SORTE LAB GUIDE – 10/15/19

This document is continuously evolving, as the lab changes and grows, to help us achieve our...

…Mission

The mission of the Sorte Lab is to (1) elucidate climate change impacts and coping mechanisms and, in doing this, the processes underlying community dynamics and biogeographic patterns, (2) train great scientists to achieve their career and life goals, (3) share our passions for science and nature with a broad range of audiences, and (4) have fun and build good memories in the process.

Policies

All members of the lab must agree to abide by these policies, which are of the utmost importance.

1. **Safety:** All members of the lab must complete and follow university safety training and requirements, including orientation to safety concerns specific to our lab (with G. Bernatchez or myself). *Safety is the #1 consideration in all situations. No data and no equipment is more important than personal safety.* It is important for everyone to exercise personal judgment and stop doing work if they feel unsafe. Lab policy is that fieldwork should be done in teams of 2 or more, and I will never ask or expect anyone to go in the field on their own. If a lab member chooses to go in the field without a buddy, they accept personal responsibility and potential risk. Our lab space is chemical free (although there is some equipment that has previously contacted chemicals). Any chemical use in the lab needs to be cleared with me and G. Bernatchez (who updates EH&S data).

2. **Healthy work environment:** It is extremely important that members of the lab are working in an environment that is healthy, which includes mental and emotional health along with physical safety. I expect lab members to be respectful and welcoming of all aspects that make us unique, including age, appearance, ethnic background, gender and sexual identity, religion and spiritual beliefs, and all appropriate expressions of our personality and self! *Inappropriate behavior, including making rude or unwelcome comments, will not be tolerated in the lab.* This includes behaving professionally both in lab and when working away from lab (in the field, at conferences, etc.). If another lab member makes you uncomfortable, please let me, a committee member, or the graduate advisor know. Other resources are the counseling center (https://counseling.uci.edu/, available for remote consultation to some locations), grad student counselor Phong Luong (pbluong@uci.edu), and Office of Equal Opportunity & Diversity (http://www.oeod.uci.edu/). Also, during our frequent "critical discourse" – whether discussing a paper, giving feedback or addressing concerns – be sure to be civil, respectful and constructive.

3. **Honesty & ethical conduct of research:** Ethical considerations include the impacts of our work on the environment, using resources responsibly, and reporting research results truthfully and transparently. *Honesty and trust are guiding principles in relationships, in the scientific field, and therefore in the lab.* When you make a mistake – which we all do – it is important to record and report it so that we can work together to correct it. (For an example, ask someone to hear the story of the New Zealand chamois incident)

4. **Responsible use of lab resources:** Lab space and equipment are officially public property, and with proper care, they can benefit many cohorts of researchers over the years. All shared space in the lab should be used with a "leave no trace" mindset: unless you have been assigned an area or are actively using space, it should be left clean and available for use by others. Careful storage, shipping, and cleaning are important to maximize the lifetime of equipment. When equipment is exposed to water/salt in the field or lab, it must be cleaned after each use as follows: (1) remove all

visible sand (sweep or rinse) before return to lab, (2) remove all salt by submerging in freshwater (if it can be) or wiping with a wet towel, (3) remove all water by wiping with a dry towel or with WD40 (if metal). *Cleaning is not optional; it is an ethical responsibility – both environmentally and to other lab members – to take care of our equipment.* Equipment and reference books should be returned to the lab daily unless they have been signed out.

5. **Data management:** *All lab members are expected to archive data in a second location as soon as possible upon collection.* It is recommended that one of these locations be digital, such as on Google Drive or photos of data sheets (particularly prior to data entry). Also see the Data Ownership Policy, below.

General Expectations

What lab members can expect from me:

- Assistance and feedback while developing and carrying out your research
- Promoting your independence while prioritizing being available to give you feedback
- Assistance with skill building and career development aimed at your specific career goals
- Advocating for you within and beyond the university
- Clear and open communication of expectations, encouragement, concerns, and congratulations
- Financial assistance, including direct funding (as promised on arrival and/or via subsequent grant applications) and helping with your grant/fellowship applications
- Managing the lab to create a positive, collaborative, inclusive, safe, healthy, and scientifically rigorous work environment

What I expect from lab members:

- Focused, diligent, creative, efficient, responsible, and safe conduct of your research
- Careful consideration of feedback on both research and career development
- Setting and meeting established deadlines through independent time management
- Acting as ambassadors for our lab's research within and beyond the university
- Clear and open communication of expectations, encouragement, concerns, and congratulations
- Attendance and active participation in weekly lab and Ecology Group meetings
- Careful recording, annotation, and backups of all data, with digital versions of data and presentations archived in shared drives at least quarterly and final versions at project completion
- Helping maintain a positive, collaborative, inclusive, safe, healthy, and scientifically rigorous work environment

Participation:

I expect lab members to attend lab meeting (unless ill or traveling) and strongly encourage attending Ecology Group (weekly, for grad students and postdocs) and department seminar (most weeks, especially for the most relevant speakers). This is to build community and because we all benefit from these opportunities for peer and group discussion and mentoring.

