

DIB GOALS AND RECOMMENDATIONS, EXCERPTED FROM

Report of the Committee to Visit the Department of Earth and Planetary Sciences Harvard University Spring 2020

VC recommendations for departmental or institutional action.

Recruitment and Retention:

- Both the Division of Science and the School of Engineering and Applied Sciences need formal and sustained mechanisms for increasing inclusive excellence in new faculty hires. Ideally these should be multi-year and widely publicized efforts. It was the VC's impression that [current mechanisms are limited to] informal... efforts.
- Recruitment and retention of women faculty and postdoctoral scholars: Better support is needed for child care – many commented that the costs of child care are too high at Harvard. This is a serious issue for women at nearly all career stages. Clearly it transcends EPS, but it is critical... Harvard should consider reducing costs for child care for early-career scientists, including Ph.D. students and postdoctoral scholars. Also, a lactation room within the department (not in a separate building) is essential for early-career women scientists.

Engagement of URM Students:

- Systematic engagement of undergraduate URMs on campus: Greater engagement by EPS of undergraduate URMs already on campus could be achieved by co-sponsoring field trips, summer sessions, and summer scholarship programs directly with existing organizations that support URMs and URM STEM on campus. Highlighting the close-knit community, rigorous mentoring, and high levels of student satisfaction among the majors would be strong selling points for incoming students.... [The VC suggests] early and repeated interactions during freshman and sophomore years, when students are still defining their field of study... Current levels of engagement appear inadequate.

DIB Committee Structure and Activities; Graduate Student Issues:

- Faculty members of the DIB Committee in EPS should have short-term, rotating appointments to enable a broader set of interactions and outcomes.
- [The DIB Committee needs a] solid budget to support their initiatives.
- Develop a consistent set of department-wide work expectations for Ph.D. students and postdoctoral scholars: [Documents] should be developed that describes expectations for productivity, work hours, attending group and department seminars and events, conference attendance, teaching, and outreach.
- Establish a [code of conduct] ...and steps by which the Chair and Dean can address failures to adhere to this policy.

[The following excerpts are quoted directly and relay the basis for this list of recommendations.]

- The diversity of EPS, especially the proportion of faculty, staff, and students from underrepresented groups, is particularly low. For a variety of reasons, the geosciences are the least diverse of the science, technology, engineering, and mathematics (STEM) fields nationwide, so the problem is not Harvard's alone.
- The VC commends EPS for significant strides towards diversity and inclusion over the last several years, including attaining a 50:50 ratio of female/male students and increasing the diversity of institutions from which graduate students are admitted. The establishment of the EPS Diversity, Inclusion, and Belonging (DIB) Committee is also a major milestone. However, much more work is needed towards inclusion and diversity in EPS. On increasing diversity, EPS needs to focus on recruiting underrepresented minorities and international students.
- A concerted effort is further needed to increase the diversity of the graduate student body and to provide additional support for underrepresented minority students. As a discovery concentration, the EPS undergraduate program needs to continue and expand its outreach to the more diverse Harvard undergraduate community. Impediments to recruitment and retention of women and URMs need to be addressed...[and the] proportions of both underrepresented minorities (URMs) and international students lags significantly behind those in the Faculty of Arts and Sciences overall.
- ...there are several areas for improvement, including diversity of the student population, student/faculty interactions, and student mental health, given the committee's perception that there are significant levels of student stress (especially among students from traditionally underrepresented groups).
- While many graduate students seem to be happy with their research advising, a significant number of students feel differently... Potential suggested solutions include: creating a lab expectation document as some groups have already done; providing graduate students with an opportunity to work on two research projects with two different advisors during their first year; [and/or] having an academic advisor in addition to a research advisor... [The VC] encourage[s] collaboration among different faculty and their groups, including joint advising of graduate students.
- As has become increasingly clear nationwide in recent years, graduate study is a quite stressful time for many students. This is also clearly the case in EPS, based on the recent Graduate Student Mental Health Survey in EPS and ESE. The results of the test mirror nation-wide studies of graduate students (<https://www.insidehighered.com/news/2018/03/06/new-study-says-graduate-students-mental-health-crisis>) and indicate common incidences of mental health issues

among graduate students, including depression, generalized anxiety disorder, imposter phenomenon, and others. Given the national surveys, the mental health issues are unlikely to be restricted to EPS, and they are likely to be GSAS-wide. Hence the VC recommends that a similar survey be conducted by GSAS as a whole, and that Harvard take the lead in formulating the best practices... [Best] practices for graduate student advising/communication, life/work balance, and managing student stress are universal to the sciences and should be developed at the FAS level, to help departments such as EPS improve the experience of their graduate students.

- Most students expressed satisfaction with their research opportunities and their current research projects, [but] career mentorship could be better developed... students would benefit from advice on professionally relevant careers outside of academia and perhaps also uniform advice regarding jobs in academia.
- We support the EPS plans to develop departmental mentoring events for postdocs such as a symposium and/or retreat. The need for and expense of child care should be considered in establishing the support package for postdocs.