



United States Department of Agriculture

Agricultural Research Service

Supervisory Research Plant Physiologist/Soil Scientist/Hydrologist GS-0435/0470/1315/14-15

Salary Range of \$123,098.00 to \$188,229.00 Per Year

Announcement Open: 05/17/2024 to 06/24/2024

The U.S. Department of Agriculture, Agricultural Research Service, Soil, Water, and Air Resources (SWAR) Research Unit at the National Laboratory for Agriculture and the Environment (NLAE) located on the campus of Iowa State University in Ames, Iowa ([Always Ames | City of Ames, IA](#)) is seeking a visionary, motivated scholar, and excellent communicator Research Supervisory Plant Physiologist/Hydrometeorologist/Soil Scientist (Research Leader). The Research Unit's mission is to discover and apply knowledge of biochemical and physical interactions within the soil-plant-atmosphere system to develop new and improved management practices that limit or reduce the impact of agricultural production systems on soil, water, and air resources. The mission of the laboratory is to develop system-wide solutions for agroecosystems that improve resource use efficiency and ecosystems services with a changing climate while maintaining farm productivity. The incumbent's personal research supports the ARS National Program entitled "Managing Nutrient, Carbon, and Water Fluxes to Provide Sustainable and Resilient Cropping Systems for Midwestern Landscapes" project. The incumbent is expected to develop surface renewal and modified eddy covariance energy balance flux measurement techniques that are optimized to measure and characterize energy balance components of plants, including crops found beneath widely spaced tree canopies or downwind of tree windbreaks; and/or identify soil biochemical compounds contributing to resilient soil -crop interfaces for intensively managed farming systems. The incumbent's contributions to this project are understanding, quantifying, and managing biophysical and chemical interactions between crop production practices, nutrient cycling, gas emissions and microclimate from the crop canopy scale to the watershed. As Research Leader, the incumbent is responsible for enhancing the creativity and productivity of the unit; managing the human, fiscal, and physical resources of the unit; providing technical information and consultation; and ensuring the proper interpretation and reporting of scientific research results and information. More information on NLAE mission can be found at [National Laboratory for Agriculture and The Environment : USDA ARS](#).

For further information and complete application instructions, search for announcement **ARS-D24MWA-12412566-ELA** at <https://www.usajobs.gov/>

U.S. Citizenship is required.

Applications must be received by the closing date of **June 24, 2024**

Scientific information: Dr. Thanos Papanicolaou, NLAE Director at thanos.papanicolaou@usda.gov
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