



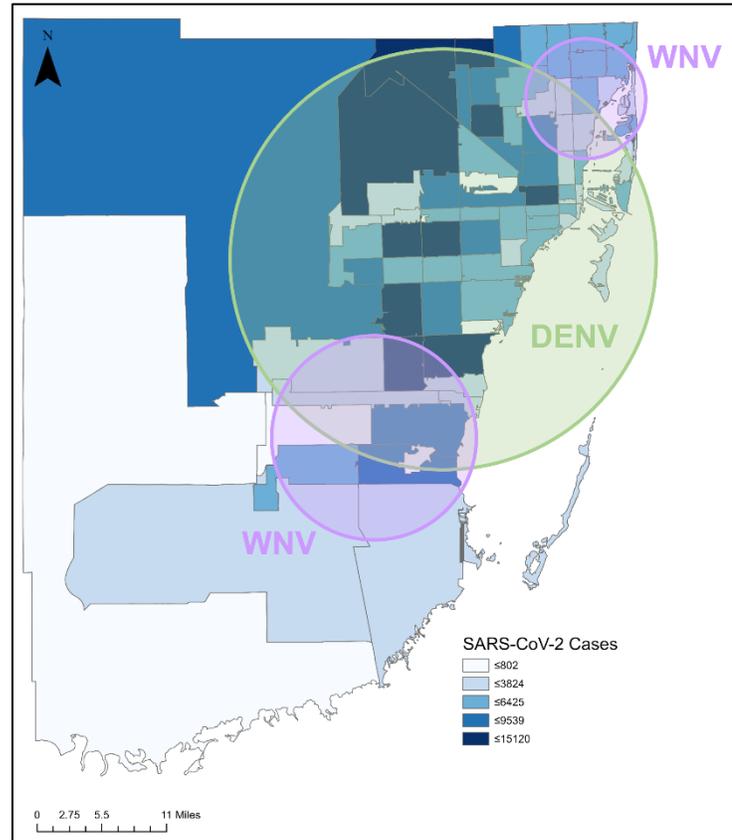
Jump to:

[News and Updates](#) | [Announcements and Requests](#) | [Featured Opportunities](#) | [Contact Us](#)

News and Updates

Triple (Virus) Threat: Leveraging SECVBD Connections for Outbreak Response

In the second half of 2020, Miami, FL was experiencing an outbreak with not just one, but three viruses circulating simultaneously: SARS-CoV-2, West Nile, and dengue viruses. In an effort to quickly respond to the vector-borne disease threats despite COVID-19-related personnel and space limitations, we leveraged existing relationships between Miami-Dade Mosquito Control District (MDMCD), the University of Miami, and the greater SECVBD



network to provide increased mosquito pool testing; this allowed for rapid turnaround of test results and, in turn, data-driven, localized vector control by MDMCD. MDMCD trapped, morphologically identified, and sorted mosquitoes by location to create pools of 2-25 mosquitoes of the same species from the same trap location. Members of the arboviral research team in the Dinglasan laboratory at the Emerging Pathogens Institute (EPI) at the University of Florida then screened *Aedes* sp., *Anopheles* sp., and *Culex* sp. collected by MDMCD for arboviruses of public health concern in Florida: West Nile virus (WNV) and dengue virus (DENV). Positive pools were reported directly back to MDMCD within a week of sample receipt for targeted vector control (i.e., insecticide spraying). Remaining homogenate was retained and shipped for subsequent secondary positive pool confirmation by the Florida Department of Health (FLDOH) as well as the CDC. In total, 548 pools were tested for DENV (N= 5079 mosquitoes) and 188 pools were tested for WNV (N= 2589 mosquitoes). 4 pools were found to be DENV-2 positive, 9 pools were found to be DENV-4 positive, and 9 pools were found to be WNV positive (See Figure 1); local DENV-1 and WNV human cases were reported in Miami-Dade County during this period. This collaboration showcases the added value of the CoE networks, as findings of positive mosquitoes allowed MDMCD to respond to the outbreaks with increased surveillance and vector control in affected areas.

