

MARYLAND SEA GRANT

2021 GRADUATE STUDENT RESEARCH SUPPORT GRANTS PROGRAM

REQUEST FOR APPLICATIONS

EXECUTIVE SUMMARY

Maryland Sea Grant (MDSG) is pleased to announce the Graduate Research Support Grants program. This program supports student research expenses (e.g., materials and supplies, analytic services, research travel expenses). **Due Wednesday, January 13 at 5 PM EST.** 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 2018-2021. In addition to financial support, these opportunities may provide additional professional development opportunities in science communication, the science-to-management process, proposal/grantsmanship, 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 that have hindered their ability to pursue a career in STEM. 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, <u>Fredrika Moser</u>, or the Associate Director for Research and Administration, <u>Mike Allen</u>, to discuss their proposal ideas. For technical assistance, contact Aliya Mejias, Graduate Research Assistant.

Maryland Sea Grant College 5825 University Research Ct. Suite 1350 College Park, MD 20740 301-405-7500 mdsg.research@umd.edu

Graduate Research Support Grants

INTRODUCTION

Maryland Sea Grant's research, education, and outreach mission seeks to address gaps in the knowledge needed for science-based efforts to inform conservation, restoration, sustainability, and resilience in the Chesapeake and coastal bays and their watersheds. As part of this mission, we anticipate awarding multiple competitive research grants to support graduate student research. Maryland Sea Grant looks to support research that is socially relevant and impactful in the near term. Research proposals should be applicable and communicated to stakeholders (e.g. end-users) outside of academia and have an impact beyond basic research results. We look to the proposal for how this will be accomplished.

Grantees will be selected based on the scientific and technical merit of their proposed research project, the relevance of their proposed research to MDSG's mission and programmatic priorities, and their academic achievements. An applicant's research must be consistent with the Maryland Sea Grant Strategic Plan and address at least one of the MDSG focus areas: 1) Healthy Coastal Ecosystems; 2) Sustainable Fisheries and Aquaculture; and 3) Resilient Communities and Economies. We encourage applicants to clearly identify how this research will have broader societal impacts on coastal communities, economies, or ecosystems. We have a particular interest in research which connects with end-users from underrepresented or underserved communities.

Consistent with our strategic plan priorities, we 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 that have inhibited their ability to pursue a career in STEM.

AWARD INFORMATION

Applicants may request up to \$10,000 to support a graduate student research project. Funds should be budgeted for a 12-month period starting May 1, 2021 or September 1, 2021. These are small grant awards intended to support graduate student research projects. Appropriate budget items may include materials and supplies, travel for fieldwork or to present project results at a conference, analytic services, summer field assistant support, or other direct research costs. Graduate student stipend, benefits, and tuition are not allowable in these grant awards. Applicants are encouraged to contact the program to discuss budget specifics during proposal development.

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

Those selected to receive awards will be required to complete an <u>Abbreviated Environmental Compliance Questionnaire</u> for review by the National Sea Grant Office prior to award dissemination.

Maryland Sea Grant meets the required 50% matching requirement for grantees in this competition by forgoing collection of indirect costs on each subaward we issue to competition awardees. As such, we recommend that institutions do not charge indirect costs on these graduate student grants. For applicants selected from the University of Maryland Center for Environmental Science, the 50% matching requirement will be implemented through foregone

indirect charges on your budget when the grant is awarded. Inclusion or exclusion of indirect costs in a budget will not affect proposal evaluation/selection.

ELIGIBILITY

International students, students from underrepresented racial and ethnic groups, individuals with disabilities, individuals from minority serving institutions, and individuals from economically or educationally disadvantaged backgrounds that have inhibited their ability to pursue a career in STEM are encouraged to apply.

Students must be enrolled in a full-time graduate or professional degree program at a Maryland academic institution at a graduate level. Students may be working toward any master's or Ph.D. degree, as long as their research is relevant to the mission and strategic plan of MDSG and has an emphasis on Maryland's portions of the Chesapeake or coastal bays and their watersheds.

GRANTEE REQUIREMENTS

Graduate student research grant recipients will be required to:

- Participate in MDSG-sponsored professional development activities;
- Contribute one entry per semester to the MDSG student blog, Fellowship Experiences;
- Provide a final progress report to MDSG, as well as electronic copies of derived publications and their thesis or dissertation;
- Acknowledge MDSG support in all relevant scientific presentations and publications.

