

Welcome to the Integrated Marine Fisheries Lab

I look forward to working with you and getting to know you during your time at OSU!

This document provides some initial guidance for achieving success in your undergraduate, graduate, or postdoctoral program. It also outlines my expectations of you as a member of the IMF Lab (student, postdoctoral scholar, faculty research assistant, or research associate, hereafter referred to as "mentee") and what you can expect from me as a mentor. Most importantly, this document serves as a foundation for effective communication. Please read it carefully and follow up with any questions you might have. This to be a living document that will be revised intermittently. I welcome and value your input, should you like to provide feedback on any portion of this guide.

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Please read OSU's New Graduate Student Guide for more information and resources.

My Mentorship Style

Finding the balance between offering guidance and fostering independence is crucial to my role as your mentor. The way that this is accomplished will be unique for each person and evolve throughout our working relationship. I value open and honest communication and will try to be clear about my expectations of you. I also encourage you to help prevent misunderstandings by asking questions. That said, please consider the varied needs of the IMF Lab and multifaceted demands of my position when communicating concerns or potential conflicts. Please also attempt to resolve issues in a timely and respectful manner.

IMF Lab Members

Although your primary responsibility is to your coursework and/or independent research program, you are also part of a team. When you present your work and interact with others, you are representing yourself as well as the IMF Lab, COMES, FWCS, CAS, and OSU. As a member of the IMF Lab, I expect you to help foster a collaborative and supportive environment. This is accomplished by being prepared for and actively engaged in team meetings, providing thoughtful feedback on the work of others, and maintaining a growth mindset. I will also ask for your assistance with various lab-related tasks from time to time.

Please read the DEI statement created in collaboration with my former advisor and fellow students at the University of Alaska Fairbanks. We strive to reflect these values in the IMF Lab. When we invariably make mistakes, I expect all lab members to consider other perspectives, learn, and grow from them.

Meetings and Communications

Regular meetings allow me to stay informed about your work so that I can effectively help you set goals, provide feedback, develop professionally, and maintain research progress. Regular meetings also help build a foundation for trust and effective communication. We will hold regularly scheduled meetings as detailed below.

Individual Meetings These meetings are typically scheduled for 30 min each week. The purpose is to check in about your academic goals, discuss research progress, and/or provide dedicated time for anything that you would like to discuss. I may also have specific items that I would like to cover during these meetings. If you require longer or more frequent meetings, please let me know. You are welcome to send emails between our regularly scheduled meetings. If you don't hear back within 3-5 business days, please resend your message. I may be on work-related travel, participating in multi-day meetings, or have simply missed your message because of the high volume of communications that I receive.

As the mentee, you are expected to take the lead during individual meetings. Please be prepared and prioritize a list of discussion topics, share materials ahead of time when review is required, take sufficiently detailed notes, and address unresolved action items in a timely manner. You will be provided with a Google document that we will reference for these purposes. It is your responsibility to regularly review and organize the information therein.

Lab Meetings IMF Lab meetings are typically scheduled for 1.5 hr on a biweekly basis. The purpose is for us to stay connected, foster support among the group, discuss relevant topics (e.g., peer-reviewed publications, workplace considerations), brainstorm project ideas, facilitate feedback on research materials, and/or troubleshoot any issues that arise. During the summer months, we will hold 1-hr meetings on a weekly basis in order to maximize participation by undergraduate students.

General Advice for Early Career Scientists

Set realistic goals One of the most challenging aspects of scientific research is maintaining motivation and focus when there are few near-term deadlines. Setting small, achievable, and timely goals help keep up the momentum. We will work together to outline tractable objectives at various time scales (e.g., degree program, quarter, month, week).

Read and write as much as you can One of the best ways to grow as a scholar is by thoroughly reading the scientific literature. Try to source and digest materials that are directly and indirectly related to your work. Identify the different ways that people frame and address research questions. Reflect on what is or is not relevant to your own research. You are not expected to understand every aspect of what you read (especially the methods sections early on) but your comprehension and confidence will grow as you continue to dive into what's already been accomplished in science. I also encourage you to review and critique the written work of others. By doing so, you will gain experience with peer review and simultaneously improve the quality of your own work.

Talk with me (and other mentors) about funding Part of my job is to help you identify potential funding to support your degree program and/or research. Financial support may come in the form of grants (external funding that I apply for), fellowships or scholarships (student-led applications), and/or teaching assistantships (based on departmental needs). Because funding is context-specific, the best approach is for us to have regular conversations about your current funding support and potential options to supplement existing budgets. Please solicit feedback on proposals that you draft at least one week prior to submission.

Solicit different perspectives Brainstorming with other students, postdoctoral scholars, stakeholders, resource managers, and faculty is a great way to gain a fresh take on your research or solve an issue that you've been struggling with. I encourage you to engage in regular conversations about science and fishery-related issues, solicit formal and informal feedback on your research, and practice communicating the details of your research to varied groups. Much of what we learn in science comes from these different discussions. They also help you fine-tune your messaging and increase your confidence as a scientist.

