From the MIT Biology Department Mentoring Survey, summer 20204

Question: Please share any strategies that you have found useful to take a proactive role in your own mentoring.

General advice

Take ownership over my project (figure out what the question is, how I want to ask it, and be proactive about proposing - this is what I think I should do at every step)

Be goal oriented and giving actionable feedback when there is a problem (always trying to provide a "this is what I want" statement if something is wrong, instead of only stating that something is wrong".

Be open and direct about the support I need.

Be frank about my needs and my boundaries.

Be confident in myself and care less what others think of me.

Never be afraid to ask questions

My labmate recommend writing down goals and trying to stick to them as opposed to going into meetings without them written down. This sometimes helps to keep on track

I've tried to make myself more visible in the community by presenting at every possible supergroup, department retreat, etc. to identify external mentors who can challenge my assumptions and suggest new experimental directions. I've also arranged external visits to other labs around the world in the same field, for the same purpose.

Deal with anything uncomfortable as quickly as possible. It's easy to want to wait it out or avoid, but the longer you wait, the worse that things will usually get.

Whenever possible, be direct and transparent about your goals and needs. If you find yourself in a situation where you cannot communicate with your mentor freely, be proactive about changing your situation, and get help from other resources that may be available to you.

Working with your PI

Me and my advisor have adopted a very direct set of communication styles to communicate what each of us needs. This can only happen because we've spent time building (and rebuilding) trust with each other that when one of has a concern, the other will make room to listen and actually try to understand where the concern is coming from and then work together to come to a plan of action. We take our IDP

quite seriously, and set aside a lot of time to prepare discussion. As part of that I share my responses directly with my advisor. I am comfortable sharing because I know my PI will take constructive feedback without getting angry, and will also be honest with me about what they think. I've also been to several workshop on "managing up" which have been helpful for me to figure out how to work with my PI to get things and support that will ultimately be helpful to me.

Start all meetings with a statement of what I expect to get out of the meeting and what considerations I had while organizing the meeting. I also include an outline of what I hope to discuss during the meeting.

- 1) Be explicit about what you want out of a situation and your own goals.
- 2) Have information and topics of discussion in mind when participating in one-on-one meetings so that you make good use of the time."

Over time I have developed a key set of guidelines that I found to be helpful in the mentorship I receive, regarding the type of comments and feedback I found most helpful, ways to provide suggestions that are actionable, and setting realistic timelines. In many cases, for example with timelines, I asked my advisor to go through some data analysis with me so they could get a good sense of the effort and time required, as well as provide feedback if they were aware of a way to optimize it.

Knowing my own personal and professional priorities helps me to advocate for what I need from my advisor, while also communicating clearly with my advisor about what areas I want feedback for growth and what areas I need support.

Understand the time constraints of faculty and adjust my behavior to fit with them (sending reminders, being proactive, preparing concise meetings)

Take specific questions and situations to my advisor for one on one meetings.

Whenever I think of a topic that I want to discuss with my PI I always make sure to write it down. This helps when planning for future meetings.

I will specifically ask for feedback about progress, presentations, and planning/timeframe

I learned to communicate my needs when I realized that my need were not met because they were not actively requested by my mentor

I have found asking for clear, written, expectations about one's role in the lab is something that helps clarify ways to go about mentoring/being mentored.

My advisor is very open and receptive to feedback. I've told them what does and does not work and they have always made the appropriate changes to better fit my needs.

