

Massachusetts Sea Grant Graduate Research Fellowship

The purpose of the Massachusetts Sea Grant Graduate Research Fellowship is to support exceptional prospective graduate students who are engaged in coastal and marine research that furthers the goals of the Woods Hole Oceanographic Institution Sea Grant (WHOISG) and Massachusetts Institute of Technology Sea Grant (MITSG) programs. The Fellowship is geared towards providing funding and support for students who have not yet matriculated into a graduate program, but are applying and intend to enroll in a thesis-granting graduate program in Massachusetts during Fall 2024. The focus of this Fellowship is both to support cutting-edge research and the professional growth of the student through mentorship, professional development training, participation in conferences in their field, and more.

It is anticipated that two (2) two-year Graduate Student Fellowships will be awarded, with a maximum Sea Grant support of \$40,000/year for stipend and tuition costs and \$2,000/year for professional development, such as conference travel or attendance fees, trainings, and/or workshops, and research and supply costs for a total of \$84,000 for each Fellow over the two year period. Prospective advisors are expected to provide the necessary equipment, resources, and support for the Fellows to engage in their research project throughout the duration of the Fellowship. **Fellowships will require a match of \$1 of non-federal funds for every \$2 of federal Sea Grant funds requested.** Awarding of this Fellowship is dependent on Federal appropriations and funding availability.

Fellowship period:

September 1, 2024–August 31, 2026

Fellowship applications must be received by:

4:30 pm Eastern Time, Wednesday, October 4, 2023

Application instructions can be found on page 5

Other important dates and deadlines:

General informational webinars:

- Tuesday, August 22nd, 2023 at 1:00pm Eastern Time. Webinar will be held via Zoom. [Click here to register.](#)
- Thursday, September 7, 2023 at 4:00pm Eastern Time. Webinar will be held via Zoom. [Click here to register.](#)

Office Hours for Application Assistance:

- Tuesday, September 12, 2023 from 2:00pm-4:00pm Eastern Time. [Click here to register.](#)
- Monday, September 18, 2023 from 9:00am-11:00am Eastern Time. [Click here to register.](#)
- Thursday, September 28, 2023 from 12:00pm-2:00pm Eastern Time. [Click here to register.](#)

August 1, 2023: Release Massachusetts Sea Grant Graduate Research Fellowship RFP

Wednesday, October 4, 2023: Proposals due to WHOISG by 4:30 p.m. Please submit the Fellowship application in pdf format to seagrant-research@whoi.edu. Late applications will be returned without review.

Applicants will be notified in early January of Fellowship review decisions.

Early January, 2024 - March 16, 2024: Awardees will be required to submit additional paperwork to WHOISG/MITSG upon acceptance. Refer to the Post-Notification Information Document for details.

March 16, 2024: Awardees must accept or decline Fellowship awards by March 16, 2024. Acceptance is contingent on the awardee and advisor first obtaining cost share commitments from their institution.

If an awardee is unable to accept the fellowship, deadlines for alternate awardees and secondary alternate awardees can be found in the Post-Notification Information Document.

September 1, 2024: Fellowship begins

Should the awardees, alternate awardees, or secondary alternate awardees run into challenges with submitting this additional documentation within this timeframe, please reach out to Jennie Rheuban (Research Coordinator, WHOISG) as early as possible via seagrant-research@whoi.edu to seek an extension.

Eligibility: Eligible applicants include students that a) are currently enrolled in an undergraduate or joint bachelor's/master's program, or b) are not currently enrolled in any graduate program and plan to attend a graduate program in Fall 2024 in Massachusetts. Applicants do not need to reside in Massachusetts and may be US citizens, permanent residents, or international students. International students who are not US citizens or permanent residents must have received an undergraduate or previous graduate degree from an accredited institution of higher education in the United States or U.S. territories. Applicants must propose to enroll in an accredited thesis-granting masters or doctoral program in Massachusetts and the research undertaken by the students must be Massachusetts-based, coastal- or marine-related, and in keeping with [the National Sea Grant](#) focus areas (i.e., [Environmental Literacy and Workforce Development](#), [Healthy Coastal Ecosystems](#), [Sustainable Fisheries and Aquaculture](#), and/or [Resilient Communities and Economies](#)). For international applicants, it is the responsibility of the student and Massachusetts-based Institution to obtain all the necessary visas and documentation to study in the United States.

