

AI4PH Scholarship Awards

Submitting an effective application

Question 1

Please include a lay summary of your project.

150 word (MAX)

- Abstract of 1 to 2 short paragraphs
- Lay language should avoid jargon, avoid acronyms
- Explain why the problem is important
- Written as if you are presenting the problem to someone outside your field
- Outline your plan to solve the problem and how it is relevant to people with lived experiences

Example

Determinants of vaping cessation among youth and young adult e-cigarette users



Using e-cigarettes has adverse health effects on young people. Although many e-cigarette users want to stop vaping each year, very few are successful.

A machine learning (ML) model can be developed to identify the factors that make quitting vaping difficult. Previous research on smoking cessation can guide some of this work, while ML methods can uncover distinct characteristics of e-vaping cessation success. Data will be gathered from two sources: a group of over 3000 young people monitored for their vaping habits and another group of young people who try to stop vaping by using a smartphone app.

This research may be used to support young e-cigarette users when they make attempts to quit vaping.

Question 2

Please share how your work aligns with the goals of the Artificial Intelligence for Public Health (AI4PH) National Training Program.

300 word (MAX)

- 3 to 4 short paragraphs
- Lay language should avoid jargon, avoid acronyms
- Demonstrate link between your work and core functions of public health, artificial intelligence methods and health equity/ethics
- Describe how the project advances health equity

Example

Understanding, predicting and preventing deaths of despair in Canada: A population-based approach



Existing tools for predicting the risk of **deaths of despair** (i.e., deaths from drug poisoning, alcohol abuse, and suicide) were developed using healthcare data only, and excluded information on important social and economic factors (e.g., income, education etc) that affect the likelihood of dying from drug poisoning, alcohol abuse, and suicide.

From 1950 to 2000, high-income countries like Canada and the U.S. experienced a continuous, gradual increase in life expectancy. Due to a sharp rise in deaths of despair in the 21st century, life expectancy either declined or stopped increasing in most high-income countries. Social risks may contribute to increased risk of death of despair.

This research is to develop tools to help identify:

- People who are at the highest risk for deaths of despair and,
- Ways to reduce the likelihood of dying from drug poisoning, alcohol abuse, or suicide.

Multiple sources of information can be combined using predictive models. The data for this research will include personal characteristics, health status, psychological well-being, and economic well-being information gathered from the national health survey data. Death data will be collected from a national database of death certificates.

This information will be used to train AI models to predict the risk of deaths of despair and identify socio-demographic factors that suggest someone is at an increased risk for these deaths. Public health interventions may be developed to prevent deaths of despair in communities across Canada.

Question 3

Please describe the training environment in which the project will take place, including how your supervisor(s) will support your proposed project.

350 word (MAX)

- 3 to 4 short paragraphs
- Lay language should avoid jargon, avoid acronyms
- Includes faculty areas of expertise in public health, artificial intelligence and/or health equity
- Realistic skills, expertise and timeline of the team for proposed project
- Describe how the trainee, project or team crosses disciplines
- Name's links to community organizations that can support the project or collaboration with people with lived or living experiences (or staff/health care provider that work with them)

New for 2023–2024

Changes in the application

After consultation with our Community Advisory Board, questions have been added to the application to better capture engagement with people with lived or living experience.

We recognize that projects are at various stages of the research cycle and have varying degrees of engagement. If this component is not applicable to your project, you may use this space to share your justification.

We ask applicants to self-declare using our survey adapted using CIHR guidelines and the University of Manitoba self-declaration survey.

A list of resources has been compiled to help you with formulating responses in your applications.

Question 4

What are some challenges you may face in engaging people with lived or living experience in your research (eg, research design, data collection or analysis, dissemination etc).

What actions have you taken, or do you plan to take to overcome these challenges?

300 word (MAX)

- 3 to 4 short paragraphs
- Lay language should avoid jargon, avoid acronyms
- Identify what has been a challenge
- Describe any limitations of the research project on having an impact on people with lived or living experience
- Describe how people with lived or living experience might benefit from the results of your research if they are or aren't meaningfully engaged in your research
- Describe how you might plan for or work around these challenges
- Justification if this is not applicable to your project

Example

Developing tools to support older adults with daily activities

Mrs. Smith is a 75-year-old woman who has been living with visual impairment for the past 20 years. Despite her condition, Mrs. Smith has always been fiercely independent and has worked hard to maintain her independence as much as possible. However, Mrs. Smith has experienced several falls over the past year, making her increasingly anxious about leaving her home.

To help Mrs. Smith regain her confidence and independence, her occupational therapist (OT) suggested enrolling her in this project designed specifically for older adults with visual impairment. The OT works with our university-based lab to collaborate with clients to design and develop digital tools using voice commands and haptic (eg a tap or vibration) feedback.

One of the tool's our lab has developed can identify and link the bus lines that clients frequently use to get around town and alert them to any empty seats on any bus they board. This was particularly important for Mrs. Smith, who often found it challenging to find a seat on the bus due to her visual impairment.

To get started, the researchers provided Mrs. Smith with a device equipped with the AI program and showed her how to use it on her outings. Initially, Mrs. Smith was hesitant at first. However, after a few weeks of using the program, Mrs. Smith reported that she was very satisfied with her experience. Unfortunately, enrollment in the project had been low during the COVID-19, so we invited Mrs Smith to join us as an advisor to help us support and reach more clients in the community.

Question 5

Describe your commitment to equity, diversity, accessibility and inclusion in your academic or research work.

Provide examples as appropriate.

200 word (MAX)

- 1-2 short paragraphs
- Lay language should avoid jargon, avoid acronyms
- Reveals your understanding of equity, diversity, accessibility and/or inclusion
- Reveals an understanding of the AI4PH program's commitment to equity, diversity, accessibility and/or inclusion
- Name a specific equity deserving group that you are committed to supporting
- Include a specific example of your actions to support equity deserving groups in your research or academic environment