



Conference presentations / Les présentations de la conférence

Plain language summaries are provided in the language they were submitted in.

Les résumés en langage clair sont fournis dans la langue dans laquelle ceux-ci ont été soumis.

Day 1 – October 26, 2026 / Jour 1 – le 26 octobre 2026

9:30 am More than numbers: Engaging people with lived experience in dementia research / Au-delà des chiffres : Participation à la recherche de personnes touchées par un trouble neurocognitif

CCNA's Engagement of People with Lived Experience of Dementia (EPLD) program session will highlight research being done across Canada involving people with lived experience of dementia. Researchers and people with lived experience, representing three different research projects, will co-present on their collaborative work that is addressing dementia in diverse populations within Canada. The audience will hear different perspectives on the research and how the involvement contributed to the process and outcomes of the work.

11 am Queens of the stage: Equity, diversity, inclusion, and accessibility (EDIA) in Indigenous brain health research / Les Queens de la scène : équité, diversité, inclusion et accessibilité (EDIA) dans la recherche sur la santé du cerveau des Autochtones

Speakers Jessy Dame and Pamela Roach will share their experiences of working on community-centered projects that prioritize and embed EDIA principles in all areas of research. A focus of the session will be to discuss the tensions and complexities of being expected to apply western concepts of EDIA in Indigenous research settings.

12 pm Lunch session sponsored by Lilly and Roche Diagnostics - More than a number: Interpreting and applying blood-based biomarkers in clinical decision-making / Présentation et dîner commandités par Lilly et Roche Diagnostics – Au-delà des chiffres : interprétation et utilisation des biomarqueurs sanguins dans la prise de décision clinique

The landscape of blood-based biomarkers (BBMs) for Alzheimer's disease – the science behind them and their practical use – continues to rapidly evolve across the globe. In Canada, clinicians and patients are asking practical questions related to their transition to real-world applications. What is a biomarker and when should one be ordered? What is the clinical significance of early detection of Alzheimer's disease? What is the importance of one versus two cut-offs? What do you say to an individual who requests a test after reading about it online? From where these tests fit in the Canadian dementia care pathway to how results are interpreted, Drs. Adrian Budhram and Zahinoor Ismail will discuss the appropriate usage of BBMs and the realities of implementing them into Canadian care settings.

2:45 pm Tik-Talk session - COMPASS-ND

Examining associations between brain health food guide adherence, allostatic load, and cognitive performance in the COMPASS-ND cohort - Alexandra Fiocco

Cumulative biological stress, also known as allostatic load (AL), has been found to predict declines in cognition in later life. Recent research also suggests that eating a healthy diet is associated with lower AL in healthy older

adults. Using data from CCNA's COMPASS-ND Study, our team asked the question: can consuming a healthy diet lower AL, and in turn, improve cognitive functioning in later life? This study also examines whether these relationships differ in women and men.

Generation and preliminary analysis of NULISA data for COMPASS-ND – Jennifer Cooper

We aim to find novel blood tests that can detect different forms of dementia and predict outcomes for those with cognitive impairment. We are measuring 220 proteins in blood samples from COMPASS-ND participants to determine which proteins are useful biomarkers. We expect to identify biomarkers that differ across dementia types that can also predict cognitive decline. This could enable earlier diagnosis, more accurate prognosis, and improve care for people living with dementia.

Peripheral and neuroinflammation markers show distinct links to neurodegeneration and cognition - Bruna Seixas-Lima

We asked if inflammation in the body affects inflammation in the brain and relates to brain and memory changes. We studied 591 participants using blood markers, MRI, and cognitive tests. Higher inflammation in the body was not linked to higher inflammation in the brain, but both were linked to neurodegeneration and poorer cognition. These findings show that different inflammatory pathways can contribute to cognitive decline in aging.

Lifelong and current engagement as predictors of cognitive-motor performance in Mild Cognitive Impairment results from the COMPASS-ND and SYNERGIC studies - Eden Mancor

Decline in mobility occurs in people at risk of dementia and threatens independence. Lifelong exercise, hobbies, and socializing can protect against dementia and improve mobility. We studied how different types of engagement throughout life and at a pre-dementia stage protect against decline in mobility. We show that lifelong engagement is important, but that stopping engagement later in life can have important impacts on mobility. Promoting engagement is vital for independence and mobility.

Choroid plexus enlargement and MRI markers of vascular brain injury in neurodegenerative disease - Manpreet Singh

We studied whether choroid plexus (ChP) enlargement is associated with white matter hyperintensities (WMHs) and enlarged perivascular spaces (PVS), two MRI markers of vascular brain-injury. Using brain MRI data from a subset of cognitively-unimpaired, Alzheimer's, and Parkinson's disease participants, we measured ChP volume, WMHs, and PVS burden. Larger ChP volumes were linked to greater WMH burden but not to PVS burden. This suggests ChP enlargement may be more closely linked to WMHs.

4:45 pm Keynote talk / Conférencière invitée

The geography of brain health: advancing cognability - Jessica Finlay / La géographie de la santé du cerveau : Faire avancer la cognabilité

Growing evidence suggests that brain health is shaped by the “exposome”—the built, social, and natural environments in which people live, work, and play throughout their lives. This talk introduces Cognability, a framework to understand how neighborhood environments can impact cognitive health and dementia risk through everyday experiences, opportunities, and hazards. Drawing on mixed-methods research that combines in-depth interviews with large national datasets, Dr. Finlay will demonstrate how specific neighborhood features such as civic and social organizations, coffee shops, recreation centers, and arts/cultural sites are linked to healthy cognitive aging. By bringing together lived experience with population science, Cognability offers a new way to understand the connections between people, place, and brain health across the life course. Creating more connected, inclusive, and supportive neighborhoods may help promote cognitive health and reduce dementia risk for current and future generations.

8:30 am Tik-Talk session - Mechanisms of dementia and basic science / Mécanismes neuronaux et sciences fondamentales

Cholinergic synaptic plasticity shapes resilience and vulnerability to tau - Kate M. Onuska

Changes in the connections between brain cells are among the earliest signs of Alzheimer's disease (AD). However, these connections can also adapt to help the brain continue functioning despite disease-related damage. Using brain imaging, we found evidence that a brain chemical system involved in memory and attention may help protect brain function in people at risk for AD. These findings suggest that the brain may have natural ways of resisting early disease changes before symptoms appear.

Absolute quantitation of the whole brain proteome in mouse models of Alzheimer's disease utilizing the SysQuan platform - Elyssa N. Baker

We asked: how do proteins change in Alzheimer's disease? We used specially bred mice with labelled proteins as measuring tools to precisely count thousands of proteins in the brain, including in Alzheimer's mouse models. We found over 7,000 proteins, including key Alzheimer's markers. This matters because measuring exact protein amounts, not just relative changes, helps us better understand the disease and test whether treatments are truly working.

An individualized approach to studying regional vulnerability in Alzheimer's disease - Hayley Shanks

We asked whether we could create a personalized technique to study how Alzheimer's disease proteins, amyloid and tau, spread throughout the brain in living humans. We used brain imaging data from 524 individuals to map where each person shows abnormal amyloid and tau levels compared to a group average. Using this technique, we found that tau, especially when overlapping with amyloid, is associated with faster damage to brain tissue. This may improve how we study disease at the individual level.

Lower cerebral blood flow and higher oxygen extraction fraction are associated with adiposity - Filip Morys

Higher body fat tissue and related comorbidities are important modifiable risk factors for dementia, but the brain mechanisms are unclear. Using specialised MRI, we found that people with higher body fat percentage had lower cerebral blood flow, but their brains compensated by extracting more oxygen from the reduced blood supply. This early adaptation may be an important sign of how excess body fat affects the brain and could one day help spot people at risk of dementia sooner.

