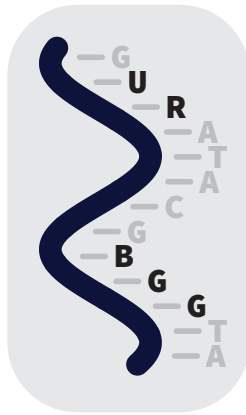




UNIVERSITY *of*
ROCHESTER

University of Rochester
School of Medicine and Dentistry



Student Handbook

for the Ph.D. Program in

Biomedical Genetics and Genomics

Updated January 2024

*This handbook supplements but does not replace the Official
Bulletin of Graduate Studies, which should be reviewed by all students.*

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1. PREFACE

1.1. Program Mission

The Ph.D. Program in Biomedical Genetics and Genomics strives to provide students with world-class, research-oriented training in modern Genetics and Genomics in a collaborative and supportive environment in which all can achieve their full potential. The program takes a broad view of Genetics, which links many diverse areas of modern biomedical research, allowing opportunities for collaboration and creative research at interdisciplinary boundaries. Research in the program encompasses a wide variety of experimental systems and models, focusing on the mechanisms of fundamental biological processes and their disruption in human disease. The program deeply values and actively fosters diversity and inclusion, critical thinking, rigorous discourse, interdisciplinary interaction and collaboration, and an appreciation of the potential of science as a positive force in society. The program also emphasizes mentoring, professional development, and preparing students for success in multiple career paths. Successful completion of the graduate program culminates in the Ph.D. degree in Genetics.

1.2. The Ph.D. Program in Biomedical Genetics and Genomics (BGG)

Students in the Biomedical Genetics and Genomics Program will, upon successful completion of the program, receive a Ph.D. in Genetics. Although the Ph.D. in Genetics is primarily a research degree, it also includes a breadth of education in areas that supplement and enrich the thesis research project. To achieve the full potential of this training program, students will participate in multiple training opportunities including formal graduate-level courses, seminars and lectures, a teaching assistantship, mentorship programs, and science communication activities through conference presentations, peer-reviewed publications, and outreach activities.

The BGG program is an interdepartmental degree program administered by the Department of Biomedical Genetics (BMG) in the School of Medicine and Dentistry (SMD). The BGG program currently encompasses 60 faculty, with primary appointments in 16 departments across the University. The faculty is composed of primary and secondary faculty in the Department of Biomedical Genetics as well as faculty from other departments with a wide variety of interests related to Genetics and Genomics. This interdisciplinary nature of the program represents one of the key hallmarks and strengths of the program, challenging students to develop creative, critical, and integrative thinking.

The BGG Program is primarily responsible for education and counseling in the first two years of graduate studies leading up to the Qualifying Exam, but also has an important role in graduate student education in subsequent years. During the first two years, students fulfill core course requirements and perform laboratory rotations. Before the beginning of the second year of study, students select their research advisor and lab. Students in the BGG program may select a research mentor from any of the program-affiliated faculty. In special cases, students may choose a non-BGG-affiliated member of the University of Rochester faculty as their research mentor, upon approval by the BGG program director.

1.3. The BGG Program Handbook and Related Resources

This handbook summarizes the policies that are unique to the Biomedical Genetics and Genomics (BGG) PhD Program at the University of Rochester. Additional details and regulations concerning graduate study at the University of Rochester can be found in the online Trainee Handbook, which is part of the Graduate Education and Postdoctoral Affairs (GEPA) website. These include the SMD Graduate Studies Bulletin (<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/policies-benefits.aspx>) and the Regulations and University Policies Concerning Graduate Studies (<https://www.rochester.edu/graduate-education/academic-resources/graduate-bulletin/>). It is expected that students and faculty mentors

regularly consult all resources as policies, guidelines, and deadlines continue to evolve in response to the changing needs of the graduate program and to new or modified rules.

1.4. Program Administration

Program Director: Douglas Portman, Ph.D., Professor of Biomedical Genetics
Office: KMRB 2-9641
Tel: (585) 275-7414
Email: douglas_portman@urmc.rochester.edu

Program Coordinator: Michael Powers
Office: KMRB 2-9644
Tel: (585) 273-1447
Email: michael_powers@urmc.rochester.edu

2. ADMISSION TO THE BGG PROGRAM

2.1. Information for Prospective BGG PhD Candidates

The BGG program seeks outstanding candidates with a passion for the biomedical sciences and the desire to excel in a rigorous, diverse, interactive, and collaborative environment. Our faculty and students come from over a dozen countries worldwide, and we encourage both domestic and international students with a bachelor's or master's degree, or their international equivalent, to apply.

Admission to the BGG program requires a solid academic foundation. This is typically a bachelor's or master's degree in biology or a subdiscipline thereof (*e.g.*, Genetics, Biochemistry, Molecular Biology, or Cell Biology), though students with other academic backgrounds are encouraged to apply if they can demonstrate preparedness for the BGG program's curriculum. Candidates should also demonstrate interest in and aptitude for biomedical research, typically through one or more significant previous experiences in a research setting.

Most importantly, applicants should have abundant curiosity, a drive to learn and discover, an openness to new ideas and constructive criticism, an ability to thrive and contribute in a diverse, collaborative environment, and a passion for scientific research.

2.2. Admissions Process

The BGG admissions committee takes an integrative, holistic approach to assessing a candidate's qualifications and goals. No one factor has a "make-or-break" influence on the committee's assessments; rather, the committee individually evaluates each candidate's background, opportunities, and achievements with an eye toward assessing their potential for success in graduate school and the degree to which enrollment in our program will benefit them. Transcripts of all post-secondary education (associate's, bachelor's, and/or master's degrees, or their equivalents) are required and allow the assessment of the candidate's academic record. A minimum of three letters of reference, ideally from referees who can provide informed, detailed, honest assessments of the candidate's potential for success in a research-intensive Ph.D. program, are required. A required personal statement allows the candidate a free-form opportunity to describe their background and explain the motivations for their interest in our program.

The Graduate Record Examination (GRE) or equivalent is not required; not submitting GRE scores will not disadvantage a candidate's application. However, test scores may be submitted voluntarily, in which case they will be integrated into the committee's holistic assessment of the application.

For students whose primary language is not English, the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Duolingo English Test (DET) is a requirement, unless applicants have successfully completed secondary instruction at an English-language institution. Test results should be submitted with institution code 2948.

2.3. Admissions Decisions

Admission to the BGG program is on a competitive basis. Decisions are made after holistic review by an admissions committee comprising program-affiliated faculty. After careful review of all application materials, prospective candidates are invited for an in-person or remote interview that will also provide an opportunity for applicants to meet faculty and student researchers in our program. In addition to prior academic training and performance, the committee evaluates a candidate's resilience, research aptitude, and letters of reference. The committee pays particular attention to the candidate's personal statement as a way of assessing their suitability and potential for success in the program.

Students may also apply to transfer into the BGG program from any other University of Rochester graduate programs, pursuant to approval by the program director. Transfer applicants will be required to submit a current *curriculum vitae*, copies of undergraduate and graduate school transcripts, and to interview with members of the admissions committee. Potential transfer applicants should consult the program director to determine their potential suitability for the program before submitting their application materials.

3. CURRICULUM FOR THE Ph.D. IN GENETICS

3.1. Overview

The graduate curriculum consists of several key components: (1) core course requirements, (2) seminar requirements, (3) elective course requirements, and (4) experimental and/or computational research. In this context, research is the most important part of the BGG program. As such, the Ph.D. degree is awarded only after a student has conducted an independent research project and successfully written and defended a dissertation that demonstrates a high level of research aptitude, intellectual competence, and original thought. Students are expected to have published their thesis work in peer-reviewed journals by the time of their thesis defense.

Additional requirements that constitute an important part of the Ph.D. training program but that are not part of the course curriculum are: (1) serving as a teaching assistant for one semester, (2) mentorship training, (3) the use of an Individual development plan (IDP) and career counseling, (4) training in science communication. These activities are detailed in Section 8. In addition, the student will be subject to the requirements of the faculty advisor's primary department.

3.2. BGG Program Course Requirements

A minimum of 96 credit hours are required for the Ph.D. degree. Of these, a minimum of 24 credit hours of course work and 8 credit hours of participation in GEN 503/504 are required, with the remaining credit hours awarded for satisfactory research work relating to the thesis project. Program course requirements

are meant to be sufficiently flexible to accommodate students with diverse backgrounds and career goals. Students should consult with their advisor or the program director for curriculum advice (students in their first year of studies are advised by the program director). Certain courses or their equivalent are specifically required. For information on requesting exemptions of this requirements, see section 3.9. A catalogue of course descriptions is available online (<https://cdcs.ur.rochester.edu/>).

3.3. Courses Required in the First Two Years of Study

Year 1 Fall Semester (16 Credits)

<u>Course Number</u>	<u>Title</u>
IND 431 (5 credits)	Foundations in Modern Biology I
IND 501 (1 credit)	Ethics & Professional Integrity
GEN 503 (1 credit)	Genetics Seminar*
GEN 507 (4 credits)	Advanced Genetics & Genomics
GEN 595 (5 credits)**	Ph.D. Research Rotation

Year 1 Spring Semester (16 Credits)

<u>Course Number</u>	<u>Title</u>
IND 432 (5 credits)	Foundations in Modern Biology II
GEN 504 (1 credit)	Genetics Seminar*
GEN 595 (7 credits)**	Ph.D. Research Rotation
Elective***	

Year 2 Fall Semester (total 16 Credits)

<u>Course Number</u>	<u>Title</u>
GEN 503 (1 credit)	Genetics Seminar*
GEN 595 (variable)**	Ph.D. Research
Electives***	

Year 2 Spring Semester (total 16 Credits)

<u>Course Number</u>	<u>Title</u>
GEN 504 (1 credit)	Genetics Seminar*
GEN 595 (variable)**	Ph.D. Research
Electives***	

* Required each semester **throughout the course of study** and includes yearly presentations beginning at the end of year 2

** The number of credits given for GEN 595 varies depending on whether an elective is taken and the number of credits of the elective. A total of 16 credits in the fall and spring semesters must be maintained.

