



Thursday 28 – Friday 29 January 2021

Workshop overview

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



Contributors

MOLECULAR ECOLOGY, EVOLUTION, & PHYLOGENETICS LABORATORY



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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