Bioecology, Self-Regulation, and Learning (BSL) Lab
Advising Statement
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What do we study?

- Our lab studies: "self-regulation"—*very* broadly conceived.
  - E.g., Executive functioning; emotion and emotion regulation; attention and attention regulation; flexible thinking; dynamics between 'top-down' and 'bottom up' cognitive and emotional processes; physiological regulation; learning and affect in context, etc.
  - Thus, my advisees' research interests typically align with this area of study.

- I expect my students to think about these phenomena as:
  - *Developmental processes:* As developmental scientists, we're interested in the way self-regulatory processes organize within children over time, where "time" can be anything from seconds to decades.
  - *Embedded in context:* Informed by developmental systems models, we consider developmental processes as being inextricably linked to the contexts in which those processes are developing. Here, we mean "contexts" broadly, ranging from 'real-time' experiential supports and challenges to more distal aspects of children's ecologies (e.g., implicit/explicit social policies; cultural norms).
  - *Occurring across multiple, intersecting levels of analysis*: We view self-regulation as the complex interplay of cognitive, affective, and behavioral processes. We also view self-regulation as an emergent property of contextual, physiological and neural processes. As such, we tend to study self-regulation across multiple levels of analysis (e.g., behavioral tasks and observations intended to capture cognition, affect, and changes in the external environment; as well as indicators of the Autonomic Nervous System, Hypothalamic-Pituitary-Adrenal-axis, and immune functioning intended to capture some of the underlying mechanisms).

- I do **not** expect my students to share my working hypotheses/conclusions about any of the above. To the contrary, I hope that you challenge both my thinking and conventional wisdom.

How do we study it? – Expectations of my Students

- I expect my students to develop comprehensive toolkits for studying developmental phenomena, grounded in an intentional philosophy of science.
- I expect my students to be as engaged in their methodological training as they are in their substantive training.
- I expect my students to learn to develop thoughtful, well-controlled experiments to test specific and well-defined causal hypotheses—in the lab, as well as in children's natural contexts.
- I expect my students to learn to test similar hypotheses in the context of naturally occurring variation and/or using quasi-experiments that combine the strengths of experimental manipulation with those of natural variation.
- In order to do this, I expect my students to learn advanced quantitative methods (e.g., econometric methods, multilevel modeling, structural equation modeling, time-series modeling, etc.). Indeed, I expect my students to be *able to* teach an applied introductory course on at least one of these topics by the time they graduate.

What are the expected deliverables?

- Publishing is essential for most career paths followed by my advisees. In addition to

preparing their dissertation for publication, I expect my advisees to be working on manuscripts that go beyond their dissertations. By their second year, my students should have at least one empirical paper under review, with others soon to follow. By the time they graduate, I expect my advisees to have *multiple* publications in the publication pipeline (published, in press, in review, in preparation).

- To publish (and succeed, generally), students need to learn to convey their ideas and findings effectively in writing. I expect my students to consider writing to be a life-long learning process. As such, I expect my students to write…and rewrite...a lot. As a reviewer, I will respond with 'tough love.' However, you will leave here with the writing chops you need for success.

- Authorship: Making authorship arrangements early is critical to maintaining positive and productive relationships. If someone has made *significant contributions* to a research project (e.g., actively developing the original idea and/or design, analyzing data, and/or writing a portion of the manuscript) then he/she should be expected to be listed as an author. It's good practice to establish authorship roles at the first sign that an activity will result in a publication. It's also good practice to allow some flexibility (upon mutual agreement), if the contributions change. I write with students a lot (see *s on my CV), and try to be extremely fair about authorship and the division of labor.

What are the commitments?

- It is common to work across multiple labs at ICD. I encourage this whole-heartedly, as long as it is building toward a coherent research program and/or a diverse set of methodological skills. By the second year, however, I strongly suggest that my students narrow their regular involvement to only two research labs, max. There are trade-offs between breadth and depth, and it pays to be conscious of erring too much on the former. There will, of course, be exceptions, but we should work out the details formally.

- I expect at least 20 hours of your time per week to be dedicated to BSL-lab-related research, unless you are splitting your ICD-required 20 hours of research across multiple labs. If you are funded via RA-ship, you are expected to work the hours that you have been allotted. We ask students to document (i.e., bullet points) their weekly activities and 'next steps' on a spreadsheet maintained by the lab manager.

- We define BSL-lab-related research broadly and tasks will vary. Sometimes it will mean working on an existing BSL-lab study. Other times it will mean running your own study out of BSL lab, with other students supporting your work. Specific tasks could include: running subjects, background reading, data coding or cleaning, getting reliable on a measure, conducting analyses, writing manuscripts, etc. The main point is that we expect you to contribute to BSL-lab's overall research agenda. The upside here is that—because your own work will be part of the BSL research agenda--we'll also all be working together to support your own semi-independent line of research.

- **NOTE:** You've decided to attend a highly competitive R1 research program. Presumably, you aspire to be successful in our field, as an academic, non-academic, or clinical researcher. In my experience, this requires more than the minimum requirement of 20-hours per week. Graduate school isn't a 9-to-5 gig, nor are most of the jobs that our students take upon graduating. I don't expect graduate students to commit 70 hours a week, but I do expect more than the bare minimum. If keeping to the required minimum is your expectation, you may want to consider whether BSL Lab is a good match for you.

- Meetings:
  - BSL Lab Group Meetings: I expect my students to attend weekly lab group meetings.
  - Individual Meetings: I expect my students to schedule regular bi-weekly or monthly meetings with me. Additional meetings can be scheduled, as needed.

Other expectations?

- Independence:
  - I am more than happy to schedule individual meetings with students and love this part of the job. I will try to respond to emails within 12-24 hours and **strongly encourage you to send me a follow-up email, if I haven't** (for real!). I will try to turn around manuscript/grant application/etc reviews within a week….however, please give me advance notice. I want you to succeed and promise to do my best to support you toward this end! However, *on a day-to-day basis*, I expect my students to work largely without daily input or guidance. Pop by. Ask a question. If my door is open (as it is typically), it's fair game. But I cannot micro-manage program deadlines or daily activities.

- Conferences/Meetings:
  - Developing a professional network is important. I expect my students to attend and present their research at national conferences. I will do my best to help find money to make this possible, but I also expect students to seek external funding where possible.

- Grant writing:
  - Grant proposal writing is a critically important. Therefore, I expect all my advisees to be active in writing proposals for both university and external funding opportunities (fellowships, research grants, travel grants, etc.). I will actively support this process, as well as involve student in my own grant writing.

- Original Literature:
  - Our field changes quickly and keeping up with the literature is critical. Thus, I expect my advisees to spend significant hours each week reading (e.g., sign up for journal updates and scan table of contents for relevant material).
  - Periodically, you'll be asked to propose and lead the discussion of readings for our lab meetings.

- Teaching:
  - Teaching plays a key role in learning how to communicate complex concepts to a non-specialist audience. You'll receive training and be expected to teach, as a requirement for our program. However, I strongly encourage you to teach for at least three semesters. Careers pursued by my advisees will require that they be able to balance multiple diverse responsibilities (such as teaching and research). Graduate school is a low-risk place to learn to balance such responsibilities.

- **Our Lab as an Intellectual Community:**
  - Having the opportunity to nerd-out with one's colleagues about the science we love is, in my mind, the bread and butter of the academic endeavor. We learn the most from our interactions with each other, and creating supportive professional relationships amongst our team (and beyond) is central to this aim. Early career students should seek out the advice of late career students and postdocs. Late career students and postdocs should be generous in providing advice. Good science is way more fun with good colleagues.