



Thursday 26 – Friday 27 June 2025

We acknowledge the tradition of custodianship and law of the Country on which the University of Sydney campuses stand. We pay our respects to those who have cared and continue to care for Country.

Workshop overview

- Interpreting phylogenetic trees
- Molecular evolution and evolutionary models
- Phylogenetic data
- Phylogenetic methods
- Phylogenomics
- Molecular dating



Contributors

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Programme – Day 1

- 09.30 – 09.40 Welcome
- 09.40 – 10.30 **Lecture 1.1:** Introduction to molecular phylogenetics
- 10.30 – 11.00 **Practical 1.1:** Sequence alignment (*MEGA*)
- *Break* –
- 11.15 – 12.00 **Lecture 1.2:** Evolutionary models
- 12.00 – 12.30 **Lecture 1.3:** Phylogenetic data
- *Lunch break* –
- 13.15 – 14.00 **Lecture 1.4:** Phylogenetic methods
- 14.00 – 17.00 **Practical 1.2:** Model selection and phylogenetic analysis
 (*MEGA* and *IQ-TREE*)

Programme – Day 2

09.00 – 09.45 **Lecture 2.1:** Phylogenomics

09.45 – 11.00 **Practical 2.1:** Gene trees and species trees (*ASTRAL*)

– *Break* –

11.15 – 12.30 **Lecture 2.2:** Bayesian phylogenetics

– *Lunch break* –

13.15 – 13.45 **Lecture 2.3:** Models and priors

13.45 – 14.30 **Lecture 2.4:** Molecular dating

14.30 – 17.00 **Practical 2.2:** Bayesian phylogenetics and molecular dating (*BEAST*)

Things to note

- Facilities
- Breaks
- Wifi
- Software
- Support
- Questions

Workshop materials
[github.com/simon-ho/
SydneyPhyloWorkshop](https://github.com/simon-ho/SydneyPhyloWorkshop)