

Master of Science in Health: Science, Technology and Policy

Carleton University, Ottawa, Canada

Proposed Project: "A Framework for Wellbeing: Innovating Healthcare Education and Clinical Environments"

Are you passionate about improving the healthcare system? Are you interested in improving the wellbeing of current and future healthcare professionals? Join us in this innovative research project that aims to transform the learning and working environments in the healthcare system, ultimately contributing to improving patient and health systems outcomes.

Supervisors: Dr. Jerry Maniate (Equity in Health Systems (EqHS) Lab, Bruyère Research Institute (BRI)), Dr. Victor Do (University of Alberta), Dr. Renate Ysseldyk (Department of Health Sciences, Carleton University).

Collaborators: Wendy Chong (EqHS Lab, BRI), Jade Alcantara (EqHS Lab, BRI) and Kelly Bute-Seaton (EqHS Lab, BRI).

Background/The Challenge:

Wellbeing of healthcare providers and learners (e.g. nursing, medical students) has been a significant challenge with high rates of burnout, disengagement, emotional exhaustion. As the individuals who provide patient care, foster and develop our health systems and ultimately are responsible for population health, ensuring that we have a workforce that is healthy and thriving is critical for the health system to function at its best.

Why This Matters:

The learning and working environments in healthcare have a profound effect on learner and health professional wellbeing, which in turn influences patient care and overall health system outcomes. Improved provider wellbeing is shown to save the health system money, lower adverse events and errors for patients and improve patient satisfaction. By focusing on improving the broader environment rather than just individual interventions, we can create sustainable change that benefits learners, practitioners, and the communities they serve. This project broadly considers how to improve the working and learning environments including ensuring we better center equity, diversity and inclusivity into our work.

Objectives:

1. Identify characteristics of a health-promoting learning environment from the perspectives of learners, leaders, and practitioners.
2. Distinguish key factors that contribute to sustaining positive learning and working conditions.
3. Develop a tool to evaluate and implement these health-promoting strategies in health sciences institutions.

Ultimately your work will improve health system and patient outcomes

Project Components:

1. Literature Review: Investigate existing frameworks, including the Okanagan Charter, and assess their applicability in clinical and educational healthcare settings
2. Data Collection: Conduct surveys and interviews to gather data from multiple institutions, identifying cultural barriers and potential champions for change.
3. Framework Development: Review models for wellbeing and design workable solutions tailored to our findings.
4. Knowledge Mobilization: Prepare manuscripts and develop educational content to share our findings with the wider community.

Who We're Looking For:

We're excited to recruit 1-2 MSc HSTP students. Ideal candidates will have experience in quantitative and/or qualitative data collection and analysis, along with a keen interest in improving healthcare outcomes and working/learning conditions for health professionals.

Join Us in Making a Difference!

If you're ready to take on the challenge of enhancing wellbeing in healthcare education and want to play a pivotal role in shaping the future of our health systems, we invite you to apply. Together, we can create environments that help everyone.

Duration: This is a 2-year project (September 2025 to April 2027).

Logistics: Data collection will be conducted both online and in-person.

References:

Albayrak-Aydemir, N., & Gleibs, I. H. (2022). A social-psychological examination of academic precarity as an organizational practice and subjective experience.

Br J Soc Psychol. 2023;62(Suppl. 1):95–110.

Do, V., Lewis, M., Goldstein, C. & Sonnenberg L. K. (2023). Fostering a Health-Promoting Learning Environment in Medical Education: Adapting the Okanagan Charter for Administrators and Medical Educators.

Acad Med. 98(6):p 672-679.

Dyrbye L, Satele D, West C. (2021). A longitudinal national study exploring impact of the learning environment on medical student burnout, empathy, and career regret.

Acad Med. 2021;96(11S):S204-S205.

Okanagan Charter: An International Charter for Health Promoting Universities and Colleges (2015). <https://bp-net.ca/wp-content/uploads/2019/03/Okanagan-Charter.pdf>



Proposed Research Project
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Carleton University, Ottawa, ON, Canada

Project Title

Supervisor / Organization

Project Objective

Background

Proposed Team

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Duration

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Logistics

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Student Project Proposal 2025-2027
Master of Science in Health: Science, Technology and Policy
Carleton University, Ottawa, Canada

Proposed Project: Spirituality in an Ageing Society: Mapping Contradictions for Health

Supervisor: Dr. Renate Ysseldyk (Department of Health Sciences, Carleton University)

Collaborators/Co-supervisors: Dr. Albert Banerjee (St. Thomas University, New Brunswick); Dr. Susan Braedley (School of Social Work, Carleton University); supported by the *Social Sciences and Humanities Research Council of Canada (SSHRC)*

