# Recommendations for Research Advisor/Advisee Interactions and Expectations

From the Graduate Council, Colorado School of Mines

This document is intended for graduate student researchers pursuing a thesis-based MS or Ph.D. (referred to as "advisees" in this document) and their research advisors (referred to as "advisors").

Academic research conducted under the direction of a faculty advisor is an opportunity for accelerated academic and professional growth. This is best accomplished by beginning with clear expectations for both the advisor and the advisee. This document, though not exhaustive, is intended to provide a framework for the advisor and advisee to discuss their expectations for a safe, supportive, and productive research advisor/advisee relationship.

Advisors and advisees should feel free to edit this document as desired, so long as all involved parties agree to its content. It is recommended that both the advisor and advisee acknowledge that they received and reviewed this document by signing it.

#### The Roles of Advisor and Advisee

The advisor and advisee each have unique roles in the research process.

The advisor is primarily responsible for:

- 1. Securing research funding through proposal writing.
- 2. Managing research funds and overseeing all research efforts in the group.
- 3. Mentoring advisees working under their direction. This includes providing academic advising, guidance, and resources to perform research as well as professional development opportunities.
- 4. Reviewing, editing, and approving all communication relating to the research effort, including sponsor reports, manuscripts, conference proceedings, and oral presentations.

The advisee is primarily responsible for:

- 1. Conducting research.
- 2. Sharing knowledge gained through study and experience with the advisor.
- 3. Managing their thesis project(s) and degree progress.
- 4. Effectively communicating research accomplishments through presentations, reports, and publications.
- 5. (Potentially) Serving as a teaching assistant (TA)

Both parties are responsible for ensuring that the advisee has a reasonable research project(s) to pursue and the resources needed to execute the work. The advisor may provide the initial framework for projects based on the group's central research areas, and the advisee is expected to develop independence in their work and generate and execute their own ideas. This is expected to be a continuous process that occurs throughout the length of the advisee's degree and is facilitated by the advisor.

Both parties are also encouraged to discuss early in the process expectations and interests regarding interactions with collaborators (inside and outside of Mines) and mentoring of undergraduate research assistants.

Adaptations to these general roles may be necessary in some circumstances. In addition, as the advisee grows in knowledge and experience, they may take on some tasks of the advisor, like proposal writing or assisting in mentoring junior researchers.

Advisors and advisees should read and be familiar with the expectations outlined in the Graduate Assistantship Policies (<a href="https://www.mines.edu/graduate-studies/graduate-assistantship/">https://www.mines.edu/graduate-studies/graduate-assistantship/</a>) and Mines' Authorship Guidelines developed by the Office for Research Technology Transfer (<a href="https://research.mines.edu/wp-content/uploads/sites/85/2021/09/Authorship-Guidelines-Mines-revised.pdf">https://research.mines.edu/wp-content/uploads/sites/85/2021/09/Authorship-Guidelines-Mines-revised.pdf</a>).

#### **Professional Behavior & Inclusion**

Both the advisor and advisee are responsible for creating and maintaining a safe, positive, and supportive culture in the research group, the department, and on campus. This is to be accomplished with open communication, mutual respect, and non-discrimination that enables all parties to realize their full intellectual potential.

Though advisor/advisee relationships vary from formal to informal, a high level of professionalism is essential. Advisors should always be careful to keep advisee information confidential.

## **Academic Mentoring**

The research advisor also serves as the student researcher's academic advisor. Student researchers should regularly consult with their advisor about selecting coursework to gain necessary skills for success in their research. In these discussions, the educational interests of the student should be the primary consideration. Advisors should support student efforts in balancing coursework and research responsibilities, establishing a thesis committee, thesis preparation, and other program requirements. However, it is the student's responsibility to meet academic requirements and timelines. Students should carefully study the major requirements outlined in the graduate catalog and handbook for their department and/or program. Students can also consult with their thesis committee, the Graduate Program Manager, or the Office of Graduate Studies.

