



VECTOR GENETICS LABORATORY

UNDERGRADUATE RESEARCH PROGRAM

2016-2017

The Vector Genetics Laboratory (VGL) at UC Davis deals with research and training in the areas of population & molecular genetics, genomics and bioinformatics of insect vectors of human and animal disease. We have developed a program aimed at expanding knowledge that may be applied to improving control of vectorborne diseases and that addresses problems of interest in the field of evolutionary genetics. The Laboratory is directed by Drs. Gregory C. Lanzaro and Yoosook Lee in the Dept. of Pathology, Microbiology and Immunology of the School of Veterinary Medicine and Dr. Anthony Cornel in the Dept. of Entomology and Nematology at UC Davis.

The VGL has a history of hosting well qualified undergraduate students who are interested in pursuing a career in biological/biomedical research. The lab offers students the opportunity of gaining experience working in an active research laboratory, to participate as author on papers in peer-reviewed scientific journals and most importantly to gain hands-on experience working with cutting edge methods in molecular biology. We are committed to providing qualified undergraduates students an excellent research experience and we expect a similarly high level of commitment from our students.

WHAT YOU WILL LEARN:

- Laboratory standards and practices for a working genetics laboratory
- A working knowledge of DNA extraction and PCR methods
- An appreciation for the importance of mosquito research with respect to public health, ecology and genetics
- Computational and bioinformatics tools for analysis of genomics data
- Basic experimental design
- The opportunity to conduct an experiment from design to write-up for publication

REQUIREMENTS:

- Have an interest in population genetics, genomics, evolutionary ecology and/or medical entomology
- Must have at least two 3 hour blocks of time per week [Mon. thru Fri. between 9:00AM & 5:30PM] to be in the laboratory, however, more time may be required to complete individual research projects.
- Must attend one weekly two hour laboratory meetings per month (lab meetings are currently held every Wednesday from 10:00AM-12:00PM). You will be expected to make periodic oral presentations describing your work. Lab meeting attendance records will be reflected in your performance review.
- Must be willing to commit to working for a minimum of three consecutive quarters
- Submit a work schedule at the beginning of each quarter. You are expected to be punctual. If for some reason you will be late or absent from work at your scheduled time you need to contact your supervisor at least 48 hours in advance. Repeated tardiness/absences will result in dismissal. Schedules will be flexible during finals week, otherwise you will be expected to budget your time to manage both your coursework and commitments to the VGL.
- Must have a meeting between mentor(s) and students once every quarter for performance and progress review and discussion.

CONTACT US:

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