Age and sex influence levels of anti-nucleosome autoantibody levels in the 3×Tg-AD mouse model of Alzheimer's disease - Margaret Fahnstock

The question: Alzheimer patients make antibodies against themselves. Does age or sex affect antibody levels? How we studied it: We compared antibody levels in male and female mice at different ages and when sex hormones were removed. What we found: Antibodies increase with age, and only female hormones affect antibody levels. Why it matters: Understanding how the immune system works differently in Alzheimer disease in males and females can help to develop different treatments for men and women.

9:30 am Tik-Talk session - Quality of life of people living with dementia and care partners / Qualité de vie des personnes atteintes d'un trouble neurocognitif et de leurs aidants

Implementation and perceived impact of the DELIGHT program for people living with dementia and care partners - Laura Middleton

DELIGHT was co-designed with people with dementia (PwD), care partners (CP), and health and social care providers to improve the wellbeing of PwD and CP. We describe implementation of DELIGHT and impact among

participants enrolled through 12 organizations across 4 provinces. Participants described feelings of belonging, learning from each other, and improved health behaviours. There were positive shifts in hope and identity, with better knowledge of supports available.

The technological frontier in fall management for older adults with dementia: a scoping review of prediction, detection, and prevention systems - Asmi Khanna

Falls are very common among people living with dementia and can lead to injuries, hospital visits, and loss of independence. This presentation explores how technologies such as wearable devices, motion sensors, and camera-based systems may help predict, detect, and prevent falls. I will discuss what current research shows, the benefits and challenges of these tools, and how they may improve safety and quality of life for people living with dementia and their care partners.

Applying best practices for meaningful engagement: learnings from the Alzheimer Society of BC and Yukon's Lived Experience Partner Program - Kimberly McKercher and Jim Mann

In this presentation, we will explore how the Alzheimer Society of BC and Yukon's Lived Experience Partner Program supports people affected by dementia. We'll discuss how meaningful engagement can reduce stigma and foster understanding. Through video interviews, we'll showcase our partners' best practices and the benefits they've gained from the program. This is important as many people affected by dementia face stigma, social isolation and loneliness, leading to negative health outcomes.

Naturalistic driving behaviour and cognitive performance in older adults with mild cognitive impairment: A mixed-methods study - Ranuki Onara Hettiarachchige

We tested whether an in-car monitoring device that records everyday driving can reveal changes in thinking and memory. Twenty-eight older adults were monitored for 8 weeks, and 9 drivers with mild cognitive impairment were interviewed about the device. Driving more slowly on faster roads and showing more sideways vehicle movement were linked to lower thinking and memory scores. Drivers felt the device captured their real-world driving better than a road test and were comfortable using it.

Single versus multidomain exercise interventions: a network meta-analysis of the effects on memory of older adults - Rebeca Hernandez-Gamboa

We asked whether combining exercise with other interventions improves older adults' memory more than exercise-only. We reviewed 105 trials and combined their results using network meta-analysis. Both exercise-only and combined interventions improved memory compared with control groups. Combined interventions were not more effective than exercise-only. Combined programs require more expertise and resources. Exercise-only provides similar benefits, making it a practical option to support memory.

11 am Tik-Talk session - Inclusion, diversity, equity, and accessibility in brain health and dementia / Inclusion, diversité, équité et accessibilité

Supporting health equity in aging and dementia research - Natasha Rajah

The CCNA's IDEA Committee serves an advisory role for research that engages and considers the unique experiences of communities and individuals historically excluded from dementia research (inclusive research) by CCNA Teams. This presentation introduces the committee, details how they support Phase III Teams, and shares actionable steps for inclusive research. Drawing from BReDAD Collaboratory recommendations, the talk offers pragmatic solutions to champion health equity across CCNA projects.

A Canadian guidance framework for integrating social determinants of health in aging and Alzheimer's disease research - Stéfanie A. Tremblay

Why are some people at higher risk for dementia than others, and are researchers measuring the right factors to understand this? We combined community engagement, a review of 23 Canadian studies, a public survey, and an

expert consultation to find out. We found major gaps between what communities and the public identified as important—like income and stress—and what studies actually measure. This evidence base will support a national guide to help researchers conduct more equitable research.

Collaborative minds: co-created resources to support dementia-inclusive biomedical research practices - Sarah A. Wu

People affected by dementia are rarely meaningfully engaged in biomedical research. To address this gap, the Alzheimer Society of BC and Yukon, Emily Carr University and the University of Victoria worked with researchers and people with lived experience to co-develop practical resources. Insights from two workshops, expert feedback and a literature review led to a guide for researchers and a handbook for people affected by dementia to support more inclusive, person-centred research approaches.

Promoting health equity among people living with dementia and care partners in ethno-racial communities: a participatory action research approach - Carrie McAiney

Supporting quality of life of people with dementia and care partners is a priority. Specific focus is needed among ethno-racial communities in Canada who face additional challenges such as racism and language barriers. This presentation describes the participatory action research process used by the Caring Minds team to co-design quality of life supports for people with dementia and care partners in the Black, Chinese, and South Asian communities.

3 pm Tik-Talk session - Diagnosis and treatment / Diagnostic et traitement

Tear biomarkers for early Alzheimer's detection: a proof of concept study - Printha Wijesinghe

Sporadic Alzheimer's is often diagnosed late or mixed because we lack biomarkers that show early brain changes. We asked whether molecules in tears can help detect Alzheimer's disease early. We collected tear samples from people with confirmed Alzheimer's, those without clear signs, and older adults. We measured 14 small RNA markers. Several were lower in Alzheimer's, and some identified the disease well. Tear testing could offer a simple, non-invasive way to screen for early Alzheimer's.

Prediction of Mild Cognitive Impairment progression using time-sensitive multimodal biomarkers - Jonathan Gallego Rudolf

Alzheimer's disease can begin affecting the brain years before clinical symptoms appear. In this study, we combined brain scans, blood tests, and measures of brain activity to better identify older adults at higher risk of developing early Alzheimer's disease. We found that changes in brain activity and Alzheimer's-related pathological proteins were linked to future risk, supporting the use of multiple biomarkers together for earlier detection and prevention.

Evaluation of Elecsys® pTau217 assay performance across care settings (primary and secondary/tertiary) and cognitive statuses for Alzheimer's disease diagnosis - Alonso Montoya

A new, automated blood test accurately detects early signs of AD, offering a simple alternative to expensive and complex brain scans. Confirmatory diagnosis of AD typically requires PET scans or spinal taps. Researchers tested a new blood test (pTau217) on 675 older adults with memory issues. The blood test was highly accurate at identifying AD changes. It proved reliable across stages of disease and worked just as well in primary care doctors' offices as it did in specialized memory clinics.

Circulating and tissue microRNA dysregulation in Alzheimer's disease: translational implications from a systematic review - Sana Arora

Alzheimer's disease (AD) is difficult to diagnose early, which is when treatments work best. Our project looks at microRNAs, which are tiny molecules in the body that act like volume knobs for our genes. By reviewing past studies, we mapped out which molecules consistently change in the brain and in bodily fluids. While some fluid

markers are inconsistent, we found specific targets that reliably change in AD patients. This helps us find better and more non-invasive tools for early detection.

Frontotemporal dementia due to MAPT mutations: how different is it from other forms of FTD? – Robert Laforce

1. Understand the three main genetic mutations that cause FTD
2. Describe the clinical and biomarker profile of FTD 2nd to MAPT
3. Explore the potential targets for drug development in FTD due to MAPT

4 pm “Laughter for the health of it” - Laughter yoga / « Rire pour sa santé » - Yoga du rire - Sylvie Dagenais-Douville, Laughter Institute

Laughter is fun, therapeutic and contagious! Enjoy a workshop that teaches how Laughter & Laughter Yoga can help manage stress, anxiety and depression. Laughing helps maintain good mental health, generate a positive state of mind while reconnecting with our JOY. It is a life tool to better assist us in building resilience and navigating life's challenges with a positive mental attitude, hence an amazing way to reduce anxiety and stress. No yoga experience is required!