## **Documentation**

All researchers are required to maintain detailed documentation of their work. This documentation could be written or digital, as directed by the advisor. While advisees may keep personal copies, all documentation should be delivered to the advisor upon completion of the research appointment or at their advisor's request. Researchers should have access to the funded grant proposal they are supporting.

## Communication

Advisors and advisees should establish and adhere to preferred means of communication (e.g., inperson discussion, email, phone, text, or other electronic formats). All parties should do their best to respect personal time by limiting text and phone calls on evenings and weekends. Exceptions may be necessary.

#### Meetings

Advisors should schedule regular meetings with their advisees, such as group, subgroup, and one-on-one meetings. The advisor should provide expectations for the frequency of these meetings and the preferred format for research discussions (e.g., printed slides, presentations, or progress reports). Advisees should come to these meetings prepared to discuss their research progress. Advisors should

also schedule regular one-on-one meetings with each advisee for academic and professional mentorship or to address topics best discussed in private.

## **Professional Development**

It is the responsibility of the advisor to provide the time and opportunities for advisees to attend regional and/or national conferences. It is the responsibility of the advisee to produce research results worthy of conference presentation. In consultation with their advisor, advisees should select a conference best suited to showcase their research results. Advisees should seek out external funding to supplement travel costs whenever possible.

#### **TAing**

Advisees may serve as teaching assistants (TAs) for none, some, or all of their graduate work. TA roles and expectations vary depending on the advisee's funding, advisor's funding, and department. Prior to joining a group, the advisee should discuss TAing expectations with their potential advisors. Some key questions to address in this conversation are:

- How often do group members typically TA?
- Under what circumstances might someone be asked to TA more or fewer semesters?
- What is the typical workload for TAs?
- What are expectations for research progress while on TA?

#### **Work Schedule**

Successful research requires a sustained effort over an extended time period. Defining an expected workload—and even more so, a fixed schedule—is notoriously difficult in graduate work for many reasons. For example, different advisors have varied expectations; factors such as lab work operations, field site access, and equipment availability will vary among and within research groups; and advisees will have different goals and circumstances that may impact their schedules, such as caregiving responsibilities, disabilities, commuting, etc.

Advisors and advisees should have a *clear* and *honest* discussion about workload expectations *before* an advisee joins a particular group. Advisees should familiarize themselves with the group culture. Key areas to discuss are:

- Academic/professional topics such as career goals, expected number of publications during degree, expected time to degree, expectations for balancing coursework with RA/TA assignments and research progress both early and later in the degree program
- Logistical factors such as typical work week schedule, expectations/availability for working nights and weekends, requirements and/or constraints for different types of tasks in the primary work locations (e.g., lab, field, other facilities), and level of hands-off/on style of advising

It is recommended that the advisee discuss these areas with both the advisor and the current group members.

## Vacation/Time Off

All Mines students and employees receive time off during official university holidays. Additional time off should also be taken throughout the year, and the advisee should make their requests for time off to their advisor. Prior to joining a lab, the advisee should discuss with their potential advisor the expectations for vacation time per year and the process by which to request time off.

A new potential advisee may hesitate to initiate this conversation with a potential advisor in fear of appearing unmotivated. However, vacation time beyond university holidays should be expected and granted. The potential advisor is encouraged to initiate this conversation prior to taking on a new advisee. The advisee is encouraged to ask the advisor and current members of the group about vacation policies prior to joining the group.

## **Lab Safety**

Advisors and advisees have a shared responsibility to maintain a safe working environment. Faculty should ensure students are properly trained before using equipment, conducting experiments, or visiting field sites. Students must ensure that they follow all safety protocols, understand the safety hazards of their research, and conduct their research with safety in mind. Students should reach out to their advisor and EH&S about safety precautions before beginning a new experiment. Additionally, students should not feel pressured to work in an environment that they consider to be unsafe. For more information, or to schedule safety training, consult the Mines Environmental Health and Safety website (https://www.mines.edu/ehs).

