Student and Postdoc Mentoring Plan
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Mentoring Style
How would you describe your advising style? Does your approach vary over the course of a student's progress within their degree?

My mentoring style is interactive. I invest deeply in understanding the research problems my students and postdocs pursue—not only the technical domain but also how each student approaches problem-solving. I tend to ask many questions during meetings, both to clarify ideas and to help them sharpen their own thinking. My advising style changes as a student goes through the PhD process. At the beginning, I provide detailed suggestions. As time goes on, the student will take on more leadership over the problem domain. I like for the student to be the research leader in their area because it provides critical practice for future research leadership positions. With postdocs, I follow a more collaborative, consultative role to help them grow in their research leadership.

Communication and Contact
What is the best way/technology for students to contact you? Are there time frames in which students should expect to hear from you?
I am best reached over Slack, where I prefer to organize discussions by topic or project. I also check email regularly and aim to respond within two business days. If you don't hear back from me, feel free to follow up—it is never considered rude. I like having one place where all the documents for a project are hosted – this can be dropbox, slack, or overleaf, as appropriate for the research, and based on our mutual comfort. I expect students to be reasonably available during working hours on weekdays (i.e., 8:30-5 pm, according to MIT CBA), while understanding that everyone has different working times. I also do not expect a prompt response to my messages outside of working hours (e.g., on weekends).

How often do you plan to meet with students one-on-one (be as specific as possible, it's okay to describe multiple styles that may vary with student needs)? Is an agenda required? How long are meetings?
In general, I meet with students and postdocs weekly for either 30 minutes or 1 hour, in person (and sometimes over zoom, if traveling). Students and postdocs are encouraged to take the lead in our one-on-one meetings by preparing a short agenda, outlining what they'd like to discuss or get feedback on. If you haven't met with me in a while or feel stuck, you can always request an extra check-in. I recommend we occasionally step back to discuss long-term directions and research agendas.

Do you have regular group meetings? What does student participation look like in a group

meeting?
Our group meetings are typically weekly during the semesters and biweekly over the summer. All group members are expected to attend these meetings. The content varies, including work-in-progress talks, small group discussions, conference presentation prep, paper submission prep, proposal/defense practice, and presentations on relevant papers. Students and postdocs generally lead a presentation about twice per semester.

Research and Teaching Expectations
Describe your students' primary area(s) of responsibility and expectations (e.g., reading peer-reviewed literature, in-lab working hours, etc.).
I recommend that each member of my research group maintain a brief research log to track key ideas, decisions, and open questions. This helps maintain continuity and identify patterns in your work. Reading peer-reviewed papers is a critical skill; I expect my group to keep up with the literature and learn to read papers deeply.

I do not require fixed working hours in the lab. Everyone has different work styles. I expect students and postdocs to be reasonably reachable during working hours (i.e., 8:30 am-5 pm, according to MIT CBA) but recognize that different people are productive at different times.

I encourage students and postdocs to develop a full suite of research skills—problem formulation, developing new algorithms, proving theorems, mathematical programming, data analysis, machine learning, writing papers, presenting to different audience, and peer reviewing --- across different research projects (not every research project may require all the skills). When appropriate, I may invite them to review papers for a conference or journal.

What is your expectation for weekly 1-1 meetings? What does progress look like to you?
Students and postdocs are encouraged to come prepared to our meetings, including a written or verbal agenda, recent results, and any points needing feedback. Over time, students are expected to define their own research directions and evaluate which problems are worth pursuing. My role increasingly becomes that of a collaborator and sounding board.

Progress on research projects looks like **any** of the following: furthering understanding of a research problem by reading related papers, thinking of new ideas and approaches, data cleaning and analysis, coding algorithms, proving (or partially proving) a theorem, coming up with a conjecture, attending talks and formulating an interesting question, partially proving a conjecture, disproving a conjecture, identifying bottlenecks in code or theory, identifying important problem aspects that would add to the problem, writing about the results, writing papers, making plots, making slides for a conference, submitting abstracts, creating revisions from a journal, etc. or discovering bottlenecks in these tasks. My expectation is that we can have a meaningful discussion, brainstorm and provide useful feedback about your progress in the 1-1 meeting.

