



Creating a Focus on Rigor and Reproducibility in a Health Sciences Library

Jeremy Kupsco, PhD; Shenita Peterson, MPH; Kimberly R Powell, MIS
Woodruff Health Sciences Center Library, Emory University, Atlanta, Ga

Introduction

Libraries have increasingly been taking a larger role in promoting and offering services around Open Science and Rigor and Reproducibility. After a library strategic planning meeting in 2018, the Woodruff Health Sciences Center Library wanted to explore if there was a role for the Library in promoting Open Science on Emory's campus. A working group was formed and charged with 1) Determining if the WHSC Library should advocate for Emory aligning research practices with Open Science Initiatives and 2) Describe potential ways the library might use the theme in communications and programming.

Methods

A working group of three librarians was created to determine if there was a need for the library to create a focus/culture of Open Science or Rigor and Reproducibility on campus. The working group interviewed 4 faculty/admin members including: the Deputy Chief Compliance Officer, an Associate Professor of Pharmacology, who teaches a course on Rigorous Research Methods, the Director of the CTSA's Medical Ethics Section, and the Director of the Health Sciences Center's Data Science Initiative, to determine the need for the library to be a resource for Open Science or Rigor and Reproducibility.

Results

Switch from Open Science to Rigor and Reproducibility

The first major decision the working group made was to switch the potential focus from Open Science to Rigor and Reproducibility for the following reasons:

- The "Reproducibility Crisis" has brought an increased attention to Rigor and Reproducibility
- The groups' belief that Rigor and Reproducibility would have more traction with Researchers with the NIH Requirements for Grants and Training Grants
- Open Science is key aspect of Rigor and Reproducibility, but Open Science does not equal Rigorous Science.

Findings from Campus Interviews

Stakeholder	Summary of Stakeholder's views on Rigor and Reproducibility
Office of Compliance	Concerns about Research Misconduct
Pharmacologist/statistician	Concerns Statistical Rigor of experiment/P-Hacking
Data Scientist	Concerns reproducibility of Code and Data Sharing
Bioethicist	Concerns teaching students how to evaluate Scientific Rigor

- All interviewees expressed interest in partnering with Library for Rigor and Reproducibility Events and services.

Results

Recommendations and Actions

Recommendation	Actions
Library and Office of Scholarly Communications should consider re-branding its pertinent customer-based services under the banner of rigor and reproducibility.	Action delayed by Pandemic
Library's own research should follow the rigor and reproductivity we would advocate to our patrons.	Librarians attended Center for Open Science "Openness and Reproducibility Research Practices" Training
Partner with stakeholders for yearly Programing centered on Rigor and Reproducibility	Library has partnered with Health Sciences Data Initiative for Rigor and Reproducibility seminar series in fall of 2020.

Summary and Conclusions

The Health Sciences Library decision to create a focus on Rigor and Reproducibility has been an effective way to engage with faculty and researchers across campus to begin to create conversations around Rigor and Reproducibility and research on campus.

Contact information

Questions? Email Jeremy Kupsco:
jkupsco@emory.edu