MARYLAND SEA GRANT 2022 COMPETITIVE GRADUATE RESEARCH FELLOWSHIP

REQUEST FOR APPLICATIONS

EXECUTIVE SUMMARY

Maryland Sea Grant (MDSG) is pleased to announce the Maryland Sea Grant Competitive Graduate Research Fellowship. Students apply for a two-year Maryland Sea Grant fellowship that provides stipend, fringe benefits, and tuition remission and travel allowances. **Due Monday, April 18 at 5 PM EDT.** To be eligible, graduate students must be enrolled in a graduate degree program at a Maryland academic institution and engaged in research that is relevant to Maryland and the MDSG Strategic Plan 2018-2023. In addition to financial support, these opportunities will provide additional professional development opportunities in science communication, the science-to-management process, and/or other relevant skills. As increasing diversity, equity, and inclusion in coastal and marine science research is an important programmatic priority for MDSG, we especially encourage applications from students from underrepresented racial and ethnic groups, individuals with disabilities, individuals from minority serving institutions, and individuals from economically or educationally disadvantaged backgrounds. 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.

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 Aliya Mejias (mdsg.research@mdsg.umd.edu).

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Maryland Sea Grant Competitive Graduate Research Fellowship

The Maryland Sea Grant research, education, and outreach mission is to address gaps in the knowledge needed for science-based efforts to inform conservation, restoration, sustainability, and resilience in the Chesapeake and Maryland Coastal Bays and their watersheds. As part of this mission, we anticipate awarding one competitive fellowship to support a graduate student conducting 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: 1) Healthy Coastal Ecosystems; 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.

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 management or policy. To assist with this, Maryland Sea Grant will offer professional development on relevant skills, including education, outreach, and communications. As a requirement of the fellowship, fellows must choose and work with a professional 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 demonstrated and potential impact on science and society, their demonstrated interest in connecting science with user communities, the scientific and technical merit of their proposed research project, and the relevance of the proposed research to [MDSG's mission](#). While all qualified graduate students should apply and will be fairly considered, MDSG is interested in increasing diversity in coastal and marine science research, and thus we encourage applications from students who have been historically underrepresented in coastal or marine science. In addition, Maryland Sea Grant is particularly interested in research that furthers our understanding of the coastal resilience and sustainability in the Chesapeake and Maryland Coastal Bays and watersheds, particularly for communities that are historically underserved or under-resourced. As funding for research costs is not associated with this fellowship, students working on coastal and marine research projects funded by non-Sea Grant sources are particularly encouraged to apply.

AWARD INFORMATION
The two-year fellowship will provide a stipend ($32,000), fringe benefits, tuition remission, and a $2,000 travel allowance for the fellow. Fellows will be paid as graduate research assistants by Maryland Sea Grant, a University System of Maryland institution, following the same model and terms as our [Maryland Sea Grant Research Fellowships](#) program. Continued support after the first year will be contingent upon satisfactory performance by the Fellow and the availability of federal funds. The anticipated start date is the fall semester 2022.

If your institution requires paying graduate students through its own payroll system, Maryland Sea Grant can provide an institutional award to cover only the $32,000 stipend, fringe benefits, partial tuition remission, and travel allowance up to a total of $45,000 per year. However, additional matching funds contribution may need to be negotiated with the institution to meet the 50% matching requirement above the first $25,000 of the subaward. Typically, these awards

would need to be made to the faculty advisor of the student. We will negotiate this arrangement with the institution of the selected students. No budget is required at the application stage.

We anticipate there will be funding available for one fellowship. If additional funding becomes available, Maryland Sea Grant reserves the ability to issue additional fellowship awards from the applicant pool.

ELIGIBILITY

Students must be enrolled in or admitted to a full-time graduate or professional degree program at a Maryland 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 fellowship 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. *While all qualified graduate students should apply and will be equally considered, MDSG is interested in increasing diversity in coastal and marine science research, and thus we encourage applications from students who have been historically underrepresented in coastal or marine science.*

REQUIREMENTS

Graduate students who are selected will be required to:
- Select and work with a professional outreach or end-user mentor who is an extension, education, or communication staff person or an end-user of research results (e.g., state or federal agency professional, K-12 teacher, industry partner) 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;*
- Acknowledge MDSG support in all relevant scientific presentations and publications.

At a minimum, the fellow is required to meet with outreach or end-user mentors periodically (no less than three times/year) 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. This mentor's role in the student's education should be discussed in the project narrative.

