# San Jose State University Research Foundation

## Position: Research Lead, Biology Department

<table>
<thead>
<tr>
<th>DEPARTMENT:</th>
<th>Biology Department</th>
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</thead>
<tbody>
<tr>
<td>IMMEDIATE SUPERVISOR:</td>
<td>Project Director</td>
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<tr>
<td>POSTING DATE:</td>
<td>January 2, 2019</td>
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<tr>
<td>CLOSING DATE:</td>
<td>January 8, 2019</td>
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</tbody>
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| SALARY:              | Up to $26 per hour, DOQ/E  
                       | 50% during academic year, and 100% during  
                       | summer and winter  
                       | Part-time, Benefited position |
| EXEMPT STATUS:       | Non-Exempt (hourly) |

## General Nature of Position:

The Department of Biological Sciences at San Jose State University is consider a leader in the education of a highly trained and diverse scientific workforce. Our mission is to provide a dynamic educational experience by engaging students in hands-on, inquiry-based learning activities at the bench and in the field. We make substantial contributions to the scientific community through our research efforts and that of our students.

This position acts a Laboratory Lead in the Biology Department assigned to the Department of Biological Sciences at San Jose State University. Responsible for overseeing day to day laboratory operations and conduct original research.

## Essential Duties & Responsibilities:

1. Conduct original research to understand the molecular mechanisms that mediate the affects of sensory activity on synapses in *C. elegans* between PHB sensory neurons and AVA interneurons.

2. Train, direct, assign, oversee, and assist undergraduate and Master’s students in microscopy, image analysis, molecular biology, *C. elegans* genetics, microinjection, PHB-mediated chemosensory behavioral testing, PHB-AVA NLG-1 GRASP, appropriate statistical analysis, and other lab techniques and protocols, and adherence to safety considerations.

3. Develop and maintain lab schedules for group meetings, lab maintenance chores, order lab and related supplies, and ensure adequate stocks are always on hand.

4. Other duties as assigned.
INTERPERSONAL CONTACTS: Frequently interacts with students, faculty and staff at all levels, as well as vendors, and external collaborators.

QUALIFICATIONS:

1) Education and Experience
   BS degree in Biology with a concentration in Molecular Biology or equivalent required.
   At least 1 year of previous experience working in a C. elegans neural development academic research lab with undergraduates, M.S. students, and research associates also required.

2) Knowledge, Skills and Abilities required
   a) Full proficiency with fluorescent compound microscopy and confocal microscopy of C. elegans synapses.
   b) Full proficiency in synaptic image analysis, including using NIH ImageJ software to measure the intensity of fluorescent synaptic markers.
   c) Full proficiency in molecular biology techniques, including but not limited to cloning and generation of plasmids for injection into C. elegans, PCR and DNA extraction.
   d) Full proficiency in completing complex C. elegans genetic crosses and analyses.
   e) Proficiency in C. elegans chemotaxis behavioral testing and analysis, preferably in PHB-mediated chemosensation assays.
   f) Proficiency in R statistical software and ability to use it to analyze non-normally distributed data.
   g) Full proficiency in the use of computer equipment and software, including Mac operating system, Zeiss Efficiency Navigation software, Zeiss Axiovision, Microsoft Office, Adobe Photoshop, and R Statistical Software.
   h) Strong organizational and planning skills.
   i) Knowledge of and ability to operate essential laboratory equipment for imaging, genetics, microinjection and molecular biology techniques.
   j) Able to follow written laboratory procedures.
   k) Ability to prepare and give clear and concise talks summarizing research progress.
   l) Solid interpersonal skills. Must be able to establish and maintain cooperative relationships with those contacted in the course of the work. Must be able to multi-task and to work independently; organize and set priorities to meet deadlines. Must apply good, consistent judgment, including solid problem-solving skills.

3) Physical Requirements
   a) Must be able to sit or stand to operate a PC, including mouse and keyboard.
   b) Must be able to walk or sit for continuous periods throughout the day, with appropriate rest periods taken.

