Setting Advising Expectations - New Graduate Students

The goal of this document is to provide a framework for a conversation on expectations between advisors and advisees before the advisee formally joins the advisor's research group. The numbered statements below provide broad starting points for a conversation, while the subtext provides suggestions for specific topics of conversation. The goal should be to touch upon each numbered statement in whatever form is important to both parties. The end result of the discussion should be for the advisor and advisee to come to an agreement regarding mutual expectations for the advisee's Ph.D.

As an advisee, you agree to...

1. Regularly communicate progress

- Discuss times to regularly meet to provide updates on research, coursework, etc.
- Decide on expected length of meetings and cancellation policy if no new updates
- Discuss frequency of presenting research to the rest of the group and/or subgroup

2. Actively participate in the lab

- Agree on expected number of hours of work per week
- Agree on the expected timeframe of daily work (i.e. 9-5 PM? Set your own hours?)
- Discuss whether all work should be done in lab or can be partially done remotely
- Discuss lab meetings, seminars, and journal clubs advisee is expected to attend
- Determine what constitutes satisfying progress in thesis and academic work

3. Engage in the broader academic community

- Seek enrichment opportunities, such as relevant courses, workshops, and papers
- Discuss expectations on disseminating research via attending conferences, etc.
- Discuss expectations to mentor younger graduate students and undergraduates

4. Seek help when needed

- Discuss who the advisee should go to for technical mentorship (Postdocs, older graduate students, advisor, etc.)
- Discuss how collaborations are facilitated (both within group and external)
- Discuss how authorship on papers is typically decided
- Discuss how to handle intragroup conflicts and advisor-advisee conflicts

As an advisor, you agree to...

1. Advocate for advisee

- Discuss how you will promote the training of advisee in professional skills1
- Discuss how you will seek out opportunities for advisee to present/discuss research
- Determine how you will support advisee in gaining new knowledge/skills
- Talk about expectations and typical process for setting up research collaborations

2. Offer personal and professional support

- Set recurring meetings to discuss advisee's professional life and well-being
- Discuss how you will sustain active interest/involvement advisee's research topic
- Talk about method of helping advisee set attainable goals and timeline for project
- Discuss your anticipated advising style for advisee's PhD (i.e. hands on vs. off, etc.)

3. Maintain regular communication

- Discuss setting a timeline to regularly review advisee's thesis progress
- Determine process for working with advisee to help plan and guide research project
- Agree upon primary means of communication (i.e. email, Slack, etc.) with advisee
- Discuss communication expectations (i.e. typical response times, etc.)

4. Be transparent about funding

- Discuss advisee's expected teaching responsibilities
- Discuss the means by which advisee will be supported (active grants, etc.)
- Discuss how you plan to continue to ensure sufficient funding throughout the PhD
- Agree upon what funds can/cannot be used for (i.e. computer? monitor? chairs?)
- Agree upon what kinds of lab items must be purchased with vs. without permission

¹ These skills are those needed for a successful career and include, but are not limited to, oral and written communication, grant writing, management and leadership, collaborative research, responsible conduct of research, teaching, and mentoring. It can also involve developing skills in other areas, and seeking input from multiple mentors.

Setting Advising Expectations - Yearly Check-In

The goal of this document is to provide a framework for a conversation between advisors and advisees on the continued progress in the advisee's PhD and communication of mutual expectations. The numbered statements provide broad starting points for a conversation, while the subtext below each numbered statement provides specific questions which *could* be used to get a discussion going. The goal should be to touch upon each numbered statement in whatever form is important to both parties².

Questions for advisors:

1. Ensuring progress towards graduation

- What steps do I need to take in order to graduate in [x] amount of time?
- What goals should I set in order to be successful?
- In your view, have I been making sufficient progress toward my goals?
- If not, what do you think needs to change and what changes should I prioritize?

2. Planning for the upcoming semester(s)

- [Describe your current workload and responsibilities]. How would you recommend I prioritize my time?
- I'll be taking [required courses] this semester. Are there any other courses you recommend I take?
- Are there any seminars/colloquia/journal clubs I should attend?

3. Discussing research progress

- (*If currently exploring many research ideas*) Is it time for me to start focusing on a particular research direction/topic for my thesis?
- What should I aim to produce?
- Are there any skills I should aim to acquire?
- Do you think I should submit to conferences this year? Which ones?
- Are there any workshops I should attend this year?

4. Continuing funding

- Are there any graduate fellowships I should apply for this year?
- I plan to TA next semester. How should I think about ranking courses?

² Some questions in this document are adapted from the Working Group on Advising (Aaron Benavidez, Allison Daminger, Siobhan Greatorex-Voith, Sasha Killewald, Joey Wallerstein, and Tyler Woods), *Harvard Sociology Department Doctoral Advising Conversation Guide*, June 2020.

