

Ocean Synthesis Lab: Systems, Syntheses and Solutions (SSS) at Duke University
Lab Expectations

Our lab recruits students who are willing to support our lab's mission of co-developing evidence based insights and tools for sustainable and equitable marine resource management. Students will join a productive group of creative, competent natural and social scientists that demonstrate research excellence through rigorous applied science.

Our applied research focuses on developing solutions to some of the major challenges in the management and conservation of marine social-ecological systems. We draw on multiple disciplines, datasets and approaches, working in collaboration with other researchers and practitioners around the world. To learn more about our current work, please visit the lab's research [projects](#) & [publications](#) pages. Additionally, our PhD students are developing dissertation research initiatives with opportunities for assistance and collaboration, visit their personal links under our [team page](#). Before contacting members of the Ocean Synthesis Lab about your interest in contributing to our research, please take the time to read the expectations of lab members below.

All students working with the Ocean Synthesis Lab are expected to abide by our lab's core principles and practices:

- Core Principles:
 - Collaboration: Support the growth & development of all lab members and foster effective partnerships beyond the lab.
 - Respect: Work considerately with those at Duke and beyond, especially recognizing varied personal and professional backgrounds, values, knowledge, and culture.
 - Diversity, Equity, and Inclusion: We are committed to justice, equity, diversity and inclusion in our internal dynamics, research, outreach and partnerships.
 - Excellence & integrity: We are committed to high quality research and service, ensuring that all we do is done with integrity.
 - Trust: As a collaborative research group, we recognize that our work is dependent on maintaining and building strong relationships amongst ourselves and with our colleagues.
 - Service: We recognize that our applied research is done in service of those individuals who share our vision of a sustainable and equitable ocean.
- General Practices:
 - Actively participate in standing lab meetings (weekly or bi-weekly), lab working sessions and project-specific check-ins or personal research 1:1s.

- Offer peer-accountability by reviewing each other's research, writing, grant proposals, presentations, etc. Be willing to ask questions and give and receive constructive feedback.
- Be self-motivated in your work, We conduct predominantly [synthesis](#) research, independently utilizing existing literature and datasets and “desktop” analyses.
- Prioritize mental health and well-being and create a space where others in our lab and community can be comfortable with their experiences. Resources include: [Counseling & Psychological Services](#), [Student Health and Wellness](#), [Success over Stress](#), and [CDC helplines](#).
- Ask for help early and often: When having difficulty or challenges with research or otherwise, let others know early so we can help!
- Share opportunities & resources with lab members (e.g., speakers, papers, grants, workshops, webinars, etc.)
- Participate in a specified lab management role (e.g., onboarding new members, documenting research or lab management protocols, coordinating lab meetings).
- Communicate regularly: Review & post to the lab's slack channel in easily searchable format (e.g. using #), add important events and personal leave to the shared lab calendar in Microsoft Outlook.
- Be flexible with engagement formats & timing: Our lab and partners are based around the world, so we typically offer hybrid (in-person and virtual) connection options and occasionally adapt our working hours to accommodate colleagues operating in other time zones.
- Contribute to scientific outreach and service, whether it be to the Duke Marine Lab, surrounding community, or the broader ocean science and conservation world. As a lab, we are intentional about supporting those who manage and conserve the oceans in capacity-limited regions of the world.

Undergraduate Students:

- Ways to engage:
 - Research for course credit (e.g., independent study or senior thesis) or voluntary experience - contribute to on-going lab research;
 - Duke Bass Connections course -, learn about systematic review processes, build skills and collaborate with the lab on the Ocean Evidence Synthesis.
 - Lab and project management - occasional opportunities to support ongoing projects or lab management activities
- Commitment: 4-10 hrs/week (as agreed upon) for at least one semester, including contributions to lab meetings & assigned tasks. Present final output or research contributions during a lab meeting or more formal setting (e.g., research symposium) before exiting the lab. Final output may include contribution to a larger research paper, an independent research paper, a presentation, etc. For those working on independent

studies, you will be expected to (co-)develop your own research questions and research plan with your supervisor as a self-motivated and organized lead of your research.

Students are expected to familiarize themselves with program deadlines, giving your supervisor adequate time to review materials before submission.

