

MIT Biology Mentoring Competencies

This document contains a summary of competencies for mentors and mentees in nine areas. For further information, recommendations, and resources, please see the MIT Biology Mentoring web page.

Communication & Feedback	Professional Growth & Training	Training Environment
Setting expectations	Setting training goals	Establishing a positive training culture
Communication standards	Enabling trainee learning and growth	Instituting equitable group policies
Constructive assessment and feedback	Supporting professional development and career goals	Respecting trainees as individuals

Setting expectations

Mentor competencies	Mentor best practices	Mentee competencies
Set and clearly communicate expectations of your trainees, as well as your own commitments and limitations.	Communicate your expectations in writing and invite questions and discussion about them. Re-visit your lab expectations periodically to ensure they are aligned with your values and practices.	Review the expectations communicated by your mentor(s) and assess whether they align with your own expectations. Communicate regarding any questions or differences in a timely manner.

Communication standards

Mentor competencies	Mentor best practices	Mentee competencies
Provide direct, honest, and respectful communication. Be willing to have difficult conversations to address differences or problems.	Accommodate different communication and work styles and implement strategies to improve communication. Practice active listening in conversations with mentees.	Provide direct, honest, and respectful communication. Be willing to have difficult conversations to address differences or problems.
Establish expectations for meeting frequency and format (and meet them).	Adjust the frequency and modality of meetings with mentees as needed.	Discuss with your mentor if the format/frequency of meetings is difficult or problematic for you.
Establish what constitutes timely communication for you; respond to messages and requests in this manner.	Acknowledge work-life boundaries. Discuss work-life integration and strategies with your mentees.	Understand expectations for timely communication and respond to messages and requests in accordance with these expectations.

Maintain a professional and courteous tone in conversations and messages/emails.		Maintain a professional and courteous tone in conversations and messages/emails.
Provide contingencies in cases of sabbatical/leave/travel.	Proactively check in with trainees, especially if you are not available over some period.	Communicate your schedule and constraints to your mentor.

Constructive assessment and feedback

Mentor competencies	Mentor best practices	Mentee competencies
Assess mentee capabilities in core scientific areas. Provide specific and actionable feedback to guide growth.	Utilize multiple approaches to assess mentees' understanding of research concepts. Provide a balance of affirming and constructive feedback. Create a lab culture that encourages constructive feedback from all members. Ask mentees how they best receive feedback and consider individual approaches. Align feedback to mentees' goals.	Be receptive to constructive feedback. Communicate the types of feedback that would be helpful to you at different stages of your work and training (including appreciation, evaluation, and coaching feedback).
Provide opportunities for trainee input and feedback.	Work with mentees to get their input about mentorship; provide multiple ways to provide feedback. Communicate that you value feedback; act on what you learn to design changes in your approaches.	Maintain a growth mindset about your mentoring relationship(s). Reflect on whether there are areas for feedback, discussion, or compromise that you would like to communicate and, if needed, seek help about how to broach these topics.
Provide positive reinforcement/ congratulate a job well done.	Recognize, acknowledge, support, and celebrate the whole individual and their accomplishments.	Tell your mentor when they provide mentorship that helps you.

Setting training goals

Mentor competencies	Mentor best practices	Mentee competencies
Discuss training goals and priorities with your mentees.	Re-visit training goals regularly with your mentee (e.g., annually, or more often if needed).	Discuss training goals with your mentor.
Provide career development support by discussing mentees' professional goals.	Support diverse career directions and outcomes. Offer suggestions, and/or encourage mentee involvement in suitable career exploration activities.	Articulate your career goals, the paths you are considering, and any changes in these directions to your mentor.

Enabling trainee learning and growth

Mentor competencies	Mentor best practices	Mentee competencies
Discuss with your mentees how you can best support their training and ability to succeed.	Identify and offer opportunities for training, information gathering, collaboration, and networking.	Self-assess your capabilities and determine areas in which you need support. Discuss a plan for filling gaps with your mentor. Advocate constructively for your training needs.
Conduct an effective onboarding process. E.g., make sure students have access to training resources and equipment.	Promote a lab dynamic that integrates newcomers into the group and helps orient them in the lab/department/institute.	Seek support from your mentor and others if you are asked to do something that you don't know how to approach.
Enable/support trainee learning and growth in experimental design, execution, troubleshooting, responsible research conduct, and mastering the literature.	Foster mentee research interests, creativity, and independence.	Assume responsibility, shared with your mentor, for intellectual ownership of your project and research directions.
Enable/support trainee growth in scientific writing and oral presentations.	Help trainees identify and attend meetings where they can present their work.	Take advantage of opportunities to practice and get feedback on your communication skills.
Enable/support trainee growth in working with others.	As appropriate for their project and goals, encourage mentees to collaborate, develop relationships beyond your lab, and mentor others (e.g., a UROP or MSRP student).	Take advantage of opportunities to learn from, work with, or mentor others.
Communicate the strengths and limits of what you can offer as a mentor.	Connect mentees with resources for their research and/or professional development beyond your lab.	Recognize the limits and strengths of what your mentor can offer, and work with your mentor (and others) to identify external training or sources of support, as necessary.

Supporting professional development and career goals

Mentor competencies	Mentor best practices	Mentee competencies
Support your mentee in formulating a career development plan that includes activities to foster professional growth.	Support diverse career directions and outcomes. Suggest and encourage mentee involvement in suitable career exploration activities. Introduce mentees to others in your network or otherwise help them make connections.	Take a proactive role in your career development. Seek opportunities to advance your professional development and discuss them with your mentor.

Establishing a positive training culture

Mentor competencies	Mentor best practices	Mentee competencies
Create an inclusive and welcoming environment to work and conduct research free from harassment, discrimination, and bullying - from both the PI and other lab members.	Be mindful of unconscious biases when interacting with trainees. Recognize that individual trainees face different challenges, based on their background or previous experiences.	Contribute to an inclusive and welcoming work environment and conduct research free from harassment, discrimination, and bullying.
Create an environment where people can express ideas freely and openly.	Practice active listening and manage discussions to ensure that everyone can contribute.	Contribute to an environment where people can express ideas freely and openly. Voice your ideas and opinions in a respectful manner.
Foster a lab environment of constructive behavior and mutual support.	Discuss with your mentees steps that you can take to make your environment more conducive to everyone doing their best work.	Contribute to a lab environment of constructive behavior and mutual support.
Create a framework to address lab conflicts, such as scientific, authorship, or behavioral challenges.	Help mentees learn and practice negotiation and conflict resolution skills.	Understand what is expected of you in terms of managing lab or personnel conflicts. Seek advice/support for addressing problems when needed (see Resources).

Instituting equitable group policies

Mentor competencies	Mentee competencies
Establish equitable norms and standards for lab citizenship.	Be a good lab citizen.

Respecting trainees as individuals

Mentor competencies	Mentee competencies
Value mentee health (including mental health) and well-being; refer students to professionals when needed.	Communicate with someone (see Resources) if health issues are interfering with your work or your ability to meet expectations.
Respond in an understanding way and provide flexibility when trainees must attend to personal matters. Connect mentees with support resources if they are struggling.	Let your advisor know if personal issues are interfering with your ability to meet expectations.
Use the name and pronouns that a mentee tells you to use.	Communicate the name and pronouns that you would like to be called by and inform your mentor of changes.