Provisional Funding to Accommodate PhD Research Advisor Transitions in MIT AeroAstro

Maryanne Kirkbride, MindHandHeart
Hamsa Balakrishnan, Department of Aeronautics and Astronautics
Massachusetts Institute of Technology
Background

• Relationship between a research advisor and their graduate students is one of the most important mentoring relationships in academia
  • Sets the tone of the graduate student experience
  • Can/does lead to career-long collaborations
  • Must recognize the power-differential between advisor and student
    • Compounded by the coupling of employment (research assistantship) and mentoring/training
    • Often more complicated for under-represented groups, and international graduate students

• MIT AeroAstro’s Strategic Plan for Diversity, Inclusion & Innovation (2018) recommended (with references to the NASEM report):
  “...an effort to implement power-diffusion mechanisms (including the use of departmental funding) in order to reduce the risk of harassment... Doing so will also alleviate some of the concerns raised in graduate student surveys around the difficulty of changing labs or research advisers due to the coupling of advisors and funding.”
Policy

• Every PhD candidate in the department is eligible for up to one semester of provisional funding from the department during the course of their enrollment in the program, if they believe it necessary to change research advisors

• The purpose of this provisional funding is to alleviate the stress of funding uncertainty on students who are seeking a new research project and a new advisor

• Policy was announced and implemented in February 2019 (at the start of the Spring 2019 semester)
Some remarks

• *All* PhD students are eligible
  • Could want to change for any reason (e.g., a change in research interests), not just harassment

• We do not require that the student provide the reason for changing advisors
  • “Reason for moving (to the extent that you are willing to share it)”

• Policy seems to be a safety net, encouraging students to have conversations with other faculty if they feel the need to change advisors
  • Anecdotally, some of these conversations lead to research advisor changes without requiring departmental funding
Practical challenges

• Can potentially be very resource-intensive for the program
  • E.g., say a program has ~65 new PhD students a year, and the average duration in the program is 11 semesters.
    • If every student changes changes advisors once (worst-case), it is equivalent to ~33 students/semester of departmental support at any time [very expensive!]
    • However, worth noting that this level of churn is indicative of other, very serious, issues
    • Estimate is most likely conservative (e.g., most advisor-student matches are robust, there are students on fellowships, etc.)

• Demand uncertainty is a challenge
  • One does not have an estimate of how many students would require the provisional funding until one actually implements the policy
    • Need a “guess” of resources to set aside (at least initially), and hope for the best
    • Resources set aside/used for this ➔ less resources for something else (it’s a choice)

• We believe that the upside (in terms of climate/peace of mind) far outweighs the potential downside!
How could we improve on this?

• Students would like this policy extended to include Masters-level candidates
  • Resource implications
  • Time-scale implications (since the Master’s program is much shorter)
  • Potential to be misused

• Have academic advisors/mentors who are different from research advisors
  • The thesis committee is supposed to currently play this role
  • Faculty bandwidth resource implications

• Need more than just $$ (advice/guidance/counselling) to navigate the transition between groups