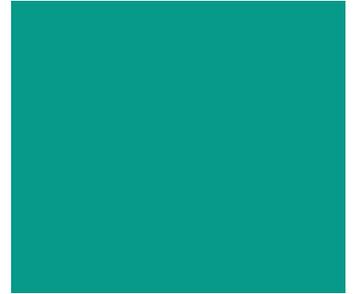




Maryland Sea Grant

2017 Coastal Resilience and Sustainability Research Fellowship



FEMA News Photo Photo by Crystal Payton (top)
Rain Garden Photo by Jeff Brainard (bottom)

MARYLAND SEA GRANT 2017 COASTAL RESILIENCE AND SUSTAINABILITY RESEARCH FELLOWSHIPS

EXECUTIVE SUMMARY

Maryland Sea Grant (MDSG) is pleased to announce the availability of coastal resilience and sustainability graduate research fellowships for 2017-2018. The fellowships are open to graduate students enrolled at any Maryland or District of Columbia academic institution. To be eligible for this fellowship, students must be enrolled in a graduate degree program and engaged in coastal resilience or sustainability research that is relevant to Maryland and the MDSG Strategic Plan 2014-2017. In addition to supporting the student's academic expenses, the fellowship will provide additional professional development opportunities in science communication, the science-to-management process and other relevant Sea Grant activities. MDSG is administered by the University of Maryland Center for Environmental Science and funded by the National Oceanic and Atmospheric Administration and the state of Maryland. MDSG is accepting applications until **March 29, 2017**.

Have questions or need more information?

Join our webinar on Monday, Feb. 13 at 4 pm. RSVP to research@mdsg.umd.edu.
Online video about last year's competition:
http://bit.ly/MDSG_CRSF

FELLOWSHIP DESCRIPTION

Maryland Sea Grant supports research, education, and outreach on current and future issues affecting the Chesapeake Bay and Maryland's coastal waters. As part of this mission, we anticipate awarding two or more competitive fellowships to support graduate students conducting coastal resilience research within Maryland's coasts and watersheds. We look to support student research that is socially relevant and is at the intersection of public engagement and science. An applicant's research must be consistent with the [Maryland Sea Grant strategic plan](#) and address one of the MDSG focus areas described therein: 1) Resilient ecosystem processes and responses; 2) Sustainable fisheries and aquaculture; and 3) Resilient communities and economies. Maryland Sea Grant emphasizes translational research that is directly applicable to informing key stakeholders outside of academia.

Maryland Sea Grant seeks motivated and dedicated graduate students who are engaged in research that furthers our understanding of the coastal resilience and sustainability challenges faced in Maryland's Chesapeake and coastal bays and watersheds. For purposes of this fellowship, coastal community resilience and sustainability research may include, but is not limited to, wise use of water resources, climate change adaptation, coastal processes studies, resilience from natural hazards, and resilient coastal businesses and industries, including fisheries and tourism.

What coastal resilience and sustainability research is eligible?

Research on water resources, stormwater, climate change adaptation, coastal processes, resilience from natural hazards, resilient coastal businesses and industries including fisheries and tourism, and other topics.

As part of this fellowship experience, successful candidates should be committed to expanding their engagement with groups beyond academia and have an interest in applying their research to informing policy decisions. To assist with this, Maryland Sea Grant will provide professional development on relevant skills, including education, extension, and communications. As a requirement of the fellowship, fellows will choose and work with an outreach or end-user mentor (i.e., extension staff, educator, resource manager, or other end-user) to ensure that their project design and research results are responsive to the needs of resource

managers, policy makers, educators, industry, NGOs, or other stakeholders. Outreach or end-user mentors should not be academic scientists.

Fellows will be selected based on their academic achievements, the relevance of the proposed research to [MDSG's mission](#), their demonstrated interest in coastal resilience outreach activities, and understanding or improving coastal resilience and sustainability in Maryland or the District of Columbia. While all qualified graduate students should apply and will be fairly considered, MDSG is interested in increasing diversity in marine research, and thus we encourage applications from students who have been historically underrepresented in coastal or marine science. Students working on coastal and marine research projects funded by non-Sea Grant sources are particularly encouraged to apply.

AWARD INFORMATION

The fellowships will provide support for up to two years in the form of a reimbursable subaward agreement (contingent upon the availability of federal funds). Continued support after the first year will be contingent upon satisfactory performance by the Fellow. The anticipated start date is September 1, 2017. **Due to the end of the multi-year federal award supporting this competition, no cost extensions at the end of the fellowship period may not be possible.**

The fellowship provides a total award of up to \$45,000 in Sea Grant funds. Non-federal matching funds equal to at least 50 percent are also required (\$2 Sea Grant: \$1 match). We expect funding to provide full or partial support in such budget categories as stipend, fringe, tuition, materials and supplies, travel, etc. Student stipend must be consistent with graduate salaries and benefits from their respective academic department. Indirect costs are allowable if permitted by your institution's federal indirect cost rate agreement. These funds can be budgeted for a 12-24 month period depending on scope of the project and needs of the applicant. Applicants are encouraged to contact the program to discuss budget specifics during proposal development.

