



## NTHRYS WORKSHOPS

# Bayesian Inference In Phylodynamics

### 8:45 AM - 10:15 AM: Session 1: Bayesian Phylogenetics and Model Selection

Hands-on workshop on Bayesian inference.  
Protocols for implementing Bayesian methods in phylodynamics using MCMC and other algorithms for estimating evolutionary parameters.

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

Networking and refreshments.

### 10:30 AM - 12:00 PM: Session 2: Bayesian Skyline Plots for Population Dynamics

Practical session on Bayesian skyline plots.  
Protocols for constructing Bayesian skyline plots to visualize population size changes over time in a phylodynamic framework.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Divergence Time Estimation Using Bayesian Methods**

Hands-on training on divergence time estimation.

Protocols for estimating the timing of evolutionary divergence events using Bayesian phylogenetic approaches.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Prior and Posterior Distributions in Bayesian Phylodynamics**

Practical session on priors and posteriors.

Protocols for choosing appropriate priors, computing posterior distributions, and interpreting the results in Bayesian phylodynamic models.

### **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**