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Appropriate Treatment of Research Trainees

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Group on Research, Education, and Training

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Appropriate Treatment of Research Trainees (AToRT)

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This document was created by the GREAT Appropriate Treatment of Research Trainees (AToRT) subcommittee and is intended to highlight the importance of supportive and inclusive training environments for graduate students and postdoctoral researchers. All content reflects the views of the GREAT AToRT subcommittee and does not reflect the official position or policy of the AAMC unless clearly specified.

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PREFACE

The Group on Research, Education and Training (GREAT) at the AAMC, which is composed of administrative leaders in the biomedical research community, has developed the *Appropriate Treatment of Research Trainees (AToRT)* document to emphasize the importance and critical need for supportive and inclusive training environments for biomedical graduate students and postdoctoral researchers. The AAMC believes that every graduate student and postdoctoral researcher has the right to a high-quality, learner-centered training experience that is free from inappropriate behavior.

In 2006, the AAMC in collaboration with GREAT developed the *Compact Between Postdoctoral Appointees and Their Mentors* to guide conversations about the postdoctoral training experience. This was followed in 2008, by a *Compact Between Biomedical Graduate Students and Their Research Advisors* which was focused on the guiding principles of a positive graduate student mentor-mentee relationship. We hope that the AToRT document used in conjunction with the AAMC compacts will help to promote an ideal training experience for all trainees.

The AToRT document outlines the principles that are essential for nurturing supportive and inclusive research training environments which include leadership, professionalism, and equity. It also underlines the importance of not only highlighting behaviors that are appropriate and are embodied by the essential principles but also the need for acknowledging what constitutes mistreatment and inappropriate behavior. Lastly, this document provides institutions with a framework to guide the level of response appropriate for each situation. The AToRT document is meant to be used as a supplemental resource by both research faculty and trainees in a broad range of activities.

The AToRT document aligns with the AAMC's strategic plan for strengthening diversity, equity, and inclusion in biomedical research. The growth and development of biomedical research depends on institutions fostering a supportive and nurturing research training environment that is diverse, inclusive, and equitable. The AAMC applauds the efforts of the AToRT working group to create a document that addresses this critical issue.

A handwritten signature in blue ink, appearing to read "Ross McKinney, MD".

Ross McKinney, MD
Chief Scientific Officer, AAMC

Introduction

The AAMC Group on Research, Education, and Training (GREAT) recognizes the critical role that research trainees play in advancing biomedical research and sustaining our current research systems. Given their vital contributions to the research enterprise and to encourage their continued pursuit of research careers, it is imperative that research trainees are afforded every opportunity to develop and refine their talents in an ecosystem of respect. Although GREAT appreciates that the vast majority of scientists tend to abide by the respectful treatment of research trainees, this document acknowledges that these practices are not standardized or universal. Further, certain inappropriate behaviors may be challenging to name and address when they do not meet the threshold of violating specific university policies; however, any incidence of mistreatment is one too many and should not be tolerated. For research trainees to thrive, all scientists have a professional and ethical responsibility not only to demonstrate appropriate behaviors themselves, but also to speak out when they observe any inappropriate treatment of research trainees.

The overarching goals of the Appropriate Treatment of Research Trainees (AToRT) document are: 1) to affirm the shared principles that are essential for fostering supportive and inclusive graduate and postdoctoral training environments; 2) to identify and consistently call out examples of behaviors that are incompatible with these principles; and 3) to provide a framework for identifying and addressing these issues that may be adapted for use at individual institutions.

Intention and Assumptions

The AToRT document should be used in conjunction with other resources (e.g., AAMC Compact between Postdoctoral Appointees and their Mentors, AAMC Compact between Biomedical Graduate Students and their Research Advisors) and is not intended to provide mentoring recommendations. The development of effective approaches to mentoring is an evolving process that requires ongoing mentorship training and learning. The AAMC Compacts, along with many other resources (e.g., Center for the Improvement of Mentored Experiences in Research [CIMER]), provide definitions and greater guidance for what constitutes positive mentorship. Further, this document is not intended to cover every potential situation or circumstance, and primarily focuses on conduct not addressed by other formal training, procedures, policies, or laws.

