



2016-2017 Virginia Sea Grant/NOAA Coastal Storms Program Mid-Atlantic Coastal Storms Graduate Research Fellowship

Deadline: April 1, 2016

Virginia Sea Grant (VASG), in partnership with the NOAA Coastal Storms Program, is pleased to announce the availability of a mid-Atlantic coastal storms graduate research fellowship for the 2016-2017 academic years. The fellowship is open to full-time graduate students at any academic institution in Virginia, Maryland, Delaware, New Jersey, and New York who are engaged in research relevant to coastal storm issues in the mid-Atlantic. In addition to supporting the student's academic expenses, the fellowship will provide additional professional development opportunities, through collaboration with mid-Atlantic Sea Grant programs and through the requirement for an outreach or end-user mentor on the proposal. VASG is accepting proposals until [April 1, 2016].

I. Virginia Sea Grant

The mission of VASG is to enhance the ecological, economic, and social sustainability of coastal and ocean communities and the ecosystem services they depend upon through university-based research, extension, education, and communication that provide science-based information to decision makers. VASG serves the Commonwealth of Virginia, the region, and the nation. More information about VASG can be found at <http://vaseagrant.vims.edu/about>

II. NOAA Coastal Storms Program

The Coastal Storms Program is a NOAA-led initiative that brings together organizations from all sectors to a specific region for the sole purpose of making communities safer from coastal storms. The goal of the program is to reduce loss of life and negative impacts on coastal property and the environment caused by coastal storms. The results include the development of user-driven products that address storm risks in a targeted regional context. Partnerships with federal, state, and local organizations are key to the success of the program and to NOAA's ability to increase the resilience (ability to "bounce back") of coastal communities from storm impacts.

III. Fellowship Description

The purpose of the VASG/NOAA Mid-Atlantic Coastal Storms Graduate Research Fellowship is to support exceptional graduate students who are engaged in research that furthers community resilience to coastal storms. While we welcome candidates who address any area of coastal storms and resilience, we particularly encourage candidates who are working on:

- ***Improving real-time and forecast water levels and conditions*** – Accurate information and effective communication about water levels and hazardous beach conditions are critical for protection of life and property and enhancement of the national economy.
- ***Enhancing coastal infrastructure resilience*** – Ports, marinas, and working waterfronts are highly vulnerable to rising sea levels, heavy rains, and storm surges. Increasing the resilience of these waterfront cities, towns, and communities to major coastal storms is critical to reducing loss of life, damage and destruction of critical infrastructure and transportation networks, and adverse impacts on local and regional economies.

- ***Managing stormwater impacts*** -- Healthy coastal ecosystems are the foundation of thriving coastal communities in the Mid-Atlantic and support valuable recreational and commercial activities throughout the region. The increasing frequency of heavy precipitation in the region is presenting new challenges in managing negative impacts of stormwater.

The fellowship also provides fellows with hands-on experience in translating research results to coastal and marine stakeholders. In addition to their primary faculty advisor, fellows will be expected to work with an outreach or end-user mentor. Through interactions with mentors, fellows will ensure that their research results are useful and used by stakeholders. The process will also help fellows develop practical skills in science communication and the transfer of science to management. (More information can be found in Section VI. Guidance on the Mentor-Fellow Relationship.)

IV. Award Information

The fellowship provides an award of up to \$40,000 for one year. VASG-funded projects require a 50% funding match (i.e., proposal budgets must show \$1 of match for every \$2 of Sea Grant funding requested). Only non-Federal funds may be committed as matching contribution.

The anticipated start date is the beginning of the fall semester 2016.

VASG expects to fund up to five fellowships, one in each of the mid-Atlantic states – New York, New Jersey, Delaware, Maryland, and Virginia.

VASG will make all awards to the student's primary faculty advisor, as required by most university sponsored programs. However, VASG expects that students will take primary leadership in developing the fellowship proposal, including engaging with their institution's sponsored programs offices and submitting proposals to VASG.

V. Eligibility

Students must be enrolled in or admitted to a full-time graduate or professional degree program at an academic institution in New York, New Jersey, Delaware, Maryland, or Virginia. Students may be working toward a degree in any discipline as long as they are engaged in research that is coastal storms-related and furthering community resilience to coastal storms.

