## **Tropical Medicine Global Health Seminar**

## Challenges of scientific collaboration during an outbreak: the recent experience with Zika in Brazil

## Dr. Fernando Bozza



Head of Critical Care, National Institute of Infectious Diseases, Fiocruz, Rio de Janeiro

Date: Thursday 6<sup>th</sup> July 2017

Time: 12h00 – 13h00

Refreshments are provided, and space is limited!

Venue: Basement Seminar Room, NDM Research Building

(Old Road Campus)

**Summary:** Zika virus is a mosquito-borne flavivirus that was first identified in Uganda in 1947 in monkeys through a network that monitored yellow fever. It was later identified in humans in 1952 in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia and the Pacific. From the 1960s to 1980s, human infections were found across Africa and Asia, typically accompanied by mild illness. The first large outbreak of disease caused by Zika infection was reported from the Island of Yap (Federated States of Micronesia) in 2007. In July 2015 Brazil reported an association between Zika virus infection and Guillain-Barré syndrome.

In October 2015 Brazil reported an association between Zika virus infection and microcephaly. Based on a systematic review of the literature up to 30 May 2016, the World Health Organization (WHO) has concluded that Zika virus infection during pregnancy is a cause of congenital brain abnormalities, including microcephaly; and that Zika virus is a trigger of Guillain-Barré syndrome. Intense efforts are continuing to investigate the link between Zika virus and a range of neurological disorders, within a rigorous research framework.

During this seminar, Fernando Bozza will review the outbreak evolution in Brazil and explore what worked and what did not work from the point of view of clinical research.

**About the Speaker:** Fernando A. Bozza, MD, PhD is Senior Scientist and Head of Critical Care at the National Institute of Infectious Diseases, Oswaldo Cruz Foundation, Ministry of Health, Brazil. He is also Chair of BRICNet – Brazilian Research in Intensive Care Network, which is a member of the International Severe Acute Respiratory and emerging Infection Consortium (ISARIC).

Dr Bozza's research interest is focused on the host immune response and metabolic adaptation to severe infections. More recently, he has been working on the mechanisms involved in the propagation of the inflammatory response in the brain associated with sepsis, malaria and HIV and its relation to cognitive decline.