The principles outlined in this document apply to all research trainees in the research environment. The AToRT document was developed, and should be used, with the following assumptions:

- The majority of faculty mentors aim to exhibit positive mentorship practices and are invested in their research trainees' competency and success.
- Mentorship is challenging, an involved process, and requires a time commitment.
- When and where a power differential exists, it is incumbent upon the person in the position of power to be the exemplar of the principles described in this document.
- The establishment of a foundation of positive support for research trainees would also extend benefits to the other professional categories who work in the research training environment.
- Establishing a culture and climate of appropriate treatment will impact research populations including, undergraduate students, staff scientists, clinician scientists, junior faculty, and research and administrative staff.

Population Definitions

- Given their leadership position, this document highlights the role of faculty mentors in establishing the shared principles necessary for inclusive and supportive training

environments. However, these principles apply to anyone involved in the training of a research trainee.

- “Research trainee” refers to graduate students pursuing post-graduate degrees (master’s and doctor of philosophy) and all categories of postdoctoral researchers, irrespective of their funding source(s).

Potential Applications

The document is structured such that it can have a broad range of uses that could include, but are not limited to, the following forums:

- Training sessions for mentoring faculty members
- Orientations for new students, research trainees, postdoctoral researchers, and new faculty members
- Departmental faculty meetings
- Committees for the conception and/or refinement of institutional policies (e.g., grievance policy)
- Committees impaneled to evaluate cases related to the alleged mistreatment of research trainees
- Coaching sessions for research trainees and/or mentoring faculty members

Shared Principles of the Document

Scientific research careers can pose significant work-life balance challenges, and levy a high demand on one’s time, expectations, and activities. As such, it is all the more important to be deliberate in the allocation of time and effort necessary for establishing supportive training environments.

As leaders of biomedical research groups, the responsibility for establishing the culture and climate of the laboratory falls primarily on faculty mentors. While the maintenance of this environment is the shared responsibility of all laboratory members, given their leadership role, faculty mentors should set the tone.

As significant pressures are inherent in academic biomedical research, GREAT recommends establishing a renewed commitment to upholding three essential principles within our scientific training environments:

1. **Leadership** – Mentors are expected to be leaders and role models. By accepting a research trainee, a mentor agrees to undertake the training and development of a scientist and to set the tone, the culture, and the climate for their research group. As the head of the research group, it is the mentor's responsibility to establish a supportive and inclusive training environment.

In general, leadership includes, but is not limited to, the following characteristics:

- a. **Encouragement** – Mentors should foster every research trainee's development in a fair, safe, supportive, and unbiased learning environment that respects trainees' physical and social boundaries. This includes creating a shared vision for the group, providing opportunities for success and recognition, establishing a collaborative atmosphere and empowering research trainees to make their own decisions about their future career path(s).
- b. **Communication** – Mentors should have open, transparent, and bidirectional communication channels to ensure research trainees understand what is expected of them. Expectations should be appropriate to each research trainee's individual circumstances, abilities, and stage of training. There should be mechanisms to ensure that tasks are understood, supervised, and accomplished. Constructive feedback should be issued in a manner that is timely, consistent, explicit, and personalized. Written assessments and performance metrics can serve as the basis for performance evaluations.
- c. **Self-improvement** – Mentors should be introspective and consistently seek opportunities to learn new strategies for leading others. This may include learning stress management methods, navigating the demands of leadership responsibilities, implementing effective strategies for coaching/mentoring, adapting leadership approaches for working with diverse populations, and working

to motivate trainees' performance. It entails a commitment to their personal growth, life-long learning, and critical self-reflection.

