



**ICGEB** International Centre for Genetic  
Engineering and Biotechnology

7-11  
November

**Workshop “Emerging infectious diseases: biology, prevention  
and treatment”**

*São Paulo, BRAZIL*

**Organizers**



**Sponsors**

fundação  
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**FINAL PROGRAM**

## Monday, November 7

9:00-12:00h **Registration**

14:00-15:30h **Open Ceremony, moderador: Prof Raul**

Dimas Tadeu Covas – Instituto Butantan (20min)

Carlos Gilberto Carlotti Jr. – University of São Paulo (15min)

Lawrence Banks – ICGEB (15min)

Marco Antonio Zago – Fapesp (10 min)

David Uip – Secretary of Science, Research and Development in Health Government of São Paulo (10min)

Marcelo Morales –Secretary of Research and Scientific Training, Ministry of Technology, Science and Innovation (MCTI) (10min)

15:30-16:00h **Coffee-break**

16:00-17:30h **Keynote Lecture, moderador: Sandra e Rodrigo**

Role of the MCTI (Ministry of Science, Technology and Innovations) for infectious diseases and post-Covid-19 strategies

**Speaker: Marcelo Morales - MCTI**

How financial agency can contribute for the relation: big pharma vs academy

**Speaker: Marco Antonio Zago - Fapesp**

17:30-19:00h **Welcome Cocktail**

## Tuesday, November 8

8:30-10:30h

### ***Epidemiology Session, moderador: Maria Carolina***

CDC in South America – A Regional Approach

**Speaker: Juliette Morgan, CDC Latin America**

Global perspectives for surveillance and control of arboviruses

**Speaker: Carlos Frederico C. Albuquerque e Melo, PAHO**

Viruses related to cancer in humans

**Speaker: Luisa Villa, FMUSP - USP**

Economic evaluation of vaccination programs

**Speaker: Ana Marli Sartori, FMUSP – USP**

10:30-11:00h

### ***Coffee-break***

11:00-12:30h

### ***Therapeutics Session, Moderador: Roxane***

Neutralizing mAbs for the treatment of infectious diseases

**Speaker: Ana Maria Moro, Instituto Butantan**

Antibody-based therapies for infections by HIV

**Speaker: Michael Nussenzweig, The Rockefeller University**

The role of equine antitoxins and anti-rabies immunoglobulin in the context of public health.

**Speaker: Fan Hui Wen, Instituto Butantan**

Llama-derived nanobodies to detect and control viral diseases: A promising future

**Speaker: Viviana Parreño, INTA – Argentina**

12:30-14:00h

### ***Lunch***

14:00-15:30

### ***“OMICS”, moderador: Lincoln***

Network Medicine of Infectious Diseases

**Speaker: Helder Nakaya, Hospital Israelita Albert Einstein (HIAE)**

Plasma metagenomics for identification of emerging viruses

**Speaker: Svetoslav N. Slavov, FMRP - USP**

Viral genomic surveillance in LACENS: helping the public health response in Brazil in real time

**Speaker: Luiz Alcântara, Fiocruz**

Automated Nucleic Acid Extraction, for all! New Frontiers and Disruptive Business Model.

**Speaker: Jayme Nunes de Souza Filho, Loccus**

15:30-16:00h

### ***Coffee-break***

16:00-17:30h

### ***Vaccines, moderador Luciana Leite***

Importance of vaccination against *Pertussis* for individuals with Chronic Obstructive Pulmonary Disease (COPD): new evidence

**Speaker: Emersom Mesquita, GSK**

*Plasmodium vivax* malaria vaccine development

**Speaker: Irene Soares, FCF – USP**

Leptospirosis: pathogenesis and prevention

**Speaker: Ana Lúcia Nascimento, Instituto Butantan**

Identification of vaccine candidates for schistosomiasis mansoni based on self-healing in rhesus macaques

