

Department of Microbiology & Immunology Ph.D. Students With Non-Departmental Research Advisors

In rare circumstances, the Director of Graduate Studies may permit students to conduct their Ph.D. thesis research under the direction of a research advisor who does not have a faculty appointment in the Department of Microbiology & Immunology. The purpose of this document is to ensure that the research advisor is aware of:

- (1) the requirements for a Ph.D. degree in Microbiology & Immunology,
- (2) restrictions on MCRO students in non-MCRO labs,
- (3) the commitment of departmental faculty to training our students, and
- (4) the limits on Microbiology & Immunology financial support for MCRO students with non-departmental research advisors.

1. Microbiology & Immunology Ph.D. Degree Requirements

In addition to the requirements of the UNC Graduate School, students must:

- Pass six semester-long graduate-level classroom courses. At least two must be seminar/tutorial courses (i.e. based on discussion of primary literature). At least one of the seminar/tutorial classes must be MCRO710, MCRO711, or MCRO712. MCRO795 (developing and writing research proposals) is required in the fall semester of the second year.
- Pass MCRO701 each semester while a departmental student. This means attending at least two-thirds of weekly departmental (Tuesdays at 9:30 am) and student (Mondays at 12:15 pm) seminars.
- Assemble a dissertation committee by the start of the fall semester of the second year. A majority of dissertation committee members, as well as the chair, will be Microbiology & Immunology faculty members, as specified by Graduate School policy.
- Pass the written preliminary exam, which involves development of an original non-dissertation research topic, typically in the spring of the second year, followed by writing a research proposal during a three and a half-week period in May (must be completed by ~June 1st). The student is expected to be free to devote their full attention to the written prelim (i.e., no laboratory commitments) during the May writing period.
- Pass the oral preliminary exam, which is held in conjunction with the dissertation project approval meeting, typically in the fall of the third year (must be completed by December 31st).
- Hold dissertation committee meetings at least once per year.
- Present a seminar in the student seminar series each year, starting in the third year.
- Twice serve as a Teaching Assistant, usually for MCRO251 and typically in the second and third years.

- Our expectation is that the student will conduct research sufficient for at least two first-author papers in high-quality peer-reviewed journals, either published or submitted for publication. Our minimum publication requirement (described in detail elsewhere) can be summarized as the student must be an author on a published paper, the student must receive peer reviews for a first author research manuscript, and the dissertation committee must verify that for both papers the student made a meaningful contribution to the work, which was published or intended for publication in a legitimate scientific journal/book.
- Write a Ph.D. dissertation that is approved by the advisor, defend the dissertation in a private committee meeting at least two weeks after the dissertation is distributed, and present results in a public seminar at least two weeks after the private defense.

2. Restrictions on MCRO Students in non-MCRO Labs

- MCRO students in non-MCRO labs must hold a dissertation committee meeting before the end of the fall semester of their first year in the department (second year BBSP students, first year M.D./Ph.D. students). The primary purpose of the meeting is to ensure that the student and advisor understand the expectations for a MCRO Ph.D. research project, a year before formal project approval is sought.
- A non-MCRO faculty member is not allowed to serve as advisor for more than one MCRO student at a time.

3. Faculty Commitment to Graduate Student Training

Ph.D. students receive their professional training in many ways, most obviously through laboratory research under the supervision of their research advisor and in classroom courses. In addition, graduate training in the Department of Microbiology & Immunology is noteworthy for faculty intensive activities, in particular the MCRO795 course to develop and write research proposals. Each student receives two extensive and detailed critiques of each of their 13 weekly writing assignments. This quickly adds up to many hundreds of critiques every fall semester.

Department of Microbiology & Immunology faculty have thought carefully about how they would like to educate graduate students and hence generally are enthusiastic participants in training activities. Their expectation is that non-departmental research advisors, whose departmental students benefit from the investment of departmental faculty time, willingly join dissertation committees of MCRO students when asked.

4. Limits on Microbiology & Immunology Financial Support

In the Biological & Biomedical Sciences Program, the Chair or Director of the Department or Center in which the student's laboratory is housed assumes financial responsibility for students in the event of a lapse in funding for the research advisor. Thus, the Microbiology & Immunology department does not assume any financial liability for departmental students with non-departmental research advisors, who by definition are not housed in departmental space. In addition to the BBSP form, there is a MCRO MOU that assigns financial responsibility for the student, including fees that

cannot be paid from federal grants, that must be signed by the Department Chair or Center Director of the advisor.

Subject to the availability of funds, Department of Microbiology & Immunology students with non-departmental research advisors will have access to departmentally administered training grants and travel awards, and tuition remission from the departmental allotment.

Research Advisor Agreement

I have discussed this document with the Director of Graduate Studies for the Department of Microbiology & Immunology. I agree to be fully supportive of and participatory in the Microbiology & Immunology Ph.D. degree requirements for

(Student Name)

Research Advisor Signature

Date