



# Roles, Responsibilities, and Expectations

There are many roles within any research group, and each carries a different set of responsibilities and expectations. We want the lab group to be a healthy, fun, and productive place where we can make scientific progress.

## Don't Spend Your Own Money!

No matter your role, you will never be expected or asked to spend your own money on work supplies. Talk to Vivek to make sure you have the resources you need.

## Everyone

1. **Be Present:** Everyone should maintain a [presence in the lab](#).
2. **Work Professionally:** Academia provides a lot of freedom and flexibility, but you should treat this job as you would any other.
3. **Do Work You Are Proud Of:** We work on issues of societal relevance, and we are in academia to learn things and be creative. If you aren't proud of your work or you find yourself working on things that you don't find interesting or you don't think others will care about, let Vivek know as soon as possible.
4. **Take Time Off:** [Take appropriate time off](#) from work each day and each week, and [take vacation](#) to recharge.
5. **Treat Others With Respect:** Beyond our (the university's and this group's) policies on [harassment](#), we expect that you will treat every other member of the lab, as well as everyone else, with respect. We want to create an environment where everybody, regardless of background and personality, feels comfortable and valued. Discussions should always be constructive.
6. **Be Collaborative:** This is likely to be a research group where everyone has different, but complementary, backgrounds, interests, and skills. Collaborations among group members is *strongly* encouraged. One of the goals of our regular lab meetings is to allow group members to ask questions, share where they might be stuck, and potentially get insights and advice from other members. You should never view any of your fellow group members as competition. All members of the group are expected to try to help if another member is stuck or otherwise needs advice.

7. **Scientific Integrity:** It is never okay to commit scientific misconduct. Even the slightest fudging of results to make them look better is unacceptable. We are here to gain scientific insights, not just publish papers, and nuanced and null results are still important findings. Our work will be completely [reproducible and open](#). We have a zero-tolerance policy towards [fabrication, falsification, and plagiarism](#). Make sure you familiarize yourself with the relevant portions of [Cornell's policies on responsible conduct of research](#) and alert Vivek if you are concerned about any research practices you observe. If Vivek is the cause of your concern or you would rather he not know of your complaint, you can use a [university-wide contact](#) instead.
8. **Open and Accessible Research Products:** As a lab, we are committed to the principles of open and transparent science. We want our peers and the public to be able to reproduce, improve upon, and critique our work. Moreover, as our work is funded by public institutions, our research products should be thought of as public property. More details on our approach to openness are provided [elsewhere](#), but all group members will make their models, data, and code publicly available and easily accessible.

## Principal Investigator

Vivek has a variety of responsibilities as the PI, in addition to those outlined [above](#).

1. **Build a diverse, inclusive, and equitable environment:** While every member of the research group is expected to contribute to a positive and inclusive environment, it is ultimately Vivek's responsibility to manage the social dynamic of the group.
2. **Provide the research environment:** Our group's work is primarily computational. Providing and managing hardware and software resources to facilitate the group's research is Vivek's job.
3. **Obtain funding:** It is Vivek's responsibility to obtain funding for research equipment, personnel, and other costs such as travel and publication fees. One of the Vivek's key goals is to never have to let someone go for lack of funding.
4. **Provide material support:** You are never expected to spend your personal finances on anything related to research. Coordinate any upcoming expenses with Vivek and he will identify grant support for payment or reimbursement.
5. **Provide moral support:** Academic life can be stressful, whether it's classwork, research, the paper submission process, or job searches. Vivek is always here to listen and provide advice (see also [Health and Wellness](#)).

6. **Provide mentoring:** One of Vivek's core jobs is to help junior researchers in the group mature into independent scientists. This mentoring role can continue, to the degree you wish, beyond your departure from the research group.

**Please Ask to See Documents!**

As part of the mentoring process, please feel free to request access to grant proposals or other relevant documents that Vivek is working on or has completed. Vivek can discuss these with you as well.

7. **Provide feedback:** Vivek will provide feedback on all aspects of research through ongoing conversations with you. These include research hypotheses, figure designs, identification of appropriate methods, code development, data management, and paper writing. If relevant, he will also provide feedback on course selection, long-term strategy, and career goals. If Vivek is not well-suited to provide feedback on a particular topic, he will connect you with someone who is better suited.

**Be Mindful About Time Constraints**

As a faculty member, Vivek has many demands on his time, including teaching and departmental and professional service. While Vivek will manage his time so that he can meet the listed expectations, he may not be able to provide immediate feedback during particularly busy periods. You will be given notice when this is the case as well as a rough timeline for when you can expect feedback.

8. **Write recommendations:** Recommendation letters are required for career moves. Vivek will write an honest recommendation letter for you at any point. If you need a recommendation letter, please give Vivek any required information with a few week's advance notice. If you have been away from the group for some time, Vivek may ask you for some additional information to help write the letter.

