Graduate Research Assistants as Researchers, Mentors, and Professionals

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Office of Research Integrity and Assurance
Outline

• Graduate Research Assistantships – Basic Information
• GRA-Faculty Supervisor Relationships
• GRA Responsibilities by Role
• Mentoring
But first…

A clunky poll using

Zoom Reactions
5 quick questions

Q1. Are you a

- new graduate student
- returning graduate student
5 quick questions

Q2. As an undergraduate, did you participate in research under faculty supervision?

- yes
- no
5 quick questions

Q3. Are you enrolled in a

- master’s program
- doctoral program
- graduate certificate program
- none of the above
5 quick questions

Q4. Are you currently a graduate research assistant?

- Yes, and this is my first semester as a GRA
- Yes, and this is not my first semester as a GRA
- No, but I am interested in becoming a GRA
- None of the above
5 quick questions

Q5. You expect to participate in research involving

- Human subjects
- Animal subjects
- Both human and animal subjects
- Neither human nor animal subjects
Graduate Assistantships – Basic Information

• University employment (up to 20 h/w)
• Must be enrolled full-time, have a minimum 3.0 GPA, and be in good academic standing
• Positions posted on Mason Jobs, Handshake, and department webpages, but also contact your advisor for information
• Come in 3 flavors
  • Graduate Professional Assistant
  • Graduate Teaching Assistant
  • Graduate Research Assistant
Graduate Assistantships – Basic Information

• GA positions are administered at the department level

• To your department, graduate assistantships are:
  • Support for graduate students (sources of funding and experience)
  • Positions that fill staffing needs in teaching and research
**Graduate Research Assistantships**

- Position descriptions, time commitment, and compensation **vary by department and position**

- In some (typically doctoral) programs, GRAs are common and are part of a departmental package of support
  - Assistantships may be guaranteed for a number of years
  - Might begin as GTA and transition to GRA as you progress in your program

- In other (and most master’s) programs, GRAs are rare, are awarded in later-stages, and are usually highly competitive
What GRAs have in common

All Graduate Research Assistants are students participating directly in research or research-support activities under faculty supervision.
# GRA–Faculty Supervisor Relationships

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GRA-Faculty Supervisor is a complex relationship involving multiple roles that overlap and interact.
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Not all of these roles are present in every situation.
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The different roles carry different norms and expectations.
Communicating with your Faculty Supervisor

• It can be helpful to keep the various roles in mind, because in practice they are often entangled.

• Unless (or even if) you are careful, it is easy for you and your faculty member to find yourselves not on the same page.

Communication and explicit discussion of expectations for these multiple roles is the most important thing you can do to ensure success.
Mentoring Agreements (& Lab Onboarding)

A basic mentoring agreement

Mentorship Agreement Template

The purpose of this template is to assist you in documenting mutually agreed upon goals and parameters that will serve as the foundation for your mentoring relationships. While mentors and mentees may find mentorship agreements to be useful, they are optional. This template is expected to be altered to meet individual needs.

[1] Goals (what you hope to achieve as a result of this relationship; e.g., gain perspective relative to skills necessary for success in academia, explore new career opportunities/alternatives, obtain knowledge of organizational culture, networking, leadership skill development, etc.):

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

[2] Steps to achieving goals as stated above (e.g., meeting regularly, manuscripts/grants, collaborating on research projects, steps to achieving independence, etc.):

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

[3] Meeting frequency (frequency, duration, and location of meetings):

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

A lab onboarding compact that also covers mentoring

Sample Compact from Laboratory of Dr. Trina McMahon for Graduate Students, University of Wisconsin-Madison

Mentor-Mentee Contract

The broad goals of my research program

As part of my job as a professor, I am expected to write grants and initiate research that will make tangible contributions to science, the academic community, and to society. You will be helping me carry out this research. It is imperative that we carry out good scientific method, and conduct ourselves in an ethical way. We must always keep in mind that the ultimate goal of our research is publication in scientific journals. Dissemination of the knowledge we gain is critical to the advancement of our field. I also value outreach and informal science education, both in the classroom and while engaging with the public. I expect you to participate in this component of our lab mission while you are part of the lab group.