Figure 1. Circulating arboviruses in Miami-Dade County, FL as determined by mosquito pool data testing results, amid SARS-CoV-2 outbreak. July-December 2020. Figure courtesy of H. Coatsworth.



Recent Tick-Related Publications and Activities

SECVBD researchers are tackling an emerging threat to the US: tick-borne diseases. A quick glance at what we've been up to:

- Dr. Greg Glass (University of Florida, Program Project 3) and previous trainees Dr. Claudia Ganser and William Kessler have recently published validated tick species distribution maps that can be used to inform the risk of tick exposure throughout Florida, with resolution down to an area the size of a football field. These maps were transferred to the state of Florida to assist in epidemiologic surveys of reported tick-borne diseases. [Check the maps out in detail in the recent publication.](#)
- Dr. Samantha Wisely, Dr. Phil Kaufman, and Yuexun Tian (University of Florida, Program Project 3) have created new tick and tick-borne disease fact sheets, which are published online and available to access for free. These fact sheets include introductions to, and medical/veterinary significance of common ticks found throughout the southeast, serving as a resource to a variety of agricultural, operational, and general audiences. Link to factsheets: [Facts about wildlife diseases: Ehrlichiosis](#) and [Asian Longhorned Tick](#). Keep an eye out for upcoming factsheets on *Ehrlichia* and *Anaplasma*, by Yuexun Tian, Dr. Eva Buckner, and Dr. Cynthia Lord.



- Dr. Sadie Ryan (University of Florida, Program Core 2), Dr. Alexis White (formerly University of Florida, Core 2), and Dr. Holly Gaff (Old Dominion University) recently collaborated on a systemic review of published studies including spatial data, models, or mapping analyses of tick-borne pathogens or vector maps. Their findings identify approaches to use existing methods to track distributions of tick-borne diseases in historically neglected areas. [Read the full publication on tick-borne disease geography here.](#)
- Surveillance activities by our largest intern cohort in SECVBD history, consisting of 23 dedicated tick surveillance interns spanning 8 states of the southeast, are well underway. Interns are hosted by leading vector-borne disease experts throughout the region and support a unified effort for the rigorous surveillance of ticks, including tick abundance, distribution, identification, and vouchering. This effort also will enable spatial mapping of tick vector distribution, which will be used to create a suite of species distribution models for the region. Additionally, host sites are harmonizing tick-borne pathogen testing for all ticks collected across the southeastern United States, laying the groundwork for expanded tick and tick-borne disease surveillance.

Virtual Training Opportunities Expanded

We are up to over 1,000 people enrolled in our **Online Mosquito Training Course**, and we have expanded the states eligible for Continuing Education credits to Florida, Alabama, South Carolina, and Colorado! The course was developed by Dr. Philip Koehler and Dr. Rebecca Baldwin of the UF Entomology & Nematology Department, and it serves as introduction to mosquitoes and mosquito control for pest managers and public health



CDC Southeastern
Center of Excellence in
Vector Borne Diseases
The Gateway Program

Newsletter

Summer 2021

entomologists. Topics include identification of mosquitoes, their life cycles, control methods, PPE, and laws and regulations of mosquito control. [Access the mosquito course here!](#)

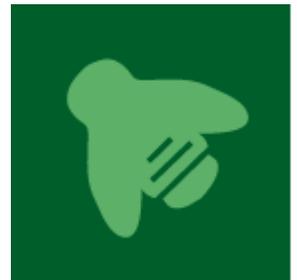
By popular demand, we recently launched a tick counterpart to the online mosquito course. Developed by Dr. Holly Gaff and Dr. Alexis White, the **Online Tick Training Course** introduces tick biology, identification, surveillance, and management; tick-borne diseases; and how these topics connect to overall public health. This course is available for free through UF|IFAS and is currently approved for 2 CEUs through the Florida Department of Agricultural and Consumer Services. [Enroll in the tick course here!](#)

After last year's successful Lyme Disease Lunch & Learn webinar series, we joined up again to co-host an **All-CoE webinar series**, held each month from January through May 2021. Topics included invasive species, vector control methods, VBD training programs, forecasts/modeling, and vector biology. We saw close to 300 attendees at each session – thanks to everyone who joined! Missed this series? Stay tuned, we may be holding another round in the future!

