Computational Tools For System Microbiology

8:45 AM - 10:15 AM: Session 1: Computational Modeling of Microbial Systems

Hands-on workshop on computational modeling.
Protocols for developing computational models of microbial systems to predict their behavior and interactions.

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

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Bioinformatics Tools for System Microbiology

Practical session on bioinformatics.
Protocols for using bioinformatics tools to analyze omics data from microbial systems and generate biological insights.

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

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Network Analysis and Simulation in Microbial Systems

Hands-on training on network analysis.
Protocols for using network analysis and simulation tools to study microbial interactions and predict system-level behaviors.

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

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Machine Learning Applications in System Microbiology

Practical session on machine learning.
Protocols for applying machine learning algorithms to microbial systems to predict outcomes and generate new hypotheses.

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