Graduate Research Assistantship in Soil Health at the University of Minnesota-Twin Cities: Land and Atmospheric Science (LAAS) or Water Resources Science (WRS) Ph.D. Program

The Jelinski and Gutknecht laboratories in the Department of Soil, Water and Climate at the University of Minnesota seek a graduate student to start in the spring term (January 2019, preferred) or Summer-term (May/June 2019). Prospective applicants should be interested in a Ph.D. program in Land and Atmospheric Science (LAAS) or Water Resources Science (WRS) and will have the opportunity to work with Dr. Anna Cates (State of Minnesota Soil Health Specialist), Dr. Joe Magner (Department of Bioproducts and Biosystems Engineering), Dr. Holly Dolliver (University of Wisconsin-River Falls), and Ann Lewandowski (Research and Outreach Coordinator, UMN Water Resources Center).

Research opportunities include the following: conducting literature reviews of soil health indicators relevant to cold climates; selection and standardization of soil health indicators for cold climates; and participation in soil health monitoring field research at the intersection of agricultural management, water resources management, and climate change. This work will be done in conjunction with partners such as the Sustainable Farming Association, Soil and Water Conservation Districts (SWCDs) and Watershed Districts across the state of Minnesota; analysis, meta-analysis, and synthesis of internal and external soil health datasets.

Applicants should have a strong interest in soil health, interacting with diverse groups of people, and a passion for communicating science to end-users and the general public. A background in Soil Science, Water Science, Microbiology or a related field is preferred. Strong skills or capacity to develop strong skills related to the statistical analysis of large datasets from disparate sources is preferred. Field and laboratory experience related to the physical, chemical or biological characterization of soil and water samples is preferred but not required.

Financial support will include three full years (including summers) of stipend, graduate tuition, funding for research and travel expenses, and medical and dental insurance. In addition to three years of research assistantship support, additional funding required to complete the Ph.D. program will come in the form of TA appointments, fellowships, or additional grants.

Interested applicants should send a CV/Resume, brief (~ 1-2 paragraph) description of background and research interests, and contact information for at least 2 references to Dr. Nic Jelinski (jeli0026@umn.edu) or Dr. Jess Gutknecht (jgut@umn.edu).

Successful applicants for this position would be required to subsequently complete an application which meets the admission standards for the Land and Atmospheric Science (https://www.laas.umn.edu) or Water Resources Science (https://wrs.umn.edu) Graduate Programs at the University of Minnesota-Twin Cities.

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