



Open Health Systems Colloquium International Bacteriophage Research Consortium

November 19, 2019 6:00 – 8:00 pm

Multipurpose Hall, Kamaladevi Complex

India International Centre, Maxmüller Marg, New Delhi

Live webcast: <http://www.bacteriophage.ohsl.us>; <http://webcast.streaminglive.in/ohsl>



INDIA INTERNATIONAL CENTRE



Lecture and Book Launch

The Perfect Predator:

A Scientist's Race to Save Her Husband From A Deadly Superbug

Speaker: Professor Steffanie Strathdee

Dr. Strathdee is an infectious disease epidemiologist renowned for her research on the intersection of HIV and drug use, having generated more than 600 scholarly publications. She is the Associate Dean of Global Health Sciences and Harold Simon Professor of Medicine at the University of California San Diego where she codirects the Center for Innovative Phage Applications and Therapeutics. She is married to Thomas L. Patterson, Professor of Psychiatry at UC San Diego, where they co-direct a research and training program on the Mexico-US border. Strathdee was recently credited with saving her husband's life from a deadly superbug infection using bacteriophages – viruses that attack bacteria. She is a member of the Task Force on Antimicrobial Resistance, South East Asian Region, WHO.

Abstract:

Dr. Strathdee will present the case study of her husband, Dr. Tom Patterson, who was stricken with a pan-resistant bacterial infection and was rescued with intravenous phage therapy as well as others who have been similarly treated successfully in other countries. The case, which involved cooperation from three universities, the U.S. Navy and researchers across the globe, shows how phage therapy is a future weapon against multi-drug resistant bacterial infections which are expected to kill 10 million people per year by 2050. Strathdee and Patterson co-authored a book on their story called *The Perfect Predator: A Scientist's Race to Save Her Husband from a Deadly Superbug*. These experiences revitalized interest in phage therapy and led to the establishment of the Center for Innovative Phage Applications and Therapeutics (IPATH), the first dedicated phage therapy center in North America.

Panel Discussion: Charting a Path Towards Bacteriophage Therapy

It would not be an exaggeration to say that we have already entered the post-antibiotic phase. The threat posed by the growing rate of emergence of drug-resistant bacteria, combined with a paucity of new antibiotics mandates urgent measures to be taken for providing alternate solutions to treat antibiotic resistant infections. In the recent past, several success stories around phage therapy have revived interest and focused attention towards this almost forgotten therapy. Phage therapy is being practiced in several countries in east Europe for about a century and reports on recent success stories in the west have created renewed interest in it. However, challenges associated with the use of phages and their derived products need to be investigated and understood before they are widely accepted as a credible alternative or complement to antibiotics. Given the rapid advances made in the field of Biomedical Research, the robustness of the high throughput technologies available and the fact that AMR is a global phenomenon, a concerted effort is required to combine the strengths of modern science with the abundantly available natural killers of bacteria!

The Talk and Discussion coincide with the **World Antibiotic Awareness Week, November 18 -24 this year**, a campaign by WHO to increase awareness of global antibiotic resistance and to encourage best practices among the general public, health workers and policy makers to avoid the further emergence and spread of antimicrobial resistance - part of the key objectives of the global action plan is to improve awareness and understanding of antimicrobial resistance.

Chairing the Panel: Prof. Balram Bhargava: Secretary to the Government of India, Department of Health Research, Ministry of Health & Family Welfare & Director-General, Indian Council of Medical Research

Discussants:

Dr. Steffanie Strathdee

Dr. Thomas Patterson: Professor of Psychiatry at the School of Health Sciences, University of California – San Diego. Dr. Patterson was the first person in the U.S. to be successfully treated with IV phage therapy, which cured him of a seemingly untreatable infection with multidrug-resistant *Acinetobacter baumannii* that he contracted while in Egypt.

Dr. Biswajit Biswas: Chief of the Division of Bacteriophage Science, Biological Defense Research Directorate, at the Naval Medical Research Center – Frederick, USA. Dr. Biswas prepared the phage cocktail that was used to successfully treat Dr. Thomas Patterson.

Dr. Sanjay Chhibber: Professor, Department of Microbiology at the Panjab University. He is the President of the Society for Bacteriophage Research and Therapy (SBRT) in India.

Moderator: Dr. Urmi Bajpai: Associate Professor, Department of Biomedical Science, Acharya Narendra Dev College, University of Delhi. Co-creator of the International Bacteriophage Research Consortium (IBRC).

The International Bacteriophage Research Consortium (IBRC) was created by Open Health System Laboratory (OHSL), USA and Acharya Narendra Dev College (ANDC), University of Delhi, India, to bring together scientists, academia, clinicians, researchers and regulatory authorities to interact, share and collaborate with an aim to contribute towards phage therapy and research.

Open Health Systems Colloquium is a collaboration between the Open Health Systems Laboratory (OHSL) and the India International Centre (IIC), seeking to bring together thought leaders to present and discuss issues of life sciences in an effort to provoke innovative and holistic thinking that could lead to a paradigm shift. The aim is also to open these discussions into the public domain such that the latest developments in biomedical sciences are accessible to those interested and to spark debate and deliberation across disciplines.