



Resolution No. 1920-02

**A Resolution to Sign on to the National Association of Graduate and Professional Students
Framework for Accountability in Academic Research and Mentoring (FAARM)**

BE IT ENACTED BY THE GENERAL ASSEMBLY HERE GATHERED THAT:

WHEREAS, graduate and professional students face a growing mental health crisis with primary contributing factors including poor work-life balance and poor relationships with research advisors, and

WHEREAS, insufficient effort has been given to updating the models of advanced study and professorship by universities and federal funding agencies to include training in mentorship and address this mental health crisis, and

WHEREAS, the National Association of Graduate and Professional Students (NAGPS), the national graduate and professional student advocacy organization of which the University of Missouri is a member, has proposed a set of reforms to address key aspects of the mental health crisis linked to mentorship, and

WHEREAS, the suggested above mentioned reforms remain unchanged from the language contained within Appendix I and II of this resolution, therefore be it

RESOLVED, the Graduate Professional Council General Assembly will be a signing member of the Framework for Accountability in Academic Research and Mentoring, and be it further

RESOLVED, any substantive changes to the language contained with Appendix I and II of this resolution must be re-resolved by the General Assembly.

SUBMITTED,

Kari Chesney, Director of National Affairs



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APPENDIX I – Framework for Accountability in Academic Research and Mentoring (FAARM) Executive Summary

Framework for Accountability in Academic Research and Mentoring (FAARM) - Executive Summary

The 21st century requires radical updates to the models of advanced study and professorship.

Graduate students face a growing mental health crisis, with rates of serious mental health problems six times that of the general population. Nearly half of students report symptoms of anxiety and/or depression, with one in five under medication, and one in ten exhibiting suicidal thoughts and tendencies. Poor work-life balance and advisor-advisee relationships have been identified as primary factors contributing to this crisis, which at times could be worse due to an advisor's neglectful, exploitative, or abusive behavior towards the advisee. While there is little advisor training or oversight in graduate education, students are also disincentivized from reporting inappropriate behavior. As a result, approximately half of doctoral students dropout of school before completing their degree.¹

In light of this crisis, it is insufficient for university researchers supervising graduate students to solely focus on their field of expertise. University faculty in the United States must be effective teachers, trainers, and mentors to their graduate students and must take an active role in their success and health. Failure in these other avenues have long-term consequences for higher education and long-term research success.

We propose a set of reforms that will address key aspects of this crisis:

- Federal Research Funding (FRF) agencies must annually collect data on time-to-degree, attrition rates, and graduate student mental health for all graduate degree programs at all federally-funded universities.
- GAO report on the success and health of graduate students in the United States.
- FRF applications must include a standardized addendum asking about the training, mentorship, and professional development practices employed by the PI, and other Co-Is.
- Develop best practices in graduate student advising and celebrate success.
- Universities must institutionalize campus climate surveys and collaborate with external partners to establish standards and best practices.
- Universities must incorporate measures of effectiveness in skills training, mentorship, and job placement in the evaluation processes by which tenure track faculty secure tenure.
- FRF agencies must augment grant application assessments using additional data and responses regarding graduate student success and health.
- FRF agencies must validate data and responses regarding graduate student success and health using a randomized and anonymous survey system.

¹ [Glover, K.M. "Graduate Student Life Brief." March 2019](#)



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APPENDIX II - Framework for Accountability in Academic Research and Mentoring (FAARM) Core Policy Memo

Framework for Accountability in Academic Research and Mentoring (FAARM)

Overview

We need to update our models of advanced study and professorship for the 21st century.

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 report taking medication, and one in ten report having suicidal thoughts. The primary factors contributing to the crisis lie in a poor work-life balance and poor relationships between graduate students and their research advisors, who at times may be neglectful, exploitative, or even abusive. There is little advisor training or oversight in graduate education, and students are often disincentivized from reporting inappropriate behavior. As a result, approximately half of doctoral students dropout of school before completing their degree. The available evidence indicates that these problems compound for students of minority populations. They report frequent instances of implicit and explicit racism and discrimination, and women and underrepresented minorities take longer to complete graduate degrees.

In light of this crisis, it is insufficient for research advisors supervising graduate students to solely focus on their field of expertise. Research advisors in the United States must be effective teachers, trainers, and mentors to their graduate students and must take an active role in their success and health. Failure in these other avenues have long-term consequences for higher education and research success.

