Create the future.

A CANADIAN NETWORK OF CENTRES OF EXCELLENCE
CORPORATE PROFILE
AGE-WELL NCE Inc. (“AGE-WELL”) is a federally-funded Network of Centres of Excellence established in 2015 to support Canadian research and innovation in the area of technology and aging. AGE-WELL is dedicated to the creation of technologies and services that benefit older adults and caregivers. Its aim is to help older Canadians to maintain their independence, health and quality of life through technologies and services that increase their safety and security, support their independent living, and enhance their social participation.

AGE-WELL research projects are organized into eight research themes (called Workpackages), supported by four Crosscutting Activities in knowledge mobilization, commercialization, team-working and training. The pan-Canadian network brings together more than 100 funded and affiliated researchers from 29 universities and research centres across Canada. Over 110 industry, government and non-profit partners have joined AGE-WELL and the number continues to grow.

OUR VISION
To harness and build upon the potential of emerging and advanced technologies in areas such as artificial intelligence (AI), e-health, information communication technologies (ICTs), and mobile technologies to stimulate technological, social, and policy innovation.

OUR MISSION
To accelerate innovation in the field of technology and aging that will improve quality of life and produce economic and social benefits for Canadians and the global community. AGE-WELL strives to:

• Conduct world-class research in technologies for healthy aging;
• Develop a broad and transdisciplinary understanding of the impacts and implications of assistive technologies for healthy aging, including an in-depth understanding of the needs of older people and their caregivers, as well as the social, ethical, and policy implications thereof;
• Train and mentor students and emerging researchers in unique, applied environments and through a core focus on commercialization, clinical application and knowledge mobilization;
• Foster strong networking and partnerships among academic, public, private, and community sector stakeholders; and
• Position Canada to become a global leader in the development of technologies for healthy aging.

ACKNOWLEDGEMENTS
AGE-WELL gratefully acknowledges the support of its funder:

The NCE Secretariat manages three national programs: Networks of Centres of Excellence (NCE); Centres of Excellence for Commercialization and Research (CECR); and Business-Led Networks of Centres of Excellence (BL-NCE). Through multi-disciplinary partnerships between academia, industry, government and not-for-profit organizations, NCE programs focus a critical mass of research resources on social and economic challenges, commercialize and apply research breakthroughs, increase private sector R&D, and train highly qualified people. Since its inception in 1989, NCE funding has helped create almost 1,500 companies; supported the development of more than 48,000 highly qualified personnel (HQP); invested more than $2 billion in research, commercialization and knowledge translation; and leveraged $1.9 billion in partner support to enhance the lives of Canadians.

And the support of its host institution:

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An Incredible Year

In Canada, people who are 65 and over represent the fastest-growing age group. Worldwide, people are living longer. Everywhere, the challenge is the same: to help people maintain health, dignity and independence as they get older. That’s what inspired the creation of AGE-WELL, a federally-funded network in technology and aging that connects researchers, trainees, industry, older adults, caregivers and community partners across Canada.

Launched in 2015, AGE-WELL has already started to deliver on its promise to create technologies and services that will have a meaningful impact on the lives of Canadian seniors and caregivers. It has been an incredible year. Our network has grown to include more than 100 researchers at 29 universities and research centres in Canada, and over 110 industry, government and non-profit partners.

We believe that AGE-WELL is destined to succeed and create technologies and services that benefit older adults and caregivers. At all stages of the research, development and marketing process, and because of our core strategy to foster collaboration among researchers, commercial enterprises and community organizations.

Already, our research has taken off. Our teams are at work developing cutting-edge technologies such as “smart” wheelchairs, robots that help with everyday tasks, and sensor systems that monitor health and give early warning signs of decline. There are other projects designed to stimulate the commercial development of new technologies in this field.

AGE-WELL would not exist without the indispensable support of our funder, the Networks of Centres of Excellence (NCE). AGE-WELL also thanks the Toronto Rehabilitation Institute – University Health Network (UHN) for being our host institution. We are grateful to Toronto Rehab – UHN, our host institution. We are infinitely thankful to Toronto Rehab – UHN for its ongoing support. Achieving so much in our first full year of operation allows us to focus on getting results and delivering on our strategic goals in the coming four years. I am excited to be part of an enterprise that could truly revolutionize the lives of millions.

Michael Harcourt
Chair, AGE-WELL Board of Directors

Dr. Alex Mihailidis and Dr. Andrew Sixsmith
Joint Scientific Directors, AGE-WELL

A key aim of AGE-WELL is to make Canada a world leader in the field of technology and aging—creating social and economic benefits for Canadians and the global community. The first year in AGE-WELL’s life shows that we are very much on track.

There is much that is remarkable about AGE-WELL, starting with the calibre of our investigators and the research they are conducting. AGE-WELL is laying the foundation to translate findings into products and services that will improve the quality of life for older people and caregivers.

We are also preparing the ground for AGE-WELL contributions to the Canadian economy by fostering entrepreneurship and equipping bright young researchers with skills they need to be the innovators of tomorrow. Two AGE-WELL HQP have already launched startup companies, and others have located work in industry.

AGE-WELL is maximizing the opportunity offered by NCE funding. I am confident that the network’s accomplishments will catapult Canada into the forefront of healthy aging.

Michael Harcourt
Chair, AGE-WELL Board of Directors

A Message from the Chair of the Board

A Message from the Managing Director
AGE-WELL by the Numbers*

*as of September 2016

100+ Researchers

39 Publications

38 Research Projects

113 Total

Industry 22%
Federal 5%
Provincial 22%
Other 20%

220 Total

Master’s Candidates 24%
Postdoctoral Fellows 22%
Doctoral Candidates 29%
Professionals (includes research associates, technicians and summer students) 25%

29 Member Universities and Research Centres across Canada

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2 Startups
This was a landmark year for research at AGE-WELL. The network launched an ambitious and robust research program that we believe will have a significant impact. Our Core Research Program, announced in August 2015, supports 25 teams of researchers across Canada. Their research focuses on three types of AGE-WELL “products”: technologies, services and policies/practices. It will lead to innovative solutions to enhance the lives of older adults and caregivers. In this section, we present a sampling of these exciting research projects.

We were delighted to unveil three new funding programs this past year. The Catalyst Program is “responsive” research funding that supports pilot research in areas of emerging importance identified by AGE-WELL stakeholders. The first projects focus on older adults, caregivers and the workplace. Our new Strategic Investment Program advances post-discovery projects by providing rapid and responsive funding for commercialization and mobilization activities. Finally, our Collaborative Impact Program is designed to support post-discovery commercialization or knowledge mobilization activities that have significant investment from an industry or community partner.

AGE-WELL research is partner-driven. In fact, our projects require partner commitments. Stakeholders also guide our work through their participation on advisory committees.

Collaborative Impact Program

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Collaboration in Action

AGE-WELL research is wide-ranging. Our investigators are developing technologies to help people in everyday life. They are also addressing important issues that come with technological change, such as privacy and ethics, and exploring how public policy can support the growth of new technologies.

We are pioneering a new way to break down silos. Transdisciplinarity is a strategy that crosses disciplinary and sectoral boundaries. This philosophy underpins everything we do. We believe it’s vital to bring together people from different backgrounds to work collaboratively on practical solutions to real-world problems.

AGE-WELL research is partner-driven. In fact, our projects require partner commitments. Stakeholders also guide our work through their participation on advisory committees. Critical linkages are now in place to generate world-class research breakthroughs and to apply that knowledge.

Within a few years, older Canadians could have their own affordable, mobile, intelligent robots specifically designed to help them stay healthy, independent and living at home.

Dr. Goldie Nejat, director of the Institute for Robotics and Mechatronics at the University of Toronto, who holds the Canada Research Chair in Robotics for Society, and Dr. François Michaud, founding director of the Interdisciplinary Institute for Technological Innovation (3IIT) at Université de Sherbrooke, are leading the AGE-WELL-funded project to create assistive robots that can be used at home, as well as in hospitals, seniors’ residences and long-term care.

The robots will help with daily tasks by prompting seniors to do everything from brushing their teeth and getting dressed, to preparing and eating meals, doing exercises and remembering to take their medications. “The objective is to develop robotic assistance to help promote independence, quality of life and assist older people with activities of daily living,” says Dr. Nejat.

“We focus on cognitive impairment, so what we really want the robot to do is prompt the person and remind them of the steps involved in a task. The robot doesn’t pick up the object or do the task, it helps provide encouragement and prompting for the older person to complete the task themselves.”

The robots will also be able to assist with “brain training” through memory games that can help the older person retain their cognitive abilities. Telepresence will make “virtual” medical visits possible—without the older adult leaving the home. “The robot is used as a remote and mobile extension of clinicians and caregivers,” says Dr. Michaud. It will also monitor the person’s well-being and signal for help in an emergency. Don’t imagine a tin box on wheels that goes beep. Plans call for the robots to have a human-like face and arms, a video screen at chest level and the ability to move safely around the home, seniors’ residence or care facility environments. They will even be capable of social interaction including natural two-way conversation, greeting and pointing gestures, facial expressions, and video and text instructions.

Dr. Nejat and her team are focusing on the human-robot social interactions and activities of daily living assistance aspects of the project while Dr. Michaud and his group are developing the telepresence, video, mapping and navigation capabilities.

Partners include CrossWing Inc. (see page 28), Vigilent Telesystems Inc. and Chartwell Retirement Residences, one of the locations where prototypes will be tested during the five-year project.

While members of the research team conduct a large-scale needs assessment with focus groups and questionnaires, Dr. Nejat is using an existing robot to gather input from seniors. The results will be combined to inform the design of an AGE-WELL prototype robot, which will then be tested with users.

“The users’ needs and wants are part of the process from the very beginning,” says Dr. Nejat, whose earlier work with robots has been featured in Time magazine. “People are looking at robotics as the next big technology,” she says. “I think it will have one of the biggest impacts in our lifetime.”