Applicants enrolling in non-thesis-granting master's programs are ineligible. Applicants are eligible to submit only one application, must be enrolled in a graduate program in Massachusetts no later than Fall 2024, and must be enrolled throughout the Fellowship. An individual may not accept the Massachusetts Sea Grant Graduate Research Fellowship if the individual accepts or is supported by a **federal** graduate fellowship. However, supplementing the Massachusetts Sea Grant Graduate Research Fellowship with funds from research contracts is allowed.

Contact information: Questions should be directed to Jennie Rheuban (Research Coordinator, WHOISG) via seagrant-research@whoi.edu.

Introduction

Woods Hole Oceanographic Institution Sea Grant (WHOISG) and Massachusetts Institute of Technology Sea Grant (MITSG) are pleased to jointly request applications for two (2) two-year Fellowships from prospective graduate students proposing to attend an accredited thesis-granting masters or doctoral degree program in the Commonwealth of Massachusetts.

WHOISG and MITSG are part of the National Sea Grant College Program (NSGCP) of the National Oceanic and Atmospheric Administration (NOAA), a network of 34 individual programs located in each of the coastal and Great Lakes states. For this 2024-2026 Graduate Research Fellowship competition, WHOISG and MITSG jointly seek applicants interested in pursuing a marine- or coastal-processes focused degree that falls under one or more of the NSGCP research focus areas (i.e., [Environmental Literacy and Workforce Development](#), [Healthy Coastal Ecosystems](#), [Sustainable Fisheries and Aquaculture](#), and/or [Resilient Communities and Economies](#)).

The purpose of the Massachusetts Sea Grant Graduate Research Fellowship is to support exceptional prospective graduate students who are engaged in research that furthers the goals of the WHOISG and MITSG programs. The Fellowship provides funding and support for students who have not yet matriculated into a graduate program but are applying and intend to enroll in a thesis-granting graduate program in Massachusetts during Fall 2024. The focus of this Fellowship is both to support cutting-edge research and professional growth of the applicant through mentorship, professional development training, participation in conferences in their field, and more. Fellows will hone their communication, collaboration, project management, research, and other critical skills needed to be effective in their field. Prospective advisors are expected to provide the necessary equipment, resources, and support for the Fellows to engage in their research project throughout the duration of the Fellowship.

Massachusetts Sea Grant Graduate Research Fellows will pursue a course of study that will fill information gaps or provide innovative solutions to pressing coastal issues in Massachusetts that are important to coastal and marine resources in a broad range of fields (e.g., natural or social sciences, engineering and design, policy and legal analysis, architecture, business, education, economics, etc.).

In addition to their primary faculty advisor, Fellows will be expected to work with a Professional Development Mentor who will help translate research results to coastal and marine communities through outreach and engagement. Through these interactions, Fellows will ensure their research results are useful to and used by coastal communities and the general public, and gain access to experienced professionals who can provide career advice. WHOISG and MITSG will assist the Fellows in identifying Professional Development Mentors.

Diversity, Equity, Inclusion, Justice and Accessibility (DEIJA) Priority

WHOISG and MITSG are committed to building inclusive research, extension, communication and education programs that serve people with unique backgrounds, circumstances, needs, perspectives, and ways of thinking. As such, we strongly encourage applicants of all ages, races,

ethnicities, national origins, gender identities, sexual orientations, disabilities, cultures, religions, citizenship types, marital statuses, education levels, job classifications, veteran status types, and socioeconomic status types to apply for this competitive Fellowship program. We recognize that many of these groups have been historically underrepresented in STEM, and one of the goals of this Fellowship is to bring new and diverse talent into the marine sciences.