2. **Professionalism** – Mentors are expected to conduct themselves in a courteous, conscientious, and respectful manner as well as adhere to a high standard of personal behavior. Professionalism involves having integrity, being responsible, and holding oneself accountable.

In general, professionalism includes, but is not limited to, the following characteristics:

- a. **Respect** – Mentors should acknowledge and ensure that research trainees and colleagues are treated with dignity and sensitivity at all times, valuing their differences, and respecting their privacy.
 - b. **Integrity** – Mentors should demonstrate honest accountability for their own actions at all times. They should practice cultural humility in an ever-changing society. Mentors should understand their personal motivational drivers, biases, and mentorship and communication styles. They should be open-minded and act with compassion.
 - c. **Compliance** – Mentors should adhere to the policies and procedures of their academic institution as well as the guidelines related to the ethical treatment of research trainees as expressed and/or implied by funding agencies and professional organizations.
3. **Equity** – Mentors, like institutions, are expected to commit to valuing and embracing diversity, inclusion, and accessibility. The scientific discipline attracts research trainees from a multiplicity of countries, ethnicities, backgrounds and experiences. Just as diversity in scientific thought is integral for the advancement of science, it is also important to recognize the value of diverse perspectives rooted in each individual's lived experiences.

In general, equity includes, but is not limited to, the following characteristics:

- a. Inclusivity – Mentors should ensure that all research trainees have equitable access to the spectrum of formal and informal opportunities available in the research training environment. Every research trainee should have opportunities to be included in relevant scientific and intellectual processes and the resulting opportunities, products, and experiments. Mentors should strive to understand; be able to identify; and work to dismantle dominant social, cultural, and/or professional norms that may create barriers to inclusion.
- b. Impartiality – Mentors should possess awareness that conscious and unconscious biases contribute to our thoughts and decision-making processes. Decisions related to research endeavors should always be based on objective, and transparent criteria, rather than implicit or explicit favoritism and/or other improper preferences.
- c. Diversity – Mentors should strive to understand the diversity profile of their research groups. As opportunities arise, they should consider how adding diverse perspectives could enhance the group profile. Both internal (e.g., age, race, ethnicity, gender identity, ability) and external (e.g., religion, personal habits, appearance) dimensions of diversity should be considered and recognized as valuable perspectives that augment intellectual innovation.

Incompatible/Inappropriate Behaviors

In addition to defining what positive and supportive training environments should strive to be, it is also important to recognize and call-out behaviors that prevent the actualization of the above principles. How incompatible/inappropriate behaviors are communicated may be hierarchical, (e.g., mentor to research trainee, postdoc to student) or lateral (e.g., trainee to trainee) in nature. Although these examples may include behavior that would be addressed by prevailing laws including, but not limited to, [Title VII](#) and [Title IX](#), the focus of the AToRT document is on behaviors that likely do not cross legal thresholds. Many inappropriate behaviors do not rise to the level of clear illegality or a violation of existing policies. Instead, such behaviors remain as “under the surface” slights (e.g., microaggressions) that unsettle or compromise the training climate and research trainees’ experiences.

APPROPRIATE TREATMENT OF RESEARCH TRAINEES (AToRT)

The following examples of behaviors are categorized based on the perceived impact to the research trainee. These lists are not exhaustive. Each of these categories of examples violates one or more of the guiding principles for research training environments as detailed above:

1. Loss of personal civility

[PRINCIPLES: Professionalism/Equity]

