

## **Fair Expectation for Graduate Students**

(Adapted and modified from the 2017 AAMC *Compact between Biomedical Graduate Students and Their Research Advisors*)

**1. Institutional Commitment.** GMS fosters an environment that is diverse, inclusive, and anti-racist. Pre-doctoral training at Boston University School of Medicine (BUSM) includes both didactic course work in a focused area and an apprenticeship in which the graduate student trains under the supervision of one or more faculty members who are qualified to fulfill the responsibilities of a mentor. Graduate Medical Sciences (GMS), home of the graduate programs at the BUSM, supports the assertion that a positive mentoring relationship between the pre-doctoral student and the research advisor is a critical component of the student's preparation to becoming an independent and successful scientific professional. In keeping with the AAMC compact between graduate students and their primary mentors, GMS recognizes that for those individuals who pursue a biomedical graduate degree there is the strong expectation to take responsibility for their own scientific and professional development. Faculty who advise students are expected to fulfill the responsibilities of a mentor, including the provision of scientific training, guidance, instruction in the responsible conduct of research and research ethics, and financial support. The research advisor also performs a critical function as a scientific role model for the graduate student. In concert with students' training, GMS provides oversight for the length of study, program integrity, stipend levels, benefits (including health insurance), grievance procedures, and other matters relevant to the education of its graduate students.

**2. Quality of Training.** Our goal is that individuals enrolled in GMS programs should be trained to independently formulate meaningful hypotheses, design and conduct interpretable experiments, adhere to good laboratory practices, analyze results critically, understand the broad significance of their research findings, and uphold the highest ethical standards in research. This goal is accomplished through programs offering relevant course offerings, research opportunities, including clear guidelines for performance assessment and close monitoring and guiding of graduate students through the course of their study.

Training in career skills includes critical thinking, grant preparation, scientific writing, presentation skills, working with others collaboratively, the responsible conduct of research and numerous other topics.

**3. Mentoring.** Effective mentoring is critical for graduate school trainees as they begin their scientific careers. Research advisors should dedicate substantial time to graduate students to ensure their development in areas of scientific, developmental, and professional development. Whether a faculty member acts as the primary research advisor or serves on a student's dissertation advisory committee, a relationship of mutual trust and respect between mentor and

graduate student is essential for healthy interactions and to encourage individual growth. Faculty members should encourage a graduate student's individual development, offering constructive criticism as well as praise. As an exemplary role model, the mentor also serves as a primary influence in providing an example of high ethical standards. In essence, the research advisor is a role model who will not only help prepare the student to become a successful scientific professional, the mentor will help shape the student to also become an effective mentor to future graduate students.

**4. Career Development.** Graduate students must have training experiences of sufficient breadth to ensure that they are prepared to pursue a wide range of professional career options in academia, industry, clinical, government and research careers. A series of formal and informal venues should exist to assist students in their career exploration and professional development.

**5. Code of Conduct.** The following commitments will form the basis for our code of conduct in GMS for both students and graduate faculty.

#### **Commitments of Graduate Students**

- **I acknowledge that I have the primary responsibility for the successful completion of my degree.** I will be committed to my graduate education and will demonstrate this by my efforts in the classroom and the research laboratory. I will maintain a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards.
- **I will meet regularly with my research advisor and provide them with updates on the progress and results of my activities and experiments.**
- **I will work with my research advisor to develop a dissertation project.** This will include establishing a timeline for each phase of my work. I will strive to meet the established deadlines.
- **I will work with my research advisor to select a dissertation committee.** I will commit to meeting with this committee at least annually (or more frequently, according to program guidelines). I will be responsive to the advice of and constructive criticism from my committee.
- **I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution.** I will commit to meeting these requirements, including teaching responsibilities.
- **I will attend and participate in laboratory meetings, seminars and journal clubs that are part of my educational program.**

