



CENTRE FOR AGING
+ BRAIN HEALTH
INNOVATION
Powered by Baycrest



Better aging + brain health

2018–19 Annual Report

CABHI is a solution accelerator,
helping drive innovation in the
aging and brain health sector.



MISSION

To accelerate the development, validation, commercialization, dissemination, and adoption of innovative products, services, and best practices to support brain health and aging.

VISION

A world in which people can age in the setting of their choice, maintaining their cognitive, emotional, and physical well-being as well as their independence as long as possible.



IMPROVING THE LIVES OF THE WORLD'S SENIORS

Driving Innovation in the Brain Health Sector

When the Centre for Aging + Brain Health Innovation (CABHI) was founded, we set out with a clear mission: to help ease the challenges of dementia -- one of the most urgent public health challenges faced by a global society living longer than ever before.

We are making remarkable progress.

CABHI is successfully filling a critical, unmet need by accelerating innovations developed by researchers, point-of-care workers, industry, and seniors' care providers. Most importantly, we are getting those innovations into the hands of those who need them as quickly as possible.

CABHI is also playing a key role in helping the Government of Canada implement the National Strategy for Alzheimer's Disease and Other Dementias Act. Our involvement recognizes Baycrest as a host organization for its leadership in care and research in aging and brain health and as the home of the Rotman Research Institute, one of the world's most acclaimed centres for the study of aging and neuroscience.

Through its contributions over the past four years, CABHI has elevated Ontario's and Canada's reputation as leading hubs of innovation and economic growth. We now have over 210 projects in our pipeline, we have increased the number of trial sites across North America to over 100, and we have engaged more than 37,000 older adults and their families in our projects.

CABHI has enhanced the culture of innovation in the seniors' care sector, and increased the receptivity of organizations to pilot and adopt innovation. Companies in our pipeline are prospering, creating jobs, attracting funding, building Canadian connections, and establishing Canadian headquarters for foreign companies.

Thank you to our partners, investors and supporters. Your collaboration is essential to the important difference we are making in the lives of seniors in Ontario, Canada and around the world.

We are proud of CABHI's momentum and look forward to working with you to amplify our impact.

William E. Reichman, MD

President and Chief Executive Officer

Baycrest and Centre for Aging + Brain Health Innovation

Allison Sekuler, PhD

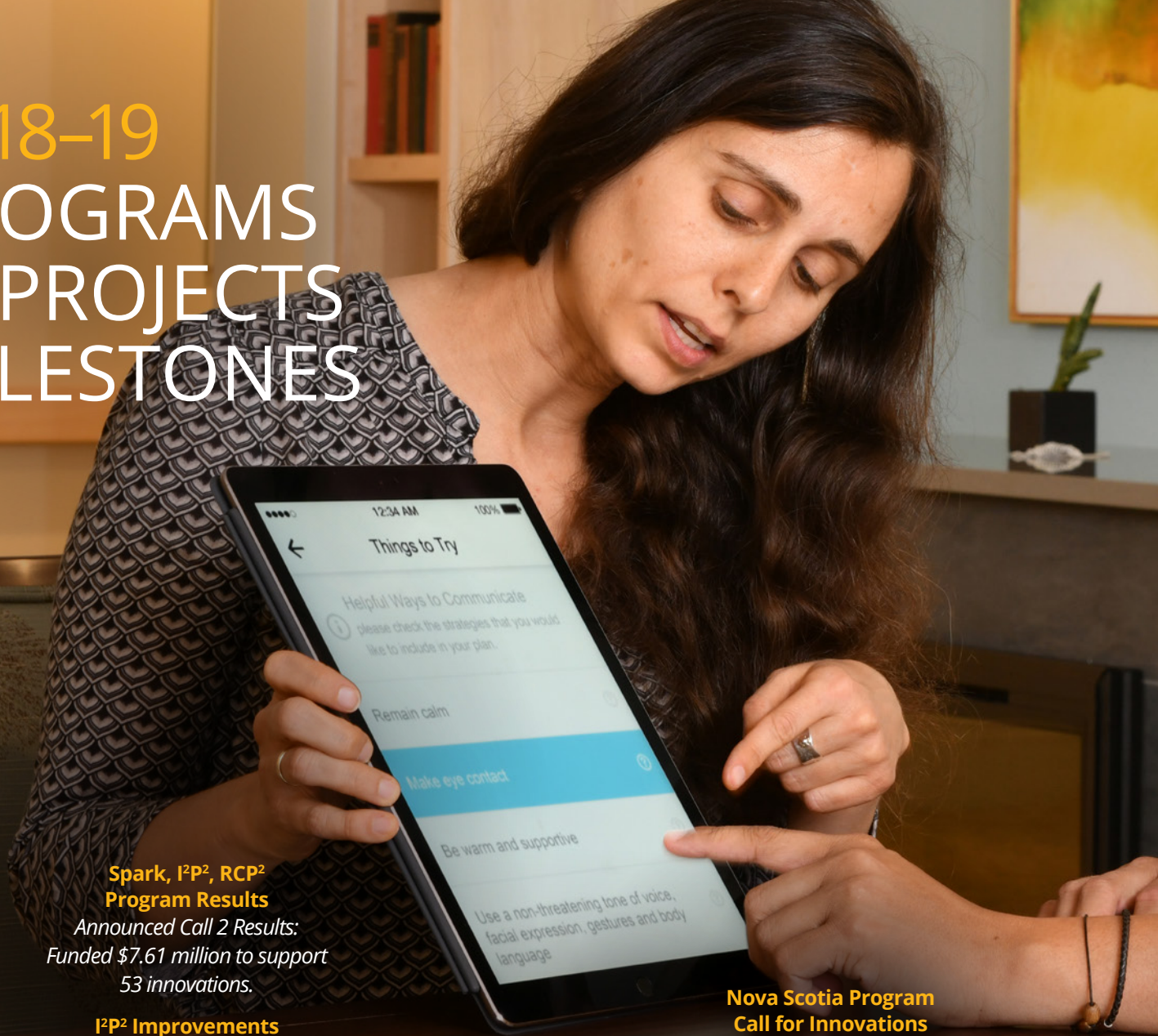
Vice-President Research and Sandra A. Rotman Chair in Cognitive Neuroscience