- a. Sharing sensitive information about a research trainee without their explicit permission (e.g., sexual orientation, disability status, personal information, medical/health status).
- b. Ignoring a research trainee's opinions or dismissing them without consideration.
- c. Intentionally singling out a research trainee for arbitrary and/or punitive treatment.
- d. Using aggressive questioning under the guise of the "Socratic method" to intentionally badger or humiliate a research trainee.
- e. Overt or implied threats of violence; intimidating behaviors (e.g., finger-pointing, invasion of personal space, shoving, or blocking one's path, shouting, directing anger, etc.); and/or using obscene gestures, cartoons, or jokes in the presence of a research trainee.
- f. Directing verbal abuse (e.g., obscenities/ profanities) against a research trainee to belittle or ridicule them in connection with their work, identities, attitudes, or private life. This includes any dehumanizing language based on race, culture, and/or gender. Even if not directed at the trainee, using such verbal expressions, so as to create a negative environment.
- g. Via words or actions, teasing, taunting and/or being sarcastic without regard to how the research trainee perceives these behaviors or actions.
- h. Disrespect for boundaries (e.g., texts at inappropriate times, critical comments regarding a research trainee's agency/personal time when outside the laboratory).
- i. Refusing to use the correct pronunciation of a trainee's name, their preferred pronouns, or "deadnaming" research trainees who are transgender or transitioning.
- j. Spreading gossip, allegations and/or rumors about a research trainee.
- k. Displaying a hostile reaction when approached by others.
- l. Not responding to requests for feedback or accommodations in a timely manner.

2. Infringement on autonomy

[PRINCIPLES: Leadership/Professionalism]

- a. Ordering work not typical for a research trainee to perform at the institution.
- b. Assigning duties to a research trainee as punishment rather than for academic or research advancement.
- c. Coercing or encouraging a research trainee to disregard institutional or federal policies regarding training and/or research.
- d. Coercing or encouraging a research trainee to lie or withhold the truth from a colleague or superior, or to perform a task that is unethical or illegal.
- e. Coercing a research trainee by threatening to withhold research resources, reference letters, or other critical professional development support.
- f. Requiring research trainees to perform personal services (e.g., run errands, personal caregiving duties, listen to personal problems).
- g. Pressuring a research trainee not to claim something to which they are entitled (e.g., travel expenses, university holidays, medical leave, vacation/time-off, intellectual property).
- h. Leveraging grades, authorship, or annual performance reviews as punishment or coercion rather than as an objective evaluation of competency.
- i. Leveraging visas to coerce a research trainee to work more hours or perform other duties above and beyond reasonable expectations.
- j. Criticizing a research trainee for cultural attire, attitudes, beliefs, and/or linguistic characteristics.

3. Professional and career development abuses

[PRINCIPLES: Leadership/Professionalism/Equity]

- a. Neglecting a research trainee's training progress or facilitating their unwarranted exclusion from reasonable learning or research opportunities.
- b. Prohibiting research trainees from engaging in reasonable professional development activities.

- c. Directing research trainees to perform an unreasonable number of general research responsibilities (e.g., excessive assignment of shared laboratory tasks), especially where performing those activities interferes with a research trainee's attendance at educational or professional development activities.
- d. Taking credit for a research trainee's accomplishments without proper attribution, which may include noncompliance to [ICMJE guidelines](#) when assigning authorship.
- e. Coercing/manipulating a research trainee to quit in the absence of a reasonable justification.
- f. Disparaging a research trainee's choice of profession or career aspirations.
- g. Knowingly withholding information that affects the research trainee's performance or career advancement.

4. Discriminatory behavior based on race, gender, religion, or other identities

[PRINCIPLES: Leadership/Professionalism/Equity]

- a. Implying that a research trainee's capacity for a specific skill is due to an aspect of their identity (e.g., they are of a given ethnicity or gender).
- b. Inquiring about a trainee's plans for starting a family based on their gender.
- c. Marginalizing research trainees by invoking harmful stereotypes, making broad group generalizations, degrading a person on the basis of a personal or cultural characteristic (e.g., "you people all expect me to read your minds") that may invoke a sense of "other-ness."
- d. Creating inequities in learning opportunities, teaching, feedback, performance evaluations or grading based on personal characteristics of the research trainee (e.g., giving a better grade because someone is going into a preferred career path or personal preference).

5. Excessive Pressure to meet unrealistic expectations

[PRINCIPLES: Leadership/Professionalism]

- a. Excessive monitoring and micromanagement of the work performed by a research trainee.