Communication:

Communication is key to team functioning. I aim to foster open communication with and between lab members and encourage all to ask questions and express concerns in individual meetings, lab meeting, or via email. For situations requiring rapid response (including lab research-related questions or if you need immediate help), all are welcome to call or text me. Do not worry about "bothering" me – *if and when you need help, please reach out*.

My Roles in the Lab: what you can expect from me & how to help me help you

1. Principal Investigator

As PI, I am responsible for setting lab policies and ensuring compliance. I will do my best to address any issues that arise with the policies, above, as quickly as possible, including facilitating conflict resolution within the lab (for which we may involve outside counselors/offices).

I am also responsible for funding lab research. When making purchase requests, please provide a budget and links to sources. Typically, the following expenses will be covered when funds are available (note: because funds are tied to research grants, this may limit my ability to fund your specific project):

- Equipment necessary for research that will remain in lab & available for use by all lab members
- A desktop computer (PC) for your personal use while in lab, which will remain in lab after you leave (for grad students and postdocs; undergrads will share a lab computer)
- Supplies necessary for the research project you are leading
- Office supplies

Lab members are typically responsible for the following expenditures:

- Equipment that will be dedicated to you and your project and will be taken with you when you move to your next position
- A home computer or laptop
- Travel to field sites for your research project (for UCNRS research, Mathias Grants are ideal)
- Conference travel (there are many sources of university and society/conference funding)

Funding sources in the lab are always changing, and I will apply for and dedicate grant funding to student research supplies, equipment and travel when possible.

2. **Coauthor**

For most research projects that are led by other lab members, the first (and corresponding) author will be the project lead while I will be the last (senior) coauthor. As a coauthor (particularly senior coauthor), I am responsible for reviewing all products, including conference abstracts, presentations, manuscripts, and grant proposals prior to submission. Once these are submitted, all authors are responsible for the content. It's important to give your coauthors adequate time to comment, both so they can fulfill their responsibility for the content but also so that they can help improve the draft and increase its likelihood of being accepted or funded! Best practices are to give the following lead times:

- Abstracts: ≥1 week if coauthors also need to review data/analysis (you will want to be ready to reply promptly to any questions that arise); ≥2 days if it is a study for which coauthors are already familiar with the data (2 days is minimum for them to find time to read the abstract)
- Manuscripts: ≥2 weeks for a first draft; ≥1 week for a final draft after incorporating comments

Publications are one of the main outcomes of our work; thus, authorship is important and should be discussed during project development. Over time, coauthors may be added – and order determined – upon discussion with and consensus of the current authorship. All those who make substantial intellectual contributions to a manuscript should be included as authors. In general, individuals who assist with data collection following an established protocol or make comments in lab meeting are not listed as authors (these contributions should be mentioned in the Acknowledgements section). It is expected that all lab members will participate, to some degree, in all lab projects, whether by providing assistance or giving feedback.

3. **Advisor**

Because my goal as advisor is to help you to achieve your career objectives – and because each of you and each of your objectives is unique – my roles and responsibilities can vary greatly. I will provide:

- For basic needs (space materials) and promote a safe/healthy/ethical working environment
- Feedback on research at all stages (in individual and group meetings and via email)

  During the academic term, we will meet weekly as a group. Individual meeting schedules and approaches can vary term-to-term. Often I will set aside an hour for each student, though I am trying other opt-in and on-call approaches. Feel free to share your preferences! Note that students are expected to lead the individual meetings, so it is a good idea to draft an agenda and consider sending materials to me to review beforehand. I expect an email summary sent by the end of the day after each individual meeting, so we can ensure we are both on the same page about – and have a record of – any decisions made.
- Feedback on any written products, including those that are grad program specific (e.g. thesis proposal) and on which I am not a coauthor (e.g., personal statements and job cover letters)