Jennifer Lee, who lives with her 96-year-old mother-in-law, can instantly see the benefits of a socially-assistive robot. “I think it’s a great idea,” says Lee. “And it’s needed.”

A robot would bring her peace of mind when she is at work and her mother-in-law is at home, says Lee. Particularly likes the idea of someone watching out for problems, such as a fall, and ensuring that the stove is not left on.

Another feature that excites her: virtual medical appointments. Getting to the doctor and sitting in waiting rooms can be a big deal for an elderly person and their family member. Doing it virtually would mean “freedom.”

“I think this is amazing,” says Lee. “I want this for myself in the future.”
Cognitive computing targets caregiver needs

Jackie struggles to find practical products, services and information online that can help her to care for her mother with dementia. “It’s hit-and-miss at best and at times overwhelming, especially if I am not sure what solutions are out there,” says the retired paramedic and nurse.

Addressing the problem Jackie describes is exactly the goal Dr. Jan Miller Polgar of Western University, and Dr. Frank Rudzicz of Toronto Rehab – UHN and the University of Toronto have in mind with their AGE-WELL project called CARE-RATE.

“We are creating a one-stop online platform where people can find assistive technologies, services, resources and other information that will support them in their caregiver role for the person with dementia,” says Dr. Miller Polgar.

What makes the CARE-RATE platform unique is the use of a new type of artificial intelligence called cognitive computing, a much more powerful and specific tool than a typical search engine.

Most dementia-care product repositories are solution-based rather than need-based, and having solutions suggested to them. Often, searches using standard search engines result in thousands of pages of useless information.

With CARE-RATE, the user can ask a question in natural language—as if speaking to another person—and the system will ask follow-up questions to help hone in on solutions aligned to caregiver needs. It will weed out information that is not helpful and allow users to rate the solutions they try in order to help others in the future.

The research team is collaborating with IBM Canada to access elements of its supercomputer called Watson, which uses cognitive computing and natural language to reveal insights from large amounts of unstructured data. About 80 per cent of all data today—including news articles, research reports, social media posts and enterprise systems—is unstructured.

“IBM has provided a really nice platform for us. It is like an ‘à la carte’ menu where they give us access to lots of different computational modules that we can stitch together into programs that we are writing ourselves,” says Dr. Rudzicz.

“AGE-WELL is leveraging two of IBM’s fundamental strengths—cognitive computing and the cloud—to help address the socio-economic challenges of an aging population,” says Sanjeev Gill, national industry executive for research, IBM Canada. “We are delighted to participate in a project that puts our core capabilities in cognitive computing to work for the betterment of all Canadians and having solutions suggested to them. Often, searches using standard search engines result in thousands of pages of useless information.

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The idea is to develop different games that are enjoyable and that will measure things like attention, reaction time, vision, problem-solving skills and memory.

“We also hope that when people play these games, it will help them to ‘use it and not lose it’ and to possibly decrease the speed of decline for those with early signs of dementia or other cognitive challenges,” says Dr. Stroulia.

A professor of computer science and a researcher at the University of Alberta, Dr. Stroulia is working on the project with colleague Dr. Lili Liu, an AGE-WELL investigator, and PhD student Victor Guana.

The researchers are targeting the games to individuals with progressive dementia, mild cognitive impairment, stroke and delirium. In 2011, almost 750,000 Canadians had Alzheimer’s disease, the most well-known form of cognitive impairment; this number is expected to almost double to 1.4 million Canadians by 2033, according to the Alzheimer Society of Canada.

Plans call for the games to be used by people in hospitals, retirement residences, long-term care and at home.

The games are integrated to UniCog, a web-based platform that centralizes the collection of information from each player. UniCog can help health professionals track large numbers of people and supervise their assessment and treatment process.

The first trial of the project is now underway at an Ottawa day program for people with dementia-related conditions under the guidance of Dr. Frank Knoefel, an AGE-WELL investigator. They are using a whack-a-mole game at least weekly for up to nine months and their data will be monitored and assessed through UniCog.

Another trial will involve residents at a Revera retirement residence and long-term care home comparing people of a similar age who have dementia with those who do not have dementia.

These smaller trials will inform plans for a much larger trial.

“Our hope is to improve overall quality of life for both the caregiver and the person with dementia…”

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Pen bridges digital divide

Digital storytelling offers a unique means of communication and can be used to share life experience in an enjoyable, meaningful and life-affirming way.

Imagine this: great-grandma hand-writes a story about family history to share with her grandchildren and great-grandchildren across the country.

The special pen she uses—complete with a miniature camera—automatically captures her words as she writes on the paper that has a microscopic dot pattern. Through a series of photos, the pen digitizes the handwritten letter and the built-in WiFi sends it to a server. The letter is delivered by email.

The generations share important stories and the digital divide is bridged.

The digital pen and paper are already available at the retail level but the sharing software is being developed by Dr. Karyn Moffatt, an assistant professor at the School of Information Studies at McGill University, with funding from AGE-WELL. Dr. Moffatt’s students are assisting on the project with PhD student Xiaofeng Allan Yong in the lead.

“There are a lot of reasons, particularly with older adults, why people want to generate their own content using handwriting,” says Dr. Moffatt. “So, how can we let them do that but then have it connected with a very digital world? We see the digital pen as an alternative interface for social media.”

The digital pen is part of a larger digital storytelling project for older adults, co-led by Dr. Moffatt and Dr. Cosmin Munteanu of the University of Toronto, which seeks to provide new opportunities to older adults to create, share and acquire information using innovative technological platforms.

“Digital storytelling offers a unique means of communication and can be used to share life experience in an enjoyable, meaningful and life-affirming way,” says Dr. Moffatt. “We have long-term visions of being able to create family archives and have older and younger generations contribute different kinds of content.”

Other benefits will flow. Digital story-telling can assist older adults in maintaining cognitive abilities, and help to prevent social isolation, which is common in older adults.

A prototype of the digital pen-and-paper technology is being used by seniors at the YKt Keen Seniors’ Day Centre in Ottawa and additional design feedback is being gathered through workshops with residents at The Westwood, a Revera retirement residence in the same city.

While there has been much research and commercial activity on technology for knowledge acquisition and sharing, little of it has considered seniors as the prime users. When research has targeted older adults, it has mainly studied them as consumers of content, “grossly overlooking their capacity to contribute to society through their amassed experiences and knowledge,” says Dr. Moffatt.

Commercialization of the digital pen-and-paper platform for seniors might involve leasing existing hardware technology or having a company create a pen specifically for this purpose and user group.

Preventing falls and reducing injuries when they happen

Gail McKenna worries that her mother is headed for another fall. The 89-year-old, who lives in a retirement residence, has fallen three times in the last year.

It is a well-founded fear. One-third of older adults fall every year, often with dire consequences. That’s what fuels research by Dr. Steve Robinovitch and colleagues in British Columbia who are devising ways to predict, prevent and detect falls.

The team is working on a wearable sensor system that can transmit sophisticated information about mobility patterns and falls. The idea is to deliver early warning signs for falls, and provide real-time feedback to assist in exercise and rehabilitation.

“The end product may rely on sensors based in a smartphone or wristwatch. Wearable sensor systems are providing us with the ability to monitor both the quantity and quality of movement—based in a smartphone or wristwatch,” says Dr. Karyn Moffatt, an assistant professor at McGill University, with funding from Simon Fraser University.

The team is also field-testing two promising innovations to reduce the likelihood of an injury—when a fall happens. Falls are a leading cause of disability and death in seniors.

Injuries suffered by older adults in falls cost about $3.5 billion a year in Canada.

A technology called compliant flooring is one of the interventions being tested. Working with an industry partner, the researchers have modified an existing flooring sublayer called “Smart Cell” that is designed for workers to reduce the likelihood of an injury—when a fall happens. Falls are a leading cause of disability and death in seniors.

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For as many as 50 hours a week over the course of several months, a team at the University of Regina has been staring at video screens, manually coding different non-verbal pain expressions—a mind-boggling 50,000 frames of video. “It’s a massive undertaking,” says project co-lead Dr. Thomas Hadjistavropoulos, who holds a Research Chair in Aging and Health at the university.

But it was the only effective way to gather raw data for an AGE-WELL-funded project that could revolutionize the assessment of pain in long-term care facilities. The goal is to adapt facial recognition technologies to alert staff when a person with dementia is experiencing pain. The result can be a cascade of damaging outcomes. People with dementia suffering from unrecognized pain can turn aggressive. Staff then sometimes prescribe psychotropic medications, when in fact what is really needed is pain relief. Psychotropic medications can in turn increase the risk of death.

There’s a pressing need for such technology. Dr. Hadjistavropoulos points to studies that indicate that people suffering from severe Alzheimer’s are far less likely to receive an analgesic medication than older adults in general. They often cannot communicate what they are feeling and overworked staff do not have the time to conduct regular pain assessments on every single resident. “Pain is under-assessed and under-treated in long-term care facilities,” he says.

Facial recognition technology, as shown in the simulation below, could revolutionize the assessment of pain in long-term care facilities.

Given the sensitivities of privacy, the cameras will never be storing video. Their purpose is solely to advise staff when a resident should be assessed for pain.

An automated pain detection system for older adults with dementia

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The University of Regina team members staring at video screens for all those hours are looking at the reactions of people with dementia and cataloguing expressions that indicate they are in pain. It could be a lowered eyebrow or a wince—things that a staff person in a long-term care facility might note, if only they had the time to be watching each resident every hour of the day. The raw data provided by Dr. Hadjistavropoulos’s group is being shared with a collaborating team headed by Dr. Babak Taati, a scientist with the Artificial Intelligence and Robotics Team at Toronto Rehab – UHN.

