

ZIKA VIRUS – POSSIBLE SPREAD POST-OLYMPICS

PRESS CONFERENCE EMBARGOED UNTIL THURSDAY 25/8 12:10 PM

Melbourne Convention Centre, Press Room, 0408378422

On Feb. 1, the World Health Organization formally declared the outbreak of Zika in the Americas a public health emergency of international concern. Zika has since spread to 49 countries. Now, less than a week after the Olympics has finished and half a million tourists and athletes are returning home from Brazil, the epicenter of the Zika virus – some of the world's leading experts on the virus will be speaking today at a press conference about the global risk post Olympics.

THE RACE TO PRODUCE A VACCINE

Professor Jorge Kalil, head of Brazil's Butantan Institute and President of the International Union of Immunological Societies, will discuss plans to produce antibodies to tackle the virus. The Institute is cultivating the virus in quantities sufficient to start tests in isolating antibodies in rodents. Researchers will then attempt to produce them in larger quantities in horses, purifying the antibodies in the laboratory before starting tests on humans.

According to Professor Kalil, these antibodies are likely to be ready for testing on women within a year. Normally only antibodies produced in human lab systems are trialled in human recipients however, Professor Kalil has expressed the need for urgency in developing a vaccine as researchers do not have a clear model of how the virus operates in animals or humans. "People have to understand this is an emergency," Kalil told Reuters in April. "If we have an idea and a product that causes no harm, we have the obligation to test it." Butantan - Brazil's largest producer of immunobiological products - has worked for nearly a decade with the U.S. National Institutes for Health (NIH) on a vaccine for dengue and believes they can piggy-back on that research to reach a solution for the Zika virus.

Professor Giovanna Barba Spaeth, from the Institut Pasteur and the French National Center for Scientific Research will discuss the development of a potential universal vaccine against both the Zika and Dengue viruses was announced in June. Professor Barba Spaeth, in collaboration with Imperial College London and the University of Vienna, Austria, has identified antibodies able to efficiently neutralize both the dengue virus and the Zika virus. The description of the binding site for these antibodies on the virus, identical for both viruses, could lead to the development of a universal vaccine that offers simultaneous protection against dengue and Zika virus disease.

Professor Cameron Simmons from the Peter Doherty Institute for Infection and Immunity is an infectious disease scientist with expertise in tropical infectious diseases, and in particular, dengue. He will talk on how Zika has highlighted the absence of good tools to fight viral infections transmitted by *Aedes aegypti* mosquitoes. He will also discuss novel strategies being developed to reduce its impact on public health impact.