Greene Group Handbook

Last updated August 25, 2026

Introduction

Welcome to the Greene Group! This document is an outline of my thinking on how I hope our research group will operate and how I will approach mentoring students and postdocs. Each of the guidelines and suggestions in it is intended to support the growth of all group members (including myself) as scholars and scientists. This document is intended to serve as a reference for current group members. Prospective students and postdocs are welcome to read it to get a sense of our group culture. This will always be a work in progress, so if you notice anything that is inaccurate or missing, please let me know.

Diversity, Equity, Inclusion, and Accessibility

I am committed to fostering a welcoming, supportive, and accessible environment for people of all backgrounds, identities, and experiences. Factors that shape our identities and experiences can include (but are not limited to) race, ethnicity, nationality, citizenship, gender identity, sexual orientation, socioeconomic background, disability, military or veteran status, age, political or religious beliefs, and marital status. As someone with a disability, I recognize the importance of feeling welcome in all environments and the challenges associated with working in an unwelcoming environment. As someone who studied for two years in a foreign country, I recognize that there are challenges associated with living and working in a culture that is different from your own. I also recognize and celebrate that your identity, experiences, and perspectives may differ from mine.

Working culture and expectations

People have different work habits, and I trust you to work in whatever way is best for your mental health, well-being, and productivity. A mentor once told me that the key to success in graduate school is working smarter, not harder. I expect you to work at least 40 hours/week, but this does not necessarily need to be between 9 am and 5 pm every weekday. I do not expect you to work exclusively in your office. I encourage you find places to work that spark your creativity, and to take breaks, get exercise, and take care of yourself. That said, I believe there is a lot of value in being in the same physical space with other group members, as this facilitates spontaneous “water cooler” conversations and learning. It is often easier to ask someone for help in person than to send a Slack message or set up a Zoom meeting. I therefore expect each person to spend at least a few hours in the office around mid-day at least 4 days/week to facilitate these conversations. Appropriate accommodations will be made for anyone unable to follow these guidelines for personal, family, or health reasons.

I recognize the importance of time away from work for maintaining our health and creativity, so I encourage everyone to take time off as needed. I will not enforce a specific number of hours or days off per month, nor will I keep track of your vacation time. I recognize that everyone works differently, so I encourage you to find what schedule works best for you. I have had colleagues who stick to a strict 9 am – 5 pm schedule every Monday to Friday, and I have had a colleague who worked in 24-hour coffee-fueled sprints followed by a few days of rest. Either schedule---and anything in between---is perfectly fine, as long as you are making progress and attending meetings. As a rough guideline, I suggest 3-4 weeks of vacation per year, including university holidays. I do not mind if you work remotely during quieter times of the year such as winter or spring break and may do the same myself. If you or anyone you care for are not feeling well, please stay home and take care. I just ask that you inform me of any absences or remote work in advance, when possible.

Everyone is encouraged to use our Slack workspace to discuss research, ask questions, post information about departmental events or seminars, share silly memes (on #random), etc. Direct Message on Slack is usually a better way to reach me than e-mail.

You are encouraged to establish a habit of making a daily to-do list of research-related tasks. I did not learn to do so until late into my postdoc but found that it helped me immensely. Making to-do lists helps us be purposeful about our work. Even if you feel that you are not sufficiently busy right now to justify this exercise, I encourage you to practice it now, as it may help you later in your career.

Group meetings

Group meetings will be held weekly and last for approximately 2 hours. Each meeting will consist of 2 presentations by 2 people: an educational presentation and a research presentation. We will set up and maintain a rotation to decide who presents in each meeting. When it is your turn to give an educational presentation, you are free to either present the key findings of a publication that relates to your current or potential future research or teach us about a topic that you think would be of interest to the group (a programming technique, mathematical method, energy technology, etc.). When it is your turn to give a research presentation, please discuss one of your current or recent research projects. Please make your presentation accessible to everyone in the group and explain the motivation behind your research. Group meetings are a great forum for presenting preliminary or “weird” results and seeking feedback from other group members.

People are encouraged to ask questions during and after presentations. I ask that people (including me) raise their hands before asking questions. I realize that this may seem a bit awkward and formal. This practice was not followed in my PhD or postdoc groups. However, I believe that this will make it easier for more reserved individuals to contribute to the discussion. It is important that we hear all voices, and not just those of people who are more outgoing or vocal.

All group members are expected to bring their curiosity to every group meeting. People are expected to ask questions and give feedback. Everyone is expected to be willing to respectfully challenge the ideas of all others in the group, including my ideas. Everyone, including me, is expected to be receptive to respectful feedback and constructive input from anyone else in the group. Group members are reminded to be appropriately critical of ideas rather than people.