Baycrest

Managing Director

Centre for Aging + Brain Health Innovation and Rotman Research Institute

2018–19 PROGRAMS *and* PROJECTS MILESTONES



Spark, I²P², RCP² Program Results

*Announced Call 2 Results:
Funded \$7.61 million to support
53 innovations.*

I²P² Improvements

*Hosted I²P² Pitch Day: In an improved
application format, shortlisted
companies pitched to a panel of
subject matter experts.*

Commercialization and Knowledge Mobilization Support

*Launched Acceleration Services
to support wider adoption and
commercialization.*

RCP² Call for Innovations

*Announced Call 3: Funding up to
\$2 million to support advanced-
stage innovations.*

Spark Program Communications & Engagement

*Created a digital
collaboration platform,
launched a monthly
eBlast, and "Community of
Innovation" podcasts for
Spark innovators.*

Nova Scotia Program Call for Innovations

*New Program Announced:
Funding up to \$400,000 for
researcher/clinician teams to
support advanced-stage innovations.*

Saskatchewan Program Call for Innovations

*New Program Announced:
Funding up to \$300,000 to support
early to advanced-stage solutions.*

Quebec Program Call for Innovations

*New Program Announced:
Funding up to \$800,000 to support
advanced-stage innovations.*

2018

APR.

MAY

JUN.



CABHI Trial Sites Grew
CABHI trial sites increased to 100.

AUG.

Spark Program Results
Announced Call 3 Results:
Funded \$1.45 million to support 31 innovations.

SEPT.

New Brunswick Program Call for Innovations
Announced Call 2:
Funding up to \$500,000 to support advanced-stage innovations.

Alberta Program Call for Innovations
New Program Announced:
Funding up to \$500,000 to support market-ready innovations.

OCT.