Further, WHOISG and MITSG encourage applicants to engage with people from underrepresented racial and ethnic groups, individuals with disabilities and individuals from economically or educationally disadvantaged backgrounds. Applicants should articulate how their research will have broader societal impacts on coastal communities, including people from underrepresented or underserved communities.

Fellowship Responsibilities and Expectations

After notification and acceptance, but prior to being awarded a Fellowship, the applicant must provide additional documentation as outlined below. WHOISG and MITSG staff will be available to help the Fellow with any of these additional documents.

Provide Additional Documentation: Provide a cost-share authorization letter from their graduate institution, a Fellowship budget and budget justification, a faculty advisor letter of commitment, and a letter of acceptance from their institution. The Fellowship will not be awarded until these items have been received. These items are further explained in the Post-Notification Information document.

As a Massachusetts Sea Grant Graduate Research Fellow, awardees will be expected to:

Engage in Hypothesis-Driven Research: Research must be Massachusetts based, coastal- or marine-related, and in keeping with National Sea Grant focus areas (i.e., [Environmental Literacy and Workforce Development](#), [Healthy Coastal Ecosystems](#), [Sustainable Fisheries and Aquaculture](#), and/or [Resilient Communities and Economies](#)).

Share Research Results: A key focus of all Sea Grant programs is public outreach and community engagement. As part of their research, Fellows will be expected to share their results with relevant communities, individuals, and/or the general public in partnership with their Sea Grant Liaisons and a Professional Development Mentor (see below).

Work with WHOISG and MITSG Liaisons: Fellows will be paired with one staff member at both WHOISG and MITSG who will be their two Sea Grant Liaisons. Fellows will be encouraged to maintain an informal line of communication with the staff members. Liaisons can help in identifying and contacting Professional Development Mentors as well as provide ideas for communities, individuals and organizations that will benefit from Fellowship outcomes. Fellows will be expected to update Liaisons at least every 6 months throughout their Fellowship.

Find and Collaborate with a Professional Development Mentor (by end of Year 1, after the award has been made): A Professional Development Mentor outside of the Fellow's graduate institution can be a critical asset in career development. Fellows should identify, reach out to, and begin a collaboration with a Professional Development Mentor by the end of Year 1. The Professional Development Mentor could work for a management, non-profit, academic, or other organization that is relevant to the goals of the Fellow's graduate research. Once identified, the Fellow and their Professional Development Mentor should design a mentorship and outreach plan that details the scope and aspirations of the Fellow-mentor relationship, and outlines

outreach activities associated with the research. The faculty advisor(s) as well as Liaisons can help identify a Mentor and aid the Fellow and their Mentor in developing a mentorship and outreach plan. This plan should be signed by both the Fellow and the Professional Development Mentor and emailed to seagrant-research@whoi.edu **no later than September 1, 2025**. For additional information, please see the [Guidance on Fellow-Mentor Relationships](#).

Work with WHOISG's and MITSG's Communications Staff: Fellows will also assist WHOISG's and MITSG's communication staffs' efforts to publicize their research and Fellowship activities. Expected activities include assisting with newsletter articles, social media posts, or press releases related to the funded research, or any other communications products.

Attend WHOISG and MITSG Events: Fellows will be expected to participate in annual meetings for the duration of the Fellowship program, along with other researchers supported through WHOISG and/or MITSG's research programs and the Sea Grant staff, to summarize findings to date. Fellows will present a short presentation introducing their proposed research or preliminary findings and have a chance to learn about other research undertaken and supported by WHOISG and MITSG.

Have Access to Professional Development and Research Funds: In addition to support for stipend and tuition costs, this Fellowship provides \$2,000/year for professional development, research, or supply costs for a total of \$4,000 for each Fellow over the two year period.

