Aquaculture Graduate Research Fellowship

Deadline: March 13, 2020

Virginia Sea Grant (VASG) and the National Oceanic & Atmospheric Administration (NOAA) Northeast Fisheries Science Center (NEFSC) are pleased to announce the availability of an Aquaculture Graduate Research Fellowship for the 2020-2022 academic years. The fellowship is open to full-time graduate, professional degree or Ph.D. students from any Virginia academic institution, who are engaged in coastal and/or marine aquaculture research relevant to NEFSC’s aquaculture program and VASG. For information on aquaculture priorities and their applications in Virginia, please refer to NOAA Sea Grant’s 10-Year Aquaculture Vision; the NOAA Aquaculture Program’s Strategic Plan; the NEFSC Ecosystem & Aquaculture Division’s website; and the VASG Strategic Plan. VASG is accepting applications until 5:00 p.m. EST on Friday, March 13, 2020. This announcement and additional information can be found at: https://vaseagrant.org/fellowship-research-funding/fellowships/.

FELLOWSHIP DESCRIPTION

The purpose of the joint VASG-NEFSC Aquaculture Graduate Research Fellowship is to support exceptional graduate students ($40,000/year for up to two years) and help them become tomorrow’s leaders in aquaculture science and management. The selected fellow will have the opportunity to participate in a comprehensive set of professional development trainings offered by VASG to enhance their career readiness. Dr. Lisa Milke will serve as the professional mentor and guide the fellow through a structured professional growth program, in collaboration with VASG’s Professional Development Coordinator, Michelle Rodriguez. Dr. Milke will provide guidance on the fellow’s research and oversight when the fellow is at the NEFSC’s Milford Laboratory. Through these interactions and in collaboration with the student’s primary faculty advisor(s), the fellow will ensure their results are useful to and used by stakeholders, and gain access to experienced professionals who can provide career advice.

FELLOWSHIP RESPONSIBILITIES

Selected fellows will:

- **Collaborate with a NEFSC Professional Mentor:** Collaborate with the NEFSC, including traveling to the Milford Laboratory to work with Dr. Milke and other researchers, as well as identifying opportunities to execute your professional development plan (see VASG’s Guidance on Fellow-Mentor Relationships).

- **Work with VASG’s Professional Development Coordinator:** Develop and launch an individual professional development plan, based on your short- and long-term professional goals.

- **Collaborate with VASG’s Communication Center:** Assist VASG efforts to publicize the fellow’s research and fellowship activities. Fellows are required to submit blog posts and share story ideas.

- **Attend VASG Events:** Participate in regular meetings with VASG, including: an orientation meeting at the beginning of the fellowship; Graduate Symposium in Richmond, including making a presentation on your research or outreach activities; and VASG-sponsored professional development activities.

- **Engage in VASG-NEFSC Aquaculture Research:** Conduct rigorous inquiry and evidence-based knowledge generation that is relevant to coastal and/or marine aquaculture research.
VIRGINIA SEA GRANT

VASG is a federal-state partnership, funded by the National Oceanic and Atmospheric Administration (NOAA) with matching support from our seven-university partners. Hosted at the Virginia Institute of Marine Science at William & Mary, VASG's other partner institutions include: University of Virginia, Virginia Tech, and George Mason, James Madison, Old Dominion, and Virginia Commonwealth Universities.

The mission of VASG is to provide transformative, integrated education, research, communication, extension, legal and policy programs – programs that create the coastal, estuarine and marine workforce, and novel solutions to meet challenges in coastal communities. We do this through funding, and by conducting research, education, outreach, and communication services.

