

Postdoctoral Scholar Opportunities in Applied Food Safety Microbiology
Department of Food Science and Technology, UC Davis
Available November 1, 2021

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We are seeking highly motivated candidates to fill two postdoctoral scholar positions that focus on improving low-moisture food safety systems by characterizing and modeling foodborne pathogen persistence, propagation, transfer, survival, and inactivation in low-moisture food systems. Specific projects include 1) filling key data gaps for characterizing and managing cross-contamination and recontamination risks including identification of surface and surface conditions that promote transfer of microorganisms among food contact surfaces and food products using fresh produce packing facilities (e.g., onions and peaches) and tree nut processing environments (e.g., almonds) as model systems. The data generated will be used to develop quantitative risk models to evaluate cross-contamination risks and hygienic design and management for diverse food contact surfaces.

Candidates should be able to design microbiological studies that include culturing, detection, and isolation of foodborne pathogens (e.g., *Salmonella*, *Listeria monocytogenes*, and Shiga-toxin-producing *Escherichia coli*) and be willing to participate in field sampling activities. Projects will incorporate a range of experimental, informatics, and theoretical/computational approaches. Candidates will be expected to communicate results through abstracts and presentations and publications in peer-reviewed journals. Opportunities to develop grantsmanship skills will be provided along with engagement in undergraduate education and extension education. Supervision and interaction with graduate and undergraduate students are expected.

In addition to these primary projects, the postdoctoral scholars will also have opportunities to contribute to ongoing research projects in the areas of microbial biosensing for diagnostic applications and photo activated biomaterials for antimicrobial applications as well as unique opportunities to engage in transdisciplinary research, cross-institutional collaborations and exchanges, and direct engagement with a Stakeholder Advisory Group and broader network of project partners (lowmoisture.msu.edu).

The positions are open November 1, 2021 and will be filled as soon thereafter as an acceptable applicant is available. Compensation is commensurate with the education, experience, and qualifications of the selected applicant. Applicants should have a Ph. D degree, a strong publication record and excellent oral and written communication skills. Interested candidates should send 1) a cover letter that states applicant's interests in the position and qualifications, 2) a CV, 3) contact information for three references, 4) one sample research paper to L. J. Harris (ljharris@ucdavis.edu) or N. Nitin (nnitin@ucdavis.edu).

Information on UC Davis postdoctoral scholar salaries and benefits can be found here:
<https://grad.ucdavis.edu/postdoctoral-scholar-appointment-and-promotion>