

Nanopore Workshop Program



Genomic Standard Consortium Meeting Bangkok Thailand Genomic Standards for Precision Medicine, Agriculture, Comparative Genomics, and Metabolomics

Location: Siriraj Hospital Mahidol University and the National Center for Genetic Engineering and Biotechnology

Nanopore Workshop: "Hands On" library synthesis, flow cell loading, QC, sequencer operations, and basic data analysis.

The Nanopore hands-on workshop will provide attendees with a critical understanding of Oxford Nanopore sequencing technology through a comprehensive laboratory and analysis workflow approach. The workshop will provide a background understanding of the sequencing technology, QC, and sequencer set up with laboratory training including "hands on "individually generated sequence ready barcoded libraries (RBK114), loading flow cells, and operating the MinKNOW sequencing software. Basic data analysis with EPI2ME software will allow participants to analyze and view the results. The program will consist of a morning session that participants will prepare actual sequencing libraries, load the MK1C MinION flow cell and initiate sequencing. An afternoon session will include understanding the QC outputs and Introduction to basecalling and Epi2ME analysis workflows.

- Introduction and Overview of Technology
- Library Synthesis and Quality Control
- Loading the Nanopore Flow Cell
- Operating MinKNOW Software
- Sequence Operations of MK1C
- Sequence Monitoring Metrics
- Post Sequencing Data Analysis