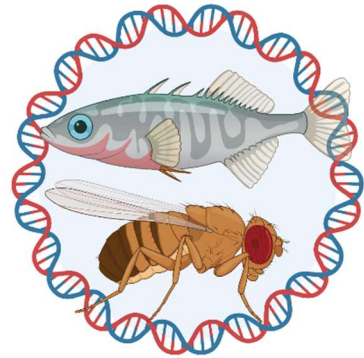


## Doctoral Students (Evolutionary Genetics/Genomics) Samuk Lab, Dept. of EEOB, UC Riverside

The Samuk Lab in the Department of Evolution, Ecology, and Organismal Biology at UC Riverside is seeking doctoral graduate students at the doctoral level to work on a variety of research topics. We are a collaborative evolutionary genetics laboratory focused on understanding the origin and diversity of life using modern genomics, with a special focus on the role of recombination in the evolutionary process. See <https://www.samuklab.com> for more about the lab.



We are currently recruiting for **Sept 2022** program start dates, with application deadlines in Dec 2021/January 2022 (see <https://eeob.ucr.edu/graduate-program/apply> and below for application details).

### About the graduate program

Doctoral students will join the UC Riverside Evolution, Ecology, and Organismal Graduate Program, and work with their faculty advisor (Dr. Kieran Samuk) to develop an individual thesis research project. These multi-part projects typically span 4-5 years and are usually closely aligned with the general research directions of the lab. Advancement through the program occurs via coursework (usually in the first year), and several examinations and checkpoints, ending with a thesis defense.

All positions are fully funded (i.e. tuition costs and a stipend) through a combination of lab and departmental funding, fellowships, and teaching assistantships.

### Primary ongoing research projects

Ph.D. students in the lab can work variety of existing research themes, or work with Dr. Samuk to develop a new one entirely. I would be happy to discuss new projects in the general subject areas of adaptation, speciation, or evolutionary genomics more broadly.

Some current ongoing projects in the lab include:

- Field and experimental studies of the origin and evolution of chromosomal inversions in *Drosophila* spp. using CRISPR/Cas9 technology

- Field and genomic studies of the evolution of recombination rate in natural populations of threepine sticklebacks.
- Experimental evolution of recombination modifiers in *Drosophila spp.*
- Computer simulations and theoretical studies aimed at understanding the evolution of recombination rate modifiers
- Theoretical and experimental studies of the utility of recombination modifiers in agricultural breeding

### General responsibilities for graduate students

- Completing coursework and program requirements
- Developing research thesis project ideas by reading the primary literature
- Carrying out research, which may include performing experiments and laboratory protocols, fieldwork, animal care, and statistical analyses
- Writing and publishing research papers
- Presenting research at conferences and seminars
- Attending and participating in weekly lab meetings
- Assisting in mentoring undergraduate students

During your time in the lab you will have the opportunity to:

- Be trained in how to perform scientific research
- Gain experience working at the intersection of genetics and evolution
- Learn a wide variety of skills, including molecular genetics, statistics, and bioinformatics
- Get experience working with the *Drosophila* and/or stickleback model systems
- Work as part of a supportive and collaborative team
- Develop your grant writing and mentorship skills
- Explore career options (lab is friendly to non-academic trajectories!)

### Requirements for admission

- Required: Admissions to the EEOB Graduate Program requires a B.A. or B.S. degree in Biology or a related discipline. Majors in other scientific fields are acceptable if basic preparation in biology, chemistry (organic and inorganic), physics, and mathematics are deemed adequate.
- A GRE test result is not a requirement for application or admission to the program.
- The following would be beneficial to an application, but are not required:
  - Experience working in a laboratory environment
  - Experience with computer programming
  - Experience working in the field, or in remote conditions
  - A US driver's license valid in the state of California
- More information on program requirements are available here: <https://eeob.ucr.edu/graduate-program/apply>

### Compensation & Benefits

PhD Students receive an individualized compensation package that includes tuition, a stipend, and a student healthcare plan. These items are funded via a combination of department, lab and institutional funds, including fellowships and teaching assistantships.

#### How to apply

- Send an updated resume/CV, a cover email, and contact information for three references to [ksamuk@ucr.edu](mailto:ksamuk@ucr.edu)
- In your email, briefly outline why you are interested in joining the lab, your background including relevant research experience, your general career goals, and some specifics about the projects you are interested in working on.