Class C Resolution Regarding the Importance of Reproducibility, Openness, and Transparency in Research at UW

WHEREAS, the primary mission of the University of Washington is the advancement, dissemination and preservation of knowledge; and

WHEREAS, there is growing evidence that nearly every field is affected by the problem of studies that are difficult or impossible to replicate or reproduce. This slows progress in research and diminishes public trust in science.

WHEREAS, many institutions and research communities are recommending or requiring practices that improve the reproducibility, transparency and openness of research that:

- Ensures the reliability of knowledge and facilitates the reproducibility of results
- Improves the efficiency and creativity of knowledge creation
- Expands access to knowledge and to the research enterprise

WHEREAS, the reports by the National Academies of Sciences, Engineering, and Medicine ‘Reproducibility and Replicability in Science’ (2019) and ‘Open Science by Design’ (2018) recommend:

- To help ensure the reproducibility of computational results, researchers should convey clear, specific, and complete information about any computational methods and data products that support their published results in order to enable other researchers to repeat the analysis, unless such information is restricted by nonpublic data policies.
- Educational institutions should educate and train students and faculty about computational methods and tools to improve the quality of data and code and to produce reproducible research, and create a culture that actively supports open science by design.

WHEREAS, many public and private funders have introduced mandates to ensure that the data and methods underlying articles are available

WHEREAS, the University of Washington Libraries has established an online, freely accessible and searchable data repository, ResearchWorks at the University of Washington (ResearchWorks), for the dissemination and preservation of scholarly works published by members of the University community; therefore,

BE IT RESOLVED, that the Faculty Senate requests that:

1. UW researchers include brief statements in their published work that attest to the reproducibility, transparency and openness of their research whenever possible, and in a manner consistent with the best practices of their research community.
2. UW instructors draw on best practices in their communities to teach students integrity in empirical research by informing students of the principles, methods, and tools that will enhance the reproducibility, transparency and openness of work produced by future generations of researchers. Instructors are recommended to consult with the UW Center for Teaching and Learning for guidance on specific challenges in teaching concepts and skills of reproducible, transparent and open research.
3. UW researchers and instructors consult the UW Libraries’ resource page on reproducibility to learn more about improving the computational reproducibility of their research, and consult with Data Scientists at the UW eScience Institute for guidance on specific challenges in making their computational work reproducible.
4. The Provost's Office provides resources to the University of Washington Libraries to improve the UW's institutional data repository to support the reproducibility, transparency and openness of UW research, according to their previous assessments.

Approved by:
Senate Executive Committee
May 3, 2021

Approved by:
Faculty Senate
May 13, 2021