We propose several measures that federal research funding (FRF) agencies and other stakeholders in academic research can take to incentivize good training and mentorship practices by federally-funded Primary Investigators (PIs). We use the terms PI, research advisor, and mentor interchangeably throughout this document. While we propose some measures below that apply specifically to tenure-track university faculty, PIs may also be employed as non-tenure track faculty, university research staff, national laboratory staff, and in other positions. Unless we specify otherwise, we intend the proposals discussed in this memo to apply equally to all kinds of federally funded PIs.

This framework includes several proposals for new surveys of, communication with, and data collection about graduate students. It is our intention that no activity proposed in this framework should ever result in personal or academic information about specific graduate students being transmitted to anyone other than the federal employees or contractors, with no conflicts of interest, responsible for carrying out that specific activity.

This document incorporates material from: [Glover, K.M. "Graduate Student Life Brief." March 2019.](#)



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Immediate Need - Reporting Procedure for Agency Staff

Periodically, staff at agencies providing federal research funding acquire information about problematic behavior by researchers their agency funds. For example, this can happen at agency-hosted conferences, working visits to agency research centers, or coordinated fieldwork. **We consider it essential that agency staff be provided with clear procedures for conveying such information to the appropriate authorities.** These authorities might include university Title IX offices, university Human Resources (HR) offices, national laboratory HR offices, lab safety officers, financial compliance officers, and others. Making full reports may require a procedure for securely communicating confidential information. Procedures and resources for reporting should be clear, concise, centrally-located, and easy to find. The objective of these procedures is to make it as likely as possible that agency staff will successfully report problematic behavior they observe to the correct authorities in a timely manner.

Immediate Need - Student Contact Policy for Agency Staff

All FRF agencies should establish clear policies governing contact between agency staff and graduate students funded by their agency. These policies would facilitate efforts by agency staff to follow-up with students to clarify the situation when potentially harmful behavior is observed and/or to offer support and resources. Agency policies and related guidance should be established to clarify when this is appropriate and document potentially helpful resources.

FRF agencies should also establish clear, concise, centralized guidance for any students that wish to contact agency staff to report or resolve potential problems with federally funded research projects in which the student is involved or with the PIs responsible for such projects. FRF agencies should ensure their policies do not place any undue burdens on students who reach out to them, and this centralized guidance should clearly communicate that anonymous and incomplete reports are welcome.



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Immediate Need - Encourage Program Structures that Allow Advisor Flexibility

Ensuring that graduate students have the genuine practical ability to leave their current research advisor at a time of their choosing and find another within their institution may be the most important single step that can be taken to reduce the severity of the graduate student mental health crisis. A variety of practical circumstances and institutional policies cause many graduate students to feel 'trapped' with their current advisor, even if the relationship with that advisor is acutely harmful to the student.

We call on all research institutions, departments, centers, and laboratories which train graduate students to immediately review their policies regarding a graduate student's choice of advisor to ensure those policies do not contribute to this problem. During this review, we recommend that the adoption of proven policies and programs to improve advisor flexibility be considered. Such policies and programs include but are not limited to:

- Formalized rotations through multiple labs during the first year of graduate study;
- The creation of mutually-developed and academically-binding "Mentor Agreements" during on-boarding of new students that outline responsibilities, expectations, and boundaries;
- Joint advising, with more than one advisor assigned to a single student; and
- Well defined roles for thesis committee members in advising the graduate student.

Immediate Need - Mentorship Training for Advisors

We strongly encourage all institutions where graduate students might be trained to adopt requirements for **management and mentorship training**. Institutions recognize the importance of ensuring that all primary investigators prove their ability to follow safety and ethical protocols through regular training, and it is important that this expectation of safe and ethical standards be extended to the advisor-advisee relationship. Some institutions have established, or are considering establishing, this requirement, and we applaud these efforts.

In order to maximize impact, this training should be in alignment with best practices and be regularly evaluated. Evaluation should incorporate various anonymous reports by students (in comparison with program and institution data), evidence of participation in mentorship training opportunities, lab-level attrition rates, and ultimate job placement (including diverse career paths) of graduated students.

Possible ways to implement this include amongst others:

- Incorporation of mentorship training into the on-boarding of all new faculty hires, with regular re-training;
- A multi-level certification program that could be used to distinguish between eligibility to oversee undergraduate, masters, and doctoral students; and



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- Evidence of high-quality mentorship as a component of reappointment, promotion, annual performance reviews, and tenure decisions.