Most university-sponsored research programs will require that the award be made to a faculty member (typically the student's primary advisor). While MDSG will make all awards to the faculty member, students should have the primary leadership role in developing the fellowship proposal and participate with their faculty mentor in the grant's management.

ELIGIBILITY

Students must be enrolled in or admitted to a full-time graduate or professional degree program at a Maryland or District of Columbia academic institution at a graduate level. Students who have not yet enrolled should submit a letter of acceptance from the dean of the graduate program at their new institution with their application package. Students may be working toward any masters or Ph.D. degree, as long as their research is relevant to the mission and strategic plan of MDSG and has an emphasis on Chesapeake or coastal bays and their watersheds. The research must demonstrate relevance to coastal resilience and sustainability.

REQUIREMENTS

Graduate student fellows who are selected will be required to:

- Select and work with an outreach / end-user mentor who is an extension, education, or communication staff person or an end-user of research results (e.g., resource manager, K-12 teacher) to ensure that results are communicated and translated for end-users;
- Provide annual and final progress reports to MDSG, as well as electronic copies of derived publications and their thesis or dissertation;
- Participate in MDSG-sponsored professional development activities, anticipated to be 1-3 activities;

- Contribute one entry per semester to the MDSG student blog, *Fellowship Experiences*;
- Attend a national meeting (include travel in budget); and
- Acknowledge MDSG support in all relevant scientific presentations and publications.

At a minimum, outreach or end-user mentors are expected to periodically (no less than three times/year) meet with the fellow to reflect upon their research design, activities, and plans. They should provide guidance on issues associated with communicating the information to non-experts, advancing the information to managers or policy makers, promoting adoption of the innovation or technology, or other application of results. In some situations, outreach or end-user mentors may serve on a student's academic committee. The exact role of the mentor is determined and defined by the applicants, in conjunction with their primary advisor.

An outreach or end-user mentor could be from the public, private, or non-profit sector. While they could be extension agents, educators, or communicators with Sea Grant or the Cooperative Extension program, they do not need to be. They should be individuals in a professional situation that requires the application of scientific information and research—particularly the information, data, and findings coming from the applicant's research project—to a pressing management or policy decision. Ideally, the mentor would directly involve the student in policy discussions and development on an issue closely tied to the student's research. The mentor should not be an academic scientist. Maryland Sea Grant can provide assistance to prospective fellows in identifying potential mentors during the application period.

APPLICATION GUIDELINES AND SUBMISSION

Adherence to the format requirements is mandatory. Font size can be no smaller than 12 point (Arial) and margins must be 1 inch on standard 8.5x11 inch paper throughout the document. Applications should include:

- Cover Sheet (1-page maximum):* This should include detailed contact information for the applicant, their faculty advisor and the outreach or end-user mentor, funding level requested, degree being sought, field of study, title of proposed project, and any institutional signatures required by the home institution's sponsored research programs office or other similar office.
- Project Summary Form (90-2) and Data Management Plan:* Applicants should request an account to access the [MDSG online proposal worksheets](#) well before the proposal deadline to create the project summary (90-2), budget (90-4), and budget justification forms. This form will include basic project information, a one-page abstract (up to 490 words), and space for a data management plan (DMP; up to 980 words describing how data will be managed, stored, and accessible). Specific guidance for the 90-2 is available from the login page. Since the PI is the faculty advisor, access will be granted in his or her name. Instead of completing the blank DMP form on the 90-2 worksheets, applicants may alternately download and use the DMP template available [online](#) and include it after the 90-2 form in the proposal. The template provides a structure for required elements of a DMP. Guidance about data management practices is available on our [website](#).
- Budget Form 90-4 and Budget Justification:* Applicants should work with their faculty advisor and Sponsored Programs Office to develop their budget. Up to \$45,000 in Sea Grant funds for one to two years can be requested for any reasonable and necessary student support and research and outreach expenses. Non-federal matching funds equal to at least 50 percent are also required (\$2 Sea Grant: \$1 match). Funding may include stipend, fringe, materials and supplies, tuition, travel expenses to a significant scientific meeting, and other fellowship-related costs. Indirect costs are allowable if permitted by your institution's federal indirect cost rate agreement. Student salary must be consistent with graduate salaries and benefits from their respective academic department.

Applicants are encouraged to contact MDSG to discuss budget specifics during proposal development. Sample forms and justification can be found [here](#).