Manage your time Scientific research can be all consuming...if you let it. It is important to balance your life with other interests. You'll find that your brain needs down time to process information...and taking personal time makes you happier. This means working efficiently on research objectives to meet deadlines and create space for personal activities. That said, graduate school is a challenging (but short) period of time that requires prioritization.

Build a support system Your time at OSU will provide opportunities for extraordinary growth - both personally and professionally. It is important that you care for your mental and physical health during this challenging time. Creating a network of support (e.g., family, friends, peers, mentors) and engaging with the broader community will help promote your overall well-being. OSU also offers crisis and counseling services.

IMF Lab Collaborations

Transdisciplinary collaborations are central to the work that we do in the IMF Lab and involves fostering relationships among academic scientists, resource managers, policy makers, fishery stakeholders, and/or members of the public. In the early stages of project development, we will discuss roles, responsibilities, and expectations for everyone involved. Our approach to collaboration may be informal (e.g., consisting of semi-regular check-ins) or formal (e.g., involving data use agreements) depending on the nature of the work.

Effective communication is imperative during all stages of a research project. Discussing details related to your questions, study design, treatments of data, analyses, and interpretations are essential to generating robust scientific products. Communicating results and working toward a shared understanding of the research are also important parts of collaborative work, particularly for projects that involve local communities.

Outreach activities (i.e., one-way communications) allow us to share our work with broader audiences. **Community engagement** (i.e., the exchange of information in multiple directions) enhances the lessons we learn in fisheries science and is a vital component of research that involves shared resources. Outreach and engagement may take the form of creating content for various websites, blogs, or social media, initiating individual meetings with interested parties, participating in educational/outreach events, and organizing or participating in roundtable discussions. Regularly presenting your research at scientific conferences, in the form of seminars, or as part of stakeholder meetings will facilitate discussion and strengthen the quality of your work.

Peer-reviewed publications are the most effective way to ensure that our science is accessible in the long-term. Publishing also serves as the final product that we promise to funders and helps early career professionals build their credentials as scientists (after all, publications still represent our "currency" in science). The peer-review process is a vital part of the science we do because it invariably improves the quality of our work. I place considerable emphasis on publishing open access because scientific findings from shared resources should be made available to the public free of charge.

I strongly encourage all IMF Lab members to publish their research. At least one publishable unit should result from a master's degree. PhDs should result in at least two and the number of publishable units for postdoctoral scholars will vary by project. My philosophy is quality over quantity, aiming for more complete and impactful "stories" rather than attempting to write as many papers as possible to increase one's publication record. Students and postdoctoral scholars typically serve as first author for their research, with myself and other committee members and/or collaborators listed as co-authors. I will work closely with you to prepare your manuscript for submission to a scholarly journal. I recommend that manuscripts be submitted just prior to or shortly after project completion, when ideas are fresh and momentum is high.

Expectations for Students and Postdoctoral Scholars in the IMF Lab

- 1) Be knowledgeable about and comply with the policies and requirements associated with your position and/or program, OSU, the Graduate School, CAS, FWCS, COMES, and HMSC.
- 2) Act according to commonly accepted scientific ethics (click here, here, and here for more info).
- 3) You may choose to live in Newport, Corvallis, or any of the surrounding areas. It is important, however, that we have sufficient face-to-face interactions. Thus, I expect you to work from the IMF Lab at HMSC at least two full days per week when taking classes and three or more once the bulk of your coursework is complete. Specific days will be identified on a quarterly basis. Adjustments may be made when necessary (e.g., due to course schedules, fieldwork, or my ever-changing schedule). If commuting from Corvallis in winter, please check road conditions to ensure that it is safe to do so. Click here for ODOT's winter travel tips.
- 4) Keep the 'IMF Lab' calendar updated with your class schedule, travel dates, etc. Notify me of planned absences at least two weeks in advance. Students are part-time employees and do not accrue paid time off. We can work together to identify potential leave dates that accommodate course and/or research needs.
- 5) Maintain clean, organized, and safe spaces. Student desks are located in shared labs, so please keep personal items to a minimum and ask before hanging items on the walls, cabinets, etc.
- 6) Demonstrate commitment to your education by being prepared for and actively engaged in the classroom, meetings, field, and/or lab and maintaining a high level of self-motivation.
- 7) Read and respond (when appropriate) to all communications from me, committee members, collaborators, OSU, the Graduate School, CAS, FWCS, COMES, and HMSC staff. A confirmation that you received information or a request is appreciated. Please set away messages when responses will be delayed.
- 8) Work with me to develop research questions, identify robust methods, and establish a timeline for project deliverables. Keep me, your committee members, and collaborators updated on your research progress (e.g., via regular project meetings, email briefings, and/or individual conversations).
- 9) Maintain a detailed, organized, and accurate record of your research activities. Take sufficiently detailed notes (click here for tips) during and/or immediately after meetings. Follow up on all action items in a timely manner.
- 10) Take ownership over your work and discuss details of your data, analyses, and interpretations with relevant experts to solicit feedback and promote sound science. Dedicate sufficient time and energy to research planning and implementation. Independently search for answers by reviewing the scientific literature and relevant websites or asking other students. *You are being trained to serve as the expert on your own research!* That said, please don't spend weeks on a problem that may be resolved by a brief conversation.
- 11) Prioritize the quality of your data and/or analyses. Do not cut corners for the sake of convenience. Likely, your results will be used to inform management practices, which have the potential to impact livelihoods.
- 12) Facilitate your own networking (e.g., be actively engaged in meetings, apply for travel awards and/or volunteer to present at conferences, introduce yourself to others in our field).
- 13) Plan ahead and do your due diligence. This will save time and energy for those involved in your research, increase confidence (in yourself and from others), conserve financial resources, etc.
- 14) Use equipment and supplies purchased by the IMF Lab for their intended purposes only. Return items purchased by the IMF Lab at the completion of your degree or project. Conserving limited resources will maximize the support provided for current and future IMF Lab members.
- 15) Address interpersonal issues in a timely and respectful manner.
- 16) Back up thesis-, dissertation-, and/or manuscript-related files (e.g., data, R scripts, written content) at least once per month. All research-related data are property of OSU and will be retained by the IMF Lab. Final databases and other files must be shared with me before you graduate. Use cloud storage and an external hard drive provided by the IMF Lab to back up all project-related files.
- 17) Allow three weeks for written reviews. I may be able to provide comments on shorter notice (e.g., 1-2 weeks) but this length of time is required for committee members and collaborators. Remember that reviewer comments take time and energy. They are also intended to strengthen the quality and/or communication of your work. Please consider reviewer comments with an open mind and sense of appreciation.