Meetings and Mentorship

You can expect to meet with me more frequently when you first join the group (approximately weekly) and less frequently once you are more established and know what you are doing (approximately biweekly). The frequency of our meetings can be adjusted based on your needs and preferences, subject to my time constraints. Please send me a few slides by 8 a.m. on the day of each of our meetings so that I can think about your work beforehand. These slides can include questions, results, points of confusion, or a summary of things you have tried since our last meeting. Slides for these meetings do not need to be well-formatted or polished. Meetings may involve just you and me, or other group members with whom you are collaborating, as appropriate. If a meeting involves more than two group members (in addition to myself), any other group member is welcome to attend. After each meeting, you are asked to send me a brief e-mail summarizing your key takeaways or next steps to ensure that we are on the same page moving forward.

Although I will make every effort to guide you in your research projects, I will not have answers to all of your questions. I expect to learn a lot from you. Accordingly, I expect that our meetings will be more of a dialogue than a one-way conversation: you are expected to challenge my ideas and propose new ones, particularly as you advance in your research. I understand that authority is viewed differently in different cultures and, as a result, engaging with your professor like this may feel awkward to some. I am committed to ensuring that every group member, regardless of cultural identity or background, can interact with me in a way that feels comfortable and natural and that helps you grow as a scientist; we can talk about how we can best accomplish this. You are invited to address me by my first name, Sam, unless that feels uncomfortable for you.

During my graduate training, I was often unsure about when I should reach out to my advisors for help when I was stuck on a problem. I wanted to learn to solve research problems independently, but I did not want to waste days or weeks of my time on a problem that one of my advisors could solve in a few minutes. Each of you will learn to find this balance as you grow as a scientist. (After I got to know my PhD advisors, I found that I was sometimes able to imagine some of the questions they would ask me if I came to them with a problem I was stuck on. Imagining their questions gave me ideas for things to try.) I encourage you to reach out to other group members if you think they can help you. Opportunities to encourage more discussion among group members are always welcome. Another good strategy is to work on multiple aspects of a project in parallel (e.g. reading papers, writing code, analyzing data, drafting a manuscript) so that if you are stuck on one task you can work on others.

When you decide it is the right time to ask me for help, please send me a direct message on Slack. I would be glad to chat in person if both of us are available and on campus, and I am also happy to continue the conversation via Slack or Zoom otherwise. If you have a particularly urgent question, please feel free to stop by my office.

Science communication

Communicating our science clearly and compellingly is one of the most important parts of scientific research, since it amplifies the impact that our work has on our field and on society more broadly. For this reason, I have high standards for accuracy, clarity, and logical flow in my own writing and presentations and those of my students and postdocs.

Learning how to write well is one of the most difficult parts of one's scientific training, in part because it takes time to learn the vocabulary and conventions of a field, and because different writers may have their own idiosyncratic preferences for how science should be presented. Learning scientific writing is similar to learning a new language, and it may take a few years to achieve proficiency. During the first few years of my graduate training, my advisors made substantial changes to every paper I wrote before they deemed it ready for publication. This was discouraging at times, especially when I had put a lot of effort into writing what I thought was a good first draft. Over time, as I learned from their feedback and suggestions, my writing improved, and I began to find more enjoyment in writing.

You can expect to receive substantial feedback on your writing, especially early during your time in the group. Please be reminded not to take my comments personally and know that my intention is to help you grow as a writer and improve the quality and impact of your writing. You are therefore expected not to blindly accept all changes I propose to your manuscript, but rather to understand the reasoning behind my suggestions and to perhaps consider opportunities for further improvements. You are always welcome to challenge my suggestions if you believe there is a better way something could be communicated. I, too, am still improving my writing skills and am therefore always open to your suggestions and challenges.

Based on my experience, clear, effective technical writing is associated more with clear thinking than with an especially good command of the English language. Writing can be used as a tool to clarify one's thinking. When writing about a complicated subject, I often use my first draft to help clarify my thinking. Much of the language in my first draft is unclear because my thinking at that stage was muddled. My writing exposes gaps in my thinking that I was not aware of. With each subsequent draft, my thinking and writing improve in tandem, until I arrive at a clear, concise, and logical final draft. I encourage you to embrace a similar mindset when you write.

Students are asked to complete this online writing course before writing their first paper in my group. (This is optional but encouraged for postdocs.) Students and postdocs are also asked to watch this online lecture on writing effective introductions. Even though the examples in this

lecture are mostly from the social sciences, I believe that most of his lessons are applicable to scientific writing. These two resources improved the speed and quality of my writing much more than anything else I read or watched during my PhD. Suggestions for other helpful writing resources are always welcome.

