

Sessions

The congress will have sessions on changes in ecosystems interfaces, changing epidemiology, burden of leptospirosis, genomics, vaccines and one health approach

Registration Fee

Student:..... Rs. 1,500/-
Indian delegate:..... Rs. 3,000/-
Accompanying person:.. Rs. 2,500/-
Foreign delegate:..... US\$ 100/-
Accompanying person:.. US\$ 50/-

Accommodation

Budget hotels..... Rs. 2,400 - 2,800/-
Mid-range:..... Rs. 3,500 - 4,000/-
Deluxe:..... Rs. 5,000 - 10,000/-

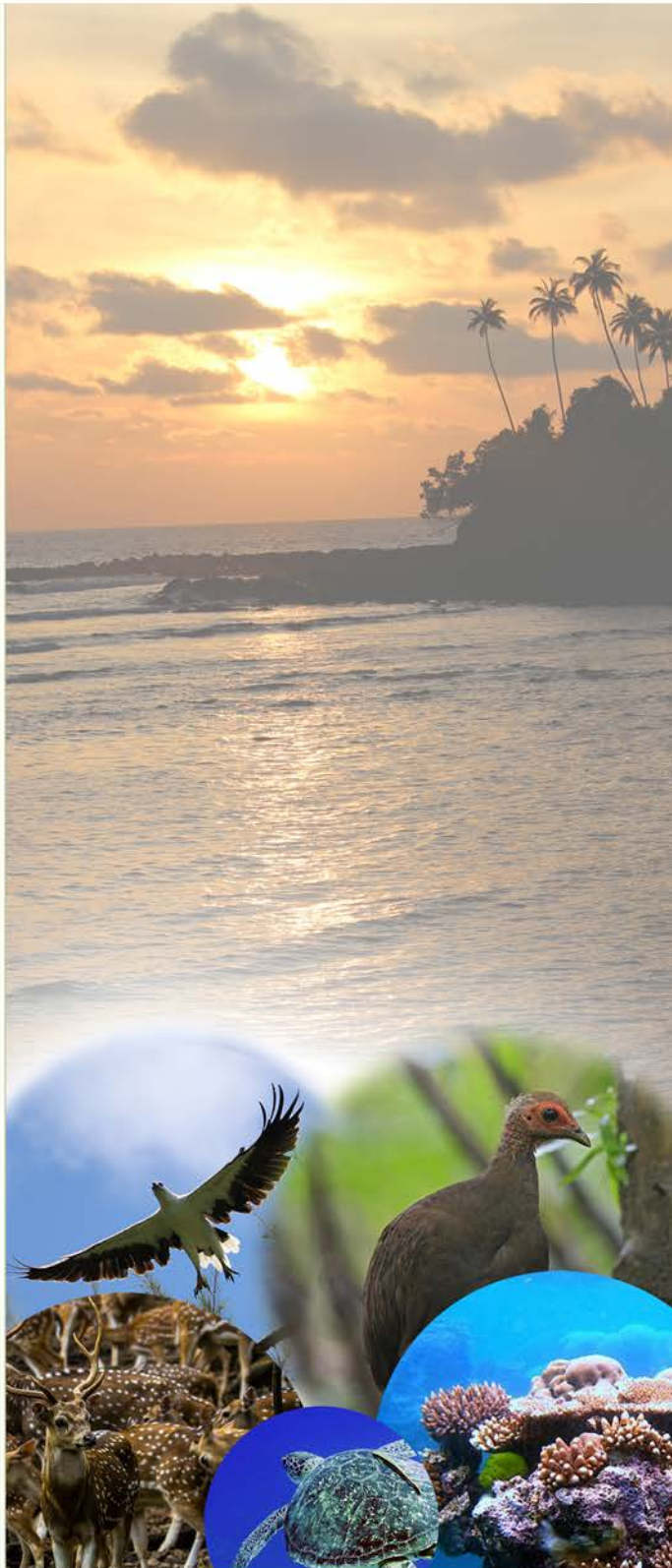
*Registration open
from 15 July 2019 to 10 November 2019*



