



PLANT BIOLOGY

Postdoc Position

POSITION OVERVIEW

Salary range: The posted UC salary scales (<https://www.ucop.edu/academic-personnel-programs/compensation/index.html>) set the minimum pay determined by rank and/or step at appointment. See Table 23: Postdoctoral Scholar-Employee, Postdoctoral Scholar-Fellow, Postdoctoral Scholar-Paid Direct, Fiscal Year (<https://www.ucop.edu/academic-personnel-programs/files/2024-25/oct-2024-scales/t23.pdf>). The salary for this position is \$66,737.

APPLICATION WINDOW

Open date: Jan 6th, 2025

Most recent review date: Feb, 15th, 2025 at 11:59pm (Pacific Time)

Applications received after this date will be reviewed by the search committee if the position has not yet been filled.

Final date: April 30th, 2025 at 11:59pm (Pacific Time)

Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

The laboratory of Dr. Xiaosa (Jack) Xu in the Department of Plant Biology at the University of California, Davis, wishes to employ a 100%-time Postdoc who will contribute to plant developmental genetics and/or single-cell genomics research. The candidate will work closely with the PI and other lab members to design and implement a variety of cutting-edge projects focused on plant development and evolution, single-cell genomics, genome editing, and genetics.

a. **Research (90%):** The Postdoc will work closely with the PI and lab members, as well as collaborators at UC Davis and other institutions, to conduct single-cell genomics and spatial transcriptomics experiments, perform data analysis, and validate findings through genome editing. The candidate will have the opportunity to be involved in: 1) Conducting single-cell genomics and spatial transcriptomics experiments by extracting DNA and RNA from single cells and plant tissue sections, and preparing libraries for next-generation sequencing; 2) Performing cutting-edge single-cell genomics and spatial transcriptomics data analysis using packages in Linux, R, Python, etc; 3) Genotyping plant mutations and conducting molecular, cell biology, and biochemistry experiments, such as building CRISPR gene-editing constructs, imaging fluorescent

plants, extracting proteins from bacteria and plants, and performing immunoprecipitation and western blot analysis for proteins of interest; 4) Propagating and caring for plants in the field, greenhouse, and growth chambers.

Professional Competence and Activities (5%): The candidate is expected to work semi-independently with oversight from the principal investigator. The candidate will assist in preparing data figures, tables, and summaries of results for progress reports to the funding agency. The candidate will keep a detailed laboratory notebook or digital notebook, including experimental methods and results. The candidate will write research results for publication by drafting sections of the manuscript and assisting with editing the full manuscript. The candidate will attend seminars on topics related to fields of interest, participate and present in lab meetings and journal clubs, and engage in scientific discussions with collaborators. The candidate will present research findings at suitable external scientific meetings, either on campus or elsewhere, depending on the availability of funds. Additionally, the candidate may participate in training programs to enhance knowledge and skills, depending on their long-term goals.

University and Public Service (5%): The Postdoc will actively contribute to lab activities through meetings and unit/campus presentations, participate in public outreach activities, and assist with mentoring graduate and undergraduate students or student interns.

QUALIFICATIONS

Basic qualifications (required at time of application)

- Ph.D. in the area of Biology, Plant Biology, Computational Biology, Developmental Biology, Genetics, Evolution, Molecular and Cell Biology, or Systems Biology (*Applicants do not need to have their PhD degree at the time of application but must have it before starting the position*).
- Efficient utilization of computer clusters and programming experience with Linux, R, Python, or similar tools to analyze genomics data using bioinformatics packages and databases.
- Experience in molecular protocols, such as DNA or RNA focused extractions, PCR, genotyping.
- Experience in molecular cloning and/or CRISPR genome editing, such as plasmid preps, making constructs.
- Excellent written and verbal communication skills.
- Highly motivated and can manage multiple projects.

Preferred qualifications (other preferred, but not required, qualifications for the position)

- Experience in building NGS libraries.
- Experience in single-cell genomics

- Experience in designing, maintaining, and harvesting large-scale experiments in fields, greenhouses, and chambers.
- Experience in imaging with microscopies such as DIC and confocal.
- Experience in protein expression and analysis.
- Experience in protein plant transformation and/or tissue culture.

APPLICATION REQUIREMENTS

Document requirements

- Curriculum Vitae
- Cover Letter
- Statement of Research
- Statement of Contributions to Diversity, Equity, and Inclusion - Contributions to diversity, equity, and inclusion documented in the application file will be used to evaluate applicants. Visit <https://academicaffairs.ucdavis.edu/faculty-equity-and-inclusion> for guidelines about writing a statement and why one is requested.
- List of Publications

Reference requirements

- 3 letters of references.

Apply link:

Help contact:

CAMPUS INFORMATION

UC Davis is a smoke and tobacco-free campus (<http://breathefree.ucdavis.edu/>).

We are an Affirmative Action/Equal Opportunity employer, and particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals' with disabilities, veterans, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community. For the complete University of California nondiscrimination and affirmative action policy see: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>

Under Federal law, the University of California may employ only individuals who are legally able to work in the United States as established by providing documents as specified in the Immigration Reform and Control Act of 1986. Certain UC Davis positions funded by federal contracts or sub-contracts require the selected candidate to pass an E-Verify check. More information is available at: <http://www.uscis.gov/e-verify>

The University of California, Davis (UC Davis) is committed to inclusive excellence by advancing equity, diversity and inclusion in all that we do. UC Davis celebrates the multi-cultural diversity of its community by creating a welcoming and inclusive environment demonstrated through a variety of

resources and programs available to academics, staff, and students. Diversity, equity, inclusion, and belonging are core values of UC Davis that are embedded within our [Principles of Community](#) and are tied with how to best serve our student population. Our excellence in research, teaching, and service can best be fully realized by members of our academic community who share our commitment to these values, which are included in our [Diversity and Inclusion Strategic Vision](#), our strategic plan: [“To Boldly Go,”](#) our Principles of Community, the [Office of Academic Affairs’ Mission Statement](#), and the [UC Board of Regents Policy 4400: Policy on University of California Diversity Statement](#). UC Davis is making important progress towards our goal of achieving federal designation as a [Hispanic-Serving Institution and an Asian American, Native American, and Pacific Islander-Serving Institution](#). The [Office of Diversity, Equity, and Inclusion](#) offers a plethora of resources on their website, and the [Office of Health Equity, Diversity, and Inclusion \(HEDI\)](#) has outlined similar goals in their Anti-Racism and DEI Action Plan.” There are a plethora of links available on the [About Us](#) webpage where you can learn more about our Administration, Diversity and Inclusion, Rankings, Locations, Native American Land Acknowledgement, Sustainability, Visiting UC Davis, UC Davis Health, and Campus Safety.

The university is consistently ranked among the top institutions in the world for campus sustainability practices by the [UI Green Metric World University Rankings](#). UC Davis is focused on achieving net-zero greenhouse gas emissions and repeatedly shown its [commitment to preserving a healthy and sustainable environment for generations to come](#).

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.



JOB LOCATION: Davis, CA