Dr. Messer’s research focuses on dengue virus, a pathogen transmitted by mosquitoes and endemic throughout the tropical and sub-tropical world. His particular interest is in viral genetics and evolution and how those factors affect viral fitness, viral pathogenicity and the human immune response to dengue virus infection.

Dr. Messer’s has three areas of active research: 1) the genetic determinants of virus fitness in the mosquito vector Aedes aegypti; 2) vaccine strategies that provide robust cross-protective immunity to dengue infection; and 3) using reverse genetics to identify mutations critical to viral RNA function and to virus mouse adaptation.

Dr. Messer is trained in diagnosing and treating infections in the general population, international travelers, and immune compromised hosts, including long-term management of HIV patients.

Join us as Dr. Messer discusses the Ebola virus.