

## Qualifying Examination in Microbiology & Immunology Department

The student becomes a candidate for the doctoral degree after passing a qualifying examination administered by a committee of the graduate school.

### 1. Qualifying Examination for Students in Doctoral Programs

#### *A. Prerequisites*

1. Each doctoral program shall define required courses and other prerequisites which must be satisfactorily completed prior to the qualifying examination.
2. In addition to these minimal requirements, the student's advisor may establish other prerequisites appropriate to the course of study undertaken by the individual student.

#### *B. Scheduling*

The graduate program in which the student is enrolled shall schedule the examination for the end of the student's second year (or soon thereafter); exceptions require approval by the Dean.

#### *C. Committee Composition and Conduct of the Examination*

**The proposed Qualifying Exam Committee is formed by the graduate student in consultation with the PI/advisor. The proposed committee is submitted for approval to the Dean of Graduate Studies, who will also assign the committee chair.** The dissertation advisor and student, in consultation with all the other committee members, will determine dates and times at which they can all participate in the exam. These dates and times must be communicated by the dissertation advisor, in writing, to each committee member who, in turn, must confirm in writing his/her continued commitment to participate. If a committee member cannot devote the required hours on the dates and times specified, either that committee member must be replaced with another faculty member approved by the Dean or other dates and/or times must be selected which allows all the committee members to fully attend. If a committee member later finds he/she cannot fully participate in the entire exam and it is not feasible to find a replacement, the oral exam can go forth with a few as four committee members, one of which must be the

dissertation advisor, provided the remaining committee members and the student agree to do so.

#### *D. Nature of Examination*

The examination shall cover areas appropriate to the student's training and research interests. The student shall provide a list of his/her undergraduate and graduate courses and training, and a brief summary of any research undertaken, at the time the request for examination is made.

At the discretion of the candidate's program, the examination will consist of a written examination, and an oral examination.

#### **1. Written Examination**

**Each graduate program may establish the format of the written part of the examination, subject to approval by the Graduate Council and Dean. Whatever the format, all members of the examining committee shall participate in formulating the tasks set for the student and shall evaluate all written material submitted by the student.**

**The format for the Microbiology and Immunology Department is:**

**a) A research proposal on the candidate's research area. The research proposal will be 10 pages in length (including Figures) and follow a simplified NIH format. The student must write a grant proposal in the style of a 2008-2009 Kirschstein Pre-doctoral Award application, or equivalent. Specifically, it must include a set of hypotheses and specific aims, a critical summary of the relevant literature and significance of the study, and the methods and experimental design used to achieve the aims. Inclusion of relevant preliminary data generated by the student is optional. Information conveyed by the student in the written proposal must fully conform to NIH guidelines for ethical behavior in research. If the research proposal was originally generated during a previous course (i.e. grant writing) then at least one new aim should be written.**

**b) The student will also submit a ~ 10 page written answer to a question agreed upon by the examining committee.**

**The chair will schedule a time for the examination. The chair will also specify the time at which written material (exam question and research proposal) are to be**

**turned in to the examination committee. The general time frame for this will be three weeks to complete each of the components. The student will return to each examiner for evaluation, the answer to the exam question and a copy of the research proposal.**

## **2. Oral Examination**

**The committee shall meet at the call of the chair within two (2) weeks after the completion of the written section at which time the student shall be examined orally. At the end of the oral examination, the student shall be evaluated on the basis of his/her performance on both the oral and written sections, and the committee shall take action as outlined below.**

### *E. Voting Procedures*

1. Each member of the examining committee, including the chairperson, is entitled to one vote. For a committee member's vote to be counted, he/she must have participated in the entire exam and his/her vote must be cast in person.

2. To reach a decision on any of the motions listed below, more than one-half of the committee members present must approve the motion. The vote shall be by ballot or roll call at the discretion of the chairperson.

Motions:

a) Approve

b) Approve with Honors (unanimous decision)

c) Approved pending completion of recommendation(s)

d) Delay final action for no more than thirty (30) days for further examination or in order to take other action deemed appropriate by the examining committee. Further examination, may be either written, oral, or both, and may cover all or selected areas. Should the committee delay decision for reexamination or other appropriate action, final decision to approve or disapprove under this section rests with the examining committee.

*If none of the above motions receive more than one half of the Committee's votes, the student is failed by the committee.*