To achieve our vision and mission, VASG is committed to certain operating values, objectives, and cross-cutting principles. However, most relevant to the Graduate Research Fellowship is VASG's commitment to:

- Advance the collaboration, coordination, and integration of VASG's capacity in its functional areas (e.g., education and workforce development, research, outreach and extension, communication) in order to achieve broader societal impacts.
- Promote interdisciplinary and transdisciplinary education, research and outreach activities that address pressing coastal, estuarine and marine challenges in the Commonwealth, the region and the nation.
- Invest in people and providing them with the knowledge and expertise to thrive now and in the future, particularly the graduate and post-graduate fellows and alumni, who will become future coastal, estuarine and marine science, business, policy and management leaders.
- Promote diversity and inclusion in our research, education, communication, outreach and extension activities. Innovation derives from diversity, in all its forms.

VASG's Strategic Plan aligns with and complements the National Sea Grant College Program (NSGCP) Strategic Plan, while addressing the Commonwealth’s specific coastal and marine challenges. More information, including the 2018 - 2021 Strategic Plan, can be found at: https://vaseagrant.org/together-for-virginia/.

NOAA NORTHEAST FISHERIES SCIENCE CENTER

The NEFSC's Ecosystems and Aquaculture Division (EAD) develops scientific knowledge on the interactions between the environment and marine biota, to promote sustainable wild-caught and cultivated fisheries, and to conserve protected species in the Northeast Continental Shelf ecosystem, nationally and internationally. Major research themes currently underway in EAD include: ecosystem processes and environmental conditions for production of harvestable algae, invertebrates and vertebrates; processes linking spatial and temporal patterns in climate with regional and local responses of species and their habitats; and positive and negative influence of human activities upon ecosystem function and services.

The Milford Laboratory, part of EAD, is a world leader in aquaculture science that was established at the request of Connecticut’s oyster industry to help expand sustainable oyster harvests. Over the lab’s 88+ year long history, NOAA scientists, working closely with industry and academia, have made fundamental contributions to the understanding of shellfish biology and reproduction. Today, the Milford Laboratory continues to conduct state-of-the-art science that informs management for the sustainable expansion of aquaculture, provides services to the shellfish aquaculture industry, and advances new technologies through collaborative research.

The Milford Laboratory consists of two research branches, Aquaculture Sustainability (ASB) and Aquaculture Systems and Ecology (ASEB), which work together to realize applied aquaculture research. ASB evaluates current and proposed marine aquaculture practices for technical effectiveness, environmental compatibility, and sustained commercial success. ASEB conducts research to improve our understanding of the ecology of estuarine, coastal and off-shore waters, and evaluates the interactions between these habitats and aquaculture
practices. Combined expertise between the two branches include marine chemistry, aquaculture systems design, marine ecology, shellfish physiology, marine microbiology, immunology, and genetics.

Dr. Milke will serve as the professional mentor for the Aquaculture Graduate Research Fellow. Dr. Milke is a shellfish biologist with expertise in feeding, physiology and nutrition. She joined the Milford Laboratory in 2005 as a research fishery biologist and put her expertise to use answering questions related to shellfish aquaculture and ocean acidification. She is also the organizer of the Milford Aquaculture Seminar, a forum for technology transfer among NOAA scientists, aquaculture professionals, the academic community, regulators, and the public convened annually.

ELIGIBILITY

Applicants must be enrolled in a full-time graduate, professional degree or Ph.D. program at an accredited academic institution in Virginia prior to the award of the fellowship, no later than Fall 2020. Students may be working towards a degree in any discipline as long as they are engaged in research or rigorous inquiry and evidence-based knowledge generation that is aquaculture-related, consistent with the NEFSC and Sea Grant aquaculture strategic plans. Previous recipients of a VASG Graduate Research Fellowship are not eligible to apply.

NOAA and VASG are committed to building inclusive research, extension, communication, and education programs that serve people with diverse backgrounds, circumstances, needs, perspectives, and ways of thinking. Diversity includes, but is not limited to age, race, ethnicity, nationality, gender identity, sexual orientation, disability and/or health status, religion, veteran status, geographic origin and socio-economic status.