VI. Fellowship Requirements

Selected fellows will be required to:

- provide progress reports to VASG on an annual basis, including a final report and copy of their thesis. VASG will share these materials with the other mid-Atlantic state Sea Grant programs.
- support Sea Grant communication efforts to publicize their research and fellowship activities
- select and work with an outreach or end-user mentor (see Section VI)
- attend an end-of fellowship workshop or conference with mid-Atlantic Sea Grant programs, NOAA Coastal Storms leadership, the Fellows' mentors, and other local, state, and federal stakeholders.
- participate in regular meetings or discussions with VASG, including
 - a welcome meeting at the beginning of the fellowship
 - an exit interview and evaluation at the conclusion of the fellowship

- as feasible, fellows can elect to participate in the VASG professional development training opportunities provided throughout the year, including a graduate research symposium. Other state Sea Grant programs may have professional development activities underway that a Fellow might participate, if interested.
- acknowledge the support of VASG and the NOAA Coastal Storms Program in all relevant presentations and publications

VII. Guidance on Fellow-Mentor Relationship

Mentors must be individuals whose work benefits from the application of scientific information, particularly the information, data, decision-support tools, and findings that may result from the student's research project. An outreach or end-user mentor could be from the university outreach, communication or extension programs, public, private, or non-profit sector.

Fellows are expected to work with their mentors to develop an outreach plan and participate in hands-on outreach activities that will implement at least a portion of that outreach plan. At a minimum, mentors are expected to meet periodically with the fellow to reflect upon the fellow's work and 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 type of outreach and role of the mentor will be determined and defined by the student, the student's faculty advisors, and the mentor. The outreach plan should complement the proposed project and student's interests; the quality of the outreach plan and mentor relationship will be an important part of the evaluation criteria (see Section VIII. Review Process).

The rationale for selecting the proposed mentor and outreach plan should be clear to reviewers.

Students are encouraged to consider the following recommendations based on past VASG Graduate Research Fellow and mentor experiences:

- Students should identify a potential mentor early in the proposal process and work with that mentor to ensure that the proposed research and outreach is relevant to end-users and represents a true collaboration between the student and mentor.
- Students should carefully consider the possible outreach audiences and products for their research, and select a mentor and project that best fits their research and career goal interests. There should be a clear rationale for why the student selected a particular mentor and outreach project, and the plan should benefit both the student and the outreach mentor.
- Students should identify a clear set of activities and outputs (e.g., presentations to resource managers or the general public, outreach products). Stronger proposals will also consider short- and long-term outcomes, such as changes in regulation or improved understanding of the general public as a result of activities and outputs.
- Students should set a clear plan for working with their mentors, including a schedule for meetings and a timeline for activities and outputs. It is anticipated that students and mentors will work together approximately 40 hours per year on outreach, although this will vary with the type of outreach planned.
- VASG recognizes that results of a research project may not be ready for outreach activities during the fellowship period. Outreach and engagement with end-users is an

ongoing process, and students should develop an outreach plan and activities that foster continuous dialogue and engagement during the research project, not just at the end.

- Students are encouraged to review the VASG website (<http://vaseagrant.vims.edu/>) to see examples of past fellow-mentor projects and to learn about our extension partners.
- Students are strongly encouraged to select one outreach mentor; those interested in working with more than one mentor should contact VASG first.

Mentors provide a unique professional development opportunity for VASG/NOAA Coastal Storm Mid-Atlantic Graduate Research Fellows, advancing a fellow's understanding of how their science may make a difference in coastal and marine resource management. We encourage creative approaches to the fellow-mentor activities that may advance the fellow's professional growth and engagement with end-users. Fellows could attend events or meetings at the mentor's organization, shadow a mentor, co-author material, or other activities that are mutually beneficial and value-added.

The Sea Grant programs from the mid-Atlantic can provide assistance to prospective fellows in identifying potential mentors and discussing the mentor's roles and responsibilities. While mentors may be extension agents, educators, or communicators with Sea Grant or the Cooperative Extension program, they do not need to be.

Virginia Sea Grant

- Sam Lake, Fellowship and Research Program Coordinator. (slake@vims.edu)

New York Sea Grant

- William Wise, Director, New York Sea Grant, (william.wise@stonybrook.edu)

New Jersey Sea Grant

- Claire Antonucci, Executive Director (cantonucci@njseagrant.org) and

Delaware Sea Grant

- Jim Falk, Acting Director (jfalk@udel.edu) and/or
- Jennifer Merrill, Research Coordinator (merrillj@udel.edu)

Maryland Sea Grant

- Fredrika Moser, Director (moser@mdsg.umd.edu) and/or
- Mike Allen, Associate Director (mallen@mdsg.umd.edu)

Prospective fellows can also reach out to NOAA Coastal Storms Program leaders to identify potential NOAA staff mentors. Contact: Lindy Betzhold, lindy.betzhold@noaa.gov.

