Community Feedback

Strategic Plan for Graduate Advising and Mentoring at MIT

June 16, 2022

Overview

On April 27, 2022, the <u>draft Strategic Plan for Graduate Advising and Mentoring</u> was released to the MIT community for review and feedback. Four **Goals**, listed below, were recommended in the Plan that align with <u>MIT's Values</u>, enable the Mission, and delineate the Committee's <u>Vision</u> for graduate student advising and mentoring at MIT.

- Goal 1 Ensure an Institutional Culture of Excellence in Advising and Mentoring
- Goal 2 Enhance Knowledge and Skills in Effective Advising and Mentorship
- Goal 3 Incentivize and Reinforce Individual Excellence in Advising and Mentoring
- Goal 4 Address Negative Advising and Mentoring Experiences

We thank the MIT community for their feedback. We received many constructive recommendations that have been paraphrased and summarized below. Highlights of these comments as it pertains to the respective Goals are the following:

Dual or multiple mentors: It was brought up by many in the community that having a second advisor, co-advisor, or mentor who is not as directly or highly vested in the research outcome of the graduate student can provide students with an additional and helpful perspective, and support. We do hope to encourage those Departments that are able to encourage structures such as (i) a secondary or academic advisor who may have a different relationship with the student, (ii) thesis committee structures with a chair other than the thesis supervisor, or (iii) advising approaches that leverage more than one key advisor. It is important to recognize that such structures require significant additional time from faculty, which may not be implementable in every Department. The committee did include the concept of encouraging and providing guidance to students to establish a network of mentors, regardless of the mentoring styles of their Department or program. This concept is one that would be embraced and promoted by the Center, and can also be encouraged by Schools through the provision of support for peer-mentoring programs, encouragement to DLCs to adopt amenable models of shared mentorship, and training for students on building mentoring networks.

DLC assessments and accountability: There were several comments regarding the need for DLCs and their Department Heads to be accountable for mentoring and advising issues that are persistent or problematic within a unit. In the proposed plan, regular assessments that range from Institute-wide anonymous surveys to metrics on graduation success rates, rates of advisor transition for advising issues, and other metrics described in Goal 3 would be shared with the Dean and included as part of the overall assessment of Departments. The most critical aspect will be the engagement of Visiting Committees in DLC evaluations on mentoring and advising, which would enable longer term measures of the progress within a Department. Equally important will be the provision of tools and mechanisms for intervention and support of DLC Heads so that they are able to take effective action. Finally, there are currently no metrics that unit Heads have been able to use to determine when early intervention is needed; thus we anticipate that the placement of regular and routine feedback that is shared with the DLC Head will lead to more frequent action. It is the ability to implement multiple modes of feedback, combined with support and monitoring on the DLC, School and Institute level, that will drive longer term cultural change and help to address persistent issues that may exist in some DLCs.

How to define "outstanding mentoring and advising": From community discussions, there is a clear need to outline what is meant by excellence in mentoring. It is important to acknowledge that there can be many different approaches and styles to mentoring that recognize the unique relationship between individuals; however, there are some defining principles that have been

outlined in the NASEM report on mentoring, as referenced in this report. These general principles can be referenced and outlined by the Center and highlighted within Schools and DLCs as a general framework that we use to build mentoring relationships. These concepts would also be key to questions used in surveys and modes of feedback and assessment. The most fundamental expectations of advisors may also be a topic of discussion within DLCs or Schools; however, because the role of the advisor differs across Schools and Centers, these are discussions that may be most effective on the School level.

Safe and effective reporting processes: There were a number of comments affirming the need for the proposed reporting system to be safe for graduate students. A great deal of consideration has and will continue to go into its design so that it safeguards students and protects against retaliation. It is also important to ensure a fair process that provides the mentor an opportunity to respond and that fosters resolution in cases in which both parties wish to address issues and concerns.

In closing, the draft Plan and the recommendations from the Community will be provided to an implementation team whose membership is yet to be determined. As they continue to refine the Plan further, we would also recommend that they engage the community for additional feedback. In the meantime, we continue to welcome your input on our <u>website</u>.

