**Reproducibility and Replication**

Read (or view) the resource assigned to your group. Make this worth your time by reading (or listening) carefully and really trying to understand what is being communicated. In the next class meeting, you will be responsible for explaining this content to people who did not read (or watch) this resource. Answer the following questions to help you prepare to do this.

**Individual Work**1) List the three most important take-aways from your reading/video. Think carefully and review your notes as you come up with this list.

 i.

 ii.

 iii.

2) List one interesting tidbit/factoid/trivia/detail from your reading/video (in other words, not a main idea, but something that you found interesting or memorable)

3) Write one question you have because of this reading – it can be a question about the content you read or a question you have about the world now (because you did this reading)

**With your home group – (others who read the same article you did)**

First, **share your answers to #**1 with the rest of the group.

Next, as a group **write a summary** of your source that you think will help someone who didn’t read your source understand the main ideas. **Everyone should write this down**, so you have it when you move to your next group.

***More on the back!***

Now, take turns **sharing your answers to #3** from the Individual Work section. Can anyone help you answer your question? As a group, **pick one person’s question** and try to come up with the **answer to it**. Record your thoughts below.

**Question:**

**Answer:**

**With your new group – (others who read different articles than you did)**

First, **take turns explaining your source to the rest of the group**. Begin by providing some context – who wrote it, where was it published, do you think this is a trustworthy source? Then summarize what you learned from this source, using your written summary on the front of this worksheet to help.

After everyone has shared, as a group, answer the following questions:

* What is the reproducibility crisis? Which sources best helped you understand why this is a problem? Why were those sources helpful?
* What, if anything, do you think scientists could do to address problems with reproducibility and replication? What ideas came from the sources you read? Do you have ideas of your own?
* As scientists make more observations, run more experiments, and get more information, their ideas and understanding will develop and change. This is an important part of the scientific process. When do you think scientists should start communicating their findings to the general public? What are some plusses and minuses of sharing results that haven’t been replicated?