

Mid-Atlantic Sea Grant / NOAA Ocean Acidification Program Supports A New Graduate Research Fellowship In Ocean, Coastal and Estuarine Acidification

Deadline: April 13, 2018

The Mid-Atlantic Sea Grant Programs (MASGP), in partnership with the NOAA Ocean Acidification Program (OAP), are pleased to announce the availability of Ocean Acidification (OA) Graduate Research Fellowships for the two-year period covering the 2018 and 2019 academic years. The fellowship is open to full-time graduate students at any academic institution in Delaware, Maryland, New Jersey, New York and Virginia who are engaged in coastal and marine research relevant to regional ocean, coastal, and estuarine acidification. In addition to supporting the student's academic expenses, the fellowship will provide additional professional development opportunities throughout its duration, focusing on science communication, management application, outreach, and other Sea Grant and OAP activities and mission priorities. The MASGP and OAP are accepting proposals until 5:00 p.m. ET on Friday, April 13, 2018. This announcement and additional information can be found on each state Sea Grant program's website. Access to submit proposals, as well as document templates and guidance document can be found on the eSeaGrant website hosted by Virginia Sea Grant. Links are provided below in this announcement.

FELLOWSHIP DESCRIPTION

The overall goal of the fellowship is to develop OA researchers for the Mid-Atlantic region to respond rapidly to the anticipated ocean acidification in the region. The Ocean Acidification Graduate Research Fellowship will support exceptional graduate students who are engaged in education and research that furthers the goals of the MASGP and OAP (together the 'sponsors'). The fellowship also provides hands-on experience in translating research results to coastal and marine stakeholders, through a professional mentor, and offers fellows professional development training opportunities. Through these fellowships MASGP and OAP will achieve their goals of 1) increasing OA knowledge and research capacity in the Mid-Atlantic region through education and workforce development; 2) addressing key priority research needs on OA within the Mid-Atlantic region, and; 3) transferring OA fellowship research and knowledge to relevant stakeholders through outreach and extension.

Ocean Acidification Graduate Research Fellows address issues relevant to coastal ecosystems and communities related to ocean, coastal and estuarine acidification. The focus should be on improving understanding of the potential ecological consequences of increasing carbon dioxide concentration in regional coastal waters. Projects may encompass natural and/or social science research topics. See links below for some OA priorities identified for the region:

[NOAA Ocean Acidification Program](#)

[Mid-Atlantic Coastal Acidification Network \(MACAN\)](#)

- [MACAN Meeting \(9 May 2017\) Report](#)
- [MACAN Research Priorities \(6 Feb 2018\) Webinar](#)

MASGP

- [Delaware Sea Grant Strategic Plan](#)
- [Maryland Sea Grant Strategic Plan](#)
- [New Jersey Sea Grant Consortium Strategic Plan](#)
- [New York Sea Grant Strategic Plan](#)
- [Virginia Sea Grant Strategic Plan](#)

Potential OA fellows are required to be enrolled full-time at an accredited university in a participating MASGP state, and have an academic advisor who will act as the primary mentor for their education and research. In addition to their primary faculty advisor, fellows will be expected to work with a professional outreach or end-user mentor. Through interactions with their professional mentor, fellows will ensure that their research results are useful and used by stakeholders. Ideally, the professional mentor will work collaboratively with the student



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throughout the fellowship and be instrumental in the development, implementation and application of the research beyond the academic community. Professional mentors could include Sea Grant extension specialists, educators, federal and state agency professionals, and industry partners. The fellowship will also include professional development training and workshops. Fellows will be asked early in the fellowship to work together with the funding sponsors to develop a two-year professional development plan.

MID-ATLANTIC SEA GRANT PROGRAMS

NOAA Sea Grant is a national network of 33 university-based state programs. For over 50 years, Sea Grant has supported coastal and Great Lakes communities through research, extension and education. Sea Grant's mission is to enhance the practical use and conservation of coastal, marine and Great Lakes resources in order to create a sustainable economy and environment. The MASGP collaborating to offer this fellowship opportunity include the Delaware, Maryland, New Jersey, New York, and Virginia Sea Grant programs.

