Sydney Phylogenetics Workshop

Thursday 27 – Friday 28 July 2023
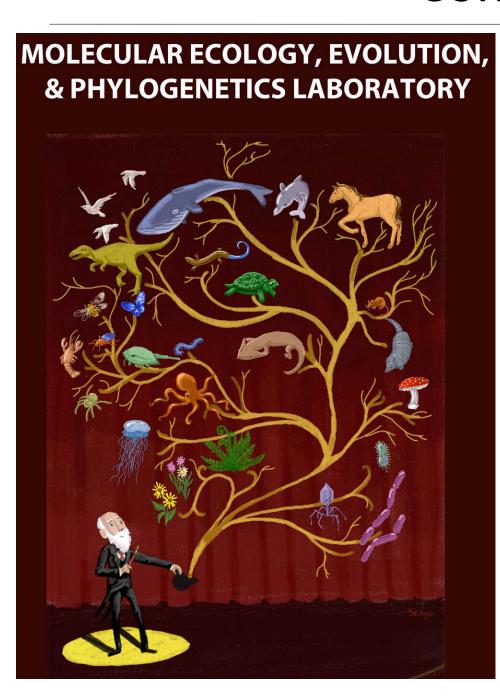
Workshop overview

- Interpreting phylogenetic trees

- Molecular evolution and evolutionary models

- Phylogenetic data

- Phylogenetic methods

- Molecular dating

Contributors

MOLECULAR ECOLOGY, EVOLUTION, & PHYLOGENETICS LABORATORY

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Programme – Day 1

09.40 – 10.30   **Lecture 1.1**: Introduction to molecular phylogenetics

10.30 – 11.00   **Practical 1.1a**: Sequence alignment in *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 – 14.30   **Lecture 1.5**: Phylogenomics

14.30 – 17.00   **Practical 1.1b**: Model selection and phylogenetics in *MEGA*

               Optional Practical 1.2: Phylogenomic analysis using *ASTRAL*

Programme – Day 2

09.30 – 10.30   **Lecture 2.1**: Phylogenetic analysis with *IQ-TREE*

10.30 – 11.00   **Practical 2.1**: *IQ-TREE* workshop tutorial

                       – Break –

11.15 – 12.30   **Practical 2.1**: *IQ-TREE* workshop tutorial (continued)

                       – Lunch break –

13.15 – 14.15   **Lecture 2.2**: Bayesian phylogenetics

14.20 – 15.00   **Lecture 2.3**: Molecular dating

15.00 – 17.00   **Practical 2.2**: Bayesian molecular dating using *BEAST*

Things to note

- Facilities

- Breaks

- Wifi

- Software

- Support

- Questions

Workshop materials
github.com/simon-ho/
SydneyPhyloWorkshop