**Hydrogeophysics Postdoctoral Researchers**

The Department of Land, Air and Water Resources at the University of California, Davis seeks to hire two postdocs in conjunction with the Sustainable Agricultural Water Systems (SAWS) Unit of the Agricultural Research Service at the US Department of Agriculture. The hired postdocs will focus on problems related to assessing and monitoring flood-managed aquifer recharge sites in California’s Central Valley, with potential to expand into other related areas using geophysics for groundwater management. The postdocs will work as part of an interdisciplinary team of scientists at UC Davis and the SAWS unit, including geophysicists, hydrogeologists, soil physicists, and agricultural scientists. We strongly encourage candidates from diverse backgrounds, and especially groups historically underrepresented in the geosciences, to apply for these positions.

The first postdoc will acquire, process, and interpret ground-based electrical resistivity data and build geostatistical frameworks to optimize site selection for subsurface sampling and infiltration experiments. The work will focus on characterizing the subsurface using geophysical methods including time-domain electromagnetics and electrical resistivity tomography—with the possibility to incorporate additional methods—as well as subsurface sampling methods including soil-core extraction, cone penetrometer testing and geophysical logging. The candidate must be capable of conducting field data acquisition both as an individual and as part of a multidisciplinary team and should have the ability to process and interpret their field data. Any experience working with geostatistical methods is considered bonus.

The second postdoc will focus on the conjunctive development and use of hydrogeological and geophysical models to assess and monitor flood-managed aquifer recharge sites in California’s Central Valley. We are interested in using computational methods to quantify hydrogeological properties using joint hydrogeophysical inversion. Approaches may include employing rock physics links between geophysical and hydrogeological measurements and models, and inverting for hydraulic properties from time-lapse geophysical data. We seek a candidate with strong computational modelling skills and a command of inverse methods for hydrogeological and geophysical parameter estimation. Experience with electrical and electromagnetic geophysical methods as well as uncertainty quantification are desired as well.

Details about salary and benefits for UC Davis postdocs are given at [https://www.ucop.edu/academic-personnel-programs/\_files/2021/2021-postdoc-salary-scales/t23.pdf](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ucop.edu%2Facademic-personnel-programs%2F_files%2F2021%2F2021-postdoc-salary-scales%2Ft23.pdf&data=04%7C01%7C%7Cc43621e4078d4b8f303208d9aad67049%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637728660388225812%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=2af8IiwwTcPgjvZLuisKZrKe%2Fl%2B%2F2q1Yr%2BAdB8Nxio0%3D&reserved=0) and [https://hr.ucdavis.edu/employees/benefits/post-doc-scholars](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhr.ucdavis.edu%2Femployees%2Fbenefits%2Fpost-doc-scholars&data=04%7C01%7C%7Cc43621e4078d4b8f303208d9aad67049%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637728660388225812%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=jn30dafBbcweFLT3mHfhHQS2mBO0MsuIWxhD5%2BIovdk%3D&reserved=0), respectively. Interested candidates should email their resumes to Scott Bradford ([Scott.Bradford@usda.gov](mailto:Scott.Bradford@usda.gov)) and Helen Dahlke ([hdahlke@ucdavis.edu](mailto:hdahlke@ucdavis.edu)). Candidates should also include contact information for three professional references. Resumes will be accepted until the positions have been filled.