Dr. Taati says advertisers already use facial recognition technology to recognize emotions—a useful tool when surveying test audiences in market research, but it is unclear whether the algorithms would work on older faces that might have wrinkles and that perhaps might express feelings differently due to the effects of dementia. “This is expanding into a different area,” he says.

His team will use the data collected in Regina to develop new algorithms that will not only note the signs of pain, but attempt to capture the indicators even when using a lower-quality (and lower cost) camera. The goal would be to have multiple cameras throughout a care facility, not only in each room, but also in common areas to effectively detect any resident who is suffering.

Success would mean that more people with dementia will get the pain medication they need, when they need it.

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It’s a typical AGE-WELL project that draws together experts from diverse fields. Dr. Hadjistavropoulos is a health psychologist, while Dr. Taati is a computer engineer. Dr. Ken Prkachin, a University of Northern British Columbia expert on non-verbal pain expressions, is also a key co-investigator.

If all goes well, a prototype will be ready within three years and testing will begin the following year in two long-term care facilities. Success would mean that more people with dementia will get the pain medication they need, when they need it. This would, in turn, decrease incidents of aggression—and lower stress levels for hard-working staff. Dr. Hadjistavropoulos has high hopes for the new approach. “It could change everything.”
Gauging technology needs in rural, remote and Indigenous communities

A unique research project is reaching out to those who live outside big cities and to Indigenous people to gauge how technology might assist in improving their lives.

“Our goal is to explore user needs for two very distinct populations, giving voice to those who aren’t usually part of studies,” says Dr. Megan O’Connell, a University of Saskatchewan psychologist.

She sees widespread benefits. “If you can make technologies that meet the needs of rural and remote people and Indigenous persons, you are going to make technology that is more widely intuitive and useful to a larger audience.”

Dr. O’Connell is exploring the needs of people in rural and remote Saskatchewan. Other data-collection sites are First Nations communities in southern Saskatchewan, Prince Edward Island, and Manitoulin Island in Ontario.

There’s already a cache of data from a phone survey, led by Dr. O’Connell, of 621 older adults in rural Saskatchewan. Asked to describe a time when they needed assistance, most respondents talked about needing physical assistance due to strength limitations or medical conditions but a sizable proportion needed help with technology, like working a computer.

“One of AGE-WELL’s core principles is to meaningfully consult with people who will use the technologies.”

“This underscores the need for technology to augment physical tasks for older adults, and for technology that is intuitive and easy to use, particularly for people who are away from centralized supports such as going to the local store to get help,” says Dr. O’Connell, who co-leads the AGE-WELL project with Dr. Debra Morgan of the University of Saskatchewan.

Dr. O’Connell believes those who live outside urban areas are a perfect market for technologies developed by AGE-WELL given that many involve remote sensors to allow monitoring of changes in cognitive health and to help family members check on the safety of loved ones.

In southern Saskatchewan, Dr. Carrie Bourassa, a professor of Indigenous health studies at the First Nations University of Canada, is doing community-based research with several First Nations communities in Saskatchewan.

Her community partner is File Hills Qu’Appelle Tribal Council. Initial work will consist of reaching out to First Nations with information sessions about subjects like dementia and then building a protocol for gathering opinions.

Dr. Bourassa, who is Métis, warns that technologies cannot be too invasive. “We have to be mindful of the kind of trauma that people have experienced; she says. For example, many potential users would likely be survivors of residential schools, places where they were constantly under supervision and subject to punishment if caught speaking their native languages.

Dr. Bourassa is collaborating with Dr. Kristen Jacklin, an associate professor of medical anthropology at the Northern School of Medicine in Sudbury, Dr. Jacklin has spent 15 years working with First Nations on Manitoulin Island.

“I think they are open to it,” she says, based on her initial conversations with representatives of the communities. “They saw it as something that they’re often excluded from and don’t benefit from and so I think they were really excited to have the opportunity to be heard early on.”

But Dr. Jacklin stresses that the Indigenous people need to be approached with a spirit of sensitivity and accommodation for cultural differences. Conversations will proceed at a pace dictated by the communities. She will be calling upon local nurse, Karen Pitawanakwot, who speaks the language and who will translate as needed.

The introduction of technologies into isolated First Nations will also have to take account of existing challenges: a severe shortage of good housing, pervasive health problems, poor bandwidth and in some cases a near total lack of reliable connectivity.

As information grows, the researchers will collaborate with other AGE-WELL investigators in developing training programs to facilitate the introduction of new technologies in rural areas.

One of AGE-WELL’s core principles is to meaningfully consult with people who will use the technologies. Dr. Bourassa believes it is particularly important for First Nations, who traditionally and sometimes calamitously have had change imposed upon them.

“It’s amazing to be able to go back and tell our communities that we’re doing really important work and the work they’re participating in could change the lives of other First Nations.”

Creating an innovation ecosystem

The development of technologies that promote healthy aging “doesn’t just happen by chance,” says Dr. Josephine McMurray, an assistant professor in the Lazaridis School of Business & Economics at Wilfrid Laurier University in Brantford, Ont. Instead it benefits from close collaboration between universities, industry, policy makers, clinicians and end users in what’s known as a regional innovation ecosystem.

Dr. McMurray is the co-lead of a three-year study funded by AGE-WELL looking at how to foster these regional “hubs.”

Called Developing Regional Health Innovation Ecosystems (DRiVE), this program of research looking at building capacity for innovation in health and aging technology includes case studies that show how regional links among different groups support the creation, commercialization and implementation of health technologies.

“The research will lay the foundation for an upcoming announcement by AGE-WELL about plans to set up a health and aging innovation hub in Canada.”

“IT takes all of these pieces working together to make a healthy ecosystem that supports the development of innovation and novel solutions to the complex problems we’re facing with an aging population,” says Dr. McMurray, a health care researcher who specializes in research that combines business, health and technology.

DRiVE is carrying out case studies to learn what’s necessary to develop such innovation ecosystems. The models include Innovation Boulevard, based in Surrey, British Columbia, which is a network of health, business, higher education and government groups creating an ecosystem where health and aging technology development is supported from “benchtop to bedside,” she says. A case study of the Copenhagen Capital Region in Denmark, which is known for its progressive health care innovation, is also underway. There are plans to study another age-tech hub in Canada and one in the United States, Dr. McMurray says.

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Creating an innovation ecosystem

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Dr. Josephine McMurray, an assistant professor in the Lazaridis School of Business & Economics at Wilfrid Laurier University, says that transdisciplinary research plays in creating innovation that’s novel, useful and sustainable across institutions and that transdisciplinary research plays in creating innovation. She comments. “Keeping the communication open and transparent, and building trusted relationships among actors in the local ecosystem are probably the most important challenges,” she adds.

DRiVE has developed a global map of health and aging innovation hubs that is in progress and will be made available for co-creation by September, Dr. McMurray says. Factors that support regional health innovation ecosystems include the development of research clusters and broadband access, she says, as well as the presence of venture capital and places to trial products, like long-term care facilities.

High-quality affordable housing, cultural activities and other community features are important to attract companies and talented workers. Despite the proliferation of virtual technologies, geographical proximity between people, research organizations and companies is critical to collaboration. “If you want to develop trust, face-to-face contact is really important,” she comments.

Dr. McMurray says innovation ecosystems are likely to be successful if they focus on novel research, global collaboration, civic capital, and a robust local talent pool. Such hubs can also promote economic development in regions, she adds.

When Dr. Rosalie Wang sees people facing the challenges of aging and disability, there is one thing that she wants for all: equitable access to devices and services that can help.
Training the Next Generation

Training students and new professionals in unique, applied environments is core to AGE-WELL’s mission. Our goal is to equip these highly qualified personnel—known as HQP—to become the next generation of leaders in the field of technology and aging. In the past year, we recruited 220 HQP into our training program. They come from across Canada, with a few from Australia and the United Kingdom. All HQP are automatically enrolled in AGE-WELL’s EPIC program—Early Professionals, Inspired Careers. Launching EPIC was a huge achievement this past year. The program trains HQP to be industry, academic, and community leaders in the development and introduction of technology to the health system and marketplace. EPIC offers exclusive experiential learning opportunities and emphasizes the development of skills, ideas, teamwork, and relationship-building that are the building blocks of a successful career.

Two other initiatives were introduced last year to support emerging researchers and new professionals. One is the Graduate Student and Postdoctoral Award in Technology and Aging. The other provides HQP with co-funding through an AGE-WELL partner. These trainees typically engage in on-site work with the industry or community partner, providing valuable work experience and exposure to Canadian companies.

Enhanced Learning Opportunities
Extra support is provided to HQP through a new internal award called ACCESS (Access to Courses, Conferences, and Exchanges for Student Success), which offers funding of up to $5,000 for experiential learning opportunities. AGE-WELL-sponsored events complement our training program and provide HQP with learning opportunities that range from hackathons to pitch events and seminars. Trainees can also participate in network management through our new HQP Advisory Committee.

We are proud to be supporting these 220 emerging researchers and professionals through a unique, value-added training program. You can meet some of our bright young stars in the pages that follow.

When Colombia-born Alexander Moreno immigrated to Canada six years ago to pursue studies in neuropsychology, he didn’t expect to be handed a chance to return to South America to expand his knowledge and experience.

Dr. Moreno is a psychologist/neuropsychologist and postdoctoral fellow at McGill University. He is also a member of AGE-WELL’s EPIC training program. That’s how he heard about an opportunity to travel to Chile to attend the 3rd International Summer School on Aging at the University of Chile.

“It sounded interesting because it was a way to collaborate internationally and to learn about the aging challenge in Chile,” recalls Dr. Moreno, whose fascination with the field was nurtured in his native country where he ran a memory clinic focusing on issues surrounding dementia.

In January 2016, he flew to Santiago, where he expected a week’s worth of lectures. Instead, there were field visits to meet government officials, industry, older adults and caregivers. Dr. Moreno found himself developing a new innovation: a smartphone application designed to ease the isolation sometimes felt by older adults.