*** To register for the qualifying exam (which must be taken by no later than Oct. 15 of year 3), students must have completed at least 5 credits of elective courses by the end of year 2.

3.4. Electives

Elective courses offer in-depth training in specialized areas that may be related to the student's research project but fall outside of the general course requirements shared by all BGG students. Electives selected by the student should reflect the specific interests of the individual student and their value in enhancing the student's research. In general, students should discuss their selection of electives with the Program Director and their research advisor before enrolling in these courses. Students may consider choosing their electives to begin fulfilling the course requirements of a doctoral concentration in either Bioinformatics or Cancer Biology. For further details on doctoral concentrations, see Section 3.5 below.

Below is a list of electives particularly relevant for the interests of most BGG students. This list is not exhaustive; students with an interest in a course not on this list should consult with the program director and their research advisor to determine whether it is appropriate for them to take. Students should note that course offerings change regularly, and some courses are not held every year; the University of Rochester course catalog (<https://cdcs.ur.rochester.edu/>) should be consulted for the most up-to-date information. **Many of these courses have specific prerequisites, enrollment caps, or other restrictions; students should consult the course director for more information.**

Course	Credits	Semester	Title
ANA 513	4.0	S	Neuroinflammation
BCH 412	4.0	S	Advanced Topics in Biological Macromolecules
BCH 521	4.0	F	Bioinformatics for Life Scientists
BIOL 457	4.0	F	Applied Genomics
BIOL 414	4.0	S	Biostatistics
BIOL 426	4.0	F	Developmental Biology
BIOL 443	4.0	S	Eukaryotic Gene Regulation
BST 432	4.0	F	High Dimensional Data Analysis
BST 434	4.0	F	Genomic Data Analysis
BST 467	4.0	S	Applied Statistics in the Biomedical Sciences
DSCC 462	4.0	F	Computational Introduction to Statistics
GEN 508	4.0	F	Development, Homeostasis, and Aging: Biological Systems From Conception To Decline
IND 419	4.0	S	Introduction to Quantitative Biology
IND 439	4.0	S	Leadership and Management for Scientists
IND 442	4.0	S	Science Outreach to All
IND 484	1.0	F/S	Current Topics in Bioinformatics
IND 507	1.0	F/S	Cancer Biology Seminar
IND 517	2.0	S	Clinical and Translational Oncology
MBI 414	4.0	F	Microbial Pathogenesis
MBI 421	4.0	S	Microbial Genetics and Physiology
MBI 456	4.0	S	Virology
MBI 473	4.0	F	Immunology
MBI 515	4.0	S	Advanced Immunology
NSC 512	5.0	F	Cellular Neuroscience
NSC 525	3.0	S	Biology of Neurological Disease
NSC 531	4.0	S	Integrative Neuroscience
PHP 404	4.0	S	Principles of Pharmacology
PHP 447	4.0	S	Signal Transduction
PTH 507	3.0	F	Molecular and Cellular Biology of Cancer
TOX 521	4.0	S	Biochemical Toxicology
TOX 522	4.0	F	Organ Systems Toxicology

3.5. Concentrations

BGG students are eligible to obtain a Concentration in Cancer Biology or a Concentration in Bioinformatics, each of which is certified by New York State. Both concentrations entail enrollment in required elective courses. The coursework requirements for concentrations can be fulfilled anytime during a student's training. Choosing to participate in a concentration is a decision that should be made by the

student in consultation with their Ph.D. research advisor, the program director, and the concentration director. Participating in both concentrations is typically not advisable and would require permission of the student's research advisor and the program director. Participating in a concentration is not mandatory; in this case, students may use their electives to tailor their curriculum to their specific interests and goals.

3.5.1 Concentration in Cancer Biology

The Concentration in Cancer Biology, directed by Paula Vertino, Ph.D., dovetails with ongoing growth in cancer biology research efforts at the University of Rochester, particularly in the Wilmot Cancer Institute. This concentration builds on the BGG core curriculum by adding a requirement for two existing courses, one focusing on the biological mechanisms of cancer and the other on clinical and translational cancer biology. Students will also participate for four semesters in an ongoing, interactive seminar series that will provide exposure to cutting-edge advances in cancer research and treatment. Students should contact Dr. Vertino for additional information about this concentration.

Course	Credits	Semester	Title
PTH 507	3.0	F	Molecular and Cellular Biology of Cancer
IND 507	1.0	F/S	Cancer Biology Seminar (<i>four semesters</i>)
IND 517	2.0	S	Clinical and Translational Oncology

3.5.2 Concentration in Bioinformatics

The Concentration in Bioinformatics, directed by Juilee Thakar, Ph.D., dovetails with expansion in Bioinformatics, Computational Biology, and Data Science across the University of Rochester. Students enrolling in this concentration will take part in coursework specifically designed to provide theoretical and practical training in bioinformatics, supplementing the core curriculum. One of these courses will focus on programming, while another concerns statistical analysis of biological data. Students in this concentration will also take part in an interactive seminar featuring discussion of cutting-edge topics in the field. Interested students should contact Dr. Thakar for more information.

Course	Credits	Semester	Title
IND 484	1.0	F/S	Current Topics in Bioinformatics (<i>two semesters</i>)
Programming requirement (<i>any one of the following</i>):			
BCH 521	4.0	F	Bioinformatics for Life Scientists
BIOL 457	4.0	F	Applied Genomics
IND 419	4.0	S	Introduction to Quantitative Biology
Statistics requirement (<i>any one of the following</i>):			
BST 432	4.0	F	High Dimensional Data Analysis
BST 434	4.0	F	Genomic Data Analysis
BST 467	4.0	S	Applied Statistics in the Biomedical Sciences
DSCC 462	4.0	F	Computational Introduction to Statistics

Choices for the statistics and programming requirements should be made by the student in consultation with their Ph.D. research advisor and/or Dr. Thakar. In special cases, other courses can be substituted for those shown here, with the prior approval of the concentration director.

3.6. Genetics Seminar Series Requirement (GEN 503/4)

All BGG students will register for and participate regularly in the Department of Biomedical Genetics (BMG) seminar series, GEN 503 (Fall)/GEN 504 (Spring). As part of course participation, students will present their research project at least once during every academic year, starting in their second year. In addition, full credit requires attendance at a minimum of 60% of the seminars in each semester. If a student fails to attend this number of sessions, they will be given an “I” (incomplete) for the course. In this case, during the following semester, the student must attend the number of seminars missed in the previous semester in addition to the 60% requirement. If the requirement is not met in the following semester, the student will receive an IE grade, automatically placing them on academic probation. In special cases where a student is unable to attend seminars regularly, alternate provisions may be made for satisfying the requirements of GEN 503/4. Such arrangements must be made with the GEN 503/4 course directors in advance and cannot be made retroactively.

Students will present their research in GEN 503/4 once annually. To help develop critical thinking skills and to foster interaction, all students are expected to be active participants in the course by asking questions and providing constructive criticism to presenters. Active participation in GEN 503/4 will be included as part of the annual evaluation.

The Genetics Seminar Series also includes graduate students from other programs who are advised by faculty members who hold primary appointments in the Department of Biomedical Genetics, as well as postdoctoral fellows in BMG. It is typically a requirement of the Department of Biomedical Genetics that all Ph.D. students in BMG laboratories, regardless of program, enroll in GEN 503/4 every semester and present annually. In special cases, students or advisors who wish to be exempted from this policy typically make such arrangements with the BMG Department Chair.

3.7. English Courses and Science Communication

The ability to effectively communicate ideas is critical to success in graduate school and becoming a successful independent scientist. To help BGG graduate students achieve this goal, the office of Graduate Education and Postdoctoral Affairs (GEPA) offers several scientific writing and English language support programs. Students are encouraged to seek out these training opportunities early in their graduate training and may be directed to attend English language programs by program director.

English Language courses are available through the University of Rochester Global Engagement English Language Program (<http://www.rochester.edu/global/programs/english-language-program/>). This program offers several classes in General English, Academic Speaking and Academic Writing. The same courses are offered during both Fall and Spring semester. To help identify the best fit, students may attend the first class and decide to drop out and take a different course. GEPA will fund up to \$900 per PhD student to take these courses.

Training in **academic writing** (manuscripts, Qualifying Exam, fellowship applications and thesis) is provided through workshops and a writing consultant as part of GEPA’s myHub professional development services. These services are aimed at providing students with the necessary framework and tools to present their ideas and research in an effective manner.

3.8. Laboratory Rotations (GEN 595)

3.8.1. Overview and Key Dates

Laboratory rotations are perhaps the most critical aspect of the BGG first-year curriculum. Laboratory rotations are an opportunity for students to directly experience and engage with the research questions,

techniques, and culture of research groups (“laboratories”) run by BGG program faculty (“PIs”). All first-year students are required to complete three laboratory rotations. Thoughtful and purposeful selection of rotations is essential for success in the first year and for identifying a suitable Ph.D. research advisor at the end of the first year. At the beginning of the academic year, faculty members interested in advising new Ph.D. students will make short, informal presentations describing their research activities to incoming students. The goals of these talks are to acquaint students with ongoing research in the program and to make them aware of opportunities for laboratory rotations and eventual Ph.D. thesis research. Attendance at these sessions is mandatory for first-year students and is essential for the thoughtful selection of laboratory rotations.