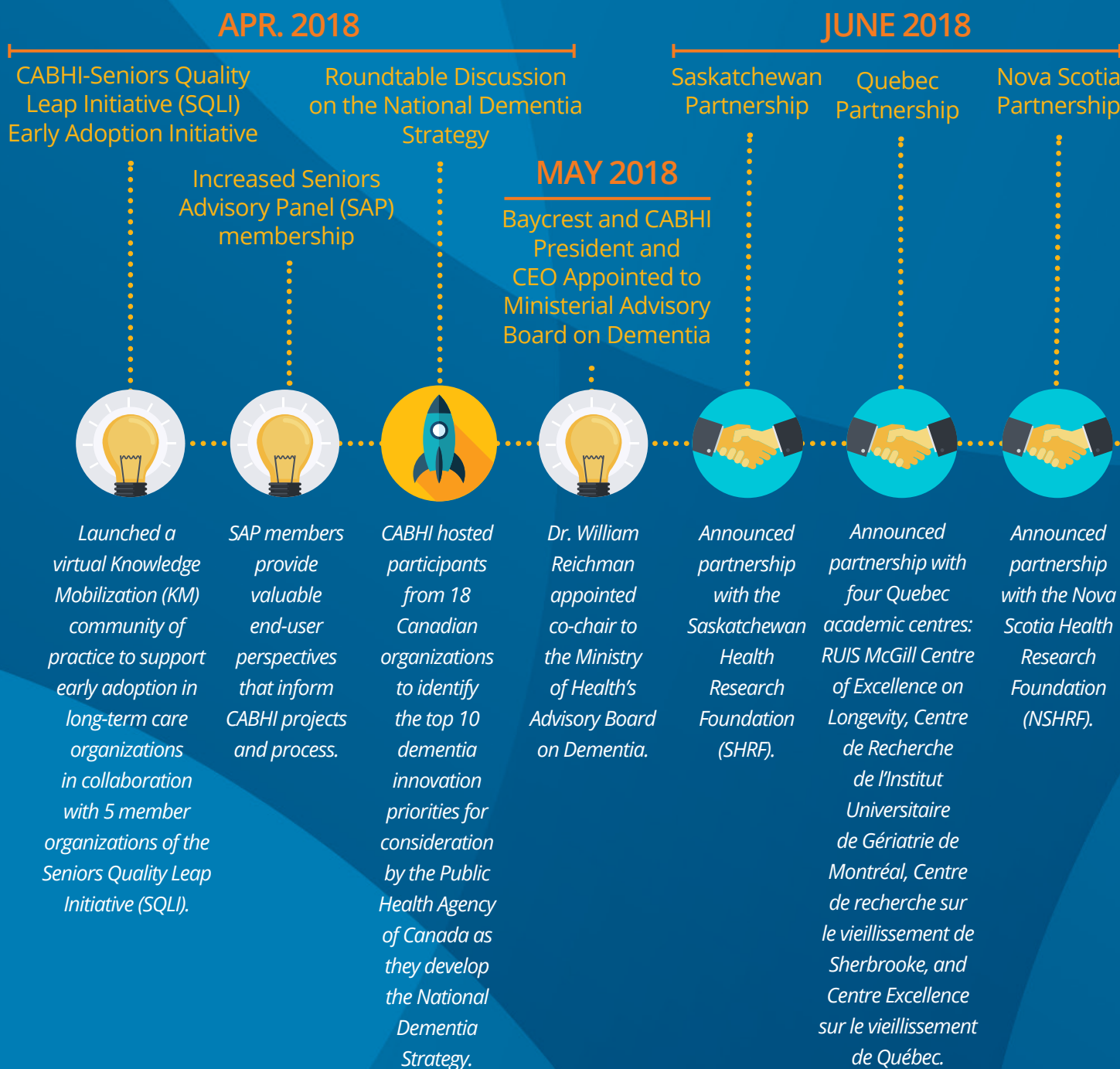
I²P², RCP² Program Results
Announced Call 3 Results: Funded \$4.26 million to support 15 innovations.