- D. *Career Goal Statement (1-page maximum)*: The statement should describe the applicant's educational and professional goals, how these goals connect to coastal science, sustainability, and/or issues relevant to the Maryland Sea Grant mission, and how the fellowship will contribute to these goals.
- E. *Project Description (4-page maximum, including figures, tables, and other graphics)*: The narrative should describe the background and rationale, objectives, general approach and methods, anticipated benefits, and research team and partners. It is intended to be a brief summary of the proposed coastal resilience research project, but should include sufficient detail to evaluate the appropriateness and feasibility of the approach, and the alignment of the project with MDSG's strategic plan.
 - a. Background and Rationale. Provide the need for the research project, background information, and how the proposed project addresses a specific MDSG mission and strategic plan focus (e.g., reference the strategic plan priority that the research will address).
 - b. Objectives. List the objective(s) and/or hypothesis(es) of the research project, including a brief statement of the context of the proposed project in relation to other related work or fields of related research. Be careful to state the purpose of the work as the objective rather than to list project activities or tasks.
 - c. General Approach and Methods. Describe the methods, approaches, and techniques that will be used to meet the objectives.
 - d. Anticipated Results. Describe the results to be achieved by the project, how these results relate to current knowledge of the proposal topic, and of what use the results will be for specific audiences or end-users.
 - e. Broader Impacts. Connect the research to the broader impacts it will have beyond the academic community. Include a brief description of the outreach, education or dissemination strategies to be used. This strategy should go beyond traditional dissemination (e.g., presentations and peer-reviewed literature) to reach end-users directly (e.g., training workshops, development of appropriate outreach products for non-scientific audiences, work with K-12 students and teachers, develop training manuals for end-users). The participation of the end-user mentor should be explicitly described. Applicants are strongly encouraged to work with their mentor to develop their outreach strategy. More detail about sharing your outreach beyond academic venues is available <http://www.mdsq.umd.edu/share-your-research>.
 - f. Research Team and Partners. Briefly describe the research team and their roles and responsibilities, including the role of the outreach or end-user mentor.
- F. *Literature Cited*
- G. *Timeline and Tasks*: The schedule should show, in table form by month, the milestones and tasks to be achieved (e.g., field work, data analysis, work with outreach mentor, development of outreach products) and the anticipated dates for achieving those tasks. An example table is available on our website: <http://www.mdsq.umd.edu/proposal-forms-and-worksheets>.
- H. *Academic CV/Biosketch (2-page maximum)*: Provide a two page (maximum) curriculum vitae for the faculty advisor and student. We request you use the format of a National Science Foundation Biographical Sketch: https://www.nsf.gov/pubs/policydocs/pappg17_1/pappg_2.jsp#IIC2f. Students may list presentations in the Products section.
- I. *Undergraduate and graduate school transcripts (unofficial copies are acceptable)*.
- J. *Two letters of recommendation (submitted directly to MDSG by writers)*: One letter of recommendation should come from your primary faculty advisor. A second letter should

come from the outreach or end-user mentor indicating a commitment to mentor and including a description of the role that the mentor will play in the fellow's academic experience. Only two letters will be accepted, so if more than one outreach mentor is selected, a joint letter is preferred. If an applicant wants assistance identifying potential outreach or end-user mentors, or would like to talk further about this expectation, they are encouraged to contact MDSG.

- K. *Proof of acceptance and enrollment* in a graduate program in a relevant field of study is required for students beginning their graduate work in Fall 2017.

DEADLINE AND SUBMISSION

Applications must be submitted online by **Friday, March 29, 2017 at 5:00 pm** as one PDF file to <http://ww2.mdsq.umd.edu/rfp/fellow>. The submission system closes promptly and MDSG will not accept late proposals, so allow ample time to submit your proposal before the deadline.

Confirmation of application receipt will be sent to the submission email only. Please contact Jenna Clark or Mike Allen if you do not receive confirmation shortly after submitting your proposal. Letters of recommendation may be mailed or emailed as a PDF to Mike Allen separately. Applicants are reminded to follow submission policies of their home institutions (e.g., obtaining institutional review and signatures).

REVIEW PROCESS

MDSG will assemble a peer-review panel composed of the MDSG director, faculty, and end-users (e.g., extension staff, resource managers, private and non-profit sectors, and/or additional stakeholders familiar with the coastal resilience issues faced by Maryland, the region, and the nation). MDSG follows strict [conflict-of-interest policies](#). The panel will review applications and select award recipients based on the following criteria:

- Strength of the applicant and proposed plan of research (including their research plan; the applicant's organization, analytic, and communication skills)
- Relevance of the proposed plans to coastal or community resilience and MDSG's mission
- Demonstrated commitment to and potential impact on watershed, coastal and marine sciences, and coastal communities (including applicant's degree of study; the applicant's potential for leadership in the field, demonstration of maturity, responsibility, and integrity; the applicant's proposed outreach)
- Special or unique attributes to the field of watershed, coastal and marine sciences (including applicant's demonstrated potential and problem solving, as well as the applicant's background)

Notification of awards is expected by June 15, 2017.

CONTACTS

Applicants are strongly encouraged to contact either the MDSG Director, [Fredrika Moser](#), or the Associate Director for Research and Administration, [Mike Allen](#), to discuss their proposal ideas. For technical assistance, contact [Jenna Clark](#), Program Specialist.

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<http://www.mdsq.umd.edu/coastal-resilience-and-sustainability-research-fellowships>