

Graduate Student Employment Opportunity
Paolini Lab
Laboratory Technician

The Paolini lab (currently housed in LS-408B, 410 and 359B) is seeking a masters level Cell & Molecular Biology graduate student to serve as a part-time laboratory technician.

Duties of this technician include the following:

The student is expected to conduct and coordinate the training of NIH Bridges to the Future student trainees during a six week intensive immersion course in wet-bench laboratory methods, and serve during the academic year to maintain laboratory operations and to help guide students in their laboratory experimental work. Bridges trainees are sophomore level community college students expecting to transfer to SDSU or other 4 year university.

The student is expected to assist in laboratory operations for an average of 12 to 15 hours/week during the academic year in addition to the full-time effort during the Bridges program. (The Bridges 6 week program is actually in session only for 4 hours/day, 4 days/week for 6 weeks; the remaining time is expected to be used for preparation of lab activities.)

The following technical skills are required:

(We don't expect any one person to be familiar with all of these; some techniques can be learned during the academic year.)

1. Ability to read technical research papers and distill essential details from those papers relevant to the lab's research projects.
2. Develop familiarity with the literature in cardiac cell physiology, pharmacology and molecular biology.
3. Be familiar with RNA extraction procedures required for both quantitative RT-PCR and gene chip microarray experiments.
4. Demonstrate good written communication skills (e.g. scientific writing).
5. Mastery of several techniques in cell cardiology, including isolation of live isolated adult rat cardiac myocytes; and neonatal rat myocytes.
6. Be familiar with common laboratory apparatus items including balances, pH meters, ultracold freezer, centrifuges, incubators, laminar flow hood and UV-vis spectrophotometer.
7. Be familiar with various more specialized laboratory instruments, including a dual wavelength microscope fluorimeter system, luminometer, electroporator, ELISA, and RT-PCR Prism system.
8. Familiarity with various data acquisition systems for recording and analyzing cardiocyte kinetics and calcium fluorescent-dye transient data.
9. Familiarity with general laboratory safety procedures.
10. Aptitude for solving problems in experiment design that can arise unpredictably during laboratory research.
11. Assist student trainees in the laboratory with mastery of good laboratory practice and in techniques such as microscopy, making solutions, and preparing plasmids.
12. When appropriate, lecture to small groups of student laboratory interns about laboratory procedures.
13. Familiarity with the various laboratory computer systems (PC, but Linux and Macintosh experience is useful) and common software packages, including Excel, PowerPoint and Word.
14. Familiarity with bioinformatics software is useful, including GenMapp, Gene Ontology, R, and Bioconductor packages.

Others currently in the laboratory include a postdoctoral fellow, two PhD students, two MS students and three undergraduates. The appointment carries a standard master's level stipend and is funded on the NIH Bridges grant, guaranteed for the next five years.

If interested, please contact Paolini at paul@sdsu.edu or at 594-4532 (lab) or 619-203-6367 (cell).

Visit the Paolini Lab: <http://www.cardiomyocyte.sdsu.edu/index.php>