“I was attending just as a student but they gave me the status of co-supervisor in one of these workshops and it led to a complete product at the end.”

Transdisciplinarity at work! Drs. Monica Nivelo, Judith Sixsmith, Mei Lan Fang and Alexander Moreno (from left to right).

Alexander Moreno (Quebec)

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HQP Profiles

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Along with his personal knowledge and passion, Dr. Moreno brought the AGE-WELL attitude about the importance of having different disciplines collaborating to deliver a superior result—an ethos that the Chileans were already embracing. His co-supervisor was a geriatrician. Other team members included an anthropologist, sociologist, psychologist, and physical therapist.

“We worked together as if we had been working together for years,” he says. At the end of the summer school, Dr. Moreno’s group and two others made presentations describing their concepts. His team turned out to be a hit.

“People fell in love with the project because it was perfectly suited to the context of the problem, and could be feasible—all because we had the opportunity to evaluate it from the perspective of all the different stakeholders that we had the opportunity to speak with.”

It was chosen to apply for funding and Dr. Moreno offered his assistance in preparing the application. He clearly made an impression on his hosts as he was invited to serve as an international member of the AGE-WELL Chilean Transdisciplinary Network on Aging.

Dr. Moreno is also part of an AGE-WELL research group along with his PhD in the Faculty of Health Sciences at Simon Fraser University (SFU), Battersby is a member of the AGE-WELL Affiliates Program that provides training and mentorship to emerging researchers and young professionals.

She says the support she received from AGE-WELL to join the inaugural class of the Graduate Certificate in Science and Technology Commercialization at the Beedie School of Business at SFU has been vital in rounding out her marketable skills.

“Now I can speak to both pieces of the knowledge translation puzzle. I have learned all sorts of language and concepts around commercialization, entrepreneurship and business planning that I would not have had the time or capacity to build independently.”

As part of the commercialization program, Battersby was required to arrive in class with a project—an innovation or business idea connected to a science or research-based initiative. She developed a business plan for products related to a “smart” wheelchair project supported through an AGE-WELL core research project.

“AGE-WELL has been a great experience,” says Battersby. “I hope to continue to be connected to it.”
Inaugural AGE-WELL Summer Institute 2016

Eighteen trainees from across Canada took part in the AGE-WELL Summer Institute, a week-long training event held in Mont-Tremblant, Quebec. The theme was Co-Creating Possibilities: Living Well with Dementia, with a focus on participatory, user-centred design. It was an unparalleled opportunity for trainees to work closely with expert mentors, and to develop a technology or solution to improve the lives of older adults with dementia.

Teams worked through the design process from problem definition to business models and prototyping, ending with a pitch competition.

Team rLife accepts its award for designing and pitching an online platform to support the social interactions of individuals with dementia.
Networking & Partnerships

An essential element of AGE-WELL’s mandate is to forge diverse, mutually-supportive partnerships involving researchers, industry, government, older adults and care providers. We believe that a collective, cooperative effort is the best way to bring new, better and affordable technologies to the public.

In total, we now have over 110 industry, government and non-profit partners who have made more than $22 million in cash and in-kind contributions to be allocated to research projects, trainees and other initiatives over our five-year mandate. It’s an impressive list of partners that includes major players in technology and long-term care (see page 45). Even companies like Uber that are not working in the technology and aging space are jumping onboard.

Why do they do it? AGE-WELL offers access to leading researchers across Canada and an opportunity to tap into a dynamic network. Partners see that our research is attuned to their needs. In fact, every research project requires partner involvement from an early stage. For example, our partnership with Revera allows our researchers to test research innovations at their sites.

Key among our collaborators are the people who will actually use the technologies and services developed through AGE-WELL research. We will only be successful if we involve consumers from the early stage of development. Thanks to our new CONNECT funding program, launched in 2016, we also provide older adults and caregivers with access to new and exciting learning opportunities, such as conferences, workshops and lectures.

Sponsoring Events

AGE-WELL launched its formal sponsorship program in 2015-2016 to support conferences and symposia aligned with our vision and mandate. Our sponsored events included Hacking Health Edmonton Hackathon and a lively pitch competition hosted by the Toronto chapter of Aging2.0, as part of its Global Local Startup Search.

International Leadership

In 2015-2016, AGE-WELL increased its visibility internationally as a leader in technology and aging. Here are a few examples:

• For the first time, Canada is an official partner in the European Commission’s Active and Assisted Living (AAL) Programme’s call for proposals. AGE-WELL is partnering with the Canadian Institutes of Health Research (CIHR) to provide a major new funding opportunity for Canadian researchers.

• AGE-WELL was instrumental in laying the groundwork for a new Canada-France collaboration to address the global need for new health technology solutions. We played a key role in bringing about an agreement between Simon Fraser University, the City of Surrey and France’s Société d’Accélération du Transfert de Technologies (SATT Grand Centre). AGE-WELL will collaborate on projects with SATT.

• AGE-WELL scientific director Dr. Alex Mihailidis was invited by the secretary general of the International Federation of Aging (IFA) to lead the Technology Working Group of the organization’s Global Think Tank. This led to a position paper on the role of technology to support older adults, presented at Ministerial meetings in Copenhagen.

• AGE-WELL scientific directors Dr. Andrew Sixsmith and Dr. Alex Mihailidis are members of a planning committee for the world’s largest conference on aging. The 2017 World Congress of the International Association of Gerontology and Geriatrics (IAGG) will be held in San Francisco.

First-ever AGE-WELL Pitch Competition

Ten teams of innovators from Canada and around the world participated in the first annual AGE-WELL Pitch Competition: Technology to Support People with Dementia. More than 150 people watched teams present a wide range of technology solutions to a panel of expert judges. The Toronto event was co-hosted by AGE-WELL and the Global Council on Alzheimer’s Disease (GCAD) and sponsored by Otsuka America Pharmaceutical, Inc., Aging2.0 Local | Toronto, the Ontario Brain Institute, and the Women’s Brain Health Initiative.

Each team delivered a fast-paced, five-minute presentation to the judges.

For more information on the finalists, judges and prize package, please visit: www.agewell-nce.ca/pitch-event.

Liam Kaufman, CEO and co-founder of Winterlight Labs (shown with certificate), made the winning pitch for a new technology that can monitor cognitive health through speech. Mr. Kaufman is pictured here with: Dr. Alex Mihailidis, scientific director, AGE-WELL; Kabir Nath, president and CEO, Otsuka North America Pharmaceuticals; and Mary Michael, senior director, Otsuka America Pharmaceutical, Inc. (from left to right).
Partner Profiles

CrossWing Inc.

Robotics company CrossWing Inc. is like a lot of Canadian startups. It has promising technology and it’s looking to make the leap to a marketable commercial product. AGE-WELL is helping to bridge the gap by giving the Markham, Ont., company access to world-class research, practical testing opportunities and potential business partners.

“AGE-WELL's mission is not only to perform core research, but to collaborate with commercialization partners like CrossWing to move innovations forward to the end-product,” explains engineer Stephen Sutherland, CrossWing’s president and chief executive. “A big step is to get our assistive robot into these clinical trials in the network that AGE-WELL has established. That's a huge asset to us.”

CrossWing is working with AGE-WELL-funded researchers at Toronto Rehab – UHN, the Interdisciplinary Institute for Technological Innovation at the Université de Sherbrooke, and the University of Toronto’s Autonomic Systems and Biomechatronics Laboratory to create a socially-assistive robot. The mobile robot, based on CrossWing's Nav2 platform, will deliver vital services to seniors and people with cognitive impairments, including monitoring their well-being, providing reminders of daily tasks and even playing games.

The latest version is leveraging the shared resources of cloud-based computing to deliver a wide array of services via a low-cost holonomic robot platform (which can move in all directions independent of where the robot is facing), equipped with camera, speakers and microphone, and controlled by a laptop or tablet. It’s all part of an effort to dramatically drive down the cost of the robots to make them affordable to consumers.

“We envision that with AGE-WELL we’ll create a robot that people can affordably place in their homes and live independently longer, or can be used in nursing and retirement homes,” Sutherland says. “I envision that in the not-too-distant future, entry-level models of this assistive robot will be available through mass-market channels such as Best Buy and AT&T retail locations.”

And he is making statements like this with considerable authority—Sutherland’s previous startup worked closely with Best Buy which later acquired his technology and more recently, CrossWing’s virtuME robot was highlighted by AT&T at their Shape Expo at AT&T Park in San Francisco.

A key challenge for CrossWing is capital. The company’s detailed execution plan calls for a $15 million investment to get its robotics platform into full production in 2017. It’s working to prove its assistive robots in clinical trials, with AGE-WELL’s help, and investors are paying attention on a global scale.

“Once the technology is validated in clinical trials, it opens doors that we wouldn’t otherwise have access to,” Sutherland says. “We are using that as ammunition to close investors.”

Further down the road, this assistive robot and other CrossWing robots based on its innovative Nav2 platform will seek to close new business partners. And there too, AGE-WELL has been a crucial partner by making introductions to some of the nearly 40 other private sector companies in the nationwide network, such as global health care giant Philips and Chartwell Retirement Residences.

“One of the goals of AGE-WELL is to get researchers and organizations that want to commercialize products together,” Sutherland says. “It’s great for Canada.”

“AGE-WELL wins by supporting a small company’s ability to deliver technology that will improve the lives of older people in their own homes, assisted living facilities and hospitals,” says AGE-WELL scientific director Dr. Alex Mihailidis.

And all Canadians benefit when great innovations get into the hands of users by matching up companies such as CrossWing with some of the top researchers in the country. The AGE-WELL team includes researchers at Western University and the Université du Québec à Montréal.