AWARD INFORMATION

Contingent upon available federal funding, one fellowship is available for up to two years. The fellowship provides an award of up to $40,000 per year to fully support the student’s academic expenses. The start date for the fellowship is September 1, 2020. The NEFSC and VASG expect to fund one Aquaculture Graduate Research Fellowship for the 2020–2022 academic years.

VASG-funded projects require a 50% funding match (i.e., budgets must show $1 of match for every $2 of Sea Grant funding requested). Only non-Federal funds may be committed as matching contribution. VASG will make all awards to the student’s primary faculty advisor, who must be listed as the principle investigator (PI) on the fellowship application, as required by most university-sponsored programs. Refer to the Budget and Budget Justification section below for additional information.

HOW TO APPLY

Intent to Apply

All applicants are encouraged to contact VASG’s Fellowship and Research Program Coordinator, Sam Lake (contact information below), to indicate their interest in the fellowship, and to discuss the application process. Additional information, resources, forms, and templates can be found at: https://vaseagrant.org/.

Application Guidelines

Students are expected to take a leadership role in developing their application – including writing the proposal, developing a budget, and engaging with the institution’s sponsored programs/research office. Students are responsible for routing the application through their institution’s research administration or sponsored programs office, and obtaining all required institutional endorsements before submitting to VASG.

Adherence to the format requirements is mandatory, and ensures fairness across all applications. Applications not meeting the format requirements may be rejected without review. Several application elements 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.

For application elements A, B, D, and E prepare using Calibri or Times New Roman, font size can be no smaller than 11 point, and margins must be at least one inch on standard 8.5 by 11 inch paper throughout these sections. VASG recommends including the name of the student in a header or footer on all pages.

**Application Elements**

Each application must include the following elements in this sequence:

A. **Signed Title Page (two-page maximum):** The title page must list the project title, identify and provide contact information for the prospective fellow and faculty advisor(s). The start and end date (09/01/2020 - 08/31/2022), and the total amount of VASG-NEFSC and matching funds being requested for each project year must also be listed. Required institutional endorsements must be included on the title page (at a minimum a representative from the university's Office of Sponsored Programs/Research and the student's primary faculty advisor's digital or handwritten signature). These are often provided by institutional sponsored program offices or equivalent to verify that the institution has reviewed the application. A template can be found on the VASG website.

In addition, include a list of funders (agency, organizations, university programs, etc.) and funding amounts that are supporting any proposed research. Separate research funding is not a requirement or selection criteria for Aquaculture Graduate Research Fellowship support. Although students will need to demonstrate the feasibility of implementing the proposed work. Please indicate if the funding program(s) peer-reviewed the associated proposal/research work plan.

B. **Career and Professional Development Goal Statement (two-page maximum):** The statement should describe your educational/professional goals and ambitions, and professional growth interests and objectives. Include how these goals relate to broader societal needs in the coastal and marine aquaculture context. 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, industry or other 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 its application. A section of the statement should include a timeline of activities and professional competencies you hope to achieve over the duration of the fellowship, i.e., the initial outline of an individualized professional development plan that will be fleshed out with your NEFSC professional mentor and VASG's Professional Development Coordinator, after the fellowship has been awarded.

C. **Recommendation Letters (submitted separately):** Two letters of recommendation should be submitted in support of the student. To maintain confidentiality, VASG requires that letters are NOT submitted with the student’s application. Recommendation letters must be requested and uploaded through eSeaGrant. There is no page limit for letters, but VASG recommends that letters not exceed two pages and not include attachments. Please address letters to Dr. Troy Hartley, Director, Virginia Sea Grant.

The student’s primary faculty advisor or appropriate faculty member (who is the PI on the research award the applicant will be working on during the fellowship) must provide one letter of recommendation. Co-advisors are encouraged to submit a joint letter.
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, and participation on integrated, trans-disciplinary projects;
- Teamwork and leadership skills;
- Ability to identify and understand the *big picture*, and connections among perspectives;
- Interest and competencies in the science-to-management process, technical communication to non-experts, issues of relevance to their professional mentor, and outreach activities; and
- Responsibility, motivation, integrity, and creativity.

