



## PhD positions: Rapid evolutionary genomics in plants

Moi Exposito-Alonso Lab - [www.moilab.science](http://www.moilab.science)

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### Details

- \* Lab located in Valley Life Sciences Building, University of California Berkeley campus, CA 94720, USA.
- \* Annual guaranteed minimum salary \$52,000 / year, yearly rises, for 5 years (set by lab in direct admit program)
- \* This PhD is research focused. Requirement of teaching assistance is two classes.
- \* National and international applicants are welcome.
- \* Deadline date: Dec 2025 (exact date to be published [here](#))
- \* Starting date: Fall 2026

### Description

Our lab asks the fundamental question: **Are plants evolving to global climate change?** We tackle this from a core population evolutionary genomics angle, integrating molecular biology and macroecology approaches.

We aim to **recruit up to 3 highly motivated PhD students** into our lab with undergraduate backgrounds in plant biology, evolutionary biology, and/or genomics. Research experience is advantageous but not required. We are a highly interactive, interdisciplinary, and diverse lab. We target scientific excellence as well as building a positive community for growth. You can read our value statement here: [www.moilab.science/our-values](http://www.moilab.science/our-values).

We provide support and freedom for PhD students to design their thesis with input and help from their advisor and peers. As an example, some broad possible PhD projects topics be:

**How fast can rapid genetic adaptation be in plants?** This would be an experimental evolution and evolutionary genetics and bioinformatics project, which may require whole-genome sequencing and plant experiments, and popgen bioinformatics data analysis. (Example research network [www.GRENE-net.org](http://www.GRENE-net.org) and lab [publication](#)).

**Are native herb populations migrating and adapting?** This is an evolutionary ecology and ecological genomics project, which will require field experimental ecology work, common gardens in altitudinal California Sierras at [nature.berkeley.edu/oxford-facility](http://nature.berkeley.edu/oxford-facility) and University of California natural reserve system <https://ucnrs.org/>. Similar to these gardens: [moilab.science/climate-change-evo-experiments](http://moilab.science/climate-change-evo-experiments). (Example lab [publication](#)).

**Are species within plant communities in temperate or tropical ecosystems rapidly evolving?** This requires a field ecology background, statistical analyses, and/or genome assembly and population genomics work. We have tackled this bioinformatically using population genetics and biodiversity theory (Example [publication](#)) and we aim to expand with field work in California and Central America.

### Contact & application

Link to all Berkeley programs and how to apply → <https://grad.berkeley.edu/admissions/steps-to-apply/apply/>

Informal form for MOILAB pre-submission interests → <https://forms.gle/T1MN75iYn8MKdnBZA>