

### NTHRYS WORKSHOPS

## **Emerging Trends In System Microbiology**

8:45 AM - 10:15 AM: Session 1: Next-Generation Sequencing for System Microbiology

Hands-on workshop on NGS.

Protocols for applying next-generation sequencing technologies to explore microbial diversity and system-level functions.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Single-Cell Analysis in Microbial Systems

Practical session on single-cell microbiology.

Protocols for studying individual microbial cells within complex communities using advanced single-cell techniques.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

#### 1:00 PM - 2:30 PM: Session 3: Multi-Omics Approaches in Microbial Systems

Hands-on training on multi-omics.

Protocols for integrating multiple omics datasets (genomics, transcriptomics, proteomics, metabolomics) to study microbial systems holistically.

#### 2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

#### 2:45 PM - 4:15 PM: Session 4: Phylodynamics and System Microbiology

Practical session on phylodynamics.

Protocols for integrating phylodynamic approaches to study the evolution and spread of microbial populations in ecosystems.

#### 4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

# 4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

#### 5:30 PM: Workshop Concludes