

# ORIGINAL RESEARCH PROPOSAL

The 4<sup>th</sup> year milestone is the presentation and defense of an original research proposal (ORP) in front of the faculty committee. The ORP may be in any area of chemistry but should be on a topic not closely related to your research ongoing at Emory or research conducted at any institution that you attended prior to coming to Emory.

## Written Component

A written paper is due to your committee one week before the oral presentation. The format of the written proposal should be similar to the project description of an NIH postdoctoral fellowship application, which follows the guidelines below:

### Item 30b. Research Training Proposal.

This section should be well formulated and presented in sufficient detail that it can be evaluated for both its research training potential and scientific merit. It is to be written by the applicant.

Include sufficient information to permit an effective review without reviewers having to refer to the literature or any previous application. Brevity and clarity in the presentation are considered indicative of an applicant's approach and ability to conduct a superior project. Sections (1) through (3) of this item are not to exceed 10 pages including all tables and figures. Follow the format below:

- 1) **Specific Aims.** State the specific purposes of the research proposal and the hypotheses to be tested. (1/2 - 1 page suggested)
- 2) **Background and Significance.** Sketch briefly the background to the proposal. State concisely the importance of the research described in this application by relating the specific aims to broad, long-term objectives. (1 - 2 pages suggested)
- 3) **Research Design and Methods** (remainder of proposal) Provide an outline of:
  - Research design and the procedures to be used to accomplish the specific aims;
  - Tentative sequence for the investigation;
  - Procedures by which the data will be analyzed; and
  - Any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised. Potential experimental difficulties should be discussed together with alternative approaches that could achieve the desired aims.
- 4) Provide literature citations at the end of the research proposal. Each citation must include names of all authors, titles, book or journal, volume number, page numbers, and year of publication.

## Oral Presentation and Defense

The oral presentation should clearly define the proposed problem and how one would accomplish the proposed research. The presentation should include about a dozen PowerPoint slides or similar visual aids. The student is responsible for coordinating the schedules of the selected committee and securing a time and location for the defense. It is the student's responsibility to ensure that the selected location meets their A/V needs.

**DEADLINE: April 30<sup>th</sup> with 4<sup>th</sup> Year Report**

## RESEARCH PROPOSAL EVALUATION

Date: \_\_\_\_\_

Student Name: \_\_\_\_\_ ID: \_\_\_\_\_

Title: \_\_\_\_\_

### Committee Members Evaluation (please circle S=Satisfactory, or U=Unsatisfactory)

1. \_\_\_\_\_ S U \_\_\_\_\_  
Name Signature

2. \_\_\_\_\_ S U \_\_\_\_\_  
Name Signature

3. \_\_\_\_\_ S U \_\_\_\_\_  
Name Signature

*Leave the completed form with the copy of the proposal in the box outside the back entrance of Atwood 380, or turn in to Ana María Vélez, Graduate Coordinator, office 380K.*