A Data Management Plan and Abbreviated Environmental Compliance Questionnaire will be filed on the Fellows' behalf by WHOISG and MITSG at the time of awarding of the Fellowship relative to the \$2,000/year for professional development and research and supply costs. Prior to these funds being released to the Fellows, more details will be sought as necessary on both of these documents to ensure compliance with the 2024-2027 Omnibus Application Requirements.

Fellowship Application Preparation Instructions

WHOISG and MITSG staff will be holding office hours to provide potential applicants with opportunities to ask any questions that arise. Office Hours will be held via Zoom. If you would like to attend an Office Hours session, please register using one of the Zoom links below.

- Tuesday, September 12, 2023 from 2:00pm-4:00pm Eastern Time. [Click here to register.](#)
- Monday, September 18, 2023 from 9:00am-11:00am Eastern Time. [Click here to register.](#)
- Thursday, September 28, 2023 from 12:00pm-2:00pm Eastern Time. [Click here to register.](#)

In order to have the best chance of success with this fellowship, it is strongly suggested the applicant contact their proposed graduate faculty advisor(s) to work together on all aspects of preparing the application package.

Applications that do not adhere to the guidelines below may be returned without further consideration by the program.

REMINDER: Applications due Wednesday, October 4, 2023 by 4:30 p.m.

Application Checklist:

To be submitted as a single pdf in the following order:

- 1. Cover Page (1 page maximum; required template available below)**
- 2. Personal and Career Goals Statement (2 pages maximum)**
- 3. CV/Resume (2 pages maximum)**
- 4. Research Plan (2 pages maximum, references not included in the page limit)**
- 5. Undergraduate and Graduate (if applicable) Transcripts**
- 6. Two Letters of Recommendation - to be submitted separately via email to seagrant-research@whoi.edu**

REQUIRED APPLICATION ELEMENTS

All documents should be single spaced, Times New Roman, and no smaller than 11 point font, with one-inch margins all around.

- 1 Cover page (1 page maximum) - Do not put any additional information other than the 3 bullets below.** Additional information will be removed and not evaluated. You must use the cover page template found [here](#). This template includes information on your:
 - a. Application Title
 - b. Contact information of the applicant including name, current affiliation or school, and email address.
 - c. Proposed graduate program and prospective faculty advisor(s) and their email address - if you are applying to multiple programs in Massachusetts, please list all of the programs and prospective faculty advisors.
- 2 Personal and Career Goals Statement (2 pages maximum) -** The statement should describe your educational and professional growth, goals, and ambitions. Include how these goals relate to broader societal needs in the coastal and marine environment. The statement should emphasize how your past experiences and competencies contribute toward your short (1-5yr) and long-term (>5yr) career goals and in particular, how this Fellowship would help you to achieve those goals. Speak to your leadership potential, responsibility, motivation, integrity, creativity, teamwork skills, communication ability, public outreach interests or experience, and include any pertinent information that provides insights into your past choices and future interests. Describe any barriers or challenges if any you have had to overcome to get to where you are today in STEM. Include information about activities and professional competencies you hope to achieve over the duration of the Fellowship. This information will form the initial outline of an individualized professional development plan that will be expanded on with your future Professional Development Mentor.
- 3 CV/Resume (2 page maximum) –** Include a brief CV/resume that summarizes your relevant academic, work, and/or outreach experience. An example CV/resume can be found [here](#).
- 4 Research Plan (2 page maximum) -** The Research Plan should be a brief summary of your research interests and demonstrate your ability to develop a research proposal. Please note that should you receive this Fellowship, you are not required to adhere to this Research Plan for your graduate research as long as your eventual graduate research is Massachusetts-based

and addresses the National Sea Grant focus areas (i.e., [Environmental Literacy and Workforce Development](#), [Healthy Coastal Ecosystems](#), [Sustainable Fisheries and Aquaculture](#), and/or [Resilient Communities and Economies](#)).