Background: Canada (and other high-income countries) is ageing, thus having far-reaching implications at social, cultural, and economic levels (World Health Organization; WHO, 2022). In particular, numerous large-scale surveys in the United States and Europe suggest a steady generational decline in religiosity and religious social participation, with visible shifts from one cohort to the next (Idler, 2022). And yet, research considering the secularization of society has largely ignored age and aging as important points of inquiry (Idler, 2021). Likewise, although the WHO (2007) has developed an “age-friendly” framework to help older adults maintain health and well-being, important social identity factors entailing gender and (non)religion have not been directly addressed, despite the propensity for older adults (and older women in particular) to be more religious (Idler, 2021). Much research links religiosity to better health outcomes in general (Pargament et al., 1998; Park et al., 2018); however, there is also evidence that religious beliefs are often tied to suboptimal health behaviours (e.g., vaccine hesitancy) and skepticism of the healthcare community more generally (Tippins, Ysseldyk, et al., 2023). The proposed research will examine the complexities of this tension between religion (and spirituality) and health among older adults in an increasingly secular society, adding to age-friendly policy conversations ranging from community to international levels.

Objectives: To achieve these aims, *our main objectives are* to: (1) examine whether older adults from a broad array of (non)religious backgrounds vary in the extent to which they experience good health and well-being, and participate in (both religious and non-religious) social life, (2) determine whether (and which) forms of social inclusion might be effective in maintaining well-being (e.g., greater life satisfaction, fewer symptoms of depression) as well as impacting older adults’ healthcare choices (e.g., vaccinations, end-of-life care), and 3) determine whether these associations are gendered. The proposed research will therefore help to put Canada at the forefront of attaining the WHO’s (2007) goal of ensuring that cities and communities are inclusive and promote health among *all* older adults.

Research Project Components:

1. Review the research literature on the topic
2. Recruit participants, collect and analyze quantitative and/or qualitative data
3. Assist with manuscript preparation and other knowledge mobilization outputs

Proposed Team: The student team for this research project will include 1-2 MSc HTSP students. Ideally, students will have experience with quantitative and/or qualitative data collection and

analysis. Experience and interest in gerontology, psychology, and/or the social determinants of health is an asset.

Duration: The project will require 20 months to complete (Sept 2025-April 2027).

Logistics: Data collection is being conducted both online and in-person.

References:

Idler, E. L. (2021). Religion and aging in the global context of secularization: Patterns, processes, consequences. In K. F. Ferraro, & D. Carr (Eds.), *Handbook of aging and the social sciences* (9th ed., pp. 255–268). Academic Press.

Idler E. (2022). Is secularization an age-related process? *The International Journal of Aging and Human Development*, 94(1), 8-22. doi:10.1177/00914150211027547

Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37(4), 710–724. <https://doi.org/10.2307/1388152>

Park, C. L., Holt, C. L., Le, D., Christie, J., & Williams, B. R. (2018). Positive and negative religious coping styles as prospective predictors of well-being in African Americans. *Psychology of Religion and Spirituality*, 10(4), 318–326. <https://doi.org/10.1037/rel0000124>

Tippins, E., Ysseldyk, R., Peneycad, C., & Anisman, H. (2023). Believing in science: Linking religious identity and beliefs with vaccination intentions and trust in science during the COVID-19 pandemic. *Public Understanding of Science*.
<https://doi.org/10.1177/09636625231174845>

World Health Organization. (2007). *Global age-friendly cities: A guide*. Geneva: World Health Organization. Available at
https://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf

World Health Organization (WHO, 2022, October 1). *Ageing and health*.
<https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>

Project Four

Project Title

Effect of Increasing Sleep Duration on Health Outcomes in Short-Sleeping Adolescents

Supervisor / Organization

Dr. Jean-Philippe Chaput, Children's Hospital of Eastern Ontario (CHEO) Research Institute

Project Objective

To determine if extending sleep duration improves health-related outcomes (e.g., mental health, mood, cognition, appetite) in adolescents with short sleep duration.

Proposed Team

Data collection is completed for this research project and only 1 student from the MSc HTSP program is needed. The main task will include writing a manuscript and presenting findings orally. The student will work in close collaboration with Dr. Chaput and will learn from his expertise and experience in the field.

Duration

The project will require 18-20 months to complete.

