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 Tecnología (INDICASAT-AIP) in Panama City, Panama.

Biology student Miriam Aragonez is conducting a research project to identify viral contaminants in water from Los Chiles, Costa Rica, that is used for human consumption. Miriam is conducting this research at the Instituto de Investigaciones de Salud (INISA) at the Universidad de Costa Rica (UCR) under the mentorship of Dr. Luz Maria Chacon. During the first week of this research experience Miriam became familiar with water filtration techniques. This technique will help to concentrate any potential viral contaminants in the water.

Social Work student Anna M. Gonzalez is conducting a research project that assesses behaviors among individuals at risk for HIV who have received nutrition education at the HIV clinic in Colon City, Panama. This research is conducted under the mentorship of Dr. Thenral Mangadu, an Associate Professor at UTEP and Dr. Amador Goodridge, an investigator at the Institute for Scientific Research and High Technology Services (INDICAST).

Social Work student Melissa Gonzalez is working on a study that analyzes life experiences in the elderly population. The purpose of the project is to determine risk factors that influence lifestyles, social participation and family structure of the elderly members who live in Los Guaidos de Desamparados, Costa Rica. Melissa is working under the mentorship of INISA investigator Maestra Norma Lau. This week Melissa became familiar with an instrument that will be used to interview participants in the upcoming weeks.

Maria Jose Ibarra, a Biology student, is conducting a study to characterize bacteriophages that are resistant to antibiotics. This research is being conducted under the mentorship of Dr. Luz Maria Chacon, a scientist at INISA. This week Maria Jose became familiar with water filtration techniques and conducted microbiological tests to find out whether or not the bacteria Escherichia coli strain 13706 ATCC was present in water. Additional 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. Andrea Danielle is working under the mentorship of Dr. Gabrielle Britton, a scientist at INDICAST. This week Daniella reviewed literature to identify studies related to “Cystatin C and Cognitive Impairment 10 years Later in Older Women.” It is hypothesized that Cystatin C damage women’s cognition and can lead to a clinical diagnosis of cognitive impairment in older women.

Nursing student Faith Munoz is working on a project that assesses whether or not people living in marginalized areas in Costa Rica are prepared to face natural disasters. The study is conducted in Zona de Los Santos, Dota, Tarrazu y Leon de Cortez under the mentorship of Dr. Cristobal Ching, an investigator at the Universidad de Costa Rica, School of Nursing. This week Faith became familiar with a database that was previously collected for the purpose of this project. She also had the opportunity to provide training on Cardiopulmonary Resuscitation (CPR) classes to many kids.

Biology student Ana Polar is conducting a study to investigate the microbial activity of different synthetic tensoactive compounds that will be exposed to antibiotic resistant bacterias. The study is conducted under the mentorship of Dr. Kenia Barrantes, an investigator at INISA. During the first week of the research experience, Ana became familiar with several protocols such as culture plate preparation, sample incubation and became familiar with different surfactants solutions that will be used for this project in the upcoming weeks.

Joel Reyes, a Biology student is conducting a study to identify bacterial resistant genes in water for human consumption under the direction and mentorship of Dr. Kenia Barrantes. The water samples are from Los Chiles, an area in north Costa Rica that is bordering Nicaragua. During the first week of the research experience Joel became familiar with water filtration techniques same that will help to concentrate potential bacteria present in water. Further analyses will be conducted in the upcoming weeks.

Maria Duarte-Gardea, Principal Investigator. Leticia Paez, Program Manager
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