VASG strongly encourages applicants to share and discuss this bulleted list with referees well in advance of the deadline for letters of recommendations.

For the second letter of recommendation, VASG encourages applicants to consider someone who might know you from a different perspective than your academic advisor (e.g., former employer, mentor from a previous relevant internship, someone you 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 breadth and will likely highlight different strengths and experiences.

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

E. **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 your proposed thesis or area of study, and how you will leverage those activities to achieve your proposed outreach plan. The final research proposal, professional mentorship, and outreach plans will be developed and launched in collaboration with Dr. Milke and the VASG Professional Development Coordinator, Michelle Rodriguez. Applicants should **not** contact Dr. Milke or Michelle Rodriguez prior to applying.

The narrative should include sufficient detail to evaluate the appropriateness and relevance of your research topic, and how the project aligns with NOAA aquaculture priorities, the VASG Strategic Plan, and the major research areas (e.g., shellfish aquaculture, aquaculture-environment interactions, ocean acidification) of the Milford Laboratory.

The narrative should include the following sections:

- **Introduction**: Provide background information.
- **Research Rational and Relevance**: This section should clearly indicate the significance of the issue being studied to the Commonwealth of Virginia. Briefly describe the research approaches and techniques that will be used and how the proposed project aligns with NOAA aquaculture priorities and the VASG strategic plan, including a specific priorities and focus areas (e.g., reference the strategic plan priority that the fellowship project will address). Applicants may describe the experimental design, data sources, how data will be accessed, and any facilities or equipment requirements. VASG recognizes that research results may not be available until the end of the fellowship period.
- **Draft Outreach Plan**: This plan will be finalized with your professional mentor and VASG. However, a draft should identify the connections between your proposed research and the needs/interests...
of an end-user and/or stakeholder group, and describe how you will leverage your proposed research activities to produce a deliverable(s) by the end of your fellowship to meet those needs.

The draft plan should indicate your proposed target audience(s) and include clearly stated objectives and the rationale behind your proposed activities. There should be sufficient detail to evaluate the method of the approach and deliverable(s), and why these are the best option(s) for your proposed target audience(s).

- **Outcomes and Broader Societal Impacts:** This section should highlight how your proposed research and/or outreach activities will make a difference to society. It should describe the anticipated outcomes of the proposed project, how these results/deliverables relate to current knowledge of the field, and how specific end-users or audiences will use the results. You may also indicate what longer-term deliverables may be planned after the fellowship.

- **Draft Professional Mentorship Plan:** This section should describe how you hope to collaborate with your professional mentor, Dr. Milke, to achieve some of the short-term professional goals identified in your Career and Professional Development Goal Statement. It should include proposed activities, what you hope to gain (skills, experiences, shadowing and networking opportunities, etc.) from working with Dr. Milke, the NEFSC, and VASG. How you anticipate growing professionally and academically from those experiences, and how they contribute towards your long-term goals. This section should detail how you propose to interact with your mentor to achieve these goals (e.g., frequency, timeline, means of communication, topics, etc.). Recognize that a portion of your time will be spent at the Milford Laboratory (e.g., summer, breaks in the academic year, and possibly other times to implement your research, if appropriate).

- **Timeline:** Students should include a schedule that indicates academic, research, and outreach milestones and tasks along with the anticipated dates for achieving those tasks. Including the anticipated times you will travel to the Milford Lab to collaborate with Dr. Milke.

- **Team and Coordination:** Briefly describe the participating team members, their roles and responsibilities, including the role of the fellow, primary advisor(s), other faculty, and any associated researchers or stakeholder partners, as appropriate.

