

Position: Postdoctoral Research Associate

Location: Indian River Research and Education Center (IRREC), Fort Pierce Florida

Contact: Dr. Sandra Guzmán
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Special Instructions to Applicants: Applicants must submit an application package including cover letter highlighting specific experience related to this position, Curriculum Vitae, list of publications, unofficial transcripts, and contact information of two references. For questions, contact Dr. Guzmán at sandra.guzmangut@ufl.edu. Send the application package to this email address.

Advertised Salary: commensurate with education and experience

Responsibilities:

- Study the integration of sensor-based irrigation and nutrient management with crop production and environmental stewardship
- Assess the effects of environmental conditions in water management
- Conduct research on participatory modeling in water and nutrient management
- Work with hydrological and crop models to simulate water management in Florida
- Organize and manage meetings with stakeholders
- Project management of extension activities, travel for official duties around central and south Florida is required. Attendance at weekend meetings might be required
- Develop research proposals to secure external funding for research projects, prepare peer-reviewed research and extension articles, reports, and presentations
- Coordinate activities with graduate students and OPS assistants to perform field work, extension activities, and modeling/simulation
- The person is required to have a valid driver's license and be able to drive vehicles to the field.

Required Education: Ph.D. in agricultural, civil, environmental engineering, water resources or related fields

Required Experience: experience with sensor-based irrigation management, data analysis, decision support systems, soil-plant-water sampling protocols, and time series analysis

Preferred Experience: experience with participatory modeling, extension activities, project management, water quality sampling and analysis, machine learning and statistical analysis. Ability to efficiently plan, organize, and coordinate work assignments. Ability to communicate effectively verbally and in writing. Ability to establish and maintain effective working relationships. Ability to publish manuscripts in peer-reviewed journals

Special Knowledge/skills: experience with hydrological and crop modeling. Programming experience with Python (R, or Matlab equivalent) databases, ArcMap, and data analysis tools

Background Information:

The postdoctoral associate will work in the Smart Irrigation and Hydrology, (SIAH) Agricultural engineering team (<https://irrec.ifas.ufl.edu/guzman/>) at the Indian River Research and Education Center (<https://irrec.ifas.ufl.edu/>). The Indian River Research and Education Center is a unit of the Institute of Food and Agricultural Sciences (IFAS) at the University of Florida and is located on a 700-acre site west of Fort Pierce, St. Lucie County. Fort Pierce is located on the east coast of Florida, 50 miles north of West Palm Beach. The internationally recognized research center is located in a major agricultural region in which nurseries, citrus, beef cattle, and vegetables are major industries. The IRREC is an interdisciplinary unit of the Florida Agricultural Experiment Station, the Florida Extension Service, and the College of Agriculture and Life Sciences, all of which are administered by IFAS to serve the land-grant mission.