

### Homework Assignment #4 (Due May 14, 2009)

We are more than half way through the quarter, and you should be thinking about your final assignment. Graduate Students will write an NSF proposal on some topic in Biological Oceanography. Undergraduates can either write a standard (10 pages, more or less) term paper on some topic in Biological Oceanography, or can write a short (5 pages) proposal following guidelines such as for the Friends of Long Marine Lab Student Awards or the Earl and Ethyl Myers Trust Awards.

Graduate Students: you can choose to apply for a Pre-Doctoral Proposal or a Post-Doctoral proposal. See:

<http://www.nsf.gov/pubs/2008/nsf08593/nsf08593.htm#prep>

<http://www.nsf.gov/pubs/2009/nsf09526/nsf09526.html#prep>

The primary difference is that the pre-doctoral proposal is 2 pages, with another 2 pages available for Previous Research Experience (where you can explain why you are qualified to carry out your proposal), while the post-doctoral proposal is 10 pages. (WARNING: it's actually harder to write a good 2 page proposal, even though it's short!)

Undergraduates: If you want to write a proposal, it should be something you could accomplish in about a year, with a small budget. You can assume that you are working in a PI's laboratory (so you have access to all the equipment, etc. necessary for the project). Below are directions for the FLML award. You can use up to 5 pages rather than 2.

1. One-page cover sheet that includes:
  - a. Your name, mailing address, phone number and e-mail address
  - b. Title of project or thesis
  - c. One-sentence description of the project (the way you would explain it to a non-scientist)
  - d. Your social security or student identification number
  - e. The degree you are pursuing and the year in the program (e.g., senior, first-year Ph.D.)
  - f. Name of your project or thesis advisor
  - g. List any previous awards received related to this project/thesis and how you used them
2. Two-page proposal that includes:
  - a. Introductory paragraph
    - i. State the major thesis
    - ii. State the significance to the research or education community
    - iii. State the significance to the general public
  - b. Details of your proposal
    - i. What you are going to do
    - ii. How you are going to do it
    - iii. Where you are going to do it
    - iv. When you are going to do it, including expected completion date
    - v. What you expect to find
    - vi. What you will do with the results
  - c. Budget
    - i. Describe/list the item or service (e.g., chemicals, four large batteries, boat time)
    - ii. Cost

**ASSIGNMENT:** graduate students should turn in a paragraph summary of the proposal. Undergraduate students should turn in the topic for their term paper or proposal.