

## EVENT RELEASE DAY 1

### **Indian and US scientists to discuss emerging diseases and global health**

**Venue:** Indian National Science Academy (INSA) premises, New Delhi, India ([Map](#))

**Dates:** November 18 – 20, 2014

"It's an interconnected world. An outbreak in one place is a threat everywhere" -- this remark by co-chair Dr James DeLuc set the tone for the three day workshop on "Challenges of Emerging Infections and Global Health Safety" at the Indian National Science Academy (INSA) premises, New Delhi.

The event, involving about 60 delegates from both India and the US, started today with members of both Indian National Science Academy (INSA) and the National Academy of Sciences, USA, giving inaugural addresses. All delegates commented on the timeliness of the meeting, given the seriousness of emerging infections like Ebola at the global level.

Prof Gadagkar, President of INSA, also commented on the "sophistication of today's science in combatting infectious diseases". Prof Krishan Lal, the immediate past president of INSA and now the President of The Association of Academies and Societies of Sciences in Asia (AASSA), spoke about the need of Asia specific approaches to tackle the problem of infectious diseases. Diane Griffin, the Vice President of the U.S. National Academy of Sciences spoke on the importance of academies, which can provide "independent scientific input to governments".

Amy Dubois, Health Attaché in the US Ambassador's office, said that the global community needs to examine their "ability to prevent future outbreaks with better tools and better knowledge." She also cautioned that there will be other epidemics like Ebola, with newer microbes. She encouraged participants to take messages from this workshop "outside this room, especially to people in charge of policy."

Prof V M Katoch, Secretary, Department of Health Research (GOI) and Director General, India Council of Medical Research (ICMR), spoke on how India and the US have been collaborating for more than 50 years, which has taken an upward swing after the H1N1 scare in the 1990s. The ICMR has been focussing on nationwide surveillance and monitoring of infectious diseases in India. "The aim is to have 160 new labs by March 2015. 48 have already been established. We also plan ten federal labs for infectious disease", he said. There are more than 100 viruses under investigation in India. "The aim at ICMR is to move away from an institution-centric approach to a public health centric approach", he added.

David Franz from Kansas State University has been involved with training personnel on biosafety and biosecurity measures to be followed in laboratories. He stressed that apart from physical infrastructure, biosafety and biosecurity for workers is crucial

during life sciences research. "We don't directly sell security or biosafety. It doesn't feed people or make vaccines; but it creates the background for research to take place", he said. He recommended leadership at all levels to bring about a "culture of safety" that will lead to security and regulatory measures.

An active discussion focused on the importance of awareness about biosafety and biosecurity among people at all levels: from undergraduate students who may be taking up a career in life sciences research, to academicians who face dangerous biomaterial in labs, to medical lab technicians, to the public who need to be aware of the gravity of biosafety issues.

Aparna Singh Shah from the WHO Southeast Asia Region office spoke about inadequate laboratory facilities in the Southeast Asian region, which supports 25% of the world's population but 30% of diseases. In established labs, safety does not get priority. WHO has now created guidelines for lab safety, and has been available for policy level consultancy and training labs in biosafety.

Thomas Ksiazek from CDC spoke of his personal experiences from Sierra Leone, where he was monitoring the Ebola outbreak. He spoke of his "Ebola Playbook": find all cases, isolate them, find who all the patient comes into contact with, protect the staff, make burials safe. In the disease epicentres of Sierra Leone, there is now a downward dip in the number of cases simply because people have "wised up" and realised the measures they have to adopt to combat spread of infection.

Ratnakar Sahoo from Ram Manohar Lohia Hospital in New Delhi spoke on the measures India has taken to combat ebola. "There are about 45,000 Indian nationals in Africa. In rural India, hygiene standards are quite low -- both factors lead to an increased danger of Ebola in India", he said. After many inter departmental meetings, international airports have been given thermal scanners. Anyone with high body temperature was screened, and those travelling from Ebola areas were classified as High Risk. Staff from all over the country has been trained at Delhi for ebola management, who will in turn hold training programmes in different areas. Isolation wards have been identified in government hospitals. The National Institute of Virology, Pune, has been certified for running Ebola tests; ten other labs from across the country have the necessary training to process samples.

S C Dubey, former director of High Security Animal Disease Laboratory (HSABL), Bhopal, spoke of the biosafety measures in the facility. The three-floor design with animal housing, laboratory and effluent treatment units complies with international biosafety norms (BSL 3+ as of now; [http://en.wikipedia.org/wiki/Biosafety\\_level](http://en.wikipedia.org/wiki/Biosafety_level)). A proposal has been approved to upgrade the facility to BSL 4. The facility has prevented the outbreak of many zoonotic diseases in India, and has been a central facility to keep check of animal and poultry diseases.

## Useful Links:

Prof Indira Nath: <http://www.insaindia.org/detail.php?id=N92-1095>

Dr James LeDuc:

[http://www.utmb.edu/internalmedicine/divisions/infectious\\_diseases/faculty/bio\\_leDue.asp](http://www.utmb.edu/internalmedicine/divisions/infectious_diseases/faculty/bio_leDue.asp)

Prof Raghavendra Gadagkar: <http://ces.iisc.ernet.in/hpg/ragh/>

Prof Diane Griffin: <http://www.nasonline.org/member-directory/members/3007695.html>

Prof V. M. Katoch: <http://icmr.nic.in/000251/dg.htm>

Krishan Lal: <http://insaindia.org/detail.php?id=N84-0390>

Dinakar Salunke: <http://insaindia.org/detail.php?id=P04-1372>