



Graduate Research Fellowship



2017-2019 Virginia Sea Grant Graduate Research Fellowship

Deadline: November 28, 2016

Virginia Sea Grant (VASG) is pleased to announce the availability of graduate research fellowships for the 2017-2019 academic years. The fellowship is open to full-time graduate students at any Virginia academic institution who are engaged in coastal and marine research relevant to Virginia and the VASG strategic plan. In addition to supporting the student's academic expenses, the fellowship will provide additional professional development opportunities throughout its duration, focusing on science communication, science-to-management process, adoption of innovation, outreach, and other Sea Grant activities and mission priorities. VASG is accepting proposals until November 28, 2016. This announcement and additional information can be found at: <http://vaseagrant.vims.edu/category/vasg-grf/>.

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.

In order to achieve our mission, VASG objectives and operational principles include:

Integration and Synergies: VASG works to advance innovation, produce synergistic benefits for partners, and promote integration that crosses functions (research, extension, education, and communication), and institutions (VASG's university partners).

Relevance and Impacts: VASG is results oriented and works towards measureable impacts and outcomes, striving for science-to-management impacts, broad adoption of technological innovation, and utilization of science by decision makers. VASG aims to prepare the future workforce of marine science professionals, and researchers by offering real-world training, and experience for graduate and undergraduate students.

Graduate Research Fellowship



Science-Based Knowledge Management: VASG is a non-political and non-ideological science broker, providing science-based information to support decision makers. VASG strives to be objective, and rigorously applies state-of-the-art procedures to manage real and perceived conflicts of interest in all matters.

VASG's strategic plan aligns with national and regional Sea Grant priorities, while addressing the Commonwealth's specific coastal and marine challenges in four focus areas: safe and sustainable seafood, healthy coastal and ocean ecosystems, sustainable and resilient coastal communities, and coastal and ocean literacy. More information about VASG, including the strategic plan, can be found at <http://vaseagrant.vims.edu/about>.

Fellowship Description

The purpose of the VASG Graduate Research Fellowship is to support exceptional graduate students who are engaged in education and research that furthers the goals of VASG. The fellowship also provides hands-on experience in translating research results to coastal and marine stakeholders, through a professional mentor, and offers a comprehensive set of professional development training opportunities that fellows may elect to take.

VASG Graduate Research Fellows address issues of relevance to Virginia communities, and of importance to coastal and marine science (broadly defined, e.g., natural or social sciences, engineering and design, policy and legal analysis, etc.).

In addition to their primary faculty advisor, fellows will be expected to work with a professional outreach or end-user mentor. Through interactions with professional mentors, fellows will ensure that their research results are useful and used by stakeholders, and have access to experienced professionals who can provide career advice. The process will also help fellows develop practical skills in science communication, collaboration, the transfer of science to management, and exposure to other critical professional skills. (More information can be found in the **Guidance on the Mentor-Fellow Relationship** section.)

Eligibility

Students must be enrolled in a full-time graduate or professional degree program at a Virginia academic institution prior to the award of the fellowship, no later than Fall 2017. Students may be working toward a degree in any discipline as long as they are engaged in research that is coastal- or marine-related and relevant to the mission and strategic plan of VASG. Previous recipients of VASG Graduate Research Fellowships are not eligible to apply. VASG especially encourages members from under-represented minority groups, women, persons with disabilities, and veterans to apply.

Graduate Research Fellowship



Award Information

The fellowship provides an award of up to \$40,000 per 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.

Contingent upon available federal funding, fellowships are available for up to two years for Ph.D. and M.S. students. The anticipated start date is June 1, 2017. VASG expects to fund between four and seven fellowships for the 2017–2019 academic years.

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.

Fellowship Requirements

Selected fellows will be required to:

- **Submit Reports:** Provide progress reports to VASG on an annual basis, including a final report, and copy of their thesis
- **Work with VASG communication:** Assist VASG efforts to publicize their research, and fellowship activities
- **Collaborate with an Outreach Mentor:** *Select* and work with an outreach or end-user mentor (see Guidance on Fellow-Mentor Relationship section)
- **Attend VASG Events:** Participate in regular meetings with VASG, including:
 - a welcome meeting at the beginning of the fellowship
 - VASG-sponsored professional development activities anticipated to occur two to four times per year
 - annual VASG Symposium in Richmond
 - an exit interview and evaluation at the conclusion of the fellowship
- **Acknowledge Support:** Acknowledge VASG support in all relevant presentations and publications

Guidance on Fellow-Mentor Relationship

The objectives of the Fellow-Mentor relationship are to:

- Nurture the professional skills of a fellow, including their communication, collaboration, project management, and other critical skills to effective engagement between science and end-users.

