

Thursday 28 - Friday 29 January 2021

Workshop overview

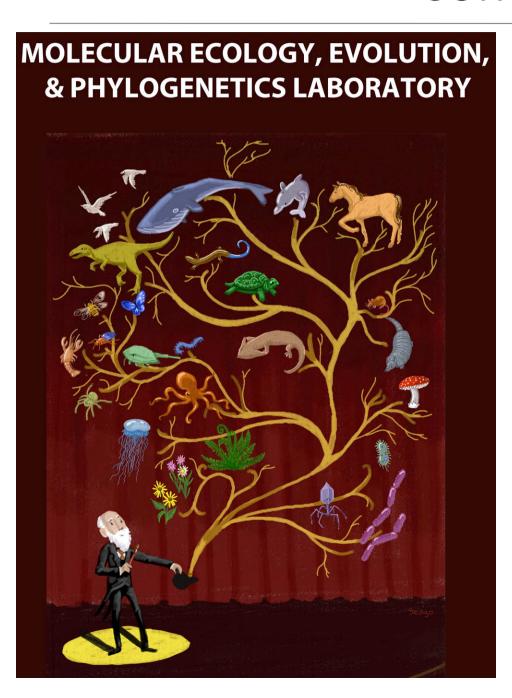
- Interpreting phylogenetic trees
- DNA sequence alignment
- Phylogenetic methods
- Bayesian phylogenetic analysis
- Molecular dating







Contributors



Matt Phillips Luana Lins

Rob Lanfear Andrew Ritchie

Matt Brandley Mark de Bruyn

Martyna Molak Zoe Patterson Ross

Nathan Lo Nik Mather

Sebastian Duchêne Cara Van Der Wal

Frank Jia Perry Beasley-Hall

Daej Arab Yi-Kai Tea

Charles Foster Fred Jaya

David Duchêne Minh Bui

Jun Tong Barbara Brito-Rodriguez

Programme – Day 1

```
12.00 - 12.10
              Welcome
12.10 - 13.00
              Lecture 1.1: Introduction to molecular phylogenetics
               - Break -
13.15 – 14.00 Lecture 1.2: Evolutionary models
14.00 – 14.30 Lecture 1.3: Phylogenetic data
               - Break -
14.45 – 15.30 Lecture 1.4: Phylogenetic methods
15.30 – 16.00 Seminar: Phylogenetic analysis with IQ-TREE
```

Programme – Day 2

```
12.00 - 13.00
               Lecture 2.1: Bayesian phylogenetic analysis
               - Break -
13.15 – 13.45 Lecture 2.2: Models and priors
13.45 – 14.30 Lecture 2.3: Molecular dating
               - Break -
14.45 - 15.15
              Lecture 2.4: Calibrating the molecular clock
15.15 – 15.45 Seminar: Phylodynamic analysis of viruses
15.45 - 16.00
              Questions
```

Workshop materials

- Slides and practical exercises on Github https://github.com/simon-ho/SydneyPhyloWorkshop
- Work through practical exercises in your own time
 - Install software on your own computer
 - Data files available on Github
 - Brief video introduction provided
 - Recording of walk-through provided
- Recordings of talks will be available after the workshop

Zoom webinar format

- Submit questions during webinar
- Questions are only visible to presenters
- Some questions will be answered after each webinar