



## NTHRYS WORKSHOPS

# Viral Phylodynamics And Epidemiology

### 8:45 AM - 10:15 AM: Session 1: Phylodynamics of Viral Pathogens

Hands-on workshop on viral phylodynamics.

Protocols for analyzing the evolution and spread of viral pathogens, including influenza, HIV, and SARS-CoV-2, using phylodynamic approaches.

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

Networking and refreshments.

### 10:30 AM - 12:00 PM: Session 2: Phylodynamics and Epidemiological Data Integration

Practical session on data integration.

Protocols for integrating epidemiological data (e.g., incidence rates, geographic data) with phylogenetic information to model disease spread.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Estimating Reproductive Numbers Using Phylodynamics**

Hands-on training on reproductive number estimation.  
Protocols for using phylodynamic models to estimate key epidemiological parameters like the basic reproductive number (R0).

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Real-Time Phylodynamics for Outbreak Surveillance**

Practical session on real-time analysis.  
Protocols for implementing real-time phylodynamic methods for outbreak tracking and forecasting in rapidly evolving viral epidemics.

### **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**