- **Literature Cited (does not count toward page limit).**

- **Data Management Plan (does not count toward page limit):** As required by NOAA Data Sharing Policy for Grants and Cooperative Agreements Procedural Directive (Version 2.0, October 2011), VASG must ensure all environmental data collected with Sea Grant support are made publicly available in a timely manner. The data management plan, no more than two pages in length, should specify the plan for making environmental data available and interpretable, and free of charge or at minimal cost within two years of collection. If the data are to be archived in a larger-scale database or warehousing effort, please include the anticipated timeframe of data submission, and contact information for the database management organization. If the data are not submitted to a database for archival purposes, please provide a description of plans for making the data available upon request. Note that during project reporting, Sea Grant programs may request information regarding any data requests you have received. Students are encouraged to consider identifying and pursuing possible databases for long-term archiving of their environmental data prior to submission. If the project will not generate environmental data, it is sufficient to include a sentence saying so.

F. **Budget and Budget Justification:** The purpose of the Aquaculture Graduate Research Fellowship is to fully support the student’s academic expenses. Up to $40,000 per year for up to two years for full-time graduate, professional degree or Ph.D. students can be requested for eligible fellowship-related expenses (defined below).
**Eligible Costs:** student stipend; fringe benefits; tuition; enrollment, university and graduate program fees; health insurance; indirect costs; VASG Graduate Symposium and conference fees, expenses and travel; and travel to the Milford Laboratory to participate in professional development and outreach activities.

**Ineligible Costs:** research and lab supplies; research and field work travel; sample processing; research-related service fees; laboratory and field equipment (expendable supplies and permanent equipment); and other expenses needed to conduct research activities.

Ideally, the budget will include, at a minimum, support for the fellow to travel to the Milford Laboratory, to attend one to two VASG meetings per year around Virginia (e.g., VASG’s Graduate Symposium in Richmond, Fellowship Orientation Meeting, and Professional Development Workshops), and attendance at one professional conference.

VASG-funded projects require a 50% funding match (i.e., budgets must show $1 of match for every $2 of Sea Grant funding requested). Only non-Federal funds may be committed as matching contribution. In-kind contributions, unrecovered F&A and tuition, non-federal research expense, start-up funds, faculty salaries, travel support (research, conference, professional development, etc.), partial stipend and tuition are all examples of match.

Historically, common methods used to meet the match and full support requirements have included: 1) providing partial support for the stipend and/or tuition as part of the required match (although that partial support cannot come with other responsibilities, e.g., teaching assistantships), or 2) the academic institutions volunteering to waive overhead on the federal dollars. To date, VASG partner institutions have chosen the latter option and have used the foregone overhead to make up most or all of their match requirement.

Budgets should be developed in the 90-4 budget worksheet (available on the VASG website). The budget justification must be a detailed description of each cost item in the 90-4 budget; additional guidance is available on the VASG website. VASG strongly encourages students to begin working early with their institution’s research administration or sponsored programs office to develop their budgets.

G. **Undergraduate and Graduate School Transcripts:** Unofficial copies 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.

**Application Submission**

Applications must be submitted online via eSeaGrant (http://vaseagrant.ecsion.com) by **5:00 pm EST on Friday, March 13, 2020.** If you plan to apply, we strongly recommend registering for eSeaGrant at least two weeks in advance of the deadline. Notifications can be sent to VASG as a short email expressing your interest in the fellowship. Please reference “VASG-NEFSC Aquaculture Graduate Research Fellowship” in the subject line.

Instructions on how to register and start a proposal on eSeaGrant are included below. Additional instructions can be found on the VASG website (https://vaseagrant.org) and on eSeaGrant.

Applicants can register for eSeaGrant by visiting the website, selecting the “Register” tab, and completing the required information. If you do not receive a “welcome” email with login credentials shortly after registering, please contact Sam Lake.

To start a fellowship proposal, or edit an existing application, click on “Current Tasks” on the banner head, and select “Add Fellowship Application” under “2020 VASG-NEFSC Aquaculture 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.

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

Application elements should be converted to PDF documents before uploading to eSeaGrant. All elements, including recommendation letters, must be submitted by the deadline. VASG 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 Sam Lake.

