

Rollinson Lab Mission and Operating Principles (Updated September 2024)

Here I outline the mission of the Rollinson Lab and our mutual responsibilities. The document started as a verbatim quote of the Stinchcombe Lab's, which itself started as a verbatim quote of the Rowe Lab's, but I've modified it to suit our needs. The principles are a living document, subject to revision, and suggestion by lab members, as necessary. It is a statement of guiding philosophy and general operating principles, rather than an exhaustive list of all possible scenarios and procedures. There will undoubtedly be exceptions, unforeseen circumstances, and situations beyond our ability to envision.

Lab Mission

The primary purpose of the lab is to conduct and publish interesting and impactful research in evolutionary ecology, behavioural ecology, and conservation. Lab members will learn the skills required to generate interesting ideas, formalize those ideas and generate hypotheses, test these hypotheses, and communicate ideas. Testing hypotheses requires learning and employing the tools of science. Sharing ideas and results will involve building skills in written and verbal communication. Achieving these goals involves learning how to manage your time, teaching things to each other, and mentorship of those who are earlier in their careers by those who are more senior.

We do science the best we can, we learn, we have fun, and we build each other up. Our lab agreement reflects this philosophy, and we work within the EEB code of conduct (<https://eeb.utoronto.ca/wp-content/uploads/2021/06/EEB-Code-of-Conduct.pdf>)

Shared Responsibilities

Culture: Most labs have a culture that evolves over time and is to some degree dependent on its current members. We actively strive to maintain respectful interactions, teamwork, and to respect members' differences. People are individuals who vary in experience, temperament, style, opportunity, skill, and history. These should be recognized and embraced when they do not harm others. Some differences may grow and others may shrink with time. Our lab values community over hierarchy and seniority in our interactions. Our work and working relationships should be fun and interactive, and professional at the same time.

Participation: A significant portion of our education as scientists comes from attendance and participation in departmental seminars, discussion groups, and lab meetings. Seminars that are more distant from your own research focus are especially important, because they give one a sense of the broader context, an understanding of which will serve you well in both your own research and in future job interviews (of any variety). For these reasons, I expect a high level of attendance and intellectual engagement in departmental seminars; discussion groups and lab meetings are also important, and as you become more comfortable in the lab and department, a natural progression is towards greater participation, and eventual application to your own work. We are expected to be good "lab citizens", meaning that there is a high level of effort put in to participating in lab meetings, helping each other, and ensuring that the lab remains a place where students can succeed for generation after generation of students. This means sharing your time with lab members, just like lab members have shared their time with you.

Likewise, meetings with visiting speakers are an opportunity to acquire some breadth from the visitors and to learn how to communicate your research to a broader audience. I particularly encourage meetings with visiting speakers. Finally, all of these activities have a social element, which often leads to lasting friendships. One of my favorite aspects of a life in science is the collection of friendships developed over many years. Don't forget that the friends you develop in grad school will later be your future colleagues.

One on one meetings: Regular one on one meetings between myself and lab members is a shared responsibility. The need for these and the ability to attend them will vary with current research emphasis and location. Meetings fall into three categories: impromptu, quick check-ins, and regularly scheduled. Very quick things can be otherwise be communicated over email, or if urgent, over text.

Impromptu: If my door is open, people may come in the door ready for a quick talk, without scheduling Just walk through the door, make sure it's an OK time, and let's get right to it.

Quick check-ins: I try to make it a point to stop by people's offices once and awhile for a quick, often social, check in about how they are doing, how things are working, interesting seminars/concerts/music/food/art that they like, etc. I find that these quick check-ins often obviate the need for longer meetings, eliminate email exchanges, while also creating a regularly occurring social element to our interactions.

Scheduled: My expectation for regularly scheduled meetings is every other week during the semesters, possibly less often during summer. I expect the tone of these meetings to be informal (first names, joking, and friendly conversation are all OK, and even expected) while still professional and substantive. These are a chance to discuss progress, obstacles, and to seek advice about current work and future plans. They will usually last an hour for graduate students, and ½ hour for honours students, but this varies by year. It's completely OK to say some variant of "I'm working on what we've discussed, don't have anything to report yet, let's meet next time". These meetings are not just about academic progress, but also to discuss work-life-balance, and to bring forward any general or specific concerns before they become bigger problems.

