Biological Sciences First Year Seminar on Research Ethics

The Role of Research Within Society

As you read the material for our next class, keep the questions below in mind. To answer these questions you will have to reflect critically on what you have read and possibly re-read important passages. Keep in mind that there are two basic kinds of information that you need to look for in the readings:

- 1. What are the main points or conclusions that an author accepts with respect to a particular issue?
- 2. What are the reasons, important considerations, and evidence that lead the author to accept that conclusion?

For our purposes, *it is information of the second sort that will be our primary concern* since our most basic task is to *evaluate the reasons and evidence* that are offered to support accepting one possible conclusion about an issue, rather than another.

Remember that your **Reading Response #6** is due by Wednesday, February 26TH at 12:00PM (noon) via Turnltin. This write up should contain brief answers to these questions, totalling 500–600 words in length and conforming to the to the course's "General Technical Requirements for Formatting Assignments". Be sure to also print out a copy of your response for your own reference. This will help prepare you to speak intelligently about these issues during our next class meeting.

Readings

- Alvin M. Weinberg, "Can Technology Replace Social Engineering?"
- Mark A. Shiffrin and Avi Silberschatz, "Thumbs on the Wheel".
- Lewis Thomas, "The Hazards of Science".
- Cornelia Dean, "Handle With Care"
- Mary Warnock, "The Ethical Regulation of Science".

Questions

- According to Alvin M. Weinberg, what is the difference between social problems and technological problems? In what ways and to what extent does he believe that social problems can be reduced to technological ones? How does the article by Mark A. Shiffrin and Avi Silberschatz illustrate Weinberg's position? Do you agree that technology can solve many social problems? Why or why not?
- 2. What does Lewis Thomas mean by "hubris"? Why does he believe that scientists are often criticized by society as displaying hubris? How do the examples in Cornelia Dean's articles illustrate instances of possible hubris? Why does Thomas believe that the accusation of hubris towards scientists is not really justified? Do you agree?
- 3. The article by Mary Warnock suggests that many scientific problems are actually social/ethical problems. How does she defend that position? What ought researchers and society do in response to this issue?