Is it okay to cancel meetings if there is nothing to discuss?
Absolutely, it is okay to cancel meetings sometimes if there is nothing to discuss.

Do you ask students in your group to serve as a TA over the course of their program?
I might require students and postdocs to teach partially during their appointment, to either augment funding needs, or to develop their teaching portfolio to align with their future academic aspirations, or the requirements of your PhD program. I'm happy to discuss what the right time for teaching is – in terms of workload and course topics. I'm also happy to sit in one of your lectures and also provide feedback.

Do you have general expectations for graduation?
Students in the ORC PhD program typically complete ~3 journal papers that form the chapters of their thesis. Example journals include: *Management Science*, *Operations Research*, *Mathematical Programming*, *Mathematics of Operations Research*, etc. I expect at least one published (or close to being published, e.g., minor revision) journal paper before the thesis proposal and another before the thesis defense. Students may submit earlier versions of their work to conferences for visibility and early feedback (e.g., SODA, ICML, NeurIPS, COLT, FAccT, FORC, AISTATS, EC, WINE, EAAMO). Some venues allow extended abstracts with journal-forwarding options.

For students from other majors like EECS, LIDS, CSE and Math, we can discuss the expectations and minimum requirements, catering to the norms of their department, requirements of their program, and the student's own aspirations (i.e., academia v/s industry jobs).

How does a typical PhD look like, e.g., in the Operations Research program?

In general, it is very hard to prescribe a specific type of journey during a PhD. Every PhD is unique, progress does not always look linear, there are at times sparks and ideas that may cause a lot of progress, and times where deep thought is needed. The progress during a PhD may look like, e.g., any of the following trajectories, or their convex combinations. This is clearly something that is hard to define. Typically, it's a matter of concern if there's no tangible progress for a long time, but I'm happy to discuss.
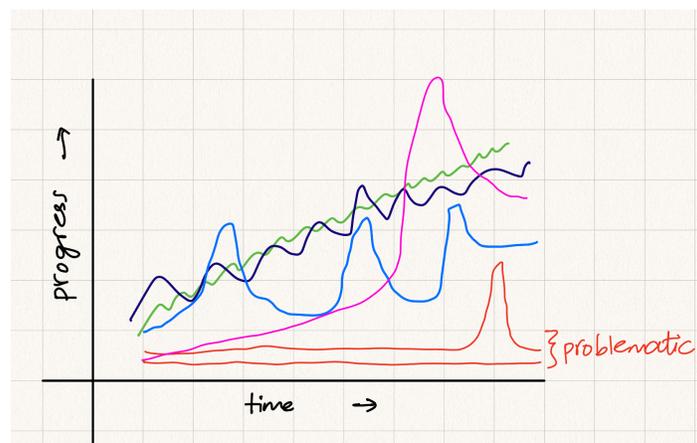
Deadlines and Submissions
How do you decide venues for submission for a research project? Is it okay to miss deadlines?
Due to the interdisciplinary nature of my work, I like sending my work to the best venue for that work – be it a Mathematical Optimization journal, a CS conference, or a law review. While I may suggest venues for submission, students and postdocs are free to push back or suggest alternatives. Once we commit to a venue, I expect that we both work to meet the deadline. Missing deadlines is okay; what matters is doing strong work within our physical, emotional, and mental limits. I would further suggest that we keep a track of deadlines using a calendar invitation, so that I do not forget!

Authorship
How do you decide authorship and/or authorship order?
Authorship varies by project. I generally follow the norms of our technical field (or the field we are publishing in) and discuss authorship decisions openly with students. I strive to ensure that authorship accurately reflects intellectual contributions. I'm happy to discuss the choices amongst journals and conferences too.

Internships for Students
Are you supportive of your students going on internships? If so, is there a time of year that is best? How many internships can they do?
Absolutely, I fully support internships, starting 2nd year onwards. I especially recommend doing one after the third year, when your research direction is more mature, and your CV is stronger. Internships should ideally support or complement your research goals. Summer is generally the best time.

