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**Expectations**

**Let’s Be Clear**

I want my students to launch successful and satisfying careers. Your experience in my lab should be fun and challenging. But what should you expect from working with my group? Here, I outline some expectations for students, postdoctoral associates, and myself.

**Scientific Virtues.** Robert Pennlock (Michigan State University) led a team that surveyed 400 top scientists in the US about the scientific virtues they thought were most important (*Nature*, vol 532, p. 139, 2016). We should endeavor to cultivate the top five:

1. Honesty
2. Curiosity
3. Perseverance
4. Objectivity
5. Humility to evidence – the willingness to abandon ideas that conflict with data

**Expectations You Have of Me**

Research is hard – I am here to help and support you; to be your ally and champion your interests. You should expect me to provide advice and guidance for your growth as a scientist. Specifically, you should expect me to:

1. Create an environment that is fair, supportive, and respectful
2. Help you navigate university policies
3. Help you set and achieve yearly goals
4. Provide guidance and critical feedback on projects, papers, and presentations
5. Ensure that you are fairly credited for your contributions on presentations and papers
6. Help you secure financial support for tuition, research, and travel
7. Help you balance academia and personal life. Science is hard work, but it should be fun!
8. Help you find a position after leaving my lab – assuming you have met the expectations outlined here. We are now part of an academic family

**Expectations I Have of You (& You Should Have for Your Lab Mates)**

And I expect that you will:

1. Work independently, ethically, & hard (40+/hrs (PD), 30/hrs (grad) 20/hrs (undergrad))
2. Be dependable: meet deadlines & expectations.
3. Understand and follow our Quality Assurance Plans
4. Represent your teammates positively and professionally on- and off-line
5. Get authorization from me for sharing lab content on- or off-line
6. Open & honest communciation: talk to me in person about complaints, challenges…
7. Attend lab meetings and one-on-one meetings

**Books & Papers I Expect Undergraduate Students to Read**

*Finish before Graduation. Audio books are in Lab\_Resources\Library\Audiobooks*

1. *Chapter 1, An Introduction to the Phylogenetic Comparative Method* by Emmanuel Paradis (in Modern Phylogenetic Comparative Methods…)
2. *Inferring Evolutionary Processes From Phylogenies* by Pagel (Zoologica Scripta 1997)
3. *Inferring the Historical Patterns of Biological Evolution* by Pagel (Nature, 1999)
4. *The Seven Deadly Sins of Comparative Analysis* by Freckleton (JEvoBio, 2009)
5. *Tidy Data* by Wickham (Journal of Statistical Software, 2014)
6. *Ten Simple Rules for Effective Statistical Practice* by Kass et al. (PLOS Comp Bio 2016)

**Books & Papers I Expect Graduate Students to Read**

*Finish before Comprehensive Exam. Audio books are in Lab\_Resources\Library\Audiobooks*

1. *Origin of Species* by Charles Darwin
2. *The Comparative Method in Evolutionary Biology* by Harvey & Pagel
3. *Chapter 1, An Introduction to the Phylogenetic Comparative Method* by Emmanuel Paradis (in Modern Phylogenetic Comparative Methods…)
4. *Elements of Style* by Strunk and White
5. *How to Write a Lot (2nd ed)* by Paul J. Silvia
6. *The War of Art* by Steven Pressfield
7. *Four Thousand Weeks* by Burkeman
8. *Visual Display of Quantitative Information* (and other books) by Edwards Tufte
9. *Make It Stick: The Science of Successful Learning* by Brown, Roediger, & Daniel
10. *A PhD Is Not Enough!: A Guide to Survival in Science* by Feibelman
11. *The Professor Is In: The Essential Guide to Turning Your Ph.D. Into a Job*. By Kelsky
12. *Inferring Evolutionary Processes From Phylogenies* by Pagel (Zoologica Scripta 1997)
13. *Inferring the Historical Patterns of Biological Evolution* by Pagel (Nature, 1999)
14. *The Seven Deadly Sins of Comparative Analysis* by Freckleton (JEvoBio, 2009)
15. *Tidy Data* by Wickham (Journal of Statistical Software, 2014)
16. *Ten Simple Rules for Effective Statistical Practice* by Kass et al. (PLOS Comp Bio 2016)

**Recommended Reading**

1. *Voyage of the Beagle* by Charles Darwin
2. *Surely You Must Be Joking Mr. Feynman* by Richard Feynman
3. *Philosophical Breakfast Club* by Laura Snyder
4. *The Theory That Would Not Die* by Sharon Bertsch McGrayne
5. *The Invention of Nature: Alexander von Humboldt's New World* by Andrea Wulf
6. *Enlightenment Now* by Stephen Pinker
7. *Calling Bullshit* by Jevin West
8. *Range* by David Epstein
9. *Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded* by Joshua Schimel.
10. *On Writing Well: The Classic Guide to Writing Nonfiction* by Zinsser
11. *Never Finished* by David Goggins
12. *Winning* by Tim Grover
13. Tenure Hacks by Russel James