Students may carry out rotations with any tenure-track, BGG-affiliated faculty member; consult the BGG website (<https://www.urmc.rochester.edu/education/graduate/phd/biomedical-genetics-and-genomics/faculty-students/faculty.aspx>) for a current list. **If a student wishes to rotate with a faculty member not currently affiliated with BGG, they must consult with the program director before contacting that faculty member.** To select lab rotations, students are encouraged to first discuss their potential choices with the program director, their first-year faculty mentor, and their peer mentors. It is the responsibility of first-year students to contact program faculty directly to discuss possible lab rotations. Importantly, students should note that lab rotations provide an opportunity for mutual evaluation of the suitability of fit between the faculty member, other lab personnel, and the rotation student. Therefore, students should be prepared to be interviewed by prospective rotation advisors for fit and interest and should be familiar with the faculty member’s area of research. *While every effort will be made to accommodate students’ wishes, specific rotations cannot be guaranteed, as the number of available training spots per lab are limited.*

Students are expected to complete three projects in three different *laboratories* representing multiple areas of interest before requesting choosing a Ph.D. thesis advisor. In some situations, a fourth rotation can be completed before such an assignment is made. **Jointly-run (multiple-PI) laboratories are not considered to be separate laboratories; students may not carry out more than one rotation in multiple-PI laboratories.** While the first rotation usually begins in October of the first year, students may elect to carry out a summer rotation, typically beginning July 1 of the summer before the official start of the first year. In these cases, students may join a thesis laboratory earlier than the rest of their cohort or may carry out a fourth rotation.

Key Dates: First-Year Laboratory Rotations			
Rotation	Start date	End date	Evaluation deadline date
1	October 1	December 15	December 20
2	January 1	March 15	April 1
3	March 16	May 31	June 15
4	July 1	August 31	September 15

3.8.2 Rotation Proposals

On or before the start date of each rotation, students must complete and submit a BGG Rotation Proposal Form to the Program Coordinator and Program Director. An electronic version of the BGG Rotation Proposal Form can be obtained from the Program Coordinator. The form includes details of the rotation as well as a short (one-paragraph) abstract describing the overall question/goal/hypothesis, experimental or computational approach, and possible results of the rotation project. This abstract should

be prepared by the student with the guidance of the rotation advisor. **Failure to submit a rotation proposal form on time will jeopardize a student's academic standing.**

3.8.3 Rotation Evaluations

At the end of each rotation period, students are expected to give an oral presentation of their work to the host lab (some rotation advisors may choose instead to have the student prepare a written document). Both student and faculty are required to complete a rotation evaluation that should be submitted to both the BGG administrator and the GEPA. These evaluations will also be used to fulfill the progress report requirements during the first year. Evaluation forms can be found online (<https://www.urmc.rochester.edu/education/graduate/forms.aspx#AcademicSupportForms>) or can be obtained from the Program Coordinator. **Failure to submit a rotation evaluation form on time will jeopardize the student's academic standing as well as the faculty member's affiliation with the program.**

3.9. Exemptions from Coursework Requirements

First-year students who may wish to be exempted from core coursework requirements should consult the Program Director to determine whether an exemption is appropriate. The student will be required to submit a detailed course description and syllabus of relevant prior coursework (as published by the originating institution), including any applicable homework, projects, papers, and exams. If the Program Director supports the student's request, the request will be subject to review and approval by both the relevant course director(s) and the Senior Associate Dean of Graduate Education and Postdoctoral Affairs. The instructions and the form for making this request can be found on the GEPA website (<https://www.urmc.rochester.edu/education/graduate/home/forms.aspx>).

4. STUDENT EXPECTATIONS AND EVALUATIONS

4.1 Grading Systems

Two grading systems are used for evaluating student performance. Laboratory Rotations, Journal Clubs, Seminars, and Teaching Assistantships are graded on the S/E system. All other courses, unless otherwise noted, are graded on an A/E system.

S/E System		A/E system	
S	Satisfactory	A, A-	Excellent
E	Failure	B+, B, B-	Good
I	Incomplete	C	Poor
IE	Incomplete and Failure	E	Failure
W	Withdrawn	I	Incomplete
N	No Grade Reported	IE	Incomplete and Failure
		W	Withdrawn
		N	No Grade Reported

4.2 Good Academic Standing: Satisfactory Progress

After formal admission to the BGG Program, all BGG students must remain in good academic standing to continue their affiliation with the program. During the first year, the student must satisfactorily complete minimum course credit requirements, satisfactorily complete at least three laboratory rotations, and, by the end of their first year, identify a Ph.D. thesis advisor who is willing to admit the student into their research laboratory and advise and support their thesis research. Before being formally admitted to

candidacy for the PhD degree, students must pass a Qualifying Examination (See Section 6). Thus, admission to the program does not guarantee continued affiliation with the program nor the awarding of a degree. Earning a PhD entails completing all coursework, passing the qualifying exam, moving a research project forward in a substantive and demonstrable manner, writing and defending a thesis, and completing additional program requirements as described in this Handbook in a timely manner.

Detailed policies regarding satisfactory progress can be found in the University's Official Bulletin, "Regulations and University Policies Concerning Graduate Studies":
<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/policies-benefits.aspx>.

One measure of progress is coursework performance. Importantly, laboratory rotations are an integral part of the required BGG coursework. Academic probation automatically results when a student receives a C grade in any class, regardless of its topic or the number of credits it carries. **A second grade of C or lower is cause for immediate dismissal from the BGG Graduate Program. Likewise, a single failing (F) grade results in immediate dismissal from the University.**

4.3 Good Academic Standing: General Expectations

Satisfactory progress is also measured by performance in the research setting, and by meeting required deadlines. The Program Director, the student's research advisor, and their Thesis Advisory Committee actively evaluate student progress and performance. **Poor performance in these areas can result in loss of good academic standing, academic probation, and dismissal.** The following are general expectations of BGG graduate students at all stages of their education.

- Active, positive contribution to the maintenance of an environment that is rigorous, intellectually stimulating, emotionally supportive, safe, and free of harassment.
- A demonstrated commitment to their own graduate education through efforts in all academic settings.
- Being knowledgeable of the policies and requirements of the BGG graduate program, the Office for Graduate Education and Postdoctoral Affairs, and the institution, and striving to meet these requirements, including meeting the appropriate deadlines.
- Timely and forthcoming communication with one's peers, faculty, and program staff.
- Maintaining a high level of professionalism, self-motivation, engagement, excellence, scholarly curiosity, and ethical standards.
- Participation in BGG program activities, including student-led initiatives, the program retreat, and recruitment efforts.
- Maintaining a detailed, organized, and accurate record of their research and/or academic progress as directed by their supervisor/advisor.
- Continuous effort to be knowledgeable of past and current literature relevant to their field and topic of study.
- Ability to balance duties and allocate professional time to be academically effective.
- Before passing the Qualifying Exam, meeting regularly with the Program Director and thesis advisor, and being responsive to advice and guidance from these individuals.
- After passing the Qualifying Exam, meeting regularly with their thesis committee and being responsive to advice and constructive criticism from the committee.
- Attendance and participation in program/department meetings, seminars, colloquia, and journal clubs that required or otherwise expected components of the student's activities.
- A demonstrated respect for laboratory facilities and an acknowledgment that laboratory space, equipment and/or other resources are shared and that care must be exercised, with problems reported as they arise.
- Discussion of policies on academic work hours, sick leave and vacation with the student's thesis advisor or graduate program director, including advance discussion of any planned absences.

- Successful completion of all pertinent institutional orientations and trainings, such as animal training, clinical orientations, HIPAA training, human subject training, new graduate student orientation, safety training, Title IX training, etc.
- Acknowledgement that the primary responsibility to complete their degree and to develop a career following the completion of their degree falls on the student. To these ends, students should actively seek guidance from available resources, including their program director, research advisor, thesis committee, career counseling services, writing support services, and any other mentors.

4.4 Annual Evaluations

The BGG Program Director reviews the performance of first-year graduate students at the end of each semester. Student progress is evaluated based on grades, instructor feedback, rotation evaluations, rotation reports, oral presentations, and participation in Genetics Seminar. Students may be placed on academic probation or a mentoring plan based on these evaluations.

In subsequent years, students receive a written evaluation of their performance from their advisor and thesis committee. The **annual evaluation form** can be obtained online (<https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/education/graduate/documents/Evaluation-Annual.docx>) or from the Program Coordinator.

After completing the Qualifying Exam, the student must meet with their Thesis Committee at least annually and submit a written progress report within one week of the committee meeting, but **no later than June 1 of each year**. This report is reviewed by the BGG Program Director and the Senior Associate Dean for Graduate Education. **Scheduling thesis committee meetings is the responsibility of the student and should be done in conjunction with their annual BMG seminar presentation whenever possible.**

4.5 Dismissal from the Program

Students who fail to maintain good academic standing are subject to immediate dismissal from the program. Dismissal decisions are made by the BGG program director in consultation with the Senior Associate Dean for Graduate Education and Postdoctoral Affairs and are final. Dismissal is automatic for students who receive two C grades (or one E grade) in any course(s). Students who are in danger of dismissal for other reasons, typically because of failure to meet the expectations of graduate students outlined above, will usually receive a formal Letter of Expectations from the Program Director and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs warning them of possible dismissal and providing specific guidance for improving their performance. However, previous receipt of a Letter of Expectations is not a prerequisite for dismissal.

5. CHOOSING A RESEARCH ADVISOR

5.1. Selecting a Research Advisor

Even if a student feels they have a specific advisor in mind when they join the program, students are required to complete three rotations. After completing their research rotations (usually by June 1 of the first year), students should meet with the Program Director to discuss their choice of advisor. Importantly, students should understand that these decisions are mutual agreements between students and faculty, and that rotating with a particular faculty member does not guarantee that they will consent to becoming a student's advisor. Rather, students should actively discuss this possibility with faculty during and after their rotations, particularly if they have an interest in joining a particular faculty member's lab. However, agreements or commitments should not be made between students and faculty before the student consults

with the program director. Eligible advisors must have the rank of Assistant, Associate, or Full Professor (*i.e.*, they must be tenure-track) and are typically affiliated with the BGG program. Faculty must also demonstrate adequate funding support for the student. Every attempt will be made to place students in their first-choice laboratory, but limitations of space and funding may, in some cases, make it necessary to assign a student to their second choice. If a student does not feel prepared to choose a thesis advisor after the third rotation, they may elect to do a fourth rotation in the summer after the first year with the prior approval of the program director.