APPROPRIATE TREATMENT OF RESEARCH TRAINEES (AToRT)

- b. Knowingly assigning an unmanageable workload for a research trainee, or pressuring them to exceed established restrictions on work hours.
- c. Pressuring a research trainee with meeting unrealistic goals and/or not providing clear work expectations; yet, holding them responsible for meeting those expectations.

In addition to the inappropriate behaviors characterized within the AToRT document, certain inappropriate behaviors may cross well-defined institutional, state, and/or federal policies. Please refer to your institutional guidelines for the types of violations that would require formal institutional intervention.

Examples of these violations include, but are not limited to, the following behaviors:

- FERPA violations: Sharing personal/sensitive information gleaned from research trainees' graduate school applications and/or personal statements with unauthorized parties.
- Environmental Health and Safety Policy infringement: Endangering the safety or welfare of a research trainee (e.g. requiring the trainee to enter an unsafe environment or exposing them to dangerous objects or substances without education, proper training and personal protective equipment; asking trainees to perform tasks they are not trained to perform; instructing a trainee not to report an occupational exposure).
- Whistleblower protections: Retaliating against any research trainee who reports perceived inappropriate treatment (e.g., informing others that a trainee is a "snitch" or to "watch out for that one", issuing an evaluation less favorable than a trainee deserves, calling future training programs or employers to "warn" them about a trainee).
- Title IX violations: Soliciting research trainees who are being currently supervised, evaluated, or graded to engage in romantic or sexual relationships; sexual assault; any sexual-/gender-based and/or pregnancy-/parenting-related discrimination or harassment through words, gestures, and behaviors (e.g., soliciting a date, commenting repeatedly on attractiveness/physique or clothing, making sexually suggestive comments or gestures, inappropriate touching).
- Physical Abuse: Committing an act of physical abuse or violence of any kind (e.g., throwing objects, aggressive violation of personal space).

Addressing Inappropriate Treatment: Suggestions for Resolution

A key component of any institutional process aimed at improving the training environment is a description of the potential ways that it could be implemented. The AToRT document recommends three pillars for successful implementation: 1) an institutional acknowledgment that mentorship is an essential responsibility of academic institutions, 2) infractions similar to those outlined in this document merit investigation and require consequential action, and 3) embedding the AToRT document in the operational procedures of the institution is essential for the process to gain broad acceptance.

Each institution is unique and should consider the range of options best suited for addressing the inappropriate treatment of research trainees within their specific environment. For institutions that do not currently have an established process for addressing behaviors described in this document, the following framework could be used as a general guide for establishing a process to address these behaviors. This framework is presented as a schematic in Figures 1A and 1B and includes the following parameters:

1. **Stakeholders:** Each institution should determine the best individuals and/or units to involve in their implementation practices. Depending on the institutional structures, the following individuals/offices may serve as stakeholders:
 - a. Institutional officials such as Provosts, Deans of Students/Student Affairs, Director of Office of Postdoctoral Studies/Affairs
 - b. Office of Ombuds Services
 - c. Department chairs/Division heads
 - d. Faculty, training grant or program directors, research trainees, Human Resources
2. **Levels of Response:** As stated in this document, inappropriate treatment of research trainees covers a broad spectrum of behaviors. It is also possible that some complaints may not involve inappropriate treatment, but may actually represent a misunderstanding or misperception on the part of either the research trainee or the mentor. Consequently, addressing inappropriate treatment requires different levels of response:

- a. Level 0 - at the lowest level, complaints in this category include two subtypes: i) complaints determined to be appropriate and ii) complaints where the research trainee expresses reluctance for action at the time of the complaint.
 - i. Actions (*confidential): i) if the complaint is determined to lack merit, then the research trainee should be coached and reminded of behaviors that constitute inappropriate behaviors. ii) if the complaint is determined to be an inappropriate behavior, but the research trainee requests no action at the time of reporting, then an incident report documenting the alleged behavior should be completed and placed on file with the relevant institutional representative(s).
- b. Level 1 - complaints in this category would include first-time, non-egregious, offenses or confidential complaints (level 0) by multiple research trainees.
 - i. Actions (*confidential): an informal, iterative, and confidential conversation between the mentor and the research trainee. It is imperative that this conversation is mediated by a neutral third party (institutional official), and that regularly scheduled check-ins with the research trainee follow the conversation. The department chair/division head should be informed that an incident occurred in the unit, but the faculty mentor should not be named at this time. The unit lead should facilitate broad discussions of the AToRT document and/or mentoring practices for all faculty members during a faculty meeting, proximal to the reporting.
- c. Level 2 - complaints in this category would include egregious, first-time offenses and/or repeated non-egregious offenses.
 - i. Actions (*private): Incident is referred to relevant members of a standing institutional grievance committee (Figure 1A). An appropriate subset of the grievance committee interviews both parties (and potential witnesses, as appropriate) and recommends actions, potentially including a written performance improvement plan (PIP) with measurable outcomes for the faculty mentor. The unit lead (Department chair/division head or their designee) executes the PIP. Designated grievance committee member monitors for potential retaliation. The research trainee should be offered

institutional support services (e.g., mental health services, counseling, etc.) as appropriate.

- d. Level 3 - at the highest level, complaints in this category would include repeated egregious behaviors and/or first-time, inexcusable or egregious offenses.
 - i. Actions (*private): Incident is referred to the grievance committee. Grievance committee interviews all parties and recommends actions, including a written PIP with measurable outcomes for the faculty mentor (mandatory). Unit lead (or their designee) executes the PIP. Grievance committee or appropriate institutional unit monitors for potential retaliation. The research trainee should be offered institutional support services (e.g., mental health services, counseling, etc.), and afforded the prospect of transferring to a different laboratory. Given the severity of the behaviors in this category, the grievance committee should consider placing an embargo on the faculty mentor's training activities and elevate the behavior to involve additional institutional offices/units, based on the nature of the offense.

*Confidential: information shared about an incident of inappropriate treatment will not be revealed to any other person without expressed permission of the individual.

*Private: information related to a report of inappropriate treatment will be shared with a limited number of individuals on a "need to know" basis in order to assist in the active review, investigation, and resolution of the report.

Figure 1A: Stakeholders



POSITION	ROLES/ACTION
Chair or Provost/Student Dean/Postdoc Office	Receives and Routes Complaints of Inappropriate Treatment of Research Trainees.
Unit Lead: Dept Chair/Division Chief and Dean	Early Warning Notification and Implementation of Performance Improvement Plan
Pool of Stakeholders: Faculty, Program Director, Training Grant Director, Administrators, HR, Trainees	Fact Finding and Implementation of Performance Improvement Plan

Figure 1B: Level of Response Framework

BEHAVIORAL LEVELS

	LEVEL 0 (Not Qualified)		LEVEL 1 (Single Incident)	LEVEL 2 (Multiple Incidents or Egregious)	LEVEL 3 (Unacceptable)
Reporting Level/ Governance	Confidential Institutional Rep		Confidential Institutional Rep	Private (Grievance Pool)	Private (Grievance Pool)
Step 1	No Merit	Trainee Requests No Action	Mediated Discussion Between Mentor and Mentee	Interview All Parties	Interview All Parties
Step 2	No Further Action	Document and Report Institutionally	Unit Leader: Initiate General Discussion in Faculty Meeting	Mentor: Performance Improvement Plan (PIP)	Mentor: Performance Improvement Plan (PIP)
			Trainee: Support Resources Including Mental Health	Trainee: Support Resources Including Mental Health	Trainee: Support Resources Including Mental Health
Step 3			No Further Action	Institutional Rep Informed Unit Leader: Implements PIP	Unit Leader: Implements PIP Including Guidelines for Reinstatement