8:30 am Tik-Talk session – Dementia risk reduction and prevention / Santé cérébrale, prévention et réduction des risques

Priming for prevention: can exercise make brain stimulation more effective at delaying cognitive decline? - Julian Schechter

We tested whether exercise helps “prime” the brain to make brain stimulation more effective for memory. We asked 58 people with mild early memory loss to exercise before receiving brain stimulation. We found that those who exercised immediately before stimulation had better memory scores than those who did only exercise or stimulation, but not both. This matters because it offers a safe way to boost brain health and potentially slow down the progression of dementia symptoms.

Effects of a virtual exercise and diet intervention on executive function: preliminary effects in the Lifestyle, Exercise And Diet (LEAD) 2.0 randomized controlled trial - Nicole Anderson

Virtual lifestyle programs may expand reach for dementia risk reduction. Here, we describe the effect of a virtual exercise and diet intervention on executive function. People with subjective cognitive decline were randomized to exercise or stretching and to diet counselling or education. Both exercise and diet improved executive function. Benefits were greater among people with poorer diet. Virtual exercise and diet interventions may be effective for dementia risk reduction.

Does a research-based community centre reduce dementia risk and improve cognition? 1-year follow-up data from the Kimel Family Centre for Brain Health and Wellness - Danielle D'Amico

The Kimel Family Centre is a community centre helping adults ages 50+ make brain-healthy lifestyle changes. After 1 year, participants who closely followed their program recommendations were more active, ate more healthily, felt less lonely and depressed, and showed improvements in physical health measures including body fat and inflammation. Thinking and memory skills also improved. The findings suggest personalized community programs may help support brain and overall health as people age.

Effects of different types of exercise training on intraindividual variability in cognitive performance in older adults with Mild Cognitive Impairment - Vrinda Dimri

Our thinking abilities can vary from moment to moment, with greater fluctuations being linked to an increased risk of mild cognitive impairment (MCI) and dementia in older adults. Whether exercise can reduce fluctuations in thinking abilities is unknown. In 226 older adults with MCI, we found that 6 months of combined aerobic and resistance training reduced fluctuations in thinking abilities more than either type of exercise alone, showing an added benefit when the two exercises were combined.

CAN-THUMBS UP and Brain Health PRO update - Haakon B. Nygaard

Brain Health PRO (BHPro) is an online educational program aimed to reduce modifiable risk factors for dementia. In a recently completed study in 353 Canadians at risk of dementia, engagement with BHPro improved knowledge about dementia and several lifestyle risk factors. BHPro is being evaluated in several new studies to compare it to a control condition, in-person programming, to help optimize it for future scale-up in community settings, and to evaluate it for use in a Métis community.

9:30 am Tik-Talk session - Sex and gender differences in dementia and brain health / Différences de sexe et de genre dans les troubles neurocognitifs

Hormone-replacement therapy may protect against cognitive decline - Cassandra Morrison

As females go through menopause, their estrogen levels drop. Estrogen may help protect the body and the brain, including memory and thinking. Hormone replacement therapy (HRT) is often used for menopause symptoms, but its effects on brain health are unclear. This study looked at how HRT affects memory and thinking. Over 15 years, females who used HRT had slower decline in memory and thinking than those who did not. HRT may help slow memory and thinking changes after menopause.

Effects of biological sex and perceived sleep on hippocampal structure, medial temporal lobe functional connectivity, and memory across cognitive aging - Alana Brown

We study whether sleep and biological sex affect how brain structure and function relate to memory. Larger brain volume is linked to better memory, and good sleep strengthens this relationship. In females, better sleep is also linked to poorer memory. We examine how functional connections between memory-related brain regions affect these patterns. Sleep may influence how brain systems support memory differently in males and females, with implications for Alzheimer's disease risk.

Sex differences in the association between processing speed and brain age gap in older adults with mild cognitive impairment - Talia Salzman

This study looked at the difference between an older adult's actual age and their brain's age taken from MRI scans. We found that in 142 older adults with mild cognitive impairment, slower processing speed was linked to a larger gap between actual and MRI-measured brain age in women. These results slower thinking speed may be a helpful warning sign for identifying older women who could be at higher risk for faster brain aging.

Sex differences in navigating the long-term care home placement process in Ontario among people living with dementia - Aaron Jones

Getting into long-term care is complicated, with many steps involving different groups. Some research suggests that men and women living with dementia may move through this process at different speeds. We will use health system data to study people with dementia who applied for long-term care. We will compare how long men and women spend at each stage in the application process. The results will show whether the process differs by sex and may inform ways to improve the process.

Cognitive changes after bilateral salpingo-oophorectomy - Amanpreet Kaur

Bilateral salpingo-oophorectomy (BSO) is a surgery performed to reduce ovarian cancer risk. BSO causes a sudden drop in estrogen before natural menopause. We compared cognitive tests before and after BSO in younger midlife participants, in those receiving and not receiving estradiol therapy. In both groups, most cognitive scores stayed stable, however, spatial associative memory showed a decline. These results may inform future research on cognitive care after BSO and later-life dementia risk.

11 am Keynote talk / Conférencière invitée

From stressed microglia to lifestyle medicine - Marie-Ève Tremblay / De la microglie stressée à la médecine du mode de vie

Microglia are the immune cells of the brain; they play critical roles throughout life and are increasingly shown to be diverse, comprised of different 'states' that perform specialized functions. This promises to provide selective targets for therapeutic intervention across a wide range of diseases in which microglia are implicated throughout life, including age-related neurodegenerative disorders. My lab studies how genetic variants and various modifiable factors for disease (e.g., psychological stress, sleep disturbances, and viral infection) influence microglial states and their functions. Therapeutic strategies, pharmacological and non-pharmacological, to

promote beneficial microglial states are investigated within the perspective of lifestyle medicine. My presentation will discuss our work on the 'stressed' microglia, a state involved in pathological brain remodelling that leads to cognitive decline. Normalization strategies to restore microglial health along an aging trajectory will be discussed, together with the importance of studying microglial states, including stressed microglia, in humans using longitudinal brain imaging.

Trainee poster session listed with presenting author names

Séance de présentations par affiche des stagiaires avec les noms des présentateurs

Day 1 – October 26, 2026 / Jour 1 – le 26 octobre 26 2026

26-01 An exploration of the engagement of traditional healers in dementia and brain health research within Indigenous Communities in North America – Hom Lal Shrestha

This paper debates the contribution of traditional healers in dementia and brain health in Indigenous communities. We reviewed studies (2000-2025) to understand their roles, and barriers. Findings show that exclusion limits culturally safe care, while integrating traditional and biomedical knowledge improves support. Recognized by the World Health Organization, engaging healers strengthens screening, care, and trust. Such work matters for advancing equity and culturally grounded dementia care.

26-02 Exploring the implementation of nature-based outdoor programs for people living with dementia – Mattea Lewis

This study explores how outdoor programs can support community participation for people living with dementia. We used qualitative methods to collect data including interviews, observations, recordings, and photos during a monthly nature walk in the forest of Pacific Spirit Park. We are learning what program features, outdoor settings, and social and organizational factors are most important for accessible, dementia-friendly outdoor programs that balance independence, safety, and well-being.

26-03 24-hour movement behaviour profiles and cognition in middle-aged and older adults: a cross-sectional analysis of the Canadian Longitudinal Study on Aging – Guilherme Moraes Balbim

We examined if thinking abilities differ across patterns of physical activity (PA), sedentary behaviour (SB), and sleep in 16,596 adults aged 45-85 from the Canadian Longitudinal Study on Aging. Three profiles emerged: Near-Balanced (near-average PA, SB, and sleep), Active Living (high PA, low SB, and average sleep), and Rest-Dominant (low PA, high SB, and long sleep). Near-balanced had better thinking abilities than the other groups. Balanced PA, SB, and sleep may support cognitive health.