5.2. Selecting a Non-BGG Program Research Advisor

If a student wishes to select a thesis advisor who is *not* affiliated with the BGG Program, they must consult with the BGG program director. In these cases, the potential thesis advisor will typically request to become affiliated with BGG; alternatively, a faculty member already affiliated with BGG can serve as the student's co-advisor. Either arrangement requires approval of the BGG program director.

5.3. Co-Advising Relationships

In special circumstances, BGG students may choose a co-mentoring arrangement. This is most appropriate when a student is carrying out a collaborative research project that involves extensive use of the facilities and/or expertise of multiple faculty members. Students interested in a co-mentoring arrangement must first discuss this possibility with the Program Director before making any agreements with faculty members. All co-mentoring arrangements must adhere to the following requirements:

- a) Prior to approval of the arrangement, **the co-mentors will submit a co-mentoring agreement** which describes the nature of the collaborative project, the joint and/or distinct mentoring responsibilities of each PI, and an outline of how the co-mentorship will be handled at a practical level. This should include which lab meetings the student is expected to attend, how often at a minimum will the student meet with each PI/mentor, and in which lab the student will be working most of the time (for contact information purposes).
- b) The co-mentors must, in writing, outline and agree on the details of their responsibilities for covering the student's stipend support.
- c) If the co-mentors are in different departments, one Departmental administrator will be responsible for payroll related matters, as specified in the co-mentoring agreement.
- d) Students and advisors are expected to comment on the progress of the co-mentorship as part of the annual evaluation.
- e) Co-mentoring arrangements can be terminated by the student at any time, with the approval of the program director. Provisions for withdrawal from the arrangement by a faculty member should be provided in the co-mentoring agreement.

5.4 Changing Research Advisors

In occasional circumstances, BGG students may decide to reconsider their original choice of thesis advisor. In these cases, students should meet with the Program Director to discuss their options. Ideally, but not always, the student will have identified an alternative faculty member, often one with whom they rotated during their first year, as a potential new thesis advisor. In some cases, a new rotation will be appropriate. These situations are handled by the program director on a case-by-case basis, and often involve the guidance and direction of the Senior Associate Dean for Graduate Education and Postdoctoral Affairs. As long as a student has remained in good academic standing, the program will make every effort to identify a suitable new advisor for the student.

6. QUALIFYING EXAMINATION

Before Oct. 15 of their third year, all students must complete the Qualifying Exam (“Qual”). The purpose of the Qualifying Examination is to determine whether the student is *qualified and competent* to continue work towards a Ph.D. in Genetics. It is not intended as a test of the proposed research problem *per se* or of the supporting experimental data, but rather as a means of determining the potential of the student for independent thought, their comprehension of the general field, and capacity for exploring a relevant problem in a scientifically sound manner. For students in the BGG Program, the Qualifying Exam requires preparation of a written research proposal and a closed oral examination.

6.1. Selecting a Qualifying Exam Committee

In consultation with their thesis advisor, students should choose a Qualifying Exam Committee of **at least four, but no more than five**, faculty members. Guidelines for the composition of this committee are as follows:

- All committee members must be full-time, tenure-track faculty at the rank of Assistant Professor or above. Research-track faculty may not serve on qualifying exam committees.
- The student’s thesis advisor must be a member of the committee.
- **At least two members of the committee must be faculty affiliated with the BGG Program.**
- **At least one member must *not* be affiliated with the BGG Program.**

The Program Director determines which member will serve as Chair for the exam.

If a student has a co-advising arrangement, only one advisor can act as voting committee member for qualifying and thesis exam purposes. Additional advisors may attend the exam as non-voting observers but are not permitted to participate in the exam in any way.

The non-BGG member of the Qualifying Exam Committee can be external to the University of Rochester, with the approval of the Program Director and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs.

The Qualifying Exam committee need not be the same as the Thesis advisory committee (See section 7). Depending on the recommendations of the Qualifying Exam committee, the program director, or the student’s thesis advisor, a student may alter the composition of the committee to meet the advisory needs of the student and project going forward to completion of the thesis work.

6.2. Pre-Qual Committee Meeting

In preparation for the Qualifying Examination, students should have a “pre-qual” meeting with their chosen committee. The pre-qual meeting should be scheduled at least **3 months prior to the date of the Qualifying Examination**. The goal of the pre-qual meeting is to ensure that students are aware of the Qualifying Examination committee expectations and for committee members to become familiar with the student’s proposed research.

Students are expected to:

- Prepare a one-page *Specific Aims* page of their proposal, which should be sent to committee members at least 3 days prior to the pre-qual meeting.
- Give a presentation during the pre-qual meeting that provides the introduction, background, and hypothesis of their proposed work. This presentation need not be exhaustive but should be sufficiently detailed to allow committee members to ask relevant questions and examine the merit and feasibility of the proposal. Overall, the pre-qual meeting should not take longer than an hour, and students should time their presentation to leave enough time for questions.

Faculty are encouraged to ask questions and provide constructive feedback during the pre-qual meeting. While the pre-qual meeting is NOT an exam (*i.e.*, there is no pass/fail or grade) and the student may not have all the answers ready, it is important that faculty assess whether there are fatal flaws in the proposal or major gaps in the student’s knowledge. At a minimum this will allow the student to make improvements prior to the exam itself. If the committee finds that the proposal or the student’s knowledge have significant deficiencies, such that successful completion of the qualifying exam seem unlikely, the committee should make specific recommendations to the student and advisor and notify the program director.

The pre-qual committee meeting should be documented using the standard annual evaluation form (<https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/education/graduate/documents/Evaluation-Annual.docx>). The form should be filled out by the mentor and student after the pre-qual meeting, then circulated among committee members for comment before submitting to the program coordinator.

6.3. QE Scheduling Procedure

Students must complete the Qualifying Exam by **October 15 of their third year**. Petitions for exceptions to the October 15 deadline, as a result of unusual circumstances, must be submitted by the program director to the Senior Associate Dean for Graduate Education and Postdoctoral Affairs.

Typically, all core courses must be completed prior to taking the Qualifying Exam. Exceptions to this can be made with approval of the program director. In this case, the award of the M.Sc. degree will be held and not be conferred until all core coursework requirements are met (see Section 6.7). To prepare for this deadline, the program director will meet with all second-year students during the Spring semester of their second year. Students should also consult with the program coordinator at this time.

Qualifying Exam Paperwork:

1. Appointment Form for Ph.D. Qualifying Exam specifies the date, time, and location of the exam, the student’s program, committee members and proposal title. This form is prepared by the graduate program coordinator and signed by the graduate program director.
(<https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/education/graduate/documents/Appoi-ntment-for-the-PhD-Qualifying-Exam.docx>)
2. Program of Study for the Degree Master of Science lists completed courses and grades earned that satisfy the course work requirements of the Master’s degree. This form is prepared by the graduate program coordinator and signed by the graduate program director and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs.
(<https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/education/graduate/documents/Progra-m-of-Study-Master-s-Degree.docx>)
3. Proposal Title Page: Cover page with title for the thesis proposal abstract.
4. Proposal Abstract: Outline of a proposed research project that is presented to an advisory committee for approval. One page, 400 word limit, Arial 11pt font.

Timeline for scheduling Qualifying exam:

At least 8 weeks prior to exam date	Schedule Qualifying Exam date with appointed qual committee members. The student will poll the committee members to identify a mutually agreeable date. Once a date/time/location has been set, students should obtain confirmation from all committee members to assure the date has been scheduled.
At least 6 weeks prior to exam date	Inform BGG program coordinator of planned exam date/time/location.

4 weeks prior to exam date	Submit the Title and Abstract page via email to the BGG program coordinator, who will prepare and submit the qualifying examination paperwork to the Office for Graduate Education and Postdoctoral Affairs (GEPA) at least 10 working days prior to scheduled exam date.
2 weeks prior to exam date	Send copy of Thesis Proposal to the members of the Qualifying Exam Committee. Students should determine in advance whether individual committee members prefer PDF or paper copies of this document.
At least 1 week prior to exam	The assigned Chair of the exam committee will poll Qualifying Exam committee members to assess the acceptability of the thesis proposal document. If the Chair determines that each member of the committee finds the thesis proposal document to be of sufficient quality, the exam will proceed. An affirmative answer means only that committee members find that the proposal is acceptable in principle and does not preclude changes to the document after the exam. If the thesis proposal document is determined by the committee not to be of sufficient quality, the student will be provided guidance about appropriate revisions and will reschedule the exam for a later date.

6.4. Qualifying Examination Proposal (“Thesis Proposal”)

The Qualifying Examination Proposal, also called the Thesis Proposal, is a document that describes, in detail, the student’s plans for a research project. The Thesis Proposal should be developed by the student in close consultation with the student’s research advisor. The proposal should provide a compelling rationale for the proposed research, a thorough description of experimental approaches and data analysis, and a discussion of potential outcomes and interpretations of the proposed studies.

To help students gain experience writing grant proposals, and to prepare qualified students for submission of their own proposals, the Thesis Proposal should be formatted in the style of an NIH F31 NRSA Fellowship application as described below and in the “Research Training Plan Section” of the NIH Fellowship Instructions (Section F.340, <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-e/fellowship-forms-e.pdf>).

Students are strongly encouraged to consult examples of successful BGG Thesis Proposals before writing their own.