Collaborations
Do you encourage collaborations with members from other research groups?
I enjoy collaborating broadly (as evident from my portfolio), and I encourage external collaborations (within MIT and beyond), especially when they enrich your research directions and bring in tools that complement your own (or mine). However, I would like to be kept in the loop – not only to help out, but also to ensure alignment with my broader research vision, available funding, and your research trajectory. I'm always happy to discuss on how to make collaborations happen, and figure out a good problem at the intersection of different broad research trends. Happy to discuss further.

Career Mentorship
What types of mentorship do you provide your students?
My students and postdocs often seek feedback on both academic and non-academic career paths, including selecting research problems, paper writing, preparation for job talks, research

statements, and networking introductions. I am always happy to provide feedback as required, and we can discuss the best ways to support to your goals.

Are there opportunities for students and postdocs to develop supervisory skills?
I encourage my mentees, especially postdocs, to develop supervisory skills while doing the proposed research. These could include supervising and mentoring UROP students, assisting in the guidance of graduate students, and supervising technical staff on the specific project or in more general tasks associated with the research group. If you see the need to hire a UROP or an MBAn student for your project, please discuss with me, and we can find the funds to support this.

Lab Culture and Values
What are the values you think are most important in your lab?
I strive to create a group culture rooted in striving for excellence and curiosity, while fostering respect and mutual support among team members. In fact, we take a deep interest in each other's problems, even when not collaborating! We value diversity of perspective, constructive feedback, and shared commitment to growth. Students are expected to treat one another with kindness and professionalism. Peer mentoring and collaboration are encouraged.

What are the key values that you hold in your mentorship?
I believe in mentoring with clarity, care, and mutual respect. My goal is for my mentees to thrive! I will be direct in my feedback, but strive to be kind and constructive. I respect your time, your voice, and your growth. I hope to create a relationship of mutual trust and learning. You can also review my Unwritten Curriculum for values I believe are important for a successful PhD.

Feedback Practices

How do you provide students with feedback regarding overall progress, research activities, etc.?
I give feedback during our weekly meetings. I aim to offer both constructive and positive feedback, and explain why I give certain types of feedback. I try to check in to make sure that I am giving enough positive feedback and to make sure that my "negative" feedback is interpreted as constructive. This can be hard to do (on both sides!) and I try to create a space where we can have an open dialogue.

How far in advance of a deadline should a student expect to provide written work for feedback, such as publication drafts?
For paper drafts, send them at least one week before conference submission deadlines, and at least a month before intended journal submissions. I provide detailed feedback and aim to iterate multiple times to ensure clarity, readability, and impact. With more junior students, we would likely iterate more times, than with senior students.

How do you solicit feedback from your students?

I welcome feedback on my advising and hope to create a space for open dialogue. Students are welcome to provide feedback during our 1-1 meetings. Particularly, at the end of the semester, we typically discuss (and feel free to ask to discuss if I forget!): Q1. what went well in a semester, Q2. what didn't go well, Q3. what can be improved, Q4. what was learned, and Q5. goals for the future semester. You can simply say – *can we do a semester feedback meeting*? You are welcome to provide feedback on advising and research practices that worked well for you and those that didn't, so we can adjust them for the next semester. Every student is different, and feedback helps me adjust to your needs.

Do your students request 1-1 time separately over coffee to have an informal chat, particularly to discuss topics outside of research?
Yes, I'm happy to have a 1-1 time to chat over coffee, or a walk around MIT campus, and be available for an informal discussion.

Changing Research or Advising Fit

What if a student feels that they do not have a good advising fit with you?
I'm happy to have an honest conversation about how to support your growth—including the possibility of changing mentors. My goal is for you to thrive!

