

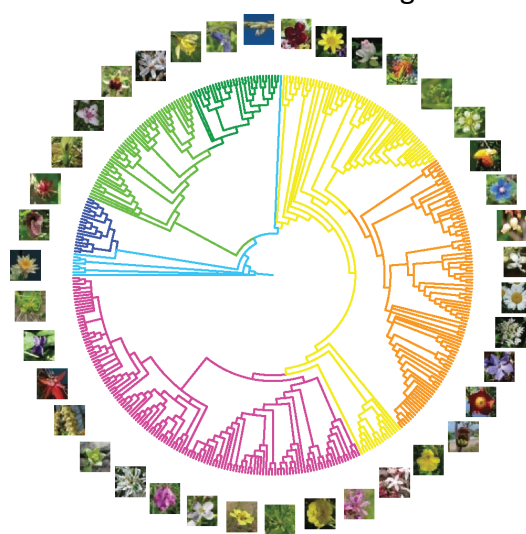
PhD Project: Evolutionary rates in flowering plants

We are looking for a highly motivated PhD student to undertake research on evolutionary rates in flowering plants. This project will be jointly supervised by Prof. Simon Ho (University of Sydney) and Dr Hervé Sauquet (Royal Botanic Garden Sydney).

Research project

The project will evaluate the patterns of morphological evolutionary rates in flowering plants (angiosperms) and the factors that have driven their changes. Key questions we want to address include rate heterogeneity through time and among lineages, as well as the relationship between morphological and molecular rates. This project will start with angiosperm-scale floral trait and genomic data sets produced by the supervisors, but will also provide an opportunity to focus on key lineages of the Australian flora. Through this project, the PhD candidate will develop valuable skills in plant biology, phylogenetics, and genomic data analysis. A solid background in phylogenetics and some experience in writing scripts are required. Good knowledge of flowering plant diversity is desirable, but not essential.

A smaller version of the project, focusing on a single lineage of Australian flowering plants, would also be suitable for an Honours student at the University of Sydney.



Project supervisors

Simon Ho jointly leads the Molecular Ecology, Evolution, and Phylogenetics research group in the School of Life and Environmental Sciences, University of Sydney. He is an ARC Future Fellow and oversees a research programme with a focus on evolutionary rates and molecular dating. Information about his research group can be found here:

<https://sydney.edu.au/science/biology/meep/>

Hervé Sauquet is a research scientist at the Royal Botanic Garden in Sydney, where he leads a research group focusing on diversification of angiosperms using phylogenetic and macroevolutionary approaches. He is the coordinator of the international eFLOWER project. Information about the group is available here: <http://www.sauquetlab.org/>

Applications

We seek a PhD candidate with an undergraduate degree in biology, molecular systematics, or computational biology. The candidate must be eligible for a Research Training Program Scholarship from the Australian Government. The University of Sydney accepts PhD applications throughout the year. To express your interest, please contact Simon Ho (simon.ho@sydney.edu.au) and Hervé Sauquet (Herve.Sauquet@rbgsyd.nsw.gov.au). For further information about studying at the University of Sydney, visit

<https://sydney.edu.au/study/how-to-apply/postgraduate-research.html>