**Speaker: Sergio Verjovski-Almeida, Instituto Butantan**

17:30-19:00

### ***Poster session***

## Wednesday, November 9

8:30-9:00h

**Q&A session**

9:00-9:30h

**Covid-19: epidemiology & genomic surveillance, moderador Sandra**

Leveraging technology and collaboration to improve laboratory capacity globally

**Speaker: Leonard Peruski, CDC – Atlanta**

One Health International Network for SARS-CoV-2 real-time genomic monitoring

**Speaker: Marta Giovanetti, Fiocruz**

Real-time specific actions contributing to the public health in São Paulo State

**Speaker: Maria Carolina Sabbaga, Instituto Butantan**

Antibodies for emerging and reemerging diseases diagnosis

**Speaker: Roxane Piazza, Instituto Butantan**

10:30-11:00h

**Coffee-break**

11:00-12:30h

**Covid-19: vaccines, Moderador Viviane Maimoni**

Cellular immune responses following SARS-CoV-2 vaccination

**Speaker: Esper Kallás, FMUSP – USP**

Vaccine-induced neutralizing antibody responses to the SARS-CoV-2 variants

**Speaker: Julio Croda, Fiocruz**

NDV vaccine against SARS-CoV-2

**Speaker: Florian Krammer, Icahn School of Medicine at Mount Sinai**

Vacina de subunidade quimérica recombinante para Covid-19

**Speaker:**

12:30-14:00h

**Lunch**

14:00-15:30

**Covid-19: treatments and molecular insights, moderador Rodrigo**

Anti-SARS CoV-2 serum: Pré clinical assays

**Speaker: Denise Tambourgi, Instituto Butantan**

Proteomic analysis of endothelial and lung cells exposed to SARS CoV-2

**Speaker: Thatiana Melo**

SUMO pathway, blood coagulation and oxidative stress in SARS-CoV-2 infection

**Speaker: Doha Ellakwa, Al Azhar University, Cairo**

High-throughput screening to identify FDA-approved compounds that target inflammasome activation and SARS-CoV-2 replication

**Speaker: Dario Simões Zamboni, FMRP – USP**

15:30-16:00h

**Coffee-break**

16:00-17:30h

**Roundtable: implementation Science, moderador Beatriz**

Luisa Villa, FMUSP – USP

Sandra Coccuzzo, Instituto Butantan

Rodrigo Calado, FMRP – USP

17:30-19:00

**Poster session**

## Thursday, November 10

8:30-9:00h *Q&A session*

9:00-10:30h *Molecular & Immunology Insights, moderador Paulo Lee Ho*

Cellular and molecular mechanisms involved in the pathogenesis of microcephaly caused by Zika virus

**Speaker: Jean Pierre Peron, ICB – USP**

Human Papillomaviruses: From Infectious Entry to Malignancy

**Speaker: Lawrence Banks, ICGEB**

The inflammasome activation in response to Leishmania parasites and the microbial mechanisms related to evasion

**Speaker: Dario Simões Zamboni, FMRP – USP**

Host-pathogen interaction in case of Mycobacterium tuberculosis infection, innate immunity response and inflammation

**Speaker: Dhiraj Kumar, ICGEB – India**

10:30-11:00h *Coffee-break*

11:00-12:30h *Molecular & Immunology Insights, moderador Waldir*

Molecular and cell biology of virus-host interactions

**Speaker: Alessandro Marcello, ICGEB – Italy**

The importance of diagnosis post-vaccination

**Speaker: Dan Lee, Osang HealthCare**

Enteropathogenic Escherichia coli: beyond the gut.

**Speaker: Waldir Pereira Elias Jr., Instituto Butantan**

Life cycles "great and small" - their pivotal role in evaluating the control of emerging protozoal diseases

**Speaker: Jeffrey Shaw, ICB – USP**

12:30-14:00h *Lunch*

14:00-15:30 *"OMICS", moderador Sergio*

Typing fluoroquinolone resistance in Staphylococcus aureus; a genomic approach

**Speaker: Alaa Abouelfetouh, Alamein International University**

The Leishmania-host relationship from the perspective of omics

**Speaker: Lucile Maria Floeter-Winter**

Chikungunya virus molecular evolution in India since its re-emergence in 2005

**Speaker: Sujatha Sunil, ICGEB - India**

Molecular solutions for infectious disease

**Speaker: Roberto Ribeiro e Karen Pinke, Thermo Scientific**

15:30-16:00h *Coffee-break*

16:00-17:30h *Vaccines, Eliana Faquim*

mRNA as the basis for novel, nucleotide-based vaccines and drugs

**Speaker: Florian Krammer, Icahn School of Medicine at Mount Sinai**

The use of shotgun phage display to uncover potential adhesins and antigens for vaccine and diagnostic in leptospirosis

**Speaker: Paulo Lee Ho, Instituto Butantan**

Development of tuberculosis vaccines based on recombinant BCG

**Speaker: Luciana Leite, Instituto Butantan**

Development and production of new pneumococcal vaccines based on recombinant proteins

**Speaker: Viviane Gonçalves, Instituto Butantan**

17:30-19:00 *Poster session*

## Friday, November 11

8:30-9:00h *Opening remarks*

9:00-10:00h *Final session, moderador Cristiano*

How to transform scientific research into products for the market?

*Speaker: Janayna Bhering, FUNDEP*

10:30-11:00h *Closing session and awards*