Step One: Selection of Your Topic

You will write a term paper this semester on a Nobel Prize winner who was recognized for his contributions to microbiology. In particular, you will choose an individual from a particular year and provide

- a brief biography of the individual;
- a description of his/her contributions to science; and
- how such advances have affected society, both positively and negatively.

You must choose a Nobel Prize winner from the inside cover of your textbook. The authors of your textbook have recognized these contributions as related to the field of microbiology. However, you should be aware that this list is not all-inclusive. For example, the 2001 Nobel Prize winners (Hartwell, Hunt, and Nurse) were omitted. Their seminal work on the yeast cell cycle was pivotal in helping scientists understand basic cellular division and the causes of cancer. Hence, you should research the list of Noble Prizes carefully by searching other sources, e.g., internet.

You are most strongly encouraged to thoroughly research your possible topic choices before submitting one by the deadline of 10:30 AM on Wednesday, June 1st. Also, it is highly recommended that you review Chapters 1, 2, and 7 in A Short Guide to Writing About Biology, 5th ed (J. A. Pechenik, 2004) before and during your deliberations on a topic choice.

From the list of Nobel Prize winners, choose three possible individuals from which to develop your term paper. Submit these choices to Dr. Cooper by the 10:30 AM on Wednesday, June 1st by doing the following:

- Send an email to Dr. Cooper (crcooper.01@ysu.edu). You MUST place the following phrase on the SUBJECT line: 2005 Summer Term Paper Topic.
- In the message area, briefly list your three topic choices in order of preference.
- Be sure to place your name within the body of your email to Dr. Cooper.

Once received, Dr. Cooper will review your requests of possible topic choices and approve, in order of preference, one of them provided that individual has not already been chosen by another student. PLEASE NOTE: Requests will be fulfilled in the order that the email messages were received. Dr. Cooper will confirm your choice by return email. If none of your choices can be accommodated, then you will be provided a list of available individuals. Again, you will choose an individual from this list based upon a first come-first filled manner.

Be sure to submit your initial topic requests by the deadline stated above. Not doing so will result in a 5-point deduction to your final term paper score.

Step Two: Researching Your Topic

You may use a number of resources in researching the individual you have chosen. Again, you are strongly encouraged to review the pertinent chapters in A Short Guide to Writing About Biology, 5th ed (J. A. Pechenik, 2004) throughout your research and writing efforts.
There are several restrictions/requirements for your references.

- You must have at least eight (8) references;
- Only one (1) reference may be a textbook or reference resource (e.g., encyclopedia) from which you heavily rely upon the information contained therein;
- No references may be an internet source;
- At least one (1) reference must be from the primary literature, i.e., it must be one in which publication occurred in a peer-reviewed journal and which describes the actual experiments pertaining to the topic you have chosen. This is considered to be the “Seminal Paper” in which the individual you are covering has published his/her work or whose work is fully reviewed. Be sure to make a copy of this article for submission along with the final draft of your term paper (This is required; see instructions below);
- At least one (1) reference must be a published book (not a textbook or traditional reference source like an encyclopedia) that specifically discusses the individual who is the focus of your term paper; and
- The remaining references may be journal articles, books, or like publications.

When researching your topic, be sure to gather information that meets the specific criteria for this term paper. Again, these criteria are:

- a brief biography of each individual (one paragraph only!);
- a description of his/her/their contributions to science (one paragraph only!); and
- how such advances have affected society, both positively and negatively.

**Step Three: Writing Your Paper**


*It is essential that you follow the instructions below.* Submissions that do not adhere to these instructions will receive a significantly lower score. Moreover, submissions received after the deadlines stated below will not be accepted and a score of “0” will be recorded for this grade component.

- Type your essay on standard letter-size paper (8.5 in x 11 in) using one (1.0) inch margins on each side.
- Use either Times, Times New Roman, Arial, Century Schoolbook, Courier, New York, or Palatino font with a size of 12 points.
- Double-space each line of text.
- Include your name on each page as well as page numbers.
- Limit your text to 1500 words total.

**DEADLINE #1:** Submit a hard-copy of your term paper to Dr. Cooper no later than **10:30 AM on Monday, June 20, 2005**. In addition, you must submit an electronic version to Turnitin.com by the same deadline. Be sure to place your completed paper to the file entitled “Term Paper Final Version”. In addition, you must also submit a hard copy of the “Seminal Paper” (see
above) upon which you chose to base your term paper. NOTE: Failure to submit the hard copy of your term paper and the Seminal Paper, as well as failure to submit the electronic version of your paper by the stated deadline will result in a 5-point deduction to your final term paper score for each offense.

**Grading Your Paper**

Your term paper will be graded according to the following scale:

**Deadlines:**
- Correct and timely submission of Topic by email 5 points
- Submission of hard-copy final version by the stated deadline 5 points
- Submission of Seminal Paper with final version 5 points
- Submission of electronic version of final version by the stated deadline 5 points

**Final Version:**
- Style, Format, Adherence to Instructions 5 points
- Proper Use of:
  - Spelling 5 points
  - Grammar 15 points
  - Punctuation 5 points
- Content:
  - Biography 10 points
  - Contributions 10 points
  - Societal impact 20 points
- Proper number, use, and citation of references 5 points
- Appropriateness of Seminal Paper 5 points

**Total Points:** 100 points