

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 I will intermittently revise. I welcome and value your input, should you like to provide feedback on any section.

Cheryl L. Barnes, PhD (she | they)

Assistant Professor, Integrated Marine Fisheries (IMF) Lab

Coastal Oregon Marine Experiment Station (COMES)

Department of Fisheries, Wildlife, and Conservation Sciences (FWCS)

College of Agricultural Sciences (CAS), Oregon State University (OSU)

Hatfield Marine Science Center (HMSC), 2030 SE Marine Science Dr | Newport, OR 97365 e: cheryl.barnes@oregonstate.edu p: (541) 867-0116

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 in my role as a mentor. The way that this is accomplished will be unique for each mentee. It will also evolve throughout our working relationship. To maximize the benefits of our time together, I place considerable value on open and honest communication. I will make an effort to be clear about my expectations of you and I encourage you to reciprocate by being open about your expectations and asking questions to prevent misunderstandings.

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, supportive, and productive environment. This is accomplished by being prepared for and actively engaged in team meetings, providing thoughtful feedback to others, and maintaining a growth mindset. Please read the DEI statement created in collaboration with my former advisor and fellow students at the University of Alaska Fairbanks. I strive to reflect these values through my work with students, colleagues, and collaborators. I will, however, make mistakes but I'm always interested in learning and growing 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 email me and 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.

As the mentee, you are expected to lead 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.

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.

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. Read and try to digest materials both within and outside the core areas that are 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 work. You are not expected to understand every aspect of what you read (especially the methods section early on) but your comprehension and confidence will increase 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 improve the quality of your own work.

Talk with me (and other mentors) about funding Part of my job as a mentor 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 maintain regular conversations about your current funding and potential options for additional support. I will provide feedback on mentee-led proposals before submission.

Solicit different perspectives Brainstorming with other students or 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 work to varied groups. Much of what we learn in fisheries comes from these types of discussions. They also help you fine-tune your message 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.

Build a support system Your tenure as an undergraduate student, graduate student, or postdoctoral scholar 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. I care about your overall wellbeing and am always available to talk.

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 necessary during all stages of a research project. Discussing details related to research 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 posting non-technical research summaries to relevant websites, blogs, or social media, initiating individual meetings with interested parties, participating in educational events, organizing or participating in roundtable discussions, and presenting your research at conferences, in the form of seminars, or as part of stakeholder meetings.

Peer-reviewed publications are the most effective way to ensure that our science is accessible in the long-term. They also represent the final product that we promise to funders and serve as a way for early career professionals to develop their credentials as scientists (after all, publications still represent the currency used in science). Notably, the peer-review process is a vital part of the science because it invariably improves the quality of our work. I place considerable value on publishing open access because scientific findings from shared resources should be made available 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 (2-3 for a PhD). 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 publish 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 (depending on who contributed substantially to the work). I will work closely with you to prepare your capstone, thesis, dissertation, or 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

You are primarily responsible for the successful completion of your degree and/or research. Please reach out to me, your committee members, and/or collaborators with questions.

- 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 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 (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 weather). 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.
- 5) Maintain clean, organized, safe, and professional desk and shared lab spaces.
- 6) Demonstrate commitment to your education by a) being prepared for and actively engaged in the classroom, meetings, field, and/or lab and b) 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 within two business days. A confirmation that you received information or a request is appreciated. Please set an away message when on leave to convey potential delays in your response.
- 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, 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.
- 10) Take ownership over your work and discuss details of your data, analyses, etc. with relevant experts to solicit feedback and promote sound science (e.g., 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. Just 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.
- 12) Facilitate your own networking (e.g., be actively engaged in meetings, applying for travel awards and/or volunteer to present at conferences, introducing 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 work-related 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 owned 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.
- 18) Work with me, your committee members, and collaborators to prepare research products for publication and/or management applications within project deadlines *.

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 and here for more info).
- 3) Direct research projects and other activities within the IMF Lab (e.g., obtain necessary permits, ensure adequate training, secure necessary funds, manage budgets, foster collaborations). Help students and postdoctoral scholars set reasonable goals, manage their time, and meet project deliverables.
- 4) Provide students and postdoctoral scholars under my supervision with an environment that is accessible, equitable, intellectually stimulating, safe, emotionally supportive, 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, and effectively training students and postdoctoral scholars for scholarly 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 curiosity, 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 inform their thesis or dissertation research and prepare them to meet their long-term career goals.
- 12) Guide students in the selection of their thesis or dissertation committee, ensuring that it provides relevant areas of expertise and meets at least once per year.
- 13) Help resolve disagreements between the student or postdoctoral scholar and myself, individual committee members, collaborators, or coauthors. Manage conflicts among committee members or collaborators (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 2-3 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 and help secure funding for their participation, whenever possible.
- 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.
 - * If the student or postdoctoral scholar cannot meet the timeline proposed to funders (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 good 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.