Assignment #5

STAT 810

Fall 2019

1. (8 points) Read both the ASA's *Ethical Guidelines for Statistical Practice* and the ISI's *Declaration of Professional Ethics*. From these readings, list four guidelines in total that statisticians should follow AND were NOT discussed directly in class or the lecture notes. Cite the locations in the documents where you found these guidelines.

1. (10 total points) *Last Week Tonight with John Oliver* is a show on the HBO TV channel. This show attempts to discuss topics in a humorous way, including those in science and politics. In an episode first shown on May 8, 2016 (<https://youtu.be/0Rnq1NpHdmw>), Oliver discusses scientific studies, their problems, and the media’s role in reporting them. Watch the video and answer the following questions regarding it. Assume there are no biases by Oliver represented in his content.
	1. (2 points) Why are there pressures on scientists to publish?
	2. (2 points) What is p-hacking and the ethical problem with it?
	3. (2 points) Discuss the ethical problems with the high-flavanol chocolate and risk of preeclampsia in pregnant women study.
	4. (2 points) Complete this sentence from the video:

Just because a study is industry funded or its sample size was small or it was done on mice doesn’t mean it is automatically flawed but…

* 1. (2 points) What is a problem with what Al Roker says beginning at 14:39 in the video?
1. (5 points) Eric Gibson will be our next guest speaker. Read his recent paper “Leadership in Statistics: Increasing Our Value and Visibility” that was in the American Statistician this year (p. 109-116). List three separate items that you learned from the paper. Cite the locations in the paper that discuss these items.
2. (2 points) Give a question here that you could ask Eric Gibson during our class on November 25. This question needs to be different from the questions that you provided for past speakers in previous assignments. Areas to inquire about include:
	1. How to climb the corporate ladder
	2. Pharmaceutical industry
	3. MS/PhD in Statistics from Kansas State University (graduate in 1997)
	4. TA at Kansas State University

Please also see Eric’s LinkedIn profile (link to it is on the schedule web page).