Northwestern Institute for Artificial Intelligence in Medicine and Center for Bioethics and Medical Humanities Ethics and Artificial Intelligence Research Grant 2024-2025

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

The mission of the Institute for Artificial 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 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 the vast opportunities presented by AI, come unique ethical challenges. Issues related to bias, privacy, confidentiality, data sharing, implementation, and what it means to be human in this era of technology are a few examples of the ethical challenges that AI brings. This award will provide funding for pilot/exploratory projects that consider 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 that supports larger research projects.

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

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

*All students, residents, fellows, and employees should identify a Northwestern University faculty member mentor with whom to collaborate. <u>Mentor qualifications and plans for mentor oversight should be described in the proposal.</u> 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 for no more than one grant per year from the Center for Bioethics and Medical Humanities. Previous awardees are eligible, but priority will be given to applicants who have not previously received CBMH/I.AIM funding, to earlier career people (including students, trainees, and instructor/assistant professors) and to employees.

Requirements:

All awardees will agree to the following:

- Request membership to the Center for Bioethics and Medical Humanities and the Institute for Artificial 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 Artificial Intelligence in Medicine in presentations and publications

How to Apply:

Applications should include the following:

- A proposal narrative with the following headings (should not exceed 4 pages):
 - Specific Aims
 - o Background and Significance
 - $\circ \quad \text{Approach}$
 - o Next Steps
 - o Timeline
 - Non-faculty applicants: Mentor qualifications and plans for oversight
- Budget with budget justification (1 page)
- Mentor endorsement (applies only to non-faculty applicants) should be provided by obtaining your mentor's signature on your proposal or including a confirmation email from your mentor (as a PDF or screenshot)

Once complete, please visit the online grant proposal form to upload your application document(s) and provide additional information:

https://forms.office.com/r/RvcPZbiLhg

Review Criteria:

Applications will be evaluated based on the following criteria:

- Background/Significance How well does the application describe the background and need for the research?
 If 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: March 4, 2024 at 5 PM CT
- Funding decisions communicated: June 2024
- Funding period: July 2024 June 2025

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