

ZIKA COMMUNITY ACTIVITY



Dr. Deborah Juarbe and Dr. Mildred Vera, investigators of the RCMi pilot Project "Risk Communication and Community Engagement Strategies to Enhance Behavior Change for Zika Virus Prevention and Control", joined the Puerto Rico Department of Health and the Centers for Disease Control and Prevention (CDC) in training communities on the use of the new autocidal gravid ovitrap (AGO) mosquito trap. Mosquitoes are responsible for spreading many viruses that can make people sick, including

dengue, Zika, chikungunya, and more. This trap is inexpensive, simple-to-assemble, and easy-to-maintain and targets female mosquitoes looking for a place to lay eggs. The current trap model stands 18 inches (45cm) tall and is made of a 5-gallon



(10L) bucket. The AGO trap's unique design lures mosquitoes by using water and an all-natural, organic hay attractant. Once inside, female mosquitoes are captured on a nontoxic, sticky glue adhesive placed inside the capture chamber. The AGO trap has been successfully used by mosquito control programs for mosquito surveillance and control.



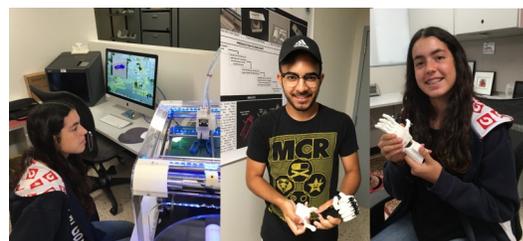
Drs. Juarbe and Vera selected the Manuel A Perez community in San Juan, PR to conduct hands-on training sessions inviting cleaning personnel, residents and youth groups to attend. Training sessions were initiated with a presentation by Mr. Samuel Lacén Boria, Environmental Sciences Specialist, who described the biology of the *Aedes aegypti* mosquito and the environmental factors that favor its propagation. Over 70 community members participated in these activities. A Certificate of Attendance was presented to all participants.



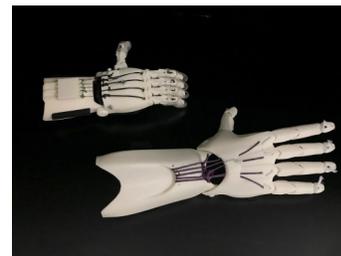
Dr. Jurabe indicated that "it is expected that in the community where AGO traps are used, fewer people become sick from mosquito bites". According to Dr. Vera, "this initiative will help reduce mosquito populations and the viruses they spread". The enthusiasm and commitment evidenced during all sessions confirm these expectations.



BIOMEDICAL SUMMER EXPERIENCE



The BioMed Innovation Laboratory is hosting research activities during the Summer focusing on biomedical applications of 3D printing. The activities target undergraduate and high school students, who learn how to produce functional prosthetic



hands designs. Students successfully print hand designs using filaments of Polylactic Acid (PLA). Each hand design requires 10-13 hours to print completely. The ultimate goal of these research activities is to offer free

prosthetic hands to Puerto Rican children from economically disadvantaged areas. All students receive a Certificate of Completion after finalizing their Summer Biomedical Experience.

ADVANCED RESEARCH TRAINING



Ms. Jessica Renta, Technical Specialist of the RCMi Genomics Unit, was invited to participate in the NIH Systemic Autoimmunity Branch as part of a training week on protein biochemistry. Ms. Renta was able

to learn techniques related to transfection of mammal cells, protein isolation, SDS-Page, nitrocellulose transfer, and protein detection using the Odyssey Imaging System. The training, sponsored by the SCORE Program, was held at Dr. Mariana Kaplan's Laboratory from June 12-16, 2017.



FAREWELL



The RCMi Program acknowledges the significant contributions of Joseph Morris in the area of information technologies support. He served as systems administrator

and Mac technical support staff of CentIT2 since 2011. Mr. Morris' contributions were recognized in a special farewell activity held on June 29, 2017. We wish Joseph success in his future professional activities.

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10.63%

Percent of live births weighing less than 2,500 grams reported for Puerto Rico during 2013-2015.

Source: National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017. Library of Congress Catalog Number 76-641496



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