  Please review the writing guide at the end of this document for tips on how to ensure your structure and grammar is working to clearly and effectively communicate your story or – if a proposal – your pitch. The writing center is a great resource, especially to get feedback from those outside our field on clarity. Following the guide's steps will allow me (and your coauthors/committee) to give more content-focused feedback. Revisions of the first paper and thesis proposal tend to take longer than students expect, while papers 2+ go faster!
- Letters of recommendation

  I need significant lead time to write (or update) a strong, personalized letter. If this is your first letter from me, allow *at least 3 weeks*. If I've previously written a letter, I recommend *≥2 weeks* (in case I am traveling or need to update/personalize the letter to the call). You should send me a concise email request with where to send the letter, how to address it, what it is for, when it is due, and any other specific information, plus an updated CV (and a proposal/summary if the instructions ask me to specifically comment on the proposal). I will confirm via email when I submit the letter, so until then, keep sending me reminders!
- Feedback on graduate program progress

  I will send a written summary after each bi-annual committee meeting and can provide feedback at other times if you prefer or if I have concerns about progress. The goal in discussing concerns is to figure out the reasons for delays and whether there's something that I can do to help you move forward. The qualifying exam is an important check point, and I generally recommend advancement when you have at least (1) 1 chapter submitted, (2) a second chapter well on its way (design complete, data collection underway), and (3) an achievable idea/plan for the 3rd chapter. Advancing by the end of your 3rd year is ideal.
- Advocacy and outreach for student research

  So that I can highlight the work you are leading in my presentations, please be sure to make data and figures easily available by sending me presentations on which I am a coauthor (for my files) and responding promptly to email requests. You will always be given full credit for this work and typically pictured in the presentation.
- Opportunities for training and career development

  e.g., participation as a 199 student mentor, involvement in lab research projects

Student work ethic & expectations:

I expect you to be self-motivated and will monitor progress by productivity and not hours worked. By being proactive, efficient, and diligent, it is absolutely possible to do a Ph.D. in 5 years of working an average of 40 hours per week (although there may be intense, busier periods). People like us that are in careers with more flexibility, including to follow our independent passions and schedule our own time,

tend to be happier, and this is a main perk of the academic lifestyle! I do not require a set amount of face-time in lab. That said, I encourage you to spend some time most days working in lab to promote lab community and benefit from – and benefit – the other lab members by informal peer mentoring.

As part of your offer letter, you are generally expected to TA during the academic year (50% time), spending the other 50% of time on graduate research. I expect you to discuss with me before committing to any other responsibility that consistently requires a significant time commitment during work hours. In general, graduate students are not expected to hold additional employment. During the summer, I have agreed to pay you whenever possible as an RA on grants. In order to do so, I budget for grad RA positions on grants, and when these grants are funded, the positions need to be filled in order to complete the work. I will be thoughtful and intentional about matching graduate students to RA positions that fit well with your thesis research. By doing this, my goal is to allow you to devote as close as possible to 100% of your time to research in the summer. It is essential for us to communicate early and openly about summer planning, including the pros and cons of any alternate funding options such as TA positions or outside internships.

Finally, I encourage you to take vacation time and trust you to use common sense about good time periods and good lengths of time. I appreciate a heads up on trips longer than 3 days and up to 2 weeks because it helps me to anticipate delays in communication. The best way to let me know is to send me an email and to add it to the Sorte Lab calendar. For trips >2 weeks or that cause you to miss a work activity (besides lab meeting), I expect you to discuss these with me prior to scheduling travel.

Mental Health:

Graduate students are at higher risk of suffering from mental health issues than those in the general population. I strongly encourage you to seek the help you need to maintain your health. Your well-being is paramount. We are all people first, and scientists second. UCI has amazing resources including counseling services (www.counseling.uci.edu). Please take some time to look through this resource guide from UCI Health and Wellness:
https://counseling.uci.edu/docs/Keeping-the-Balance_Grad-Guide.pdf
There are other resources, including specifically for international graduate students (https://grad.uci.edu/services/graduate-interconnect-program.php), and support groups (https://counseling.uci.edu/services/groups.html). *I cannot stress enough how important it is to build a support network during graduate school, ideally including individuals within academia (who understand the specific pressures) and those outside academia (to give broader perspectives).*

Additional Resources to be aware of:

The EEB department has resources to assist with health and safety in fieldwork, specifically, including:

- funds to ensure that grant funding limitations do not require researchers to live in uncomfortable situations (such as to avoid room sharing by members of the opposite sex, although this is not the only way these funds can be used). To access these funds, first contact me so that I can ensure we have exhausted other funding mechanisms and use these only when grant funds are not available.
- a satellite telephone that can be taken in the field to locations without cell phone reception. You should reach out directly to the EEB office to request to use this.

