

Event Objectives

Upon completion of this event, participants should be able to:

Session I - appraise the acute febrile illness surveillance system in Belize; describe the epidemiology of tick-borne pathogens, specifically spotted fever group rickettsiosis (SFGR) and ehrlichiosis, in Harris County; and describe the epidemiology of neglected tropical diseases along the Texas-Mexico border.

JV Irons Keynote Lecture - distinguish between four main communication styles and temperaments and apply strategies to modify approaches to communication in order to improve team dynamics and organizational effectiveness.

Session II - assess COVID-19 infection control procedures under the *COVID-19 Infection Prevention and Control Assessment Tool for Captive Wildlife Facilities: Zoos, Sanctuaries, Aquaria, and Wild Animal Rehabilitation Centers*; and identify the clinical presentation of young adults affected by SARS-CoV-2.

Session III - assess the strengths and weaknesses in companion animal disease surveillance and describe the distribution of SARS-CoV-2 in Harris County; demonstrate how a One Health approach can be used to investigate and respond to SARS-CoV-2 in companion animals; and discuss the potential relationship between methicillin-resistant *Staphylococcus aureus* (MRSA) carriage in humans and pets in the home.

Session IV - describe the common clinical characteristics and cardiac diagnostic test results in asymptomatic dogs with *Trypanosoma cruzi* infection; and create an animal rescue organization to include testing for Chagas disease in its routine protocol and promote Chagas positive dogs as being both manageable and potentially curable.

Session V - describe exposure risk factors associated with plague in human and animal hosts and illustrate plague prevention and control measures; explain the extent and pathophysiology of Bartonella infection/cat scratch disease (CSD); and describe the critical objectives, actions, and implications for a public health investigation of a human rabies case.

Session VI - describe the evolving epidemiology of melioidosis as an emerging infectious disease in the Americas, plus the role of imports from endemic areas as a novel exposure source to *B. pseudomallei* in the US; and describe the evolving necessary objectives and goals of an effective vaccine preventable disease/tetanus case investigation.

Session VII - describe the epidemiological factors associated with the 2021 West Nile virus outbreak in Maricopa County, AZ; describe the epidemiological and clinical characteristics of dengue virus infections in Belize in 2020; and compare the epidemiology of travel-associated and locally acquired dengue virus transmission in Texas in the recent decade.

Session VIII - describe the importance of developing an anti-tick vaccine for white-tailed deer for tick control and compare and contrast the genomic organizations of *Borrelia* spp. isolated from two different vertebrate hosts.

Back-up presentation - assess processes for establishing thresholds to make decisions about the aerial application of mosquito control insecticides during a West Nile epidemic while dissecting complicating factors during a pandemic.

Back-up presentation - distinguish between biological and ecological characteristics of soft and hard ticks and recognize the symptoms of tick-borne relapsing fever (TBRF).