I Arbovirus-transmitting Mosquitoes

WORKSHOP REPORT

The I Arbovirus-transmitting Mosquitoes Workshop was held in Macaé, Rio de Janeiro, Brazil, from 5th to 7th September 2019. The venue was one of the campi of Federal University of Rio de Janeiro (UFRJ), known as NUPEM. Workshop participants use the accommodation and kitchen facilities, as well as the biology laboratories and auditorium.

This workshop was part of the IX Course on Arthropod and Vector Biology, a 2 week course organized by the Oswaldo Cruz Institute (IOC-Fiocruz), the Federal University of Rio de Janeiro University (UFRJ) and the National Institute of Science and Technology on Molecular Entomology (INCTEM). It was sponsored by the graduate offices of the above institutions and the Research Capacity Network (REDe). Financial support was essential to host the event and to include participants from all socio-economic backgrounds; costs of accommodation and catering were met fully by participant themselves.

The course targeted graduate students, but government staff were also among those who attended. There were 33 participants all keen to gain information about how to conduct research. Most of them had experience with vector studies, methods of data collection and formulating studies based on a research question.

The workshop was strategically planned for the 4th day of the course, in order to offer the basics about the biology of vectors before the practical sessions for those who were not experienced in the field.

The workshop was composed of a theoretical part, during which the speakers presented about several topics, ranging across phylogeography/phylodynamics of arboviruses, virus-mosquito interaction, the Wolbachia model for arbovirus control, surveillance of arbovirus in the Amazon Forest and novel technologies such as infrared to improve arbovirus surveillance. The speakers shared their own research experience during the talks, which was very valuable to the participants when it comes to capacity building. This was pointed out by several participants in the feedback questionnaires, one of which stated, "*the talks related to field work helped me a lot to re-evaluate my own graphs and maps*". Another participant wrote, "*the workshop will help me in the dissertation writing process as well as fostering my future research projects*". These talks are available online on the NUPEM YouTube channel:

The practical part of the workshop was conducted on the 6th day of the course, and the participants were taken to the Atalaia National Park, nearby Macaé. There, the main traps used to collect mosquitoes were demonstrated and described to the participants. Across a period of 2 hours, they used these traps to collect mosquitoes in the forest. Subsequently, the specimens were taken to the laboratory and the participants were taught how to process, fix, and do the taxonomy of the mosquitoes collected. This was very positively received by participants, emphasizing the importance of such practical activity. According to the feedback, many suggested this particular session should have been longer.

The protocol used in the practical activity has been made available (in English and Portuguese) through the REDe knowledge hub, so that other researchers based in other settings around the world can make use of it.