Transparent Data

FRF agencies should, on an annual basis, compile data on time-to-degree, attrition rates, graduate student mental health, and job placement summary data for all graduate degree programs of all federally-funded universities. This data should be reported for the smallest academic unit possible while still ensuring reasonable standards of anonymity. It should be made available in a convenient form in a central location such as a website maintained by the National Science Foundation. It would be ideal to report such data for each individual faculty member that supervises graduate students, but we also recognize this might result in anonymity issues when dealing with small sample sizes.

Centrally compiling transparent job placement data could be distinctly valuable to graduate program applicants and potential applicants. It would allow for a more objective evaluation of academic programs and reduce imbalances between the number of graduates from Ph.D. and Master's programs compared to employment opportunities in various fields. It would also help develop more realistic expectations among both graduate students and researchers.

We recommend that FRF agencies work together with university leaders and various academic program leaders towards establishing specific processes regarding sharing of data regarding respective university and academic programs. However, we recognize that the diversity of programs may require unique approaches that cannot be captured in broad policy generations, and we encourage flexibility at the agency level to accommodate the needs of programs.

As it would represent a productive step in the same direction as this proposal, we support the College Transparency Act and urge Congress to pass it. We recommend amending the Act to require the collection and reporting of the data described above.

We also endorse recommendation 3.3 regarding "Comprehensive National and Institutional Data on Students and Graduates" in the National Academies's 2018 report, *Graduate STEM Education for the 21st Century*.

GAO Report

The Government Accountability Office should prepare a report on the success and health of graduate students in the United States. This report could serve as a starting point for the annual data collection effort described above.



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The Graduate Trainee Addendum

Applications for FRF opportunities should include questions that address three areas fundamental to the development of all graduate students:

- In what practical skills will the primary investigator (PI) train the graduate student(s), and how will that training be carried out?
- How will the PI serve as a mentor for the graduate student(s)?
- How will the PI assist in developing professional skills and employment opportunities for the graduate student(s) upon completion of their program of study?

These questions could be grouped into a standardized *Graduate Trainee Addendum* (GTA), to which any applicant must respond if they foresee potentially using funds from a particular grant to support graduate students.

These questions should be used for a trial period of at least two years, or a period considered appropriate by the respective agency, during which FRF agencies would collect a database of applicant responses and compile other relevant data (like job placement data) for comparison. After this trial period, GTA Summary Statistics and Supporting Data should be published alongside the data described in the "Transparent Data" section, broken down in the same manner described above.

During the trial period, FRF agencies should evaluate the feasibility of including in the grant application process, a survey of graduate students currently being supervised by the grant applicant. Applicants could be asked to identify any graduate students they currently supervise at the time they submit the application to facilitate these surveys. FRF agency staff may find it useful to compare student survey responses with the GTA responses of their supervisors. In general, we believe student survey responses should never be publicly released in any form.

Develop best practices and celebrate success

Federal agencies, private foundations, national laboratories, professional societies, the National Academies and/or university leaders should convene a series of **Best Practices in Graduate Education** conferences to develop and celebrate clearly successful models of skills training, mentorship, professional development, and work-life balance. Awards must be given to highly successful advisors, and their management and mentorship methods could be disseminated to and incorporated by others.

Such conferences could be an ideal place to periodically publicly release summary statistics on GTA responses and supporting data. Centrally compiled transparent data could contribute to the development of management and mentorship training programs and other best practices. We believe it would be wise to involve as many stakeholders as possible in such conferences.



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We urge university leaders to explicitly incorporate measures of effectiveness in skills training, mentorship, and professional development in the evaluation processes by which promotion, reappointment, annual performance reviews, and tenure decisions are made, as also recommended by the NASEM report on Graduate STEM Education for the 21st Century. Explicit consideration of these factors in the tenure process is likely to be the best way to incentivize effectiveness throughout the career of tenure-track faculty.

Current best practice - Campus Climate Surveys

We are aware that several universities, professional societies, and government organizations have conducted **Campus Climate Surveys (CCS)**. According to [an archived best practice from the Department of Justice Office of Violence Against Women](#), campus climate surveys “measure the prevalence of sexual assault on college campuses and gauge students’ attitudes and behaviors.”