Because each person thinks and learns differently, I do not believe that there is one writing strategy that works universally well for everybody. The strategy that works best for you may differ from my preferred strategy. It may involve a combination of the strategies suggested in the resources mentioned above. This is perfectly acceptable. However, I expect you not to cling too strongly to the writing habits you bring into graduate school or your postdoc and to be open to giving new strategies a fair chance. Graduate school and the early stages of a postdoc are perfect low-stakes environments for trying new strategies.

You are asked to use Overleaf/LaTeX to draft all manuscripts for which you are first author. In my experience, getting Microsoft Word to format scientific writing correctly is extremely challenging and time-consuming, particularly when equations or references are involved. After an initial investment of a few days to learn the basics, formatting is quick and straightforward in LaTeX. Reference management and sharing in LaTeX is also easy. (I like to use JabRef.) Many journals use LaTeX to typeset articles, so submitting manuscripts in LaTeX format helps streamline the typesetting process and ensure that our publications look the way we want them to.

Presentation slides should be clean and free from unnecessary details. When preparing a short talk, I often find it helpful to make my presentation backwards, i.e. to first decide on my key takeaways, and then decide which results best support them, and then figure out the minimum number of introductory and methodological details needed to understand those results and their importance. Your slides should be adapted for your audience. Figures that you make for your papers often need to be adapted or simplified before they can be included in presentation slides. Animations should be used judiciously to avoid overwhelming your audience with new information after every slide change.

Conference Attendance

PhD students and postdocs can expect to attend approximately 1-2 conferences per year, depending on their research progress and their interests. Since conferences can be a good way to quickly learn about a new field, there is value in attending conferences even if you are not presenting. You are therefore not expected to present at every conference you attend. However, if you have relevant results that you are ready to present, you are strongly encouraged to do so. If you are giving a talk, I expect people to practice and solicit feedback from me and other group members before leaving for the conference. If presenting a poster, please send it to me at least 4 working days before printing so I can provide feedback.

Career Advancement

I am committed to helping every member of my group find work that aligns with their objectives (personal or professional) after their time in my group. In order to facilitate this process, students and postdocs are asked to complete an individual development plan (IDP) when they join the group. The IDP is a document that prompts you to think about your career plans, even if they are uncertain, and what you hope to learn from your experiences in the group. Please plan to revisit this document and discuss it with me on at least a yearly basis. This will ensure that we are finding research projects and other activities that are best supporting your goals and advancing your thinking. Students are expected to have a more in-depth discussion with me about their career plans at least 9 months before graduation to ensure that we have good options lined up for when you finish. (If you do not yet know exactly what you want to do at that point, that is fine too. We can talk about that.)

There are many skills beyond executing research projects and writing papers that will be useful in whatever future career you choose to pursue. Consequently, I expect every student and postdoc, regardless of career plans, to spend 1-2 hours every day (on average) learning about topics that are not directly related to your current research. For example, you might read review papers to learn about important research questions. (These may also spark ideas for new directions in your current research projects.) You might read books on pedagogy if you are interested in teaching. You might find online classes on technology or entrepreneurship. You might learn a new programming language or read a math textbook. You might read about different career paths to help decide which is right for you. You are free to decide which topics or activities are best for you. Feel free to learn together and share suggestions with other group members. You may also ask me for suggestions.

Scientific misconduct

Any instances of scientific misconduct within the group (e.g. harassment, bullying, plagiarism, data fabrication, etc.) will not be tolerated and should be brought to my attention immediately. Depending on the circumstance, I might advise you on how to address the problem yourself, or I might take direct action. I promise total discretion in handling any situation. Catching issues like these early is almost always in the best interests of the parties involved.

Feedback

Receiving feedback is an important part of your growth as a scientist. I will therefore set up a mechanism to provide you with feedback on a semesterly basis. This will include a one-on-one meeting in which we can discuss how things are going, and you can ask any questions.

I am still learning how to manage a research group, so I am very open to your feedback and suggestions. We will likely also need to change policies and procedures as the group grows and

evolves. I will provide a mechanism for all group members to anonymously provide feedback on a regular basis. I will consider all feedback carefully, but I may not implement all suggestions. There may be situations in which I believe, based on my knowledge and experience, that a certain action or policy is best for the group, and my decision may differ from what some group members want. I hope that each of my decisions and actions will support your well-being, learning, and growth as a scientist. However, if you ever feel that I am being unfair or unsupportive, please discuss the issue with me and/or other support staff in your department as soon as possible.

Like all people, I sometimes make mistakes and may inadvertently say something insensitive. With humility, I ask that you let me know when I do so. I never want to be insensitive and am committed to learning from my mistakes. For example, please correct me (repeatedly, if needed) if I mispronounce your name; I believe this is one example among many where “inclusion” is very real.