



Online Ethics Center  
FOR ENGINEERING AND SCIENCE

# Ethical and Responsible Research in the Design of Sociotechnical Systems

## Year

2022

## Description

**The OEC Project Pages are intended to cultivate a community of practice and allow ethics researchers, educators, and practitioners to more effectively disseminate their work. This Project Page provides a detailed overview and relevant resources for an on-going science or engineering ethics project. Once you've explored this project, visit the "Projects" section under "Resources" to see more ethics projects.**

## Body

## Project Summary

Digital technology offers new ways to deliver personalized support for health and wellbeing to more people than ever before. For example, smartphones are a common hub for a wide range of health and wellbeing applications, from medication adherence tools to condition screening applications as well as access to social support through patient-centered online forums. While digital technologies have contributed to many advancements in the health and medical fields, there are important concerns about how the design of this technology can inadvertently create access and literacy barriers for specific communities and can lead to risks related to data collection, management, and sharing. As the “digital health” field is

rapidly expanding, it is critical that the research community actively reflect on the ethical and responsible conduct of digital health research.

The purpose of this research is to investigate formal and informal opportunities for training in ethical and responsible research (ER2) related to digital health. Specifically, our team is in the process of conducting a series of interviews with lead researchers, based on a systematic literature review of digital health research. The objective for the interviews is to elicit active reflection about the research conversations related to key moments in the conduct of a study, such as when deciding how to recruit and introduce participants to a novel technology or what procedures to follow when returning study data to participants. Through the course of the expert interviews, we hope to gain a greater understanding of the informal opportunities for ER2 training in digital health research. Additionally, our team is connecting with the academic staff at major university programs in digital health to learn about the formal opportunities for ER2 training, including required courses, panel discussions, and journal clubs.

As our team accumulates research about the formal and informal opportunities for ER2 training, we will develop methods to elevate the conversation about ER2 throughout the planning, conduct, and presentation of digital health research. Specifically, the research team will facilitate the development of ER2 instructional prototypes through community co-design workshops. Key contributions will include the ER2 instructional prototypes for use by those designing technologies for use in health research as well as recommendations for educational interventions/strategies that are anchored to stakeholders within a behavioral ecological systems model. As interest in digital health continues to grow, our hope is that this research will help to elevate the conversation about ER2.

## **Project Leadership**

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## Recipient Institution

University of California, San Diego

## Start and End Date

September 1, 2021 - August 31, 2024

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Use of Materials on the OEC

**Resource Type**

Projects

**Parent Collection**

STEM Ethics Projects (2017-Present)

**Topics**

Human Subjects Research  
Informed Consent

Institutional Review Boards

Vulnerable Populations

**Discipline(s)**

Research Ethics

**Publisher**

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