18) Work with me, your committee members, and collaborators to prepare research products for publication and/or management applications within project deadlines. If the student or postdoctoral scholar cannot meet the timeline agreed upon (extensions are possible, when sufficiently justified) and/or they do not submit for publication within one year of the project's completion, I may be in a position where I need to finalize the manuscript myself – to meet project deliverables, satisfy funding requirements, and/or maintain productive relationships with collaborators. Depending on the amount of work required, this may result in the student or postdoctoral scholar being listed as second author. My expectation, however, is that students and postdoctoral scholars will see their work through to publication. As such, I will provide ample opportunities for the student or postdoctoral scholar to maintain first author status.

Expectations for Myself (Your Faculty Advisor)

- 1) Be knowledgeable about and comply with the policies and requirements associated with my position and/or program, OSU, the Graduate School, CAS, FWCS, COMES, and HMSC.
- 2) Adhere to commonly accepted scientific ethics (click here, here, and here for more info).
- 3) Direct research projects and other activities within the IMF Lab (e.g., obtain necessary permits, ensure adequate trainings, secure necessary funds, manage budgets, foster collaborations). Help students and postdoctoral scholars set reasonable goals, manage their time, and meet project deliverables.
- 4) Provide those under my supervision with an environment that is accessible, equitable, intellectually stimulating, safe, and free from harassment of any kind.
- 5) Work with OSU, the Graduate School, CAS, FWCS, COMES, and/or HMSC to ensure that all IMF Lab members can access the resources needed for successful completion of their degree and/or research.
- 6) Be accessible and thoughtfully respond to all communications within 2-5 business days.
- 7) Be committed to holistic mentoring, promote individualized professional development opportunities, and effectively train students and postdoctoral scholars for scientific research.
- 8) Maintain a high level of curiosity about members of the IMF Lab and their work.
- 9) Support, encourage, respect, and foster the student or postdoctoral scholar's confidence in science by encouraging critical thinking, skepticism, and creativity.
- 10) Prevent potential conflicts of interest from interfering with the success of any student or postdoctoral scholar's degree, research, and/or professional development.
- 11) Assist students in the selection of courses that will help them meet their short- and long-term career goals.
- 12) Guide students in the selection of their committee, ensuring relevant areas of expertise.
- 13) Help resolve disagreements between or among IMF Lab members, individual committee members, collaborators, and/or coauthors. Manage conflicts should they arise.
- 14) Aid students and postdoctoral scholars in developing a timeline for degree and/or project completion based on institutional and funding requirements.
- 15) Meet regularly with students and postdoctoral scholars to ensure that I am knowledgeable about and can provide effective feedback on their academic, research, and professional development.
- 16) Review proposal drafts, grant applications, and manuscripts in a timely fashion (i.e., within 1-2 weeks).
- 17) Facilitate development of the complementary skills needed to become a successful fisheries scientist. These may involve oral and written communications, grant writing, database management, the ethical conduct of collaborative research, and discussions about scientific discourse.
- 18) Encourage IMF Lab members to participate in conferences and/or professional meetings.
- 19) Help students and postdoctoral scholars find other mentors when I don't have the necessary expertise.
- 20) Work with the student or postdoctoral scholar to publish their work in a timely manner.
- 21) Acknowledge IMF Lab members for their contributions (to their projects and work that is led by others).
- 22) Provide honest letters of recommendation for scholarships, job applications, and awards.
- 23) Offer career advice and assist in finding a position for the student or postdoctoral scholar following the successful completion of their degree program and/or research.