General Format: Use Arial or Times New Roman font (11pt, single spaced) with 0.5 inch margins. Figures should be placed in-line with text with appropriate figure legends (Figure legends may use 9 point font). **Proposals that do not strictly adhere to these guidelines will be rejected.**

Specific Aims (one page limit):

- State concisely the goals of the proposed research and summarize the possible outcome(s), including the impact that the results of the proposed research will have on the research field(s) involved.
- List succinctly the specific objectives of the research proposed (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm, address a critical barrier to progress in the field, or develop new technology) and how they will be achieved.

Research Strategy (six page limit, single-spaced)

A. Significance:

- Explain the background to the proposal and critically evaluate existing knowledge. Explain the importance of the problem or critical barrier to progress (the knowledge gap) that the proposed project addresses.

- Describe the proposed project's innovation. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

B. Approach:

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include discussion of how the data will be collected, analyzed, and interpreted.
- Discuss in detail the experimental design and the procedures to be used to accomplish the specific aims of the work described in the proposal.
- Describe the protocols to be used and a tentative timetable for the investigation. Include the means by which the data will be analyzed and interpreted.
- Describe any new methodology and its advantage over existing methodology.
- Describe how your methods for analysis and sample size are appropriate for your experimental plan. Include power analysis and description of statistical analysis. If appropriate, provide plans for participant assignment and intervention delivery.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

Information on preliminary studies, including data collected by you and/or others in the lab, can be included in the Significance or Approach section.

References (no page limit)

Use any standard reference format. Students are encouraged to use reference-manager software to organize this section.

6.5. Oral Qualifying Examination

The oral examination begins with a closed meeting of the Qualifying Examination Committee to review the student's academic record, research performance, and written proposal. The committee will also decide on the general areas of questioning for the oral examination.

The student is expected to present the thesis research proposal as a formal presentation with slides. The presentation should be timed to be approximately 45 minutes long. The committee may choose to examine the student only after the presentation is complete. However, the committee will typically choose to ask questions as the presentation proceeds. A typical examination will take between two and three hours. The candidate is judged on their written and oral presentation; their grasp of the fundamental issues; their ability to apply the background from formal coursework to problems related to the proposal; and a demonstration of critical assessment of results.

The Chair of the Examination Committee will moderate the examination and assure that each member has adequate time to ask questions. The Chair is also expected to ask questions. While the focus of questioning is usually related to the student's thesis proposal, questions aimed at assessing the student's background knowledge in Genetics and other fields related to their proposal are also possible and should be anticipated.

6.6. Results of the Qualifying Examination

Immediately following the oral examination, the Committee will meet in closed session to evaluate the student's overall performance (considering the oral examination, written proposal, academic record, and laboratory performance). The committee will then vote on the following outcomes:

- 1) Pass: student earns the Master's degree associated with the Ph.D. degree and is admitted to candidacy for the Ph.D. degree.* A three-fourths majority of the committee is required for this outcome. All votes will be recorded.
- 2) Pass, pending modifications: the student passes pending modifications to the thesis proposal, with 14 calendar days after the exam to make necessary revisions. The quality of these revisions is typically assessed by the student's thesis advisor, though the entire committee may request to be involved.
- 3) Fail: If the student did not pass the exam, they may be granted an opportunity to take a second exam. This is determined in consultation with the advisor, program director and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs. The following courses of action may be taken:
 - a) the student may repeat the qualifying exam. It is recommended that an exam not be scheduled *earlier* than 5 months or *later* than 9 months after the first attempt. The procedure for the second exam is the same as for the first, with the exception that another repeat is not possible.
 - b) the student may be dismissed from the program. Under certain circumstances the Committee may decide that a second examination is not warranted. Such cases require a unanimous decision by the Committee. Examples of circumstances that could void a second examination include, but are not limited to: (i) that the initial exam was scheduled after October 15th of the third year, without approval by the Associate Dean of Graduate Studies; (ii) that the student has significant deficiencies in coursework (i.e., one or more "C/E" grades); (iii) the student's performance on the initial exam indicates that re-examination is unlikely to yield a favorable result.

*In unusual circumstances, the advisory committee may determine that although the student has passed the qualifying exam, the student should not be admitted to candidacy for the doctoral degree. In this case, the student is awarded a terminal Master's degree and dismissed from the program.

6.7. Program for the Degree of Master of Science

Upon successful completion of the Qualifying exam, and the required minimum of 30 credit hours of course work (of which no more than 6 may be credits for research), the student will be awarded a Master of Science (M.Sc.) degree.

The graduate program coordinator will complete a Program for the Degree of Master of Science form, setting forth the requirements for the student's degree. It will be filed with the office of Graduate Education & Postdoctoral Affairs at the time of registration, 30 working days prior to the qualifying exam. This form must list all formal courses (both specifically required and electives), seminars and research credits that the student must complete. In order to obtain the Master of Science degree a minimum of 30 credit hours of course work is required, of which no more than 6 may be credits of research.

7. THESIS ADVISORY COMMITTEE

Following successful completion of the Qualifying Exam, the student selects a thesis advisory committee ("thesis committee"). This critical committee performs several functions. It provides advice to the student regarding the planning and progress of their research with regard to scientific merit, techniques, data

interpretation and analysis, relevance for related fields, etc. It provides guidance to the student regarding professional development, career advice, and networking. It gives final approval for the student to write their dissertation and defend their thesis. The thesis committee also mediates in case of tension between the advisor and the student. Finally, it, along with a Chair appointed by the Senior Associate Dean for Graduate Education and Postdoctoral Affairs, is the examining committee for the thesis defense.

In addition to the mentor/PI, the thesis advisory committee should consist of at least four members. Three of these should be affiliated with the BGG program, and one must be not affiliated with the BGG program. The outside member may come from an institution other than the University of Rochester, with prior approval of the program director and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs. **All members of the committee must be tenure-track faculty of the rank of Assistant, Associate, or full Professor, or equivalent.**

Additional committee members may be included from either within or outside the University if the student and/or their advisor consider it useful or necessary. Thus, the minimum size of the committee, including the student's advisor, will be five members, but six is quite possible. In the case of joint co-advisors, a minimum of six members may be required.

8. ADDITIONAL PROGRAM EXPECTATIONS AND REQUIREMENTS

8.1. Fellowship Applications

Students are encouraged to apply for awards, fellowships, and grants early on in their course of research. Learning to prepare competitive applications is a critical skill required for a successful career in research. Numerous opportunities exist for graduate students to apply for travel awards, research grants, and fellowships that provide stipends support.

Per NIH requirements for institutional training grants, all BGG students are required to obtain an NIH eRA Commons ID as well as an Open Researcher and Contributor Identifiers (ORCID) ID. The Program Coordinator can provide guidance about establishing an eRA Commons ID. The ORCID ID is a “persistent digital identifier that distinguishes you from every other researcher and supports automated linkages between you and your professional activities, ensuring that your work is recognized.” There is no fee to establish an ORCID profile and it can be linked to the one that you maintain within eRA Commons. A profile can be established via a link in Commons or by visiting the ORCID website directly (<https://orcid.org/>).

For US Citizens and Permanent Residents, the first major opportunity is to apply for a National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) award (www.nsfgrfp.org). GRFP Fellowships provide five years of independent stipend funding directly to the student. A wide area of STEM-related research is eligible for GRFP awards, with the exception of research with primarily disease-related goals and clinical research. This needs to be considered when preparing the application. Submission deadline is in Sept/Oct after the start of the second year. Students should consult with their research advisor and the Program Coordinator before preparing a GRFP application.

After successful completion of the Qualifying Exam, students who are US citizens or permanent residents are strongly encouraged to apply for an NIH R31 NRSA NIH Training Fellowship (or, for M.D./Ph.D. students, an F30 fellowship) (see <https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html>). In addition to providing awardees with significant funding resources, these training awards provide peer-reviewed accreditation of the applicant and a significant benefit to future career development. The process of applying for such a fellowship also provides an invaluable training opportunity in how to prepare a research application and how to address reviewer's comments.

Due to the nature of the NIH and NSF rules, foreign nationals do not qualify for F31 or GRFP grants. These students, as well as domestic students, are encouraged to seek out training grants offered by private foundations and/or state agencies that do not impose a citizenship requirement. Students can register in the GENIUS/SMARTS/SPIN databases at <http://www.rochester.edu/ORPA/funding/index.html> and receive funding opportunities daily. For more information about grants and fellowships, call the Office of Research and Project Administration (ORPA) for an appointment, x54031 (Hylan Building, Rm. 515 on River Campus) or visit them online (<http://www.rochester.edu/ORPA/>). Students are encouraged to consult with their research advisor and members of their thesis committee for advice and guidance on all grant and fellowship opportunities.

8.2. Conference and Meeting Attendance

At least once during their PhD training, all BGG students are required to attend and present their research at one or more national or international conferences. Presentation can be in the form of an oral presentation or a poster. Students should submit an abstract or outline of each presentation to the program coordinator.

Throughout the year, various departments, centers, and programs sponsor poster sessions to showcase their research and to provide a forum for exchanging ideas. BGG students who have passed their qualifying exams are expected to present their work at these sessions, and all students are expected to attend and actively participate.

8.3. Individual Development Plan

The Individual Development Plan (IDP) is a commonly used tool to help trainees define and pursue their career goals. Per the URM's "Roles And Responsibilities Of Supervisors/Advisors And Graduate Students" (<https://www.urmc.rochester.edu/education/graduate/forms/roles-responsibilities-advisors-students.aspx>), all BGG students will create an Individual Development Plan (IDP). In creating and developing the IDP, the trainee will work with their research advisor, as well as other mentor(s) where appropriate. The IDP maps out the general path the trainee wants to take and helps match skills and strengths to career choices. Since needs and goals will evolve over time, the IDP should be revised and modified on a regular basis, no less than annually. myHub recommends that SMD trainees use the *Science* Careers myIDP online tool (<https://myidp.sciencecareers.org>), a unique, web-based career-planning tool tailored to meet the needs of PhD students and postdocs in the sciences.