APPLICATION SUPPORT

While submitting a grant proposal for the first time may seem intimidating, Maryland Sea Grant is here to help you understand the process and provide technical support. We believe writing, preparing, and submitting a grant proposal is an important educational experience for students.

Join our webinar or watch it afterward: MDSG will offer a webinar to explain the goals of the grant and the eSeaGrant application process on Monday, November 16 at 1 PM Eastern. Register for the webinar here: https://umd.zoom.us/meeting/register/tJMuc-msqTojGNxy5FrHY3rT3f-cUcmAp24b

Schedule a discussion: We have open appointment hours for students, and if desired, their faculty mentor to discuss the application goals and process. Check out Mike Allen's <u>appointment calendar</u> for open hours or contact us. You can also receive technical support for eSeaGrant from us at mdsg.research@umd.edu or mallen@mdsg.umd.edu.

APPLICATION GUIDELINES AND SUBMISSION THROUGH ESEAGRANT

Adherence to the format and component 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.

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. Either the faculty advisor or the student can start the application process. Detailed guidance and images on site use and budget development are available at the end of this RFP.

Click "Add Proposal" under the "2021 MDSG Graduate Research Support Grants" selection and enter a title to start a new submission.

eSEAGRANT TAB: START HERE

Provide your proposal title and any keywords. Enter the correct dates for your project. These should be 5-1-2021 to 4-30-2022 or 09-1-2021 to 08-31-2022. On this tab, you can also add a delegate—someone who has access to your submission—by clicking on the "Actions" dropdown box. This person must already be registered for an eSeaGrant account. Add the advisor or student so that he or she has access to the proposal.

<u>eSEAGRANT TABS: PRINCIPAL INVESTIGATOR – FACULTY ADVISOR and CO-PI(s) – STUDENT APPLICANT</u>

Complete the requested information for the principal investigator (faculty advisor) and each coprincipal investigator in the appropriate form. The student should be listed as a Co-PI.

eSEAGRANT TAB: PROJECT DESCRIPTION UPLOAD

Enter the title of your proposal and then upload the proposal narrative file (PDF only).

The project description file must include the following components in this sequence:

- Signed Cover Sheet
- Project Description (4-page maximum)
- Literature Cited
- Timeline and Tasks (1-page maximum)
- Academic CV/Biosketch
 - Student (2-page maximum)
 - Advisor (2-page maximum)
- Data Management Plan
- A. Signed Cover Sheet (1-page maximum): This should clearly indicate include "Graduate Research Support Grants Application" as well as the title of proposed project; detailed contact information for the applicant and their faculty advisor; degree being sought; the primary Sea Grant focus area; and your institution's required sponsored programs office signatures.
- B. *Project Description* (**4-page maximum**, including figures, tables, and other graphics): The narrative should describe the background and rationale, objectives, general approach and methods, anticipated 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. Attention should be paid to how this research is responsive to priorities in meeting MDSG's broader societal mission as discussed in the research grant introduction above.

- 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 how the proposed Sea Grant funding will be used to advance the research project. Describe the role of the applicant and any other individuals contributing to the approach.
- d. Anticipated Results and Impacts. What will be accomplished and what will the impact be? 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. Describe any broader impacts of the research on society. Demonstrating an outreach component or illuminating how the proposal is relevant to audiences beyond academia is an important consideration.
- C. Literature Cited: Document all references cited in your proposal.
- D. *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, product development) 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.
- E. Academic CV/Biosketch (2-page maximum): Provide two-page (maximum) curriculum vitas for the faculty advisor and student. We recommend you use the National Science Foundation Biographical Sketch or SciENCv format. Students may list presentations in the Products section.
- F. 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: http://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: http://www.mdsg.umd.edu/data-management-and-sharing.

eSEAGRANT TAB: BUDGETS

Applicants should work with their faculty advisor and Sponsored Programs Office to develop their budget. You may provide direct access to your budget worksheet to these individuals through a sharing icon in the module. Up to \$10,000 in Sea Grant funds can be requested for any reasonable and necessary research and outreach expenses. Funding may materials and supplies, travel for fieldwork or to present project results at a conference, analytic services, summer field assistants, or other direct research costs. *Graduate student stipend, benefits, and tuition are not allowable in these grant awards.* Applicants must use the budget module in eSeaGrant to create and submit their budget. In the budget module, you must add all dollar values for each requested item and **add the appropriate budget justification** for each item. You may also share editing access to your budget worksheets through the module interface. You may then view/print your budget justification from the budget worksheet tab and the budget

table using the 90-4 tab. Applicants are encouraged to contact MDSG to discuss budget specifics during proposal development. See detailed budget instructions below.

