Graduate and Post-Doctoral Program Expectations Evelyn Merrill Department of Biological Sciences - University of Alberta

"An ounce of prevention is worth a pound of cure."

Graduate and post graduate work is a mutual investment in the process of learning and producing. It is accomplished by the joint efforts of the supervisor and the graduate student or post-doc. Like most relationships, it requires hard work and good communication. Most students, particularly MSc students, do not know what is expected of them. The following is a list of responsibilities and expectations of graduate students that I provide to each student at the beginning of their program.

Responsibilities of the supervisor

- Provide an environment within my lab that is amenable to learning, open discussion of ideas, and producing credible research without discrimination or harassment.
- Consider a student a "junior colleague in research" and treat them with respect.
- Along with the supervisory committee, guide the student through his/her graduate studies program including courses and research.
- Provide timely and constructive feedback to the written research questions, proposal, study design, progress reports, thesis, publications and overall graduate program, as well as discussion of your research ideas when you are developing them.
- With the student's help, provide reasonable resources and financial support to meet the mutually agreed upon research objectives of a thesis.
- Acknowledge appropriately student's contributions to research and other efforts in presentations and publications.
- Notify students of anticipated, prolonged leaves of absence from the University at the earliest date reasonable. Even when on leave, I expect to provide feedback to your study progress.

Expectations of the student

- Become familiar with the graduate portions of the Calendar and meet the requirements of your degree program and department requirements (read guidelines bulletin). Ultimately, accomplishing your research and meeting the degree requirements is <u>your</u> responsibility.
- Make an early plan for meeting UA ethics and professional requirements see forms.
- Develop a web page on yourself that includes your personal history (posted by end of first 4 weeks in fall) and your research project (posted within first year) to link to the lab's activities.
- Maintain regular communication with me. Inform me of your research and course activities, particularly before you feel overwhelmed. I cannot help you solve a problem if I am unaware or not well informed of the problem. This either can be through regular project meetings, scheduled individual meetings, or written reports/emails when we cannot meet. At a minimum, I expect such a meeting once per semester. When necessary, I may expect as much as weekly meetings.
- Meet mutually agreed upon deadlines for work completion, and show up prepared and on time for set meetings.
- Work hard in the lab or field. Often the difference between a mediocre and excellent thesis is hard work.

- Maintain a degree of independence, especially for Ph.D. students and Post-docs. *Before asking questions, make the effort to research the question.* Come ready to discuss various ideas or options, not to ask me what to do!
- While I will do my best to facilitate your research, do not expect me to provide services like buying supplies, interviewing your assistants, doing the initial drafts on annual reports and other normal project work, unless we agree upon this ahead of time.
- Provide all reports, newspaper articles, etc. for my edits prior to submission. Note all reports should have my name listed on the document even if you do most of the report development.
- Participate actively in lab, research group, and departmental seminars meetings and discussion. Absorbing information is not the same as critically evaluating it.
- Help apply for funding for your project. This is includes draft applications for funding from various agencies. Please note all funding administered by UA MUST go through me because I become the financially responsible.
- Prepare a budget for your project and maintain an informal log of expenses and keep within the agreed upon budget.
- Prepare any forms required/associated with conducting your research, such as Animal Welfare Forms, agency progress and final reports, and have them reviewed by me *prior to submission*.
- Inform me of any newspaper interviews and have me review any written new releases prior to submission, as well as provide me with a copy of the final statement/article.
- Take care of project equipment and keep up with its upkeep, including regular maintenance of equipment such as vehicles. Students are not responsible for normal equipment wear from use. I expect equipment loss/damage from unreasonable negligence to be replaced or repaired. For example, if you careless put something breakable in your backpack and break it, instead of keeping it in a adequately secure case, you will be responsible for repairing or replacing the item(s).
- Provide copies of data with data documentation and maps of study plots after every field season for safe keeping. At the end of the project provide full data files. I will not sign your thesis until the data files have been provided me on a hard medium.
- Read and stay abreast of the literature in your area of research. I cannot stress enough the importance of this for producing a quality research thesis. You can expect to be asked questions at your defense on general knowledge in your area.