## Postdocs

Postdocs should be focused on transitioning into independent researchers. This does not mean working without guidance or supervision, but rather developing the ability to formulate and pursue independent lines of research.

1. **Develop your own line of research:** As a postdoc, you should develop the ability to independently identify interesting questions and develop a research plan to address them. Vivek will help guide you through this process and provide feedback.
2. **Publish and present research:** Your primary role as a postdoc is to produce research. You will be given a large degree of autonomy when it comes to writing manuscript for publication and developing presentations for seminars or conferences.
3. **Co-develop group research:** Postdocs will bring their own expertise to the group, and are likely to have different perspectives on problems and methods than Vivek. You should take an active role in discussing parts of the research group agenda with Vivek and in meetings so that your insights can be incorporated into the group's research portfolio.
4. **Mentor students:** As a leader in the research group, a postdoc will at some point be expected to help mentor graduate and undergraduate students in the group. This mentoring will likely be primarily focused on research, but you may have useful perspectives on work-life balance and classwork as well, and sharing these are strongly encouraged.
5. **Develop a career plan:** Postdocs have a lot of autonomy and independence, but have to navigate an increasingly tight job market. It is important that you think carefully about what types of jobs you might be interested in and how you might want to prepare for those roles, and that you discuss those plans with Vivek so that he can effectively mentor you.

## Graduate Students

Unlike postdocs, grad students have to balance research and coursework, and as a result have a wide range of responsibilities to manage.

1. **Be organized:** Grad school is full of demands on your time and can be stressful. Make sure that you develop a time management system that works to manage your responsibilities, both research and coursework, while allowing sufficient time off to decompress. There is no universal strategy, but identifying how to manage your time is one of the biggest challenges of grad school.

2. **Ask questions:** As a grad student, you are learning how to do research, or an equivalent type of professional work for M.Eng. and M.P.S. students. Make sure that you actively ask questions if anything, whether a science question, a research plan, course suggestions, or an administrative issue, is unclear to you.
3. **Develop a research plan:** Our research group uses a broad variety of methods to address problems across a number of application domains. As such, there is a large degree of freedom to identify areas which you find exciting, rather than simply working on problems which Vivek assigns you. It is, of course, understood that this plan is likely to be dynamic and may change as you engage in research, are exposed to other areas or ideas in seminars or by talking to collaborators, or take additional courses. The important thing is that you are working on problems which you find fulfilling and intellectually stimulating.
4. **Stay in good standing:** Graduate programs have a wide variety of requirements, from required courses and credits to exam dates. While Vivek will help you manage these requirements, it is important that you stay on top of them and your status and communicate with him about any upcoming deadlines or needs.
5. **Focus on your research:** If you're in a thesis-based program (an M.S. or a Ph.D.), your research is the most important part of your graduate education. For students in professional programs (M.Eng. and M.P.S.), your project is a key part of your overall experience. You should prioritize your research as such and treat it professionally.
6. **Succeed in your coursework:** Depending on your program, there are periods (or your entire program) in grad school that are dominated by coursework. You should try to get as much from your coursework as possible (while meeting your other responsibilities) and connect it to your research whenever possible.
7. **Develop independence:** You should not hesitate to pursue and discuss your own ideas as they arise. Within the context of your time management system (and without compromising your personal time), set aside time to read new papers in and out of your field, attend as many seminars as you can, and run independent experiments with new models and datasets. Make sure you discuss ideas and results with Vivek and the broader group for feedback.
8. **Develop a career plan:** There is no hiding the fact that there is a clear opportunity cost to attending graduate school. You should think carefully about what type of job you would like to have, and what credential and what type of training would best prepare you for your ambitions. This plan is likely to be dynamic, and communication with Vivek and others in the group is important.

# Undergraduate Students

Undergrads who are working with the research group have several responsibilities.

1. **Learn!:** As an undergrad, you are not necessarily expected to write and publish papers or give presentations (though it's great for your resume if you can!). However, you should link your research to your broader education and learn as much as you can from the process. This may help you decide if you want to go to graduate school.
2. **Succeed in your coursework:** Research activities should be viewed as a supplement to undergrad education, not a primary requirement. As such, your first responsibility is to make sure that you remain in good academic standing and are on track to graduate with a strong GPA.
3. **Work 3 hours each week for every credit hour:** This is the standard conversion from credit-hours to work-hours. Both your research and your classwork will have varying demands from week to week, but try to work this many hours each week on average. If you find yourself needing to work more than this to complete your project, let Vivek and anyone else you're working with know so they can scale the scope back.
4. **Stay on top of deadlines:** It is your responsibility to be aware of upcoming deadlines for course content or for paperwork, and make Vivek aware of what he needs to do or how he can help you complete the relevant task(s).

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