Graduate Research Fellowship



- Develop effective outreach and engagement strategies, products and deliverables that can move science, technologies, and other pertinent knowledge from a Fellow's research into the hands of a decision-maker who would benefit from that information.

Mentors provide a unique professional development opportunity for VASG 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.

Mentors must be individuals whose work requires the application of scientific information, particularly the information, data, and findings that will result from the student's research project. An outreach or end-user mentor could be from the public, private, or non-profit sector.

Fellows are expected to actively work with their mentors to develop an outreach plan, and participate in concrete, hands-on outreach activities. 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. 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. In some situations, outreach or end-user mentors may serve on a student's academic committee. Mentors will be invited to participate in VASG activities such as the VASG Symposium.

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 Review Process section).

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 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.

Graduate Research Fellowship



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

VASG 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.

Proposal Submission and eSeaGrant

Proposals must be submitted online via eSeaGrant (<http://vaseagrants.ecsion.com>) by 5:00pm EST on Friday, November 28, 2016. If you plan to apply, we recommend notifying VASG, and registering for eSeaGrant at least two weeks in advance of the deadline. Notifications can be sent to VASG as a short/simple email expressing your interest in the fellowship. Please reference "VASG Graduate Research Fellowship" in the email subject line.

VASG is currently launching a new system for our fellowship proposal submissions. Students can register for eSeaGrant by visiting (<http://vaseagrants.ecsion.com>), selecting the "Register" tab, and completing the required information. If you do not receive a "welcome" email with login credentials shortly after registering, please contact Sam Lake (see Contact and More Information section). Once you have successfully accessed eSeaGrant, you can change your password by clicking on your name in the upper-right corner of the screen, and selecting "My Profile."

To start a fellowship proposal, or edit an existing proposal, click on "RFP" (Request for Proposals) on the banner head. Use the box under RFP to search for and select "2017 VASG Graduate Research Fellowship." Once you have entered a title for your fellowship proposal, you must progress down through the sequence of application sections ("Instructions" through "Submission Preview") listed on the left side of the proposal window to submit the proposal. Guidance related to these sections follows, in sequence. eSeaGrant provides a separate page to enter the names and affiliations of your referees. This page may require additional pop-up pages, so please allow your browser to display pop-up windows, and enable JavaScript. All elements of your proposal must be converted to PDFs before uploading to eSeaGrant.

Graduate Research Fellowship



Further instructions on submitting your proposal can be found on the VASG website (<http://vaseagrant.vims.edu/category/vasg-grf/>) by contacting Sam Lake (see Contact and More Information section for contact).

Confirmation of proposal and letter receipt will be sent by return email; please contact Sam Lake (see Contact and More Information section) if you do not receive confirmation shortly after submitting your proposal.

VASG will not accept late proposals under any circumstances (e.g., online portal ceases to accept materials after 5:00pm EST on November 28, 2016), so please allow ample time to submit your proposals before the deadline.

Proposal Guidelines

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.

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. Do not exceed the page limits; excess pages will not be reviewed. Only the requested materials should be submitted; additional documents (e.g., appendices, 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/>.

For proposal elements C, D, H, and I, prepare using Calibri or Times New Roman, font size can be no smaller than 11 point, and margins must be at least one inch on standard 8.5 by 11 inch paper throughout these sections. VASG recommends including the name of the student on all headers.

Each proposal must include two major sections with the following elements in this sequence:

PART 1

- A. ***Signed title page*** (*one page maximum*): The title page must list the project title, and identify and provide contact information for the prospective fellow, faculty advisor(s), and professional 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 be included on this page; these are often provided by institutional sponsored program offices or equivalent to verify that the institution has reviewed the proposal. A template can be found on the [Virginia Sea Grant website](#).