8.4. Teaching Assistantship

All BGG students will be required to act as teaching assistants (TAs) for one semester. Unless otherwise arranged with permission of the program director, BGG students will TA for Foundations in Modern Biology (IND 431 or IND 432). TA activities include small group workshop prep and moderating, pre-exam tutoring, exam proctoring and grading. Typically, students will complete their TA requirement during the third year, but, with permission of the program director, this may also take place in the second year. However, for those students for whom English is a second language, the teaching assistantship can be delayed until the fourth year.

8.5. Outreach and Science Communication

To enable students to further improve communication skills, all BGG students are expected to participate *at least once* in any of several, research and science-based competitions that take place every year. These include the Three Minute Thesis (3MT), Falling Walls and Born Seekers competitions. These opportunities are invaluable for student in their 3rd through 5th year, as they prepare to attend conferences

and seek post-doctoral career opportunities. The requirement to participate in such a competition will be part of the annual review.

3MT: <https://www.urmc.rochester.edu/education/graduate/professional-development/3mt.aspx>

Falling Walls: <https://www.falling-walls.com/>

Born Seekers: <http://www.bornseekersfellowship.com/fellowship.html>

8.6. Peer Mentor Program

BGG students are expected to serve as Peer Mentors for new, incoming students. Peer mentors play an important role in helping the incoming students to navigate their first year in graduate school. The goal is to provide important information from the perspective of a graduate student for new first-year student. This includes giving advice about, for example, expectations in graduate school, balancing classes and lab work, study habits, choosing a rotation, and eventually choosing a thesis lab. This mentorship helps students learn about how to read the scientific literature, improve scientific writing, and prepare for the qualifying exam. Mentorship is also intended to improve networking among the existing and new students.

The peer mentorship program provides mentors with a valuable experience in leadership, helping to build skills that will become part of the formal training experience (and as such, an activity that will be documented and listed in the CV).

Peer mentor responsibilities are to:

1. Meet with the student frequently. Peer mentors should make themselves available to the student as much as possible and meet at least once a month.
2. Provide advice on expectations in graduate school, balancing classes and lab work, study habits, choosing a rotation and thesis lab, and, where appropriate, personal matters like housing and extracurricular activities.
3. Help students find the right resources. New students may not always remember all the resources they learn about during orientation.
4. Provide feedback to the BGG program director and/or program coordinator as appropriate. As fellow students, mentors have a unique perspective on a mentee's performance and progress. Peer mentors can help make program leadership aware of issues and concerns that might not otherwise be apparent.

8.7. Attendance and participation in BGG-Sponsored Events

Students are expected to attend and participate in all events sponsored by BGG and the Department of Biomedical Genetics (BMG). These include:

- Scientific events (*e.g.*, BGG student thesis defenses, Genetics Day, Wilmot Cancer Institute Symposium, invited speaker presentations)
- BGG Recruitment Events (*e.g.*, hosting/chaperoning applicants, presenting in the interview weekend poster sessions and/or data blitz events, taking part in student activities)
- BGG Social events (*e.g.*, Retreat, Summer Picnic).

Participation in these events is important for both the growth of the individual student as well as the program itself. The program coordinator should be notified in advance if a student is unable to attend.

9. GUIDELINES FOR THE PREPARATION AND REGISTRATION OF THE Ph.D. THESIS

9.1. Requirements

- Qualifying exam has been passed no sooner than six months prior to the thesis defense.
- Completion of degree requirements within specific time limits (seven years, unless an extension has been granted by Senior Associate Dean for Graduate Education and Postdoctoral Affairs).
- Satisfactory completion of the appropriate number of credit hours for the program (90 credit hours with no grades outstanding, excluding the current term).
- *Program of Study* must be on file with all requirements met. Note that the *Program of Study* should be filed before student completes the Qualifying Exam and will be used as a guideline for completion of their degree work. It reflects the minimum courses/credits needed to complete the degree.
- Student must have maintained continuous enrollment since admittance into the Graduate Degree Program.
- All students are required to have at least one first-author, peer-reviewed journal article published (or submitted for publication) prior to defending their PhD research. Potential exceptions to this requirement should be discussed well in advance with the BGG program director and must be approved by the Senior Associate Dean for Graduate Education and Postdoctoral Affairs.
- Committee must conform to the guidelines set by the Vice Provost for Research and the Office of Graduate Education and Postdoctoral Affairs (GEPA). The Committee consists of four people including the advisor and an outside member. The outside committee member is defined as a tenure-track faculty member who is **not affiliated** with the BGG program or the Department of Biomedical Genetics. A person from outside the University may serve as the outside member with prior approval from the Senior Associate Dean for Graduate Education and the Vice Provost and University Dean for Graduate Studies. Refer to the University's Official Bulletin for Graduate Studies for more details.

9.2. Written Thesis

A "The Preparation of Doctoral Theses" manual is available online (<http://www.rochester.edu/Theses/>). Requirements outlined in this manual must be strictly adhered to. It is the responsibility of the student to see that style, format, margins, paper, binding, etc., are in accordance with University regulations. Questions or concerns regarding thesis preparation should be directed to the program coordinator or the Office of the University Dean for Graduate Studies, x54279. The thesis should consist of the following:

- Title Page (formatted as the example in the Doctoral Thesis Manual)
- Curriculum Vitae
- Acknowledgments (where relevant)
- Abstract
- Table of Contents
- List of Tables (if applicable)
- List of Figures; note that figures may be placed in-line with the written text and need not be placed at the end of a chapter, as was previously previous practice.
- Foreword
- Text of the Thesis
- Conclusion
- Bibliography
- Appendices

The University Dean of Graduate Studies has set deadlines during the academic year by which a thesis must be registered in order to participate in graduation at the next Commencement. Please refer to the School of Medicine and Dentistry Graduate Student Academic Calendar for dates regarding

registering the thesis, holding the defense, and submitting corrected copies. **These dates must be adhered to; there are no exceptions.** Calendars are available online (<https://www.urmc.rochester.edu/education/graduate/current-students/academic-calendar.aspx>).

9.3. Overview of Due Dates

- **At least 6 months prior** to scheduling a defense, the student must meet with the Thesis Advisory Committee to request approval to begin writing thesis. **The committee must provide affirmative consent before the following steps can be undertaken.**
- **At least 4 months** to scheduling a defense, in consultation with the thesis advisor and/or program director, the student must identify **3 individuals** to serve as a Chair for their defense. Students should fill out the [Request for PhD Defense Chairperson](#) and submit it to the program coordinator along with a title page and abstract. Please note that while faculty who hold an M.D. but not a Ph.D. may serve on a student's thesis advisory/defense committee, to chair a BGG student's thesis defense committee the faculty nominee **must** hold a Ph.D.
- **At least 6 weeks prior** to the date of defense, students must notify the graduate program coordinator of their defense plans, by providing the names of committee members, title, and dissertation abstract. The coordinator will prepare the necessary forms for thesis registration ([Biomedical Science Program of Study](#), [Program Statement on Completion of PhD Requirements](#)) and will start a record in the PhD Defense Processing System (SharePoint). The system allows student's personal information, all necessary forms, and the required approvals to be collected electronically at various points through the process prior to defense.
- **At least 4 weeks prior** to the defense, students must complete the [Alumni Update Form](#) for their exit interview and ensure the graduate program coordinator uploads their thesis registration forms, including their PhD thesis and CV, in PDF format, to the PhD Defense Processing System. **At this point, no further revisions can be made to the thesis unless committee members request revisions during the thesis defense.** Students should ask their committee whether they prefer paper or/and electronic versions of the thesis. Committee members have 2 weeks to review and approve the dissertation. *Please note that URMCCopy Center requires at least 4 business days to print and bind a thesis.*
- **At least 10 full working days prior** to the date of defense, the Chair should be provided with a copy of the thesis (hard-copy and/or PDF, according to their preference). The coordinator will approve the student's record in PhD Defense Processing System, which triggers emails to committee members asking for their approval. After committee approval, the BGG Program Director must approve a student's defense, followed by review and approval by the Senior Associate Dean and the University Dean. Students will receive notification from the University Dean's Office confirming scheduling of the defense and the appointment of the Chair. The Chair of the defense and the committee will receive exam information directly from the University Dean via email.

NOTE: More detailed information on registering and finalizing the thesis is available at <https://www.urmc.rochester.edu/education/graduate/trainee-handbook/academic-resources/thesis-defense.aspx>

10. THESIS DEFENSE

10.1. Overview

Before the exam, the student's advisor will receive confirmation of the scheduling of the exam and name of the Chairperson of the Examining Committee appointed as the representative of the Dean of Graduate Studies.

The format of the Final Examination for the Ph.D. is as follows. A formal seminar open to the public is presented by the student during the first hour of the exam. The student's presentation should last approximately 50 minutes and 10 minutes are allowed at the conclusion for questions from the audience. Notes, slides, charts, and the usual visual aids for a seminar are permitted. The student and the Examining Committee will then adjourn to a private session where the second part of the exam will be conducted. Using oral examination, the committee will scrutinize the student's comprehension, execution, description and interpretation of the research described in the thesis.

10.2. After the defense

After the Defense, the Committee Chair notifies the Dean of Graduate Studies of the outcome of the defense. If the outcome is a pass, the student will receive an email with further instructions from the University Graduate Studies.

After the successful completion of both the public and closed exams, the student needs to complete **revisions to the written thesis**, if necessary, and submit them to faculty for approval. The Dean's Office receives the final approval from the faculty via email.

Publication of Thesis

The student uploads the final document to the UR ProQuest site **before the degree period deadline**. It is student's responsibility to be aware of the deadline for the current degree period and submit all required forms and documentation on time. Deadlines are listed on the academic calendar. It is strongly recommended that a student begin working on their ProQuest form before their defense to familiarize themselves with the site and learn what they have to do to complete the form. The form can be started, continued and/or amended.