REVIEW AND SELECTION PROCESS

Stage 1

The review process proceeds in stages. In Stage 1, VASG will first review all proposals for scientific, technical and outreach relevance to VASG and NEFSC, completeness of applications, and adherence to format requirements. This review will be conducted by Sea Grant staff, and key aquaculture stakeholders (e.g., industry, NGO, and resource management agencies). VASG follows strict conflict-of-interest policies in all of its review procedures. Any fellowship application not considered complete will not be eligible for further review. Feedback submitted by VASG’s External Advisory Committee and key stakeholders regarding the scientific, technical and outreach relevance will be shared and considered by the Stage 2 review panel (Professional Mentor Relationship evaluation criteria) and Stage 3 interview committee (Relevance of Research or Inquiry evaluation criteria).

Stage 2

VASG will assemble a review panel composed of coastal and marine science scholars, educators, fellowship managers, and talent search and development professionals to review the fellowship proposal. The panel will assess the student’s academic/professional performance and potential, professional mentorship plan, and outreach activities. Top candidates will move forward to participate in interviews during Stage 3. The Stage 2 review panel will consider the following criteria:

**Academic and Professional Performance** (40%): Strength of academic and professional performance to date, with a focus on graduate school performance. Reviewers will consider their responsibility, motivation, integrity, creativity, teamwork and leadership skills, experiences at or interests in the science-to-management interface, and with end-user engagement. Performance is assessed primarily by review of the student’s CV, transcripts, and letters of recommendations; students 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.

**Academic and Career Potential** (40%): Student’s interest in a relevant career path, as well as demonstrated success in academic and career goals. Students are to be evaluated on their interests and understanding of science-to-management and end-user engagement. The demonstration of academic, professional, research, and outreach potential (e.g., professional engagement, initiative, participation in previous research and outreach projects); evidence of vision and past professional growth, work ethic, and strong interpersonal and communication skills; and strength and breadth of relevant academic, professional, and extracurricular experiences. Reviewers will consider the student’s potential as a collaborative leader, particularly in integrated, trans-disciplinary settings, their ability to see the big picture and connections between different perspectives. Reviewers will apply a holistic perspective – considering the student’s academic/professional experiences,
growth, attributes, competencies, and achievements as a demonstration of future impacts both academically and professionally. Potential is assessed primarily by review of the career and professional development goal statement, letters of recommendations, CV, outreach plan, and the potential impact on broader societal needs from the student’s work, future interests and potential.

**Proposed Structure & Objectives of Professional Mentor Relationship** (20%): Strength and potential of the proposed collaboration with the NEFSC professional mentor and the professional development services of VASG. Will the proposed arrangement lead to professional growth for the student? Has the student thought through the mentor relationship and laid out a thoughtful, systematic, and strategic plan for professional growth, and impactful outreach activities? Will it produce valuable transferable knowledge to an end-user? Is the approach feasible and likely to achieve the professional growth and outreach objectives identified? Reviewers will assess the mentor relationship potential based upon the career and professional development goal statement and project narrative. Please note that applicants are instructed to not contact Dr. Milke or Michelle Rodriguez prior to applying.

**Stage 3**

VASG will assemble a committee to conduct in-person interviews with the final candidates identified by the Stage 2 review panel. Selected finalists will be interviewed by VASG and NEFSC staff. Finalists will be asked to provide a 15-minute overview of their proposed fellowship activities, their academic and professional background, and why they want a joint VASG-NEFSC Aquaculture Graduate Research Fellowship.

The committee will consider all proposal elements and the interview, including submitted comment regarding the scientific, technical and outreach relevance, and will advise VASG and NEFSC on the selection of fellows based on the following criteria:

**Candidate Interview** (40%): Candidates will be assessed on their ability to successfully communicate the importance of their proposed activities, describe how those activities align with NOAA NEFSC and Sea Grant's missions, and their ability to demonstrate how partnering with Dr. Milke will contribute to both their short- and long-term goals. Candidates should illustrate how they reflect upon professional experiences, and hope to grow from an Aquaculture Graduate Research Fellowship.