I will adapt the meeting schedule to reflect the current state of the project, with more frequent meetings during critical phases (e.g., data analysis).

Exceptions to shared responsibilities will be granted only under exceptional circumstances.

Expectations of Njal

My primary responsibilities are to provide the resources and training necessary for lab members to conduct their research, to mentor lab members through their programs, and to support their advancement to their next position or stage, whatever that may be.

Training and mentoring: Lab members can expect me to support them in gaining the training in technical skills required to complete their programs. Usually a majority of training will be self-driven with guidance from me, including statistical and conceptual guidance, reading suggestions, guidance toward local courses or course selection, and consultation with colleagues, especially graduate students and post-docs in allied labs. In some cases, local resources are insufficient in which case I will help identify people, workshops, and venues where

the training can be had, and I will normally cover the costs of accessing these resources. Lab members can also expect feedback on the verbal and written communication of their science, as well as a frequent exchange of ideas and concepts that help push projects forward. Communication feedback will occur through both direct interaction with me and through interactions with other lab members. For example, I will work with lab members to improve their writing through discussion, comments, and edits to manuscripts. We will work on framing manuscripts to position them within the field, construction of the argument of a manuscript, and refining the prose of individual paragraphs and sentences. Likewise, students should use other lab members as a resource by seeking comments on their work from the lab. Lab meetings are a good place to do this, either with discussion of manuscripts or practice talks. I cannot always help students that experience significant difficulty writing, but in those case I will recommend that the student visit the writing centre (<https://writing.utoronto.ca/writing-centres/graduate-students/>), as employees of the centre have specific training that helps students learn to write. It is fair for students to usually expect comments back on their work from me within a week. Do not be afraid to bug me if I am late.

For undergraduates, I expect them to be there, to participate, and to learn. I do not expect undergraduates to generate publishable research, it is just a bonus for all involved if publication occurs.

I am also open to amending these expectations if there is an accessibility need. (<https://studentlife.utoronto.ca/service/accessibility-services-registration-and-documentation-requirements/>)

Career support: Lab members can expect support and mentorship for their career choices after completing their programs. I do not expect lab members to continue in academics, and I do not value academic trajectories higher than non-academic trajectories. I am better able to mentor people in academic trajectories than alternative paths, simply because of my own experiences. However, I can usually be of some help in supporting non-academic paths, so don't hesitate to ask, and I will endeavor to support all paths to the extent that I can. Support includes providing advice, letters of reference and connections, and lab alumni can expect this support for at least a few years, and often many years. When PhD students and post-docs leave the lab and continue in academia, they often take the ideas and systems developed during their projects with them.

Financial support: Njal is responsible to provide the Research Assistant (RA) proportion of the funding packages of graduate students, and at a level that ensures that all within program students are funded to at least the departmental minimum, sometimes more. Agreed upon research programs of graduate students and post-docs will be funded by Njal to the level required to complete them, barring unforeseen circumstances including loss of grant funding and substantial increases in costs. For PhD students, I may or may not fund you after you leave the funded cohort; I will be fair in this decision, and it will depend on whether you had a reasonable opportunity to finish in the allotted time (eg., started with data, financial help, no significant barriers, etc).

The costs (registration, accommodation, transportation, but not food or per diems) up to \$1000 of at least one national meeting per year for all graduate students will be covered if you have original research to present that I helped you with, just ask before booking. I will usually cover

the costs of one local meeting per year for each undergraduate thesis student, and in rare cases, some of the costs for one national (or international) meeting.

Fieldwork is on me, not you. I am responsible for paying all reasonable costs associated with fieldwork, including gas, food (for cooking), equipment, etc. I do not pay for meals at restaurants unless this is agreed upon before fieldwork. Usually I expect students to pay for basic items like gas and food, and then be reimbursed, and I am happy if students approach me to discuss this if it imposes any burden on them. We can work it out.

Expectations of Graduate Students, Undergraduate Students, and Post-docs

The primary responsibility of graduate students and post-docs is to complete their programs of research and courses in a productive and timely fashion. Be diligent with funding so as to ensure there is limited need for extra TAs, which ultimately eat up time you could be spending on research. Attend lab meetings and department academic events; be a good departmental citizen, and be a great lab citizen. I expect students to bring their projects as close to completion as they can, and to share their data, figures, and manuscripts in useful, edit-able form. I expect students to back up their data regularly, and to archive their data in the appropriate repositories. I expect trainees to apply for relevant scholarships, funding, and travel awards.