VIII. Proposal Guidelines and Submission

Proposals must be submitted via email to vsgrproposals@vims.edu by 5:00pm EST on Friday, April 1, 2016. Proposals should be submitted as a single PDF document. Recommendation letters and mentor letters of support may be submitted separately from the rest of the proposal, but must also be time-stamped as sent by the deadline. Confirmation of proposal and letter receipt will be sent by return email; please contact Sam Lake (see Section X for contact) if you do not receive confirmation shortly after submitting your proposal.

All elements of the proposal, including supporting letters, must be time-stamped as sent by the deadline. We will not accept late proposals under any circumstances (e.g., internet delays) so please allow ample time to submit your proposals before the deadline.

Adherence to the format requirements is mandatory and ensures fairness across all proposals. Proposals not meeting the format requirements may be rejected without review. Several sections

have specific page limits; sections that go beyond the specified limit may be accepted, but any text beyond the page limit will be truncated. Only the requested materials should be submitted; additional documents (e.g., appendices, additional letters of support) will not be reviewed. Forms and templates can be found on the VASG graduate research fellowship website:

<http://vaseagrant.vims.edu/category/vasg-grf/>.

Although awards will be made to the faculty advisor(s), students are expected to take a leadership role in developing their proposal, including writing the narrative, developing a budget, and engaging with the institution's sponsored programs office. Students are responsible for routing the proposal through their institution's sponsored programs office and for obtaining all required institutional endorsements before submitting.

Each proposal must include the following elements in this sequence:

- A. *Signed title page (1 page maximum)*: The title page must list the project title and identify and provide contact information for the prospective fellow, faculty advisor(s), and outreach mentor. The proposed start and end date and the total amount of Sea Grant and matching funds being requested for each project year must also be listed. Required institutional signatures should also be included on this page; these are often provided by institutional sponsored programs offices or equivalent to verify that the proposal has been reviewed by the institution. A template may be found on the [Virginia Sea Grant website](#).
- B. *Resumes/CVs (2 page maximum per Resume/CV)*: A brief CV or resume should be included for the student and primary advisor(s). Only the CVs of the student and the primary advisor(s) may be submitted; do not include the CVs of outreach mentors, committee members, or other associated project participants.
- C. *Career goal statement (1 page maximum)*: The statement should describe the student's educational and professional goals and how these goals fit into broader societal needs. The statement should emphasize how this fellowship would contribute to the student's goals. Font (Calibri or Times New Roman) size can be no smaller than 11 point and margins must be at least 1 inch on standard 8.5x11 inch paper throughout this section. The name of the student may be included in the header.
- D. *Undergraduate and graduate school transcripts*: Unofficial copies are acceptable but should clearly indicate name of institution, degree program, courses taken, and GPAs. Transcripts should be included in reverse chronological order (i.e., newest transcripts first).
- E. *Project abstract (1 page maximum)*: Sea Grant programs collect some key information as a record of proposals submitted to be used for reviews and public dissemination. Font (Calibri or Times New Roman) size can be no smaller than 11 point and margins must be at least 1 inch on standard 8.5x11 inch paper throughout this section. The abstract should be separate from the project narrative and cover the following content:
 - a. Project Title and Name of Student.
 - b. Project Keywords.
 - c. Objectives. Summarize the objectives of the proposal, which may include the hypotheses to be tested. What will the project accomplish or determine? How will the project improve understanding of the issue?
 - d. Methodology. Summarize the work to be done, highlighting the methods necessary for conducting the research, such as standard models or techniques to be followed, specialized equipment needed, new or previously designed techniques resulting from other Sea Grant projects or related research. A brief summary of the outreach plan should also be included.