Ensure an Institutional Culture of Excellence in Advising and Mentoring

Objective 1.1

Define excellence and communicate the definitions throughout MIT.

Strategy 1.1.1

Determine the attributes that define a culture of excellence in graduate advising and mentoring.

Strategy 1.1.2

Communicate the attributes that define a culture of excellence in graduate advising and mentoring.

Summary of Responses from the Community

- Mentoring and advising is a deeply personal, human relationship between two (or more) people and thus "defining excellence and communicating the definitions throughout MIT" may not be useful in terms of improving mentoring.
- Given that many may disagree about the qualities of a good mentor, our definition of a culture of excellence in mentoring and advising should begin with the NASEM definition and the competencies defined by CIMER.
- The Institute (or perhaps School or DLC) should define a set of basic professional expectations of graduate students.
- The table of competencies and expectations in Appendix A could be interpreted as treating the mentor and mentee as equals, which could unintentionally overlook the differences in power and responsibility in these relationships.
- The use of mentoring compacts and Individual Development Plans should be included in Appendix A.

Objective 1.2

Provide Institutional resources designed to foster excellence.

Strategy 1.2.1

Develop a Center that provides resources to faculty, thesis supervisors and graduate students to support excellence in advising and mentoring.

- The proposed Center should have a faculty director to have some credibility with the faculty.
- The establishment of a resource center and training for faculty and students may not be effective if its use is optional.
- It will be challenging, but critical, to staff the Center with people who deeply understand the graduate mentoring relationship and the MIT promotion and tenure process.
- The resources available from the Center should include practical, concrete, operational support to DLC Heads in creating and sustaining norms and policies.
- It is important to consider how the Centre will interface with external resources like consulting companies that have already been used at MIT such as for 360 reviews.
- The Center should amplify the work of the Teaching and Learning Lab which supports wellbeing in academics.

Objective 1.3

Incentivize excellence throughout the organization.

Strategy 1.3.1

Incentivize and reward DLCs that collectively excel in graduate advising and mentoring.

Strategy 1.3.2

Identify and highlight advising and mentoring best practices that have been demonstrated in the Schools, the College, and the DLCs.

Summary of Responses from the Community

- The awarding of graduate fellowships to DLCs should be tied to outcomes (i.e., retention and graduation with a PhD). Reward those units that show excellence by awarding them resources that faculty value.
- It would be beneficial to have more robust incentives, not simply funding for further recruitment efforts.
- Strategy 1.3.2 could be tied to C2C efforts and recipients.
- Incentivizing and rewarding DLCs that collectively excel in graduate advising and mentoring may present an inequity for units like the Center for Computational Science and Engineering (CCSE) which does not have faculty appointments. CCSE can set policies, procedures and requirements for graduate students but not so much for their advisors, faculty / researchers who all have appointments elsewhere.

Objective 1.4

Assess MIT's progress in advising and mentoring on an ongoing basis.

Strategy 1.4.1

Conduct assessments to identify Institute, School, College, and DLC trends in graduate advising and mentoring.

Strategy 1.4.2

Review and discuss with appropriate protections the results of Strategy 1.4.1.

- Surveys do not reveal many problems and put the onus on the target population. Interviews conducted by outside consultants (not MIT) are an alternative option.
- Assessment data could include PhD completion curves (the fraction of each cohort that completes the PhD after N years) and changes of advisors and departures. These should be monitored by some central office with disaggregation by department, gender, race/ethnicity (including international as a category), and possibly other identity markers.
- Departmental self-assessment should be included. This should be part of the Visiting Committee cycle, with departments encouraged or even required to complete and submit a self-assessment rubric such as Appendix X of the 2018 national report on <u>Diversity and</u> <u>Inclusion in Astronomy Graduate Education</u>. The department's self-assessment should be reviewed by graduate students who may present an alternative scoring as they may disagree with the department leadership.
- Visiting Committees should be provided degree completion curves, trends on frequency of complaints, etc.