Conference Attendance

Which meetings do your students generally attend? What funding is available to attend these meetings?
Typical conferences that my students attend include INFORMS, INFORMS Computing Society, MIP Workshop, IPCO, EC, NeurIPS, SODA, and others. Funding is available and students are not expected to cover their own travel. However, due to limitations on travel funding and following the norms at MIT Sloan, I ask that students be co-authors on a paper presented at the conference, and that the work was done with me at MIT (if seeking funding support from me). Please discuss your travel plans with me in advance. It's also useful to send me a calendar invitation to mark the times you will be away, or at a conference, so I don't forget.

Grant Writing

Do you provide guidance for writing grants? Can your mentees reach out to you if they need feedback on their writing? Do you write grants with them jointly?
Learning how to write grants is a critical part of a future faculty career. I encourage my postdocs to develop grant writing skills, e.g., by taking courses at MIT. I'm also happy to provide feedback on the grants they write. I occasionally also submit joint grants with my postdocs and students, and we may discuss opportunities that might be of interest to both of us.

Time Away from Campus

Discuss expectations regarding vacations and time away from campus and how best to plan for them. What is the time-frame for notification regarding anticipated absences?
I believe that vacations are important, and I am very supportive of students unplugging. Letting me know some amount of time in advance, proportional to the time you are taking off, is helpful, e.g., 2-3 days in advance for a day off, or a month in advance if seeking remote work plus vacation for about a month. There are MIT guidelines around leaves, holidays, and remote work. Although I do not like to create hard-and-fast rules on this, students should not deviate too much from these guidelines. Furthermore, it can be confusing how our working schedule aligns with the academic calendar. For institute holidays, all students, faculty, and researchers have that day off. For periods outside of the academic semester, but excluding holidays, there are no classes for students; however, "employees" of the institute (e.g., RAs and TAs) continue to work, unless they are on vacation (e.g., this is true during the IAP period).

What are the MIT guidelines around time away from campus and institute holidays?
Students should review the MIT guidelines for vacation and time-off here and here. In general, this is 5 days off per semester – spring, fall, summer for full RA and TA appointments. According to the MIT CBA, however, students can request their supervisor for remote work for up to 30 days per full appointment period, to accommodate a student's need and circumstances (see full policy here). Please submit these requests in writing (i.e., over email), so that I do not forget! It is further important to note that any remote RA/TA work *longer than* 30 days needs advanced notice and formal Institute review and approval (this is beyond the supervisor's approval due to laws in the U.S.). More information is available in the MIT Remote Appointment Guidance.

Are there specific standard times that students in your group generally take vacation? What do you do to facilitate students taking time off?
Winter break and late spring/summer are common vacation times. I also encourage time off after major deadlines. I ask students about their plans and encourage them to take time off. I also note that I will be taking time off. It is further useful if you can send me a calendar invitation marking your time away from campus, so that I do not forget!

Supporting Mental Health

In what ways are you available to support your students in the mental health challenges they may face during the PhD?

Students can experience struggles with their mental health during the course of their PhD, which can be quite challenging (e.g., there are periods of time when research is slow, and this can induce uncertainty and anxiety) and can feel isolating (especially if you are far from family and

friends). If you feel that personal challenges are impacting your ability to do research, I'd encourage you to

- Seek resources from MIT Health to help manage stress, anxiety, or depression. You don't have to navigate these challenges alone.
- Communicate with me if you need to lighten your workload temporarily while navigating these personal challenges (and it is completely okay to ask for this!). It is up to you how much you want to disclose or keep to yourself.
- Ask me for advice (if you want it)! I was once a graduate student in your shoes, and I'm happy to take off my advisor cap for a minute if that would be helpful for you.

Closing

Above all, I see your time as a mentee with me as a time for intellectual growth, self-discovery, and establishing yourself as an independent researcher. Every PhD is different, and there is no fixed trajectory or path to follow. I am always there to help you navigate this, and trust that I will do my best to support you—not just in doing good research, but in becoming the kind of researcher and professional you aspire to be. I'm there to answer any questions you may have, and my door is always open. I hope our mentoring relationship will be one of mutual respect, trust, and growth.

This document was inspired by multiple mentoring plans across various faculties in universities, particularly the faculty mentoring plans at the University of Michigan.