Philips

One of the health care system’s challenges is to monitor survivors of stroke and traumatic brain injury after they leave the hospital in order to ensure their continuing care.

It’s difficult and labour-intensive work involving a battery of cognitive tests to measure complex brain functions such as memory, language, visual skills, problem-solving and self-awareness. Tests are typically administered using pencil and paper. This can complicate data analysis and storage. Moreover, the limited diagnostic sensitivity of existing tools can make follow-up treatment less likely.

Philips and AGE-WELL are working together to collect data using a new tablet-based digital cognitive assessment tool that Philips has created. The goal is to assess the performance of the easy-to-use software platform to administer standardized cognitive tests in hospitals and even by patients and caregivers at home.

“With digital tools, you have vastly more diagnostic information,” explains AGE-WELL investigator Dr. Robin Green, a neuropsychologist at Toronto Rehab – UHN and Canada Research Chair (Tier II) in Traumatic Brain Injury at the University of Toronto.

The project is part of a growing relationship between Philips, a leading health technology company, and AGE-WELL. The partnership enables Philips to validate its technology by working with world-leading researchers and institutions as it pursues regulatory approvals for various hospital-to-home products, in Canada and the U.S.

“AGE-WELL perfectly aligns as an academic and developmental partner from what we are trying to accomplish from a business perspective,” says Michael Weber, director of business development at Philips Canada. “It’s a perfect match for us.”

It’s about testing technology with “the best scientists available,” adds Dr. Vladimir Pekar, director at the Clinical Research Board, which oversees Philips' cooperative research projects in Canada. Philips has “many choices” of where to do research, and he says it makes him proud that his company chose Canada.

The relationship between Philips and AGE-WELL also involves testing a prototype “healing room” for stroke and brain injury patients at Toronto Rehab – UHN. The special room uses lighting and oversized TV screens to create soothing recovery environments. As well, the company is looking into new collaborative projects involving wearable devices to monitor patients.

The collaboration offers significant reciprocal benefits for Canada’s research community. Researchers get access to the vast product development and commercialization expertise of a global health care company, helping to get good ideas out of the lab and into the world.

“A company like Philips can mass produce and allow for a much broader use,” says Dr. Green. “The commercialization part is really valuable if you are trying to do something on a broad scale. We are currently trying to get services to patients around Ontario. This relationship gives us much greater confidence that we can do something.”

Connected health technologies and digitization allows for more and better testing inside hospitals. But Dr. Green also sees a future where the same tools will be used to offer effective in-home treatment of a large and often neglected group of patients.

“My hope is that we would develop not just cognitive assessment tools, but also intervention tools that would be deliverable on a massive scale because of the size of this company and their reach,” she says.

Health Canada statistics show that the risk of stroke increases with age and, after 55, it doubles every 10 years. For traumatic brain injury, adults over 75 are among groups most at risk, according to the Alzheimer Society of Canada.
Knowledge Mobilization & Commercialization

AGE-WELL research is all about achieving impact. It could be a new technology, service or policy. At the start of every research project, we begin the conversation about knowledge mobilization and commercialization. A big component of this involves choosing the right partners—whether industry, non-profit or government.

Last year, AGE-WELL took an important step to expedite commercialization. We developed new funding programs to support post-discovery projects, helping them get to market faster. You can read on pages 32-35 about two of these projects, funded in 2016, both of which are AGE-WELL startups.

We also focus on how to foster innovation and create best practices for knowledge and technology exchange and exploitation. A story on page 17 describes the progress being made in establishing something called an "innovation hub".

AGE-WELL investigators share their knowledge and expertise widely. Last year, our researchers presented at numerous meetings and events, including an Ottawa forum on innovative practices and policies for an aging population. Network members also generated publications and reports, such as a draft manual outlining regulatory processes for health technologies, and a paper on the use of technology, sensors, and big data in the Canadian Longitudinal Study on Aging.

The second AGE-WELL Annual Conference and Annual General Meeting on October 18-20, 2016 in Montreal will be a major opportunity for knowledge exchange and networking. This year’s conference is open to the public, and the emphasis will be on sharing results and new technologies. Attendees will include AGE-WELL investigators, industry and community partners, students, Board and committee members, staff, and Canadian seniors and caregivers.

First AGE-WELL Annual Conference and Annual General Meeting

More than 200 people attended AGE-WELL’s first annual conference and AGM in Calgary in October 2015. It was the first time that researchers working on AGE-WELL core projects could meet as a group, joined by commercial and community partners, Board members, trainees and research associates. The conference was very much a trainee-centred event, with 35 HQP subsidized to attend.

The conference included panels of partners, HQP and researchers speaking to issues of relevance to the AGE-WELL community. Pictured below is the industry panel session.

Trainees participated in a Minute Madness event and poster presentation that showcased AGE-WELL’s core research projects.

Jim Mann, an advocate for people with Alzheimer’s disease who was himself diagnosed at the age of 58, gave the keynote speech. He is shown above with AGE-WELL Board member Mimi Lowi-Young, then-CEO of the Alzheimer Society of Canada. [Read a profile of Mann on page 38.]

Dr. Andrew Sixsmith (left) and Dr. Alex Mihailidis (right), AGE-WELL’s joint scientific directors.
The incidence of Alzheimer’s disease and other dementias is growing worldwide, and there’s a pressing need for a quick and accurate way to screen for cognitive impairment.

That’s the idea behind a new technology that analyzes a person’s natural speech to detect and monitor Alzheimer’s disease and other cognitive disorders.

“Subtle changes in speech are among the earliest signs of cognitive decline,” explains AGE-WELL investigator Dr. Frank Rudzicz, who developed the technology with students at Toronto Rehab – UHN and the University of Toronto, where he is an assistant professor in the Department of Computer Science.

The new tablet-based tool analyzes short samples of a person’s speech, which is recorded as they describe a picture on the screen. It extracts hundreds of variables from the speech samples, producing results in under five minutes.

In the lab, the technology can reliably identify Alzheimer’s disease, Parkinson’s disease and aphasia with between 85 and 100 per cent accuracy. The fully-automated system analyzes a combination of things such as choice of words, grammar and the sound of a person’s voice.

Other potential markets include clinical trial sponsors, who are already interested in using the system to help screen participants more quickly for studies. Regulatory approval will be sought to make the technology available to family doctors and speech-language pathologists.

With funding from AGE-WELL, Dr. Rudzicz and his team will be field-testing their prototype in several retirement homes. They are partnering on the project with five organizations which collectively care for more than 100,000 seniors.

“Companies that are just coming out of the lab need help to perform some of the necessary tests that would otherwise be impossible. This means they can go on to get other investment,” says Dr. Rudzicz. “AGE-WELL funding has been tremendously important, and the network has also opened doors to potential collaborators.”

Winterlight Labs, an AGE-WELL startup established in 2015, is commercializing the technology. AGE-WELL has been indispensable, says Dr. Rudzicz, who co-founded the company with software developer and AGE-WELL HQP Liam Kaufman.

“Companies that are just coming out of the lab need help to perform some of the necessary tests that would otherwise be impossible. This means they can go on to get other investment,” says Dr. Rudzicz. “AGE-WELL funding has been tremendously important, and the network has also opened doors to potential collaborators.”

Winterlight Labs will seek a seed round soon. The company aims to make the technology available in 2017. For Dr. Rudzicz, it’s the answer to an “immense need” for a simple, low-cost and efficient system for detecting and monitoring Alzheimer’s.

“This will ease the burden on the health care system and on individuals. Right now, it can be very stressful for people to undergo a long battery of tests.”

Over 44 million people have Alzheimer’s disease worldwide and that number is expected to triple by 2050.
A Toronto team has created a system that can transform a regular powered wheelchair into a “smart” wheelchair able to help prevent collisions.

The novel system uses sensors to detect obstacles and provide feedback to the driver. Feedback can be visual, audio or tactile (vibration). The idea is to alert the driver to obstacles. It’s a much-needed product.

Statistics show that 20 per cent of powered mobility device users report at least one major collision within a year, and 11 per cent of them are hospitalized due to injuries.

These safety issues mean that people with visual-perceptual difficulties, including older adults with dementia, are often excluded from using powered wheelchairs. Loss of mobility can in turn lead to depression and an increased reliance on caregivers.

“Our collision avoidance and feedback system can help increase safety and independence for users of mobility devices, and improve quality of life for people currently excluded from using these devices,” says Pooja Viswanathan, CEO of Braze Mobility Inc., an AGE-WELL startup that is commercializing the system.

Dr. Viswanathan highlights the innovative add-on feature that can transform a regular powered wheelchair into a “smart” wheelchair.

University of Toronto and an AGE-WELL HQP, has worked for over a decade on collision-avoidance systems for wheelchairs. She says an advantage of the new system is that it’s an add-on product that can be installed on any commercial powered wheelchair.

AGE-WELL support through a Strategic Investment Program grant has been crucial in getting a prototype ready to launch, says Dr. Viswanathan. Incubated at the University of Toronto’s Impact Centre, the project also receives funding from the Ontario Brain Institute.

Several working prototypes have been tested at Toronto Rehab – UHN, with wheelchair users involved from the beginning. “We have consumers on our team, and we are innovating along with end users.”

A market-ready prototype is now being tested by early adopters in the community, and the company is looking for others to test the system. A crowdfunding campaign will be launched in coming months. The product is expected to be available by early 2017.

“It’s a perfect innovation for a startup because we have the ability to be nimble, to work closely with our consumers, and to come out with a product that perhaps the bigger companies are not as focused on.”

Braze recently hired its first employee and a total of nine people are involved with the company as contractors, interns or in other roles.

Although the technology is designed for powered wheelchairs, there are plans to adapt it for scooters and manual wheelchairs. “In general, rear visibility and maneuverability in tight spaces is a real issue with mobility devices.”