Graduate Research Fellowship



- B. **Resumes/CVs** (*two page maximum per Resume/CV*): A brief CV or resume should be included for the student, primary advisor(s), and professional mentor. Do not include the CVs of committee members, other associated project participants, or others.
- C. **Career goal and professional mentoring statement** (*three page maximum*): The statement should describe the student's educational and professional goals and ambitions, professional growth interests and objectives, and how these goals relate to broader societal needs in the coastal and marine environment. The statement should emphasize how past experiences and competencies contribute toward your short- (1-5yr) and long-term (>5yr) goals and in particular, how this fellowship would contribute toward those goals. Speak to your collaborative leadership potential, communication ability, and include any pertinent information that provides insights into your past choices and future interests. Further, the statement should discuss what you hope to gain from your professional outreach or end-user mentor relationship, and how that contributes toward your long-term academic and professional goals.
- D. **Professional mentor and outreach plan** (*one page maximum*): The plan should be developed with your mentor to identify specific objectives of the professional mentoring and outreach activities to be conducted under the fellowship. What does the fellow hope to gain professionally, and academically from the specific outreach activities proposed in the outreach plan? What are the connections between the fellow's research and the needs and interests of an end-user, and how will you make these connections happen? Who are the target audience(s) for the outreach activities on your research? What deliverables or plan for such will the fellow produce once the research is completed, and why are these the best option for your target audience(s)? How will you and the mentor interact to achieve these goals (e.g., frequency, timeline, means of communication, topics, etc.)?

If a student wants assistance identifying potential professional outreach or end-user mentors or would like to talk further about this expectation, they are encouraged to contact VASG. (see Guidance on Fellow-Mentor Relationship section)

- E. **Professional outreach or end-user mentor letter of commitment**: 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 and professional experience. Only a single letter should be sent (i.e., mentor teams must write and submit a single joint letter). The proposed outreach or end-user mentor may submit the letter either to the student to be included with the proposal narrative Part 1, uploaded through [eSeaGrant](#) as an additional referee, or mailed, emailed, or faxed directly to VASG (attention: Sam Lake, see Contact and More Information section). 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.

Graduate Research Fellowship



- F. **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 student's application proposal; instead, letters should be uploaded through [eSeaGrant](#). Letters may also be mailed, emailed, or faxed directly to VASG (attention: Sam Lake, see Contact and More Information section). All letters must be time-stamped as sent before the deadline. 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. There is no page limit for letters, but VASG recommends that letters not exceed two pages and not include attachments. Referees are encouraged to consider:
- Student's academic and professional performance, including record and relevant experience.
 - Student's academic and professional potential for future success, including research and professional activities in integrated, trans-disciplinary settings.
 - Student's maturity, responsibility, motivation, integrity, and creativity.
 - Student's collaborative leadership skills and potential, and ability to identify and understand the big picture, and connections among perspectives.
 - Student's interest and competencies in science-to-management, science communication to non-experts, and capabilities and issues of relevance to their professional mentor relationship, and outreach activities.
 - Relevance of this fellowship program to the student.
 - Other relevant background, competencies, or materials that the referee feels is important for applicant reviewers to know.
- G. **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).
- H. **Research project abstract** (*one page maximum*): Please summarize the research project you will be working on during a fellowship. The abstract should be separate from the project narrative described below in Part 2, and cover the following content:
- **Project Title and Name of Student**
 - **Research Funding**: Identify the agency or organization currently funding the research, include funding level.
 - **Project Keywords**

Graduate Research Fellowship



- **Research Objectives:** Summarize the objectives of the research to be conducted by the fellow, list the objectives and/or hypotheses of the research project. What will the project accomplish or determine? How will the project improve understanding of the issue? Be careful to state the purpose of the work rather than to list project activities or tasks. What are the outcomes that have lasting impacts?
- **Methodology:** Summarize the work to be done and research approach taken, highlighting the methods necessary for conducting the research (e.g., standard models or techniques to be followed, specialized equipment needed).
- **Rationale:** State the priorities or problems being addressed through the proposed research, including some relevant background information. Relevant VASG, regional or national priorities may be highlighted.

PART 2

- I. **Project narrative** (three page maximum, including figures, tables, and other graphics but excluding literature cited and data management plan): 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 VASG's strategic plan.

The narrative should include the following subsections:

- **Introduction:** Provide background information, rationale for the research project, and how the proposed project addresses the VASG mission, and a specific strategic plan focus area (e.g., reference the strategic plan priority that the research will address).
- **Research Plan:** This section should briefly 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 should include a schedule that indicates milestones and tasks to be achieved, and the anticipated dates for achieving those tasks.
- **Outreach Tasks:** Beyond the objectives discussed in the Part 1, 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.

Graduate Research Fellowship



- **Outcomes:** 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.
 - **Research Team and Coordination:** Briefly describe the research team and their roles and responsibilities, including the role of the fellow and primary advisor(s).
 - **Literature Cited** (does not count toward page limit).
 - **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. The 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.
- J. **Budget and budget justification:** Up to \$40,000 per year for up to two years for Ph.D. and M.S. students can be requested for any reasonable and necessary research fellowship funds, including stipend, tuition, fringe benefits, travel, and supplies. While the majority of the budget is likely to be stipend, tuition, or other enrollment fees, it is expected that the budget will include funds for discretionary travel for conferences, professional development, or research-related events, equipment, and/or supplies. The budget should include, at a minimum, travel support for the fellow to attend one to two VASG meetings per year around Virginia (e.g., annual Symposium in Richmond, fellowship orientation, VASG professional development workshops), 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

Graduate Research Fellowship



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.