26-04 Increased brain healthy eating index (BEI) scores are linked to improvements in brain health outcomes in older adults with subjective cognitive decline – Sarah Granville

Subjective cognitive decline (SCD) is a condition that increases risk of dementia. Eating a brain-healthy diet may lower dementia risk, but its effects in people with SCD are understudied. To study this, older adults with SCD participated in a 6-month lifestyle trial. After 6 months, participants with improved brain-healthy eating habits had better memory recall and less anxiety. These results suggest that improved brain-healthy eating habits support the overall health of people with SCD.

26-05 Brain and muscle: corticospinal tract integrity as a moderator of physical performance in aging – Elissa Orbasli

What is the relationship between the corticospinal tract ("motor highway"), brain, and muscles in aging females? We measured brain activity during a virtual-reality game that required participants to think and give answers by moving their hands. We also tested how well signals travel along the motor highway. A better motor highway, but not brain activity, was linked to better performance in the virtual-reality game. This research helps us understand how the body's systems change as females age.

26-06 A study of piano training and cognition after ovarian removal – Keridwen Campbell

Ovarian removal (BSO) is risk reducing for young women with genetic breast and ovarian cancer. However, BSO links with memory decline and higher risk of late-life Alzheimer's disease. Estradiol hormone therapy alleviates some but not all cognitive decline. Piano training aids cognition in older adults and might also help women after BSO. This study uses several measures to test piano training as a support for memory and brain health for women with memory decline post-BSO.

26-07 Preserved in the face of injury: Functional resilience in vascular mild cognitive impairment – Israa Sinan

This project explores how cognitive and social resources built over a lifetime may protect daily functioning and independence and explains why some people with memory concerns manage daily tasks better than others. It also looks at whether these protections work differently for men and women. Findings will help inform more personalized and equitable clinical support strategies that better reflect how people live and age.

26-08 Advancing community-based approaches to support cognitive ability in aging populations: a policy-informed, lived-experience approach – Ezinne Ekediegwu

This project focuses on helping people maintain brain health as they age by supporting them earlier, not just after problems begin. A policy brief was developed using research and feedback from older adults, caregivers, and professionals. It highlights the importance of staying active, connected, and mentally engaged. The findings call for subsidised, accessible culturally-responsive community programs to help people stay independent and reduce pressure on the healthcare system.

26-09 Echo of Knowing - in quiet reflection – Ezinne Ekediegwu

The artwork captures that subtle, universal moment when the work of research turns inward, reflecting how the boundaries between science and self blur, and how knowledge is shaped not only by analysis, but by the humanity of the one who stands before the glass.

26-10 Engaging ethnocultural communities in dementia policy implementation through co-designing culturally- and linguistically- adapted KTE products – Zaina Alsibai

Our project examines the question: What are the experiences and barriers faced by equity-seeking communities in accessing dementia health and social services? We engaged with the Black English-speaking community in Montreal to better understand their experiences and co-create a policy brief, informed by the members' recommendations, to be presented to the ministry of health. This project is a stepping stone to bridging the gap between community needs and government priorities.

26-11 Living in a double standard and working around the system: advocacy in long-term care – Paulina Malcolm

In this study, I set out to understand how family care partners advocate for people who live in long-term care. After analysing all transcripts from interviews and focus groups, I created a theory about advocacy that includes details of how family care partners work within and around the system, the importance of being physically present, and acting on curiosity. This research is important, as insights could impact future provincial health policy and education for long-term care staff.

26-12 Multimodal feature characterisation of the lewy body spectrum: a shap-based analysis of structural MRI, neuropsychiatric, and cognitive profiles using the COMPASS-ND cohort – Diba Davoodi

Parkinson's disease and Lewy body dementia share the same brain changes and early symptoms, so they're hard to tell apart before major damage occurs. My project uses structural MRI, neuropsychiatric measures, and cognitive tests in a computational model to find which features best define each group, with a focus on distinguishing Parkinson's with Mild Cognitive Impairment from Lewy body dementia, where early diagnosis matters most.

26-13 Texture-based MRI analysis in different levels of cognitive impairment across the Lewy Body spectrum – Halle Carlson

Parkinson's disease and dementia with Lewy bodies affect movement and thinking. Traditional MRI scans don't show differences in brain shrinkage until people have severe symptoms. We used a tool called texture-based MRI analysis to look for early texture differences in movement and memory areas of the brain compared to people without thinking problems. We found differences in texture measurements between groups, which means that there are changes in brain texture before shrinkage is seen.

26-14 Associations between peripheral mitochondrial energetics and cortical neurophysiological alterations in Alzheimer's disease – Sean L. Kriwokon

People living with Alzheimer's disease (PLWAD) show changes in the signaling of their brain cells, as well as changes in how much energy the mitochondria in their cells can produce. We tested if there is a link between these mitochondrial changes in the blood and altered signaling in the brain. We found a relationship between these variables, suggesting that blood-based measures of mitochondria may offer a less invasive way to study the effects of cellular energy changes on the brain in PLWAD.

26-15 Plasma biomarker discovery for TDP-43 pathology in an autopsy-confirmed Canadian dementia cohort – Rachael Smith

Dementia is a complex condition with multiple causes, resulting in diverse types. In this study, we will measure proteins in blood samples taken from patients who lived with dementia and donated their brain for research following their death. By measuring these proteins in blood, we can determine which changes in the blood reflect specific changes that we know have occurred in the brain, and these blood-based patterns can be used by doctors to diagnose dementia types earlier and more accurately.

26-16 Exploring the clinical portraits of patients with dementia and anemia: an emergency department-based cross-sectional study – Sonia Mirza

Dementia places a growing burden on patients and health systems and currently has no cure. Due to this, finding early markers of prevention is important. We asked what proportion of dementia patients also have anemia and how their clinical profiles differ. Using emergency department records, we found anemia was common, especially in men, and tied to more health issues. Recognizing these patterns could strengthen early detection, guide care decisions, and help reduce the burden of dementia.

26-17 High-resolution T2-weighted MRI scans for imaging hippocampal subfields in Phase III of the COMPASS-ND study – Merron Woodbury

The hippocampus is a brain region both important for memory and vulnerable to atrophy in dementia. To support new research on how the hippocampus is affected in those at risk for or living with dementia, a more detailed image of this brain region is now collected from older adults across Canada as part of the Comprehensive Assessment of Neurodegeneration and Dementia (COMPASS-ND) study. These images as well as measures of hippocampal size will be available for use in future dementia research.

26-18 Hearing ability and brain network connectivity in individuals with or at risk for Alzheimer's disease – Nicole Grant and Natalie Phillips

Hearing loss is linked to higher dementia risk, though the cause is unclear. We tested if hearing was related to brain function in older adults with or at risk of Alzheimer's disease. Using MRI brain scans and hearing data from 300 people, we examined the connections between brain networks. Those with more difficulty understanding speech showed altered connectivity between two key networks. This may help explain the hearing-dementia link and suggests hearing care could support brain health.

26-19 Gray and white matter atrophy profiles and their cognitive correlates in neurodegenerative diseases – Roqai Moqadam

We studied brain MRI scans from participants in the Canadian Consortium on Neurodegeneration in Aging (CCNA), including people with Alzheimer's disease, Parkinson's disease, frontotemporal dementia, Lewy body dementia, and Mild Cognitive Impairment. We compared patterns of brain atrophy and examined how they relate to cognition. Each condition showed a distinct pattern of brain changes. Brain atrophy was linked to worse cognition, particularly in Parkinson's disease and frontotemporal dementia.

26-20 Sex and APOE effects on Alzheimer's disease pathology in a calibrated and validated mechanistic brain health model – Halima Sadia

We studied how a gene called APOE and sex influence Alzheimer's disease. We used a mathematical model of healthy to simulate how changes happen over time. We tested the model using information from large groups of people. We found that APOE strongly affects one early brain change linked to Alzheimer's but has little effect on later brain damage. This suggests that different processes are involved in early and later stages of the disease.