- Take time to talk with my mentors (PI and postdoc) both formally and informally, asking questions when I'm confused or just want clarification.
- Reach out to either my PI or other informal mentors in the lab when I have questions/issues
- Often having to manage up, confirming schedules repetitively, being explicit about your timelines and reminding often
- I do a lot of what the department likes to call "managing up," wherein I specifically ask how I am doing and share my own goals and projected timelines with my advisor. I do find that I don't receive this kind of feedback unless I ask for it, so setting aside time to have IDP-style conversations is pretty important to me (and something I plan on doing more than once a year).
- I ask their opinion about certain mentoring topics and ask their advice about specific situations.
- Speak up and tell your advisor what is and isn't working for you. They won't know if you don't tell them.
- I always update my project progress on time, sometimes do more work than my mentor expected. I realized the negative data is also appreciated by my mentor.
- Having an agenda when meeting with my PI. Telling my PI when my career goals change and asking them to keep me in mind for related opportunities.
- What feedback am I looking for in this meeting? Am I asking for help directly with what I need help with, or just assuming that I'll get the help I need?
- Prepare for mentoring meetings, and take charge of those meetings when necessary to make sure you get what you need from them.
- I speak directly to my PI and inform them what I need. I also ask them about their expectations of me to make sure we are on the same page
- I set up meetings and inform my advisor of my progress.
- I schedule time with my advisor and specify the topic of the meeting several days in advance. I also try to be active in building other mentors outside academia.
- Make an effort to communicate your own goals to your advisor so they know what areas to help you with. (Don't make them guess what you need help with, you know yourself best so try to be your own advocate).
- Set up a regular cadence of meetings, at whatever frequency. The timetable is less important than the consistency which avoids the common trap of "not meeting until I

have more data". Less data can often be the most useful times to meet, but hard to convince yourself to make the time unless it is pre scheduled

Directly ask my mentor to meet on a weekly basis. Provide insight from previous research experiences on projects in the lab; this has resulted in my mentor referring to me on questions in this area.

Communicate via email without hesitation albeit professionally.

Communicate to my PI my specific mentorship needs and open a dialogue about how to adjust our communication/meetings to better reflect the mentorship that I feel I need from them.

Communicate about what mentoring style works best for you, letting them know your overall goals for your PhD and what you hope to get out of your graduate training, taking initiative to find opportunities that excite you and bringing them up to your PI, establishing a healthy balance between research and other commitments

Clear communication and speaking out about challenges.

Both asking for direct feedback from my advisor while also clearly communicating my needs

Being upfront and direct about mentorship. Although I realize that not everyone feels comfortable and confident in doing this.

Being persistent in bringing up what would be good for me as a trainee whenever I meet with my faculty mentor. Having examples, opportunities, or suggestions for things I want to pursue or see addressed in my mentoring is useful for providing concrete avenues for my faculty mentor and I to pursue.

Asking for help with grants/presentations, asking for recommendations of what conferences to attend, requesting my advisor mediate meetings with senior collaborators, scheduling frequent meetings

Always plan my conversations with my PI, structured around what I have done, my current model and the future plans.

Seek support from people beyond your PI

Talk to many people inside and outside lab and get feedback from them

Talk to the senior people in your lab when you encounter a mentorship challenge with your PI. They may have gone through the same thing or may have insights into how your PI thinks about certain situations that could help you navigate.

Learning how to manage upwards, and having other mentors inside and outside the lab.

Just start talking to people.

Reach out to other trainees, in the lab, and outside the lab, for scientific and emotional consultations

Seek out mentors from other labs

Subscribe to newsletters about (online) workshops from CAPD, handshake, EdX or NPA (national postdoctoral association). Looking through MyIDP from Science careers to get info on future career paths.

Participate in inclusion groups to network

Participate in department organizations to meet peers and seek out peer mentoring.

Get advice from many faculty and senior students

Get feedback from senior grad students and post docs, reach out to past PI, ask friends in industry,

I find it useful to chat with other members of the lab about their experiences and brainstorm ways to improve.

I am grown more comfortable reaching out to my labmates and other PIs for help.

Diversification is key. Don't rely just on your PI or even your committee for mentorship. No mentor can be perfect, and it is important to have many other people available you can go to that can best help you with different things.

There's a real chance that in order to build certain skills or get some things accomplished, you're going to have to go outside your PI. Talk to others and hear their opinions rather than assume what your PI has said is the best option for you and that they're omnipotent.