Review Process

The review process proceeds in stages. VASG will first review all proposals for relevance to Sea Grant and Virginia. This review will be conducted by VASG staff, the External Advisory Committee, and key stakeholders through review of the proposal abstract. Any proposals considered not relevant to VASG will not be considered by the review panels. VASG follows strict conflict-of-interest policies in all of its review procedures.

Stage 1

VASG will assemble a professional impact potential review panel composed of coastal and marine science scholars, educators, other fellowship managers, talent search and development professionals, and VASG clients, end-users, and outreach staff to review Part 1 of the fellowship proposal. The panel will assess a candidate's academic and professional performance, and potential. Approximately the top fifteen candidates will be moved forward to the technical review panel (VASG typically funds seven to eight fellows). The professional impact potential will consider the following criteria:

Academic and Professional Performance (40%): Strength of academic and professional performance to date, with a focus on graduate school performance. Also consider their maturity, responsibility, motivation, integrity, creativity, and collaborative leadership skills, and experiences at the science-to-management interface, and with end-user engagement. 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.

Academic and Career Potential (40%): Student's interest in a relevant career path, as well as their demonstrated potential to succeed in their academic and career goals. Students are to be evaluated on their interests in and understanding of science-to-management and end-user engagement; demonstration of academic, professional, research and outreach potential (e.g., professional engagement, publications, participation in previous research and outreach projects); evidence of maturity and vision, work ethic, and strong interpersonal and communication skills; and strength and diversity of relevant academic,

Graduate Research Fellowship



professional, and extracurricular experiences. Consider the student's potential as a collaborative leader, particularly in integrated, trans-disciplinary settings, their ability to see the big picture and connections between perspectives. Apply a holistic perspective, considering collectively a student's academic and professional experiences, attributes, competencies, and achievements as demonstration of potential future impacts both academically and professionally. Assessed primarily by review of the career goal statement, letters of recommendation, and the potential impact on broader societal needs from the student's work and future potential.

Professional Mentor Relationship (20%): Strength and potential of the relationship established with a professional outreach or end-user mentor. Will the arrangement lead to substantial professional growth by the student? Will it produce valuable transferable knowledge from science to an end-user? Is the approach feasible and likely to achieve the professional growth and outreach objectives identified?

Stage 2

VASG will assemble a technical review panel composed of relevant researchers and end-users (e.g., university faculty, extension staff, resource managers). The technical review panel will review Part 1 and Part 2 proposals, but particularly Part 2 and the outreach implementation material from Part 1. The panel will advise VASG on the selection of fellows based on the following criteria:

Research Plan (60%): Quality, scientific merit, and feasibility of the proposed research, and the significance of the issues to coastal and marine science (broadly defined, e.g., natural or social sciences, engineering and design, policy and legal analysis, etc.)

Outreach Plan (40%): Quality and extent of collaboration between student and outreach or end-user mentor, and quality of outreach plan. Consider how much professional growth potential exists for the student under the mentor relationship structure. Quality, merit, and feasibility of the proposed outreach activities, and their importance to the target end-user audience(s). Assessed primarily by review of the outreach implementation plan material, and the mentor letter of commitment.

VASG makes the final selection of Graduate Research Fellowships after considering reviewers' advice, and programmatic objectives and priorities. Notification of results is expected in April 2017.

Tentative Timeline for Fellowship Competition

- September 16, 2016: Fellowship announcement released
- November 28, 2016: Proposals due by 5:00 p.m. EST
- April, 2017: Notification of results
- June 1, 2017: Awards begin
(VASG has flexibility to start awards between June 1 to September 1)

Graduate Research Fellowship



Actual award notifications contingent upon the availability and timeliness of federal appropriations.

Contact and More Information

Students are strongly encouraged to contact the VASG Fellowship and Research Program Coordinator, Sam Lake, to discuss proposal ideas. VASG Director, Troy Hartley, and Sam Lake will visit each partner institution in late September or early October to discuss all of VASG's fellowship announcements and answer questions; please contact Sam Lake for more information on these informational sessions.

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

Graduate Research Fellowship website: <http://vaseagrant.vims.edu/category/vasg-grf/>