26-21 Lifetime reproductive factors and Parkinson's disease in women: exploring indirect indicators of endogenous estrogen exposure – Matteo Paventi

Parkinson's disease (PD) affects females and males differently, and the female sex hormone estrogen may help protect the brain. We studied reproductive factors linked to estrogen exposure in females with PD and controls. Females with PD reported more pregnancies and a later age at their last menstrual period. These findings suggest that reproductive history may help us better understand PD in females. Future studies should directly measure hormone levels to clarify estrogen's role.

26-22 Characterizing sex differences in the effect of APOE on lipid profiles and cognitive trajectories – Sara N. L. Gunderson

Which APOE gene a person carries greatly affects their risk of developing Alzheimer's disease, but we don't understand why. Cholesterol may be a link. We analyzed health data from over 30,000 Canadians aged 45 and older. We found that APOE has different effects on cholesterol and brain function in males and females, and at different ages. This research will help us understand how lowering cholesterol at critical life stages could reduce AD risk in males and females with different APOE genes.

26-23 Sex-Specific pTau Accumulation and GFAP-Associated Astrogliosis in Early- and Late-Onset Alzheimer's Disease – Kasra Khunjush

We studied brain tissue from people with Alzheimer's disease to see whether the disease differs by sex, age, and brain region. While all patients showed increased tau, a harmful protein linked to Alzheimer's disease, we found a type of brain cell damage only in women with early-onset Alzheimer's disease. The same damage was seen in a lab model from a female patient with early-onset Alzheimer's disease, suggesting some women may be more vulnerable to this form of brain injury.

26-24 The role of social connectedness in the COVID-19 pandemic experiences of older adults with and without cognitive impairment – Cassandra Sorin

We studied the social experiences of older adults during the COVID-19 pandemic. We measured levels of social connectedness and analyzed reports of positive social experiences. The perception of worsening loneliness during the pandemic best predicted distress. Also, many participants found that connections with others were a source of positivity in the pandemic. This study emphasized the importance older adults' perceptions of social connectedness to understand how they cope with stress.

26-25 Advancing intersectional health equity research for persons with dementia: creating an inventory of Canadian databases with research potential – Dimitri Yang

Do Canadian databases contain the information needed to study how social factors shape dementia care? We reviewed and catalogued existing Canadian health databases. Many databases exist, but they measure dementia, social factors, and healthcare use differently. Better use of these databases could help us understand and reduce unfair differences in dementia care.

26-26 Improving practices of information transfer between hospitals and primary care for older adults: a mixed methods study – Martina Alkot

We investigated how discharge information for frail older adults is sent from hospitals to primary care. Surveys, interviews, and a scoping review of studies were used to understand current practices of information transfer, as well as barriers and facilitators. Findings show that communication, which is often missing, is hindered by the lack of system interoperability. Improving information transfer practices will help ensure safer transitions across settings for older adults in the community.

26-27 Have you considered apathy? Empowering families with knowledge and language for self-advocacy – Oriel Feldman

Apathy is common in dementia but is often misunderstood as depression, memory loss, or “not trying.” Together with care partners, people living with dementia, researchers, and knowledge mobilization experts, we created a clear infographic to explain how apathy differs from depression. The tool helps families recognize changes in motivation, emotion, interest, behaviour, and daily life, and supports conversations with healthcare providers about better care strategies.

26-28 The association between clusters of lifestyle risk factors and cognitive function among members of a dementia risk reduction community centre – Danielle D'Amico

In 725 adults ages 50+ without dementia, we found two lifestyle patterns: one with healthier habits and one with less healthy habits. People with healthier habits, including better physical activity, mental wellbeing, social connections, and cognitive engagement, performed better on a set of cognitive tests measuring memory and thinking ability. These results suggest that healthy lifestyle behaviours together may help support brain health and help guide dementia risk reduction strategies.

26-29 Population-based reference intervals for plasma BD-Tau and p-tau-217 across the lifespan – Isabella DiBerardino

Blood tests are emerging as powerful tools for detecting and monitoring brain diseases such as Alzheimer's disease. We are establishing “normal” ranges for two proteins found in the blood that are linked to neurodegeneration across the lifespan. By analyzing blood samples from 2500 Canadians aged 3-79 years, we aim to better understand how these proteins change with age, sex, and other health factors. These findings may improve future blood tests used to assess brain health and disease risk.

26-30 The cornea: a transparent window into neurodegeneration in Alzheimer's disease – Lana Rummel

Alzheimer's disease is difficult to detect before symptoms appear. Previous studies have shown that other parts of the eye can show signs of Alzheimer's-related changes. We studied the clear surface of the eye in healthy and Alzheimer's mice to see whether it shows signs of the disease. If successful, this research could lead to simple eye scans that help identify Alzheimer's earlier, when treatments may be most effective.

26-31 Translational health research into vascular and neurocognitive effects of weight loss (THRIVE) – Shilan Heshmati

Can a weight-loss medication protect the brain? Obesity damages brain blood vessels and brain tissue, raising dementia risk. We are giving 120 adults with obesity a weekly weight-loss injection called semaglutide for 80 weeks and scanning their brains with magnetic resonance imaging five times to measure changes in the brain. If weight loss improves brain health, it would support using this widely available medication to prevent dementia.

26-32 Plasma biomarkers and neuropathology as predictors of cognitive decline in aging populations – Simren Ahuja

Some people with dementia experience much faster cognitive decline than others, yet tools to predict who will decline rapidly remain limited. We studied 42 participants with dementia by analyzing their memory scores, blood protein levels, and brain tissue. We found that understanding what happens in the brain is a better indicator of cognitive decline than blood protein levels alone. Identifying individuals at risk of faster decline may help improve clinical care and treatment planning.

26-33 Exploring cerebral oxygenation and executive function in older adults with subjective cognitive decline: A dual-task verbal fluency and walking study – Ria Prasana

Many older adults notice changes in their memory before they have difficulty on standard cognitive tests. These changes might be an early warning sign and we want to capture brain activity during multitasking (i.e., walking and talking) to test this. Subtle differences in brain activity between older adults who notice changes and those who do not might provide a marker of dementia risk and support implementing interventions earlier to maintain cognitive health.

26-34 Plasma biomarker levels and brain imaging in vascular Mild Cognitive Impairment (VaMCI): data comparison in COMPASS-ND cohort – Jedsada Khieukhajee

This study from COMPASS-ND registry examined whether blood markers differ among people with normal cognition, Mild Cognitive Impairment (MCI), and vascular Mild Cognitive Impairment (VaMCI). We measured five blood markers that reflect damage in the brain. The results showed that people with VaMCI had higher NfL markers than those with MCI, and higher NfL also linked to greater stroke damage. NfL may help identify people whose memory problems are related to blood vessel damage in the brain.

26-35 Predicting early cognitive decline: the role of olfaction, cognition, and plasma biomarkers in individuals at-risk for dementia – P. Tristin Best

Can smell loss predict cognitive decline in people at risk for Alzheimer's disease (AD)? We used participant's first study visit and their diagnoses 2-5 years later to test whether smell, thinking, and AD blood markers predicted cognitive decline. In people with subjective cognitive decline (SCD), only thinking and blood markers predicted decline, while smell was also linked to decline in people with Mild Cognitive Impairment (MCI). Smell loss may help predict progression in MCI, but not in SCD.

26-36 Multimodal machine learning for differential diagnosis of neurodegenerative diseases: a proposed explainable ai framework using ONDRI and COMPASS-ND – Arman Hassanpour

Can AI help doctors tell apart brain diseases that look similar? We are training a computer program to analyze how people speak, move, think, and what their brain scans show, all at once. We use data from over 2,000 Canadians already enrolled in national research studies. The program also explains its decisions, so doctors can trust and use it. This could help people get the right diagnosis sooner.