Questions for advisees:

1. Ensuring progress towards graduation

- What qualifying exams do you still need to pass, if any?
- Have you passed your oral exam yet (if the advisee is in/approaching third year)?
- (If advisee has passed quals) Have you formed your thesis committee yet?
- What required courses do you still need to take, if any?
- Do you feel you are making sufficient progress towards your plans for graduation?
- Are there specific skills you want to learn or improve over the next year?

2. Discussing research progress

- Do you feel I am supporting you sufficiently in your research progress?
- Are there any changes that would be helpful (i.e do you need more/less support in [x]?)
- Are there any additional resources that would be helpful to you (i.e. setting up a new collaboration, etc.?)

3. Checking-in on professional plans and goals

- What are your plans post-graduation?
- Have your career goals changed in the past year? If so, what are they?
- Are there any other professional or career development issues we should discuss?
- Do you have any concerns to raise?
- What are your goals for this coming year?
- How can I support you in these goals?

4. Communicating funding situation

- [Communicate with advisee their funding situation for the year (i.e. how they will be supported, either through TA work, an active grant, etc.)]

Self Reflection Exercise

This worksheet is intended to help guide graduate students in reflecting on their current research environment and how it might be improved, especially in advance of annual meetings with their research advisor.

Part I: Identifying Areas for Adjustment

For these questions, please think about how/if you would prefer things to change relative to the current status quo. If you feel that changes would significantly improve your situation, please consider raising them at the annual meeting with your advisor (and/or reaching out to other mentors).

- 1. Would you prefer to have regular meetings with your advisor more or less often?
- 2. Would you prefer a more or less flexible schedule with regard to meetings with your advisor?
- 3. Would you prefer your advisor to provide more hands-on guidance with regard to research, or take a more hands-off approach where you are expected to be independent?
- 4. Do you feel that your research advisor's expectations for research progress are too high (e.g. they are assuming skills you haven't had a chance to learn), too low (e.g. they are not taking advantage of your skills), or appropriate?
- 5. Are you learning new technical skills and knowledge at a pace that feels appropriate to you? (options run from too slow / bored, to too fast / not enough absorption time)
- 6. Are you comfortable with your advisor's current level of formality in your interactions, or would you prefer a significantly more formal or more casual style?
- 7. Would you prefer to have group meetings involving the full research group more or less often?
- 8. Would you prefer a more formal/professional or more casual/friendly group environment?
- 9. Would you prefer to spend more time working collaboratively with other students, or on tasks that you can do or lead alone?

Part II: Identifying Gaps and Problems

For these questions, please think about whether you agree or disagree. If this exercise identifies situations that you do not know how to handle, or concerns about your interactions with your advisor or the group environment, please consider raising them at the annual meeting with your advisor (and/or reaching out to other mentors).

- 1. I know what to do if I have guestions or concerns about research
- 2. I know what to do if I have questions or concerns about non-research aspects of the advising relationship or group environment
- 3. I feel comfortable expressing my opinion on scientific topics within the group

- 4. I feel that individual meetings with my advisor are productive
- 5. I feel that group meetings are productive
- 6. I find my current research area interesting
- 7. I find my current research project(s) interesting
- 8. My advisor interacts with me in a courteous, respectful manner
- 9. My advisor listens to my concerns
- 10. My advisor gives me sufficient credit for my work
- 11. My advisor treats students equally
- 12. My advisor handles interpersonal conflicts within the group well
- 13. My advisor responds to emails and other communications in a timely manner
- 14. Work hour expectations are reasonable
- 15. My advisor is understanding of non-research commitments
- 16. My advisor is open to flexible work arrangements
- 17. My advisor communicates good safety practices in experimental labs
- 18. My advisor promotes ethical professional practices
- 19. I feel that I need to work harder than some of my peers to be taken seriously
- 20. I am responsible for a disproportionate amount of non-research-related responsibilities

Part III: Other Topics for Discussion

For these questions, please think about whether these are topics you would like to learn more about. If so, please consider raising them at the annual meeting with your advisor (and/or reaching out to other mentors).

- 1. Required steps to finish the PhD
- Academic career pathways beyond the PhD
- 3. Norms and expectations in academia
- 4. Non-academic career pathways beyond the PhD
- 5. Involvement in departmental service, outreach, or similar activities
- 6. Development of specific skills (note them and bring them to the meeting)