I typically expect PhD students to publish at least 3 papers over the course of their degree, and MSc students should publish at least 1 paper (coinciding with three and one data chapter requirements for a PhD and MSc degree, respectively, in EEB at the University of Toronto; see EEB Grad Student Handbook, <https://eeb.utoronto.ca/education/graduate/graduate-handbook/>). PhD students should also gain experience mentoring an undergraduate researcher(s), and if possible, coauthoring a paper with them. This will help everyone in their careers. I expect attendance at lab meetings, and participation (leading a lab meeting) twice per year for graduates. For undergraduates, expectations vary depending on the project and involvement in the group.

Succeeding in grad school does not come easy, especially in the limited time you are given. Do not underestimate the amount of work that lies ahead. You can expect to work most evenings and many weekends throughout your graduate degree; grad school is nothing like a 9 to 5 job, and you simply won't complete your degree requirements in time if you work a regular 40hrs per week. Ultimately, I don't set expectations on how many hours per work you must work; we're all adults, it is up to you to succeed, and my *raison d'être* is to help you in this direction and to point out to you when you're not on a productive path, *sensu lato*. If I point out that you are not meeting the bar, I will also tell you how to meet the bar; usually if this happens, these conversations begin quite early in the degree program. Remember that I am not trying to be hard on you, I am trying to help you.

Take 3 weeks vacation per year; vacation is time you take off from work when the University is not closed. I want you to talk to me early on if you have concerns about your work-life balance, as talking about these things early helps reduce problems that arise later during the degree program. You can work from home some of the time, but you should spend as much time as you reasonably can in the department, as this is where ideas and relationships flourish; you will be

doing yourself a disservice if you do not participate in department life. It's also difficult to develop a rapport with a student that is absent, or to make sure they are on a productive path.

Academic events include lab meetings, departmental seminars (internal and external; student appraisal and defenses), the Darwin and Atwood seminars. Undergraduates are welcome to attend seminars and I expect research project thesis students to do so. While support will be provided for graduate students and post-docs to attend local, national and international meetings, both should apply for available funds to offset these costs.

There is no expectation of responding to messages or emails on weekends or evenings; either on my part, or on yours. Similarly, there is no expectation to respond to fellow lab mates about work-related queries on off hours when in the office, unless unusual circumstances suggest a clear need for a prompt exchange of information, such as during a crucial experiment. My parenting schedule means that at times I will send emails and messages off-hours, but I do this because I will forget to send it unless I do it right away, or because my work day was cut short and I'm making up time later.

Working in the Lab

The lab is a shared space in which much of our research is conducted. To do this, the lab needs to be well-equipped, well-stocked, clean, and safe. We are all responsible for lab safety, but you are responsible for your own safety training, which you must do every year through EHS services (see health and safety links below). Ask Njal at the beginning of your degree program about this, ideally on Day 1.

Equipment and consumables: Care should be exercised in the use of equipment. It is your responsibility to leave the equipment in the working order you found it, and any equipment you moved should be moved back to its original location. When equipment fails and requires maintenance or replacement, go to Njal, and he will have it repaired or replaced. If new equipment is required for your research, come to Njal, and he will purchase it if funds are available and we agree that there is no easy way to borrow or share the equipment with colleagues. Do not keep non-research items (personal belongings) in the lab.

Equipment that is purchased with lab funds stays in the lab, please return it when you leave.

A supply of consumables should be available and graduate students and post-docs will have purchasing permissions to replenish them; if you do not have permissions, ask Njal. I do not want you to ever ask me permission if the dollar amounts are under \$250 for purchases necessary for completing an agreed-upon research project. People should use paperless billing and purchasing systems wherever possible, shop for the cheapest overall price, and use their judgment about making purchases. If I think a purchase is unwarranted, I will tell you directly. I do not want to engage in lengthy exchanges about purchases, and I do want you to develop a sense of ownership, independence, and autonomy about obtaining the regular supplies necessary to do your work, as well as some sense of the costs of doing research. If you or undergraduates working with you are using consumables, it's your responsibility to replenish them.