Undergraduate 199 Student Expectations & Curriculum

199 students will have a direct mentor (such as a grad student or postdoc in the lab, in addition to me as advisor) and will conduct a research project during the term, culminating in a final presentation. Students are expected to follow these schedules and deadlines unless alternate plans have been agreed on (e.g., due to experiment timing).

Time commitment per week and credits: 8 hours = 2 credits, 10 hours = 3 credits, 12 hours = 4 credits

Of these hours per week:
1 hour = attend and participate in weekly lab meeting
+1 hour = scheduled meeting with mentor
+Remaining committed hours = conduct research project & assist with other lab projects
Independent reading and preparing proposal and presentation may extend beyond committed hours.

Term schedule
Week 1 – Meet with Cascade to discuss expectations & project topic; background reading
Week 2 – Background reading & draft project proposal (due to Cascade by end of Week 2)
Week 3 – Meet with Cascade to discuss project proposal (final proposal due by end of Week 3)
Weeks 3-8 – Conduct research project; assist with other lab projects; enter & explore data
Week 7 or 8 – Meet with Cascade to discuss research results & data analysis
Weeks 8-10 – Analyze data; prepare 10-12 min PowerPoint presentation
Finals Week – Final presentations at symposium (combined with the Bracken Lab) & party

Grades will be assigned once data are archived (and keys returned, if not returning the following term).

A few more nuts-and-bolts

- The Sorte Lab Google Calendar is available online for recording travel & requesting meetings
- Requests for ordering basic lab/office supplies can be sent to G
- Be sure to keep lab keys safe and return them before leaving the lab when you move to new positions

WRITING GUIDE

Recommended checklist for critically reviewing a draft of your own writing:
This includes feedback that I often find myself giving on early drafts and/or as a journal reviewer/editor.

- Use spell- and grammar-check in your word processing program to minimize typos.
- "Reverse outline" by section. After you have a full draft, go "in reverse":
    - Highlight (or copy/paste to a blank page) the first sentence of each paragraph. This is your reverse-constructed outline. Now you can double check the following to ensure that:
        - Each of the sentences is a topic sentence (A topic sentence identifies the main idea/point of the paragraph. It is usually the first sentence of the paragraph, and this is highly recommended when the writing will be read by manuscript/grant reviewers, skimming readers, and anyone who is pressed for time and thus unlikely to meticulously read every word)
        - All of the main topics that need to be covered in this section are there (and combined effectively by paragraph)
        - These sentences/paragraphs are in a good order for the "story" to build logically (if not, it is easier to try out new organization by shifting them around in this reverse outline than as entire paragraphs in the full draft)
- Also review the document with an eye for:
    - Sentences that do not add new information (some repetition is desirable to emphasize important points, but unnecessary text obscures the message by adding bulk without information content)
    - Repeated words: watch for the same word being used twice in close proximity
- Once you are close, read the document out loud to yourself to make sure it reads clearly to you before sending it out for comment.

Specifically for papers:
- Refer to resources provided separately for a "menu" for writing an effective introduction paragraph
- Aim to get to the main topic of your study by end of first paragraph
- Describe the approach, so that the reader understands (in the Methods) why you collected each type of data and (in the Results) the question answered by each result. The approach section tends to fit well at the end of the Introduction or beginning of the Methods. It can also work well to repeat the point of each data type in each subsection of the Methods and, concisely, in the Results.

Specifically for proposals:
- Assume reviewers will carefully read the first paragraph and (maybe) first sentence of each subsequent paragraph. Key points should go in these "prime real estate" locations. Even in a short 1-2 page proposal, it is worth using the first 1-4 sentences for a section that reads like an abstract.
- Throughout, use bold/italics/etc. (sparingly) to make the most important text/ideas stand out
- Figures are encouraged: a picture is worth 1,000 words, and reviewers appreciate a break from blocks of text. Just be sure that the figure is super clear so it doesn't take work to understand!

