



Postdoctoral Researcher in Marine Social-Ecological Systems Smithsonian MarineGEO

Location: Edgewater, Maryland, USA; negotiable
Duration: Up to 3 years pending satisfactory progress
Application Closes: **September 16, 2022**

The Smithsonian's MarineGEO program seeks a postdoctoral scholar to advance a new project synthesizing scientific evidence on how biodiversity affects marine ecosystem functioning and resilience, in support of U.S. marine resource managers and decision-makers. The Postdoc will join a multidisciplinary leadership team, working with PIs Emmett Duffy (Smithsonian), Gabrielle Canonico (U.S. Integrated Ocean Observing System and MBON) and Steven Scyphers (University of South Alabama), and a task force of experts and managers exploring the role of biodiversity in U.S. marine social-ecological systems.

Research context: A wealth of evidence confirms that changing biodiversity can strongly affect the functioning of ecosystems, but these advances have not widely influenced management and conservation. This project will convene a diverse, collaborative team to help 'operationalize' the functional roles of marine biodiversity by identifying key components of biodiversity, resilience, and their interactions that can inform practical decision making in U.S. marine management. The work is supported by the Lenfest Ocean Program, National Marine Sanctuary Foundation, and the Angell Foundation.

Position description: The postdoc will be a key member of the project team, co-leading design of specific project research components, data analysis, and interpretation, with the opportunity to lead resulting MSs and products. As such, we welcome applicants from all fields of study focused on marine social-ecological systems. Research activities include data mining, data synthesis, modelling, and participation in stakeholder interviews. The postdoc will have opportunities to learn skills in a highly integrative social-ecological milieu, including sophisticated modeling approaches, mind mapping, stakeholder engagement, and interactions between western science and traditional and local ecological knowledge.

Requirements:

- 1) Doctoral degree in a relevant field of natural, social, or interdisciplinary sciences.
- 2) Demonstrated skills in one or more of the following fields: marine ecology, quantitative ecology, social sciences, marine resource management.
- 3) Ability to plan, execute, communicate, and publish independent and collaborative research.
- 4) Eagerness to learn from and work with a diverse, interdisciplinary community.



Beneficial qualifications:

- 1) Strong track record of lead-authored scientific publications.
- 2) Strong quantitative spatial and coding skills (Python, R, GIS).
- 3) Experience quantifying, mapping, or valuing ecosystem functions and services (e.g., water quality, fisheries, tourism, climate and hazard risk reduction).
- 4) Experience with policy analysis, scenario modeling, or decision-support for marine conservation or ecosystem-based management.

Research environment: The postdoc will be based in Emmett Duffy's group at the Smithsonian Environmental Research Center in Edgewater, Maryland, but will work closely with the Co-PIs and a diverse group of experts in natural and social science, managers, and marine resource stakeholders from around the U.S. The postdoc will also have opportunities to participate in MarineGEO network-wide activities, and to liaise with international colleagues in the Marine Life 2030 program of the UN Ocean Decade.

Appointment & application: The appointment is for 2-3 years (renewable after each year pending satisfactory progress). As a Smithsonian Trust employee, the position includes a competitive salary with paid leave, health, vision, dental, and other benefits. Proof of authorization to work in the U.S. is required, but international applicants are welcome. This is not a federal position.

How to apply: Please submit a single PDF that includes a cover letter describing your suitability for the project and previous achievements (2 pages max), a curriculum vitae (CV), and full contact information for three references who know you well, to marinegeo@si.edu and duffye@si.edu with the subject "MarineGEO Biodiversity Postdoc" by **Sep 16, 2022**.

To learn more about MarineGEO, please visit: <https://marinegeo.si.edu>. To learn more about the Smithsonian Environmental Research Center, please visit: <https://serc.si.edu>. Please address any inquiries to: duffye@si.edu.

MarineGEO values diversity in all forms, and the Smithsonian Environmental Research Center community recognizes the value of diversity in promoting innovative science and creative solutions. We recognize each applicant will bring unique skills, knowledge, experiences, and backgrounds to this position. We encourage persons from any historically underrepresented group in environmental and data sciences to apply. The Smithsonian Institution is an equal opportunity employer, committed to a policy of non-discrimination on the basis of race, ethnicity, national origin, gender identity and expression, sexual orientation, age, religion, marital/parental/caregiver status, and disability.