

QDEC Lab Graduate Research Assistant Expectations¹

The graduate curriculum is greatly enhanced by attaining research experience through becoming a research assistant. The relationship between a graduate student and a lab group fosters an educational experience for the student, while providing additional human resources for the lab. It is accomplished through the joint efforts of the student, other lab members, and the supervisor. Like most relationships, it requires hard work and good communication. Most students, particularly graduate students, do not know what is expected of them. The following is a list of expectations and responsibilities of graduate research assistants that are meant to be informative and guide your journey.

Basic Expectations:

- The QDEC lab conducts research in many realms, using many different approaches – field work, lab work, quantitative analysis and synthesis, computational modeling, and likely more as the lab grows. It is therefore not a one-size-fits-all lab, and requires each individual student to take responsibility for themselves. As such, the following guidelines are intended to be generic, but are important.
- Three main facets of this are particularly important in work in this group:
 - Respect – your advisor is your supervisor, and this is your job. As your advisor, my goal is the successful research outcomes of the lab, not to make you like me. If the two occur together, that is great.
 - Communication – I spend time in the field, out of the country, often out of email contact for periods of time. Keeping me updated is very important. Letting me know early if you have any concerns is very important.
 - Excelling – this lab group will be held to a high standard of academic and research excellence. I expect you to do well in your classes, and I expect you to push yourself very hard to accomplish research.

Expectations of the student:

- Time management is of vital importance to being a graduate student. **Maintain regular communication with me.** Inform me of your research and course activities, particularly before you feel overwhelmed. I cannot help solve a problem if I am unaware of it or am not well-informed. 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, but monthly, bi-weekly or weekly are also workable. To facilitate the communication of individual progress, I have provided a tool (3x3 template) for reporting weekly progress and immediate research goals. The 3x3 sheet should be completed at the end of each week during the semester.
- Meet mutually agreed upon deadlines for work completion and work hard in the lab or field. Often the difference between a mediocre and excellent research project is hard work.
- Maintain a degree of independence. *Before asking questions, please make the effort to research the question.* Come ready to discuss various ideas or options, not to ask me what to do!
- Read and stay abreast of the literature in your area of research. The importance of this cannot be stressed enough for producing a quality research project or thesis. A logically organized annotated bibliography is strongly suggested.
- If you want to complete a research project within the lab, a well-rounded research proposal with solid and obtainable research objectives is expected by the end of the second semester (unless we explicitly agree that this is not a good timeline). This should be comprised of a 5-10 page introduction justifying the importance of the research followed by logical well-researched methods for achieving the research objectives as well as a timeline of research and a discussion of the study limitations and potential pitfalls that may be encountered.
- Inform me of any newspaper/magazine interviews/articles and provide all reports for my review prior to submission, as well as provide copies of the final article/report. Note that all reports should have my name listed on the document even if you do most of the report development, as ultimately, I am responsible for everything coming out of my lab.
- Participate actively in the lab, research group, and departmental seminars meetings and discussion. Absorbing information is not the same as critically evaluating it.
- **Copy me on all written communication between yourself and funding or research partners.** Also, inform me of any event or action that has the potential to cause concern among our partners or people outside our research group so that I am not surprised by a telephone call or question at a meeting.

¹ This material has been adapted from the contract Jacquelyn Friar signed with her Ph.D. advisor, Dr. Evelyn Merrill at the University of Alberta. It was in turn adapted from materials developed by Dr. Susan Hannon. Whether this “contract” originated entirely with Susan or was handed down through her academic forefathers is unknown. Regardless, these materials have been vetted by highly respected researchers with proven track records in successful graduate student advising.

- Keep a detailed research notebook/diary/paper trail. Doing so is critical to remembering ideas and insights, knowing what you are accomplishing, as well as being an important reference for tasks completed, sites visited, people talked to, etc.
- Provide me with digital copies or archival access of all data. At the end of the project provide full data files with proper written descriptions (metadata). Data deposition will vary by project, but digital archives and open access after a publication lead time are the expected norm in this lab. I will not be able to sign your thesis until the metadata/data files have been provided to me. Exceptions to this must be agreed upon in writing by all invested parties.
- Much of our data and research are subject to permits, regulations, security, and privacy. You are responsible for understanding this and abiding by any regulatory needs. Failure to do so can have very dire consequences. Any indication that you do not understand or respect this will be noted, and further action may become necessary.

Responsibilities of the advisor (note this section is shorter and vaguer than those given above as my role varies depending on the needs of a particular student and a more precise description would not be relevant to all):

- Provide an environment within my lab amenable to learning, open discussion of ideas, and producing credible research without discrimination or harassment.
- Along with other lab members, guide the student through his/her studies including courses and research.
- Provide timely (standard is two weeks, I'm usually a bit faster) and constructive feedback to written research questions, proposals, progress reports, thesis chapters, and publications, 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 or research project.
- 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.