26-37 Comparative plasma biomarker profiles in cerebral amyloid angiopathy: insights from the COMPASS-ND cohort – Caroline Dallaire-Thérout

We examined whether blood tests used in Alzheimer's disease can also identify cerebral amyloid angiopathy (CAA), an associated disease affecting brain blood vessels. We compared blood biomarkers and cognitive performance in 272 older adults with and without CAA. We found that most available biomarkers could not clearly distinguish CAA, although one marker of brain injury (NfL) was higher in affected individuals. These findings highlight the need for new blood tests to improve CAA diagnosis.

26-38 The association between DEGS and AGED status and sex, and the influence of vascular burden in the COMPASS-ND database – Katrina Mae Tapang

DEGS and AGED are aging-related brain health patterns linking depression/apathy, thinking ability, and slow walking, often tied to brain vessel health and dementia risk. We studied whether these patterns differ by sex and whether vascular burden explains using 824 older adults from COMPASS-ND. Men had higher risk, especially for AGED. Blood vessel burden represents little of the difference. This suggests sex difference beyond vascular health.

26-39 When culture meets the care system: dementia caregiving in the Indian diaspora in Canada – Navaneetha Ravichandran

Many Indian families in Canada feel a deep duty to care for relatives with dementia, but this can clash with how the health system expects them to ask for help. We are interviewing 15 caregivers to understand how they navigate these tensions and how it shapes their sense of self and daily caregiving. Results will help therapists and policymakers better support South Asian dementia caregivers in Canada. This study is underway, and early findings will be presented at the conference.

26-40 Sex differences in the relationship between physical activity and cognitive function in Alzheimer's disease – Ashani Sivakumar

Alzheimer's disease affects females and males differently, but we do not fully understand why. This study looked at whether being more physically active is linked to better thinking and memory in people with Alzheimer's disease. We found that females who were more physically active tended to have better cognitive function, while this pattern was not big in males. These findings suggest that exercise may benefit females and males differently and could help guide more personalized care.

Poster session listed with presenting author names Séance de présentations par affiche avec les noms des présentateurs

Day 2 – October 27, 2026 / Jour 2 – le 27 octobre 2026

27-01 A programmatic approach to studying and promoting resilience in brain aging and dementia across diverse communities – Roger A Dixon

As persons get older, changes in their brain health may lead to challenges in how well they can adapt to everyday events. We identify key lifetime, community, social and biological influences that promote or inhibit healthier (“resilient”) brain and cognitive aging. We aim to integrate aspects of diversity (ethnocultural, racial, sex, gender) in such resilience research. An integrated series of six activities are designed to understand and improve our ability to promote resilient aging.

27-02 Design of the Brain Health PRO online risk factor reduction study (BHPROOF) – Haakon Nygaard

Brain Health PRO (BHPro) is an online educational program aimed to reduce modifiable risk factors for dementia. In a recent study in 353 Canadians at risk of dementia, engagement with BHPro improved knowledge about dementia and several lifestyle risk factors. The BHPROOF study will test a shorter version of BHPro in 700 participants across Canada in a fully-remote study. We will compare those who start BHPro immediately to those not receiving it, but all participants will get access to BHPro.

27-03 Brain Health PRO, a modular online educational program to modify lifestyle risk factors for dementia – Haakon Nygaard

Brain Health PRO (BHPro) is an online educational program aimed to reduce modifiable risk factors for dementia. In a recently completed study in 353 Canadians at risk of dementia, engagement with BHPro improved knowledge about dementia and several lifestyle risk factors. BHPro is being evaluated in several new studies to compare it to a control condition, in-person programming, to help optimize it for future scale-up in community settings, and to evaluate it for use in a Métis community.

27-04 Implementation of Brain Health PRO across Canada: Barriers, facilitators, and strategies – Sylvie Belleville

Brain Health PRO is an online program that helps people understand dementia and learn how to protect their brain health. Working with 14 rural and urban sites across Canada, this study identified factors that could make the program easier or more difficult to deliver to the population. It also developed practical strategies to support its implementation in the community. The findings offer useful guidance for making Brain Health PRO available to more people.

27-05 Feasibility of the lifestyle, exercise and diet (LEAD) 2.0 trial: a 6-month randomized controlled trial of virtual exercise and diet interventions in older adults with subjective cognitive decline – Laura Middleton

Virtual lifestyle programs may expand reach for dementia risk reduction. Feasibility must be established. We describe the feasibility of the virtual LEAD 2.0 Trial. People with subjective cognitive decline were randomized to exercise or stretching and diet counselling or education. All feasibility targets were met. We recruited 9.1 participants/month (146 participants). Participants attended 84% of sessions and 83% completed assessments. Intensive virtual lifestyle interventions are feasible.

27-06 Go upstream with digital social prescribing: addressing barriers of preventive integrated care through community engagement – Daniel Gan

Digital social prescribing (DSP) connects people with community services to support healthy brain aging. We spoke with more than 70 service users and providers across Metro Vancouver to understand what gets in the way. Common challenges included limited funding, staff burnout, weak partnerships, and outdated information. We created a community-focused web app and propose a simpler DSP model using automated referrals and follow-up to ease staff workload and reduce isolation for brain health.

27-07 Reproductive history and cognitive health in older Canadian women – Saadat Khan

Pregnancy and childbirth may affect women's brain health later in life, but we still know little about how these experiences relate to memory and thinking as we age. In this study, we will use data from older Canadian women to explore whether the number of pregnancies and births is linked to cognitive health. We will also consider factors such as mental health and socioeconomic status. Our findings may help improve understanding of women's brain health and healthy aging.

27-08 The Sprott Prevent Alzheimer Research Collaboration at Université de Sherbrooke (SPARCUS): A new research and educational initiative for Alzheimer's prevention funded by Mr. Eric Sprott – Karl Fernandes

FINGER and US POINTER improved cognition in those at risk of Alzheimer disease (AD) but did not aim to correct deteriorating metabolic brain health (MBH), i.e. declining brain fuel utilization. SPARCUS is funded by a private donation with the specific aim of assessing whether integrating lifestyle changes that improve MBH into an AD prevention program will improve cognitive outcomes in older people. The initial feasibility trial will start in 2027. Improved MBH should directly reduce AD risk.

27-09 Diversifying dementia research: findings from the dream survey – Susanna E. Martin

How helpful and feasible are recommendations aimed at improving diversity in dementia research? We invited people from underserved communities and people working in dementia research or services to tell us their perspectives. Survey results show that recommendations are broadly perceived as very helpful but less feasible to implement. Results highlight the importance of researchers adopting diversity strategies to build meaningful and inclusive collaborations with underserved communities.

27-10 EPLED's impact in dementia research: From partnerships to capacity building – Juanita-Dawne Bacsu

Engagement of People with Lived Experience of Dementia (EPLED) is a program within the Canadian Consortium on Neurodegeneration (CCNA) that works to involve people with lived experience of dementia in CCNA research. For this presentation, EPLED Advisory Group members, alumni, staff and leads reflected on activities, reviewed evaluation data, and outlined potential next steps for the program. We hope that this inspires new approaches and collaborations for EPLED both within and beyond CCNA.

27-11 Promising practices for engaging people with lived experience of dementia in advocacy and research: findings from an international modified Delphi study – Jennifer Bethell

People living with dementia, their friends, family and caregivers/care partners are taking part in various roles in advocacy and research. An international team came together to identify some ways to do this well and that could work in different contexts. The team asked researchers, people with lived experience and others to share their views and then prioritize the ideas that were shared. This framework will help individuals and organisations meaningfully engage people with lived experience.

27-12 ABLE: a patient engagement platform within a biomedical research project – Karen Myers Barnett and Christine Thelker

Our research network includes researchers and people with lived experience of dementia, epilepsy and stroke. This collaboration is quite new for "biomedical research" which is typically done in a laboratory. So far, our team has been working on ways to understand each other and our different perspectives. Next, we want to share our work so others can learn from our experience. We believe that research that is inclusive of different ideas and perspectives will be more innovative and impactful.