Advice & Musings for Writing a Scientific Paper

Cascade Sorte, 1/04/2017

When is it time to start writing? It's never too soon, once you know you "have a paper". Sometimes this means having the data in hand; sometimes the data collection isn't yet complete, but you know that the results will be interesting whatever they "say". If it's a perspectives or review paper, just having a clear idea of the topic is enough. Before you start though (and usually before you even start data collection) be sure you have answered "yes" to the question:

Does this fledgling paper fill a niche in the literature? Search and comb the literature carefully and rigorously, skimming or reading relevant papers to establish the "playing field". You will need to repeat these searches continuously until your paper is accepted to make sure that you are an expert on what's already known about both the narrow (*e.g., thermal tolerance and tide height distributions of New Zealand mussel species*) and broader (*e.g., impacts of climate change on species distributions*) topic of your paper.

Ok, I have a (nascent, unwritten) paper, and I know it fills a niche, so…

How do I get started?

1. Develop a list of ~3 target journals, so that you format accordingly and write to a specific audience. This choice will likely take into account:
    a. subject matter (where are similar papers published?), and
    b. impact factor (this is often associated with how much the paper will be read and cited itself, and the difference between *Science* and an impact < 1 is often more about the way the story is told/pitched rather than the data quality per se) but weighed by
    c. the publishing timeline (lead time for review and publication differs widely, and its importance depends on whether there's any reason to hurry along the process).
2. Print out the Instructions to Authors and 1-2 recent, representative papers from your first target journal as formatting examples.
3. Open MS Word, Save As "LastName_ProjectName_MS_Date", and create a MS template:
    a. Cover page: format as required by the journal, making it as complete as possible. If you don't have a title yet, put "xxAwesome Title Here". "xx" is a marker for anything you need to fix later. Now, doesn't that look official?!
    b. Title all of the sections in order (e.g., Abstract, Introduction, Methods, Results, Discussion, Acknowledgments, References, Figure Captions, Figures).
4. Write the Acknowledgments. Of all the sections, it's the shortest and easiest (although you might have to dig out names of previous student researchers to fully credit everyone who helped). But don't think about its length – think about the fact that you have now passed the hurdle of <u>getting started</u> and <u>you have one section written!</u>

What's next?

Every subsequent day that you work on your MS, "Save As" with the current day's date and archive the previous version. Keep these archives until you see the publication proofs!

1. Each of the subsequent sections will begin with an outline. Go ahead and type it right into your draft. Depending on your style, the outline can be very general (e.g., a couple words describing each paragraph) or very specific (incorporating references and bits of text).
2. Tackle the Methods next. Your outline might look something like this:
    a. Study location(s)
    b. Field surveys & collections
    c. Thermotolerance methods
    d. Temperature data collection & accession
    e. Data analysis
3. Start writing! This is usually a hybrid of *de novo* composing and pulling in text from your previous writing, such as proposals and research plans/protocols. Write above or below your outline, so that you keep the road map until each section is complete. Mark text that needs to be filled in later (often, this is the data analysis section if you've started before analyses are complete).

And so on…with the recommended order as follows:

1. <u>Template/Title page/Acknowledgments</u>
2. <u>Methods</u>
3. <u>Figures</u>: these provide visuals to motivate your story telling. Start by brainstorming their order in that section in the template (e.g., Fig. 1 = map of sites, Fig. 2 = tide height distributions, Fig. 3 =

thermotolerances & temperatures, supp Figs. = short vs long term temp comparisons) and sketching what they might look like. Once you make a draft figure, write the caption for that figure at the same time.

4. Results: as a starting format, allow 1 paragraph per question/hypothesis/figure. In each paragraph, describe the main effect first (including statistical results in the text) and then elaborate. This section should not include a restatement of the purpose, approach, or hypotheses – these belong in the Introduction and Methods. Make sure you have a separate data analysis log in which you record your analyses and results.
5. Introduction: now you're getting onto the narrative sections!
    a. As always, start with an outline. This is not as freeform as you might think. A paragraph recipe looks something like this:
        i. Start with the big problem and narrow down to the specific problem in the last sentence. By the end of the first paragraph, the reader should know what problem you are addressing and how it fits into the broader context (but not necessarily your study system unless the MS is pitched to a narrow audience).
        ii. Provide background and justification for your specific focus area.
        iii. Introduce your study system (location, species) including why you picked it and any characteristics that are necessary as context going forward.
        iv. End with some combination of the following: questions, objectives, hypotheses, and predictions and your approach. (Some journals will also have a specific requirement for the end of this section such as a statement of what was accomplished by the study – but typically the findings/punchline is not given here yet…)
    b. Before you starting writing this section, it's time for a very important step: binge reading. Your goal is to cram your head full of this topic! If you have an excellent memory and took copious notes earlier, you may be able to work from notes. I always speed-read 30-50 key references during this process. Match references to Introduction paragraphs (i-iv, above) and big category 5 (the Discussion), e.g., by marking the tops of printed papers or adding the references to the outline in your draft.
    c. Now, for each Introduction paragraph, you can pull together the subset of papers you want to cite and use them to help frame your narrative.
6. Discussion: as you're writing the other sections, you'll likely think of points that need to go into the Discussion. Jot them down – you'll be thankful when you get there and already have the topics listed that just need to be organized. The first paragraph should return to your questions/hypotheses and summarize your findings in light of the Results. The last paragraph should provide a take home message and broader context. In between, there's room for discussing any surprises, caveats, alternative explanations, (very, very careful and circumspectly written) conjecture, and areas for future research.
7. Abstract: summarize "the key findings of the paper and clearly articulate what is novel and important about the work" (Harley et al. 2004).
8. References: cross-check the text and this list and be sure it conforms to the journal's style. This section can be polished up while the full draft is with your coauthors.

