From the Rep

**Self-assessment and comparison.**

How do we know if we’re doing “enough”? If we’ll finish on time? If we’ll be competitive on the job market?

I’m a fourth-year PhD student, and I just submitted my first lead-author paper. For the first three years, I was so sensitive to my classmates submitting papers—it felt like everyone around me was building their resumes, and I wasn’t.

The wonderful flexibility that we have in research comes at a price—we must learn how to assess ourselves. We (with the help of advisors and collaborators) decide when the project is ready for submission. We (mostly) decide how many hours we work, and when, and where. Throughout our schooling, we are assessed using grades, which can largely be relative to our classmates. It makes absolutely perfect sense that we use our classmates as yardsticks against which to measure our effort and productivity.

The reality, though, is that no two projects can be compared. Once we’ve been doing this science thing long enough, we’ll know intuitively that each project moves at its own pace. Sometimes it takes months to perfect a laboratory technique, and other times we are able to do a new analysis with pre-existing data. I think a lot of our anxieties in graduate school are normal “growing pains” as scientists, and I’ll talk more about that next month.

I’d love to hear from you about how you deal with self-assessment—write to me at chernandez@whoi.edu or @fishy_chrissy on Twitter and Instagram!

— Chrissy

TOS Student Highlight

**ISAIAH MILTON.** I am a third-year marine and environmental science major working toward my Bachelor of Science degree at Hampton University. I became enamored with marine biology in middle school after the father of a friend of mine came in to talk about his occupation. He works for NOAA and he was studying marine mammals and how we affect their migration. I do not remember every detail, but I do know that he sparked my perpetually growing interest in studying the marine science.

When I was accepted to Hampton University in 2016, I did not know all of the things I was getting myself into for the next four years. This department has offered me so many academic and research opportunities, and connections with people and programs that have significantly changed my life for the better. I had enlightening and inspiring summer research experiences because of this department. I have done research in the Maryland Coastal Bays on Blue Crabs and the bacteria infecting them through the University of Maryland Eastern Shore, and I have scuba dived on the coral reefs of Mo’orea, French Polynesia, through the Diversity Project at UCLA.

After completing these research projects, I was able to attend the ASLO conference through the ASLO Multicultural Program (ASLOMP) two years in a row to present my research. I have made great connections that have pushed me to pursue my PhD after I graduate. I am so grateful for the experiences I have had in the past three years here at Hampton and in the field of marine science.

Have You Read…?

**From academia to industry: Seven tips for scientists making the leap.** Crystal Romeo Upperman shares her advice after moving out of the lab and into the private sector. *Nature*, https://doi.org/10.1038/d41586-019-00692-y

31 Tips for Thriving in Graduate School (the last 7)

From https://graduateschool.vt.edu/about/deanscorner/tips-for-thriving.html

25. Laughter is good for you. And so is keeping a good sense of humor.
26. Goals are important for progress. Set long term and short term goals. Review regularly.
27. Don’t write a script about things to come. Be attentive as the journey unfolds and follow.
28. You might not have all the information you need or want. It is OK to ask questions. Ask!
29. Learn through active listening and observing. Also, look for the “unobvious.”
30. (originally the last one): Change rhetoric and reality from surviving to thriving in graduate school. Shared responsibility. Please join.
31. It’s hard to thrive without a mentor. Find at least one, maybe more than one.

Send Us Your Feedback!

Have questions or comments for the Student Rep? Interested in being a highlighted student? Want to share your best career tips and tricks? We need your input!

» studentrep@tos.org and @fishy_chrissy

Follow Us

The Oceanography Society
@TOSOceanography
@TOSOceanography

Ocean Sciences Meeting 2020 Call for Input

Camille Pagniello is the TOS Student Representative on the 2020 Ocean Sciences Meeting Planning Committee. She and her counterparts from AGU and ASLO are building upon experiences from the 2018 OSM to create exciting events for next year’s meeting. Ideas from TOS student members are welcome, please send them to Camille at cpagniel@ucsd.edu.

---

**Seen in Oceanography**

True Colors of Oceanography

Guidelines for Effective and Accurate Colormap Selection

By Kristen M. Thyng et al.

...wherever color is used to represent numerical values, its role transitions from a mere aesthetic nicety to carrying the responsibility of conveying data honestly and accurately.

https://doi.org/10.5670/oceanog.2016.66