The Research Plan should include sufficient detail to showcase your critical thinking skills, your development of hypothesis-driven research questions, methods to address those research questions, and the potential broader societal impacts of your work. Your plan should describe how your research addresses the National Sea Grant focus areas, and how you would improve DEIJA in the marine sciences. Structure your research plan with the following sections: introduction/background, hypothesis/objectives, experimental design, broader societal impacts, relevance to focus areas, and DEIJA. References should be included but are not counted in the two-page limit.

*We highly recommend discussing your Research Plan with your potential advisor.

- 5 Undergraduate and Graduate (if applicable) Transcripts** - Unofficial copies of transcripts are acceptable, but must clearly indicate the name of institution, degree program, courses taken, and GPAs. Transcripts should be included in reverse chronological order (i.e., newest transcripts first). All personal identification numbers (social security, student ID, etc.), personal email addresses, mailing addresses, etc. should be redacted prior to submission.
- 6 Letters of Recommendation (to be submitted separately)** – Two letters of recommendation should be submitted in support of the prospective Fellow. Additional letters will not be reviewed. Recommendation letter writers should know the applicant well. It is suggested that one recommender be someone who knows you well from an academic perspective (e.g. your current undergraduate advisor, faculty from a course you took, research mentor, potential future faculty advisor, etc.), and one recommender who might know you from a different perspective (e.g., former employer, mentor from a previous internship or volunteer program, someone you worked with on an outreach or policy project, etc.). It is most important to select recommenders who will write a strong letter for you, but an “outside” perspective helps to demonstrate your breadth and will likely highlight different strengths and experiences.

To maintain confidentiality, letters of recommendation should NOT be submitted with the application package. Recommendation letters **must** be submitted separately via email to seagrant-research@whoi.edu. There is no page limit for letters, but we recommend that letters not exceed two pages and not include attachments. Please address letters to Dr. Matthew Charette, Director, WHOI Sea Grant and Dr. Michael Triantafyllou, Director, MIT Sea Grant. The name of the file must include the applicant’s name.

Recommenders are encouraged to consider the applicant’s:

- Academic and professional performance, including record and relevant experience;
- Academic and professional potential for future success, including research and professional activities, and participation on integrated, trans-disciplinary projects;
- Teamwork and leadership skills;

- Ability to identify and understand how their work, actions, and activities fit into the larger context;
- Interest and competencies in outreach activities
- Responsibility, motivation, integrity, and creativity.
- Observed growth over the time period the recommender has known the applicant

Applicants are strongly encouraged to share and discuss this bulleted list with referees well in advance of the deadline for letters of recommendations.

Note: If your application is selected for funding, you and your graduate program will also be required to submit a cost share authorization form, faculty advisor letter of commitment, acceptance letter from the graduate program, a budget, budget justification, and provide details for a 90-2 Project Summary Short Form. See [Post-Notification Information section](#) for more details.

Fellowship Proposal Review and Selection Process

The application solicitation and review process complies with the guidance set forth by the National Sea Grant Office. Selected reviewers are free of conflict of interest (COI), based on the National Science Foundation (NSF)-style standards for COIs with respect to recent co-authorship, collaboration, and other professional relationships. Each reviewer will be required to sign a COI form indicating that they have no conflicts with their assigned applications. Applications will be evaluated by WHOISG and MITSG staff for completeness based on the required application elements, and applications that are incomplete may be returned to the applicant without further review.

Each application will be evaluated by three external reviewers who will provide written reviews of the applications. These external reviewers will be convened as a panel to formally discuss and evaluate the full application packages. This panel will be composed of coastal and marine science scholars, educators, and/or Fellowship managers, or other relevant experts to review the Fellowship applications. This panel will assess the Research Plan's relevancy, the applicant's academic/professional performance, potential for growth, and proposed engagement of communities typically underrepresented in the marine sciences based on the below review criteria. The panel will also make determinations on whether applications are fundable. The NOAA Sea Grant program officer for WHOISG and MITSG will also attend the panel as an observer.