If there is proprietary or confidential information in a student's dissertation, such as industry trade secrets or studies using a reagent obtained under the Material Transfer Agreement (MTA) with restrictions on publishing, the information should be removed from the dissertation, placed in an appendix that will be restricted from public view, and provided to the UR Graduate Studies Office electronically. Text should be in PDF format.

Some publishers may consider worldwide access to your dissertation on UR Research to be prior publication of the work. If your dissertation includes chapters or data that you plan to publish in the future, you should opt to **restrict access to the University of Rochester community only**, which this form permits for up to 2 years after the date your degree is awarded by the Trustees. Extensions of the UR-only restriction in order to delay worldwide access are permitted in some circumstances on request to the University Dean of Graduate Studies.

The option of a **complete embargo** (blocking access to anyone, including those within UR) is limited to 3 months. Use this option if your dissertation contains new information that could lead to an invention. It will be completely embargoed for a 3-month period after the date your degree is awarded by the Trustees, during which an Invention Disclosure Form may be submitted to the Office of Technology Transfer and patent protection obtained for the invention.

Exit Survey

To exit the program student will need to complete a two-part web-based survey. The first part of the survey contains a brief set of questions from the University of Rochester. When the first part is completed, the student will be automatically directed to the second part where questions about activities in the program, future plans and honest opinion on the quality of the PhD program will be asked. The

responses are completely confidential, but the student ID number is requested to verify the survey has been completed.

University Graduate Studies monitors the completion of the post-defense requirements and updates the student's record accordingly. Once they have all been met, and the final version of the student's PhD thesis has been sent to ProQuest, the site will generate the final completion memo, a copy of which is sent to the graduate coordinator, the student, the dean's staff, International Services Office (if appropriate), and University Housing. The Graduate Program Coordinator will prepare forms (Change of Status and 506 Appointment Forms) to terminate graduate student status.

The PhD stipend is to be terminated at the end of the pay period in which the student submits the final copy of the dissertation. SMD policy requires that students turn in the final copy of the dissertation within 30 days of the final oral examination. In extremely rare circumstances, the student may be unable to turn in the final dissertation within 30 days of the oral examination. In such cases, continuation of the stipend beyond the end of the pay period in which the 30th day falls is at the discretion of the advisor and the Senior Associate Dean for Graduate Education.

11. HEALTH INSURANCE FOR GRADUATING STUDENTS

Graduating students are encouraged to check their health insurance status **at least 60 days in advance** of graduation to assure continuing coverage and access to health care following graduation. For information about coverage options after graduation, please visit: <http://www.rochester.edu/uhs/primary-care/mandatory-health-fee/health-insurance-for-full-time-students/insurance-and-health-information-for-graduating-students/>.

12. M.D./Ph.D. PROGRAM

M.D./Ph.D. program students ("MSTP students") usually enter the Ph.D. portion of their combined degree work after the basic science years of the M.D. curriculum. During the second year of the M.D. program, they should discuss the Ph.D. Program with prospective faculty advisors and the BGG program director. It is optimal for the student to complete two research rotations before choosing a permanent advisor.

A total of 96 credit hours are required for the Ph.D., M.D./ Ph.D. Program course requirements are meant to be sufficiently flexible to accommodate students with diverse backgrounds and career goals.

12.1. Curriculum and Electives

The BGG curriculum for MSTP students is identical to that for Ph.D. students, unless other arrangements have been made with the program director, the MSTP program director, and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs.

12.2. Other Requirements

- Two research rotations should be conducted prior to joining a laboratory for dissertation research. Students are encouraged to complete these rotations during the first two years of the M.D. program.
- The Qualifying Examination is required at the end of the second year of the Ph.D. studies.
- The teaching assistant requirement is waived.
- At least one meeting per year with the thesis advisory committee is required (normally held after the student's Genetics Seminar presentation).

- A satisfactory thesis must be written and successfully defended.
- Unless otherwise noted, all requirements and expectations of BGG Ph.D. students outlined in this document also apply to M.D./Ph.D. students in the BGG program.

13. GENERAL POLICIES

This handbook was prepared to supplement but **not** replace the Official Bulletin of Graduate Studies, which supersedes program specific-rules and should be reviewed by all students (<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/policies-benefits.aspx#GraduateStudents>).

13.1. Student Support Resources

The success of our program is measured by the success of our students. Providing trainee support is key to ensuring that our students achieve their full potential. Students who feel they are not achieving this potential are encouraged to seek help as soon as possible. Several resources are available to our students, including tutoring support for course work, writing support, support for improving study habits, mental health counseling services, peer support, and career services. Contacts and information can be found on the Office for Graduate Education and Postdoctoral Affairs web site (<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/trainee-support-resources.aspx>).

13.2. Assuring a Professional and Respectful Learning Environment

URMC expects and requires learners, faculty, and staff to conduct themselves in a professional and respectful manner.

This expectation is summarized in the acronym *iCARE*, which stands for:

INCLUSION:

I will embrace diversity, be an ally for others, and acknowledge that everyone has their own story.

- Be welcoming – invite everyone to be involved
- Address my own biases and behaviors – take responsibility for my actions
- Ask – don't make assumptions about others

INTEGRITY:

I will be honest, ethical, and act in a fair and trustworthy manner.

- Be mindful of my actions – in my conversation topic, tone, volume, and body language
- Uphold professional and ethical standards – adhere to all regulations that apply to me
- Take pride in my work – both in quality and rigor

COMPASSION:

I will act with kindness, show empathy, and be responsive to individual needs.

- Communicate with kindness – use preferred names, smile, make eye contact, actively listen
- Be mindful and sensitive to others' feelings – act with empathy
- Value all team members and their roles – introduce new members

ACCOUNTABILITY:

I will lead by example, take responsibility for my actions, and support the efforts of my team.

- Introduce myself – greet others, say my name, and explain my role
- Answer questions clearly – ask about and address concerns, explain, involve, and update
- Take ownership of problems – work collaboratively with others to resolve

RESPECT:

I will be open and accepting of others' perspectives and treat each person with dignity and cultural sensitivity.

- Treat all individuals fairly and equitably - regardless of personal identity
- Be courteous and friendly – to all colleagues, learners, patients, families, and visitors
- Speak positively – about colleagues, learners, departments, and the institution

EXCELLENCE:

I will advance personal and team goals, seek innovative approaches, be Ever Better – Meliora.

- Accomplish tasks and fulfill responsibilities –work to the best of my abilities and expertise
- Take initiative to help – offer assistance and support, and ask if there is anything else I can do
- Recognize my colleagues – thank them for their efforts both publicly and privately

Inappropriate behavior that negatively impacts our learning environment is prohibited.

Inappropriate behavior includes but is not limited to: sexual harassment; any discrimination or harassment based on age, color, disability, domestic violence status, ethnicity, gender identity or expression, genetic information, marital status, military/veteran status, national origin, race, religion/creed, sex, sexual orientation, or any other status protected by law; humiliation; verbal, psychological or physical punishment; and/or the use of grading and other forms of assessment in a punitive manner.

All concerns or complaints regarding inappropriate behavior, either witnessed or experienced, should be reported. Specific procedures and contact information can be found online

(<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/trainee-support-resources.aspx>

and https://sites.mc.rochester.edu/media/1924190/urmc-18_pr_conduct_full_pub_r6.pdf). All individuals who file a report will be advised about the follow-up and outcome of any reported incident.

13.3. Dealing with Problems and Grievances

While graduate studies are exciting and intellectually stimulating times in a trainee’s career, occasionally problems can arise. There are many people to whom students can turn for advice and help when facing problems. This includes their faculty advisor(s), thesis committee members, the graduate program director, the program coordinator, the department chair, and the Senior Associate Dean for Graduate Education and Postdoctoral Affairs. And students are encouraged to seek help and advice as soon as possible to resolve problems, including scientific and personal disagreements.

A grievance may be considered if the student has evidence that criteria have not been applied consistently. The informal procedure consists of discussing the problem or concern with the relevant faculty member. If the student is not satisfied with the outcome of the discussion with the relevant faculty member, or is not comfortable approaching them directly, the student should:

1. Alert the advisor of the problem or concern, unless the problem is with the advisor.
2. Alert the program director of the problem or concern, unless the problem is with the program director.
3. Alert the department chair of the problem or concern, unless the problem is with the Department Chair.

If the student is still not satisfied with the outcome of the discussion, the student should contact the Senior Associate Dean for Graduate Education and Postdoctoral Affairs within 10 days of receiving the faculty member's response (advisor, program director or chair). All materials and communications from previous contacts in the procedure should be assembled by the student and forwarded to GEPA with a cover letter. The cover letter should contain information which describes why the results of the previous steps in this procedure were objectionable and/or unsatisfactory and a statement which explains how the student feels this problem can be solved. GEPA has three options:

1. To rule that the problem is not grounds for a grievance; this ends the grievance.
2. To rule on the problem.

3. To refer the problem to an ad hoc committee appointed by GEPA, comprised of three individuals who have not been involved in the procedure thus far. The committee will review all materials and refer their written evaluation to the GEPA, who will act on the recommendations.

If the student is still dissatisfied with the outcome, the final step in this procedure is to assemble the materials as outlined in the previous step within 10 working days, attach a cover letter (see above) and forward these materials to the Dean of the SMD. The Dean will either rule that the problem is not grounds for a grievance or rule on the problem.

SMD Ombudsperson

Students can also turn to the Ombudsperson. The current names and contact information of these ombudspersons can be found online (<https://www.urmc.rochester.edu/education/post-doctoral/ombudspersons.aspx>).

Each of these ombudspersons is a faculty member who can provide **confidential, neutral, independent, and informal** advice to help trainees address their concerns. Discussions with the Ombudspersons can be through phone or in-person.

