



Ecosystem Services Market Consortium (ESMC)/Ecosystem Services Market Research Consortium (ESMRC)

Position Title: Postdoctoral Researchers/Research Scientists, 2 PTE Positions Available (estimated at 20 hours per week)

Location: Remote, minimal travel expected

Position term: Annual Contract Basis, \$25,000 stipend

Required: Interested applicants should send cover letter, earliest possible start date and resume to info@ecosystemservicesmarket.org. Please include your name at the top of all documents, and file names for all files that are sent (ex. Jane Doe cover letter). Position will remain open until filled.

Background Information

The Ecosystem Services Market Consortium LLC (ESMC) is a member-driven consortium working with partners and collaborators across the agricultural supply chain and value chain to build, test and launch a technologically advanced ecosystem services market conceived and designed for the agricultural sector. ESMC's market program will reward and incentivize producers for beneficial impacts of sustainable agricultural systems that are demanded by consumers, society, and the agricultural supply chain. ESMC's research arm, the Ecosystem Services Market Research Consortium (ESMRC), is investing in critical R&D for a cost-effective, scalable, harmonized market to scale the beneficial impacts of sustainable systems adoption on working agricultural lands. The ESMC market meets corporate and societal needs by quantifying, monitoring, verifying, and certifying environmental outcomes in a transparent, credible science-based program.

Four ESMRC Working Groups made up of Member representatives and supported by Science Advisors chosen from a slate of national experts have been established and tasked with developing and implementing specific research and development initiatives. The Working Groups focus on the research, development, demonstration and deployment of cost-effective, scalable technologies and investments to further develop, refine, and launch a fully functioning market. The Working Groups are coordinated by an ESMRC Research Coordinator who provides administrative, strategic, and technical support to achieve measurable progress towards accomplishing the goals, objectives, and outcomes of ESMRC. ESMRC seeks two Postdoctoral Researchers to work directly with the ESMRC Program Director, ESMRC Research Coordinator and Working Group technical experts to provide additional research expertise in support of ESMRC research priorities, and to provide scientific support for research project development,

execution, tracking and reporting, including in-field demonstrations and pilot projects.

One Postdoctoral Researcher will focus on agricultural greenhouse gas (GHG); and one will focus on water quality and water use from agriculture.

ESMRC Postdoctoral Researcher

ESMRC seeks two dedicated ESMRC Postdoctoral Researchers (PTE contractors) with experience in the agricultural field to join a small and dynamic, fast-paced team environment. The Postdoctoral Researchers will be responsible for providing additional research and technical expertise to the Working Groups, R&D projects, and pilots/field demonstrations. Dedicated Postdoctoral Researchers will enable more consistent and expert direction and support for WG's, assist in identifying priority research needs, and implement pilot project research while working closely with the ESMRC Program Director and ESMRC Research Coordinator who will facilitate coordination with WG's, research contractors, and necessary linkages to ESMC/ESMRC teams, including protocol adaptation and refinement teams and pilot project teams.

Postdoctoral Researchers will be focused on one of two topics that relate directly to the impacts of soil health and other conservation practices on ecosystem services outcomes within agricultural systems: 1) soil carbon and agricultural GHG quantification, including soil carbon sequestration sampling and modeling, and modeling of carbon dioxide, methane and nitrous oxide from agricultural systems; and 2) water quality and water quantity quantification and modeling. Research in both topics is focused on improved and technologically advanced approaches to ecosystem services asset quantification, including Measurement, Reporting, and Verification (MRV) technologies as part of an advanced MRV platform. Research results will be used to support and refine ESMC's market protocols based on the best available science and strongest statistical methodology to optimize accuracy of asset quantification, scalability, and cost-effectiveness. In-field pilot project comparative research studies will be designed to refine and validate the predicted and measured outcomes while meeting the requirements of the ecosystem services market demands.

Responsibilities and deliverables:

- Support ESMRC research, development, demonstration, and deployment projects in the agricultural field:
 - Provide input on identification and prioritization of RDD&D projects that meet ESMRC goals and objectives as established by grant awards and as further influenced by technical working group members
 - Develop or refine guidance on research design, implementation, data collection and analysis, documentation and reporting for consistency across ESMRC work
 - Develop data collection and storage SOPs across multiple ESMC sub-contracted projects and pilots
 - Support technical project implementation across pilot projects to further test,

- evaluate and refine ESMC's protocols and program
 - Facilitate technical communication between ESMC staff, project researchers and Working Group Science Advisors
 - Serve on Project Advisory Committees for individual ESMRC Working Group projects
- Support technical aspects of Working Groups and Strike Teams to meet grant objectives:
 - Provide technical support to Working Groups and Strike Teams
 - Support drafting technical sections of project RFPs
 - Support technical review of Working Group RFP applications
 - Provide technical support to Project Advisory Committees
 - Provide technical support for monthly Science Advisor cross-pollination and coordination calls
 - Provide technical updates during Member calls and at periodic in-person (no travel due to COVID-19 pandemic through at least January 31, 2021) or virtual Member Meetings
- Support and coordinate with pilot project managers:
 - Provide technical support for pilot project leads including research design and implementation of pilot and micro-pilot comparisons and data collection and analysis
- Assist in translation, documentation and reporting of technical results to Protocol Team, modelers, and platform developers, ESMC and ESMC/ESMRC members, including FFAR
- Support drafting of technical/science sections of ESMC reports
- Support publication of appropriate results and outcomes
- Remain current on relevant scientific and industry research
- Interface with external scientists on collaborative programs or research, as necessary
- Other tasks as appropriate and necessary

Required Qualifications:

- PhD or doctorate equivalent degree in agriculture, natural sciences, environmental sciences, conservation, or related field and 3 years related experience or equivalent combination of education and experience
- The position is viewed as a training or transitional period preparatory to a long-term academic, industrial, governmental, or other full-time research career.
- Understanding of the science underlying the agriculture industry, ag conservation and sustainability efforts, and ecosystem markets
- Experience leading, developing, and implementing agricultural research and in-field projects and experience with project management skills

- Experience working across teams and communicating with a diverse range of people from technical and non-technical backgrounds
- Ability to work independently with proficiency in prioritizing tasks, organizing time and managing multiple activities to meet deadlines, strong organizational skills, accuracy, and attention to detail
- Experience in writing, editing, and proofreading; ability to compile and synthesize divergent sources of information to create cohesive reports and recommendations