

DEPARTMENT OF IMMUNOBIOLOGY WRITTEN COMPREHENSIVE EXAMINATION

The Department of Immunobiology faculty advisors do not require a formal written comprehensive examination. In lieu of the formal written examination, the written portion of the comprehensive examination shall be in the form of a "proposal" using the format of an NIH application (minimum number of pages: 15 single-spaced or 30 double-spaced, maximum number of pages: 25 single-spaced or 50 double-spaced – omit budgetary information). The student will choose a topic taken from outside or within their immediate research area. The detail given in each section, e.g. Background, Experimental Methods, etc., should be comparable to that in an NIH proposal. The topic chosen will be approved by the student's committee.

Prior to scheduling the oral comprehensive examination, you must meet with your committee to discuss and receive approval of the written proposal. The department form: **Approval of Written Comprehensive Examination** is on the web site, http://immunobiology.arizona.edu/files/apprvcompre_0.pdf

Give the original completed form signed by the student's committee and the student to the Graduate Program Secretary.

INSTRUCTIONS

RESEARCH PLAN: The research plan should include sufficient information needed for evaluation of the project, independent of any other document. Be specific and informative; avoid redundancies.

Organize items a-c of the form, to answer these questions: (1) What do you intend to do? (2) Why is the work important? (3) What has already been done? (4) How are you going to do the work? *Do not exceed 25 single-spaced or 50 double-spaced pages for items a-c.*

Use the following format and page distribution.

- a. **Specific Aims.** List the broad, long-term objectives and what the specific research proposed in this application is intended to accomplish. State the hypotheses to be tested. *One page is recommended.*
- b. **Background and significance.** Briefly sketch the background leading to the present application, critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State concisely the importance and health relevance of the research described in this application by relating the specific aims to the broad, long-term objectives. *Two to three pages*



are recommended.

- c. **Research Design and Methods.** Describe the research design and the procedures to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Describe any new methodology and its advantages over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. As part of this section, provide a tentative sequence or time table for the project. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

Literature Cited: List all references. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature. While there is no longer a page limitation, it is important to be concise and to select only those literature references pertinent to the proposed research.