- We urge all universities to establish a regular practice of conducting CCSs. We also urge FRF agencies, professional societies, the National Academies, and university leaders to collaborate to establish standards and best practices to ensure the data acquired from CCSs is of the highest possible quality and fully validated for use in administrative decisions.
- We urge state legislators to pass legislation requiring that universities in their state conduct regular CCSs focused on sexual violence on their campuses and publicly report the results.
- We also endorse recommendation 3.7 regarding “Stronger Support for Graduate Student Mental Health Services” and periodic climate surveys in the National Academies’s 2018 report, *Graduate STEM Education for the 21st Century*. The *White House Task Force to Protect Students From Sexual Assault* which laid this as a key priority in their first Not Alone report released in 2014 as well.

Augment grant application assessments using additional data and GTA responses

Over time, data on GTA responses, relevant supporting data, surveys of graduate students, conference proceedings, and other efforts described above will help identify best practices in skills training, mentorship, and professional development in academic research. As these best practices become clear and widely-shared among academic researchers, federal agencies should begin scoring GTA responses and well-validated supporting information as part of their assessment of grant applications. We recommend that each FRF agency should have significant flexibility to incorporate GTA responses and supporting data in a manner that best serves their research objectives.



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In general, we envision that GTA responses that are consistent with established best practices, and reasonably consistent with all available supporting data and survey responses, should contribute positively to the assessment of the grant application. GTA responses that indicate the applicant has specific and measurable plans to improve their practices over a specific timeframe should also generally contribute positively to the assessment of the grant application, as long as the plan articulated is not inconsistent with available data.

Federally-funded PIs should generally be exempt from all grant application assessment measures included in this framework at the beginning of their research career. FRF agencies should develop an appropriate definition for the "beginning of their research career" and accommodate PIs and institutions accordingly. Some possible PI exemptions might include the following:

- The PI's first two years of full time work as an independent researcher;
- The PI's first two federal research awards (possibly with a limit on dollar value - any PI that has secured more than \$500,000 in federal research awards should certainly be subject to all of the grant application assessment measures included in this framework);
- PIs that have not yet supervised a cumulative total of at least 3 graduate students.

Tenured university faculty should *never* be exempt from the grant application assessment measures included in this framework. Arguably, they should be held to a higher standard.

If this practice is consistently maintained over many years, incentives at academic research institutions will begin to favor hiring and promoting researchers who are effective at skills training and mentorship and who support the work-life balance, mental health, and professional development of their students. Institutions would have a direct incentive to include consideration of mentorship practices in their various processes be it around promotion, reappointment, annual performance reviews, or tenure, as discussed earlier in this memo. This could substantially improve the working environment and productivity of research institutions and the quality of education for students and junior researchers.

Validate GTA responses and supporting data

During the trial period, the feasibility of randomized surveys to compare the actual practices of federally funded researchers with their GTA responses should be explored. We recommend an approach where continuous surveys of both researchers and their graduate students are carried out in a blind and fully-randomized manner. Researchers, students, and institution administrators should not be notified who is selected for a survey, or when, or the content of any specific response.

Agencies should consider measures that strongly ensure the responses of graduate students to randomized surveys never motivate retaliation or impair the academic progress of the student. One possible approach is to provide students with the option to request that their survey response is never incorporated into a grant application review or any actively-used agency



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databases until after the student graduates; however, we believe that the most appropriate way to do so must be for the funding agencies to decide. We reiterate that in general, we believe student survey responses should never be publicly released in any form.

If this randomized survey system proves feasible, a database of survey responses should be created. Survey responses that apply to a given grant applicant could then be considered as part of the grant application evaluation.

Student Privacy Considerations

This framework includes several proposals for new surveys of, communication with, and data collection about graduate students. We consider it essential that all reasonable measures be taken to protect the privacy of graduate students at every step. A variety of existing state and federal laws and regulations protect students' right to the privacy of their academic information and personally identifiable information, and all such laws and regulations should apply fully to this framework.

It is our intention that no activity proposed in this framework should ever result in information that could be used to identify a student being transmitted in any way to anyone other than the federal employees or contractors, with no conflicts of interest, responsible for carrying out that specific activity. It is especially important for the integrity of this framework that no PI ever acquire any information about their students or their students' survey responses through this framework.

In support of this objective, we recommend that:

- All student surveys included in this framework should be optional;
- Students should always have the option to request that information in surveys they respond to is not considered in any way until they complete their degree and/or leave their current institution;
- Any category of data for which there are too few samples to properly anonymize the data should be handled with special care and should *not* be used in other elements of this framework;
- Special care be applied to any data about PIs that typically have very few graduate students over an extended period of time; and
- Summary data about student responses to surveys should always be anonymized according to best practices.



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