- Supervision: Report to project lead, Dr. David Gill, postdoc or PhD student, for regularly scheduled check-ins on progress and to troubleshoot any challenges
- Work with us: If you would like to apply to work with our lab, please complete the [research assistant application](#). Opportunities are available to non-Duke students as well.
- Lab and Community Engagement:
 - Work with fellow undergraduate students in a collaborative manner
 - Ensure that feedback to peers is always constructive and respectful
- Funding: Typically students do an independent study, have their own funding, or join the lab for volunteer experience. See our [funding page](#) on the website for potential Duke-wide funding options.

Masters Students:

- Ways to engage:
 - Research for course credit (e.g., Master's research project or independent study), work study (e.g., 1st year assistantship) or voluntary experience - work with lab management, contribute to on-going lab research;
 - [Duke Bass Connections](#) course -learn about systematic review processes, build skills and collaborate with the lab on the Ocean Evidence Synthesis.
- Commitment: 4-10 hrs/week as agreed upon for at least one year, including contributions to lab meetings & assigned tasks (assistantships are 8 hours/week). Present final output or research contributions during a lab meeting before exiting the lab. For those working on independent studies, you will be expected to (co-)develop your own research question(s) and research plan with your supervisor as a self-motivated and organized lead of your research. Students are expected to familiarize themselves with program deadlines, giving your supervisor adequate time to review materials before submission.
- Supervision: Report to project lead, Dr. David Gill, postdoc or PhD student, for regularly scheduled check-ins on progress and to troubleshoot any challenges
- Work with us: If you would like to apply to work with our lab, please complete the [research assistant application](#) or [apply](#) for the available Bass Connections course for the semester. Assistantships are open to first year students offered this scholarship in their admissions package.
- Funding: See our [funding page](#) on the website for potential masters funding options

PhD Students:

- Ways to engage: As a PhD student, you will be directly in charge of your own engagement in our lab. This will range from being a trainee, to a team member, to a

project lead. It is important that you be able to engage well with a team in all of these roles.

- Commitment: The commitment for a PhD is no small task. It is a full-time, 5-year job, including coursework, research, teaching or research assistantships, service to the Marine Lab and leadership in the Ocean Synthesis lab. It includes not only contributing to, but leading lab meetings, overseeing the research of and mentoring students reporting to you in the lab.
- Supervision: Report to project lead, Dr. David Gill, or postdocs, for regularly scheduled check-ins on progress and to troubleshoot any challenges as you start up. As you learn more about the lab, you will also be expected to take on a supervisor role yourself, for select lab and research duties.
- Being a Team Member: As a PhD student, you are expected to not just be a member of the team, but a *leading* member of the team. You should consider not just your own dissertation and ideas, but how to collectively expand the questions and thoughts of the lab. This applies to both research and lab structure, and is crucial for the growth of our lab environment.
- Funding:
 - As of fall 2021, we **do not** have funding for a PhD student starting in the Fall 2022.
 - There are many other external sources of funding available, and we are happy to discuss different avenues through which you can find and secure your own external funding. Below are links to some potential funding avenues.
 - <https://researchfunding.duke.edu/>
- Work with us: If you would like to apply to work with our lab, please complete the [Lab Application for PhD Students](#), which will serve as an initial expression of interest for further discussion with Dr. David Gill. Official applications to the Nicholas School of the Environment's Marine Science and Conservation Ph.D. program are administered through the [Duke Graduate School](#). The [electronic application](#) is typically due in early December.

Postdoctoral Research Candidates:

- Ways to engage: Applying to advertised post-doctoral positions or co-developing funding applications. Postdoctoral researchers are encouraged to engage with us as well (e.g. joining lab meetings, engagement and collaboration on projects)
- Commitment: Postdoctoral researchers are expected to take ownership of their research and project management. This includes fulfilling all requirements and meeting deliverable deadlines set by Duke and the funding agencies, and mentoring or supporting students who are participating in the research. Researchers are also expected to participate in the lab community as specified in the "General Practices" section above.

- Supervision: Report to project leads for regularly scheduled check-ins on progress and to troubleshoot any challenges as you start up. Post-doctoral researchers will work with their supervisor to complete an [Individual Development Plan](#) to help develop and track progress towards their career and personal development goals.
- Resources: the [Office of Postdoctoral Services](#) provides [awards](#) and professional development [counseling and training](#).

Contact: OceanSynthesisLab@duke.edu