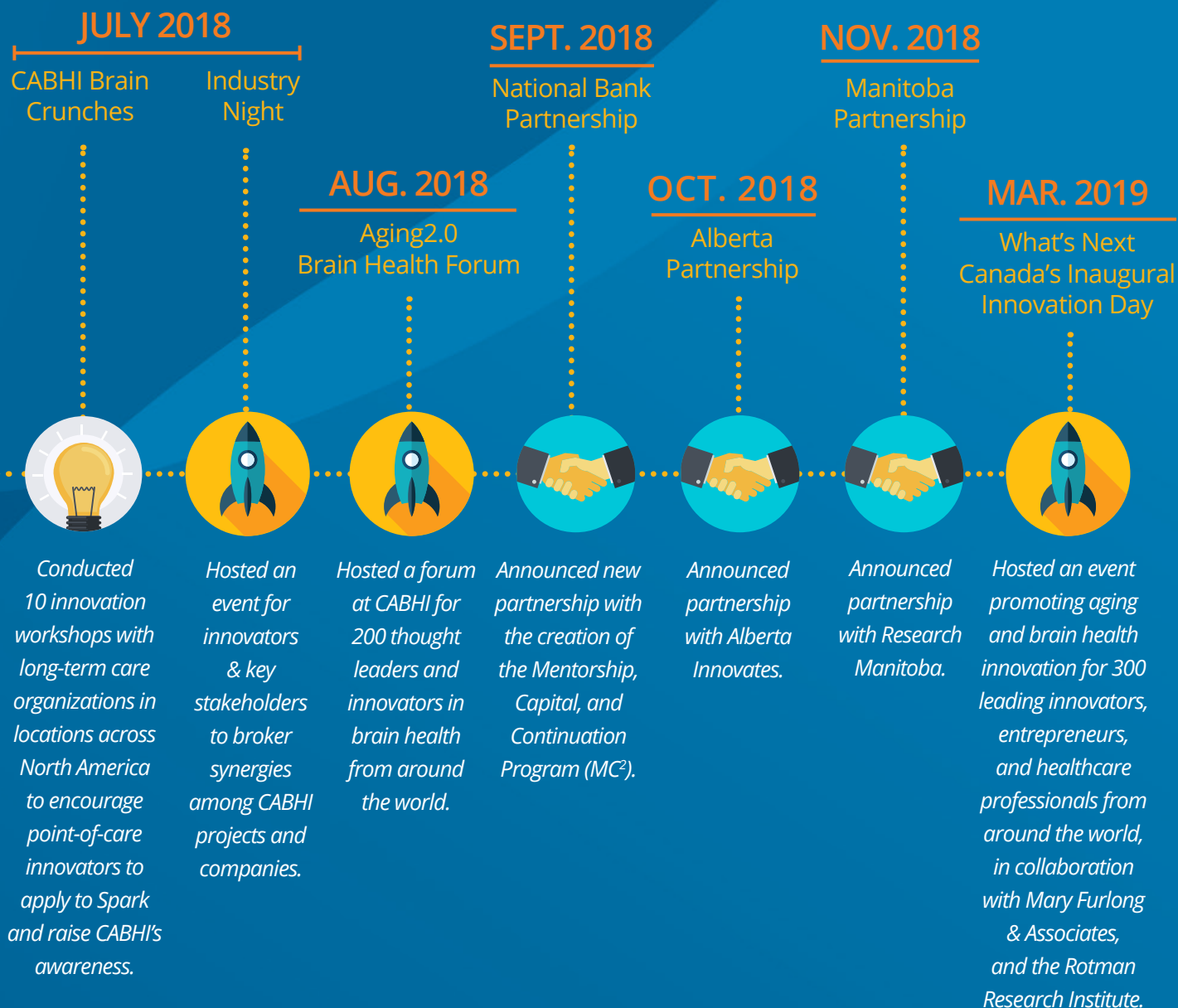
CABHI innovation Projects Grew
CABHI innovation projects increased to 200.

Manitoba Program Call for Innovations
New Program Announced: Funding up to \$400,000 to support market-ready innovations.

NOV.

2018–19 PARTNERSHIPS and REACH MILESTONES





project spotlight

Young onset dementia program gives Canadian families hope: ***YouQuest***





**WHEN CINDY MCCAFFERY'S
HUSBAND BEGAN
STRUGGLING AT WORK,
SHE KNEW SOMETHING
WAS OFF.**

"He was incredibly computer-savvy," Cindy says of her husband John, who worked as an estate administrator at a national bank. "So, it was strange when he failed the software training."



Young onset dementia, a term used to describe symptoms of dementia that start before the age of 65, accounts for up to 8% of all dementia cases.*

According to the Alzheimer Society of Canada, 16,000 Canadians live with the condition. Those affected are usually in their 40s or 50s, meaning their family life, careers, and financial status are heavily affected. On top of this, long-term care homes can't accommodate the needs of those with young onset dementia, who are often highly functioning and physically active – making them an underserved dementia population.*

Together, the Calgary couple began a long and arduous medical journey to find out what was wrong. The answer? At 48, John had young onset dementia. He had no choice but to leave his job. The family downsized their home. And Cindy and John grappled to explain the diagnosis to their children, 12 and 17 at the time.

Frustrated at the lack of available, age-appropriate programs, and worried John would decline without any stimulation at home, Cindy decided to take matters into her own hands. She and her partner Myrle Bulman co-founded **YouQuest**, a community service designed to fill the gap for those living with young onset dementia in the Calgary area.

The YouQuest pilot program launched in September 2018, supported by CABHI. The service provides meaningful group activities one day a week tailored

to the needs of individuals living with young onset dementia, including physical exercise, music sessions, outings exploring the city, and social coffee chats. YouQuest is purposefully designed to promote independence, giving participants choices about everything from what exercise activity they'll join to what they'll eat that day. Participants currently range in age from early 50s to 64.