Lab sharing etiquette. We share our lab with other groups, and use equipment from other groups. If we borrow or use equipment in other labs, please: ensure you have permission and know how to use it; introduce yourself to the PI and grad students in that lab; leave the space and equipment cleaner than you found it; return items promptly.

Cleanliness: Without vigilance, labs can quickly become cluttered, dirty, and disorganized, with disposables and unused equipment scattered about, iced over and unidentified sample filled freezers, bags of old, dead, poorly labeled specimens/samples, and unknown gear. This disarray tends to multiply, and is conducive to neither productivity nor safety. The Rollinson lab is bad at this, and I admit our clutter is largely my doing. Despite this, I fully expect you to keep the areas you work in clean and organized, and expect to participate in an annual or semi-annual general clean-up. This includes, but is not limited to, coordinating pickup of sharps bins once they are full, ensuring that the green bin is picked up if you are filling it with carcasses. If you perform an experiment in the lab, you must clean it up. All of it. And you must make sure it is tidy at the end of each day. This includes making sure incubators are devoid of debris, that substrate is not strewn across counters, that the sinks are devoid of dishes you used, and that microscopes are not overrun with debris. Tidy up everyone.

Working in the Field

Much of what is said above about cleanliness and equipment also applies to working in the field and the field lab. But working in the field is very different. Expect to work very long hours in the field, often under inclement conditions. Conditions will be tough, and you will be tired, but above all else we must try to remain positive, and we must always remain respectful to one another. Every spring, the entire field team collectively develops our Field Agreement, a document that aims to help increase the equity and inclusivity of the field season. These don't always work, as conflict has arisen despite these agreements. However I still believe that building these agreements is well motivated and helps build relationships in the group prior to the season.

The integrity of our long-term studies depends on how carefully the data are collected. Remember that during our long days (and long nights) every datum tells part of a story, and even when we're tired and unhappy, we must strive to do our best to ensure we collect the data carefully and according to protocols and training.

You must also be familiar with our animal care protocols, which are distributed during our spring training (prior to the field) every year. These protocols must always be respected. If you notice a disparity between your training and the protocol, point it out to me. I probably just forgot to update the protocol year over year after a useful refinement was discovered, and I'll update it with the Animal Care Committee, based on your information. The animals we work with are the core of our entire research enterprise. These animals have our deepest respect, and they must never be handled roughly, or unreasonably harassed for eg., a photo opportunity. Do not try to capture an animal because it is unusual and you want a selfie with it. (This includes photographs with Humongous Harry and his kin.) Judge whether it is safe to capture an animal, for you and for the animal, and do not capture the animal if there is no scientific merit to it. Tell me immediately if you have any concern with animal handling in the field, and I'll see to your concern.

Included in our responsibilities for cleanliness is prompt clean-ups of field labs at Algonquin Wildlife Research Station (AWRS; <https://www.algonquinwrs.ca>). After field work, you must clean up the AWRS turtle lab before you leave and stow lab-related items 'out of the elements' to promote longevity (e.g., oil bicycles and wheelbarrow and store indoors, remove batteries from electronic devices, store batteries and electronic devices in a secure tote and transfer them to the climate controlled basement of the Hilltop Cabin (AWRS Manager's cabin) for winter, with permission from the Manager).

Safety: Safety in the lab, at AWRS and other field sites is a primary responsibility for all lab members. Safety involves common sense, but often there is training required (WHMIS, Biosafety, etc), policy to follow, and reporting/permissions to be completed.

Information for working safely in Earth Sciences and the lab can be found here:

- <http://www.eeb.utoronto.ca/resources/healthsafety.htm>

Information for Workplace Hazardous Material Information System (WHMIS) training (course EHS101), including **necessary annual refresher (EHS112)**, for lab users:

<https://ehs.utoronto.ca/our-services/chemical-and-lab-safety/whmis/whmis-lab-safety-training/>

Information and EEB resources for general well being and mental health can be found here:

- <https://eeb.utoronto.ca/resources/mental-health-and-wellbeing/>

Information and policy for working safely in the field can be found here:

- <https://ehs.utoronto.ca/field-research-safety/>

Information and policy for working at AWRS can be found here:

<https://www.algonquinwrs.ca/>

Finally, the department and Koffler Scientific Reserve offer Wilderness First Aid training, and all lab members are encouraged to obtain this training.

