Reproducibility in Science: Writing, Data and the Growth of Knowledge

SEEDS “You Choose” leadership award, Joanna Johnson Ph.D., Director of Writing, College of Arts & Sciences

This SEEDS “You Choose” Award, with co-sponsorship from the Miller School’s Institute for Bioethics and Health Policy and the Miami Clinical and Translational Science Institute (CTSI) provided the opportunity for me to host a “Reproducibility in Science: Writing, Data and the Growth of Knowledge” symposium and panel on April 24, 2017. The symposium featured a keynote talk by Elizabeth Iorns, Ph.D., founder and CEO of the California-based Science Exchange and co-director of its Reproducibility Initiative, and a subsequent panel with John Bixby, Ph.D., vice provost for research and professor of pharmacology and neurological surgery; Dushyantha T. Jayaweera, M.D., executive dean for research and research education and professor of medicine; and Joyce M. Slingerland, M.D., Ph.D., associate director for translational research at Sylvester Comprehensive Cancer Center, professor of medicine, and director of the Braman Family Breast Cancer Institute. The symposium was advertised and reported on community-wide via Veritas (http://everitas.univmiami.net/2017/04/28/seeds-reproducibility-in-science/).

This award has enabled me to further my research on examining how poor, boastful and hedging scientific prose might be a potential contributor to failures of scientific reproducibility. The causes for irreproducibility are various and complex; my hypothesis is that poor and unclear writing may be a contributing factor. During her visit, Dr. Iorns suggested this hypothesis was novel and of interest, and will be introducing me to several other of her colleagues, many of whom will be at the global research integrity conference I will be attending later this month in Amsterdam, NL, in order to pursue this inquiry further.

The award fostered connections between all three UM campuses (STEM disciplines), contributed to improving scientific reproducibility – also an important component of the responsible conduct of research and a key element of NIH compliance rules for academic institutions -- and allowed me to connect with other nationally renowned researchers in the field.

My research will contribute to two symposia in the coming weeks: a presentation at the Medical Humanities Summer Institute at the University of Miami, May 19-20, 2017; and to a presentation at the World Conference on Research Integrity, Amsterdam May 27-31. Additionally, I have been asked to present my work at the symposium for the Rhetoric of Health and Medicine conference at the University of Cincinnati, September 14-15, 2017. I hope to publish an article stemming from this research within the next six months.