Committed to Better Mentorship. Better Research. A Better Tomorrow.

Improving Mentorship in STEM Higher Education Act

Policy Statement

The Improving Mentorship in STEM Higher Education Act, H.R.9134, was introduced in the House of Representatives by Congresswoman Jennifer McClellan (D, VA-04) on July 25th, 2024. The purpose of this bill is to ensure participants in research projects funded by the National Science Foundation (NSF) know where and how to report possible misconduct by their supervisors or colleagues and authorize \$5 million in targeted research on mentorship methods for STEM graduate students. The bill calls for a formal assessment of the research results after 5 years that could lead to permanent implementation of new mentorship programs, if specific new methods are found to be effective.

Graduate Student Mental Health Crisis

Graduate students face a growing mental health crisis, with a rate of serious mental health problems six times that of the general population. Nearly half of students report symptoms of anxiety and/or depression, one in five taking medication, and one in ten having suicidal thoughts. The primary factors contributing to the crisis lie in a poor work-life balance and poor relationships with their research advisors. As a result, approximately half of doctoral students drop out before completing their degree.

NSF Mission and Mentorship

Several bills over the last 20 years, including the America COMPETES Act (Pub. L. 110-69, 2007) and CHIPS and Science Act (Pub. L. 117–167, 2022) have established that the NSF has a responsibility to understand how research trainees whose work is funded by NSF grants, including both postdoctoral and graduate student researchers, are being trained and mentored by project leaders. Primary investigators (PIs) are nominally required to discuss mentorship in both grant applications and final reports on NSF-sponsored projects. Definitions of who should be mentored by project leaders have broadened multiple times in recent years.

In practice, these requirements are very easy to satisfy, and effective mentorship is not incentivized by the merit review process that determines which grant applications will be funded.

The FAARM Team urges Congress to pass the Improving Mentorship in STEM Higher Education Act

Passage of the bill would provide for much-needed research on mentorship methods and require that participants on NSF-funded projects are informed about resources, like the NSF Office of Equity and Civil Rights Awardee Program Complaint Form, where they can report possible misconduct by supervisors or colleagues. We note that the National Institutes of Health (NIH) have maintained a similar simple, online webform for reports of potential misconduct for many years and have a track record of investigating complaints and taking meaningful action to address substantiated reports. Resources like this can be effective at discouraging misconduct when the research community is aware of the available outlets and agency staff actively respond to investigate credible reports.