

Buckley Lab Expectations

Parts of these expectations are adapted (or directly borrowed) from similar documents written by Jacob Wenegrat (UMD), Mariam Aly (Columbia), Dan Chavas (Purdue), Alison Nugent (UH Manoa), Morgan O'Neill (Stanford), and Leif Thomas (Stanford).

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The Buckley Lab is based at the University of Illinois Urbana-Champaign in the Department of Earth Science and Environmental Change. In this group, I expect everyone to take ownership of their educational and research experiences, to think about their work in the context of long-term career goals, and to contribute to a supportive, collaborative environment where colleagues are not competitors.

Respect, inclusivity, and a zero-tolerance policy for harassment or discrimination are central to our group and community. We will not tolerate any verbal or physical harassment or discrimination on the basis of gender, gender identity and expression, sexual orientation, disability, physical appearance, race, or religion. I encourage lab members to bring concerns to me directly, or to the departmental ombudsperson (Alison Anders) if needed.

Research Development

For PhD students, I will help guide you in developing your first project and shaping your scientific questions and methodology. Your projects should excite you, help you develop new skills, and contribute to our field. Over time, you will gain increasing independence, and by the time you defend, you should be the expert on your topics and results, with knowledge that exceeds mine.

Ethics

I encourage thoughtful and ethical use of AI tools. While large language models such as ChatGPT are useful for coding, generating ideas, and editing text, over-reliance can stunt your education. It is important to understand the rules for AI use in classes, journals, and proposals. In terms of research results, I expect transparency in reporting results, honesty about failed projects, and avoiding exaggeration of findings.

Reproducibility

Reproducibility is essential in our work. I expect everyone to comment their code, keep clear notes, and document their work and decisions. This is so useful when you go back to old work when you are writing up a paper or making a presentation. This also ensures someone can take on your project in the event that you leave the group

Collaboration and Publications

Co-authorship is granted for significant contributions to a project, including idea generation, providing funding, analysis, figures, or code. If you leave the group with unpublished results, we will discuss next steps. The work that you develop here is part of the group- if you begin any collaborations outside of our group, consult with me first to discuss how this new project may fit into the context of your current projects

Career Development

I support career development by encouraging participation in trainings, workshops, and conferences. If you are interested in getting on the ice, I will try my best to provide that opportunity for you. However, this is not guaranteed and will likely require applying to programs, rejections, and persistence.

If you have new results, you can expect to attend at least one professional meeting each year, and I encourage you to apply for fellowships to support travel (departmental and external). Common meetings I attend include the AGU Fall Meeting, AGU Ocean Sciences, IS2 Science Team meetings, IGS Sea Ice Symposium, and IGARSS.

I also encourage you to attend the departmental seminars, even if they are not directly related to our work, because they provide exposure to different career paths, research approaches, and professional skills. Meeting with the speaker is a great way to practice talking about your research and asking scientific questions.

Each group member should have an Individual Development Plan (IDP) through the University of Illinois, which includes a self-assessment and a one-on-one discussion with me about goals for the year. I also ask students to provide a CV to support these annual check ins.

Schedule

I expect graduate students to work a nominal 40-hour week, but to understand the ebb and flow of deadlines and other responsibilities. Flexibility and work-life balance are important. Please be generally available on Slack during work hours. We will hold regular group and individual meetings, and we will adjust as needed. For trips shorter than three days, let me know which days you will not be available, for anything longer please discuss your time off with me as soon as you know your plans- at least two weeks in advance.

What you can expect from me

As your advisor, I will give credit where it is due, adjust my mentoring approach to your needs, be available for questions and discussions, return feedback promptly, respect your long-term career goals, and facilitate your research and education. I aim to serve as a lifelong mentor, to the extent that you choose to keep me in that role. Please give me feedback or suggestions as I grow the research group.

Additional Resources

- <https://esec.illinois.edu/academics/graduate-program/graduate-student-resources>
- [Current graduate student handbook](#)