#### **Feedback**

Constructive feedback is critical to professional development. Advisors should provide timely and regular performance feedback to their advisees. Feedback should be constructive by describing specific items/tasks that were executed well or should be improved. If an advisee feels they are not receiving adequate feedback, it is recommended that the advisee schedule a one-on-one meeting with their advisor and prepare a list of specific questions on which the advisor can offer insight. Advisors are also encouraged to ask for feedback from their advisees to create a more supportive, positive, and productive environment.

#### **Group Manuals**

In addition to the discussion items and expectations listed in this document, each group is encouraged to have other standard operating procedures (SOPs) to help the group run smoothly. To ensure all important information is communicated and accessible to everyone in the group, it may be helpful to create a Group Manual that details expectations in the group, SOPs (such as ordering supplies, waste management, equipment access, field site permits or protocols), and resources (such as online tools, resources, fellowships, etc.). There are several examples of free, cloud-based, password-protected collaboration software (also called multi-user wikis) in which users can log in and easily access information and contribute new information. Examples include Nuclino and Notion.

## **Conflict Resolution**

Advisors and advisees are required to abide by Mines Policy on Academic Integrity/Misconduct (<a href="https://catalog.mines.edu/policiesandprocedures/">https://catalog.mines.edu/policiesandprocedures/</a>). This includes maintaining professionalism at all times.

Mines policies include a Student Complaint Process: If a student needs to make a complaint, specific or general, about their experience at Mines, he or she should contact the Office of the Dean of Students at 303-273-3288 or studentcomplaint@mines.edu. If there is an issue related to discrimination, sexual harassment, or sexual violence, there are specific procedures that will be followed. Students may find more information on the Title IX website (<a href="https://www.mines.edu/title-ix/">https://www.mines.edu/title-ix/</a>) or by contacting the Title IX & Equity Director at 303-273-2558.

The Graduate Program Manager, Department Head, and Office of Graduate Studies are also available to consult on any conflicts that cannot be suitably settled within the research group.

#### **Additional Resources**

Conducting research and working towards a degree can be challenging. Mines offers several resources to help. All the below resources are free for students.

- The Graduate Studies Office (<a href="https://www.mines.edu/graduate-studies/">https://www.mines.edu/graduate-studies/</a>) provides policies, forms, FAQ, office hours consulting sessions, and more. Visit https://www.mines.edu/graduate-studies/graduate-assistantship/ for policies and guidelines related to this document.
- Student Outreach and Support (<a href="https://www.mines.edu/student-life/student-outreach-and-support/">https://www.mines.edu/student-life/student-outreach-and-support/</a>) provides mental health resources and options. If you are concerned for someone's wellbeing, you can also submit an online referral to the Care team.
- CASA (<a href="https://www.mines.edu/casa">https://www.mines.edu/casa</a>) provides academic advising, tutoring, academic support, and academic workshops.
- The Counseling Center (<a href="https://www.mines.edu/counseling-center/">https://www.mines.edu/counseling-center/</a>) provides mental health resources and support. Students may call 303-273-3377 for an appointment. Located in the Wellness Center 2nd floor at 1770 Elm St.
- The Health Center (<a href="https://www.mines.edu/student-health/">https://www.mines.edu/student-health/</a>) provides health services. Students may call 303-273-3381 for appointment. Located in Wellness Center 1st floor at 1770 Elm St.
- The Center for Professional Education (<a href="https://www.mines.edu/cpe/resources-for-gradstudents/">https://www.mines.edu/cpe/resources-for-gradstudents/</a>) provides professional development courses, workshops, and seminars as well as one-on-one support.
- Colorado Crisis Services (<a href="http://coloradocrisisservices.org">http://coloradocrisisservices.org</a>) provides crisis support 24/7 via phone, text, and in person. Colorado Crisis Services is a great confidential resource, available to anyone by calling 1-844-493-8255, or texting "TALK" to 38255. Walk-in location addresses are posted on the website.

The Counseling Center, Health Center, and Colorado Crisis Services are confidential resources. The Counseling Center will also make referrals to off-campus counselors, if preferred.

In an emergency, you should call 911, and they will dispatch a Mines or Golden PD officer to assist.

By signing below, the advisor and advisee agree to the content of this document.
Advisee signature and date
Advisor signature and date