

ACOTUP Researcher Profile

Name of researcher: Louise Demers, Université de Montréal

Degrees and professional qualifications (including fellowships):

Bachelor's in Occupational Therapy (scholarship from the industry, CAOT prize); Diploma in Health Services Management; Master in Biomedical Sciences (Rehabilitation option) (salary award from the Quebec Health Research Funds); Doctorate (PhD) in Biomedical Sciences (Rehabilitation option) (salary award from the Quebec Health Research Funds); Post-doctorate fellowship in Epidemiology (salary award from the Quebec Health Research Funds and Canadian Foundation for Healthcare Improvement)

- Occupational therapist (erg and OT(C))
- Full professor and Department Director, Faculty of Medicine, University of Montreal
- Associate Vice-Dean for Health Sciences, Faculty of Medicine, University of Montreal

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Area of research:

Dr. Demers has a long standing experience in the design, conduct and dissemination of studies involving assistive technology, older adults living with physical disability and their family caregivers, outcomes measures, and social participation.

Research related awards and honors:

- Dean's Honor List for exceptional thesis, Faculty of Medicine, University of Montreal (2000)
- Research Scholar (Junior 1, Junior 2 and Senior) in Epidemiology and Clinical Research, from the Quebec Health Research Funds (2001-2013)
- Chancellor Prize for Pedagogical Innovation, University of Montreal (group award) (2010)
- Advisory Board member for the Institute of Aging (2006 to 2010) and University of Montreal' spoke person on the Steering Committee for the Quebec Network for Research on Aging.
- Workpackage Lead in Canada's technology and aging network AGEWELL (National Centers of Excellence) (<http://agewell-nce.ca/>)

Grants/funding history:

As a principal investigator, Dr. Demers was responsible for conducting 15 studies involving multi-site and multidisciplinary teams of 4 to 6 scientists (1.5 M\$). As a co investigator, she played a key role in about 20 others studies (14 M\$).

- AGE-WELL - Aging Gracefully across Environments through Technology for Wellness, Engagement, and Long Life. Nominated PI: Mihalidis A, Sixmith A. Co-Investigators: **Demers L** and 48 others. Network of Centres of Excellence. 36 605 194 \$ (2015-2019) <http://www.agewell-nce.ca/>
Role: Workpackage lead for 4 projects that aim to understand the needs of caregivers (675 000\$/year redistributed to project leads).
- FRELE: Espace de vie et cognition, une association novatrice pour mieux détecter les personnes âgées à risque de démence. **Demers L**, Bier N, Desrosiers J, Negron P. Quebec Network on Aging. 15 000 \$ (2014-2015)
Role: Principal investigator

- Enhancing Community Participation in Canadians with Physical Disabilities: Development, Implementation and Evaluation of a Partnered Strategy. Social Sciences and Humanities Research Council (SSHRC) partnership grant. Nominated PI: Martin Ginis K; PI: Noreau L, McBride C. Co-Investigators: **Demers L** and 21 others. 2 643 997 \$ (2014-2021). <http://cdpp.ca/>
Role: Co-investigator.
- A Multi-Site Trial of the Impact of Assistive Technology with Individuals with Mobility Limitations and their Caregivers. Canadian Institutes for Health Research (CIHR). **Demers L**, DeRuyter F, Jutai J, Mortenson W, Sixsmith A. 503 427 \$ (2011-2016).
Role: Principal investigator
- Wheeled mobility for older adults team. Emerging Team Alliances in Mobility and Aging of the Canadian Institutes for Health Research. 1 500 000\$. (2010-2016). Miller B, Mitchell IM, Sawatzky BJ, **Demers L**, et al.
Role: Co-Investigator and Co-Principal investigator for the projet on the “Natural history and measurement of power mobility outcomes» that involved 6 sites of data collection across Canada and 8 researchers (216 000\$ in total).

Research collaboration:

Dr. Demers has a long-standing history of working across disciplines, borders and institutions. She is part of active research groups including AGEWELL (90 leading academics, industries and community partners in the field of technology and aging across Canada, www.agewell-nce.ca), the FRELE longitudinal study on frailty (sample of 1 641 community-living elderly persons, www.rqrv.com/fr/init_FRELE.php), the CIHR Emerging Team CanWheel (6 data collection sites across Canada, www.canwheel.ca), and the SSHRC Partnership project on Enhancing Community Participation in Canadians with Physical Disabilities (with connection to 20 academics and 20 community-based disability-related groups and agencies, <http://cdpp.ca>).

What is the most important thing in mentoring graduate students?

Feel passionate about your work and be a role model. Make sure that graduate students know why and how their individual project contributes to advancing the field of occupational therapy. Rigorous methods are important for student to learn, no doubt. Yet, research efforts become truly significant, valuable and stimulating when students anchor them in clinical problems and when they feel their work can help the profession move forward, one small step at a time.

Most significant publications:

During her career, Demers authored and co-authored more than 80 articles in relation to social participation, disability, outcome measurement, family caregivers, psychometric, and assistive technology.

- Demers, L., Weiss-Lambrou, R. & Ska, B. (1996). Development of the Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST). *Assistive Technology*, 8, 3-13. The QUEST is the one of the first published instrument designed specifically for measuring the impact of assistive technology device from the user’s perspective. It was translated into 14 languages and has become an international standard for measuring user satisfaction with assistive technology (<https://evalorix.com/boutique/geriatrie/quebec-user-evaluation-of-satisfaction-with-assistive-technology-quest/>).
- Demers, L., Fuhrer, M., Jutai, J., Lenker, J., Depa, M., & DeRuyter, F. (2009). A conceptual framework of outcomes for caregivers of assistive technology users. *American Journal of Physical Medicine and Rehabilitation*, 88, 645-658. This paper is a significant theoretical

development in the field of assistive technology outcomes research. It is the first that examined the assistive technology experience of caregivers identifying many facets that merit the attention of future outcomes research.

- Mortenson B, Demers L, Fuhrer, M, Jutai J, Lenker J, DeRuyter F. (2013). Effects of an assistive technology intervention on older adults with disabilities and their informal caregivers. *American Journal of Physical Medicine and Rehabilitation*, 9, 297-306. This is the first experimental study to demonstrate that the provision of assistive technology decreases caregiver burden. The findings have significant policy and practice implications by advocating for improved access of service provision and follow-up.

Tips would you give for new investigators:

1. Be positive about yourself. All Canadian researchers are going through a tough time in terms of funding. It is reassuring to remember that all valuable projects do not succeed at first and even at second attempt, but eventually succeed in being implemented.
2. Identify a mentor that you trust and create the opportunities for regular exchange and support.
3. Get involved in research networks and collaborative work. It is mind opening, stimulating and a good way to gradually build your own network.
4. Learn to choose among options and recognize that it may be fine to say no sometimes. Too many projects, tasks, and committees can be very time-consuming in a new investigator's agenda.

Resources/supports/training programs for new investigators:

The School of Rehabilitation at the University of Montreal is the host of M.Sc. and Ph.D. programs in Rehabilitation Sciences (<http://readaptation.umontreal.ca/recherche/research/>). There is strong opportunity to support clinicians who would like to expand their knowledge and experience by pursuing a research career, in a wide range of areas in the field of health and rehabilitation. Moreover, post-doctoral opportunities are offered in five affiliated established research centers, related to various groups of clients, from the newborn to the older adult, and from musculoskeletal to psychosocial disorders. Finally, as a work-package lead in the Canada's technology and aging network AGEWELL, Dr. Demers can provide support to young researchers interested in research related to understanding the needs of caregivers.