

The Department of Plant Biology at the University of California, Davis invites applications for a Junior Specialist (100%) in biochemistry and structural biology to join the laboratory of Dr. María Maldonado. The special focus of this position entails developing protocols to isolate mitochondria and purify respiratory complexes from photosynthetic organisms and carrying out biochemical and structural (cryoEM) characterizations.

POSITION DESCRIPTION:

Research (90%): This position requires creative contributions to an active research program to investigate the bioenergetic organelles of photosynthetic organisms. The candidate will work with and lead a pool of undergraduate students to isolate mitochondria from the organism. The candidate will perform biochemical, biophysical and molecular assays to characterize the mitochondrial fractions and the function of respiratory complexes. With the purified complexes, the candidate will participate in single-particle cryogenic electron microscopy (cryoEM) experiments to obtain the high-resolution structures of the complexes. The candidate will also be responsible for the recombinant expression and chromatographic purification of enzymes, as well as other supporting protocols needed for the mitochondrial purifications. The candidate will help to determine research goals for defined projects in regular consultation with the Principal Investigator (PI) and a senior postdoctoral researcher. The candidate will assist in designing and conducting research projects, including the selection of appropriate approaches, and to document and organize the results in preparation of scientific publications, presentations or grant proposals. The candidate will summarize data, prepare figures and assist in writing manuscripts for publication and grant proposals. The candidate will be responsible for ordering lab supplies and maintaining equipment related to the projects, as well as other lab management duties as needed. The candidate will present their research and discuss relevant scientific literature in weekly laboratory meetings.

Professional Competence & Activity (5%): The candidate will be expected to participate in and actively contribute to the weekly lab meeting, as well as monthly group meetings for cryoEM and plant biochemistry. The candidate will present at these forums an average of 3 times a year.

University and Public Service (5%): The candidate will aid in the training and mentoring of undergraduate students. The candidate will engage in public outreach activities that include presenting scientific research results to students and the general public.

BASIC QUALIFICATIONS:

Qualified applicants must have a Bachelor of Science degree and laboratory experience in biochemistry or structural, molecular or cellular biology or related fields, including experience presenting research data and analyzing/discussing literature. Candidate must be able to keep a complete and detailed laboratory notebook of experimental procedures and data and to archive and document reagents and data for publications, grant proposals, and/or presentations. Maturity, proactivity, dependability, and solid organizational and communication skills are a must. The candidate will have strong interpersonal, communication and decision-making skills and the ability to work well both independently and as a part of a team.

PREFERRED QUALIFICATIONS:

Prior experience in team management and training in a laboratory setting. Previous experience in biochemistry, recombinant expression, organelle isolation, enzyme kinetics. Experience in CryoEM or other structural biology methods. Experience writing funding proposals (e.g., fellowship applications) or manuscripts (e.g., thesis, review article).

TO APPLY: Qualified applicants should upload a cover letter, a research statement describing their research experience and skills and a curriculum vitae. Documents must be submitted as PDF files. Applicants should also provide contact information for two references. Apply via this URL: <https://recruit.ucdavis.edu/apply/JPF06498>

QUESTIONS: Please direct questions to Dr. María Maldonado, mmaldo@ucdavis.edu.

- The University of California, Davis commits to inclusion excellence by advancing equity, diversity and inclusion in all that we do. 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.
- 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 <http://www.uscis.gov/e-verify>.
- UC Davis is a smoke & tobacco-free campus (<http://breathefree.ucdavis.edu/>). If you need accommodation due to a disability, please contact the recruiting department.