OPENING STATEMENT Ranking Member Eddie Bernice Johnson (D-TX)

House Committee on Science, Space, and Technology Subcommittee on Research and Technology "National Science Foundation Part II: Future Opportunities and Challenges for Science" March 21, 2017

Thank you Chairwoman Comstock and Ranking Member Lipinski for holding this hearing, and welcome to the very distinguished panel of witnesses.

I believe that the stated purpose of this hearing is something we can all support. The process for setting research priorities at the National Science Foundation has always been a combination of science-driven and policy-driven, or bottom-up and top-down, and Congress has a role to play.

Reproducibility is a well-documented challenge across all STEM fields, and one for which this Committee can help promote progress. Research misconduct is the rare exception. Nevertheless, we should remain vigilant and promote good policies, including education and training, to minimize misconduct everywhere.

I strongly support open science and data sharing. For the last two Congresses I cosponsored the *Public Access to Public Science Act* with Rep. Sensenbrenner, but to date we have been unable to convince the Chairman to take it up in Committee. I hope that it will be considered in this Congress. Along with every other Science Committee Democrat, I also cosponsored Rep. Tonko's *Scientific Integrity Act* that promotes open science and data sharing while protecting privacy and confidentiality. I encourage the Chairman to take up that bill too. However, data sharing is never as simple as it sounds, and our witnesses will help shed some light on that complexity.

While the core STEM disciplines remain essential, many scientific frontiers are at the boundaries between disciplines. We must continue to look for policies and funding incentives to promote transdisciplinary research. NSF has come a long way just in the last decade. However, unhelpful stovepipes between disciplines remain, especially at our research institutions. Finally, there are few topics that I am more passionate about than developing a new generation of STEM workers.

On all of these topics, I have no doubt that the experts sitting before us will have many wise recommendations based on many decades of collective experience. Those of us sitting on this side of the dais would be most wise to heed their recommendations. For example, I am quite confident that none of these witnesses will endorse slashing funding for the geosciences or social and behavioral sciences in order to increase funding for other fields. I also doubt that any of these witnesses confuse research reproducibility with research misconduct, yet I often hear the rare cases of misconduct being used as a sledgehammer to impugn scientists broadly.

We can set priorities and develop good science policies without stifling scientific inquiry or shutting down entire fields of research. If we truly care about developing a new generation of STEM workers, if we truly care about our nation's economic and national security, and if we truly care about the wellbeing of our children and grandchildren, we will listen to the experts before us today and the many other scientific leaders who have so thoughtfully developed recommendations for the future of the National Science Foundation and U.S. leadership in science and technology.

I look forward to today's testimony and discussion, and I yield back.