**Relevance of Research or Inquiry** (25%): Relevance of the research to Sea Grant and NEFSC, and the significance of the issues to coastal and marine aquaculture science.

**Professional Potential and Broader Societal Impact** (35%): Quality and extent of collaboration proposed between student and the NEFSC, and quality of the proposed mentorship and outreach activities. VASG will consider how much professional growth potential exists for the student under the proposed mentor relationship structure. VASG will evaluate the quality, merit, and feasibility of the proposed outreach activities, and their importance to the target end-user audience(s). VASG will assess the short- and long-term potential to make a difference and address a substantial societal challenge locally, regionally, nationally, or globally.

VASG and NEFSC will make the final selection of Aquaculture Graduate Research Fellowship after considering the review panel and committees' advice, programmatic objectives, and priorities.

**TENTATIVE TIMELINE FOR FELLOWSHIP COMPETITION**

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Announcement released</td>
<td>October 2019</td>
</tr>
<tr>
<td>Proposals due to VASG by 5:00 p.m. EST</td>
<td>March 13, 2020</td>
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<tr>
<td>Stage 1 – Relevancy review</td>
<td>Late March 2020</td>
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<tr>
<td>Stage 2 – Review panel</td>
<td>April 2020</td>
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<tr>
<td>Stage 3 – Candidate interviews</td>
<td>May 2020</td>
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<tr>
<td>Notification of results</td>
<td>Summer 2020</td>
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<tr>
<td>Awards begin</td>
<td>September 1, 2020</td>
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POLICIES & PROCEDURES

This section includes information on the required policies and procedures that selected awardees must adhere to as a requirement of the fellowship award. These and other conditions of the grant award are stipulated in guidance documents, agreements, and the award announcements, which will be sent to the PI and affiliated institutions. Please read through these policies carefully.

Federal Funding and Award Notifications

Funding for the Aquaculture Graduate Research Fellowship program is contingent on available federal funds from NOAA and the NSGCP. Throughout the award, VASG will work closely with the PI(s), fellow, and representatives in each institution's sponsored programs/research office to support the administration of the award. As VASG's host institution, the Virginia Institute of Marine Science's Office of Sponsored Programs will be the point of contact for questions regarding financial documentation and sub-award management.

In addition, all projects supported with federal funds must comply with the following:

- When traveling, the fellow is subject to the provisions of the Fly America Act and must comply with the Act when scheduling transportation for travel paid with VASG funds.
- Federal and match expenditure reports and/or invoices should be provided upon submission of every reimbursement request, or quarterly (every three months; if no such requests have been submitted) at a minimum, and accurately reflect expenditures.

Award Expectations

The fellowship provides an award of up to $40,000 per year to support the student's academic expenses. Fellows are required to be enrolled on campus and remain in good standing at their academic institution. All fellowship funds must be used for the objectives outlined in the original application, unless prior approval is requested (see Change to Scope and Objective section below).

Changes to Scope and Objective

Per § 200.308 Revision of Budget and Program Plans, NOAA and Sea Grant require prior approval for any changes to the scope of the objective of the project or program. The scope and objective of the program is focused on supporting the student's fellowship-related expenses so they can conduct research to benefit the Commonwealth of Virginia. The fellowship program is aimed at supporting the student's academic-, professional development-, and outreach-related costs.

Pre-award Costs

Pre-award costs are those incurred prior to the start date of the award directly pursuant to the negotiation and in anticipation of the award where such costs are necessary for efficient and timely performance of the scope of work. Per § 200.458 Pre-award Costs, NOAA and Sea Grant allow up to 90-day pre-award spending. Such costs are allowable only if they would have been permitted to incur after the date of the award (i.e., pre-award cost must be eligible fellowship-related expenses) and with written approval from VASG.