When is a good time to get feedback from my coauthors and "friendly" reviewers? You'll want to solicit feedback many times throughout the process and to do so in the most efficient way possible. It's essential to carefully proofread your writing before sending anything out for comment as reviewers get distracted by fixing editing errors. Ask for feedback "as you go", such as on the outline before you start writing, in order to minimize need for restructuring. You'll need to allocate plenty of time for thoughtful feedback (usually at least 1 week, up to 3 weeks for a full draft), so sending section-by-section will allow you to work on section n+1 while section n is out for comment. Be sure to keep your coauthors involved in your plans for revisions. For example, if you send a paper out for friendly review after it has already been edited by a coauthor, then your coauthor will expect to see the reviewer comments and your plans for addressing them before you make changes.

How do I know when a paper is ready to submit? All coauthors must agree that a paper is ready to submit. It need not and will never be perfect! But once you have put your best effort into addressing or at least considering concerns and questions that came up during the writing process, then it's time to send it out for the next step: external review!

Sorte Lab Agreement on Publication and Data Sharing

This agreement is designed to clarify expectations of Sorte Lab students and PI Sorte regarding data archiving and sharing.

Data ownership:

For UCI graduate students, data collected are co-owned by the student, PI Sorte, UCI, funding agency, and general public (as UCI is a public institution funded by state and federal taxes). Regardless of the form in which these data are eventually shared, the student and PI Sorte will always be recognized as primary contributors to project development and data collection.

Responsibilities:

- Graduate students are primarily responsible for collection, archiving, publication, and sharing of data for their project. This should include keeping data organized (including with data collection protocols and meta-data, in a form that PI Sorte can interpret) and archiving at least 2 copies of the data as soon as possible after collection.
- PI Sorte is secondarily responsible for archiving, publication, and sharing of data collected by Sorte Lab graduate students. A Google Drive will be created for each graduate student, and data should be archived in the drive both periodically (every ~3 months) for data in progress and when data sets are in final form. PI Sorte will provide timely feedback on student-led publications or assume primary responsibility in some cases, as described below.

For published papers:

- All data will be made openly accessible by other researchers and the public either through supplemental material, github, or an online public repository (e.g., BCO-DMO, PANGEA, etc). at the time of publication

For unpublished papers at the time students leave UCI:

- Before leaving UCI, students will meet with PI Sorte to develop a plan and timeline for publications and data sharing.
- With the understanding that manuscript preparation, submission, and revision can often take longer than expected, as long as progress is continuing (defined as no lapses longer than 6 months), the student will have 3 years after leaving UCI during which to continue to work on papers. If after this time, significant progress has not been made (e.g. manuscripts *in press*), then PI Sorte will have the option to take primary responsibility for publishing and/or generally disseminating these data.
- If no progress has been made toward publication within 1 year after departure, the PI Sorte will have the option of moving forward on publication and/or data dissemination, either led by themselves or other lab members. In this case, the student would expect co-authorship, with the condition that participation and communication between all authors is ongoing.
- If PI Sorte is unable to reach the student for 6 months, the data may be used for lab projects with the condition that credit for data collection and any previous analyses incorporated is clear. In this case, the student has no expectation for authorship.
- If the student is unable to receive feedback from the PI for 6 months, the student has the right to solely publish their thesis data, as long as credit for ideas and feedback is given.

By signing, we confirm that this agreement was discussed and represents our expectations.