An outreach or end-user mentor could be from the public, private, or non-profit sector. While we encourage students to explore opportunities to work with Maryland Sea Grant educators, communicators, or Extension faculty within the University of Maryland Extension program as outreach mentors, it is not required. 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 assist prospective fellows in identifying potential mentors during the application period.

NAVIGATING THE SUBMISSION PORTAL: eSEAGRANT
You must submit your proposal online at https://eseagrant.mdsg.umd.edu. Login to the proposal online submission system with your credentials. Fill out the registration information to create an account, if necessary.

If you forget your password in the future, use the password retrieval function from the landing page. Maryland Sea Grant will not have access to your password.

Click "Add Proposal" under the "2022 MDSG Competitive Graduate Research Fellowship" selection and enter a title to start a new submission. When you later return to eSeaGrant, this proposal will be listed under the Fellowship Applications list as proposal 01. Click on the title to continue.

Navigate to different sections for the proposal using the tabs along the left. Each tab is required and includes a brief description of the file to be uploaded. You must follow the instructions outlined in the application description for each section.

Submit your completed application on the "Submission Preview" tab no later than the deadline.

APPLICATION FORMAT, GUIDELINES AND ENTRY IN eSEAGRANT

eSEAGRANT TAB: STUDENT APPLICANT
Complete the requested information for student applicant in the appropriate form.

eSEAGRANT TAB: FACULTY MENTOR AND END-USER MENTOR
Complete the requested information for student's primary advisor and end user mentor. Click the "Add additional Mentor" button to complete the second form.

eSEAGRANT TAB: PROJECT DESCRIPTION UPLOAD
Enter the title of your proposal and then upload the proposal narrative file (PDF only).

Adherence to the format requirements is mandatory. Font size can be no smaller than 12 point (Arial preferred) and margins must be 1 inch on standard 8.5x11 inch paper throughout the document. The project description file must include the following components in this sequence:
- Cover Sheet
- Career and Research Interest Statement (1-page maximum)
- Project Description (5-page maximum)
- Literature Cited
- Timeline and Tasks (1-page maximum)
- Academic CV/Biosketch (2-page maximum)
- Data Management Plan
- Proof of acceptance (letter or current transcript)

A. *Cover Sheet (1-page maximum):* This should clearly indicate "Maryland Sea Grant Competitive Graduate Research Fellowship Application" as well as include the title of the proposed project; detailed contact information for the applicant, their faculty advisor, and the professional mentor; degree being sought; the primary Sea Grant focus area; and any signatures required by your institution to submit the application.
B. *Career and Research Interest Statement (1-page maximum)*: The statement should discuss your personal and educational journey to this point and how these experiences

inform your current educational goals and professional career plans. Include in your narrative reflections on such questions as: What are your educational or career goals? What motivates your academic and research interests? What impact do you hope to have on science and society? How do your goals connect to marine or coastal science; sustainability; diversity, equity, inclusion, justice, and accessibility (DEIJA); and/or other issues relevant to the Maryland Sea Grant mission? How can Sea Grant and this fellowship contribute to these goals? (You do not need to address all of these questions or individually list them.)

C. *Project Description (**5-page maximum**, including figures, tables, and other graphics)*: The narrative should describe the background and rationale, objectives, general approach and methods, anticipated results, broader impacts, and research team and partners. It is intended to be a brief summary of the proposed 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. <u>Abstract</u>. Provide an up to 300-word abstract describing the objectives, rationale, methodology, and anticipated impact of the research.

    b. <u>Introduction / Background / Objectives.</u> Why is the project needed? 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). What is the objective, purpose, or hypothesis of the proposed project?

    c. <u>General Approach and Methods</u>. How will the project be accomplished? Describe the methods, approaches, and techniques that will be used to meet the objectives. Describe the role of the applicant and any other individuals contributing to the approach.

    d. <u>Anticipated Results</u>. What will be accomplished? 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. <u>Broader Impacts</u>. 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, work with or impacts on under-served communities). **The participation of the end-user mentor should be explicitly described. Applicants are strongly encouraged to work with their mentors to develop their outreach strategy.** More detail about sharing your outreach beyond academic venues is available https://www.mdsg.umd.edu/share-your-research.

    f. <u>Research Team and Partners</u>. Briefly describe the research team and their roles and responsibilities, including the role of the outreach or end-user mentor.

