis to compare two elderly Panamanian groups, NEURO001 and NEURO002. The data revealed that individuals in the NEURO001 group were older, had more chronic problems, and their educational level was lower when compared to group NEURO002. Additionally Andrea search for scientific literature related to sociodemographic information including age, and economical status in the study population.

**Nursing student Faith Munoz** is working on a project that assesses the level of preparedness of people living in marginalized areas in Costa Rica to face natural disasters. This week Faith entered data collected from previous interviews. Faith also traveled to La Zona de Los Santos to interview community members. Faith observed that many houses might be at risk of landslide and floods.

**Biology student Ana Polar** is investigating the microbial activity of different synthetic surfactants at different concentrations when exposed to resistant bacteria. This week Ana performed dilutions for five different surfactants exposed to E. coli and S. aureus. After incubation, the surfactants failed to inhibit E. coli at all concentrations but three surfactants started to show signs of inhibition at high concentrations against S. aureus. Ana plans to repeat dilutions at higher concentrations and test to see if this marker for inhibition proves to be effective.

**Joel Reyes, a Biology student** is conducting a study to identify bacterial resistant genes in water for human consumption. This week Joel processed eight water samples (1 gal each) collected from Los Chiles river in Costa Rica. He filtered the samples through a special 0.2 um filter that selectively separates the bacteria from all other components in the water. This was done in order to concentrate bacteria present in the water sample. The end product was a filter-containing bacteria from which Joel performed DNA extraction. Joel plans to perform subsequent bacterial resistant-gene analysis the next week.