	Advi	Advisors	Stud	Students
	DO	DON'T	DO	DON'T
	Set a meeting schedule with your student and abide by it.	Take on a student if you cannot come up with a plan to provide them with funding/support.	Communicate your commitments for the semester with your advisor, both research and non-research.	Ask your advisor to undertake tasks (e. g. recommendation letter writing) on short notice.
COMMUNICATION	Respond to emails in a timely fashion.	Regularly speak over students in meetings/talks.	Respect your advisor's time (e.g. show up on time to meetings, etc.).	Expect your advisor to keep track of your deadlines.
	Proactively check in on students and provide for contingencies in cases of sabbatical/leave/travel.	Expect students to routinely respond or complete tasks outside of working hours.	Be open with your advisor regarding areas of improvement for both yourself and your advisor.	Travel or otherwise disappear without letting your advisor know.
	Recognize the limits and strengths of what you can offer as a mentor.	Belittle a student's knowledge; instead, offer resources to help them learn.	Attend seminars, colloquia, and group meetings	Miss important meetings or deadlines without communicating
PROFESSIONALISM	Provide positive reinforcement / congratulate a job well done	React in a hostile manner if students underperform when evaluated against your expectations.	Respect your advisor's point of view and be able to articulate disagreements.	Promise something you cannot deliver / expect someone else to cover for you
	Be understanding when students have to attend to personal matters.	Fall prey to -isms when interacting with students, both publicly and privately (e.g. ableism, sexism, racism, trans/homophobia, etc.)	Know what areas you are skilled in, and communicate with people in areas you are less skilled in. Be proactive about reaching out for help!	Rely solely on your advisor to answer questions and clarify points of confusion.
	Be aware of tone in messages / emails.	Badmouth students in front of other students and/or play favorites.	Treat your labmates, PI, and staff with respect and understand everyone's personal/professional boundaries.	Treat your lab like your apartment and your labmates as your roommates and/or friends.*
LAB CULTURE	Conduct an effective onboarding process, e.g., make sure students have access to training resources and equipment.	Devalue non-academic career paths / extra-curricular activities that are important to your advisees	Be aware of the space you're taking up in group meetings and other lab-wide settings.	Interrupt lab mates while they are speaking without a good reason (e.g. clarification, identifying an error, etc.)
	Use a student's preferred pronouns.	Schedule lab outings that are not inclusive to certain group members.	Help new lab members feel welcome and provide mentorship and follow-up to their questions when appropriate.	Make inappropriate jokes/comments or harass your colleagues, both inside and outside of lab.
				*You can certainly be friends with your lab mates! But make sure you respect everyone's boundaries and comfort levels, especially when discussing sensitive matters.

Resources for students and advisors

Within physics:

- Graduate advocate They are a current faculty member with a significant level of
 expertise in dealing with both the central MIT administration as well as physics
 leadership. Fully confidential resource, but they can communicate your concerns to other
 faculty and help you find a resolution and/or suggest further offices/resources.
- <u>physREFS</u> -- This is a confidential, student-only resource that allows you to talk with a
 peer about your problems and be pointed to the appropriate folks if your issue needs to
 be escalated. If you meet with a physREFS, you'll also get a coffee -- on them!
- Academic Programs Office (APO) -- The one-stop-shop for anything physics-specific.
 They can help you with anything logistical related to your classes, thesis work, and
 stipend (e.g. the APO manages transitional TAships). Say hi to Turbo and Nugget, the
 APO's two office dogs, while you're there!

MIT-wide:

- Office of Graduate Education (OGE) -- This is the first place to stop for any questions about policies and procedures regarding the graduate student experience at MIT. They are also available for academic support (e.g. can route accommodations via Disability and Access Services) and assistance for students who are seeking advice about sensitive matters regarding advising (via their GradSupport arm).
 - Financial assistance is directly handled by the OGE. They have a monthly Fellowships newsletter, in addition to short- and long-term hardship funding and for grad students with families and children. For more information about the length and types of assistive funding available, see this link.
- Institute Discrimination and Harassment Response Office (IDHR) -- This is the office
 that handles Title IX complaints for both students and employees. They also handle
 complaints about discrimination, harassment, and bias in the workplace. They can help
 you chart a plan of action if you ever experience one of these issues.
 - Violence Prevention and Response (VPR) -- a confidential service that you can contact if you or a peer/coworker ever experience interpersonal violence. They also provide further resources to assist when such incidents happen.
- Ombuds Office -- This is the "conflict resolution" office on campus. They help to manage and de-escalate tense situations and can offer guidance on how to move

forward after a significant conflict. This service is available to all community members. Their office offers informal mediation and communication coaching for everyone.

- Office of the Vice President for Research -- This is the place to go if you're ever uncertain about legal and/or ethical compliance with your research. They can also help manage conflicts of interest and assist you to work within the procurement guidelines.
- MIT Medical -- The on-campus medical clinic has a host of specialized services (e.g. dermatology, vision, dentistry), in addition to general medical care and lab tests. Keep in mind that it may take a while to get a specialist appointment.
 - MIT Mental Health -- The counseling center at MIT has a wide array of counselors to talk to students about any issue that's been affecting them. They also handle off-campus referrals to providers who take the student's insurance.
 52 sessions are covered every year as part of the MIT Student Health Plan, with a co-pay of \$5 for every additional session.