

## **Post-doctoral Associate Position – Hydrologic and Nutrient Transport Modeling**

Agricultural and Biological Engineering (ABE) Department and Southwest Florida Research and Education Center, University of Florida (UF), seeks a post-doctoral associate for hydrologic and nutrient transport modeling in vadose zone. The post-doc will develop and use hydrologic model(s) and contribute to developing a decision support system (DSS) for multi-disciplinary projects on developing and evaluating water and nutrient best management practices (BMPs) under different groundwater environments. The post-doc will help collect and use the soil, water, and plant data from multiple sites to develop models for predicting subsurface water and nutrient transport in well-drained and poorly-drained soils in agricultural fields. The project takes a systems approach and involves conducting experiments on high-value fresh market crops under different nutrient inputs, irrigation and drainage, hydrologic, and weather conditions. The post-doc will work with a team of post-docs, graduate students, and faculty to integrate water and nutrient loss predictions with plant, soil, water, and economic data to develop a DSS for nutrient and water management. The project team includes faculty drawn from engineering, hydrology, statistics, economics, plant, soil, and ecosystem sciences. Responsibilities include analyzing irrigation, soil, plant, hydrologic, topographic, and weather data, developing hydrologic model(s), integrating model predictions with field data, preparing reports, manuscripts, and proposals, and presenting at conferences and stakeholder meetings. Applicants must have Ph.D. in agricultural/biological/civil/environmental engineering, soil and water sciences, or related physical sciences. Applicants are expected to have strong background in vadose zone models (e.g. HYDRUS) and nutrient transport processes. Background in irrigation management for agricultural systems and machine learning models is a plus. The position is available immediately with initial appointment for one year and is likely to be renewable depending on funding and performance. Send a resume and the names of three references to Dr Sanjay Shukla, Professor, Water Resources, Agricultural and Biological Engineering ([sshukla@ufl.edu](mailto:sshukla@ufl.edu)) and Ms Becky Decker ([rdecker54@ufl.edu](mailto:rdecker54@ufl.edu)). The screening of candidates will begin July 24<sup>th</sup>, 2023. Salary will be commensurate with education and experience and is likely to range from \$50,000- \$62,000/year.