What NOT to expect of your research supervisor:

- To provide instant turnaround with feedback on proposal, reports, letters of reference, etc. As a minimum, provide two full weeks for turn-around on these items.
- To answer questions that you have not made a reasonable effort to answer yourself.
- To answer all questions. I don't know the answer to all questions. Seek advice from fellow students, statistical experts, lab members or other faculty if necessary.
- To teach you everything you need to know to conduct research. It is instead my job to teach you to teach yourself, and guide you towards resources.
- To accept phone calls at home at night or weekends, unless it is an emergency or there has been a prior understanding or arrangement made.
- Provide financial support beyond the end of departmental, project, or scholarship support. I will do all I can and provide guidance and suggestions, but resources are finite.

Causes for immediate dismissal:

- Unsafe behavior or actions that endanger yourself or others; for example drinking and driving a grant funded or state vehicle.
- Falsifying data or plagiarism.
- Unreasonable negligence in care of project equipment without assuming responsibility of repair or replacement.
- Misuse of project funds.
- Explicit sexual harassment or other serious unethical behavior.

Additional causes for dismissal:

- Failure to progress as expected. With appropriate communication and work, this should never occur. If you simply are not progressing appropriately, we will discuss your options, and termination is one of those options.
- Disrespectful behavior. I will try to address misunderstandings, and will remind you that your behavior reflects on the whole lab group.

General Lab Policies:

- Lab camaraderie is encouraged and expected. New students should consult with more experienced lab mates for advice and help with navigating their way through tasks as well as on lab policies. Students should be supportive and willing to help out on lab research projects and provide critical and constructive feedback on written materials.
- Students are responsible for planning ahead, registering for conferences, reserving hotel rooms, submitting the paperwork for travel advances and finally obtaining and submitting financial receipts to our departmental office administrator for reimbursements.
- Students should not expect food allowances while conducting research, except while at conferences where they are presenting their research.
- Students are expected to take care of lab equipment and make sure it is maintained properly. Students are not responsible for normal equipment wear from use, however, if loss/damage occurs from negligence the student should be prepared to replace or repair it. For example, if something breakable is placed in your backpack instead of keeping it in an adequately secure case, you will need to repair/replace the item(s) if it gets broken.
- During the tenure as a research assistant, no student will submit a grant without first discussing the proposed work and providing me a copy.

Thesis policies:

- In general, 1-2 publications are expected from a M.S., 3+ from a Ph.D. program; 1-2/yr from a Post-doctoral fellow, depending on the project. Graduate theses should result in one lead or co-authored publication, and at least one poster presentation. QDEC Lab generally follows a ‘publish as you go’ model, to ensure the best success at graduation.
- Graduate theses should be written in the “publication” format with the first chapter being an introduction chapter (based on the research proposal literature review) and the final chapter a synthesis of where results of your research fit into the larger context of the relevant field. Students should expect a minimum of three major editing sessions from me on each chapter with some sections likely needing additional editing.
- Do not submit these 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.

Expectations on data ownership, publications and collaborations:

It is important that graduate students become well versed in the literature that is already available and that you contribute to that knowledge base by assisting on research projects or co-authoring a publication.

Conducting research includes various steps: (1) Coming up with and refining research ideas, (2) developing ways to test your ideas, (3) writing a research proposal, (4) administering finances to conduct your research, (5) conducting the field/lab/analytical work, (6) trouble-shooting field work due to logistics/unforeseen problems, (7) providing logistical support for 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.S. student might be given an idea by the supervisor and be helped considerably in the remaining steps. Usually, the supervisor 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., NSF) 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. If a student’s or post-doc’s project 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 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 the manuscript).
- The following guidelines for authorship hold:

- You should discuss with me any research/paper collaborations you participate in while you are in my lab early (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 I, or others, have had **no** input in steps 1-9 above, then the student/postdoc can be sole author.
- Paid technicians and volunteers should not expect to be authors unless expressly agreed upon by supervisor and/or students at the beginning of the project. They will, however, be acknowledged in the manuscript.
- 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.
- In some cases, data will be requested from students/postdocs for uses other than theses and manuscripts, e.g., presentations at professional meetings, and authorship or acknowledgment on the presentations will be given.
- In most cases, I would expect to be a secondary or senior author on student papers; however if I have to substantially reanalyze and rewrite the paper; the order of authorship would need to be discussed.
- I expect to be able to use the data collected by students in my lab for purposes other than those outlined in theses. The student will be notified and offered the first right of refusal on authorship.

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. I will encourage a collaborative approach to both research and publication in my lab, I expect collaborative efforts among my students, among students helping on projects, and with other key contributors and myself. 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.

Signing below indicates that we have read and discussed the above expectations. This is not a legally binding contract, but instead an informational source and a plan for success.

Student signature

Date: _____

Supervisor signature