The need for YouQuest is clear. The service gives family caregivers, who often experience burnout, a day of respite and peace of mind knowing that their loved one is safe and cared for. Though only 8 months into their pilot year, YouQuest already has provided 2,380 caregiver respite hours – an estimated value of \$83,300 in private care.

By helping its participants live at home, YouQuest reduces the risk of those living with young onset dementia from entering long-term care prematurely. YouQuest also creates health system capacity by leaving space for seniors who require formalized care in adult day support programs or long-term care facilities.

YouQuest is supported by CABHI's Spark Program, which provides funding for the development and testing of early-stage innovations. Before CABHI funding was secured, says co-founder Myrle, YouQuest was only on the precipice of launching. CABHI support became "the absolute catalyst to get this out of the gate."

Now, not even a year since the program started, the waitlist of families continues to grow – proof of the need for innovations like YouQuest to be offered across the health sector. The co-founders hope to expand the service to two or three days per week in the coming year, as well as increase the number of participants after the pilot evaluation.

In the meantime, Cindy and Myrle focus on the vibrant YouQuest community of participants – which includes John, families, staff and volunteers – which has grown closer through their support of one another, in just a matter of months.

It's been 12 years since John's diagnosis. The McCafferys know that whatever obstacles come their way, they'll have the YouQuest support system alongside them the whole way through.

* Alzheimer Society of Canada "Young onset dementia" Alzheimer Society of Canada, 2019 alzheimer.ca/en/Home/About-dementia/Dementias/young-onset-dementia

END-USER IMPACT



CABHI enhances the health and well-being of older adults living with and at-risk for dementia, and their caregivers.

338 PRACTICES, PRODUCTS, PROCESSES, AND SERVICES DEVELOPED

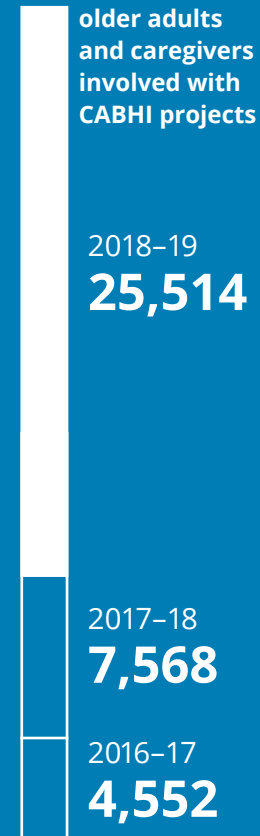


92% of all surveyed respondents reported CABHI positively impacted their ability to develop new tools or technology

95% of all surveyed respondents reported CABHI positively impacted their ability to engage in new clinical research methodologies

91% of surveyed healthcare respondents reported CABHI positively impacted their ability to conduct evaluation and validation directly with end-users

37,634



27 PROJECTS WITH GREATER THAN 100 MEMBERS OF THE PUBLIC ENGAGED

Data sourced from The Evidence Network 2019 annual survey, project key performance indicator reports, and CABHI administrative data

**AN ESTIMATED 564,000
CANADIANS ARE CURRENTLY
LIVING WITH DEMENTIA.**

*As of 2016, the combined healthcare system and out-of-pocket caregiver costs each year related to Alzheimer's are estimated at \$10.4 billion per year. And by 2031, this figure is expected to increase by 60 percent, to \$16.6 billion annually.**





project spotlight

RetiSpec

aims to improve
lives—and the
healthcare system



Alzheimer's is the most common form of dementia among the elderly – yet there's no standard screening system for the disease. It's difficult to diagnose Alzheimer's early, which means treatment often occurs after the brain has suffered irreversible damage. Not only is this devastating for families, but as our population ages the heavy impact of Alzheimer's on the healthcare system increases.

Ontario-based start-up **RetiSpec** is looking to change that.

Recent scientific evidence has demonstrated that the signs (or 'biomarkers') of Alzheimer's normally found in the brain can also be found in the retina. What's more, these biomarkers identify those at risk of developing the disease years before symptoms appear. RetiSpec has developed a non-invasive eye scanner that uses artificial intelligence to detect these biomarkers and identify people at risk of developing the disease. The technology is designed to connect to standard ophthalmological equipment that's available at most clinics, making it accessible and easy to implement.

