

San José State University Research Foundation

Position: Graduate Student Research Assistant

DEPARTMENT: Geology Department

IMMEDIATE SUPERVISOR: Dr. Carlie Pietsch

POSTING DATE: September 21, 2021

CLOSING DATE: Open Until Filled

SALARY: \$20.00 per hour

EXEMPT STATUS: Part-time (50% FTE), up to 20 hours per week during the semester, up to 40 hours during intersession if needed, Non-Exempt, Non-Benefited

GENERAL NATURE OF POSITION

The MS student will work in an active research lab and will be responsible for detail-oriented preparation, preservation, and curation of delicate fossil material from rock samples representing the Cretaceous-Paleogene mass extinction event. Students will take a leading role in taxonomic and ecological data analysis using the statistical programming software R. Students will be mentored through the publication and presentation of the study results in addition to career mentoring. Paid training will be provided for the following essential functions and will take place throughout the first month of the position.

The aim of this project is to study previously unexamined sections spanning the Cretaceous-Paleogene mass extinction in order to apply new quantitative techniques to investigate the impact of the K/Pg extinction on functional ecology of survivors and the body size and energetics of recovery assemblages.

ESSENTIAL DUTIES & RESPONSIBILITIES

1. Fossil sample preparation including extracting fossilized remains from rock using hand-held manual tools and power tools and stabilization of fossilized remains with archival quality adhesives.
2. Accurate and precise identification of fossilized remains using a binocular microscope and provided reference guides.
3. Professional quality specimen photography using a microscope-compatible digital camera.
4. Careful curation and storage of fossilized remains including accurate specimen labels and appropriate containment as well as maintaining and updating electronic records including specimen identification, images, and measurements.
5. Lab maintenance including following COVID safety protocols.
6. Taxonomic and ecological data analysis using packages in the statistical software R.
7. Presentation of preliminary results at regional and national scientific meetings.
8. Preparation of a MS thesis.
9. Interest and willingness to teach general education level laboratory courses.

10. Option to participate in additional field collection of fossil material and the development of virtual field experiences.

Previous knowledge or experience in fossil preparation is preferred but not required. On the job training will be provided. Previous experience in R or other programming (MATLAB) or other statistical training is preferred but not required.

INTERPERSONAL CONTACTS

- Reports to Dr. Carlie Pietsch.
 - Participation in twice monthly lab meetings with additional SJSU Paleo Lab members.
 - Participation in reading groups on thesis topic.
-

SUPERVISORY RESPONSIBILITIES

- Potential to supervise undergraduate lab assistants.
-

QUALIFICATIONS

Education and Experience

- Bachelor's in Physical Sciences such as Geology, Biology, Chemistry, Meteorology, or Environmental Studies, or a related field with a cumulative GPA above 2.5.
- Previous scientific research experience is preferred.
- GRE is not required.

Knowledge, Skills, Abilities

To perform this job successfully, this individual must be able to perform each essential duty and responsibility satisfactorily.

- This individual must be patient and detail-oriented when working with delicate scientific research samples.
- Must maintain open communication with position supervisor, integrity, consistency, and reliability at all times.
- Strong time and project management skills required.
- Experience with Microsoft Windows 7/10 required.
- Microsoft Office, Google Workspace required.
- Familiarity with operating a binocular microscope preferred.
- Experience in the programming language R and strong quantitative skills preferred.
- Experience in digital photography preferred.

Physical Requirements

- Must be able to work at least 10 hours/week, with a minimum of 2 hours per shift.
- Shifts may take place between the hours of Mon-Fri 8:00AM – 8:00PM.
- This job operates in a lab environment and also routinely uses standard office equipment.
- Must be able to operate a computer, including a keyboard and mouse.
- Must be able to occasionally lift or carry rock samples, office, or technology products or supplies, up to 40 pounds.

Complexity of Duties

- Works under general supervision on specific projects.
- Exercises judgment within defined procedures and practices to determine appropriate actions.
- Able to be resourceful and to escalate situations or issues when and as appropriate.

NOTE: 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.

COVID-19 VACCINATION POLICY

As required by the CSU Vaccination Policy, all new hires must be fully vaccinated against COVID-19 starting on September 30, 2021. Fully vaccinated means it has been 14 days after the second dose of the Pfizer or Moderna vaccine has been given, or it has been 14 days after the one dose of the J&J vaccine has been given. Proof of being fully vaccinated does not need to be disclosed until a job offer has been made, and proof must be submitted after the acceptance of the job offer. New hires may request a reasonable accommodation of the COVID-19 vaccination requirement based on medical or religious reasons. New hires must submit their request for an accommodation form after they accept the job offer, and before their scheduled start date. The reasonable accommodation provided to the employee, if any, will depend on the employee's job and the applicable facts, but it may include weekly COVID-19 testing. New hires who do not submit, before their scheduled start date, proof of being fully vaccinated or a request for reasonable accommodation will have their job offer revoked.

APPLICATION PROCEDURE

- Apply to the Cal State system through CSU Apply by Oct 1- instructions available here: <https://www.sjsu.edu/admissions/graduate/admission-requirements/index.php>
- Apply to the Geology Department MS program by Oct 1 following the instructions available here: <https://www.sjsu.edu/geology/program/graduate/gradapps/index.html>
 - Completed application questionnaire available at https://www.sjsu.edu/geology/docs/graduate_application_form.pdf
 - 1 page resume highlighting coursework, volunteer work, or job experience that directly relates to the essential functions, knowledge skills and abilities, essential skills, and preferred skills.
 - Copies of all transcripts by the October 20th document deadline
 - Three letters of recommendation using the form available here: https://www.sjsu.edu/geology/docs/letter_of_recommendation.pdf
 - Recommendation release form: https://www.sjsu.edu/geology/docs/recommendation_release_form.pdf
 - All Geology Dept specific documents should be submitted to: grad-apps-geology@sjsu.edu

Only complete applications will be considered.

Deadline: Application deadline October 1st, 2021. Document Deadline Oct 20th, 2021.

REASONABLE ACCOMMODATION

The San José State University Research Foundation (SJSURF) 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.

ABOUT THE SJSU RESEARCH FOUNDATION

SJSURF employment is separate and distinct from San José State University or state of California employment. SJSURF employees are not employees of SJSU or of the state of California.

SJSURF is a non-profit auxiliary of San José 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.

SJSURF 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.
