

## cxTitle: Increasing Graduate Student Diversity with Headhunters

### Categories of the reform idea (keywords):

Diversity (main), recruitment, admissions, graduate students, inclusion

### What is the problem to be solved?

Current data for our department<sup>1</sup> (see Fig. 1) shows that the total number and fraction of URM graduate students, postdocs and faculty is incongruent with the demographics of our society in the U.S. It is well known that representation at these levels is key to improving inclusion in the department as well. However, taking Black community members as the focus, other data (not shown) also shows that we already admit Black graduate students at a significantly higher rate than non-URMs. Yet and still, Black graduate students make up about the same fraction of our student population as they did 10 years ago (data not shown), which seems to stem from a lower yield (i.e., of the Black students admitted a smaller fraction than non-URMs actually choose to come to our department). Thus, the problem to be solved in this idea submission is simply to increase the number of Black graduate students, postdocs and faculty by increasing the number of applications received and the associated yield.

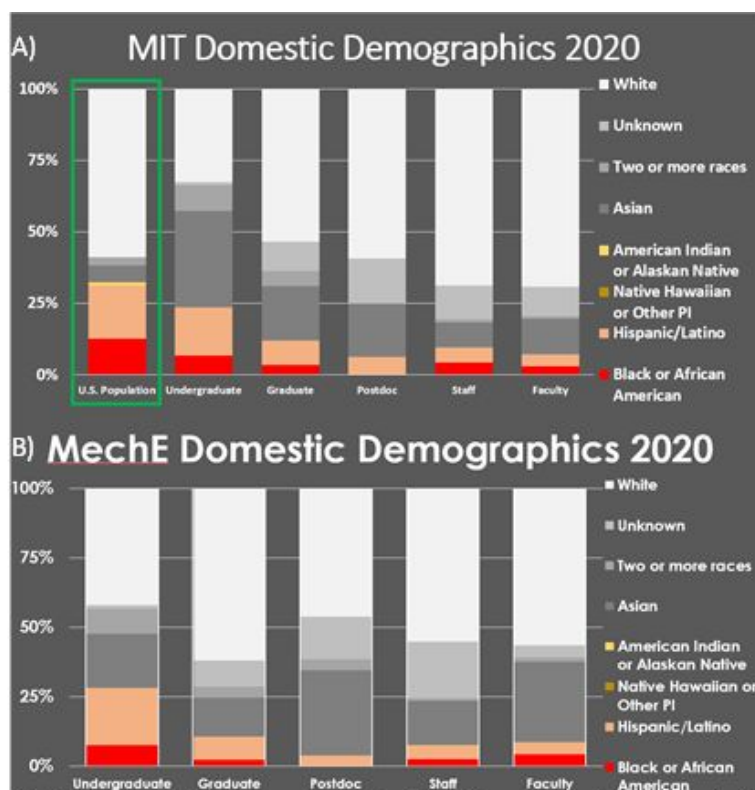


FIG 1 | Ethnic/racial demographics for A) MIT and B) the Department of Mechanical Engineering at MIT. The leftmost bar in A) shows the proportions of each group in the greater U.S. population, and the red bars in each plot show that the Black or African American proportion is substantially smaller than the U.S. population in all cases.

### Proposed reform:

MIT has a unique position amongst other schools, as it is not only widely regarded as the #1 institution in the U.S., for science and engineering, but it is also considered the #1 university in the world by some accounts. MIT's reputation as "the best" can therefore be used to recruit top talent from underrepresented groups, and the central hypothesis underpinning this proposed reform is that excellent candidates exist, but somehow are not applying. By comparison, universities with top rated sports programs shamelessly head hunt and go out and search for

top talent, and employ people to do so. When such talent is identified, they then offer gifts, and perks to try and attract such talent to the school. Here, we propose to adopt a similar model for recruiting top URM talent, with a specific focus on Black graduate students and postdocs in the first 2-3 years, and gradually increasing efforts on Black faculty in years 2-5. The reason for considering staggering the effort is rooted in the hopes that some of the Black graduate students and postdocs will naturally become candidates of interest for faculty positions, and can even be groomed/mentored towards assuming such a role – just as college sports players are groomed to play in professional sports leagues.

We propose that a group of ~ 10 headhunters should be employed, who have deep connections and relationships with URM dominated schools and potential talent pools (e.g., HBCUs). The head hunters should be gathered together for several strategic planning meetings early in the spring semester, preceding the recruitment season in the summer and early fall. Travel costs for head hunters should be covered and a small yet incentivizing salary of ~\$5-10K should be provided for each head hunter. The main incentive, however, should reside with getting Black undergraduates to apply (e.g., \$50/applicant), and a major bonus of (\$20K) should be given for any yielded applicants. Thus, with approximately 10 headhunters, yielding a total of ~6-7 black graduate students each year, the total budget for this effort would be ~ \$350K. If such yield can become consistent, over time the reward for finding top candidates can be gradually lowered, and in 5 years, when a first cohort is likely graduating, the total Black graduate student population could potentially be increased from the current ~ 5, closer to 30-40. Reaching a Black graduate student population of 30-40 students in MechE would likely reach the critical mass needed to see a step change in the Black graduate student experience of community and inclusion. It would also approach the national demographics, whereby Black people comprise ~ 14% of the population and 14% of the domestic graduate population in MechE currently would translate to about 42 students.

**Metrics to track:**

- Graduate student application rates for Black candidates
- Number of Black postdocs
- Faculty application rates for Black candidates
- Number of Black faculty candidates interviewed/hired
- Number of applications associated with the efforts of headhunters (can be flagged by the head hunters providing a list of students they convinced to apply – i.e., for grad, postdocs and faculty)
- Black graduate student and postdoc yield
- Head hunter feedback based on their searches

### **Implementation strategy:**

- This effort should be executed with the DCEO in a supervisory role (i.e., head hunters report to the DCEO), with input and in collaboration from the MechE graduate admissions committee, faculty search committee, OGE, OME and the undergraduate admissions office.
- In the initial years, to help the head hunters identify ideal candidates, the graduate admissions committee should be positioned and prepared to provide early reviews and quick feedback on recruited applicants.
- The head hunters should also recruit sophomores and juniors for the MSRP.
- This initiative should be implemented for an initial 5 year probationary period, with annual review. After 5 years, an evaluation based on the aforementioned metrics should be done to determine if the effort is successful and should be continued.

### **Cost/Resource Estimates:**

- Current black graduate student applications are less than 80/yr. If the headhunters increase this by 220, the cost (\$50 compensation per applicant) would be \$11K total.
- If the headhunters yield 7 black graduate students each year, the cost of paying the bonuses would be \$140K. Here, it should be emphasized that the \$20K bonuses would be stretched over several important progressive milestones associated with the student's matriculation, which will vest the recruiters into the student's success. Thus, the bonus could be staged as follows: [1] \$5K upon enrollment; [2] \$5K upon successful completion of 2nd year in good academic standing and transition to the Ph.D. program; [3] \$5K upon successful passing of Ph.D. qualifying exams, and [4] \$5K upon successful graduation.
- The nominal base salary for 10 head hunters would be ~ \$50-100K
- Travel costs are estimated ~ \$100K (\$10K each)
- The total cost is estimated ~ \$350K

### **Values targeted:**

Increasing diversity.

### **References**

<sup>1</sup>Data taken from institute research: <https://ir.mit.edu/diversity-dashboard>