

**Northwestern Institute for Augmented Intelligence in Medicine and
Center for Bioethics and Medical Humanities
Ethics and Artificial Intelligence Research Grant
2021-2022**

About the Institute for Augmented Intelligence in Medicine (I.AIM) and the Center for Bioethics and Medical Humanities (CBMH):

The mission of the Institute for Augmented Intelligence in Medicine (I.AIM) is to bridge computational methods with human expertise to advance medical science and improve human health. The Center for Bioethics and Medical Humanities (CBMH) seeks to advance bioethics and medical humanities at Northwestern and beyond through education, innovation, clinical application, and thought leadership. This award presents a unique opportunity to advance the missions of both I.AIM and the CBMH.

Purpose:

The award will fund research in bioethics and artificial intelligence (AI). AI holds enormous potential to advance healthcare delivery, through improved diagnostic techniques, predictive analytics, applied robotics, drug development, disease tracking, and much more. But along with vast opportunities presented by AI, come unique ethical challenges. Issues related to bias, privacy, confidentiality, data sharing, and what it means to be human are a few examples of the ethical challenges that AI bring. This award will provide funding for pilot/exploratory projects that explore bioethics problems associated with any type of AI in healthcare. Projects can address issues from conception, development, testing, and implementation of AI and can be normative or empirical work. The aim is to support preliminary work that will provide a foundation for obtaining funding to support larger research projects.

Preference will be given to proposals with a clearly delineated plan for obtaining subsequent extramural or internal funding.

Award Information:

Projects can be up to one year in duration. Awards up to \$2,500.00 (total costs) will be granted.

Eligibility:

To be eligible, applicants must be one of the following:

- A Northwestern University Feinberg School of Medicine medical student, resident, or fellow*
- An employee of Northwestern Memorial Hospital, Shirley Ryan AbilityLab, or Ann & Robert H. Lurie Children's Hospital*
- A Northwestern University Feinberg School of Medicine faculty member

*All medical students, residents, fellows, and employees should identify a Northwestern University faculty member mentor with whom to collaborate. Mentor qualifications and plans for mentor oversight should be described in the proposal.

Applicants must have the backing of a department or center who can receive the funds in full and process all payments related to the project. Applicants may apply to no more than one grant per year from the Center for Bioethics and Medical Humanities.

Requirements:

All awardees will agree to the following:

- Apply for membership to the Center for Bioethics and Medical Humanities and the Institute for Augmented Intelligence in Medicine.
- Present results of the funded research at a conference sponsored by the Center for Bioethics and Medical Humanities.
- Prepare two progress reports, one halfway through the period of funding, and one at the end of the period of funding.
- Acknowledge funding from the Center for Bioethics and Medical Humanities and the Institute for Augmented Intelligence in Medicine in presentations and publications.

How to apply:

Applications should not exceed 5 pages and should include the following:

- A completed Cover Page (included below; 1 page)
- A proposal narrative with the following headings (up to 3 pages):
 - o Specific Aims
 - o Background and Significance
 - o Approach
 - o Next Steps
 - o Timeline
 - o Mentor qualifications and plans for oversight (Applies to all non-faculty applicants)
- Budget with budget justification (1 page)

Please submit all application components in one email to Bryan Morrison at bryan-morrison@northwestern.edu

Review Criteria:

Applications will be evaluated based on the following criteria:

- Background/Significance - How well does the applications describe the background and need for the research? If all the specific aims are achieved, would the project make a significant/important contribution to this field and how significant/important is this contribution?
- Approach - Are the strategy, methods, and analyses well-reasoned and appropriate to accomplish the aims?
- Mentor qualifications and plans for oversight (If applicable)
- Plans for subsequent funding - Are the plans for obtaining subsequent funding adequately described? What is the likelihood of obtaining subsequent funding?

Important Dates:

- Deadline for submitting applications: October 1, 2021 at 5 PM CDT
- Funding decisions communicated: November/December 2021

Questions: Please contact Bryan Morrison (bryan-morrison@northwestern.edu) with any questions.

Proposal for Institute for Augmented Intelligence in Medicine and Center for Bioethics and Medical Humanities Ethic and AI Research Grant

Cover Page

Project Title: _____

Amount Requested: _____

Principal Investigator:

Name: _____

Title: _____

Please indicate your affiliation:

- Northwestern University Feinberg School of Medicine medical student
- Northwestern University Feinberg School of Medicine resident or fellow
 - Please indicate Department/Division _____
- Northwestern University Feinberg School of Medicine faculty member
 - Please indicate Department/Division _____
- An employee of Northwestern Memorial Hospital, Shirley Ryan AbilityLab, or Ann & Robert H. Lurie Children's Hospital (please specify):
 - Northwestern Memorial Hospital
 - Shirley Ryan AbilityLab
 - Ann & Robert H. Lurie Children's Hospital of Chicago

Address: _____

Email: _____

Phone number: _____

Applicant Signature: _____ Date: _____

Endorsements:

Faculty mentor (if applicable): _____

Signature of faculty mentor: _____