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The OAP pursues science to improve our understanding of how (and how fast) the chemistry of the ocean is changing, how variable that change is by region, and what impacts these changes are having on marine life, people, and the local, regional, and national economies. In support of NOAA's mission to understand changes in the world's oceans, share that knowledge, and conserve coastal and marine ecosystems, the OAP plays an integral role in maintaining long-term ocean acidification monitoring; conducting research designed to understand marine ecosystems sensitivity to acidification; promoting relevant educational opportunities; engaging in national public outreach activities related to ocean acidification and its impacts; and coordinating activities with other agencies and appropriate international ocean science bodies. As part of its responsibilities, the OAP provides grants for critical research projects that explore the effects on marine organisms, ecosystems and the socioeconomic impacts that can lead to potential adaptive strategies. To learn more visit:

<http://oceanacidification.noaa.gov/WhoWeAre.aspx>

ELIGIBILITY

Applicants must be enrolled in a full-time graduate or professional degree program at an accredited academic institution in Delaware, Maryland, New Jersey, New York or Virginia prior to the awarding of the fellowship, no later than the fall 2018 semester. Students are expected to complete the fellowship while enrolled at their home institution. 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 of the MASGP and OAP. The sponsors strongly encourage students who are from underrepresented groups in marine science, women, persons with disabilities, and veterans to apply.

AWARD INFORMATION

The fellowship provides a total award of \$47,000 per year for two years. For this fellowship, a yearly non-federal match of at least \$12,500 is required. Only non-federal funds may be committed as matching contribution. Pursuant to federal regulation (15 C.F.R. § 917.11), no overhead is permitted on Sea Grant fellowships. It is acceptable to the MASGP for the difference between an institution's federally negotiated overhead rate and the Sea Grant 0% fellowship overhead rate to be applied toward match. See *Budget and Budget Justification* section below for more details.

Contingent upon available federal funding, fellowships are available for two years for M.S. and Ph.D. students. The anticipated start date is August 1, 2018. We anticipate supporting approximately five fellowships, one in each of the five participating states. The MASGP will make all awards to the student's primary academic advisor, as required by most university-sponsored programs. However, the sponsors expect that students will lead in developing and submitting the fellowship proposal.



FELLOWSHIP REQUIREMENTS

Selected fellows will be required to:

Submit Reports: Provide progress reports to the state Sea Grant programs on an annual basis, including a final report, and copy of their thesis, dissertation, or capstone project.

Work with Sea Grant and OAP Communication: Assist the MASGP and OAP efforts to publicize the fellow's research and activities.

Collaborate with a Professional Mentor: Select and work with a professional outreach or end-user mentor throughout the fellowship, and develop and launch an individual professional development plan in collaboration with mentor and sponsors.

Attend Fellowship Events: Participate in regular meetings with MASGP and OAP, including:

- An OA Training Session (Location TBD) at the beginning of the fellowship
- Presenting at a minimum of one relevant national meeting in 2019, and attending the 2020 Graduate Symposium hosted by Virginia Sea Grant including making a presentation on the fellow's research or outreach activities.

Acknowledge Support: Acknowledge the Ocean Acidification Graduate Research Fellowship support in all relevant presentations and publications.

HOW TO APPLY

Intent to Apply

All applicants are strongly encouraged to contact their state Sea Grant program's Director to express their initial interest and for general guidance, and Sam Lake at Virginia Sea Grant (contact information below) to discuss the specifics of the application process on eSeaGrant (<https://vaseagrant.ecsion.com>).

Proposal Guidelines

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

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, etc.) will not be reviewed. This announcement can be found on each participating state Sea Grant program's website under Ocean Acidification Graduate Research Fellowship. Guidance, forms and templates, and access to eSeaGrant for proposal submission can be found on the Virginia Sea Grant website (<https://vaseagrant.org/>).

For proposal elements A, B, C, F, and H (described below) 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. Please include the name of the student in the header or footer on all pages.



