Responsible Research and Engagement Practices for Indigenous Data Governance in Earth Science Institutions

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

Overview

This project incubation proposal "Responsible Research and Engagement Practices for Indigenous Data Governance in Earth Science Institutions" will leverage relationship building and collaborative planning to convene a working group that will

jointly develop a data governance framework and full research proposal to implement CARE (Collective benefit, Authority to control, Responsibility, Ethics) Principles for Indigenous Data Governance in the National Ecological Observatory Network (NEON), other open data repositories and Earth system science institutions, and STEM education broadly.

Specific goals within the scope of this project incubation proposal are to:
Build a robust working group that includes Earth scientists from NEON and NCAR networks, Indigenous scholars and community members, data managers and social scientists with expertise in Indigenous data sovereignty
Work collaboratively with the working group to develop a framework for promoting responsible research and engagement practices in open data research institutions

Work collaboratively with the working group to develop a full ER2 research proposal to submit in the next funding cycle that will outline metadata and process steps to apply CARE principles in existing databases and promote ethical training for scientists at undergraduate and graduate level education

Intellectual Merit

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) asserts Indigenous Peoples' right to self-governance and decision making with respect to access and management of natural resources and traditional knowledge systems on their lands (United Nations General Assembly 2007). This includes the right to control data about their peoples, lands, and resources. In a review of 311 climate studies, conducted around the world, David-Chavez and Gavin (2018) found that 87% demonstrated extractive practices in which Indigenous knowledge systems, communities, and knowledge holders had minimal participation in the research and only limited decision making authority within the scope of the research (David-Chavez and Gavin 2018). This situation exists because our training of earth, environmental, and climate scientists focuses heavily on the theoretical and technical aspects of the discipline and little on the ethical considerations and ethical practice of conducting research in and with under-represented communities.

Broader Impacts

Earth, environment and climate science research and collection have a long history of extractive practices (Whyte, 2013, 2018). The guiding goal of this project is to

promote more ethical practice in science that recognizes historic inequities and seeks to transform data collection, storage and dissemination in large open data research repositories and institutions from an extractive to one that is relational, respectful, and honors communities' rights. Overlaying ethical considerations on an existing system is complicated. For this reason, our proposal places planning, project team development and establishing an ethical framework as an essential, intentional process that will ground the practical work to follow. By addressing data practices in Earth science institutions while revising the training of upcoming and early career scientists, we are shifting the expectation for ethical engagement in all stages of research across Earth system sciences.

Project Leadership

Katherine Jones - Ecologist, II Battelle/NEON

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Recipient Institution

National Ecological Observatory Network

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October 1, 2022 - September 30, 2023

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Resource Type

Projects

Parent Collection

STEM Ethics Projects (2017-Present)

Topics

Big Data
Climate Change
Cultural Awareness and Sensitivity
Data Management

Discipline(s)

Earth Sciences
Ecology and Evolutionary Biology
Research Ethics

Publisher

Online Ethics Center