Enhance Knowledge and Skills in Effective Advising and Mentoring

Objective 2.1

Provide faculty and thesis supervisors with evidence-based resources that support excellence in advising and mentoring.

Strategy 2.1.1

Provide professional development workshops for faculty and thesis supervisors.

Strategy 2.1.2

Increase awareness of resources that support faculty and thesis supervisors in their roles as graduate advisors and mentors.

Strategy 2.1.3

Establish programs and provide discussion opportunities to share experiences and best practices.

Summary of Responses from the Community

- There is a particular need for helping faculty foster a sense of belonging for students with historically and currently marginalized identities, especially when faculty don't share these identities.
- Mental health of graduate students is an important consideration. For example, faculty need resources and support so that they may know how to best help and communicate with students who may be facing mental health challenges.
- Information on bullying and abuse should be included in workshops for faculty, framed around their own past personal experiences of graduate school.
- Even well-intentioned faculty members and thesis supervisors don't necessarily remember what it is like to be a graduate student. Scenarios and case studies for them to review common issues would be helpful.
- It is crucial that faculty understand the specific challenges of non-native English speaking graduate students and help them get the support they need.

Objective 2.2

Provide graduate students with evidence-based resources that enable them to establish and maintain effective mentorships.

Strategy 2.2.1

Provide information to graduate students on how to establish a mentoring network.

Strategy 2.2.2

Provide workshops and information to graduate students on how to excel as mentees.

Strategy 2.2.3

Provide workshops and information to graduate students on how to excel as mentors.

Strategy 2.2.4

Increase awareness of resources for the professional development of graduate students.

- For graduate students who are marginalized group members, having access to a network of mentors and to group mentoring (including peer- and near-peer mentoring) is important.
- Graduate students (and also advisors) would benefit from strategies that involve explicit executive function skill building as well as <u>metacognitive skill development</u>. These skills can help students and advisors communicate better, plan for and prioritize goals, regulate emotions, increase working memory capacity (or conversely, acknowledge its limitations), process complex information, be aware of one's strengths and challenges and so much more, while also normalizing receiving training in these topics and scaffolding weaker areas in all individuals, regardless of gender, cultural upbringing or neurotype.
- It may be worth exploring the ideology and methodology of <u>Collaborative Problem Solving</u>, which builds relationships and executive function skills in the context of real-life situations, as applicable to advisee/advisor relationships.

Incentivize and Reinforce Individual Excellence in Advising and Mentoring

Objective 3.1

Include consideration of advising and mentoring plans in the hiring of faculty.

Strategy 3.1.1

Encourage graduate advising and mentoring statements in applications for faculty positions.

Strategy 3.1.2

Provide best practices to search committees for evaluating the graduate advising and mentoring potential of faculty candidates.

Strategy 3.1.3

Discuss graduate advising and mentoring with faculty candidates during their interviews.

Summary of Responses from the Community

- The encouragement of graduate advising and mentoring statements in applications for faculty positions needs to be thought through carefully. We already ask for a research statement, a teaching statement and a DEI statement. It adds extra work to the applicant, extra work for the committee, but won't actually materially affect hiring.
- An alternative to the request for the advising and mentoring statement would be to have somebody focused on advising & DEI issues to interview candidates in person (e.g., one representative for each School) and to advise the hiring committees.

Objective 3.2

Use structured feedback systems both to evaluate the mentorship competencies of faculty and thesis supervisors and foster continuous improvement.

Strategy 3.2.1

Implement two-way feedback mechanisms for the purpose of continuous improvement.

Strategy 3.2.2

Establish annual assessments to evaluate the advising and mentoring experiences of all graduate students.

Strategy 3.2.3

Conduct exit surveys of graduate students.

Strategy 3.2.4

Include graduate student feedback in annual merit performance review and promotion and tenure processes.