Changes to Proposed Spending

Fellowship funds can be carried over from one year to the next without prior approval (e.g., if you have a two year fellowship, you can reserve some of your year 1 budgeted funds and spend them in year 2). However, you cannot move funds forward (e.g., funds in the year 2 budget cannot be spent in year 1).

Awardees must report budgetary changes as part of their annual reporting requirement, so that VASG can comply with the Department of Commerce (DOC) and NOAA's Research Performance Progress Report requirements (refer to the Annual Reports section below). A brief justification for the change(s), a revised 90-
4 budget, and budget justification must be submitted to document any budgetary change that exceeds ten (10) percent of the total award.

Please note that ineligible costs defined in the Budget and Budget Justification section are not allowable in any budget change, and funds from other line item categories cannot be used to support research-related costs after the fellowship has been awarded. Additionally, budget revisions may result in changes to the indirect costs and have match ramifications. Please inform your institution’s sponsored programs/research office and VASG as early as possible.

Other Types of Budget Modifications

VASG will entertain all allowable budget modifications, within the constraints of our NOAA award and NOAA/VASG policies, as long as they are consistent with the intent of the fellowship program.

Changes in Duration

Aquaculture Graduate Research Fellows can request a no-cost extension – up to one year, with reasonable justification. Unexpended funds are not, by themselves, justification for an extension. All changes to the project duration require prior formal approval by VASG, and in some instances NOAA and the NSGCP as well.

Extensions must be requested before the end of the fellowship (at least 30 days in advance) and must be coordinated with your institution’s sponsored programs/research office. Formal requests should be addressed to the VASG Associate Director, briefly discuss the reason for the extension, confirm if a budget modification will be necessary, and include a new proposed end date.

Annual Reports

Fellows are required to submit progress reports to VASG on an annual basis, including a final report. Progress and final reports must highlight significant activities, detail important measures and metrics, and document any budgetary changes that occurred within the previous Sea Grant fiscal year (February 1 to January 31). All reports must be submitted through VASG’s eSeaGrant reporting system.

Acknowledge Support

Per the DOC’s Standard Terms and Conditions, NOAA and VASG require funding recipients to credit financial assistance where appropriate. Acknowledging NOAA and Sea Grant support is important to let the academic community and other key audiences know that the projects VASG funds are producing results.

VASG and the NEFSC request that you make these attributions by referring to DOC, NOAA, and VASG in publications and by reproducing NOAA and VASG’s logos, using the following guidance and resources available on our website (https://vaseagrant.org/about-us/brand/).

Papers in scientific, technical, or professional journals should include language mirroring the following within the acknowledgement section when support by NOAA and VASG (Please replace the bracketed items with the appropriate information):

_This [publication, report, website, video, etc.] was prepared by [recipient/author’s name] using Federal funds under award [NOAA Award/Grant #______], Virginia Sea Grant College Program Project [VASG Project #______], from the National Oceanic and Atmospheric Administration’s (NOAA) National Sea Grant College Program, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of Virginia Sea Grant, NOAA, or the U.S. Department of Commerce._
Graduation

Aquaculture Graduate Research Fellowship funds are intended to support the student’s fellowship-related expenses while they are seeking a graduate degree at a Virginia institution working on their research objectives outlined in the application. VASG encourages all of our fellows to share important milestones, including defense and graduation dates, with VASG staff. At the conclusion of the fellow’s graduate program they are required to submit a digital copy of their thesis or dissertation.

Fellows who graduate before the end date of their fellowship award may request up to $2,500 of their remaining fellowship funds, if applicable, to communicate the results of activities (for example a conference presentation, and/or publication costs) for up to six months after graduation. Fellows should notify VASG two months in advance if they plan to use of fellowship funds after graduation.

Exit Interview

Aquaculture Graduate Research Fellows are required to participate in an exit interview (in-person or virtually) at the conclusion of the fellowship.

ADDITIONAL INFORMATION AND CONTACT

This announcement, application element templates, and additional resources can be found at: https://vaseagrant.org/fellowship-research-funding/fellowships/.

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