Announcements and Requests

Call for Articles: Special Edition on Citizen Science and Vector Surveillance

Guest editors of *Insects* are putting together an article collection aiming to highlight the application of citizen science in vector surveillance, including the use of targeted citizen science projects, smartphone apps, social media, online databases, and other passive surveillance methods for the collection of vector data. Research showcasing integration of citizen science into existing surveillance programs, comparison of passive and active surveillance data, or reviews on this topic are also very welcome. About the journal: *Insects* is an international, peer-reviewed open access journal of entomology. It is ranked 18/102 in Entomology with an impact factor of 2.769. If you have any questions or would like to contribute, please contact [Dr. Ben Cull](#) or [Dr. Emma Gillingham](#).



CDC Request for Tick Samples

The Rickettsial Zoonoses Branch at the Centers for Disease Control and Prevention is partnering with various national and international universities and public health agencies to develop a robust, protein-based platform for identification and characterization of tick species of medical and veterinary importance, with applications for surveillance and scientific activities in the United States and other countries in the Western Hemisphere. Thanks to all who have provided ticks so far! The Rickettsial Zoonoses Branch is currently seeking additional collaborators to provide recently collected (2018 - present), field-caught specimens of *Amblyomma americanum*, *Amblyomma maculatum*, *Dermacentor variabilis*, *Dermacentor andersoni*, *Dermacentor occidentalis*, and *Ixodes scapularis*. They are requesting samples of all feeding life stages of these species from various US locations for subsequent analysis by MALDI-TOF. Desired specimens should be preserved in 70-95% ethanol and stored at room temperature since the time of collection. Ideally, at least 10 specimens from each geographical location are requested. If you have questions or can assist with this project please contact [Maria Galletti](#), [Joy Hecht](#), or [Chris Paddock](#) for more information.



CDC Southeastern
Center of Excellence in
Vector Borne Diseases
The Gateway Program

Newsletter

Summer 2021

Entomology Advocacy Week: #EntVocate21

The Entomological Society of America's Entomology Advocacy Week will be August 16-20, 2021 this year! This is your chance to get engaged and advocate for the science of entomology. In this modern era, it is the responsibility of all scientists to advocate for their discipline. Daily Action Alerts will go out with suggested tweets, live and interactive content to join, and other opportunities to make your voice heard. Many ESA members already engage in outreach activities throughout the year. Entomology Advocacy Week is a concentrated effort to target policymakers with science that matters so that evidence-based decision making becomes the norm at all levels of government. Visit the dedicated [Entomology Advocacy Week page](#) for advocacy resources and live updates during the week of August 16 – 20th, and [sign up](#) to attend an interview with Senator Angus King (I – ME)!



Call for New Dodd Course Proposals

Interested in teaching a course at the 2022 Dodd Short Courses? Submit a course proposal through [this form](#) by Friday, August 20th, 2021! If you have any questions related to the form section requirements, please email [Dr. Shelley Whitehead](#).

7th International Forum for Surveillance and Control of Mosquitoes & Vector-borne Diseases

You are invited to join the 7th International Forum for Surveillance and Control of Mosquitoes & Vector-borne Diseases (virtual), August 15-18, 2021. The meeting is free open access. The zoom link information in the front of each session in the [program](#). All presentations will be in English only.