27-13 Using registry infrastructure to support recruitment in frontotemporal degeneration research – Mary Krause

This poster explains how the FTD Disorders Registry helps connect people interested in frontotemporal degeneration research with studies that need participants. Anyone can join the Registry and receive notices about studies, including studies in Canada. Adults in the U.S. and Canada may also join the Registry Research Study to share information that can help researchers better understand FTD and plan future studies.

27-14 CCNA and the dementia community investment: exploring opportunities for collaboration – Carrie McAiney

Projects funded by CCNA and the Public Health Agency of Canada's Dementia Community Investment (DCI) aim to improve prevention and treatment of dementia and enhance quality of life among people living with dementia (PLWD) and care partners (CP). We explored the goals of CCNA and DCI funded projects and looked for opportunities for collaboration. Very few connections existed. Greater collaboration can improve dementia risk reduction activities and enhance quality of life for PLWD and CP.

27-15 Specialist care continuity for persons living with dementia transitioning to long-term care: a population-based study – Natasha Lane

No one knows why specialist dementia care from psychiatrists and geriatricians often stops after people are admitted to long-term care. We used Ontario health records of adults living with dementia entering long-term care to find out who is most likely to lose specialist contact and why. Knowing who loses access to specialist care after long-term care admission can guide policy to increase specialist access for people who need it most.

27-16 Sex differences in reasons for hospitalization and incidence of health events during hospital stay among community-dwelling persons living with dementia in Ontario, Canada – Susan Bronskill

People living with dementia can experience frequent hospitalizations, which may lead to declines in their cognition and overall health. Whether females and males experience differences in reasons for hospitalization is unclear. Our research will explore reasons for hospitalization in older adults living with dementia in Ontario, Canada using routinely collected health datasets. This information can be used to target sex-specific interventions to reduce, delay, and shorten hospitalizations.

27-17 Using multi-sensory approaches to promote reminiscence therapy for people with dementia in long-term care – Winnie Sun

The objective of our project is to explore the use of technology-enabled reminiscence therapy on memory recall among people with dementia (PWD) through applying virtual reality (VR), exercise gaming and AI-powered tools in long-term care. Three themes are: (1) multi-sensory reminiscence helps trigger specific memory recollection; (2) Multi-use of sensory cues provide increased brain exercises and stimulation; and (3) applying integrated approaches allow for diverse sensory options for inclusion.

27-18 Advancing the future of dementia care: challenges and opportunities from the perspectives of healthcare workers and program staff in specialized geriatric services – Winnie Sun

This study explores the perspectives of frontline workers on barriers and priorities for dementia care in Ontario to inform future research agenda. Findings revealed three themes: (1) Addressing systemic gaps in community support, understaffing, and public understanding of dementia; (2) Providing adequate family and caregiver education regarding dementia care and support for system navigation; (3) Addressing gaps in dementia education with practical training focusing on cultural competency.

27-19 Trauma-informed dementia care in long-term care homes: an environmental scan of training, guidelines, and educational resources – Kim Ritchie

We studied how trauma-informed care is integrated into dementia care and whether older adult PTSD guidelines address dementia in long-term care homes. We reviewed dementia and PTSD frameworks, guidelines, and training resources. We expect to find gaps in addressing trauma, PTSD, and dementia together. This matters because better training can improve care and quality of life for older adults living with dementia and trauma histories.

27-20 Keeping the fire within burning: partnering with community to co-develop strengths-based approaches to preventing frailty in older First Nations people with cognitive impairment – Jennifer Walker

Working with our community partners at Maamwesying North Shore Community Health Services, we will co-develop a program to help older First Nations adults experiencing memory challenges to age well. The program will be designed with community members and healthcare providers, honouring First Nations understandings of healthy aging and building on the strengths and resilience of the community. Once the program is developed, it will be offered to community members who receive care from Maamwesying.

27-21 Co-design of a Métis-specific dementia prevention intervention in Alberta, Canada – Yun Yun Lee

Dementia prevention resources that are culturally relevant and align with Métis ways of knowing are needed. Our prior study showed that Brain Health PRO, an online educational program to reduce dementia risk, did not align with Métis ways of knowing. This study will engage with Métis people across Alberta to determine what a Métis-specific dementia prevention intervention that is culturally safe and relevant looks like.

27-22 Continuing the journey of the Indigenous Cognitive Health program – Katrina Fras

Indigenous-centered cognitive health research helps to ensure ethical, culturally safe, and self-determined research. The Indigenous Cognitive Health program addresses this through the CCNA by promoting Indigenous health research practices and including Indigenous perspectives in cognitive health research. This involves providing guidance for publications and data access requests, brain health promotion materials, supporting CCNA Teams, and collaborating with CCNA platforms.

27-23 Combining community-based research with cross-continental collaboration: progress, insights and future directions from an Australia-Canada Indigenous health research team – Shanaya Fischer

Health communication is a relational process in health care to help people make informed decisions. Culturally-safe health communication resources about dementia are lacking for Indigenous Peoples, despite facing higher rates of dementia. Presenting progress to date, this poster showcases a Canadian-

Australian research partnership which aims to study dementia resources for Indigenous People, discuss strengths and priorities, and co-create culturally-specific resources.

27-24 From risk scores to real lives: user perspectives on dementia prevention tools – Abby Hensel

We studied how older adults and caregivers feel about online tools that estimate heart and dementia risk. We held small group discussions where participants used these tools and shared their thoughts, opinions, and experience. Early findings are showing what makes these tools easy to use, helpful, or concerning. This matters because it helps us design tools that people trust and use to support healthier aging.

27-25 Cartographie systématique des outils de connaissances pour soutenir les transitions de soins des personnes âgées vivant avec une maladie neurodégénérative et de leurs proches aidants : projet Aquila – Patrick Archambault

Les aînés ayant des troubles cognitifs vivent des transitions de soins complexes. Nous avons cherché des outils pour les aider, eux et leurs proches, à mieux communiquer et planifier ces transitions. En analysant plus de 300 textes, nous avons trouvé 122 outils, mais malheureusement très peu en français. Nos résultats montrent que ces ressources sont souvent en anglais et peu sont numériques. Cette recherche servira à créer une boîte à outils adaptée aux besoins des francophones du Canada.

27-26 Brain health resources and integrated diversity (BRAID) hub – Louise Lafortune

Canada does not have enough healthcare providers trained to deliver culturally appropriate care for people with, or at risk of, memory problems or dementia. Many do not know about or use recommended best practices. The Brain Health Resources and Integrated Diversity (BRAID) Hub will co-develop resources with providers and communities and host them on an easy-to-use website to share guidelines, support better care, and offer training to improve culturally appropriate care.

27-27 Evaluating Alzheimer's knowledge in the workplace: a cross-regional study among highly educated employees – Alonso Montoya

This study assessed 907 people, almost all of whom had advanced education. We found that their general understanding of AD was just average, particularly on risks that can lead to the disease, how to care for someone who has it, and how it is diagnosed. This shows that even highly educated people working in the pharmaceutical industry need to learn more about Alzheimer's. Better education will help break down negative stereotypes and encourage people to get tested and diagnosed sooner.

27-28 Mapping the genetic mechanisms linking age-related hearing loss to dementia – Britt Drogemoller

Do hearing loss and dementia share genetic roots? We analyzed genetic data from over 17,000 Canadians, comparing specific types of age-related hearing loss to genes linked to dementia and brain health. We found one region of DNA tied to both difficulty hearing speech in noise and the health of the brain's white matter. These findings point to a possible shared biological pathway that could one day inform strategies to protect both hearing and memory as we age.

27-29 TREM2-regulated lysosomal function in microglia: a critical link between genetic risk and neurodegeneration in Alzheimer's disease – Parasto Shokraian

Alzheimer's disease is a brain disorder that affects memory and thinking. It is caused by buildup of amyloid- β plaques and tau tangles that damage brain cells. Microglia help clear waste in the brain, but in Alzheimer's they become dysfunctional. TREM2 is a gene important for microglial function. Its dysfunction reduces clearance of toxic proteins and increases inflammation, contributing to disease progression.