For Dr. Viswanathan, the new system is a game changer. It will widen access to mobility devices, giving opportunities for independent mobility to all. “Mobility is a fundamental human right.”
Management

Strong Governance
AGE-WELL’s Board of Directors was crucial in guiding the network toward its accomplishments in 2015-2016. The Board is comprised of 15 members with a broad range of experience and expertise from the private, university and public sectors. Two members are profiled, starting on this page.

Our directors have provided important oversight in the governance, strategy and management of the network. We are incredibly fortunate to have such an engaged group of individuals who execute their duties and stewardship with the utmost care and diligence, and have repeatedly proven their commitment to the success of AGE-WELL.

A great deal of effort was focused last year on developing a comprehensive evaluation framework for the network. It is now set to be implemented. This will ensure that AGE-WELL’s research program remains solutions-driven. It will help us chart progress and implement any needed course corrections in our efforts to produce lasting social and economic benefits for Canadians.

In addition to the AGE-WELL Board, there are four advisory committees to the Board which have also contributed hugely to the network’s achievements in its short life. On page 38, we share the story of Jim Mann, a retired businessman with Alzheimer’s whose time has come.

Mike Harcourt
Chair, AGE-WELL Board of Directors

After more than 40 years in political and post-political life—where he passionately advances social justice issues and lends his support to clean energy, modular housing and life sciences startups—it takes a unique and forward-thinking initiative to capture the imagination of Mike Harcourt. AGE-WELL has done just that.

“It’s all new territory. AGE-WELL is poised to be an international leader in technology and aging, and to play a huge role in areas that really interest me—good public policy, good governance and innovation,” says Harcourt, chair of the AGE-WELL Board of Directors.

A former premier of British Columbia and mayor of Vancouver, Harcourt is proud to champion AGE-WELL and its work to drive innovation and create solutions for the disability community and First Nations people.

Harcourt earned a Bachelor of Arts and a Bachelor of Laws (LLB) from the University of British Columbia, and has received six Honorary Doctors of Laws. His exemplary career as a lawyer, community activist and politician has earned him numerous awards.

In 2013, he was named an Officer of the Order of Canada.

Barbara Stymiest
Vice-Chair, AGE-WELL Board of Directors

Barbara Stymiest believes it’s a stroke of serendipity that her diverse interests in international business and finance, technology and health care “have been nicely married within AGE-WELL.”

The vice-chair of the AGE-WELL Board of Directors and one of Canada’s most well-known and respected women in business, Stymiest has always been attracted to work that is intellectually engaging and has global impact.

Effective Management
A small but highly-qualified team of individuals works hard to ensure the smooth running of this complex and multi-faceted organization. Leaders across the network play a crucial role in supporting our researchers and partners through Workpackages and Crosscutting Activities.

Four additional advisory committees to our executive team provide further guidance and expertise to our operations and activities.

Leadership Profiles

Mike Harcourt
Chair, AGE-WELL Board of Directors

Harcourt is fascinated by the possibilities of AGE-WELL—from commercialization of robots that assist seniors with activities of daily living, to the development of services and products to support family and friends who may be struggling to care for older Canadians.

“We’re now at the point where the results are really going to start to happen,” he says. “It’s a privilege to chair AGE-WELL. I’m delighted to be involved.”

Harcourt has had a profound and lasting influence in the public realm over many years and in many fields, and has earned national and international acclaim for his vision, passion and impact.

He served as premier of British Columbia from 1991 to 1996 and mayor of Vancouver from 1980 to 1986. He has worked extensively on climate change and other sustainability issues, and has been a dedicated advocate for the disability community and First Nations people.

Harcourt earned a Bachelor of Arts and a Bachelor of Laws [LLB] from the University of British Columbia, and has received six Honorary Doctors of Laws. His exemplary career as a lawyer, community activist and politician has earned him numerous awards in British Columbia, across Canada and globally.

In 2013, he was named an Officer of the Order of Canada.

Barbara Stymiest
Vice-Chair, AGE-WELL Board of Directors

Stymiest says that technology was also a big part of her role overseeing strategy as a senior member of the leadership team at the Royal Bank of Canada, where she stayed until her retirement in 2011.

Stymiest began her accounting career with Ernst & Young in Toronto after graduating from the Richard Ivey School of Business in 1978. At age 30, she became the youngest partner in the firm. With both her FCPA and FCA designations, she moved to BMO Nesbitt Burnes in 1992 as executive vice president and chief financial officer.

“I’m still involved in financial services, technology and health care in my various roles today,” says the former chair and current director of Blackberry, and a director of George Weston Limited and Sun Life Financial. She is also chair of the AGE-WELL Finance & Audit Committee.

Stymiest was recently named the chair of the Canadian Institute for Advanced Research. She also chairs the Ivey Leadership Institute and is a trustee of University Health Network, where she chairs the technology committee.

She led a campaign to raise $60 million for the Toronto Rehabilitation Institute, where she volunteered for over 25 years. The Barbara G. Stymiest Chair in Rehabilitation Technology Research at Toronto Rehab was established in her honour. It is held by Dr. Alex Mhalilidis, scientific director of AGE-WELL.

continued on next page
Leadership Profiles

continued

Stymiest also chaired the 2005 United Way of Toronto campaign raising nearly $100 million. She was named one of Canada’s most powerful women four consecutive years (2003 to 2006), one of Fortune’s 50 most powerful women in business each year from 2006 to 2008, and one of the Financial Times’ top 50 women to watch in 2009. Stymiest is excited to see the ground-breaking practical innovations that AGE-WELL will create in the coming few years. “We have a great group of diverse people involved and it’s still early days. So there’s lots more to come.”

Jim Mann
Member, AGE-WELL Research Management Committee

Jim Mann was once a world traveller. But the most difficult journey of his life began in a mundane location in 2007. While walking through a small airport, he suddenly realized he had no idea where he was or what to do next. Before long he was undergoing tests which eventually led to a diagnosis of Alzheimer’s disease. He was only 58. Since then, he has had to dissolve his company, give up driving and come to terms with the many challenges of memory loss.

But as some doors closed, Jim Mann pushed open many others. He became active in volunteer work with several Alzheimer’s organizations, including the Alzheimer Society of Canada (ASC). That’s where he met Dr. Alex Mihailidis, scientific director of AGE-WELL.

When Dr. Mihailidis made a presentation to ASC’s Board, Mann challenged him with a simple question: are the voices of people with dementia being heard in AGE-WELL’s work to promote the growth of technology to assist people who are aging?

The answer was that listening and engaging with end users through all parts of the development process is a core principle in AGE-WELL’s mission. So much so that Mann found himself invited to be the keynote speaker at AGE-WELL’s first annual conference. He was also recruited to the AGE-WELL Research Management Committee, where he plays a role in reviewing research proposals and providing recommendations on research priorities and budget allocations.

Mann is the recipient of numerous awards, including a Queen Elizabeth II Diamond Jubilee Medal for volunteer service to the community and a Governor General’s Caring Canadian Award. He had a 25-year career with Canadian Airlines/CP Air before establishing his management consulting company, Capital Business Strategies Ltd. in 1994.

Mann himself is a user of technology, likes it (despite occasional frustrations) and sees the huge potential to improve people’s lives. But he says that many will resist the introduction of new technologies, being both suspicious and fearful.

“Will it keep me safe? Do I feel spied on? Is the complication in understanding its operation worth the headache?” These are some of the questions he says researchers may face.

“Introducing and integrating assistive technology will therefore have to be done with patience and empathy.”

Speaking at AGE-WELL’s conference last fall, Mann sounded a clarion call to include people with dementia in the process. Getting true and profound input will mean something deeper than occasional conversations and questions in an office somewhere. It will involve ongoing communication and collaboration in real-world sessions.

“For the developers, maybe even spending time in the home to watch the person or couple move around. Have them talk about their day and from that insight will come valuable nuggets to guide the creation and development of products enabling them to live well at home and in their community.”

Research Themes

AGE-WELL research projects are organized into eight Workpackages, supported by four Crosscutting Activities: knowledge mobilization; commercialization and technology transfer; transdisciplinary working; and training and mentorship.

WP1: NEEDS-OA
Understanding the Needs of Older Adults
To most effectively harness the power of technology and translate it into practical solutions, it is crucial that the people who will be using it are consulted and fully involved from the early stages right through product testing and marketing. NEEDS-OA is centred on understanding the needs of older adults related to technology, and on developing tools to include them in technology development.

WP2: NEEDS-CG
Understanding the Needs of Caregivers
Family caregivers are critical to the health and support of older people. The aim of NEEDS-CG is to gain a better insight into how to better support caregivers. The goal is to support the development of novel technologies that can provide more effective and efficient care, reduce the burdens and consequences of care, and also enhance the quality of life of caregivers. We are developing strategies to assist caregivers in making more informed decisions on the selection of technologies.

For more details, visit: www.agewell-nce.ca

continued on next page >
WP3: TECH-FAI
Technology for Supporting Functional Autonomy and Independence
Approximately one-quarter of Canadian seniors report having some kind of physical, cognitive, or sensory impairment that affects their ability to perform common activities of daily living. TECH-FAI research focuses on two areas: technologies that can support older adults in the home and community with cognitive tasks, and technologies that address physical impairments and disabilities faced by older adults that often severely restrict their mobility and ability to remain independent.

For more details, visit: www.agewell-nce.ca

WP4: TECH-APS
Technology for Active Participation in Society
Social interaction and support are consistently identified as key aspects of seniors’ quality of life. Lack of communication has been shown to lead to isolation and loneliness, which can result in problems such as depression and cognitive decline for older adults. TECH-APS explores novel technologies that encourage and enable greater social interaction for older adults, and support social participation, including technologies for collaborative play, learning and knowledge sharing.