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Proposal Elements

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

PART 1

- A. **Signed Title Page** (*two-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 MASGP/OAP and matching funds being requested for each project year must also be listed. The title page should include a Research Abstract of up to 200 words, summarizing the research project you will be working on during the fellowship that encompasses objectives, methodology and rationale. Please indicate if the funding program(s) peer-reviewed the research proposed fellowship work plan. Required institutional signatures (Principal Investigator and Authorized Institutional Representative) should be included on the title page; these are often provided by institutional sponsored program offices or equivalent to verify that the institution has reviewed the proposal. A title page template can be found on the eSeaGrant website.
- B. **Career and Professional Development Goal Statement** (*one-page maximum*): The statement should describe your 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 leadership potential, communication ability, stakeholder engagement interests or experience, and include any pertinent information that provides insights into your past choices and future interests. Illustrate what motivates you today and moving forward with your research and their applications. The sponsors encourage you to include 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.
- C. **Professional Mentor and Outreach Plan** (*one-page maximum*): The plan should be developed with both your academic advisor and end-user mentor to identify specific objectives of the professional mentoring and outreach activities to be conducted during the fellowship. What do you hope to gain professionally and academically from the specific outreach activities proposed in the outreach plan? What are the connections between your research and the needs and interests of an end-user, and how will you make these connections happen? Who are the target audiences for the outreach activities on your research? What deliverables will you produce once the research is completed, what deliverables may be planned for after the fellowship, 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.)?
- D. **Professional Mentor Letter of Commitment**: The professional mentor letter should indicate a commitment to mentor the student, and include a description of the role the mentor will play in the fellow's academic and professional experience. It is recommended that fellows identify a single professional mentor. The proposed professional mentor may submit the letter either to the student to be included with the proposal, or submitted separately through eSeaGrant (see *Recommendation Letter* section below). The letter must be submitted before the deadline. There is no page limit, but the sponsors recommend that they not exceed two pages, and not include attachments.
- E. **Recommendation Letters** (*submitted separately*): Two letters of recommendation should be submitted in support of the student. To maintain confidentiality, letters should NOT be submitted with the student's proposal; instead, letters should be uploaded through eSeaGrant by their authors. One letter of recommendation should come from the student's primary academic advisor or faculty member who is the PI on the research award the applicant will be working on during the fellowship. Co-advisors may submit a joint letter, or they may submit separate letters. However, each student is limited to a total of two



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recommendation letters. Please address letters to the Ocean Acidification Review Panel. There is no page limit for letters, but the sponsors recommend that letters not exceed two pages and not include attachments. Referees are encouraged to consider the student's:

- academic and professional performance, including record and relevant experience
- academic and professional potential for future success, including research and professional activities in integrated, trans-disciplinary settings
- responsibility, motivation, integrity, and creativity
- teamwork and leadership skills and potential, and ability to identify and understand the *big picture*, and connections among perspectives
- interest and competencies in the science-to-management process, science communication to non-experts, and capabilities and issues of relevance to their mentor relationship, and outreach activities

For the second letter of recommendation, applicants are encouraged to consider someone who might know the applicant from a different perspective (e.g., former employer, mentor from a previous relevant internship, someone you have worked with on an outreach or policy project). It is most important to select someone who will write a strong letter for you, but an “outside” perspective helps to demonstrate your diversity and will likely highlight different strengths and experiences.

- F. **Resumes/CVs** (*two-page maximum per Resume/CV*): A brief resume or CV should be included for the student, primary academic advisor(s), and professional mentor. Do not include the CVs of committee members, other associated project participants, or others.
- 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).

PART 2

- H. **Project Narrative** (*four-page maximum, including figures, tables, and other graphics but excluding literature cited and data management plan*): Project title and name of student must 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 relevance of the research and outreach approach, and the alignment of the project with the missions of Sea Grant and OAP.

The narrative should include the following subsections:

- **Introduction**: Provide background information, rationale for the research project, and how the proposed project addresses the research priorities described in this announcement.
- **Research Plan**: This section should briefly describe the research methods, approaches, and techniques that will be used to meet the project's objectives. Students should describe the experimental design, data sources to be used, how data will be accessed, and any facilities and equipment requirements. Students clearly describe how their research goals, objectives and tasks align with their milestone chart (see below).
- **Outcomes and Broader Societal Impacts**: 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. What difference will the research make to society?
- **Fellowship Milestone Chart / Timeline**: Provide a timeline of research, professional development, and outreach activities and accomplishments you hope to achieve over the duration of the fellowship. This should include the initial outline of a research and individualized professional development plan.