- An issue with the two-way feedback for continuous improvement is how to ensure honest feedback is obtained from graduate students. If the average group size is small then anonymity cannot be certain. One possible solution would be to include feedback from former graduate students, current and former postdocs, and undergraduate group members.
- Graduate students need additional ways to give feedback to PIs that is normalized and in a less high-stakes situation.
- Students who transfer labs should be captured in the surveys.
- Implementing graduate student feedback in the context of unionization is wrong. More specifically, it is important to evaluate the practicality and reality of the proposed measures in the new context of a unionized graduate worker as opposed to a student. This would put young faculty in a particular disadvantage since they do not have an easy and quick mechanism to evaluate and verify the quality and amount of work delivered by a graduate student.
- Graduate student feedback in promotion and tenure should be curated by the Department Head and care must be taken to get representative voices.
- The things that MIT can/should do to hold senior faculty accountable for mentorship needs to be considered.
- The use of *genuine* 360 reviews should be considered. It would be beneficial to create institutional avenues for feedback and review of faculty for their students as well as for students of their faculty.
- Surveys do not reveal many problems and put the onus on the target population. Interviews conducted by outside consultants (not MIT) are an alternative option.
- There is quantitative data that is quite valuable that should be monitored at the Department Level for individual faculty (using their complete history of graduate supervision). This includes PhD completion curves (the fraction of each cohort that completes the PhD after N years) and changes of advisor and departures. It's straightforward to identify statistically significant outliers, and this would provide important background for qualitative interviews.
- Exit interviews are too late, and often departing students will not grant them, sometimes because of a lack of trust. An alternative would be for external consultants to conduct interviews and work with the DLC head to respond to findings.
- More clarity is needed on how to address long term persistent issues in a number of DLCs.
- What are the metrics for "outstanding mentoring and advising" in MIT P&P 3.2 (Tenure Process")? If they don't exist and are not created, then accountability for 3.2.4 seems impossible.
- It is important to explicitly state how graduate advising and mentoring are weighted/factored into promotion and tenure reviews.

• The content of the assessments should be strongly aligned with the competencies defined in Goal 1 and the workshops provided as part of Goal 2. Those involved in defining those competencies and workshops should participate in the development of the assessment frameworks.

Objective 3.3

Incentivize and recognize faculty and thesis supervisors for exceptional advising and mentoring.

Strategy 3.3.1

Incentivize faculty and thesis supervisors to be proactive in amplifying their advising and mentoring practices.

Strategy 3.3.2

Create an Institute-level award that recognizes excellence in mentoring and advising.

Strategy 3.3.3

Highlight demonstrated excellence in advising and mentoring throughout the Institute.

Summary of Responses from the Community

• Consider expanding the MacVicar Faculty Fellowships or instituting a parallel program.

Address Negative Advising and Mentoring Experiences

Objective 4.1

Enhance support for graduate students experiencing negative advising and mentoring situations.

Strategy 4.1.1

Identify a centralized Advising and Mentoring Grievance Response Team.

Strategy 4.1.2

Raise awareness of resources whose aims include fostering reconciliation (when possible and appropriate) between graduate students and faculty or thesis supervisors.

Strategy 4.1.3

Raise awareness of the options available to graduate students for formal and informal reporting of advising and mentoring grievances.

Strategy 4.1.4

Increase awareness of Potential Outcomes and Sanctions and MIT's non-retaliation policies.

Strategy 4.1.5

Amplify awareness of the <u>Guaranteed Transitional Support Program</u> for graduate students who wish to change research advisors or groups.

Strategy 4.1.6

Provide DLC Heads with information and resources for addressing advising and mentoring grievances.

Summary of Responses from the Community

• The use of facilitators for student-advisor conversations could be helpful to take meeting notes and facilitate follow-ups and action items, pre-empt manipulation or even unintentional coercion, help a student advocate for themselves in terms of work load, and provide access to resources, or work environment etc.

