



Date November 13, 2013
To Smithsonian Marine Science Distribution
From Tennenbaum Marine Observatories Network Executive Committee
Subject **Call for FY14 MarineGEO Postdoctoral Fellowship Proposals**

Submission Deadline: 15 January 2014

The *Tennenbaum Marine Observatories Network* (TMON) is the first network of marine observatories focused on global-scale, long-term study of coastal biodiversity and ecosystems using standardized approaches. The network is a developing partnership of diverse organizations facilitating long-term interdisciplinary, comparative research. TMON currently includes the Smithsonian Environmental Research Center, Edgewater, Maryland (SERC), the Smithsonian Marine Station at Ft. Pierce, Florida (SMSFP), the Carrie Bow Cay Marine Field Station (CCRE Program-Belize), and sites on both Caribbean and Pacific sides of Panama administered by the Smithsonian Tropical Research Institute, Panama (STRI). Additional partner sites are under development. TMON invites research proposals for a Postdoctoral Fellowship that will complement our developing comparative research program.

Eligibility and Award Amount. Postdoctoral scientists must collaborate directly with Smithsonian scientists as named sponsors (see Smithsonian Marine Research Staff at <http://www.si.edu/marinescience/staff.htm>) and must select co-Advisors from more than one SI unit (NMNH, SMSFP, SERC, STRI, NZP). Stipend is \$45,000 per year with an allowance for health insurance, travel to the Smithsonian host facility, research travel and supplies, up to a total \$60,000 maximum per year. Awards will be made for a maximum of two years, pending first-year performance review. Proposals must focus on comparative research involving at least two TMON facilities. Applicants must have completed the Ph.D. degree before commencing the fellowship. Individuals who have been employees at the Smithsonian Institution within the previous year are not eligible.

TMON research. TMON is dedicated to understanding change in the biodiversity, structure, and functioning of marine ecosystems, at local through global scales. The research aims to advance scientific capacity for forecasting change and to inform appropriate policy. A cornerstone of TMON is the use of standardized, repeated measurements and experiments, maintained over decades, conducted across the Smithsonian's marine laboratories and an expanding global network of diverse partnerships. This approach is designed to achieve rigorous comparisons among sites, to understand underlying variation, and to assess links between local and global biodiversity, environmental and ecological change. We seek applications for independent Postdoctoral research projects that address at least one of TMON's overarching research themes:

1. *How does marine biodiversity vary through space and time across the globe?*
2. *How do natural and human forces (e.g. fishing, land-use, invasions, habitat loss) drive changes in marine biodiversity and ecosystem functioning and resilience?*
3. *What are the consequences for human well-being of these changes in marine ecosystems?*
4. *How does anthropogenic alteration of carbon cycles affect coastal marine systems and ecosystem service provision?*
5. *How are marine ecosystem connected via dispersal and metapopulation dynamics, and how do these connections affect responses to change and human well-being?*
6. *How do nearshore food webs change through space and time?*
7. *How can the past—ancient through historic—help us understand the consequences of local human*

activities and global change?

8. *Where are the critical tipping points that lead to rapid and unwanted shifts in marine ecosystems, and how can these best be avoided?*

Proposal submission. Prospective applicants are strongly encouraged to consult with Smithsonian staff scientists prior to proposal submission. Proposals must be submitted electronically as a single PDF by 15 January 2014 at midnight EST to stonem@si.edu. Two non-Smithsonian referees must be identified and submit letters of support to the same site by 15 January 2014.

Proposal Review and Award Notification. Proposals will be peer-reviewed by a panel of Smithsonian scientists for scientific merit, project feasibility and appropriateness match with TMON goals. Award notification will be forwarded electronically by 15 April 2014 to the applicants and their Smithsonian sponsors.

Smithsonian Scientific Diving Authorization. See www.si.edu/dive

Progress Reports and Publications. A progress report is required for all projects and must be electronically submitted no later than ten months after start of fellowship appointment. A final report is due upon expiration of fellowship appointment. All publications resulting from work supported by the Smithsonian Institution must include an acknowledgment of the appropriate Smithsonian Research Unit(s) and the Tennenbaum Marine Observatories Network.

Application Process. Applications are submitted via e-mail as a single PDF to stonem@si.edu, to whom questions can also be directed. The application must include the following elements:

I. Curriculum Vitae

II. Abstract (not to exceed 300 words)

III. Proposal Body (not to exceed 6-8 pages):

1. *Introduction:* Background, rationale, and support from published scientific literature.
2. *Goals and Objectives:* A clear statement of the central question or problem and the major elements comprising the objectives to address the goal. What are the hypotheses?
3. *Methods:* Brief summary of approach, procedures, experimental designs, technical methods, and/or statistical treatment. Indicate the types of equipment (boats, microscopes, scuba equipment, etc) and the frequency of their need. Information on existing facilities can be found on the MSN website (www.si.edu/marinescience), through links to MSN facilities.
4. *Work plan and schedule:* Dates and locations of field travel and schedule of work.
5. *Research facilities:* Description of which TMON facilities will be used, including SERC, SMSFP, Carrie Bow Cay, STRI's Caribbean and Pacific labs.
6. *Significance/Relevance:* Anticipated contributions of the project and its significance.

IV. Literature Cited

V. Budget and Justification (max. \$10,000/year): Specify costs for 1) *Research Allowance* to include supplies, equipment needs, and travel for research purposes (including per diem and transportation); 2) *Relocation Travel Expenses* to include transportation from point of origin to Smithsonian, and return after appointment concludes (does not include moving expenses); 3) *Health Insurance*. Indicate source and amounts of matching funds from other sources, if available.

VI. Letters of Recommendation from 2 non-Smithsonian referees.

Contacts. TMON Executive committee contacts: Nancy Knowlton (NMNH), Emmett Duffy and Greg Ruiz (SERC), Valerie Paul (SMSFP, CBC), Andrew Altieri and Rachel Collin (STRI), Rob Fleischer (NZP). For questions about application process and status, please contact Maggie Stone (StoneM@si.edu).