

Project Title The Ethics Evolution: Assessing and Advancing Research Integrity Training

Project Summary The Fellow will undertake a research project to evaluate the effectiveness of existing research ethics training at Rice University and selected TMC peer institutions. They will produce a report on the effectiveness of available training and provide recommendations for a Fondren Library/ORI joint educational program.

Project Description Strengthening public confidence in the research enterprise is a shared goal that drives Rice's commitment to excellence. While many federal agencies have successfully integrated ethical training requirements into the research funding process, Rice is moving to the next step by elevating the quality and impact of that education. By refining research ethics training programs into a more cohesive, evidence-based framework grounded in Rice's existing academic strengths, we will equip junior scholars with the essential tools they need to succeed. This strategic shift ensures that our research practices are as innovative and reliable as the discoveries Rice produces, fully justifying the public's continued investment in our work.

The Office of Research Integrity is expanding training options and investigating the effectiveness of the Responsible and Ethical Conduct of Research (RECR) program. In particular, we are interested in evaluating the effectiveness of the online training made available (via our provider Epigeum) and in-person training. Our evaluation is situated within the broader context of the Texas Medical Center by benchmarking our results against select peers. To address this question, the Fellow will conduct a literature review of RECR pedagogical approaches and evaluation methods to co-create a tool to measure the impact and effectiveness of Rice training. We will build an inter-institutional network that will serve as the foundation for applying the same tool for comparison across these peer institutions. Working with their mentor, the Fellow will collect and analyze assessment data to inform recommendations for future programming. The final product will be a data-driven set of programming options for RECR training at Rice, which the Office of Research Integrity will provide in partnership with the Fondren Short Course program and the Texas Medical Center.

Key Tasks

- Conduct a literature review of RECR pedagogical approaches and program assessments
- Implement an RECR assessment tool
- Collect assessment data on Rice's RECR program
- Collect benchmarking assessment data on TMC RECR programs
- Analyze Rice's data and compare with TMC entities
- Develop recommendations for Rice's RECR program based on data analyses
- Provide data and related research materials in the Rice Research Repository

Anticipated Project Outcomes This program will provide a research opportunity for the Fellow while establishing data-driven improvements to research ethics training for thousands of junior scholars at Rice. With direct support by the mentor, the Fellow will lead an investigation into how

to improve Rice's RECR program by following the standard scientific method. The Fellow will leave the program with applied knowledge of how to develop, implement, and report on a research project while receiving direct support from seasoned researchers.

Rice will benefit from this project through a strategic program assessment intended to modernize its research ethics training and integrate various existing resources. Joining together resources from the Office of Research Integrity, Fondren Library programming, academic departments, and student services will intensify the ethical instruction and preparation of Rice graduates. Additionally, this program will further enhance Rice's alliance with the Texas Medical Center through a new pathway.

Qualifications This project requires a student who is curious, is interested in improving academic training in ethics, and is motivated to learn about data management, analysis, program evaluation, and developing data-driven recommendations.

Learning Outcomes Broadly speaking, the student would learn how to reduce a broad question ("How do we evaluate the effectiveness of RECR training?") to actionable steps, including defining more specific questions, familiarizing themselves with what is already known, collecting and analyzing data, and providing a report to stakeholders.