WP5: TECH-DD
Technology for Reduction and Prevention of Disease and Disability
Chronic conditions such as cardiovascular diseases, diabetes, or physical injuries due to falls and other accidents have significant costs for people, the health care system and the Canadian economy. However, close monitoring of chronic conditions can significantly reduce their effects. In addition, regular activity and exercise in older adults is associated with an overall improvement in health, functional capacity, quality of life, and independence. TECH-DD is producing technologies and tools that will help to actively engage older adults in society.

WP6: TECH-MCH
Technology for Maintaining Good Mental and Cognitive Health
Currently, 747,000 Canadians have some type of cognitive impairment, including dementia. This number is expected to double to 1.4 million by 2031. Furthermore, 20 per cent of Canadian seniors are living with a mental illness, anxiety and depression. Pain tends to be under-reported and not treated, resulting in agitation and aggression, while mood disorders often go untreated. TECH-MCH will result in new technologies in an area that has been largely ignored in the technology and aging field.

For more details, visit: www.agewell-nce.ca

WP7: POLICY-TECH
Health Systems, Practice, Policy, and Regulatory Issues
While technological innovation offers tremendous new opportunities, there are challenges in relation to policy, regulation and decision-making in the care of older persons. It is also important to understand how different sectors and stakeholders can work together to develop innovative solutions. POLICY-TECH will deliver in-depth information that will be crucial for AGE-WELL partners as they attempt to bring new technologies and tools to the market. The research will also drive new health care policies.

WP8: ETHICS-TECH
Ethical, Cultural, and Social Aspects of Technology
The use of new advanced technologies in the care and support of older adults poses significant social and ethical questions, particularly in areas such as robotics, artificial intelligence and sensors that collect potentially sensitive data. ETHICS-TECH is developing advice and methodology to assist researchers and policy makers who are exploring aging, disability and technology. The research also investigates ethical, privacy, and security factors that are most likely to contribute to disparities in the usage of emerging technologies.
Financial Statements

STATEMENT OF FINANCIAL POSITION
AGE-WELL NCE Inc.

As at March 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSETS</td>
<td></td>
<td></td>
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<tr>
<td>Current assets</td>
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<tr>
<td>Cash and cash equivalents</td>
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<tr>
<td>Due from University Health Network</td>
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<td>4,640,887</td>
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<tr>
<td>Unspent research grants held at participating institutions</td>
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<td>Accounts receivable</td>
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<td>Prepaid expenses</td>
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<tr>
<td><strong>Total current assets</strong></td>
<td><strong>8,984,084</strong></td>
<td><strong>4,640,887</strong></td>
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<tr>
<td>LIABILITIES AND NET ASSETS</td>
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</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
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<td>135,702</td>
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<tr>
<td><strong>Total current liabilities</strong></td>
<td><strong>282,049</strong></td>
<td><strong>135,702</strong></td>
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<tr>
<td>Deferred contributions</td>
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<td><strong>Total liabilities</strong></td>
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<tr>
<td>Net assets</td>
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<tr>
<td>Unrestricted</td>
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<td>–</td>
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<tr>
<td><strong>Unrestricted net assets, end of year</strong></td>
<td><strong>75,935</strong></td>
<td>–</td>
</tr>
</tbody>
</table>

The first tranche of funding from NCE was received March 26, 2015.

Please refer to the audited financial statements on the AGE-WELL NCE website:

www.agewell-nce.ca

STATEMENT OF OPERATIONS AND CHANGES IN UNRESTRICTED NET ASSETS
AGE-WELL NCE Inc.

Year Ended March 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVENUE</td>
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<tr>
<td>Networks of Centres of Excellence grant</td>
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<tr>
<td>Grant from other partners/organizations</td>
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<tr>
<td>Other sources of funds</td>
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<tr>
<td><strong>Total revenues</strong></td>
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<td><strong>209,815</strong></td>
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<tr>
<td>EXPENSES</td>
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<tr>
<td>Research and training</td>
<td>3,253,143</td>
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<tr>
<td>Networking meetings and events</td>
<td>233,470</td>
<td>43,304</td>
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<tr>
<td>Communications</td>
<td>75,055</td>
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<tr>
<td>Professional fees</td>
<td>32,410</td>
<td>49,925</td>
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<td>Travel</td>
<td>12,067</td>
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<tr>
<td>Administration</td>
<td>467,949</td>
<td>28,113</td>
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<tr>
<td><strong>Total expenses</strong></td>
<td><strong>4,074,094</strong></td>
<td><strong>209,815</strong></td>
</tr>
<tr>
<td><strong>Excess of revenue over expenses for the year</strong></td>
<td><strong>75,935</strong></td>
<td>–</td>
</tr>
<tr>
<td><strong>Unrestricted net assets, beginning of year</strong></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Unrestricted net assets, end of year</strong></td>
<td><strong>75,935</strong></td>
<td>–</td>
</tr>
</tbody>
</table>

Cash and in-kind contributions from partners held and spent at network member institutions are not included in these statements.

The Network follows the deferral method of accounting for contributions which include government and other grants. Deferred contributions represent unspent resources externally restricted for program expenses in future years. Changes in the deferred contributions balance are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>4,505,185</td>
<td>–</td>
</tr>
<tr>
<td>Amounts received during the year - NCE</td>
<td>8,095,944</td>
<td>4,715,000</td>
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<tr>
<td>Amounts received during the year - Non NCE</td>
<td>95,000</td>
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</tr>
<tr>
<td>Amounts recognized as revenue during the year</td>
<td>(4,070,029)</td>
<td>(209,815)</td>
</tr>
<tr>
<td><strong>Balance, end of year</strong></td>
<td><strong>8,626,100</strong></td>
<td><strong>4,505,185</strong></td>
</tr>
</tbody>
</table>

Please refer to the audited financial statements on the AGE-WELL NCE website:

www.agewell-nce.ca
Network Community

as of September 2016

Member Universities and Research Centres

Bruyère Research Institute
Carleton University
Centre de recherche de l’Institut universitaire de gériatrie de Montréal (CRIUGM)
Dalhousie University
First Nations University of Canada
Laurentian University
McGill University
McMaster University
Ontario Shores Centre for Mental Health Sciences
Ryerson University
Simon Fraser University
TELUS – Université du Québec
The Research Institute of the McGill University Health Centre
Université de Montréal
Université de Sherbrooke
Université Laval
University Health Network
University of Alberta
University of British Columbia
University of Guelph
University of Northern British Columbia
University of Ottawa
University of Regina
University of Saskatchewan
University of Toronto
University of Victoria
University of Waterloo
Western University
Wilfrid Laurier University

Partners

Active and Assisted Living (AAL)
ADL Smartcare
Alberta Health
Alberta Health Services
Alzheimer Society of Canada
Annapolis Valley Health
Art Institute of Vancouver
Aurege
Baptist Housing
Baycrest
Baycrest Centre for Learning Research and Innovation
BlackBerry
Breton Ability Centre
British Columbia Care Providers Association
Burnaby Multicultural Society
Canadian Association on Gerontology
Canadian Frailty Network (CFN)
Centre de réadaptation Lucie-Bruneau
Centre de recherche de l’Institut universitaire de gériatrie de Montréal (CRIUGM) – Université de Montréal
Centre de santé et de services sociaux de la Montagne (CSS-DLM)
Centre de santé et de services sociaux de la Montagne (CSSS-DE) de l’Énergie
Centre for Assistive Technology and Connected Healthcare (CATCH), University of Sheffield
Centre for Education and Research on Aging & Health (CERAH) – Lakehead University
Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal (CIRR)
Centre interdisciplinaire de recherche en réadaptation et intégration sociale (CIRRIS) – Université Laval

Centre on Aging, University of Manitoba
Centre on Aging, University of Victoria
Centre Universitaire Jean-François Chartwell Retirement Residences
Christie Gardens Apartments and Care Circle of Care
City of Surrey
Clearpath Robotics Inc.
Communitel Corporation
Com Santé, Université du Québec à Montréal
CrossWing Inc.
Delta View Life Enrichment Centre
Employment and Social Development Canada
ENGAGE Biomechanics Inc.
Extendicare
fami.net
Fraser Health
Gerontech LTD
GF Strong Rehabilitation Centre
Glenrose Rehabilitation Hospital
Gibbrea Centre for Studies in Aging – McMaster University
i-Edit
IBM
Institute for Life Course and Aging, University of Toronto
Institut sur le vieillissement et la participation sociale des aînés (IVPSA) – Université Laval
JLG Health Solutions Inc.
Keebee
Kinova
Kiwanis
Lawson Health Research Institute, Western University

continued on next page  >
Network Community

as of September 2016

Partners continued

Regroupement des aidantes et aidants naturels de Montréal (RAANM)
Retirement Concepts
Revera Inc.
Royal Ottawa Health Care Group
Ryerson University
Saint Elizabeth Health Care
SAVIE
Schlegel-University of Waterloo Research Institute for Aging (RIAl)
Semaphore Lab
Seniors Care Network
Seniors Health Knowledge Network
Sermax
Sheridan Centre for Elder Research
Silver Harbour
Simon Fraser University
TelAsk Technologies Inc.
The Brenda Strafford Foundation
The Chang School of Continuing Education – Ryerson University
Thornebridge Gardens
Triel
Uber
Vancouver Coastal Health Research Institute
Vancouver Public Library
VentureLab
VHA Home HealthCare
Vigilent
Western Ottawa Community Resource Centre
Women’s Brain Health Initiative
Yet Keen Seniors’ Day Centre

