DEPARTMENT OF ENVIRONMENTAL SCIENCES - 084
2258 GEOLOGY BUILDING
RIVERSIDE, CALIFORNIA 92521

Assistant Research Agronomist

The Department of Environmental Sciences at the University of California, Riverside invites applications for an Assistant Research Agronomist position (Professional Research Series). The selected candidate will conduct Digital Agriculture research in collaboration with the USDA-ARS Salinity Laboratory. Digital Agriculture (DA) is the multidisciplinary use of electronic data acquisition technologies, high-performance computing, and advanced data analytics to improve farming and food production. The selected candidate will work with existing DA and agricultural systems modeling tools developed at USSL and UCR to address problems associated with water scarcity, marginal quality irrigation waters, water reuse, and crop production on salt-affected lands. Specifically, the selected candidate will work on: (a.) combining proximal soil sensing and remote vegetation sensing with multi-scale, high-resolution geodata analyses to create a large-scale spatiotemporal soil salinity prediction model; (b.) evaluating modeling frameworks for soil property estimations (e.g., pedotransfer functions, digital soil mapping) across scales (e.g., laboratory analyses, field-scale, farm-scale, regional-scale) using hyperdimensional sensor data (e.g., electromagnetic induction, gamma-ray spectrometry); and (c.) developing a transient-state model to generate crop-water production functions and irrigation recommendations for a variety of different irrigation strategies (e.g., variable rate vs uniform). The position is currently funded at 50% of time; external grants obtained by the candidate are required to make the position full-time.

Basic qualifications for this position include: a Ph.D. in Soil Science, Agronomy, Ecohydrology, or a closely related discipline.

Preferred qualifications for this position include expertise in: geophysical instrumentation and sensors for characterizing soil properties, especially apparent electrical conductivity; remote sensing of soil and vegetation properties; GIS and spatiotemporal data analysis; a history of obtaining external funding and grants.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

Advancement through the Professional Research Series ranks at the University of California is through a series of structured, merit-based evaluations, occurring every 2-3 years, each of which includes substantial peer input.

Applicants should submit a Cover Letter, Curriculum Vitae, Statement of Past and/or Planned Future Contributions to Advancing Diversity and Inclusive Excellence, and contact information for a minimum of three Letters of Recommendation to https://aprecruit.ucr.edu/apply/JPF01147. Review of applications will commence on October 17, 2019 and proceed until position is filled. For full consideration, applicants should submit their complete applications by the above date.

For more information about this position, please contact Prof. Jirka Simunek, Chair of the Search Committee, at jiri.simunek@ucr.edu, or Todd Skaggs, Acting Research Leader of the USDA-ARS Salinity Laboratory, at todd.skaggs@usda.gov. For questions on application procedures and requirements, please contact Ms. Kendall Dunmore, Academic Personnel, at kendall.dunmore@ucr.edu.