



POSITION DESCRIPTION

Soil Scientist

The Soil Health Institute (SHI), www.soilhealthinstitute.org, is a non-profit organization created to safeguard and enhance the vitality and productivity of soil through scientific research and advancement. The Institute brings together leaders in soil health science and the industry to conduct research and empower farmers and landowners with the knowledge to successfully adopt regenerative soil health systems that contribute economic and environmental benefits to agriculture and society. SHI has a dynamic team of scientists and educators, working together to assess and promote soil health practices on U.S. (United States) farms.

SHI is seeking to hire a Soil Scientist to contribute to SHI's effort to incorporate realistic effects of soil health management systems into models. Year one of the position will focus on development of the DSSAT model and communication of project outcomes to scientific and lay audiences. The ideal candidate has an understanding of biophysics in agricultural systems, is comfortable with large datasets, has experience coding, is a strong collaborator, and is a skilled communicator. The ideal candidate will also be passionate about incorporating the effects of soil health management systems into models to support the impact assessment of soil health systems.

Key Responsibilities:

- Develop modeling scenarios for DSSAT, including locating, gathering, documenting, and formatting input data (soil, weather, climate change, yield, etc.).
- Assessing model results in context of literature and recommending modifications or alternative approaches for future phases of modeling that represent effects of soil health systems.
- Identifying opportunities to use existing data to develop/refine pedotransfer functions to improve models.
- Close collaboration with DSSAT model developers to ensure project outcomes are freely distributed in new versions.
- Publish outcomes in peer-reviewed literature and for lay audiences.

Qualifications

Required:

- An M.S. or Ph.D. degree in soil science, agronomy, agriculture, or a related discipline in agriculture or natural resources.
- A background in soil science, including an understanding of the physical effects of soil health management systems on soil properties and functions.
- Proficiency using datasets and R or python to analyze model output and make recommendations.
- Familiarity or training in crop modeling and/or environmental biophysics.
- Experience working with geospatial or temporal data.
- Proficiency in translating scientifically sound work to coding and modeling applications.
- Experience publishing in peer-reviewed literature.
- Authorization to work anywhere in the United States and possession of a Driver's License valid in the U.S.

**Work Environment**

The Soil Scientist will work remotely or may choose to work from the Soil Health Institute's office in Morrisville, North Carolina, adjacent to Research Triangle Park (RTP). The project will be fast-paced and collaborative with regular meetings with the SHI team and with research partners.

Compensation

The Soil Scientist will be hired as a full-time, limited term employee for a period of one year, with a possibility of longer-term work depending on employee performance and project funding availability. Annual salary will range from \$70k to \$95k, commensurate with qualifications and experience. This is a full-time position with competitive paid leave, life, health and dental insurance, 401K, and other benefits.

To Apply

Qualified applicants are encouraged to send their cover letter, college transcripts (unofficial ok), resume, and contact information for three professional references to Kade Flynn, Soil Scientist, kflynn@soilhealthinstitute.org. The project start date is July 1st, 2024, and the position will remain open until filled. The first review of completed applications will begin on April 15th, so interested applicants are encouraged to submit their completed application by that time.