Niani Scott Professor Meyer Jour 199 – Speech Story 31 October 2017

"Science Friction:" A Decline in Scientific Research Investment

What is a world without scientific research? NPR's Richard Harris addressed the decline in scientific research investment in a speech at the University.

Funding in scientific research declined due to a lack of reproducibility, Richard Harris, author of *Rigor Mortis*, said.

"In science, you want to be able to reproduce things, because that's how you know that they're real," Harris said.

In his speech, Harris addressed the slowing progress in biomedical research.

"Making a claim isn't good enough," Harris said. Scientists need thoroughly tested studies for credibility and funding.

Harris talked about a who scientist conducted an experiment that tested 53 studies and in the end, could only reproduce six of them. At merely an eleven percent success rate, investments in scientific research have drastically decreased.

He gives an example of a man with Lou Gehrig's Disease who did not have a curable option due to a lack of testing of medication.

Most of the medicine for his disease were tested on mice samples. The mice studies were ineffective and there were not enough mice in the studies for significant results.

Scientific studies are expensive and more test subjects require more money.

Scientists and investors need to "bring into balance money and talent," Harris said. More investments would create thorough studies.

According to Monya Baker, a chart used by Harris during his presentation, 52 percent of scientists say there is a significant crisis in reproducibility

"Once you realize it's a crisis, you can find a solution," Harris said.

He suggested solutions such as "easing the financial crunch" when it comes to funding pressures by investors because "if you make the incentives right, people will do the right thing," Harris said.

Harris also suggested solutions such as, "better training of scientists" to decrease statistical errors in research, and "transparency" of methods to combat design susceptible to bias. All of his suggestions are outlined in his book.

If scientists were to create studies that could be reproduced and investors were willing to support such endeavors, "we can move forward in science," Harris said.