



R MONITORING MY MOBILITY RE

MOBILITY, TECHNOLOGY AND AGING RESEARCH

## **MACM3: McMaster Monitoring My Mobility (2020-2025)**

**- an interdisciplinary research program at McMaster creating a comprehensive mobility tool enabling older adults to anticipate and manage their mobility needs**

**Paula Gardner, Co-applicant**

<https://mira.mcmaster.ca/research/research-projects/technological-approaches-for-advancing-the-assessment-of-early-mobility-limitation-in-older-canadians>

## OUR PARTNERS & COLLABORATORS



Institute for  
Research on Aging



Thrive Group  
Integration. Inspiration. Independence.



aditum health  
technology for accessible healthcare



## About Mac M3

McMaster Monitoring my Mobility-MacM3, is a research platform based at the Institute of Applied Health Sciences at McMaster University. Our research focus is in the areas of mobility, aging and technology. Interested in learning more about our current research projects? Click on our research tab for an in depth look at the projects we are currently work on.

Our team is multidisciplinary, comprised of researchers from: rehabilitation science, engineering, computational statistics, humanities, business, and geography and earth science. See the discover us tab to learn more about our team.

Interested in becoming a community or industry partner with our research team? We'd love to connect with you, contact us by phone or email listed below

# Why focus on mobility?

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Mobility limitations, such as difficulty walking or transferring to and from a car, are a common and costly problem affecting older adults. Identifying changes in mobility as early as possible is critical to mitigate or prevent major declines in health and social functioning. Our multidisciplinary team has been funded by the McMaster Institute for Research on Aging (MIRA), AGE-WELL NCE and McMaster Provosts' Office to study technological approaches for advancing the assessment and management of mobility problems in older adulthood. A key component of our 5-year MIRA project involves the assembly of a large-scale prospective cohort study that will lead to the development of a novel tool ('the Monitoring My Mobility' ('M3' tool)) for mobility assessment by older adults and their caregivers. We will also create a community-based platform where leading-edge research on mobility and aging will be conducted.

# Paula Gardner contributions:

## Innovating tangible

## Interdisciplinary team methods

With my Doctoral research assistant, we are creating and testing innovation techniques and games to engage our team to:

- ❖ learn interdisciplinary theory (without attending training workshops)
- ❖ discover and address our disciplinary habits (e.g. methods, protocols, team work)
- ❖ recognize and value moments of interdisciplinary thinking; and use problem solving moments for interdisciplinary skills cultivation and training
- ❖ use play and gaming techniques in exercises. In this period of remote meetings, due to the COVID-19 pandemic, we have created games exploiting the tools available on zoom, including emojis and chat

## Clarity Questionnaire

...ance for us to understand how the M3 team understands their roles within this inter...  
...there are no right or wrong answers. The information will be used only internally, to h...  
...n practices. Please answer honestly so that we understand where interdisciplinary is or is...  
...!

**My academic discipline is...**

\* must provide value

**I feel that I understand what it means to work on an interdisciplinary project.**

\* must provide value

Not really

Change the

**I feel that my work on M3 is generally interdisciplinary - that is, it incorporates methodologies, priorities, and theoretical frameworks from multiple fields.**

\* must provide value

Rarely

Change the

**In my work on the M3 project, I communicate with people from other disciplines...**

\* must provide value

Rarely

Change the

**my work on the M3 project, I work with people from the following fields:**

\* must provide value

☐ Computer Sciences ☐ Humanities

**my top personal or assigned goals**

# Paula Gardner contributions:

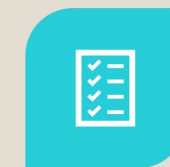
## Creating Co-design methods with stakeholder advisory group

With colleague Dr. Brenda Vrkljan and my Doctoral research assistant, we are working establish lateral relations, power sharing and trust with our advisory team of older adults. We use creative collaboration techniques and playful tools to keep them updated and engage their expertise including:

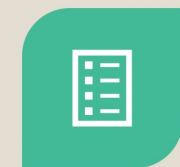
- ❖ Creating a group agreement of collaboration principles to practice to ensure all members can participate fully
- ❖ Provide progress updates featuring clear and bright visuals
- ❖ Use design thinking techniques for sharing ideas and preferences such as sticky note boards, dot voting, red/yellow/blue card preferences, etc.



## Snapshot: The M3 Research Stages



(✓) **STAGE 2.**  
**TEST**  
WATCHES



**STAGE 3.**  
**LARGE COHORT**  
**TESTING**  
(MOBILITY CHANGES)



**STAGE 4**  
**DESIGN**  
WEARABLE FOR MONITORING/SU

# For more information visit:

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