The Ombudspersons provide a resource for and information about institutional policies, act as facilitators to help trainees resolve their problems and connecting trainees with those who can help, accompany the trainee in discussions of problems or issues with faculty or administrators, and act as an informal mediator between the trainee and faculty or administrators. The Ombudspersons can also help to effect positive change by providing feedback on patterns of problems and complaints to appropriate administrators.

Discussions with the Ombudsperson will normally operate under a rule of confidentiality. It should be understood, however, that if a problem disclosed to the Ombudsperson involves a violation of law or University policy, the Ombudsperson may be required to disclose the problem to the Senior Associate Dean for Graduate Education and Postdoctoral Affairs and the Office of Counsel. The Ombudsperson considers the interests and concerns of all parties to disputes, with the goal of achieving appropriate and fair outcomes. The Ombudsperson does not participate in any formal grievance process. The Ombudsperson is independent of the academic administration and only reports on patterns of problems to administrative officers in order to effect positive change for trainees. The Ombudsperson helps to identify formal and informal avenues for resolving conflicts, and works with trainees to determine the appropriate response for their situation. If a trainee is not comfortable taking their concerns to any of the people noted above, they may also contact the University Intercessor (<https://www.rochester.edu/intercessor/>).

13.4. Academic and Scientific Misconduct

Honesty is the cornerstone of academic integrity and scientific inquiry, and suspected infractions will be treated with utmost seriousness. Academic misconduct includes cheating on exams and assignments, plagiarism, or providing false information. Scientific misconduct includes a deliberate attempt to alter existing data, creating data that did not exist, or knowingly misrepresenting data to support an idea or to perform additional experiments. Scientific fraud also includes deliberately denying the existence of an experiment because the results of the experiment did not meet expectations, confirm the hypothesis, or were inconsistent with previous results. Plagiarism is also a form of scientific misconduct.

Any concerns regarding possible academic misconduct should be brought to the attention of the Program Director. In consultation with the Chair of the Department of Biomedical Genetics and the Senior Associate Dean for Graduate Studies, the Program Director will conduct an investigation, and make specific recommendations to the Dean of Graduate Studies. For additional University guidelines

regarding academic misconduct please refer to the University of Rochester's "Policy on Research Misconduct". (http://www.rochester.edu/orpa/_assets/pdf/compl_miscon3.pdf)

Consequences may include the loss of student status and/or employment with the university. Depending on the findings, it may also be necessary to notify state and federal agencies, which may need to conduct further review of the case. Any publications that include fabricated data will be corrected by notifying the journal editors. If work was conducted on a government grant, the governmental agency funding the study will be notified. This may restrict or prevent future employment on any government-funded research project.

13.5. Data Management, Access, and Accountability

As with all research materials and results generated under the auspices of, and with resources provided by the University of Rochester, all data generated by students remain property of the University (as further outlined in the University of Rochester Intellectual Property Policy (<http://www.rochester.edu/ventures/for-ur-innovators/for-inventors-university-policy-on-intellectual-property-and-technology-transfer/>)). Therefore, students are responsible for the safe and accessible storage of data generated in the course of their research work. Proper storage includes: (1) the use of secure, redundant storage systems to prevent inadvertent data loss (*i.e.*, University of Rochester Box cloud storage or other University-authorized data-management solutions) and (2) the clear and accessible cataloging of data to allow ready access to the data by authorized third parties, including but not limited to the principal investigator. This applies to both published and unpublished data.

13.6. Space

The Department of Biomedical Genetics provides dedicated office space with swipe-card access for first-year BGG students. Once a research advisor has been chosen, the student will usually be given a desk in the advisor's laboratory.

13.7. University-based training

Students are responsible for obtaining and maintaining compliance with all required training as is necessary for their work in laboratory settings. Such training includes, but is not limited to, lab safety, HIPAA, and, if appropriate, UCAR protocols and procedures.

13.8. Work hours

Daily attendance in the laboratory is required unless a student is in class or attending an on-campus event. The following also qualify as excused absence: off-site research conference, illness, or illness in the family. Students should discuss expectations regarding work hours and attendance with their research advisor, ideally before they join that advisor's research group. *Scientific research often requires work days that are longer than the traditional 8-hour workday. Sometimes work will need to be performed on Saturdays and Sundays to initiate or complete research projects.* If unexplained absences occur more than occasionally, this may result in loss of laboratory privileges, reduction to or loss of financial support, or a failing grade on research credits, which would result in dismissal from the program.

13.9. Vacation policy

Each student is allowed 10 business days of vacation per year as mandated by NIH, plus University holidays. University holidays include Christmas Day, New Year's Day, Memorial Day, the 4th of July, Labor Day, and 2 days at Thanksgiving. While the scheduling of vacations is left to the discretion of the student, **prior approval from the advisor must be obtained** so as not to conflict with coursework, laboratory experiments and other duties. Before scheduling an extended absence from the University (*i.e.*,

more than 10 business days), students must obtain permission from their thesis advisor and the BGG program director. **Students will not receive stipends if absent without authorization.**

It is important that all **international students** inform the BGG program coordinator of their international travel (including Canada) at least 10 days in advance, as there are specific documents from the University that are needed in order to ensure successful re-entry into the United States. Travel within the U.S. does not require documentation. International students should refer to the University’s *Travel Information and Documentation website* (<http://www.iso.rochester.edu/travel/index.html>) before traveling within the U.S. or abroad.

When traveling, all students should maintain their secure login access to university websites, such as HMRS, using two factor authentication (TFA) on the Duo Mobile phone app.

13.10. Parental leave

The University of Rochester School of Medicine and Dentistry (SMD) provides accommodation for its graduate students for the birth or adoption of children, as outlined in this policy. Graduate students are provided up to 8 weeks of leave following the birth or the adoption of a child. During this period, students may postpone course assignments, examinations, and other academic requirements but remain active full-time students, with access to university facilities (including student health insurance, library privileges, and housing) and to university faculty and staff.

While students will continue to be fully funded off any existing funding sources (*e.g.*, fellowship, assistantship) during the leave period, students will be excused from regular teaching or research duties. However, it is the student’s professional responsibility to work with their advisor or faculty member to prepare for the absence in advance of the leave. This includes reviewing the status and continuation of research projects, adequately preparing those who will assume teaching responsibilities during the student’s absence, and arranging for a smooth transition in any other responsibilities.

Eligible graduate students are required to notify their Advisor and school Dean of Graduate Studies of the date of their intended time away at least 60 days prior (when possible) to the expected date of childbirth or adoption, using the Parental Leave Request Form (<https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/education/graduate/documents/Parental-Leave-Request-Form-for-Graduate-Students.docx>). While applications for parental leave are required, the benefit is automatic. Please contact the SMD Registrar to discuss how Parental Leave may affect your credit hour status. For those on NIH training grants, the use of parental leave must be approved by the Training Grant PD/PI. If extended time is needed beyond the 8 weeks leave, written approval for an unpaid Leave of Absence must be requested, and approval obtained from the student’s Advisor, Program Director, and the school’s Dean of Graduate Studies. Note that individual fellowships, such as the NSF Graduate Fellowships, may require sponsor approval for extended leaves of absence. Specific guidelines should be consulted. Additional information for services and support, such as Child Care options, Family Health Insurance, available Lactation Rooms and Family Counseling, are available online (<https://www.urmc.rochester.edu/education/graduate/trainee-handbook/policies-benefits/family-friendly-policies.aspx>).

13.11. Inclement weather notifications

Situation	Email Communication to Trainees and Faculty
- Monroe County has issued a travel <u>advisory</u>	Dear students and postdocs, Please be advised that Monroe County has issued a travel advisory although the University remains open.

Situation	Email Communication to Trainees and Faculty
<p>- The University remains open</p>	<p>Students and postdocs should monitor course and program communication channels for the status of those activities. Students and postdocs should attend courses or travel to the University for research or other program-based activities at their own discretion. Students engaged in clinical activities must follow any URMC requirements related to direct and indirect patient care.</p> <p>Your safety and well-being is our primary concern.</p> <p>Sincerely, Senior Associate Dean for Graduate Education and Postdoctoral Affairs</p>
<p>- Monroe County has issued a travel <u>ban</u> - The University remains open</p>	<p>Dear students and postdocs,</p> <p>Please be advised that Monroe County has issued a travel ban although the University remains open. Students and postdocs should not attend courses or travel to the University for non-essential research or other program-based activities Students and postdocs should maintain open lines of communication re: <u>essential</u> research activities with the appropriate parties. Students and postdocs must consult with program/department leadership and/or individual PIs/research advisors for clarity regarding which research activities are essential.</p> <p>Students engaged in clinical activities must follow any URMC requirements related to direct and indirect patient care.</p> <p>Your safety and well-being is our primary concern.</p> <p>Sincerely, Senior Associate Dean for Graduate Education and Postdoctoral Affairs</p>
<p>- The University closes</p>	<p>Dear students and postdocs,</p> <p>Please be advised that the University has closed due to inclement weather. All courses and non-essential research activities are cancelled. Students and postdocs should maintain open lines of communication re: <u>essential</u> research activities with the appropriate parties. Students and postdocs must consult with program/department leadership and/or individual PIs/research advisors for clarity regarding which research activities are essential.</p> <p>Students engaged in clinical activities must follow any URMC requirements related to direct and indirect patient care.</p> <p>Your safety and well-being is our primary concern.</p> <p>Sincerely, Senior Associate Dean for Graduate Education and Postdoctoral Affairs</p>

Handbook Version: 2024-01

This copy of the BGG Handbook was designed to be in line with current policies and regulations of the University of Rochester. As a result, this Handbook contains content from UR GEPA and Graduate Program resources. This Handbook supplements but does not replace the Official Bulletin of Graduate Studies, which should be reviewed by all students. Any conflicting information in this document is superseded by the Official Bulletin of Graduate Studies.