What I expect from you

Another part of my job as a professor is to train and advise students. I must contribute to your professional development and progress in your degree. I will help you set goals and hopefully achieve them. However, I cannot do the work for you. In general, I expect you to:

► Learn how to plan, design, and conduct high quality scientific research
► Learn how to present and document your scientific findings
► Be honest, ethical, and enthusiastic
► Be engaged within the research group and at least two programs on campus
► Treat your lab mates, lab funds, equipment, and microbes with respect
► Take advantage of professional development opportunities
► Obtain your degree
► Work hard—don’t give up!
Your responsibilities as an employee

• Be courteous and professional in your interactions with others
• Follow standards of conduct for all Mason employees and specific to your work situation (e.g. no open-toed shoes in the lab)
• Report to work as scheduled and perform assigned duties
• Use university equipment, time, and resources judiciously
• Support efforts that ensure a safe, healthy, and inclusive work environment (including completing all HR, EHS, and ORIA compliance trainings)
• Be aware of and meet deadlines
• If specific research plans have been agreed to, see these through if at all possible
Your responsibilities as a mentee

• Be aware of your needs and how these change, and discuss them with your mentor
• Maintain a list of goals and a work plan
• Maintain regular communication with your mentor
• Respect your mentor’s other responsibilities and time commitments
• Prepare for meetings with an agenda or list of action items
• Be open and responsive to critiques and suggestions for improvement
• Take suggestions and criticism, follow through, and request feedback
• Do not expect one mentor to meet all your needs. Seek assistance from multiple sources
Your responsibilities as a co-investigator

• Conduct and cultivate ethical and responsible research
• Be aware of and uphold established professional norms and ethical principles in the performance of all activities related to your research
• Complete and maintain certification on all research compliance trainings (IRB, IACUC, RCR, EHS/lab safety, COI, and so on)
• Participate in lab/research team meetings, ask questions, raise and report problems and concerns
• Make and keep neat records and follow all protocols for managing and securing data and for storing and using samples, reagents, etc.
• Avoid (and report) research misconduct (fabrication, falsification, or plagiarism) and detrimental research practices (e.g., lack of rigor, failure to disclose conflicts)
Your responsibilities as a co-author

• Understanding the publication and taking responsibility for it.
• Acknowledging that you meet the authorship criteria required by their disciplinary and publication/venue standards. A coauthor should have participated sufficiently in the work to take responsibility for appropriate portions of the content.
• Acknowledging that you have reviewed and approved the manuscript.
• The content of all appropriate portions of the manuscript, including the integrity of any applicable research.

Mason’s Authorship Guidelines
What you can expect from your faculty supervisor

• To treat you fairly and with respect, and to not be harassed or discriminated against.
• To be available for regular meetings and informal conversations
• To provide reliable guidance on research and the profession
• To provide feedback on your work
• To discuss authorship and data ownership with you
• To encourage and support your professional development
• To serve as a role model and lead by example
Good Mentors are:

• **Advisers**, experienced and willing to share knowledge
• **Supporters**, give emotional and moral encouragement
• **Tutors**, give specific feedback on performance
• **Masters**, as in to whom one is apprenticed
• **Sponsors**, help in obtaining opportunities
• **Role models**, the kind of person an academic or researcher should be

Few if any individuals do all of these things well, which is why you should seek and cultivate **multiple mentors** to meet your needs.

Tips for getting good research mentoring

• **Multiple mentors** – develop a network or team of mentors to address different needs and issues

• Assess your current mentors and **identify potential needs** for the future

• **Ask for help** where you need it, with specific and focused questions

• Understand and **take advantage of the resources available to you**.

• **Be a mentor** as well as a mentee, **participate in a mentoring hierarchy or network**
Some common-sense guidelines for new mentors

• Mentoring relationships are voluntary. Either party has the right to withdraw from the relationship if, despite attempts to make it work, it is not satisfactory.

• The best mentoring relationships are partnerships in which both parties jointly make decisions.

• Meetings should be comfortable, neither too long nor too short, and held in environments where both parties can speak freely.

• Commitments made should be honored.

• If either party feels unclear about the current status of things in the mentoring relationship, that party should seek to clarify the views and wishes of the other party.

• Mentors and mentees should recognize their limitations and avoid working in ways that exceed those limitations.

• Be transparent about (even apparent) conflicts of interest.
Takeaways for new GRAs (by role)

• Clarify job and workplace responsibilities (employee)
• Set explicit expectations for the mentor-mentee relationship (mentee)
• Discuss authorship proactively (author)
• Conduct and cultivate ethical and responsible research (investigator)
• Seek out multiple mentors and be ready to mentor others (mentor)
Celebrating Mason’s Graduate Student Research

Keep an eye out for information on two events that showcase Mason graduate student research

• Mason Graduate Interdisciplinary Conference

• 3MT - Three Minute Thesis
Additional Resources at oria.gmu.edu

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Thank you!

Questions?
Vignette 1. PI MIA

Even during your second year as a GRA, you have a lot of trouble scheduling meetings or getting feedback from your faculty PI, while other students in your lab seem to always receive generous attention and prompt replies to emails and written drafts.

Adapted from “Mentoring Vignettes” in the Duke Graduate School’s *Cultivating a Culture of Mentoring Toolkit*
You are interested in participating in an interdisciplinary program that will require several hours per week over the course of the semester. Your faculty supervisor discourages you from applying because she believes you should be focusing on your research instead.