

COURSE DESCRIPTION

This course will review different aspects of the human arboviruses infections. Workshop program will combine an online course (Theoretical Part) with a one-week period of intensive practical activities (Practical Course).

The Theoretical Part of the *course* will include *recorded* video lectures. Different aspects of arboviruses infections **will be discussed during these lectures.** All participants will have access to the recorded lectures one month before they initiate Practical sessions.

Practical sessions (**Practical Course**) will cover serologic and molecular methods of diagnostics, as well as viral culture and interpretation of the results observed according to the different methods.

The course will be delivered by a group of experts on arboviruses from Brazil, through a dynamic mix of presentations, practical sessions and case scenarios.

TARGET AUDIENCE

- Laboratory staff, doctors, nurses or any graduates in life science with relevant curriculum or professional experience in Brazil, who might be involved in the identification, diagnosis or treatment of patients with arbovirus infections.

A maximum of 10 participants for practical training will be selected after application review.

Course Period:

Group A from March 8th to March 12th 2021 (5 students)

Group B from March 15th to March 19th 2021 (5 students)

LOCATION The course will be held at Virology Laboratory, **Tropical Medicine Institute, Sao Paulo University.**

ACCOMODATION will be provided in hotels nearby **Tropical Medicine Institute, Sao Paulo University.**

TIME: 08:00 - 18:30

ATTENDANCE GRANTS: Fondation Mérieux will provide 10 attendance grants for the 10 selected participants for the practical and theoretical course.

The grant for the course will cover the registration fee, travel expenses, accommodation, course materials and meals for the full period of the course.

Theoretical Program

The Theoretical Part of the *course* will include *recorded* video lectures, as follows:

		Duration
Video 1	Opening/Welcome - <i>Florence Pradel/Fondation Mérieux</i>	15 minutes
Video 2	Course aims and structure – <i>Maria Cassia Mendes Correa/Virology Laboratory</i>	15 minutes
Video 3	Arboviruses as a Global Health Threat – <i>To be confirmed</i>	40 minutes
Video 4	Epidemiological Situation of Arboviruses in Latin America – <i>Julio Croda/FIOCRUZ/MS</i>	40 minutes

Video 5	PCR and Real-Time PCR - <i>José Eduardo Levi/IMT-USP</i>	40 minutes
Video 6	Phylogeny of Alpha and Flaviviruses: implications for diagnostic assays - <i>Camila Malta Romano/IMT-USP</i>	40 minutes
Video 7	Sequencing technologies and viral discovery - <i>Ester Sabino/FMUSP/IMT</i>	40 minutes
Video 8	Arbovirus Infections Clinical Diagnosis - <i>To be confirmed</i>	40 minutes
Video 9	Laboratory Algorithms for Arbovirus Infections – <i>to be confirmed</i>	40 minutes
Video 10	Vaccines for arboviral diseases - <i>Ana Marli Sartori/FMUSP</i>	40 minutes
Video 11	Epidemiological situation of Yellow Fever in Brazil and Predictors of mortality – <i>to be confirmed</i>	40 minutes

Practical Program

Practical Course will be provided for 10 students, divided in 2 groups :

Group A from March 8th to March 12th 2021 (5 students)

Group B from March 15th to March 19th 2021 (5 students)

Practical Molecular Biology Module - Program
Real time PCR to detect 4 arboviruses: dengue, zika, chikungunya and yellow fever
Sanger
New generation sequencing methods: Illumina and MinIon
Practical Serology Module - Program
Different serological methods to detect 4 arboviruses: dengue, zika, chkv and yellow fever
Plaque Reduction Neutralization Test (PRNT)