VIRUSES MEET BIOPHOTONICS AND BIOINFORMATICS:

ELUCIDATING HOST-PATHOGEN INTERACTIONS OF INFECTIOUS DISEASES

DECEMBER 7, 2023: 8 AM - 3 PM

SCIENTIFIC ORGANIZATION:
UTE NEUGEBAUER (LEIBNIZ IPHT),
STEFANIE DEINHARDT-EMMER (JUH)

Please register via

Registration link or

Leibniz Institute of Photonic Technology
Albert-Einstein-Str. 9
07745 Jena // Germany

SPONSORED BY THE
Federal Ministry of Education and Research

LEIBNIZ IPHT LEIBNIZ INSTITUTE of PHOTONIC TECHNOLOGY

UNIVERSITÄTS KLINIKUM jena

SARS-CoV-2DX

VIRUSES MEET BIOPHOTONICS AND BIOINFORMATICS: ELUCIDATING HOST-PATHOGEN INTERACTIONS OF INFECTIOUS DISEASES

7th December 2023

Leibniz Institute of Photonic Technology
Albert-Einstein-Str. 9, 07745 Jena // Germany

Agenda

08:30 Opening of conference and Welcome // Ute Neugebauer & Stefanie Deinhardt-Emmer

Session Virus infections and models (Chair: Ute Neugebauer)

08:40 tba
Palmira Ryquett Ventosilla Lopez // UPCH, Lima, Peru

09:00 Defeat dengue
Marie Flamand // Institute Pasteur, Paris, France

09:20 Inflammasomes: double edge sword in the pathogenesis of viral diseases
Karolina Sidor // Medical Center for Postgraduate Education, Warsaw, Poland

09:40 Virus induced premature aging of the lung
Stefanie Deinhardt-Emmer // Jena University Hospital, Jena, Germany

10:00 Coffee break

Session Unravelling and blocking host-virus interactions using in-silico approaches (Chair: Volker Deckert)

10:20 Artificial Intelligence for modeling virus interactions and target molecule generation
Joel P. Arrais // University of Coimbra, Coimbra, Portugal

10:40 RNA secondary structures throughout Flaviviridae genomes and Orthoflavivirus denguei
Manja Marz // Friedrich Schiller University, Jena, Germany

11:00 Pandemic modeling using automated model discovery
José Luis Oliveira // BMD Software and Campus Universitário de Santiago, Aveiro, Portugal

11:20 Flash poster presentations (1 slide, 2 min each)

11:30 Postersession

12:30 Lunch break

Session Photonic strategies to shed light on host-virus interactions (Chair: Stefanie Deinhardt-Emmer)

13:15 High-resolution microscopy of virus cycling
Christian Eggeling // Leibniz IPHT, Jena, Germany

13:35 Raman spectroscopy for label-free interaction studies
Ute Neugebauer // Leibniz IPHT, Jena, Germany

13:55 Topography based pre-selection of viruses for targeted nano-scale spectroscopy
Volker Deckert // Leibniz IPHT, Jena, Germany

14:15 Label-free studies of molecular interactions using plasmonic nanosensors
Wolfgang Fritzsche // Leibniz IPHT, Jena, Germany

14:35 Wrap up // Ute Neugebauer & Stefanie Deinhardt-Emmer

14:40 End of meeting

Please register via registration link or

SPONSORED BY THE
Federal Ministry of Education and Research
Leibniz ipht Leibniz Institute of Photonic Technology
Universitätsklinikum Jena
SARS-CoV-2DX