"Current detection methods are expensive and invasive, and not suited to routine testing. Our goal is to identify the people that are at risk for Alzheimer's so they can be treated at the right time, before it's too late," says Eliav Shaked, CEO of RetiSpec.

"It is crucial to understand that if you detect Alzheimer's disease before signs of cognitive decline, it provides an important window of opportunity for timely therapeutic interventions, so the progression of the disease can be slowed or even prevented."

CABHI is working with RetiSpec to accelerate its technology in Ontario and Canada. Through the Industry Innovation Partnership Program (I²P²), CABHI matched RetiSpec with the Toronto Memory Program, a medical facility with one of the largest clinical trial programs for Alzheimer's in the country. The CABHI-funded RetiSpec trial will determine the safety and effectiveness of the technology through human clinical testing, and help spur commercialization of the technology in Ontario and Canada – to get it into the hands of those who need it most.

"CABHI's support has enabled us to do a lot more than we expected in a short time," Shaked says. "It's enabled us to move faster to market with this project that's pivotal to our research and development, to our business development, and to our commercialization process."

Though the company has global ties – RetiSpec is conducting a concurrent study with Israeli hospital Sheba Medical Center – Shaked says it was important to start local.

"Collaborating with CABHI is allowing us to immediately help Canadians in our own backyard. We're doing a trial here in Ontario so we can get our technology Canada-approved and start adding value today."

Not only does the technology have the potential to drastically improve the lives of aging Canadians, it could decrease Alzheimer's patients' long-term medical needs – thereby saving the healthcare system money and resources. With CABHI's support, RetiSpec is hopeful its technology will make a positive health and economic difference on people living with Alzheimer's today.



HEALTH SYSTEM

CABHI supports a sustainable, efficient, and cost-effective health system through the creation and dissemination of scalable solutions that address the major public health challenge of dementia.

27,889

audience engaged in knowledge exchange activities and events

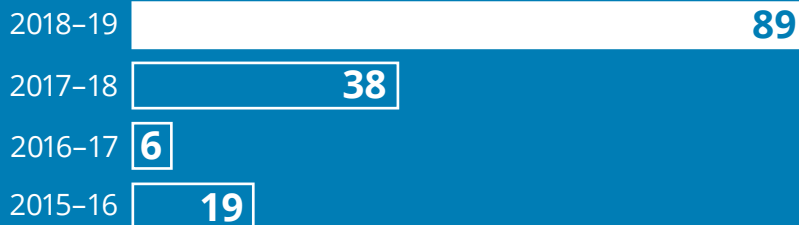
2018-19
16,662

2017-18
6,999

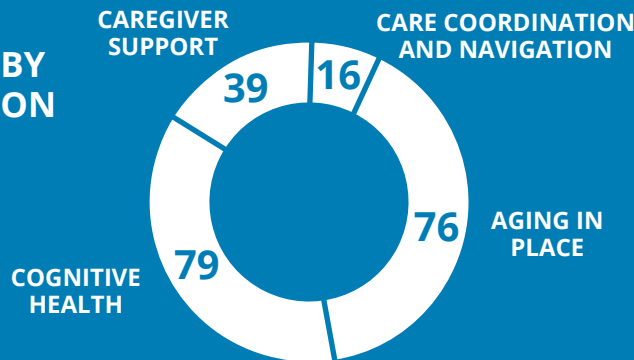
2016-17
4,228

152

PRACTICES, PRODUCTS, PROCESSES, AND SERVICES INTRODUCED INTO USE



CABHI PROJECTS BY INNOVATION THEME



88%

of surveyed healthcare respondents reported CABHI positively impacted their ability to engage in new clinical practices

97%

of surveyed healthcare respondents reported CABHI positively impacted their ability to develop new or improved healthcare practices for practical application

MORE THAN 2/3

of surveyed healthcare respondents reported CABHI positively impacted their ability to influence healthcare guidelines, policies, or regulations