eSEAGRANT TAB: BUDGET 90-4

Once you complete the budget tab, you may download or print a copy of your full budget table from this tab. No data are entered here.

eSEAGRANT TAB: INVITE LETTER OF RECOMMENDATION WRITER

One letter of recommendation should come from your primary faculty advisor. This letter should describe the applicant's academic achievement, role in developing the fellowship application and carrying out the research project, and aptitude and potential for a career in coastal or marine science. Enter the advisor's information into this tab and a request will go to the individual to log in and submit the letter.

<u>eSEAGRANT TAB: DEMOGRAPHIC AND OTHER OPTIONAL DATA</u>

Complete this optional form to provide information to the program about the applicant pool.

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 **Wednesday**, **January 13**, **2021 at 5:00 pm EST** 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 us 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 seek external technical reviews from faculty and professionals familiar with the coastal issues faced by Maryland, the region, and the nation to assess how well the applications meet the criteria and priorities. MDSG follows strict <u>conflict-of-interest policies</u>. The evaluation criteria include:

- Research Plan Strengths and Feasibility (40%). Technical strength of the research narrative, including background, objectives, methodologies, potential outcomes. Timeline and budget feasibility.
- Research Plan Relevance and Potential Impact (30%). Relevance of the proposed research to the MDSG strategic priorities, impact beyond academia to influencing public perceptions, management decisions, society, policy, or the environment.
- Applicant Strengths and Potential Impact (30%). The applicant's achievements, skills, background, and potential impact as demonstrated by the CV and advisor recommendation letter. Potential of funding to advance the student's research, degree completion, or career.

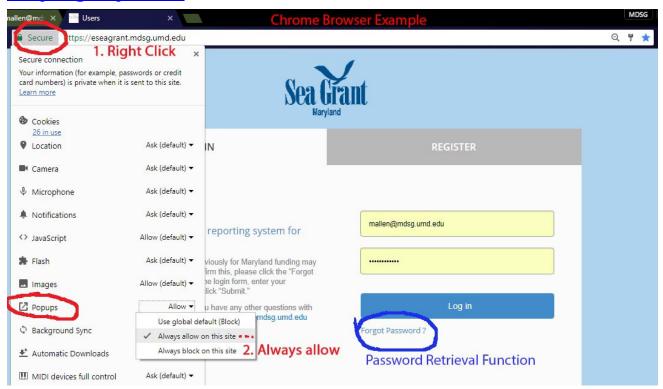
Based on the evaluations, MDSG will select and notify grant recipients. MDSG will consider the technical reviews, availability of funds, and specific programmatic priorities, which include having a diverse and inclusive portfolio of awards across institutions, research topics, strategic focus areas, and student backgrounds. Notification of awards is expected by April 15, 2020.

INSTRUCTIONS FOR USE OF MARYLAND'S eSEAGRANT SYSTEM AND DETAILED BUDGET GUIDANCE

https://eseagrant.mdsg.umd.edu

SITE-USE INSTRUCTIONS

Please report any issues, problems, or suggestions for improving the user experience to eseagrant@mdsg.umd.edu.



LOGIN: If this is your first time using eSeaGrant, go to https://eseagrant.mdsg.umd.edu and click on the gray "REGISTER" bar to create an account. Otherwise log in with your existing credentials.

Click on your name in the upper right corner to access the dropdown menu for your profile. Once on the profile page, your password can be changed by clicking the 'Change Password' button on the upper right side of your screen. Additionally, your contact information can be modified here by clicking the 'Edit' button.

FORGOTTEN PASSWORD: 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.

CREATE A NEW PROPOSAL: On the Current Tasks tab, find the appropriate graduate student RFA. Click the "Add Proposal" link. Add the title of your new proposal and click "CONTINUE".

When you later return to eSeaGrant. This proposal will be listed under the Request for Proposals list as proposal 01. Click on the title to continue.

COMPLETE YOUR PROPOSAL

From the proposal landing page, you may modify the proposal title, keywords, and start/end dates. The start date is May 1, 2021 or September 1, 2021.

