

Position Title: Research Associate, Transdisciplinarity

Program: Connected Minds

Contract Term: 1 year with the possibility of extension

Annual Salary: \$90,000

Hours of Work: Full-time, 35 hours per week

ABOUT CONNECTED MINDS

Connected Minds: Neural and Machine Systems for a Healthy, Just Society (2023-2030) combines York's existing science and technology research ecosystem, and longstanding institutional strengths in the social sciences, arts, and humanities with Queen's University's complementary strengths in neuroscience, health, and artificial intelligence, as well as a substantial consortium of multi-sector partners. The Connected Minds vision is to co-create and co-lead socially responsible, community engaged research that produces innovative technologies, policies, and regulations that optimize the benefits and mitigate the risks of the new techno-social collective. Connected Minds will fund 35 strategic faculty hires, partner-focused seed, team, and prototyping grants, KM/commercialization events, and an ambitious multi-institutional micro-credential training program with 385 trainees and cross-sector stakeholders. All activities will require interdisciplinary participation, and we will prioritize projects that benefit Indigenous and other equity-deserving groups. With CFREF funding, Connected Minds will lead Canada and the world in the socially responsible creation and adoption of scientific and technological innovation to promote a healthy, resilient, and just techno-social collective.

ABOUT TRANSDISCIPLINARITY AND THE CONNECTED MINDS PROGRAM

Transdisciplinarity is a core principle of the Connected Minds program and underpins all its research and training activities. Within Connected Minds, transdisciplinarity refers to the integration of perspectives, methods, and knowledge from multiple disciplines to address complex societal challenges that cannot be fully understood through a single field of study.

The program brings together expertise across science and technology, social sciences, humanities, health, and the arts, alongside partners from industry, government, and community organizations. This diversity of perspectives enables more holistic, innovative, and socially responsive approaches to research on the evolving techno-social landscape.

Connected Minds emphasizes not only collaboration across disciplines, but meaningful integration where different ways of knowing are actively combined to shape research questions, methodologies, and outcomes. This approach supports the development of new frameworks, tools, and insights that are both scientifically rigorous and socially relevant.

Transdisciplinarity in Connected Minds works in tandem with co-creation. While co-creation emphasizes collaboration across sectors and with communities, transdisciplinarity focuses on the integration of academic and intellectual perspectives. Together, these approaches

strengthen the program's ability to generate impactful, inclusive, and innovative research outcomes.

Building capacity for transdisciplinary research is also an important component of the Connected Minds approach. Effective transdisciplinary collaboration requires researchers and trainees to develop skills that extend beyond disciplinary expertise, including the ability to communicate across different fields and sectors, integrate diverse forms of knowledge and methods, navigate different research cultures, and collaborate around complex problems. Connected Minds therefore seeks to develop educational opportunities, resources, and tools that strengthen transdisciplinary competencies among trainees, researchers, and supervisors and support their application within research teams.

JOB PURPOSE

Reporting to the Connected Minds Directorate, the Research Associate will advance understanding and practice of transdisciplinarity within the Connected Minds program through a combination of research, evaluation, and education. The role will examine how transdisciplinary collaboration is conceptualized, implemented, and experienced within Connected Minds, while translating these findings into practical approaches for strengthening transdisciplinary capacity across the program.

Through literature review, qualitative and quantitative analysis, and engagement with researchers, trainees, and program collaborators, the Research Associate will identify effective practices, barriers, and opportunities related to transdisciplinary research. This work will inform the development of frameworks and metrics for assessing transdisciplinary collaboration and its impacts.

A significant component of the role will focus on transdisciplinary education and capacity building. The Research Associate will translate research findings and evidence-based practices into training initiatives, educational materials, resources, and tools that help trainees, researchers, and supervisors develop the knowledge and skills needed to work effectively across disciplinary and sectoral boundaries. The Research Associate may also support the delivery and evaluation of these initiatives to inform their ongoing development.

The role will generate both scholarly and practical outputs, including academic publications, educational resources, training initiatives, and/or toolkits. In doing so, the Research Associate will help Connected Minds both contribute to the broader scholarship on transdisciplinarity and strengthen its application across the program.

MAJOR DUTIES

- Conduct a comprehensive literature review on transdisciplinarity, including theoretical frameworks, models of collaboration, and evaluation approaches in research contexts.
- Conduct qualitative and quantitative analyses to analyze how transdisciplinarity is conceptualized and operationalized within Connected Minds, identifying key successes, challenges, and lessons learned.

- Develop evidence-informed training initiatives, educational materials, resources, and tools to build capacity for transdisciplinary research among Connected Minds trainees, researchers, and supervisors.
- Support the delivery and facilitation of transdisciplinary learning opportunities, including workshops, training sessions, and other educational activities.
- Evaluate the effectiveness of transdisciplinary training initiatives and use participant feedback and research findings to support their ongoing refinement.
- Gather and synthesize data from interviews, reports, and program documentation to inform the research paper.
- Examine barriers and enablers of effective transdisciplinary collaboration, including institutional, methodological, and cultural factors.
- Develop or adapt frameworks and/or metrics for assessing the effectiveness and impact of interdisciplinary research.
- Identify key themes and insights that contribute novel perspectives to the study of transdisciplinarity in academic and applied contexts.
- Produce an academic paper and/or toolkit that integrates theory, empirical insights, and actionable recommendations.
- Contribute to writing, editing, and dissemination of research outputs.
- Present research findings to internal collaborators and potentially at external academic conferences or seminars.
- Collaborate with researchers, trainees, and program staff to ensure the relevance and applicability of outputs.

QUALIFICATIONS

- PhD required, postdoctoral fellow preferred, in a relevant field with demonstrated experience in transdisciplinary research, education, training, or collaboration across domains.
- Strong understanding of qualitative and quantitative research methodologies, evaluation, and academic writing.
- Previous experience conducting literature reviews and synthesizing complex cross-disciplinary information.
- Experience developing educational, training, professional development, or capacity-building initiatives and materials.
- Ability to translate research evidence and complex concepts into accessible and practical learning resources for diverse audiences.
- Familiarity with approaches to adult learning, curriculum or instructional design, facilitation, or program evaluation is an asset.
- Familiarity working across disciplinary boundaries or in collaborative research environments.
- Excellent written and verbal communication skills, with the ability to translate across disciplinary perspectives.
- Strong organizational and project management skills.
- Ability to work independently and collaboratively in a fast-paced, dynamic environment.
- Strong relationship and trust-building skills, with the ability to engage effectively with diverse collaborators, including researchers, program leaders, and external collaborators.
- Proven ability to foster collaborative partnerships and create an environment conducive to open, productive dialogue.

- Previous experience working with or within CFREF-funded programs or similar funding structures is a plus.
- Delivers clear, concise presentations of complex research findings to both technical and non-technical audiences, effectively communicating key insights, methodologies, and implications to drive informed decision-making.

Application Instructions:

Please submit a cover letter and resume to Nicoleta Negoita, Senior People Partner, at nicol23@yorku.ca. This position is open until filled.