Causes for immediate dismissal

The following conditions are considered sufficient for immediate dismissal from my lab:

- (1) Unsafe behavior or actions that endanger yourself or others; for example drinking and driving a university or project vehicle.
- (2) Falsifying data or plagiarism.
- (3) Unreasonable negligence in care of project equipment without assuming responsibility of repair or replacement.
- (4) Misuse of project funds, i.e. for project purposes.
- (5) Explicit sexual harassment or other serious unethical behavior.

What NOT to expect of your supervisor/committee members

- To provide instant turnaround with feedback on proposal, reports, letters of reference, etc. As a minimum, provide a minimum of 2 full weeks for turn-around on these items both to the supervisor and committee members.
- To answer questions that you have not made a reasonable effort to answer yourself.

- To answer all questions. Seek advice from fellow students, statistical experts, committee members or other faculty if necessary.
- To accept phone calls at home at night or weekends, unless it is a emergency or there has been a prior understanding or arrangement made.
- Provide financial support beyond the end of departmental, project, or scholarship support unless expressly agreed to in writing at the beginning of your project.

General Lab Policies:

- Students are expected to be informed of and adhere to Animal Care Protocols associated with the projects, *including informing and training the employees*. Any issues related to animal handling considered controversial/detrimental to the animal should be discussed **immediately** with the supervisor.
- Students are expected to complete a (1) Risk and Safety Field Form and (2) a Biohazard Project Form prior to initiating field or lab work. You are responsible for *informing and training the employees of the conditions in the forms*. Forms are available from the lab coordinator.
- Students should educate themselves about general financial protocols in securing supplies/equipment /services and hiring technicians (see handout from lab coordinator) and adhere to these protocols. They are also responsible for any technician working on their projects
- Any accidents related to trucks or personnel must be reported in writing to me and the appropriate authorities with **24-hrs**. Have these forms available in the field! See details on: <u>http://www.biology.ualberta.ca/facilities/safety/index.php?Page=686</u>
- During the tenure as a student/post doc, no student will submit a grant without first discussing the proposed work and providing me a copy. <u>Note</u>: UA grants legally **must** be signed by me unless specified otherwise by the grantee and discussed with me.
- Students are expected to give papers (maybe posters) if conference expenses are covered by the project, scholarships, or UA funds. Student should seek UA funding for conference travel prior to requesting it. Students are expected to apply for UA student travel grants prior to asking for project funding to a major meeting. **Travel support to a meeting after graduation is unlikely so plan for a conference prior to graduation.**
- Students and their employees should not expect food allowances while conducting research, except while at conferences where they are presenting their research.
- Students are responsible for submitting financial receipts to the lab coordinator in a timely fashion or before set deadlines. Also truck mileage reports ~ monthly.
- Reports, theses, and other documents must be provided in WORD format to me, unless otherwise agreed upon at the beginning of the degree program.
- If you spend more time participating in projects outside my lab than collaborative effort with me and my other students, after consultation, you may be asked to leave my lab.

Thesis policies

- In general, I expect 1-2 publications from a M.Sc., 3+ from a Ph.D. thesis/program; 1-2/yr from a Post-doctoral fellow depending on the project.
- Unless agreed upon at the beginning of the student's project or under special circumstances, I expect your thesis to be written in the "publication" format. As a result, you should expect a minimum of 3 major editing sessions from me on each chapter with some sections likely needing additional editing.

- Do not submit your thesis chapters to other committee members until we have **mutually agreed it is ready for circulation** or have agreed it is prudent to do so. This is to ensure we do not wear down our busy colleagues and that you get the very best feedback.
- Forms requesting a thesis defense must be submitted a full month a head of the defense date. Do not ask me to submit a thesis defense form if I have not seen revisions of all chapters.
- Finish your thesis in a reasonable time frame. I will not write letters for extensions beyond the Department's maximum.

Expectations on data ownership, publications and collaborations

My philosophy is that science progresses by building on and adding to a foundation of knowledge. Truth among this knowledge will stand the test of time. Therefore, it is important that graduate students be well versed in the literature that is already available, and that you also add to the written word buy publishing.