- **I will comply with all institutional policies, including academic program milestones.** I will comply with both the letter and spirit of all institutional safe laboratory practices and animal-use and human-research policies at my institution.
- **I will participate in my institution's Responsible Conduct of Research Training Program and practice those guidelines in conducting my thesis/dissertation research.**
- **I will participate, as applicable, with my mentor in applying for grant funds to support the research in the laboratory in which I work, and when appropriate, myself.** I understand this contribution supports the success of the laboratory, whether or not I receive a stipend. I understand that regular applications for the financial support of my laboratory are required for the support of myself, my laboratory colleagues, and laboratory resources. To the best of my ability, I will partner with my mentor in preparing research results and the proposed research plans for these applications. Whenever possible and appropriate, and with the assistance of my mentor, I will submit applications of my own for the support of my stipend, realizing that this is not only an important research career training opportunity, but that it is required for the success of the laboratory in which I work.
- **I will be a good laboratory citizen.** I will agree to take part in shared laboratory responsibilities and will use laboratory resources carefully and frugally. I will maintain a safe and clean laboratory space. I will be respectful of, tolerant of, and work collegially with all laboratory personnel.
- **I will maintain a detailed, organized, and accurate laboratory notebook.** I am aware that my original notebooks and all tangible research data are the property of my institution. Only with the explicit approval from my research advisor and in accordance with institutional policy may I make copies of my notebooks and digital files and have access to tangible research materials that I helped to generate during my graduate training.
- **I will discuss policies on work hours, sick leave and vacation with my research advisor.** I will consult with my advisor and notify fellow lab members in advance of any planned absences and will notify my advisor of any unexpected absences due to illness or other issues.
- **I will discuss policies on authorship and attendance at professional meetings with my research advisor.** I will work with my advisor to submit all relevant research results that are ready for publication in a timely manner prior to my graduation.
- **I acknowledge that it is primarily my responsibility to develop my career following the completion of my graduate degree.** I will seek guidance from my research advisor, career

counseling services, thesis/dissertation committee, other mentors, and any other resources available for advice on career plans.

### **Commitments of Mentors**

- **I will be committed to the mentoring of the graduate student during this early phase of their research career.** I will be committed to the education and training of the graduate student as a future member of the scientific community.
- **I will demonstrate respect for all graduate students as individuals without regard to gender, race, national origin, religion, disability, or sexual orientation, and I will cultivate a culture of tolerance among the entire laboratory.**
- **I will be committed to the research project of the graduate student.** I will help to plan and direct the graduate student's project, set reasonable and attainable goals, and establish a timeline for completion of the project. I recognize the possibility of conflicts between the interests of externally funded research programs and those of the graduate student, and will not let these interfere with the student's pursuit of their thesis/dissertation research.
- **I will be committed to meeting one-on-one with the student on a regular basis.**
- **I will be committed to providing financial resources for the graduate student as appropriate or according to my institution's guidelines, in order for them to conduct thesis/dissertation research.**
- **I will be knowledgeable of, and guide the graduate student through, the requirements and deadlines of their graduate program as well as those of the institution, including teaching requirements and human resources guidelines.**
- **I will help the graduate student select a dissertation committee.** I will assure that this committee meets at least annually (or more frequently, according to program guidelines) to review the graduate student's progress.
- **I will lead by example and facilitate the training of the graduate student in complementary skills needed to be a successful scientist, such as oral and written communication skills, grant writing, laboratory management, animal and human research policies, the ethical conduct of research, and scientific professionalism.** I will encourage the student to seek opportunities in teaching.

- **I will expect the graduate student to share common laboratory responsibilities and utilize resources carefully and frugally.**
- **I will not require the graduate student to perform tasks that are unrelated to their training program and professional development, nor will I impose requirements beyond those needed to complete a rigorous body of scientific work.**
- **I will discuss authorship policies regarding papers with the graduate student.** I will acknowledge the graduate student's scientific contributions to the work in my laboratory, and I will work with the graduate student to publish their work in a timely manner prior to, and if necessary, after the student's graduation.
- **I will discuss intellectual policy issues with the student with regard to disclosure, patent rights and publishing research discoveries.**
- **I will encourage the graduate student to attend scientific/professional meetings and make an effort to secure and facilitate funding for such activities.**
- **I will provide career advice and assist in finding a position for the graduate student following their graduation.** I will provide honest letters of recommendation for their next phase of professional development. I will also be accessible to give advice and feedback on career goals.
- **I will provide for every graduate student under my supervision an environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.**
- **Throughout the graduate student's time training under my supervision, I will be supportive, equitable, accessible, encouraging, and respectful.** I will foster the graduate student's professional confidence and encourage critical thinking, skepticism and creativity.

*Adopted by Graduate Medical Sciences PhD Steering Committee on 8/25/2020*