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It is expected this chart will align with the research objectives and will be expanded in consultation with the professional mentor and faculty advisor as the research project evolves.

- **Research Team and Coordination:** Briefly describe the research team and their roles and responsibilities, including the role of the applicant and academic advisor(s).
 - **Literature Cited** (*does not count toward page limit*).
 - **Data Management Plan** (*two-page maximum; does not count toward page limit*): As required by NOAA Data Sharing Policy for Grants and Cooperative Agreements Procedural Directive (Version 3.0, March 2016) and NOAA's Public Access to Research Results Plan (PARR) (http://www.glerl.noaa.gov/review2016/reviewer_docs/NOAA_PARR_Plan_v5.04.pdf); all proposals must include a data management plan which is compliant with PARR). The MASGP must ensure all environmental data collected with Sea Grant support are made publicly available in a timely manner and the OAP requires funded PIs to archive their data with NCEI in the OA data portal. The data management plan, should specify the plan for making environmental data available and interpretable, free of charge or at minimal cost, within two years of collection. A detailed data management plan will describe how metadata and data collected as part of the project will be disseminated to the broader community, and will describe plans for longer term archiving of these data. National Centers for Environmental Information (NCEI) serves as the data management focal point for the NOAA OAP (<http://www.nodc.noaa.gov/oceanacidification/index.html>). All data resulting from NOAA OAP-funded projects must be archived and accessible through NCEI. 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.
 - **National Environmental Policy Act (NEPA) Abbreviated Environmental Compliance Questionnaire Form** (*does not count toward page limit*): A completed form will be required by all applicant, and can be accessed through eSeaGrant.
- I. **Budget and Budget Justification:** Fellowships are for two years with \$47,000 available each year. \$40,000 is available each year for stipend, tuition, fringe benefits, and fees. There is an additional \$7000 per a year for fellowship related travel and research expenses. Funds must first be allocated for required travel to the OA training week and conferences, including a relevant national meeting in 2019 and the required Graduate Symposium hosted by Virginia Sea Grant in 2020. It is recommended that fellows anticipate a minimum of \$3500 per a year in travel expenses. The remaining \$3500 per year may be allocated for research supplies and analyses as needed for the proposed project. 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).

For this fellowship MASGP and OAP require an annual non-federal match of at least \$12,500 per year. 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 eSeaGrant website). The budget justification must be a detailed description of each cost item in the 90-4 budget; additional guidance is available on the eSeaGrant website. The sponsors strongly encourage applicants to work with their institution's research administration or sponsored programs office to develop their budgets.

In addition, include a paragraph at the beginning of the Budget Justification detailing the in-kind or leveraged support. This paragraph should provide an explanation of how the proposed research is being supported outside of the fellowship. This may include sources of in-kind support (e.g. agency,

organizations, university programs, etc.) and how they are supporting the proposed research. Students are expected to use the project narrative to demonstrate the feasibility of implementing the proposed work, this section will be used to assess if there is adequate funding to complete the proposed work.

Proposal Submission

Proposals must be submitted online via eSeaGrant (<http://vaseagrant.ecsion.com>) by **5:00 pm ET on Friday, April 13, 2018**. If you plan to apply, we strongly recommend registering for eSeaGrant at least two weeks in advance of the deadline. Beforehand, please notify your state Sea Grant program with a short, simple email expressing your interest in the fellowship. Please reference “Ocean Acidification Fellowship” in the subject line (see contact information at the end of the announcement). Instructions on how to register and start a proposal on eSeaGrant are included below. Additional instructions can be found on the eSeaGrant.

Submitting an Application on eSeaGrant

Applicants should carefully review the eSeaGrant instructions document available on the eSeaGrant website. Applicants can register for eSeaGrant by visiting the website (<http://vaseagrant.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 Dr. Sam Lake, Virginia Sea Grant (see contact information below).