Conducting research includes various steps: (1) Coming up with and refining the ideas, (2) developing a test of the idea, (3) writing a proposal to get the support, (4) administer finances to conduct the research, (5) revising the study in the field due to logistics/unforeseen problems, (6) conducting the field work, (7) providing logistical support to the field/lab work, (8) analyzing the data, (9) writing up the data for publication. Involvement in these steps may occur by various persons to various degrees. For example, a M.Sc. student might be given an idea by the supervisor and be helped considerably in the remaining steps. Usually, the supervisors raises the bulk of the funding to do the research and may deal with many of the logistical dealings with agencies. Ph.D. and post docs would be more independent in the development of ideas, field logistics, and analysis of the data, but are expected to maintain good communication nonetheless.

In discussions of publication, the main priority is to get the data published because there is little point in doing the research if it is not made widely available. Some funding agencies require publication as part of a binding contract, while other agencies (e.g., NSERC) will no longer provide future funding if research is not published. As the holder of the grants in my lab, I am legally, professionally, and morally responsible to make sure the data are published. As a result, here are the guidelines that I will use for research conducted in my lab.

- A copy of all data collected should be given to me (on disc) at the end of each field season (usually fall), along with a key that explains the data (variables, codes, units of measure) and hard copy/digital map of study site locations. This provides you with a safe back-up and me with a copy in case you decide not to write up the data. At the end of the project, I expect a full version of organized data for the project **prior to my signing the thesis**.
- If the student's or post-doc's projects is not written up within one year of the thesis defense, or a PhD/postdocs leaving, I reserve the right to publish the data/thesis with the student as the co-author. Order of authorship will be decided based on consultation.
- If the student does not defend a thesis, I reserve the right to publish the data after one year after the student leaves, if no action has been taken by the student to publish the data (i.e. I would need to see drafts of MS).
- The following guidelines for authorship hold:
 - You should discuss with me any research/paper collaborations you participate in while you hold tenure in my lab early in the process (preferably discuss this with me prior to your commitment). This is to ensure it will not be detrimental to the student's degree progress and any associated agreements.
 - If the supervisor or others have had no input in steps 1-9 above, then the student/postdoc can be sole author.

- Individuals paid as technicians may but are not expected to produce publications unless specified as part of the job responsibilities. Likewise, technicians should not expect to be authors unless expressly agreed upon by supervisor and/or students at the beginning of the project.
- If the student has had input from me or other key individuals on several of the above steps, I would expect these persons to be given the opportunity to be included in the authorship: *right of first refusal.* With acceptance of authorship, comes the expectation to provide considerable, constructive feedback on manuscript drafts.
- Authorship of a person who developed a dataset as part of a collaborative project is the lab is not expected unless (1) the data set was developed expressly for the purposes of the intended analysis or (2) the person contributed significantly to the ideas for which the dataset is now being used.
- > In some cases, I will request data from the student for uses other than the thesis.
- If there is a binding agreement on authorship from other key persons providing ideas, data, or technical support (field or statistical/analytical) at the beginning of the project, the authorship is subject to this agreement, and order of authorship should be discussed early on in your program.
- In most cases, I would expect to be a secondary author on student papers; however in some cases I have had to substantially reanalyze and rewrite the paper; in this case the order of authorship would need to be discussed. To date, this has happened only when a student did not complete their formal thesis.
- I expect to be able to use the data collected by students funded by grants in my lab for purposes other than that those outlined in theses. The student will be notified and offered the first right of refusal on authorship. In return, papers written by students that emerge from additional

When working on collaborative/group projects, authorship should be discussed and agreed to *at the beginning* of the project and agreed to *in writing* so there is no disagreement later. Additionally, over time the data you collect may be used for an overview paper, to explore analytical and statistical techniques, or a different purpose. You will be contacted and your participation in the paper discussed.

Sometimes students see the professor/student relationship as an exploitative one and tend to overemphasize their own contributions ("I did all the field work") without realizing that field work is only one of the steps outlined above. In my view, most field research (the orientation of my lab) must be a collaborative endeavor because the diversity of efforts involved. My own track record shows a collaborative approach among a range of researchers' involvement. I will encourage a collaborative approach to both projects and publication in my lab, I expect collaborative efforts among myself and my students, among students helping on projects, and with other key contributors where appropriate. If you see your involvement otherwise, make this known to me at the time of your proposal, or a collaborative approach will be assumed and expected.

I have read the above expectations and discussed them with my supervisor.

Student signature

Date: _____

Supervisor signature

