

**University of Rochester School of Medicine and Dentistry**  
**Graduate Education Assessment Plan**  
**Executive Summary Spring 2019**

**Mission**

To provide graduate students with a strong foundation in basic biomedical and health sciences essential to conducting high caliber research, and professional attitudes and skills needed to become leaders in their chosen field, all with a focus on launching a lifetime of continuous learning.

**Program Goals**

- 1) Students will develop knowledge of core concepts and principles of the specific scientific discipline within the chosen program of study.
- 2) Student will develop research skills to identify an important and timely scientific problem, to design studies to gather data or develop methodology to address this problem, to execute experimental procedures and/or analytical approaches needed to gather the data or assess the methodology, and to interpret the evidence in a sound and objective manner.
- 3) Students will develop the ability to present results of research to scientific colleagues and the public through oral/audiovisual and written work.
- 4) Students will be prepared for immediate integration into the professional career for which they have been trained.

**Data Collection Tools and Approaches-**  
Student Assessment Data

**Formative assessments** include seminars, qualifying examinations, annual committee meetings with evaluations and peer reviewed publications. As part of their program, students attend *research in progress seminars* in which students present the background information, approaches, data gathered, interpretation and future directions of their research project to an audience of peers, near-peers, and faculty. Peers and faculty provide feedback to student presenters via written evaluations. *Qualifying Exams* provide opportunity for written and verbal feedback to the student regarding their research proposal. Our standardized *annual review and evaluations* process require each student to meet with their advisory committee at least once a year. Through this process, each student receives a progress evaluation by his/her faculty mentor and thesis advisory committee members. The committee evaluates student progress, noting areas of strengths and weaknesses, and makes recommendations for future goals. An evaluation form is completed and submitted to the Senior Associate Dean for Graduate Education. This process also monitors student achievements, such as the receipt of awards, fellowships and contribution to local and national service activities. Biomedical graduate students are required, all are strongly recommended, to be the lead author on manuscripts that describe their research. This provides internal and external benchmarks of student learning.

**Summative assessments** used are the *students' thesis document and defense* as well as our *post-graduation employment/scholarly achievements database*. The students' written dissertation document is evaluated by a faculty committee, which provides written and verbal feedback to the student. The oral defense includes a public seminar and closed-door examination, after which the student receives written and/or verbal feedback. Required components and criteria for success are provided to students prior to the thesis defense. The Office for Graduate Education and Postdoctoral Affairs maintains a graduate program-wide database to track students post-graduation through our Center for Professional Development. Students complete an Exit Survey at the time just prior to their defense. The database maintains records of post-graduation employment and peer-reviewed publications for all students. The database also contains information regarding awards and other achievements reached during their career.

### **Use of Evidence**

Data is continually collected at the departmental- and program-level, analyzed, de-identified and reported annually to the Dean and Assessment Liaison. Results are discussed with program leadership and with the Committee on Graduate Studies to inform program improvements. The Committee reviews major findings and determines actions to be taken to further develop and improve student achievement of program outcomes. The Committee also reviews evidence that students are achieving program outcomes. These findings are used in a variety of ways to support course and curriculum analysis, for requests for resources, in marketing and recruiting of graduate students and in grant applications.

### **Assessing the Process**

The Committee on Graduate Studies supports efforts to create and implement student assessment structures and is responsible for the periodic review of this information for the purpose of improving student learning and the overall program effectiveness to provide the highest quality education possible.