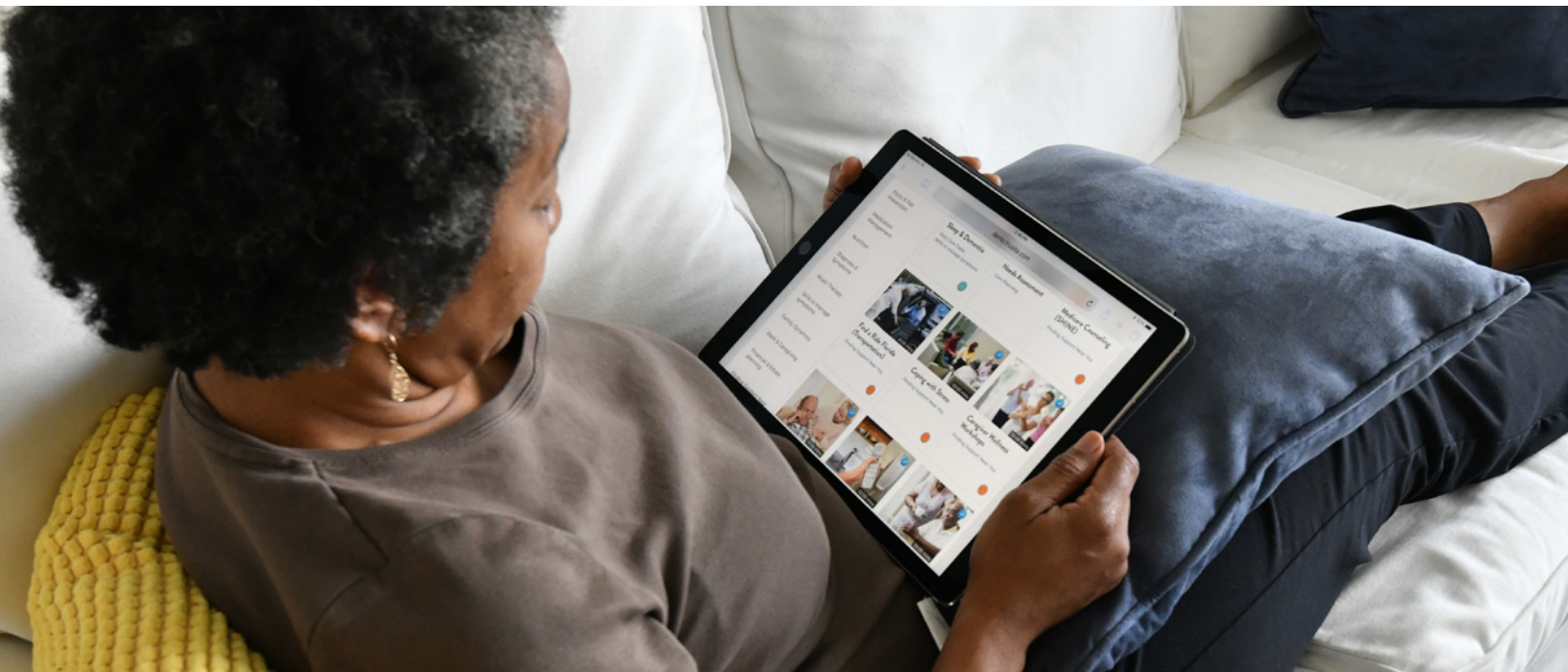
Growing Canadian companies: **Trualta** expands reach at home and abroad





**FAMILY MEMBERS
PLAY AN
INCREASINGLY
IMPORTANT ROLE IN
PROVIDING SAFE AND
COMPETENT CARE
FOR LOVED ONES
WITH DEMENTIA
LIVING AT HOME.**

Informal caregivers often provide care while juggling a career and family responsibilities, which can take a toll on their mental health, well-being, and finances. They have limited access to training on how to provide quality care, and that gap is particularly notable post-discharge from hospital. Enter Canadian company Trualta.



Trualta creates training and support tools, conveyed through bite-sized video clips, to help family caregivers build the skills they need to assist loved ones in continuing to live at home safely. Video topics include managing challenging behaviours such as wandering and lowering the risk of falls, which can be especially dangerous for individuals living with dementia.

Trualta came to CABHI with a developed solution that had not yet been validated in a real-world setting, limiting its ability for adoption. CABHI arranged consultations with our Seniors Advisory Panel, a consumer panel comprised of older adults with lived experience in aging and caregiving, who provided critical feedback on the solution regarding usability and additional suggested content.

Funding from CABHI's Industry Innovation Partnership Program (I²P²) is enabling Trualta to demonstrate that its product improves health outcomes for individuals living with dementia, reduces the burden on their caregivers, and prevents re-admission to hospital emergency rooms – thus, reducing the extent of hallway healthcare.

CABHI has directly helped Trualta magnify its national and international reach, while expanding its roster of investors and employees. CABHI connected

Trualta with two trial sites, one in Toronto and another in Florida, where the company is testing its product with more than 100 family caregivers.

