

# **Compact Between Graduate Students in Chemistry and Their Research Advisors**

**Adopted July 2014**

## **Intent**

These guiding principles are intended to support the development of a positive mentoring relationship between the graduate student and their research advisor. A successful student-mentor relationship requires commitment from the student, mentor, graduate program, and institution.

Pre-doctoral training entails both formal education and an apprenticeship in which the graduate student trains under the supervision of (most commonly) one research advisor who is qualified to fulfill the responsibilities of a mentor. A positive mentoring relationship between the pre-doctoral student and the research advisor is a vital component of the student's preparation to become not only an independent and successful research scientist but also an effective mentor themselves.

Students pursuing a graduate degree are expected 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. The faculty advisor also performs a critical function as a scientific role model for the graduate student.

This compact provides general guidelines for the graduate student and the research advisor on the commitments and responsibilities of either side. This compact should be discussed at the beginning of their affiliation and depending on the research group. Additional guidelines may be agreed upon and implemented at the research group level.

Conflict resolution is part of every relationship and ideally, conflicts are resolved by discussion between the advisee and mentor. If needed, conflict resolution can involve other mentors, or involve assistance from the institutional ombudsman. A relationship of mutual trust and respect should be established between mentors and graduate students to foster healthy interactions and effective communications, as well as encourage individual growth.

## **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, teamwork spirit, and ethical standards.
- I will meet regularly with my research advisor and provide him/her with updates on the progress and results of my activities and experiments.
- I will work with my research advisor to develop a thesis/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 thesis/dissertation committee. I commit to annual meetings with this committee and to being 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 participate in my institution's Responsible Conduct of Research Training Program and practice those guidelines in conducting my thesis/dissertation research.
- I will will comply with all institutional Safe Laboratory Practices at my institution.
- I will be a good lab 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 but that I am able to take a copy of my notebooks with me after I complete my thesis/dissertation.
- I will discuss policies on work hours, sick leave and vacation preemptively with my research advisor. I will consult with my advisor and notify fellow lab members in advance of any planned absences.
- 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 doctoral 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 Research Advisors**

- I acknowledge being a mentor for the graduate student. I will be committed to the education and training of the graduate student as a future member of the scientific community.
- I will be committed to supervising the research project of the graduate student. I will provide for every graduate student under my supervision an environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment. I will be supportive, equitable, accessible, encouraging, and respectful.
- I will meet with the student on a regular basis to discuss progress and results of experiments.
- I will work with each graduate student to develop a thesis/dissertation project. I will help to plan and direct the graduate student's project, set reasonable and attainable goals, establish a timeline for completion of the project, and make necessary adjustments along the way.
- I will help the graduate student select a thesis/dissertation committee. I will assure that this committee (but not necessarily including the GCR) meets at least annually to review the graduate student's progress.
- I will assist guiding the graduate student through, the requirements and deadlines of his/her graduate program as well as those of the institution, including teaching requirements and human resources guidelines.
- I will be committed to providing financial resources for the graduate student as appropriate or according to my institution's guidelines, in order for him/her to conduct thesis/dissertation research. 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 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, lab management, the ethical conduct of research, and scientific professionalism. I will encourage the student to seek opportunities in teaching, if that is not required by the student's program.
- 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 his/her training program and professional development.
- I will discuss intellectual policy issues with the student with regard to disclosure, patent rights and publishing research discoveries.
- I will discuss policies on work hours, sick leave, and vacation with my students.
- 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 his/her work in a timely manner prior to the student's graduation.
- I will provide career advice and assist in finding a position for the graduate student following is/her graduation, including letters of recommendation for his/her next phase of professional development. I will also be accessible to give advice and feedback on career goals.