

CLIMADE AFRICA WORKING GROUP MEETING MINUTES – WEEK 6

Host: Centre for Epidemic Response and Innovation (CERI)

Date: March 14, 2023

Time: 12:00 – 13:00 p.m. (SAST)

Facilitators: Prof Tulio de Oliveira, Dr Monika Moir, and Dr Houriiyah Tegally

Attendance/ No. of Participants: 68

Start time: 12:02 p.m. (SAST)

Purpose of the meeting

An update on the preliminary phylogenetics and transmission dynamics results for Arboviruses in Africa.

Agenda Items

1. Welcome by Prof Tulio de Oliveira.
2. Recap by Dr Monika Moir.
3. Presentation: Continental analysis of Arbovirus transmission dynamics in Africa using genomic and epidemiological data by Dr Houriiyah Tegally.

Discussion points and Questions

1. Welcome and agenda briefing – Prof Tulio de Oliveira.
Prof Tulio de Oliveira highlighted on the collaboration and sharing of sequencing protocols on GitHub.
2. Dr Monika Moir recapped on the past meetings and contributions from participants.
3. Dr Houriiyah Tegally presented the preliminary arbovirus transmission dynamic results in Africa expanding on:
 - The genomic surveillance and the distribution of genomic data for arbovirus sequences in Africa.
 - The phylogenetic analysis and what this can tell us on the transmission dynamics of viruses on the continent.
 - The questions that will be answered through the CLIMADE AFRICA initiative.

- The preliminary analysis of Dengue serotypes 1, 2, 3 and 4 outbreaks, the DENV phylogenetic and transmission dynamics analysis in the top 8 countries in Africa between 2017 and 2023.
 - DENV outbreak data mapped to publicly available genomic data visualizing the current situation of dengue infections,
 - Sharing of the World Health Organization (WHO) weekly outbreak reports in Africa.
 - Viral Movement map of all DENV serotypes in Africa as well as the exports and importations into the continent.
 - Yellow Fever cases and phylogenetic transmission dynamics.
 - Future work on quantifying the risk of importations from Asia and the Americas using travel datasets, looking at seroprevalence data and increasing genomic surveillance.
4. Dr Issaka Maman discussed cases in Togo in 2017 that have not been reported.
 5. Dr Idrissa Dieng from the Institute of Pasteur in Senegal expressed the interest in collaborating and analyzing positive arboviral samples.
 6. Dr Nadir Abuzeid from Sudan requested to set up an MTA for sequencing of positive arbovirus samples.
 7. Potentially sharing bed files for arbovirus for other genome assembly pipelines.
 8. Prof Tulio de Oliveira touched on opportunities for capacity building and training at CERI for laboratory and bioinformatic analysis teams in Africa.
 9. Dr Houriiyah Tegally explained how to access publicly available arboviral genomic data on VIPR and on GenBank.

Adjournment and Closing points.

1. Request for laboratories and research to complete the questionnaire before the deadline, March 21, 2023.
2. Dr Monika Moir and Prof Tulio de Oliveira adjourned the meeting at 13:08 p.m. (SAST).

Next Meeting

Tuesday, March 21, 2023, at 12:00 – 13:00 p.m. (SAST)

Submitted by: Yajna Ramphal

Approved By: Monika Moir