Authorship

The primary consideration for inclusion as an author is whether the person made an intellectual contribution. Defining this is not easy, but ultimately should be a joint decision between me and the first author. In some cases, a conversation or comments on a draft from a colleague may substantially change the direction and conclusions of an MS. If so, it would be appropriate to invite that colleague to coauthor. In other cases, an undergraduate may have collected much of the data as part of a tech or work-study position (e.g., weighing turtles repetitively), but not made an intellectual contribution, and therefore might not be included as an author. I typically assume that the first author is responsible for producing the initial drafts, coordinating comments

from all authors, and driving the manuscript forward. Shared first authorships are possible, and can be decided by coin flips and noted on papers, or can be mutually agreed upon.

Typically, I consider papers published from the work of lab members to be products of the lab, and therefore should include me as an author, usually last, and cite any grant funding support. The reason for including me as last author on manuscripts is that the primary funder of the lab (Natural Sciences and Engineering Research Council of Canada) funds programs, rather than projects, and the primary scientific output of a program is published papers. Exceptions to this happen with some regularity, but should not be assumed, and should be discussed ideally before the work is undertaken, and definitely before much writing or analysis occurs. More generally, discussion of authorship ideally happens before the work is started, and changes to authorship order should happen *before* the work that may warrant the change.

Where to Go When Things Aren't Working

The first place to go if things feel like they are not working appropriately is Njal. All I ask is a little advance warning that we need to talk from either you, or from a concerned friend or partner.

More important than my scientific goals is my goal that you all are happy and meeting your own goals. When things are not working, it undermines my main interest in working with people. It is also often obvious to all parties that something is amiss, so it's usually easier to put the issues on the table, acknowledge them, and work towards solutions that improve everyone's happiness, health, and well-being. Suffering in silence is a terrible option. Burnout is a common occurrence among graduates and undergraduates, but if we tackle it early, it won't dominate your degree program. This is partly what our regular meetings are for, so please do not shy away from talking about this.

In the same vein, it is also perfectly ok to say, "I have something going on, and I do not want to talk about it" if you prefer to maintain some separation between work and personal life; however, I care about all of you, and even if you do not want to talk with me, I will seek some assurances that you are taking steps to address your well-being. There are very few life events, health considerations, professional conflicts, or stresses related to career, health, children, parents, marriages and divorces, births and deaths, that will come up that haven't been experienced in the life of the lab, or by trusted, humane colleagues and friends. These experiences and friendships can be a source of advice, sympathy, and empathy, if wanted. There is also a variety of support available in the department, including the mental health committee, and EEB allies (<https://eeb.utoronto.ca/eeb-allyship-network/>).

In some cases, students and post-docs may rather approach others first. A good place to start is with their own colleagues – other students and post-docs. If satisfactory answers or actions do not result, depending on the nature of the issue, should discuss the issue with their research committee members, the Associate Chair, Grad Studies (or Undergrad Studies), the EEB Chair, or for grads and post-docs, the Vice-dean Students at School of Graduate Studies (<https://eeb.utoronto.ca/people/staff/>; <https://www.sgs.utoronto.ca/about/contact/>).

It is also possible that you'll experience conflict with another member of the EEB community. I expect every student to act cordially and professionally with all members of the EEB community,

regardless of whether you are experiencing conflict. This conflict is more often of a personal nature than a professional nature, but interpersonal conflict can be important to raise with Njal. If for example you have concerns about working with another student in the lab or the field, you should tell me; the earlier, the better. We'll do our best to sort it out and to make sure everyone is comfortable and happy. If you feel the behaviour of another student may have crossed a line (e.g., harassment), then both the department (<https://eeb.utoronto.ca/eeb-allyship-network/>) and the University (<https://www.communitysafety.utoronto.ca/>) have resources to help us through this. Please come forward and tell me, in private, and we can discuss what options are available. The sooner we act on this, or at least discuss it, the sooner the problem can be resolved, and this decreases the chance it will escalate. If you have a concern about me and my behaviour, you can tell me and we can discuss it; if you're not comfortable doing so, you can also discuss anything related to my supervision confidentially and in private with the Center for Graduate Student Mentorship (<https://www.cgms.utoronto.ca/>).