- e. Rationale. State the priorities or problems being addressed through the proposed research, including some relevant background information. Relevant Sea Grant priorities may be highlighted and potential users may be identified.
- F. *Project narrative (5-page maximum, including figures, tables, and other graphics but excluding literature cited and data management plan)*: Font (Calibri or Times New Roman) size can be no smaller than 11 point and margins must be at least 1 inch on standard 8.5x11 inch paper throughout this section. Project title and name of student may be included in the header. The narrative is intended to be a brief summary of the proposed thesis or area of study but should include sufficient detail to evaluate the appropriateness and feasibility of the research and outreach approach and the alignment of the project with coastal storm and resilience needs in the mid-Atlantic. The narrative should include the following subsections:
- a. Introduction. Provide background information, rationale for the research project, and how the proposed project addresses mid-Atlantic coastal storms or community resilience to coastal storms.
 - b. Objectives. List the objectives and/or hypotheses 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 rather than to list project activities or tasks.
 - c. Research Plan. This section should describe the research methods, approaches, and techniques that will be used to meet the stated objectives. Students may describe the experimental design, data sources to be used, how data will be accessed, and any facilities and equipment requirements. Students may wish to include a schedule that indicates milestones and tasks to be achieved and the anticipated dates for achieving those tasks.
 - d. Outcomes and Outreach Plan. Describe the research results to be achieved by the project, how these results relate to current knowledge of the topic, and of what use the research and results will be for specific audiences or end-users. A brief description of the engagement, outreach, education, or dissemination strategies to be used should be included. Strategies should go beyond traditional dissemination (e.g., scientific presentations and peer-reviewed literature) and should involve end-users directly (e.g., training workshops, development of appropriate outreach products for non-scientific audiences, work with K-12 students and teachers). Students are strongly encouraged to work with their mentor to develop their outreach strategy. Students may wish to include a schedule that indicates milestones and tasks to be achieved and the anticipated dates for achieving those tasks. VASG recognizes that research results may not be available until the end of the fellowship period; however, outreach is an ongoing process and the plan should describe mechanisms for consulting with and engaging the mentor throughout the fellowship.
 - e. Relationship to Ongoing Research or Programs. VASG encourages leveraging of non-Sea Grant funds and recognizes that the proposed research and programming is likely supported by ongoing funding and activities of the faculty advisor. This section should briefly describe the existing support (PI, project title, and funder), what portion of the proposed project is supported by these funds, and how the student's proposed project adds to and enhances ongoing activities and the overall mission of the faculty advisor's research activities. While the proposed research may be related to previous proposals, the project narrative is expected to be original text developed by the student.
 - f. Research Team and Coordination. Briefly describe the research team and their roles and responsibilities, including the role of the outreach or end-user mentor.
 - g. Literature Cited (does not count toward page limit).

- a. Data Management Plan (does not count toward page limit). As required by NOAA Data Sharing Policy for Grants and Cooperative Agreements Procedural Directive (Version 2.0, October 2011), VASG must ensure all environmental data collected with Sea Grant support are made publicly available in a timely manner. Data management plan, no more than two pages in length, should specify the plan for making environmental data available and interpretable, free of charge or at minimal cost, within two years of collection. If the data are to be archived in a larger-scale database or warehousing effort, please include the anticipated timeframe of data submission and contact information for the database management organization. If the data are not to be submitted to a database for archival purposes, please provide a description of plans for making the data available upon request. Note that during project reporting, Sea Grant programs may request information regarding any data requests you have received. Although not required, students are encouraged to consider identifying and pursuing possible databases for long-term archiving of their environmental data prior to proposal submission. If the project will not generate environmental data, it is sufficient to include a sentence saying so.
- G. *Budget and budget justification*: Up to \$40,000 for Ph.D. or master's students can be requested for any reasonable and necessary research funds, including stipend, tuition, fringe benefits, travel, and supplies. While the majority of the budget is likely to be stipend and/or tuition, it is expected that the budget will include funds for discretionary travel for research or conferences, equipment, and/or supplies. The budget should include, at a minimum, travel support for the fellow to attend a Sea Grant or NOAA meetings (e.g., Graduate Research Symposium in Virginia) and attendance at one professional conference. Facilities & Administrative (F&A) costs, also known as indirect or overhead, are NOT allowable on Sea Grant fellowships per federal regulation (15 C.F.R. § 917.11). VASG-funded projects require a 50% funding match (i.e., budgets must show \$1 of match for every \$2 of Sea Grant funding requested). Only non-Federal funds may be committed as matching contribution. In-kind contributions, unrecovered F&A and tuition, and non-federal salaries are all examples of match. Budgets should be developed in the 90-4 budget worksheet (available on the [Virginia Sea Grant website](#)). The budget justification must be a detailed description of each cost item in the 90-4 budget; additional guidance is available on the [Virginia Sea Grant website](#). VASG strongly encourages students to work with their institution's research administration or sponsored programs office to develop their budgets.
- H. *Mentor letter of commitment—may be submitted separately or with the proposal narrative*: The letter should indicate a commitment to mentor the student and include a description of the role that the mentor will play in the fellow's academic experience. Only a single letter should be sent (i.e., mentor teams must write and submit a single joint letter). The proposed mentor may submit the letter either to the student to be included with the proposal narrative, or directly to VASG (attention: Sam Lake). If sending to VASG, the letter may be mailed, emailed, or faxed (see Section XI for contact) and all letters must be time-stamped as sent before the deadline. There is no page limit for letters, but VASG recommends that they not exceed two pages and not include attachments. If a student wants assistance identifying potential outreach or end-user mentors or would like to talk further about this expectation, they are encouraged to contact VASG or their home Sea Grant program. (See Section VI for more information about mentors.)
- I. *Recommendation letters—submitted separately*: Two letters of recommendation should be submitted in support of the student. To maintain confidentiality, VASG suggests that letters NOT be submitted with the proposal narrative; instead, letters may be sent directly to VASG (attention: Sam Lake). One letter of recommendation should come from the student's primary faculty advisor. Co-advisors may submit a joint letter, or they may submit separate letters. However, each student is limited to a total of two recommendation letters. Letters may be