Network Investigators

Directly funded by AGE-WELL

Sara Ahmed, McGill University Health Centre
Philippe Archambault, McGill University
Arlene Astell, Ontario Shores Centre for Mental Health Sciences
Claudine Auger, Université de Montréal
Ronald Baeker, University of Toronto
Éric Beaudy, Université du Québec
Carrie Bourassa, First Nations University of Canada
Mark Chignell, University of Toronto
Virginie Cobigo, University of Ottawa
Ryan D'Arcy, Simon Fraser University
Louis Demers, Université de Montréal
Tilak Dutta, Toronto Rehab – UHN
Max Evans, McGill University
Janet Fast, University of Alberta
Fabio Feldman, Fraser Health
Debra Fels, Ryerson University
Shannon Freeman, University of Northern British Columbia
Uwe Glässer, Simon Fraser University
Cynthia Goh, University of Toronto
Rafiq Goubran, Carleton University
Manon Guay, Université de Sherbrooke
Thomas Hadjistavropoulos, University of Regina
John Hirdes, University of Waterloo
Jesse Hoey, University of Waterloo
Kristen Jacklin, Laurentian University
Susan Jaglal, University of Toronto
Mandar Jog, Western University
Jeff Jutai, University of Ottawa
Don Juzwishin, Alberta Health Services
Dahila Kairy, Université de Montréal
David Kaufman, Simon Fraser University
Susan Kirkland, Dalhousie University
Frank Knoefel, Bruyère Research Institute
Karen Kobayashi, University of Victoria
Pia Kontos, Toronto Rehab – UHN

Directly funded by AGE-WELL

Joon Lee, University of Waterloo
Lili Liu, University of Alberta
Lynn McDonald, University of Toronto
Josephine McMurray, Wilfrid Laurier University
François Michaud, Université de Sherbrooke
Bill Miller, University of British Columbia
Ian Mitchell, University of British Columbia
Karyn Moffatt, McGill University
Debra Morgan, University of Saskatchewan
Ben Mortensen, University of British Columbia
Cosmin Munteanu, University of Toronto Mississauga
Emily Nalder, University of Toronto
Goldie Nejat, University of Toronto
Ioannis Nikolaidis, University of Alberta
Megan O’Connell, University of Saskatchewan
Marc Oremus, University of Waterloo
Norm O’Rourke, Simon Fraser University
Rajni Patel, Western University
Hélène Pigot, Université de Sherbrooke
Joelle Pineau, McGill University
Jan Miller Polgar, Western University
Johanne Queenton, Université de Sherbrooke
Stephen Robinovitch, Simon Fraser University
François Routhier, Laval University
Rajni Patel, Toronto Rehab – UHN
Louise Sauvé, TELUQ
Judith Sixsmith, Simon Fraser University
Paul Stoles, University of Waterloo
Eleni Stroulia, University of Alberta
Heidi Sveistrup, University of Ottawa
Babak Taati, Toronto Rehab – UHN
Michel Toussignant, Université de Sherbrooke
Rosalie Wang, University of Toronto
Anthony Wensley, University of Toronto
Michael Wilson, McMaster University
Herbert Yang, University of Alberta
Paul Yoo, University of Toronto
Network Community
as of September 2016

Board of Directors
Mike Harcourt, [Chair] President, Harcourt Enterprises Inc.
Barbara Stymiest, [Vice-Chair] Corporate Director
Jim Brookes, Retired Telecom Executive
Diane Finegood, President and CEO, Michael Smith Foundation for Health Research
Peter Goodhand, Executive Director, Global Alliance for Genomics and Health
Justine Jackson, Executive Vice-President & Chief Financial Officer, University Health Network
Susan Kirkland, Professor, Dalhousie University
Mimi Loew-Young, Former CEO, Alzheimer Society of Canada
Alan Mackworth, Professor, University of British Columbia
Alex Mihailidis, Scientific Director, AGE-WELL
Andrew Petter, President and Vice-Chancellor, Simon Fraser University
John Reid, Director, Technology Development and Commercialization Office, University Health Network
Susan Thorning, Retired Non-Profit Executive
Aaron Unger, Corporate Director
Bridgette Murphy, [Observer] Managing Director, AGE-WELL
Rick Schwartzburg, [Observer] Senior Program Manager, NCE Secretariat
Andrew Sixsmith, [Observer] Scientific Director, AGE-WELL

International Scientific Advisory Committee
Alan Mackworth, [Chair] Professor, University of British Columbia
Anthea Tinker, [Vice-Chair] Professor, King’s College London, UK
James Barlow, Professor, Imperial College Business School, UK
Dieter Fox, Professor, University of Washington
Jeffery Kaye, Professor, Oregon Health & Science University
Anne Martin-Matthews, Professor, University of British Columbia
Lawrence Normie, Consultant, Advanced Technologies Evaluation & Planning
Nick Roy, Professor, Massachusetts Institute of Technology (MIT)
Alex Mihailidis, [Observer] Scientific Director, AGE-WELL
Bridgette Murphy, [Observer] Managing Director, AGE-WELL
Rick Schwartzburg, [Observer] Senior Program Manager, NCE Secretariat
Andrew Sixsmith, [Observer] Scientific Director, AGE-WELL

Research Management Committee
Alex Mihailidis, [Chair] Scientific Director, AGE-WELL
Ronald Baecker, Professor Emeritus, University of Toronto; Co-Founder, famli.net; Co-Lead AGE-WELL WP4 [TECH-APS]
Louise Demers, Professor, Université de Montréal; Co-Lead AGE-WELL WP2 [NEEDS-CG]
Geoff Fernie, Institute Director, Research, Toronto Rehab – UHN; Co-Lead AGE-WELL CC2 [TECH-TRANS]
Nadine Henningsen, Executive Director, Canadian Home Care Coalition
Amy Hwang, President (Outgoing), HQP Advisory Committee; PhD Candidate, University of Toronto
Susan Jagial, Professor, University of Toronto; Lead AGE-WELL CC4 [TRAIN]
Jeff Jutai, Professor, University of Ottawa; Co-Lead AGE-WELL WP8 [POLICY-TECH]
Ayse Kuspinar, President, HQP Advisory Committee; Postdoctoral Fellow, University of Waterloo
Karen Kobayashi, Professor, University of Victoria; Co-Lead AGE-WELL CC1 [K-MOB]
Pia Kontos, Senior Scientist, Toronto Rehab – UHN; Co-Lead AGE-WELL CC3 [T-WORK]
Jim Mann, Community Member and Alzheimer’s advocate
Richard McAloney, Director, Technology Management & Entrepreneurship, Impact Centre, University of Toronto
Cosmin Munteanu, Professor, University of Toronto Mississauga
Milos Popovic, Senior Scientist, Toronto Rehab – UHN; Professor, University of Toronto
Andrew Sixsmith, Scientific Director, AGE-WELL
Bridgette Murphy, [Observer] Managing Director, AGE-WELL
Rick Schwartzburg, [Observer] Senior Program Manager, NCE Secretariat
Network Community
as of September 2016

Knowledge and Technology Exchange and Exploitation (KTEE)
Advisory Committee

Alex Mihailidis, (Chair) Scientific Director, AGE-WELL
Geoff Fernie, Institute Director, Research, Toronto Rehab – UHN; Co-Lead AGE-WELL CC2 (TECH-TRANS)
Karen Kobayashi, Professor, University of Victoria; Co-Lead AGE-WELL CC1 (K-MOB)
Laurent Moreno, Business Development and Partnerships Manager, AGE-WELL
Bridgette Murphy, Managing Director, AGE-WELL
John Reid, Director, Technology Development and Commercialization Office, University Health Network
Andrew Sixsmith, Scientific Director, AGE-WELL

Community Advisory Committee (Executive)

Susan Thorning, (Chair) Retired Non-Profit Executive
Mary Lou Ackerman, VP Business Development, Saint Elizabeth Health Care
Ron Beleno, Independent Member & Caregiver
Sue Cragg, Executive Director, Seniors Health Research Network
Don Fenn, President/CEO, Caregiver Omnimedia Inc
Josephine Grayson, Independent Member, Care Watch
Dan Kohl, Executive Director, Regina Qu’Appelle Health Region
Kirk Kylen, Director, Ontario Brain Institute
Sandra McKay, Manager, Research & Evaluation, VHA Home HealthCare
Alex Mihailidis, Scientific Director, AGE-WELL
Michelle Porter, Director, Centre on Aging, University of Manitoba
Nalini Sen, Research Program Director, Alzheimer Society of Canada
Andrew Sixsmith, Scientific Director, AGE-WELL
Bridgette Murphy, (Observer) Managing Director, AGE-WELL

Industry Advisory Committee (Executive)

Peter Goodhand, (Chair) Executive Director, Global Alliance for Genomics and Health
Trish Barbato, Senior Vice President, Revera Inc.
Phil Davis, Independent Member
David Dougall, Director, BlackBerry
Tim Fielding, Product Development Manager, MDA
Sanjeev Gill, National Industry Executive, IBM Canada
Adam Gryfe, Director, Strategic Initiatives, Clearpath Robotics Inc.
Mike Mahoney, Senior Engineering Manager, Mircom Group
Jolene McNeil, Director, Hospital to Home Canada, Philips Healthcare
Alex Mihailidis, Scientific Director, AGE-WELL
Paula Neves, Vice President, Extendicare Canada
Andrew Sixsmith, Scientific Director, AGE-WELL
Bryan Watson, Partner, FlowVentures
Bridgette Murphy, (Observer) Managing Director, AGE-WELL

HQP Advisory Committee

Ayse Kuspinar, (President) Postdoctoral Fellow, University of Waterloo
Aaron Yurkewich, (Vice-President) PhD Candidate, University of Toronto
Randa Dalle, Research Assistant, University of British Columbia
Amy Hwang, PhD Candidate, University of Toronto
Shehroz Khan, Postdoctoral Fellow, Toronto Rehab – UHN
Maxime Lussier, Postdoctoral Fellow, Université de Montréal
Mackenzie Martin, Undergraduate Student, University of Alberta
Heather McNell, PhD Candidate, University of Waterloo
Afroza Sultan, PhD Candidate, McGill University
Kim van Schooten, Postdoctoral Fellow, Simon Fraser University
Network Community
as of September 2016

Crosscutting Advisory Committee

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