Relevancy to National Sea Grant focus areas (10%): Relevancy is assessed by a review of the applicant's *Research Plan*. Reviewers will consider whether the proposed Research Plan is Massachusetts-based and addresses the National Sea Grant focus areas (i.e., [Environmental Literacy and Workforce Development](#), [Healthy Coastal Ecosystems](#), [Sustainable Fisheries and Aquaculture](#), and/or [Resilient Communities and Economies](#)). Reviewers should **not** consider the feasibility of the proposed project as part of this evaluation criterion.

Diversity, Equity, Inclusion, Justice and Accessibility (10%): This metric is assessed by a review of the applicant's *Personal and Career Goals Statement* and *Research Plan*. MITSG and WHOISG programs are committed to supporting diversity, equity, inclusion, justice and

accessibility (DEIJA) by proactively engaging and serving the diverse populations of coastal communities. Reviewers will consider how the applicant proposes to improve DEIJA in the marine sciences.

Past Academic and Professional Performance (40%): Performance is assessed primarily by review of the applicant's *Personal and Career Goals Statement*, *CV*, *transcripts*, and *letters of recommendations*; applicants are evaluated on their suite of academic/professional accomplishments including GPA, honors, awards, breadth of coursework, publications, presentations, and breadth of relevant professional and extracurricular experiences both in and outside of school. Reviewers should consider the career stage of the applicant when evaluating this metric and any challenges they may have faced throughout their academic journey and/or career.

This metric considers the strength of academic and professional performance to date, with a particular focus on academic performance toward recent academic years and coursework relevant to the applicant's major and career interests. A high GPA is important and indicates that the applicant likely is organized and understands their field of study. However, it is also critically important to evaluate the full transcript of the applicant, as lower cumulative GPAs are acceptable if the applicant shows recent improving trends in grades, indicating personal growth throughout their academic career.

Reviewers will also consider the applicant's responsibility, motivation, integrity, creativity, teamwork and leadership skills, experiences at or interest in the science-to-management interface, and any outreach or educational activities that were part of their past project(s). Applicants can convey this to the review panel through their extracurricular activities, especially in natural and social sciences, communication, policy and outreach - applicants who have sought out extracurricular opportunities likely are motivated and have experience with time management. Extracurricular activities can include participation in clubs, work experience, research, teaching, volunteer experience, etc., and are all relevant. These activities do not necessarily need to be focused on research or natural sciences.

Academic and Career Potential (40%): Potential is assessed primarily by review of the *Research Plan*, with supporting information from the *Personal and Career Goals Statement*, *Letters of Recommendation*, and *CV*. Reviewers should consider the applicant's critical thinking and research project development skills, evaluated through the ability to develop clear research questions, hypotheses, appropriate methods to address the proposed research questions, and the broader societal impacts of their Research Plan. Reviewers should consider the career stage of the applicant when evaluating this metric as undergraduate students may have less research and proposal writing experience than those further along in their careers.

Reviewers will consider the applicant's potential as a collaborative leader, particularly in integrated, trans-disciplinary settings, and their ability to see the big picture and connections between different perspectives. Reviewers will apply a holistic perspective – considering the applicant's academic/professional experiences, growth, attributes, competencies, and achievements as a demonstration of future impacts both academically and professionally. The applicant should clearly articulate the benefits derived from this Fellowship and how this Fellowship will help the applicant to reach their short- and long-term career goals.

Selection Criteria

During the review, the panel will provide WHOISG and MITSG with a rank order list of applicants based on the scoring criteria outlined above. WHOISG's and MITSG's directors, research coordinators, and educators, who may also consult other relevant, non-conflicted WHOISG and MITSG staff, will make the final recommendations for awards and secondary awardees based on the application rankings and the initial completeness review, unless Fellows are recommended for funding outside of rank order based on the following selection factors:

- 1) Availability of funding
- 2) Strategic priority
- 3) Diversity of institutions, geography, research topics, and end user groups

These recommendations are submitted by WHOISG's and MITSG's directors to the National Sea Grant Office for final approval prior to award notifications.