To start a fellowship proposal, or edit an existing application, click on “Current Tasks” on the banner head, and select “Add Fellowship Application” under “2018 Ocean Acidification Graduate Research Fellowship.” Once you have added the fellowship application to your Current Tasks, you must progress down through the sequence of application sections (“Start Here” through “Submission Preview”) listed on the left side of the window to submit the application. Guidance related to these sections follows, in sequence. Please note - some sections may require additional pop-up pages, please allow your browser to display pop-up windows and enable JavaScript.

All application elements must be converted to PDF documents before uploading to eSeaGrant. Adherence to the format requirements and page limits is mandatory, and ensures fairness across all applications. Applications not meeting these requirements may be rejected without review.

To preserve confidentiality, letters of recommendations must be uploaded directly from the referees to the sponsors through eSeaGrant. Applicants must identify and submit requests to their referees through eSeaGrant, by entering their names and email addresses on the corresponding section.

All elements, including recommendation letters, must be submitted by the deadline. The sponsors will not accept late applications under any circumstances (e.g., internet delays), so please allow ample time to submit your applications in advance of the deadline. Confirmation of the application and recommendation letters will be automatically generated and sent by eSeaGrant. If you do not receive confirmation shortly after submitting your application, please contact Dr. Sam Lake at Virginia Sea Grant.

REVIEW AND SELECTION PROCESS

Stage 1 - Professional Potential and Technical Review Panel

The sponsors will assemble a review panel to evaluate the fellowship proposals in terms of: 1) the student’s academic and professional performance and potential; and 2) the proposal’s scientific, technical and outreach relevance to Sea Grant and OAP. Relevant components to be considered by the panel include the applicant’s professional mentorship plan, outreach activities, research and regional relevance of the research. Prior to convening the panel, members will be asked to score each assigned proposal with the following rubric: 40% technical and relevance; 20% leadership potential; 20% communication and problem solving skills; and 20% outreach and end-user mentor engagement. Panel members will discuss all elements of the proposal and scores. After panel discussion, the panel will summarize each proposal and provide two rankings for each



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proposals: 1) qualification of applicant (qualified; somewhat qualified; not qualified); and 2) quality of the science (fundable; not fundable).

Stage 2 - Final Selection Panel

A committee comprised of the Sea Grant Directors and representatives from NSGO and OAP will then select fellows for each state. The committee will review all proposals elements and will take into consideration the pre-panel application scores and the panel rankings (qualification of applicant and quality of science). Discussion elements include the research plan, professional potential, relevance to region and each state, and broader societal impact. A fellow from each state will be selected, if qualified. All Sea Grant awards are contingent upon the availability and timeliness of federal appropriations.

TENTATIVE TIMELINE FOR FELLOWSHIP COMPETITION

Fellowship announcement released	March 2018
Proposals due by 5:00 p.m. EST	April 13, 2018
Stage 1 – Professional Potential and Technical Review Panel	May 2018
Stage 2 – Relevancy and Final Selection Panel	May 2018
Notification of results	June 2018
Awards begin	August 1, 2018

ADDITIONAL INFORMATION

All applicants are strongly encouraged to contact their state Sea Grant program to indicate their interest in the fellowship and for general questions. Applicants should contact Dr. Sam Lake, Virginia Sea Grant, for technical questions regarding the application process, including eSeaGrant and document templates.

CONTACTS

Delaware Sea Grant

Dr. Edward Lewandowski
Acting Director
Phone: 1-302-645-4253
Email: edlew@udel.edu

Virginia Sea Grant & eSeaGrant

Dr. Samuel J. Lake
Fellowship & Research Program Coordinator
Phone: 804-684-7436
Email: sjlake@vims.edu

Maryland Sea Grant

Dr. Mike Allen
Associate Director for Research and Administration
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National Sea Grant Office

Dr. Rebecca Briggs
Regional Program Officer
Phone: 301-734-1084
Email: rebecca.briggs@noaa.gov

New Jersey Sea Grant Consortium

Dr. Peter M Rowe
Associate Director
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NOAA Ocean Acidification Program

Dr. Erica Ombres
Program Manager
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New York Sea Grant

Dr. William Wise
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