

Global Virus Network (GVN) Launches Zika Task Force Comprised of Leading Virus Researchers from Around the Globe

GVN catalyzes international collaborations in an effort to address the urgent need to share information and research to better combat the global Zika outbreak

February 11, 2016, Baltimore, MD: The Global Virus Network (GVN), representing 35 Centers of Excellence and 5 Affiliates in 26 countries, and comprising foremost experts in every class of virus causing disease in humans, today announced the formation of the GVN Zika Task Force chaired by **Scott Weaver, PhD**, who is also co-chairman for the GVN Chikungunya Task Force and is director of the University of Texas Medical Branch's Institute for Human Infections and Immunity and scientific director of the Galveston National Laboratory, a GVN Center of Excellence. The GVN Zika Task force, which is expected to grow, fills a gap identified by leading scientists to catalyze urgent international collaborative research. The announcement was made today by **Robert Gallo, MD**, co-founder of the GVN and chair of GVN's Scientific Leadership Board and **José Esparza, MD, PhD**, president of the GVN.

"I am pleased to chair GVN's Zika Task Force which will serve as a catalyst for driving communication and information flow between fellow GVN colleagues researching and responding to the Zika epidemic gripping much of Central and South America and the Caribbean," said Dr. Weaver. "Our research team has been studying Zika virus for several years now, including working with countries such as Senegal to study enzootic ecology as well as Brazil and Mexico in developing sensitive diagnostics to identify those infected and follow the epidemiology of these outbreaks." Dr. Weaver continued, "We look forward to beginning nonhuman primate model development next month and continuing vaccine research, and to coordinating efforts with others in the GVN Zika Task Force in these efforts."

"GVN's mission includes accelerating research from our Centers of Excellence to advance testing, treating and prevention tools to clinics worldwide," said Dr. Gallo, who is also The Homer & Martha Gudelsky Distinguished Professor in Medicine and Director of the Institute of Human Virology at the University of Maryland School of Medicine, a GVN Center of Excellence. "Having said that, people constantly ask scientists to move faster, act quicker. To them I suggest investing more in research to advance laboratory discoveries so that when acute outbreaks such as Zika or Ebola occur, public health officials are better prepared." He continued, "We need to be – and we can be – on the offense, not defense."

Zika virus is transmitted to humans primarily through the bite of an infected *Aedes* species mosquito, which are the same species spreading the chikungunya and dengue viruses. This presents a scientific problem in that the Zika virus is challenging to diagnose because, once viremia ends after about 7 to 10 days of acute infection, there are cross reactions among antibodies generated by other flaviviruses such dengue and yellow fever, which are endemic in many regions experiencing outbreaks.

“Zika virus is being actively transmitted in 29 countries and one US territory, and the numbers will continue to grow,” said Dr. Esparza. “A global response is imperative. International collaborations and shared information is key to addressing the Zika virus outbreak. The GVN Zika Task Force fulfills this by strengthening GVN’s internal and external strategic alliances involved in the urgent response to this global public health emergency.”

Giuseppe Ippolito, MD, scientific director of the National Institute for Infectious Diseases Lazzaro Spallanzani in Rome, Italy, which is a member of Italy’s GVN Center of Excellence said, “We are pleased to be of service in the international response to this world crisis via the Global Virus Network. Our institute has established a collaborative project with colleagues in Slovenia and Brazil to study Zika virus occurrence and pathogenesis, and we look forward to sharing our findings with other members of the GVN Task Force.”

There is evidence suggesting Zika virus can cause microcephaly, a neurological condition in newborns that includes an abnormally small head due to abnormal brain development, leading to lifelong mental impairment and in some cases death. Currently, there are no reports of infants obtaining Zika virus through breastfeeding. Although spread of the virus through blood transfusion and sexual contact has been reported, more research is needed to determine the role of direct human-to-human transmission in the current epidemic.

Jorge Osorio, PhD, a professor of infectious diseases at the University of Wisconsin-Madison and a GVN Zika Task Force member, recently returned from researching Zika virus in Colombia, where the total of confirmed Zika cases is second only to Brazil. “We are building the capacity to better diagnose Zika infections in Colombia, as well as dengue and chikungunya, which are also viruses contracted by the same mosquitoes. As we learn more about this virus and others like it, particularly through other members of the GVN Task Force, we will better predict similar outbreaks. In the meantime, we need to control mosquito populations in affected regions, and promote protection tactics against mosquitoes.”

In children and adults, Zika virus infection is generally mild – some develop flu-like symptoms, joint pain, eye inflammation and rashes, while other people may not have any symptoms. The disease may also lead to serious complications, including Guillain-Barre syndrome, a disorder where the immune system attacks the peripheral nerves, sometimes leading to paralysis.