NAVY.mil The Source for Navy News

Navy Entomology Center of Excellence Instructs International Students

Story Number: NNS120606-02
6/6/2012

By Lt. Ryan Larson, Navy Entomology Center of Excellence Public Affairs

GAINSEVILLE, Fla. (NNS) -- Entomologists and preventive medicine technicians (PMTs) from the Navy Entomology Center of Excellence (NECE) instructed 25 international students during the University of Florida Emerging Pathogens Institute's annual Certificate in Emerging Infectious Disease Research (CEIDR) program May 21-22.

Students enrolled in the program travelled from 13 countries to complete 20 days of intensive public health training in Gainesville, Fla.

"[During this program] students learn about numerous epidemiological, laboratory, and entomological approaches to infectious disease control," said Dr. Gregory Gray, professor, chair of University of Florida's Department of Environmental and Global Health, and retired Medical Corps captain. "They learn quite a bit about such infectious diseases and are introduced to modern food production techniques to reduce food-borne illnesses. Multiple resources are also provided to better equip them to do their public health or research jobs."

The CEIDR program is designed to bolster international public health efforts by facilitating advanced training available to international public health practitioners. In doing so, this course nurtures the development of sustainable epidemiologic research capacity and promoting collaborations between international and U.S. laboratories.

"We share with them some laboratory techniques during their training but a major benefit from the certificate program is the professional networking that occurs afterwards," Gray said. "After meeting and becoming friends with other researchers from across the world Certificate trainees often share laboratory approaches to disease problems for a number of years afterwards."

Potential students are generally nominated by U.S. government sponsors such as the Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS), Centers for Disease Control and Prevention (CDC), U.S. Department of State, United States Agency for International Development (USAID) and the Fogarty International Center. However, this program is open to anyone providing independent support to his/her studies.

This year marks the second time NECE instructors were requested by the University of Florida, Emerging Pathogens Institute (EPI) to support this course. Students were able draw on the many years of firsthand vector control experience that is a result of NECE's unique mission.

"NECE's mission focuses on reducing the incidence of human disease transmitted by blood feeding arthropods in any area of the world," said NECE Officer-in-Charge Cmdr. Eric Hoffman. "This is accomplished through developing and evaluating novel tools and techniques through collaboration with world-class organizations and establishing comprehensive control programs, whenever and wherever needed."

Hoffman also said that NECE's involvement in the program - along with supporting local training opportunities - maintains a distinct advantage for potential efforts in years to come.

"The certificate program is able to draw on our experience and knowledge to train international public health professionals in creating effective and sustainable vector control programs when they return home," said Hoffman. "Being able to participate in the Certificate Program is certainly advantageous to

us by creating opportunity to cultivate professional relationships which may lead to future collaborations," he said.

Eight NECE personnel lectured on several subjects including mosquito surveillance methods, mosquito identification, chemical and equipment control of ticks and mosquitoes.

To familiarize the class with vector surveillance and control equipment, NECE staff performed several equipment demonstrations, including instruction on the role of spaces sprays followed by a demonstration of the proper use of thermal fog and truck mounted sprayers. Students were also provided the opportunity to operate a hydraulic sprayer as well as a backpack sprayer configured for both liquid and granular formulations.

As part of this course's hands-on vector surveillance training, NECE personnel assisted the class with setting up CDC light traps and gravid traps. After the traps were retrieved the following day, students were given the opportunity to develop their mosquito identification skills by keying out the mosquito specimens collected.

Identifications were then verified by NECE and University of Florida staff members. Students were also given a demonstration on mosquito larval surveillance techniques before being sent out to try larval dipping. Lastly, University of Florida staff members demonstrated several tick surveillance techniques.

Although NECE's demonstrations and lectures comprised two days of intensive training on the surveillance and control of vector borne diseases, the certificate program covered a wider scope of public health to include communicable diseases that have serious impacts on human health and national economies, an experience which could ultimately build global public health personnel's capacity to respond to emerging infectious diseases such as SARS and avian influenza virus.

For more information, visit www.navy.mil, www.facebook.com/usnavy, or www.twitter.com/usnavy.

For more news from Navy Medicine Support Command, visit www.navy.mil/local/nmsc/.