The "ACTIONS" menu allows you to add a delegate to your proposal – another individual already registered with eSeaGrant who you give permission to view and modify your proposal. Add your advisor or your student applicant.

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.

eSEAGRANT BUDGET INSTRUCTIONS

There are 4 tabs on the budget worksheet. Tab 1 is instructions. The "Subaward" tab is informational only. Start with Tab 4.

Use the Budget Worksheets tab to add a budget worksheet.

- Enter a Worksheet Title (e.g., [PI/Student Last Name] Year 1).
- Select Indirect Cost type for your budget (On-Campus, Off-Campus, Other).
- Select Duration to align with the budget period for the proposal you are submitting.
- Click Save and Continue.

Lines for adding items are noted. Enter dollar values requested in the "Sea Grant Funds" column. "Grantee share" is for matching funds, which are not required for this application. When finished populating a new item, be sure to click 'Add' to the right of it. **You are required to provide COMPLETE justification for every dollar value entered on each worksheet.** To add budget justifications, select the "Missing" icon (red) in the Justifications column. A pop up window will appear, enter justification language here. Be sure to click 'Save' before closing. Once you have added a justification, the "Missing" icon will change to "Added" (green).

Justifications submitted for each line, along with each line's SG Funds and Matching Funds requests, appear automatically in the Justification Preview page (click [view] under 'Justification' at top-right) at the appropriate place within the justification outline. It is unnecessary (unless noted otherwise) to type formatted outline information or line totals in a justification textbox.

Budget worksheets include auto-calculation of sub-total and total values but are not automatically saved as new data are entered. We recommend you save frequently. For all budget sections you must click the ADD or SAVE button at the end of each budget line to save before you move on to the next line. Data will be lost if you click Update Worksheet before selecting ADD or SAVE. To ensure totals at the bottom of the worksheet are updated after adding new data, click the "Update Worksheet" button at the top of the page after you add or save a new line.

Once you edit and save a worksheet, click Back (top right) and it will be added to your Budget Worksheet tab. To edit a saved budget worksheet, click the Edit button next to its listing in the Budget Worksheets tab. You can also view the justification from this table.

For A. Salaries and Wages. *No salary funds are allowed for senior personnel or the graduate student applicant for this application.* If you are asking for support for field or laboratory assistants, choose the appropriate Other Personnel type. Include the person's name or TBD in the box. Enter the individual's monthly salary in box 1 (Mo. salary), their benefit percentage as a decimal in box 2 (Benefits %), how many months charged to the proposal in box 3 (Sea grant mos. effort), how many months to be applied as match in box 4 (Grantee mos. effort). eSeaGrant will auto-calculate the total salary request and fringe based on these numbers. Add each individual to the form separately.

For G. Other Costs, choose the appropriate option from the drop down menu and then enter a very short item description in the box. Click "Add" on the right to add the line to the budget (and allow another line to be created). Include the full description and breakdown in the justification popup window. You may add up to 10 "Other Costs" lines.

For H. Indirect costs, you must enter your actual institutional rates in the "Inst. Rates" set of boxes. Enter the rates you are charging on this proposal in the "SG Rates" boxes. Usually these will be the same. However, if you are partially forgoing collection of indirect costs, your proposal rates may be lower. To apply indirect costs as match/cost share, click the "Waived IDC as match" box. The difference between the Inst. Rates and SG rates will be applied as additional match. Make sure the "include" check box is selected for each set of items to which the rate applies (all for MTDC, A and B for salary and fringe only, A for salary only). If you uncheck the "Auto Calculate" box, you can manually enter a waived/foregone IDC total in the box on the right. Do not forget to add budget justification language for Indirect Costs, including describing any use of IDC as cost share.

Refer to our <u>Budget Justification Guidance</u> for examples of the minimum level of detail required in a justification response.

Once you have completed your budget and justifications, you may view the justifications from the budget worksheets tab and the 90-4 budget form(s) using a separate tab on the left side navigation.

<u>Sharing your budget</u>. From the table listing your worksheets (Tab 4), select the share icon on the right side of the budget worksheet you wish to share. A pop up window will appear; click the "Add" button. Enter the information for the person whom you wish to share access to the worksheet and press "Send Request". The individual will receive an email with a direct link to the worksheet from mdsq-eseagrant@umd.edu.