Background

Insufficient sleep has been shown to be associated with a wide range of adverse health outcomes. However, the influence of sleep extension on health outcomes in adolescents is largely unknown. This issue is of high relevance given the high prevalence of sleep deprivation in this population and the accumulating body of evidence indicating that having a good night's sleep is important for the prevention of chronic diseases. We hypothesize that compared with decreasing sleep duration, increasing sleep duration by 1.5 hours over 1 week will improve health outcomes. Using a randomized, counterbalanced, 2-condition crossover design, over 40 adolescents with obesity between 13 and 18 years of age completed the study. Participants slept their typical amount at home for 1 week and were randomized to either increase or decrease time in bed by 1.5 hours per night for 1 week, completing the alternate schedule on the fourth week. This procedure resulted in a targeted 3-hour time in bed difference between conditions. Sleep was objectively measured using actigraphy (Actiwatch) and sleep schedule adherence was promoted by providing fixed bedtimes and wake times during the experimental weeks, and was monitored through SMS with the participants. We will compare outcome measures between both sleep conditions (on day 8 of each study week). The primary outcome measure is insulin sensitivity, as measured by the homeostasis model assessment of insulin resistance (HOMA-IR; hepatic insulin sensitivity) and the Matsuda index (total body insulin sensitivity). Secondary

outcomes include mood, mental health, reaction time, cognition, and energy balance (food intake and energy expenditure).

Research Project Components:

1. Review the literature on a topic chosen by the student (in collaboration with Dr. Chaput)
2. Analyze data
3. Write a manuscript in collaboration with Dr. Chaput
4. Submit the manuscript for publication in a peer-reviewed journal
5. Present research findings orally

Logistics

Most of the work will be conducted from home (remotely). The student may also be exposed to other studies. Experience in academic writing and statistical analysis is needed. Independence is also required because the Principal Investigator (Dr. JP Chaput) works from home full time.

Project Title: Strengthening Strategies for Single Fathers: Masculinities and trauma- and violence- informed physical activity

Supervisor: Dr. Francine Darroch, Carleton University

Collaborators: Ottawa Community Housing Foundation, St. Mary's Home, Dr. John Oliffe, UBC lead of Men's Health Research Team, Dr. Jen Mootz, Columbia University

Overarching Project Objective:

Equity-owed single fathers are a growing demographic in Canada that, to date, have received little research attention. This includes fathers living with and/or periodically providing care to their child(ren), while navigating inequitable systems. Equity-owed single fathers face unique barriers in accessing health-related, social, and economic resources, which may be further compounded by systemic biases particularly around gender roles. The role of single-fatherhood in equity-owed communities is not widely recognized, considered, nor well understood in academic literature. Additionally, while the benefits of physical activity are well-documented, there is limited research examining access to physical activity for single fathers who face multiple vectors of oppression such as income instability, racial discrimination, precarious housing, gender discrimination, and trauma. Trauma- and violence-informed physical activity (TVIPA) has been identified as a promising approach to improve access and appropriateness of physical activity for self-identified women who have experience trauma or PTSD; however, there is a dearth of research on the effectiveness of TVIPA approaches with men. Gender, trauma-, violence-, and masculinities-informed approaches to physical activity may be a strategy to promote health and remedy illness among men. The development of TVIPA interventions for single fathers, and their children, who experience multiple marginalizing circumstances is an important step to make gender and equity-focused advancements in health and physical activity research. This work is crucial to understanding the ways in which engaging single fathers in community-based physical activity programs can be a strategy to create social and community connections, and as a suicide prevention strategy. Through community-based participatory action research and a mixed methods approach, this project will address the overarching question,

“How can TVIPA approaches support the mental and physical health of equity-owed (single) fathers?” The objectives of this research are to:

1) Understand the current mental and physical health status and needs of equity-owed single fathers in Canada.

- a) Develop health profiles of equity-owed single fathers and their children in Canada.
- b) Through CBPR, we will conduct research in Vancouver and Ottawa through existing community partnerships to assess alignment to masculine values, physical and mental health, sense of community, suicide risk, and current participation in physical activity.

2) Examine the role TVIPA can play in suicide prevention, specifically, creating opportunities for social connection, community cohesion, positive masculinities, and effective relationality for equity-owed single fathers and their families.

3) Engage with equity-owed single fathers to revise existing TVIPA training frameworks to ensure a tailored intersectional masculinities lens.

Proposed Team: The student team will consist of 1-2 students from the MSc HTSP program. Student(s) will be involved in data collection, analysis, contribute to manuscript preparation and additional knowledge mobilization work.

Duration: The project will require 20 months to complete.

Logistics: Dr. Francine Darroch will be the direct supervisor

Animation: Trauma- and Violence-Informed Physical Activity: An Approach to Address Barriers and Enhance Access (2020) Available at:

<https://www.youtube.com/watch?v=tgCIXqDxtZg&t=1s>

Men's Mental Health Inequities: RMS Research Theme 1:

<https://www.youtube.com/watch?v=YSAw-mwrWZ0>