Featured Training and Career Opportunities

Tick-Borne Disease Fellowship | ORISE

Funding is available for a one year ORISE (Oak Ridge Institute for Science and Education) Fellow opportunity for tick threat assessment at US Air Force Bases. The participant will investigate tick species presence, distribution and density at up to 8 Air Force Bases (TBD) in the United States. Activities will include: The Fellow will also engage with Public Health at 2 – 3 bases to implement on-site tick testing of human biting *Ixodes scapularis* for *Borrelia burgdorferi* and may participate in CDC's MALDI-TOF tick analysis project by submitting specimens to that program. The Fellow will be encouraged to submit all novel findings for presentation or publication. This opportunity has significant travel and field work components, and also lab work as specified within the description. See the full description [here](#).

Graduate Teaching Assistantship | University of South Alabama

The University of South Alabama (Mobile, AL) Biology Department is seeking a Graduate Student TA for two years, plus summer salary for first summer (and most likely for a second summer). Tuition will be waived. The study is a mixture of molecular and field work with a concentration on Lone Star and American dog ticks. If you



**CDC Southeastern
Center of Excellence in
Vector Borne Diseases
The Gateway Program**

Newsletter

Summer 2021

are interested in this position, please contact Dr. John McCreadie at jmccread@southalabama.edu. You can also visit the [Biology Department web page](#) for more information.

Fellowship | The Intergovernmental Platform on Biodiversity and Ecosystem Services

Open call for fellows to take part in the upcoming IPBES nexus and transformative change assessments (see the full notification through [this link](#))! Fellows will participate in the thematic assessment of the interlinkages among biodiversity, water, food and health (nexus assessment) and the thematic assessment of the underlying causes of biodiversity loss and the determinants of transformative change and options for achieving the 2050 Vision for Biodiversity (transformative change assessment). [See this flyer](#) for more details!

ULV Truck Operator | Lee County Mosquito Control

Lee County Mosquito Control District is seeking a ULV Truck Operator for their pool of On-Call drivers to operate the “spray/fog trucks” throughout the year on an as-needed basis (primarily May through October). This position will remain open until filled. Pay rate is \$13.67 per hour and is not eligible for benefits. This is an On-Call position all year round. See the full job description [here](#)!

Online Tick Training Course | SECVBD Online

This course is an introduction to ticks, tick-borne diseases, and tick control for employees in the urban pest management industry, public health entomologists, and anyone interested in learning more about ticks. Students will learn about tick biology, identification, surveillance methods, tick management, common tick-borne diseases, safety and prevention, and how all of these modules connect to overall public health. This course is currently approved for FDACS CEUs (maximum 2.0) in the following categories: Commercial Lawn & Ornamental; Commercial General Household Pest Control; Public Health. Have questions about this course? Contact Kaci McCoy, Program Coordinator for the CDC Southeastern Center of Excellence in Vector Borne Diseases by email at: kd.mccoy@ufl.edu. Enroll [here](#)! Already enrolled? Access the course [here](#).

Tick Academy | Tick IPM Working Group

Join the [Tick IPM Working Group](#) September 13 – 15, 2021 for the second annual Tick Academy! The Tick Academy is for public health professionals, researchers, educators, students, pest control professionals, public-space managers and citizen scientists interested in learning more about what they can do to stop the spread of ticks and tickborne diseases in their communities. This virtual event will feature twelve presentations over three, four-hour sessions where presenters will share the newest information about tick management, tickborne disease prevention, recent discoveries of emerging pathogens, public perceptions of risk, diversity, identification of ticks and ongoing research on control and vaccine developments. [Click here](#) to register!

For training and job opportunities please visit our website:

Training: bit.ly/SECVBD_Training | Job Board: bit.ly/SECVBD_JobBoard

To advertise VBD-related opportunities, please email us at flvbdcoe@gmail.com.

Want to join our mailing list? Subscribe here: bit.ly/SEVBD_Newsletter_Signup



**CDC Southeastern
Center of Excellence in
Vector Borne Diseases
The Gateway Program**

Newsletter

Summer 2021



**Visit our [website](#).
Follow us on [Facebook](#) and [Twitter](#).
Check out the [All-CoE Facebook page](#).**

*Copyright © 2021 Southeastern Regional Center of Excellence in Vector Borne Diseases
All rights reserved*