27-30 TBI subtypes differentially induce neuropathologies, blood biomarkers, gene transcription and proteome in rTg4510 tau mice – Wai Hang Cheng

Objective

We compared a single moderate-severe TBI vs repetitive mild TBI in mice.

Methods

Single High-energy (SH) TBI mice received 1 strong head impact. Repetitive Low-energy (RL) TBI mice received 6 mild head impacts. Sham-injured mice received anesthesia only.

Results

SH-TBI had higher immediate mortality and longer loss-of-righting. SH-TBI, but not RL-TBI, showed acute changes of plasma biomarkers. The 2 TBI types showed differential gene expression and chronic tau burden.

27-31 Cross-scale fuzzy injury profiling identifies a neurodegeneration dominant white matter hyperintensity context in AD – Zahra Khalilzad

We asked whether Alzheimer's disease is linked to a combined pattern of biological ageing, small vessel brain injury, and brain shrinkage. Using ADNI data, we studied telomere length, white matter hyperintensities, and brain volumes. AD showed a neurodegeneration dominant profile, where white matter injury was most meaningful when paired with brain shrinkage. This helps clarify why vascular brain injury may matter differently across ageing profiles.

27-32 Implementing open data sharing in LORIS: infrastructure, curation, and provenance – Camille Beaudoin

To support registered-access of COMPASS-ND data, LORIS has developed a secure platform for sharing data with approved researchers worldwide. The system separates shared datasets from the internal study environment, removes or codes direct identifiers, and supports compliance with privacy, ethics, and governance requirements for managing indirect identifiers and disclosure risks. All data releases are tracked to ensure transparency, accountability, and participant privacy.

27-33 From controlled to registered access: sharing COMPASS-ND cohort data with the international research community – Randi Pilon

To facilitate global dementia research, the COMPASS-ND study is changing how it shares its data. Rather than keeping data access tightly restricted, it is moving to a "registered-access" model, which will allow approved researchers worldwide to use the data in their projects. This shift involved updating participant consent forms, getting ethics board approval to share existing data safely, and removing personal details to protect privacy. This sets a secure blueprint for other health studies.

27-34 COMPASS-ND in Phase III: expanding data collection and global reach – Michael Borrie

The COMPASS-ND study has streamlined operations and has grown in CCNA Phase III to include Time 3 data collection, alongside recruitment of new participants with up to high school education to expand participant diversity. Updated brain imaging and advanced blood and microbiome analyses will be added to the data. To maximize global impact, a tiered Open Science platform is in development for a late 2026 launch, which will share these high-quality data with health researchers worldwide.

27-35 CCNA Phase III brain donation: milestones & next steps – Kelly Sun

The COMPASS-ND brain donation program facilitates brain tissue examination and banking to help researchers understand the basis of brain diseases. When participants pass away, expert doctors across five Canadian sites examine the tissue to confirm diagnoses and look for clues about how these diseases progress. This tissue is safely stored at a national brain bank. 50 donations have been studied so far, and 328 more people have enrolled, creating a vital resource to help find future treatments.

27-36 Multiple pathologies are common in the COMPASS-ND cohort – Ging-Yuek R. Hsiung

While patients are often given a "single" diagnosis of dementia in clinic, such as Alzheimer Disease or Lewy Body Dementia, in autopsy studies, people often have multiple causes leading to their cognitive symptoms. In this study, we examined patients who come to autopsy in the COMPASS-ND cohort and found that mixed pathologies were seen in over 2/3 of cases. The multiple mixed pathologies affect how patients should be treated and now new therapies should be tested.

27-37 Innovating driving assessment in adults with cognitive impairment: a person-centered approach leveraging ai and digital technology – Sayeh Bayat

For many people, driving is central to independence, and being told to stop can be some of the hardest news to face. Our goal is to help people keep driving safely for as long as they can. Using small, unobtrusive in-car devices, we study how people actually drive over a year across three Canadian cities, applying AI to interpret the resulting patterns. Our prior work showed people find this technology acceptable and that driving differs with cognition, supporting fairer, real-world assessment.

27-38 Laughter Yoga for the health of caregivers and people living with Alzheimer's disease – Sylvie Dagenais-Douville

While in a 6-week placement in gerontology training with War Veterans, I became fascinated with the work of a music therapist and witnessed the power music had on people living with Alzheimer's Disease (AD) who would become receptive and open up to the music. Years later I became a Laughter Yoga Master Trainer. This practice is a fun, light and fairly easy way to engage the para-sympathetic system and bring calm to the nervous system and I decided to apply LY to people living with AD and their caregivers. The response obtained during LY sessions was and still is very powerful and rewarding. Within minutes of being in a circle initiating repetitive exercises of smiling, simulated laughter (no humor), guided breathing exercises and music, I can see JOY and playfulness surfacing and the release of stress and anxiety is palpable! Caregivers also observe a lasting relaxed state in many AD participants. After almost 19 years of successfully working with this clientele I wonder if perhaps our Laughter is registered at the same brain "level" as music, therefore enabling us to recall sounds, words or emotions associated with pleasant feelings. Many things need to be elucidated regarding the mechanisms underlying LY effects, but my experience shows that our LY sessions are a success. When delivered properly, regular LY workshops could be a CAM (complementary and alternative medicine) for people with AD and their caregivers and, further, LY contributes to developing a beautiful and playful complicity among participants.

27-39 Baseline characteristics and preliminary safety from a multicenter, safety surveillance study of lecanemab treatment for Alzheimer's disease in real-world clinical practice using Alzheimer's network for treatment and diagnostics (ALZ-NET) registry – Barbara Ramos

Lecanemab is a treatment for Alzheimer's that targets harmful brain protein buildup. In a real-world study of 742 people followed for about 8 months, most side effects were mild brain changes seen on scans, usually within 6 months. Few people stopped treatment, serious bleeding was rare, and one death may be related. Overall, safety matched what was already known.

27-40 Characterization of "early-start" participants that continued receiving donanemab in the trailblazer-ALZ 2 long-term extension period – Curtis P. Schreiber

In TRAILBLAZER-ALZ 2, donanemab slowed progression of Alzheimer's disease, but some participants had to continue treatment at study end. We looked at why some participants may need to continue on donanemab. Reasons for continuation for >18 months may include a higher rate of treatment-related adverse events, leading to more and longer treatment pauses. Despite requiring longer treatment duration, participants had similar clinical benefit to the group who met treatment completion criteria.

27-41 Optimizing pharmacotherapy for older adults with dementia: involving pharmacists in the care trajectory – Edeltraut Kröger

How can pharmacists improve medication use for seniors with dementia? We developed a list of medications still useful in advanced dementia and tested it in NHs. We then asked pharmacists to review and adjust medications independently, but in team collaboration in NHs and family medicine clinics. Care teams found pharmacists helpful. Medication numbers did not always decrease, but the use of inappropriate medications did. Dementia patients use many medications which may be harmful or suboptimal.

27-42 Normative data for the MoCA - language (MoCA-L): expanding cognitive screening to language deficits in neurocognitive disorders – Robert Jr Laforce

We developed the MoCA - Language (MoCA-L) to provide clinicians with a quick tool to detect primary progressive aphasia (PPA). We tested 121 controls and 17 PPA participants using both MoCA/MoCA-L. We found the error pattern to be congruent with PPA diagnosis. The MoCA-L is a 10-min screening tool for language deficits in neurocognitive disorders. It is intended for primary care professionals and has the potential to improve timely recognition of neurocognitive disorders.

27-43 Celebrating the successes of team 14 in CCNA Phase I and Phase II – Shanna Trenaman and Melissa Andrew

Since the start of CCNA, Team 14 has studied how frailty, social factors, and multiple medication use affect people living with dementia. Our research showed that some medications may lead to additional prescriptions, explored how social vulnerability and frailty can affect thinking and memory, examined how frailty may influence dementia risk, and studied medication use near the end of life. Together, this work provides a foundation for new research using COMPASS-ND.