D. *Literature Cited:* Document all references cited in your proposal.

E. *Timeline and Tasks (1-page maximum):* The schedule should show, in table form by month, the milestones and tasks to be achieved (e.g., field work, data analysis, work/meetings 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.mdsg.umd.edu/proposal-forms-and-worksheets. *This section does not count toward your 5-page limit.*

F. *Academic CV/Biosketch (2-page maximum):* Provide a two-page (maximum) curriculum vita for the student. Students may include presentations.

G. *Data Management Plan*: Proposers must complete a Data Management Plan for making environmental data and results accessible and interpretable within two years of collection. Download and fill out the "Sea Grant Data Management Plan Form" from our forms page (https://www.mdsg.umd.edu/proposal-forms-and-worksheets). Additional instructions are provided on the form. Storing data on local servers or external drives without public access or noting that data will be available "upon request to the PI" are no longer sufficient options. Note you will be required to list data sets created and how to access them when reporting on your project. For additional guidance, see our "Data Management and Sharing" page: https://www.mdsg.umd.edu/data-management-and-sharing.

H. *Proof of acceptance and enrollment in a graduate program:* This can either be an acceptance letter or a current transcript.

eSEAGRANT TAB: INVITE LETTER OF RECOMMENDATION WRITERS
Use this section to invite your referees to submit letters of recommendation. Click the "Request Document" button and enter each referee's name and email address. Enter the contact information for two letter of recommendation writers – your primary faculty advisor and end-user mentor. **Do this well in advance.** This will send them an email to access eSeaGrant and submit their letter confidentially. Once letters have been submitted, you will be able to see this on the tab.

One letter of recommendation should come from your primary faculty advisor. The advisor's letter should describe the applicant's background and research potential, as well as describe the advisor's role in mentoring and supporting the applicant (advisor's contributions of expertise, academic training and resources (e.g., equipment, supplies, funding) to carry out the project.)

A second letter should come from the professional mentor indicating a commitment to mentorship and describing the role that the mentor will play in the fellow's academic research and outreach experience.

Only two letters will be accepted, so if more than one professional mentor is selected, a joint letter is preferred. If an applicant wants assistance identifying potential professional mentors, or would like to talk further about this expectation, they are encouraged to contact MDSG. Please enter the recommenders' contact information into eSeaGrant well in advance of the deadline to ensure your writers have time to submit.

eSEAGRANT TAB: SUBMISSION PREVIEW
Review the data and filenames of your submission. Click the "Submit" button in the upper right corner to submit your proposal package. **You MUST click submit by the deadline or your proposal will not be considered, regardless of what you have already uploaded.**

DEADLINE AND SUBMISSION PORTAL
Applications must be submitted online by **Monday, April 18, 2022 at 5:00 pm EDT** to MDSG's proposal system, eSeaGrant: https://eseagrant.mdsg.umd.edu. 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 submitter by email only. Please contact Aliya Mejias or Mike Allen if you do not receive confirmation shortly after submitting your proposal (eseagrant@mdsg.umd.edu). Applicants are reminded to follow submission policies of their home institutions (e.g., obtaining review and signatures).

REVIEW PROCESS

MDSG will assemble a peer-review panel composed of the MDSG director, faculty, and professionals (e.g., extension staff, resource managers, private and non-profit sectors, and/or additional stakeholders) familiar with the coastal issues faced by Maryland, the region, and the nation. The panel's evaluation may be supported by external written reviews. MDSG follows strict conflict-of-interest policies. The panel will review fellowship applications and recommend award recipients based on the criteria established for the fellowship and consistent with MDSG's longstanding commitment to developing a diverse science-based workforce. The Maryland Sea Grant director has final discretion to select the application(s) to fund based on panel ratings and comments, availability of funds, and specific programmatic priorities, which include having a diverse and inclusive portfolio of fellows across institutions, research topics, strategic focus areas, and program needs.

Applications will be reviewed based on the following criteria:
- Research Plan: Strength of the proposed plan of research (including the research plan; the applicant's organization, analytic, and writing skills) (30%)
- Research Impacts and Relevance: Potential research impact, relevance to the Maryland Sea Grant strategic plan, and involvement of professional mentor (25%)
- Applicant Strengths: Demonstrated strengths and potential impact of the applicant on watershed, coastal, marine or social sciences (including applicant's academic experiences; leadership experience; education and career goals; commitment to DEIJA issues; demonstration of maturity, responsibility, and integrity) (25%)
- Applicant Broader Impacts: Demonstrated or potential impact on others or society (including applicant's outreach and engagement efforts/plan, extracurricular and professional activities, and engagement with diverse stakeholders and communities) (20%)

Notification of awards is expected by June 30, 2022.