- Clearer intervention mechanisms would be helpful and should be normalized. For example, the Ombuds Office could offer office hours for mediation.
- The privacy policies under which the Advising and Mentoring Grievance Response Team operate will have to be very clear to all.
- The administration should encourage faculty to seek out support when they aren't sure how to handle a situation.
- It isn't clear how the Advising and Mentoring Grievance Response Team differs from the GradSupport team.

Objective 4.2

Enhance existing reporting processes, intervention mechanisms, corrective measures, and protections.

Strategy 4.2.1

Establish options for informal and formal reporting of an advising and mentoring grievance.

Strategy 4.2.2

Implement resolution practices and enforce retaliation policies related to advising and mentoring grievances.

Strategy 4.2.3

Enhance the EthicsPoint Hotline for graduate students who wish to report an advising and mentoring grievance using this mechanism.

- Grievance procedures should be explicit about ways that students can report issues in a research group that is not their own.
- The notion of support should be separated from the notion of grievance. We need a different group of people who are here just to support the students and who are clearly separated from the group of people who review and prosecute formal grievances. This could dramatically increase the willingness of students to talk to someone.
- There should be a mechanism for faculty who might have reports against them to be able to refute unsubstantiated claims.
- Addressing of advising and mentoring grievances should be part of job description of DLC Heads and should be evaluated for their success in this via their own annual performance review by their Dean.
- DLC Heads should be offered training on how to give feedback in cases of poor mentoring or other concerns.
- An explicit process for removing abusive advisors is needed.
- Current sanctions are not effective or consistently used. This Plan does not currently solve that problem. Stronger sanctions are needed for those who are 'bad mentors'.

- It will be important to manage information regarding grievances involving junior faculty with
 respect to the promotion and tenure process more specifically how to appropriately share
 information between the promotion process and the remedial process, etc.
- There needs to be a mechanism for students to appeal to a Deans Office if the DLC Head does not respond appropriately to the grievance.
- The exact pathway, timeline and resolution options need to be presented to students prior to the formal reporting of a grievance.
- The confidentiality of the reporting mechanisms should be made clear to students.
- It is very important to communicate that retaliation is not allowed. If students knew that DLCs took this very seriously, then this would lower the fear among students.
- Whistleblower protections are needed for students and those protections should be communicated.
- We need to ensure the well-being of students by helping them get settled and feel safe.

Other Comments

- How this plan can be extended to other groups such as postdocs and staff should be addressed.
- It is necessary to consider how mentoring is different across different programs and how the Strategies and Tactics would be tailored accordingly.
- Culturally responsive advising should be addressed in this plan to account for experiences of graduate students who are URM or first-generation college students.
- DEI should be addressed in the Plan.
- The report does not indicate a commitment from MIT leaders to addressing issues, etc.
- The report should better describe the role of DLC Heads.
- There needs to be a much stronger role played by the senior administration and MIT's visiting committees, who provide accountability for DLCs.
- Leadership (President, Provost, Chancellor, Vice Chancellor, Deans, and DLC Heads) are part of the essential infrastructure and should be actively engaged in communicating values, norms, and practices.
- Decentralization of accountability seems like a potential impediment to this Plan (i.e., up to each DLC if/what to do/implement).
- How advisor/student relationships are established should be addressed so that students have time to understand the process, MIT's culture, and the difference between advisors and research laboratories before having to make a multi-year commitment. Options could include:
 - Rotations in the first year of the PhD.
 - Provide funding to the student for the first year (i.e., funding that is not tied to a certain faculty member).
- We should consider changing the nature of the advising and mentoring relationships at MIT such as:
 - Limiting the size of a group to ensure the advisor has sufficient time to mentor his/her graduate students.
 - o Including an unaffiliated staff/faculty member on every graduate committee.
 - Assigning each doctoral student a secondary research advisor/mentor.
- There needs to be a discussion of the criteria for obtaining a PhD. The vagueness of our criteria leads to many undesirable things, including unnecessary graduate student stress, suppressed student ambition and motivation, and inaccurate career expectations. Discussing PhD criteria should probably be undertaken at the department level, not higher.
- There needs to be a clear process or policy regarding graduate students being 'fired' from labs.