World Congress on
Leptospirosis

Contact details

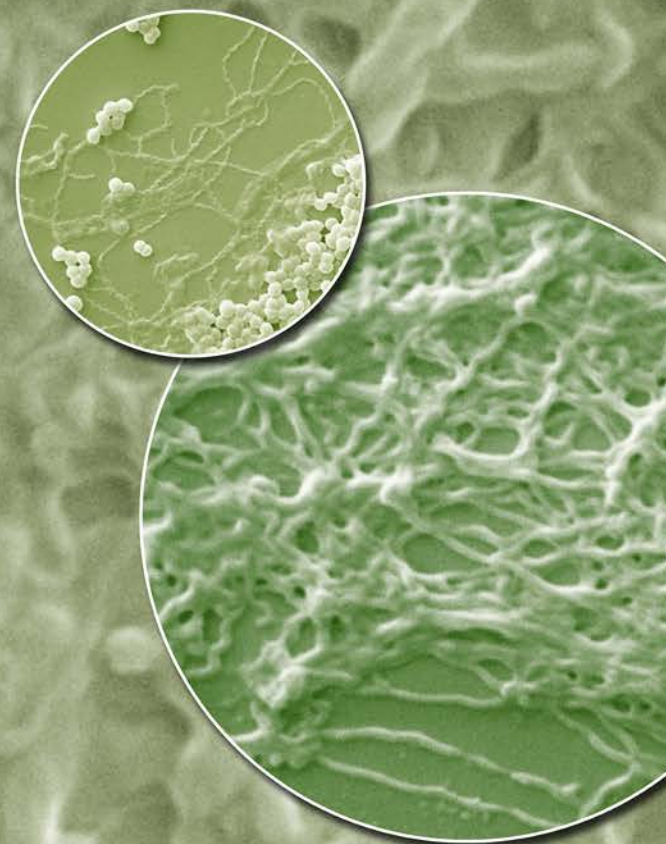
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World Congress on Leptospirosis

*Climate change and the changing epidemiology
- opportunities opened up by the new insights
into genomics and vaccine*

18-19 November 2019



ICMR
Regional Medical Research Centre
Port Blair, Andaman & Nicobar islands
India

Ecology and leptospirosis

Zoonotic diseases epidemiology is driven by ecosystems, and when the transmission cycle involves passage of the pathogen through environmental vehicles of transmission, this influence is amplified. Leptospirosis transmission, in most cases, involve environmental vehicles. Global climatic change, thus is vastly important in the epidemiology of leptospirosis. A direct consequence of global warming is the increase in the frequency of extreme weather conditions. Extreme precipitation and the ensuing floods are often the triggers of large epidemics of leptospirosis.

Leptospira – new insights into evolution, host adaptation, pathogenesis and vaccines

The Rapidly growing genomic database of *Leptospira* strains is constantly improving our understanding of the virulence, pathogenesis, host adaptation and other critical functions of pathogenic *Leptospira*. The concept of the evolution of *Leptospira* and the evolutionary link between pathogenic, intermediate and saprophytic groups of *Leptospira* is evolving. Recent studies have given new insights into the mechanisms of survival of *Leptospira* in the environment and within animal hosts. The genomes of a large number of strains are now available and these contain a large number of hypothetical genes, some of which may be coding for virulence factors or may be candidates for vaccines including DNA vaccines.

Welcome to the emerald islands!

The Andaman and Nicobar islands that stretch as an arc from Patheingyi in Myanmar to Banda Aceh in Sumatra have some unique geological and ecological features. Limestone caves in Baratang, Middle and North Andaman, the largest living arthropod in the world, Birgus Latro or Robber crab, and the largest sea turtles that come here to nest are some of these. Some of the most isolated paleolithic tribes live here. The islands are fringed with pristine beaches and a vast area of the inner land is covered with tropical evergreen forests



World Congress on Leptospirosis

Global Congress on Leptospirosis Relevance and Goals

The magnitude of the problem of leptospirosis appears to be increasing and the endemic regions are widening. Global climatic factors and frequent extreme weather events apparently are driving this trend.

The knowledgebase on the biology of Leptospira is rapidly expanding and the new insights into the pathogen's mechanisms of adaptation, virulence, pathogenesis and DNA based vaccines may have the potential to be developed as solutions to the emerging challenges.

The conference will be a platform for a formal conversation among researchers, public health professionals and clinicians.

Disease burden and one health approach

Health risks posed by changes in ecosystems are common to human beings and animals. Zoonoses are health risks in human-animal-environment interfaces. The global climate change appears to have increased these risks and consequently the burden of zoonoses like leptospirosis. One health is an attempt to reduce the burden through an approach that views zoonotic diseases as challenges shared by humans and animals.

Leptospirosis in Andamans

The problem of leptospirosis in the form of Weil's Syndrome with gastro-intestinal haemorrhages and high case fatality was particularly severe in Andaman Islands during the early years of the 20th Century (1920s) and some of the pioneering research on leptospirosis in India was conducted in these islands.

The emergence of epidemics of leptospirosis with predominant pulmonary involvement in the 1980s and 90s drew the attention again onto the problem. As a result, the ICMR-Regional Medical Research Centre was developed as the National Leptospirosis Reference Centre and WHO Collaborating Centre for Leptospirosis.

The ICMR-Regional Medical Research Centre at Port Blair has been actively involved in leptospirosis research, not only in Andamans but in other parts of India as well, and has been supporting the development of reference laboratories in other South East Asian countries.