4) Complexity of Duties
   Works on a variety of projects, utilizing many different laboratory methods. Trains, oversees, and directs students in a variety of lab tasks. Interacts with vendors, faculty, and other staff to ensure the smooth day-to-day function of an active research laboratory.

SUPERVISORY RESPONSIBILITIES: The Research Lead will provide day-to-day direction, assignments, guidance, advice and training to a team of undergraduate and Masters’-level student researchers and research associates in the field of neural development, using techniques including imaging, behavioral analysis, microinjection, genetics and molecular biology techniques.
This position description intends to describe the general nature and level of work being performed by people assigned to this job. It is not intended to include all duties and responsibilities. The order in which duties and responsibilities are listed is not significant.

5) Benefits

The comprehensive benefit package includes:

- a) Nine health insurance plans to choose from
- b) Free dental and vision for employee and eligible dependents
- c) Paid Federal & State Holidays
- d) Retirement Plan: 403 (b) employee contribution plan component and a 403 (b) employer contribution component
- e) Vacation and separate sick plans
- f) Employee Discounts
- g) Paid Training and Conferences

APPLICATION PROCEDURE

To apply for this position, an applicant must submit a formal application for employment, as well as a resume and a cover letter. The applicant may do this via e-mail or by regular mail. The formal employment application is located at http://www.sjsu.edu/researchfoundation/open/Employment%20Application%20Form_new.pdf

It may also be obtained from the Research Foundation through its website at http://www.sjsu.edu/researchfoundation/open/index.html.

An applicant may also apply in person by visiting the Research Foundation, located at 210 North 4th Street, 4th Floor, San Jose, CA (corner of St. James and North 4th Streets). Please address your formal application, your resume and your letter of interest directly to:

San Jose State University Research Foundation
Attn: HR/Job Code **BD RL**
210 North 4th Street
San Jose, CA 95112
E-mail: foundation-jobs@sjsu.edu

Reasonable Accommodation:

The San Jose State Research Foundation is committed to providing access, equal opportunity and reasonable accommodation for individuals with physical or mental disabilities in the employment, recruitment, examination, hiring and interviewing processes. If you are a job seeker with a physical or mental disability and require a reasonable accommodation to search, apply, or interview for a job opening or otherwise need a reasonable accommodation during the application and hiring process, please contact us at foundation-jobs@sjsu.edu. In the email message, please indicate your full name, phone number and the type of assistance required. You must not reveal the underlying medical reason for your needed reasonable accommodation or otherwise disclose confidential medical information. You may also call (408) 924-1400 from 8:00am to 5:00pm (PST), Monday through Friday, excluding holidays, to get assistance.

The Research Foundation provides excellent benefits package to benefited employees. Please visit http://www.sjsu.edu/researchfoundation/humanresources/benefits/index.html to get more details.

Research Foundation employment is separate and distinct from San Jose State University or State of California employment. Research Foundation employees are not employees of either SJSU or of the state of California.
The San Jose State University Research Foundation (SJSURF) is a non-profit auxiliary of San Jose State University. SJSURF is totally self supported. The majority of the organization’s funding comes from the federal government, and other public and private entities. With annual revenues totaling over $65 million, programs managed through SJSURF cover a rich diversity of applied research, public services, and educational related activities.

SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION is an Equal Opportunity Employer and does not discriminate on the basis of race, color, creed, gender, religion, marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition, sex, genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

The SJSURF has implemented California State University Executive Order 1083 (http://www.calstate.edu/eo/EO-1083.pdf). By policy, all SJSURF employees are mandated reporters for suspected child abuse or neglect and are expected to undergo formal training in accordance with the directives of the Executive Order.

The SJSURF has also implemented California State University Policy Memorandum HR 2015 – 08 (http://www.calstate.edu/HRAdm/pdf2015/HR2015-08.pdf).

A background check (including a criminal records check) must be completed satisfactorily before any candidate can be offered a position with the SJSURF. Failure to satisfactorily complete the background check may affect the application status of applicants or continued employment of current SJSURF employees who apply for the position.