I have given this assignment in my Montserrat course and my non-majors Biological Principles course on aging. At this stage, we have discussed all the biology necessary for the assignment in class, so the focus is (hopefully) on the argument. A second writing assignment is very similar in terms of audience, but is a research paper and students can choose any topic in the Biology of Aging.

Writing Assn #1: Rebuttal of “Life Begins at 140” or “The Man Who Would Stop Time”
Draft due on Moodle Sunday, October 21st at 1 pm
Revision due on Moodle Thursday, November 1st at 5:30 pm
Presentations in class Monday, November 5th and Wednesday, November 7th

Imagine that the editors of GQ and the editors at Popular Science receive more comments from readers about Michael Finkel’s “Life Begins at 140” and Joseph Hooper’s “The Man Who Would Stop Time” than they have about any article in the history of their respective magazines.

The comments are equally divided—half are from consumers eager to buy products that will help them to live longer. The other half (including some prominent biologists) thinks de Grey and Andrews are lunatics and that the magazine did a disservice to their readers by printing the piece without a rebuttal.

The editor concedes that the biologists have a point, and decide that the next issue will include a counterpoint to de Grey’s ideas. However, the issue has already been planned, so he allots just one page (<750 words). Several famous biologists volunteer to write it, but the editor wants someone who fits the demographic of the magazine’s reader—a college educated professional, but not a scientist. He picks you.

Using what you’ve learned in this course, write a one-page rebuttal to Michael Finkel’s article or to Joseph Hooper’s article, formatted such that it would be suitable for the audience of GQ or Popular Science. Your article:

• should specifically address at least one of de Grey’s 7 Strategies of Engineered Negligible Senescence that relates to what we’ve discussed in class (“chromosomes mutate”, “extracellular clogging”, “cells don’t die”, or “cells die”) OR specifically address Andrews’ intention to develop a telomerase-promoting drug or supplement.

• must be biologically accurate, but written so that a GQ or Popular Science reader would be both interested and able to understand.

• should use some visual element(s) to help the reader understand your main point(s)—a chart, graph, diagram, picture, etc.

You can use our readings from class as well as the de Grey and Andrews articles from our class research assignment as source material. Magazines often credit sources in the text, but writers are required to document sources for their editors. You will do the same (an annotated citation list will be handed in separately from your article and will not be included in your page/word count).
I do not give this flow chart to the students, but we discuss in class the components of a successful paper and discuss the strengths and weaknesses of a sample paper (usually one of their classmates) in a draft workshop.

I do tell the students that the division between an A/B paper and a C/D paper is the thesis and significance, and give them a breakdown of each component of the paper.

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**Evaluating a Scientific Argument in the Popular Press:**

**Criteria for a Good Paper**

Is the **thesis** clear, specific, and arguable?
Is there a clear statement of **significance**?

- **YES** (paper is in A-B range)
  - Is the reader given enough **background** to understand the argument?
  - Is the **biology** accurate?
  - Does the **evidence** support the thesis?
  - Is the evidence appropriately **analyzed**?
  - Is the argument **structured** logically and well organized?

- **YES to all (A range)**

- **YES/NO** (B range)

- **NO** (paper is in C-D range)
  - Does the paper fulfill the **assignment**?
  - Is there some understanding of the **biology**?
  - Is there a solid attempt at **evidence/analysis**?

- **YES (C range)**

- **NO (D range)**