

1. Responsible Conduct of Research

Format: I completed both formal and informal responsible conduct of research (RCR) training activities during this reporting period. Formal instruction included renewing my Collaborative Institutional Training Initiative (CITI) certifications. A second formal training opportunity was completing a faculty-directed workshop on research ethics organized by Temple University's Psychology & Neuroscience department. This was a collaborative event in which individuals with different levels of experience are grouped together to discuss and solve examples of realistic research ethics dilemmas. I also received formal ethics training relevant to neuroscience as an attendee of the Methods in Neuroscience at Dartmouth (MIND) Computational Summer School and the Computational Psychology Preconference at SPSP 2024, as the curriculum included discussions dedicated to open challenges and ethical issues concerning social psychology and neuroscience. As the principal investigator of my project, I have also been responsible for ensuring that research assistants and staff are sufficiently certified and trained in research ethics and that all research practices meet our IRB's standard for ethical research practices. This, along with the applied component of our ethics workshop, has given me the opportunity to practice engaging with research ethics in an instructive role, rather than solely as a student. Such exercise is crucial to my own development as an independent social neuroscientist. In terms of informal instruction, I have continued to meet weekly with my sponsors and at least one meeting per month is dedicated to primarily to ethical challenges in social neuroimaging research, though ethical questions frequently are a central topic of discussion in our other meetings as well. Regarding future ethics training, I will continue to meet with my advisors regularly. I also plan to enroll in Temple University's "Ethics and Ethical Conflicts in Psychological Science" course in Spring 2025, which is its next available offering. This graduate course is faculty-led and I will have the opportunity in this course to discuss and plan for ethical dilemmas that I might encounter. I will also continue to seek additional formal ethics training from developmental and neuroimaging conferences, such as FLUX, CCN, or SANS, as outlined in my planned activities under this award.

Subject Matter: The CITI training modules that I had completed include Responsible Conduct in Research, Practice Runs Training, Biomedical Research, and Social/Behavioral Research - all of which are all now valid until at least November 2025. Our Temple-organized ethics workshops address questions of collaboration, authorship and credit disputes, data integrity, open-science practices, resource sharing, subject protections, and working with vulnerable populations, among other topics. The heterogeneity of experience within each discussion group encourages all participants to think more critically about their responses as they try to navigate these difficult situations together. Novel ethics topics focused upon by MIND's curricula include the appropriate application and reporting of neuroscience methodologies, as well as tool development, use, maintenance, and crediting. Topics discussed at SPSP 2024 that filled gaps from the previously mentioned sources include the importance of representation in our samples, especially from an international population, and appropriate compensation for subjects. My recent meetings with my sponsors have centered around identifying the most accurate means of modeling neural phenomena relevant to our recently completed manuscript on differences in active engagement. For example, our initial attempt to identify neural activity associated with rating behaviors yielded some interesting and reasonable results that in many ways matched our initial hypotheses, but lack of motor activation for a button-pressing task left us concerned that this was not the most accurate representation of the phenomena. Across several weeks, we devised a plan with input from my consultant, David Smith, to conduct supplementary analyses that would grant us greater certainty that we are targeting the underlying phenomena that we intend to target, rather than to simply adopt what conveniently matched our hypothesis. However, we also regularly discuss questions of subject compensation, subject safety, subject privacy, and data integrity as part of our ongoing collaborations together.

Faculty Participation: Faculty have contributed to my RCR training both through the informal instruction from my sponsorship team, but also via the Temple organized workshops, which are led and attended by many Temple faculty.

Duration and Frequency of Instruction: Instruction in RCR has exceeded the minimum 10 hours through the completion of workshops, events, and regular weekly meetings with members of my sponsorship team. I will continue to keep my CITI training valid, participate in yearly Temple-organized workshops, and maintain my weekly meetings with my sponsor team.