mailed, emailed, or faxed (see Section XI for contact), and all letters must be time-stamped as sent before the deadline. Letters should specifically address the relevance of this fellowship program to the student, and how well the student meets the evaluation criteria, e.g., student's academic record, relevant experience, potential for future success, interest in science-to-management. There is no page limit for letters, but VASG recommends that they not exceed two pages and not include attachments.

IX. Review Process

VASG will assemble a technical review panel composed of relevant researchers and end-users (e.g., university faculty, extension staff, resource managers, state Sea Grant staff). VASG follows strict conflict-of-interest policies.

The technical review panel will review proposals and advise VASG on the selection of fellows based on the following criteria:

1. *Academic and Professional Performance (25%)*: Strength of academic and professional performance to date, with a focus on graduate school performance. Performance is assessed primarily by review of student's CV, transcripts, and letters of recommendation; students are to be evaluated on their suite of academic and professional accomplishments including GPA, honors and awards, strength and diversity of coursework, publications and presentations, and diversity of relevant professional and extracurricular experiences.
2. *Academic and Career Potential (25%)*: Student's interest in a relevant career path, as well as their demonstrated potential to succeed in their academic and career goals. Assessed primarily by review of the career goal statement, letters of recommendation, and the fit of the overall proposal with VASG's mission and goals. Students are to be evaluated on their interests in and understanding of science-to-management and end-user engagement; demonstration of research and outreach potential (e.g., publications, participation in previous research and outreach projects); evidence of maturity, work ethic, and strong interpersonal and communication skills; and strength and diversity of relevant academic, professional, and extracurricular experiences.
3. *Outreach Plan (20%)*: Quality and extent of collaboration between student and outreach mentor and quality of outreach plan. Assessed primarily by review of the outreach plan and mentor letter of commitment.
4. *Research Plan (30%)*: Quality, scientific merit, and feasibility of the proposed research.

VASG, the other mid-Atlantic state Sea Grant programs, and the NOAA Coastal Storms leadership team make the final selection of the Mid-Atlantic Coastal Storms Graduate Research Fellowships after considering reviewers' advice and programmatic objectives and priorities. Notification of results is expected in June 2016.

X. Tentative Timeline for Fellowship Competition

- February 15, 2016: Fellowship announcement released
- April 1, 2016: Proposals due by 5:00pm EST
- Late May/early June, 2016: Notification of results
- Summer 2016: Awards begin (VASG has flexibility to start awards, but anticipates beginning the awards in the Fall semester 2016)

XI. Contact and More Information

Students are strongly encouraged to contact the VASG Fellowship and Research Program Coordinator, Dr. Sam Lake, to discuss proposal ideas.

Sam Lake, Fellowship and Research Program Coordinator
Virginia Sea Grant
Virginia Institute of Marine Science
P.O. Box 1346
Gloucester Point, VA 23062
Ph. 804-684-7436
Fax. 804-684-7269
Email. sjlake@vims.edu

VASG/NOAA Coastal Storms Mid-Atlantic Graduate Research Fellowship website:
<http://vaseagrant.vims.edu/graduate-student-opportunities/>