

MONKEYPOX & ORTHOPOXVIRUS

MINI SYMPOSIUM ON BIOINFORMATICS RESOURCES, TOOLS & RESEARCH
September 15, 2022

Event Information

Registration: [Click Here](#)

Date: September 15, 2022

Time: 7 AM – 11:30 AM Pacific, 10 AM – 2:30 PM Eastern , 4 PM – 8:30 PM CET

Scope: Discussion of bioinformatic resources and tools available and in development for the purpose of studying monkeypox virus. Will also include a brief primer on monkeypox virus, as well as research presentations focusing on the recent outbreak.

Audience: Bioinformaticians, public health practitioners, bench scientists in the field of Monkeypox or poxvirus research

TOPICS WILL INCLUDE

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| Monkeypox Primer | Database Resources for Monkeypox and Orthopoxvirus | Monkeypox diagnostic and sequencing assays | Monkeypox Epidemiologica l Analysis tools | Latest research on the current outbreak |
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(Preliminary agenda provided below - subject to change)

BV-BRC MONKEYPOX & ORTHOPOXVIRUS

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September 15, 2022

| Time | Title | Speaker |
|----------------------------------|---|---|
| 10:00 EDT / 16:00 CET | <i>Introduction and Welcome</i> | Richard Scheuermann & Anna Maria Niewiadomska - BV-BRC & J. Craig Venter Institute |
| 10:05 EDT / 16:05 CET | <i>Monkeypox virus primer</i> | Paula Traktman - Medical University of South Carolina |
| 10:20 EDT / 16:20 CET | <u>Phylogenomic characterization and signs of microevolution in the 2022 multi-country outbreak of monkeypox virus</u> | Vitor Borges - National Institute of Health - Portugal |
| 10:35 EDT / 16:35 CET | <u>Monkeypox virus sequencing in the 2022 outbreak reveals multiple independent lineages and unique mutational signatures</u> | Crystal Gigante - CDC/DDID/NCEZID/DHCPP |
| 10:50 EDT 16:50 CET | <u>A distinct phylogenetic cluster of Monkeypox genomes suggests an early and cryptic spread of the virus</u> | Bani Jolly - CSIR-IGIB, New Delhi, India |
| 11:05 EDT 17:05 CET | <u>Genetic variability, including gene duplication and deletion, in early sequences from the 2022 global monkeypox outbreak</u> | Terry Jones - Charité - Universitätsmedizin Berlin |
| 11:20 EDT 17:20 CET | <u>Nextclade, Nextstrain and New Monkeypox Sublineages</u> | Emma Hodcroft & Cornelius Roemer - Nextstrain |
| 11:35 EDT 17:35 CET | <u>Detection of monkeypox viral DNA in a routine wastewater monitoring program</u> | Marlene Wolfe - Emory University |
| 11:50 EDT 17:50 CET | <u>Monkeypox virus whole genome sequencing using combination of NextGenPCR and Oxford Nanopore</u> | Matthijs Welkers - Amsterdam UMC, Amsterdam, the Netherlands |
| 12:05 EDT/18:05 CET BREAK | | |
| 12:15 EDT 18:15 CET | <u>Amplicon-based sequencing of human monkeypox virus</u> | Chantal Vogels - Yale School of Public Health |
| 12:30 EDT 18:30 CET | <i>Applying the COVID-19 Lessons Learned to Other Pathogens of Public Health Concern</i> | Kevin G. Libuit - <u>Theiagen Genomics</u> |
| 12:45 EDT 18:45 CET | <i>International Committee on Taxonomy of Viruses: <u>ICTV</u></i> | Elliot Lefkowitz - University of Alabama Birmingham |
| 13:00 EDT 19:00 CET | <i>Monkeypox/Orthopox data and tools in <u>NCBI Virus</u></i> | Eneida Hatcher - NIH/NLM/NCBI |
| 13:15 EDT 19:15 CET | <i>Monkeypox/Orthopox data and tools in the <u>Bacterial and Viral Bioinformatics Resource Center</u> (BV-BRC)</i> | Anna Maria Niewiadomska - J. Craig Venter Institute |
| 13:30 EDT 19:30 CET | <u>Viral Bioinformatics Research Center: Bioinformatics for Poxviruses</u> - | Rachel Roper - East Carolina University |
| 13:45 EDT 19:45 CET | <i>Advanced Genomic Sequencing for H2H Transmission Analysis of Poxvirus</i> | Gustavo Palacios - Icahn School of Medicine at Mount Sinai |
| 14:00 EDT 20:00 CET | <i>Plumbing a Monkeypox virus genome sequence assembly, annotation, and public database submission pipeline</i> | Michael Weigand - CDC/DDID/NCIRD/DBD |
| 14:15 EDT 20:15 CET | <i>Diagnostic assays (PCR and POC) for monkeypox</i> | Christina Hutson - CDC/DDID/NCEZID/DHCPP |
| 14:30 EDT 20:30 CET | <i>(5 minute talk:) UCSC <u>Genome Browser</u> & <u>hgPhyloPlace/Usher-web</u></i> | Maximilian Haeussler - UCSC |
| 14:30 EDT/20:30 CET END | | |