

Yale Postdoctoral Associate Opportunity: Comparison of agricultural soil carbon MRV protocols

With corn and soybean production in the North American Corn Belt of major economic, land-use, and environmental consequence, a recent expansion in effort seeks to connect improved land management with climate mitigation outcomes. For instance, the emerging voluntary carbon market aims to incentivize farmers to adopt conservation agricultural practices through payments for resulting carbon sequestration and GHG emission reductions. These voluntary markets rest on measurement, reporting and verification (MRV) protocols that document the rules for such quantification, but differences in the ways that protocols account for uncertainty, permanence, additionality and other variables could yield different quantities of carbon credits and degrees of net climate mitigation.

We are seeking a postdoctoral associate to work as part of a new Yale Applied Science Synthesis Program housed in The Forest School at the Yale School of the Environment. The postdoctoral associate will lead a collaborative project, funded through and in collaboration with the Environmental Defense Fund, Woodwell Climate Research Center and other partners, to test the sensitivity of generated carbon credits to within and among differences in the assumptions of soil organic carbon MRV protocols. Primary responsibilities include developing a synthetic dataset (based on empirical data from private and public sources and simulations) to test the protocols, followed by protocol comparisons and dissemination of the findings through white papers and the peer-reviewed literature.

YASSP is committed to structured mentoring activities to prepare the postdoc to succeed in their individual career path, and to provide opportunities to those under-represented in biogeochemical, ecological, applied, and data sciences. We value the expertise of researchers whose identities and experiences bring unique and important perspectives to land management decisions, and we aim to provide an inclusive and supportive environment for all research team members. This postdoctoral associate will join a collaborative and supportive research community that includes other postdoctoral associates in the Program, faculty and students at The Forest School, and other affiliated programs like the Yale Center for Natural Carbon Capture (<https://planetarysolutions.yale.edu/center-natural-carbon-capture>). Starting salary for the position is based on years of postdoctoral experience and will follow Yale's recommended postdoctoral salary scale (see: https://postdocs.yale.edu/sites/default/files/files/PD_salarymemo%202021.pdf). This position provides full medical benefits, long-term disability, paid family leave, retirement saving accounts, and many other resources (see here: <https://postdocs.yale.edu/applicants/yale-benefit-summary>), as well as funding for travel to professional conferences and workshops. The desired start date is between August 15 – September 15, 2022, where the initial funding is for 1 year with at least one additional year dependent on satisfactory progress. Interested candidates should have a PhD in a field which provides subject expertise in soil carbon science, a desire to conduct applied science, and (preferred) experience in data science, spatial analysis, and/or soil biogeochemical modeling.

To apply, send a single PDF that includes a cover letter explaining research interests and experience, a CV, and listing three potential references. Applicants should discuss in their cover letter why they have a desire to conduct applied science and any prior experience applying research to management or policy decisions, as well as prior experience in data synthesis. Applications or inquiries should be directed to Dr. Sara Kuebbing (sara.kuebbing@yale.edu) with the subject line "*Soil C MRV Postdoc*". We will begin application review on July 25, 2022 and continue reviewing applications until the position is filled.