"The ability to fund a trial in Canada and the United States is something that is distinctive about CABHI, compared to other funding applications we have underway," says Trualta founder Jonathan Davis. "Collaborating with CABHI has been game-changing. It's allowed us to set the groundwork for significant expansion across Canada and the US."

CABHI also introduced Trualta to potential customers in Canada and the United States to increase their revenue stream. A Kansas City agency became their first US customer, which opened channels to another US opportunity, currently in contract. These contacts then assisted Trualta with identifying 600 potential American agencies to target with significant potential for sales, helping the company expand and bringing income to the Ontario-based company. CABHI is also introducing Trualta to venture capitalists (VCs) and banks to secure financing.

CABHI even helped build part of Trualta's staff. Through CABHI facilitation, Trualta was introduced to and subsequently hired highly skilled staff.

CABHI is facilitating the export of this Canadian innovation across Canada and the US, and it has achieved all of these milestones in less than a year. With CABHI's support, Trualta is on its way to making a tangible impact in the lives of family caregivers and their loved ones living with dementia in Ontario, Canada, and around the world.



COMMERCIALIZATION

CABHI increases the success of high-potential companies engaged in the aging, brain health, and dementia care markets.

65%

of surveyed company respondents have received at least

\$100K

in new private investments

35%

of surveyed company respondents have received at least

\$500K

in new private investments

24%

of surveyed company respondents have received at least

\$1M

in new private investments

485+

Full Time Equivalent Jobs
Funded, 230
Newly Created,
255 Sustained

2018-19

247

2017-18

135

2016-17

57

2016-17

48

\$40M+

SECURED INVESTMENTS
BY CABHI COMPANIES,
EXTERNAL TO
INNOVATION PROJECTS

\$3M+

REVENUES REPORTED IN 2018-19 BY
CABHI COMPANY INNOVATORS

\$37M+

FUNDING
DIRECTED TOWARD
CREATED AND
SUSTAINED JOBS

39

INNOVATOR COMPANIES, ACROSS 6 COUNTRIES,
ENGAGED IN CONTRACTED TRIAL TESTING

Data sourced from The Evidence Network 2019 annual survey, project key performance indicator reports, and CABHI administrative data

A photograph of a middle-aged Black man with a grey beard, wearing a maroon button-down shirt, seated and using a VR headset. A woman's hands are visible adjusting the headset on his head. The background is a plain, light-colored wall.

project spotlight

Seniors Quality Leap Initiative (SQLI)

drives adoption of
leading-edge innovations
in seniors' care



**ADOPTION REMAINS
ONE OF THE BIGGEST
BARRIERS TO
INNOVATION.**

*Even the best ideas can
get stuck if provider
organizations do
not have the capacity to
take up something new
and put it into practice.*

In 2016, CABHI formed a strategic partnership with the **Seniors Quality Leap Initiative (SQLI)**, a group of 15 leading long-term care organizations across North America collaborating to improve clinical quality and safety for seniors. Over the past year, CABHI engaged interested SQLI member organizations in an Early Adoption Initiative. The Initiative was designed to facilitate the adoption of CABHI-supported innovations into SQLI member organizations, while also creating a space in which all partners gain a fuller understanding of the factors that enable organizational adoption and innovation.

Through the Early Adoption Initiative, participating SQLI member organizations selected innovations and practices that addressed their needs from the CABHI pipeline, and sought to implement and adopt them. The selected innovations spanned a dance program for older adults, to a seniors' peer support group, to an empathy-building virtual reality program for dementia care staff, among others.

Five SQLI organizations participated: Actionmarguerite (Winnipeg), CapitalCare (Edmonton), the Perley and Rideau Veterans' Health Centre (Ottawa), San Francisco Campus for Jewish Living, and Westminster Communities of Florida.

CABHI supported the organizations in selecting innovations that met their needs, and facilitated access to these innovations for a period of six to nine months. CABHI also provided on-site implementation training, education, and tools; regular check-ins; monthly community of practice sessions with the cohort; and pre-procurement support for some direct costs associated with accessing the innovations.

The result? A blossoming culture of innovation across the five sites. Organizations benefited from the opportunity to enhance their comfort and capacity to actively implement the innovations.

They were also able to experience firsthand what does and doesn't work when it comes to adopting new innovations, through open dialogue across all participating members within the cohort.

Edmonton's CapitalCare was one of the participating organizations. CapitalCare's 2,700 staff provide care and services for nearly 1,400 elderly and disabled adults living in their ten care homes. The organization chose to introduce the CABHI-supported Java Group Programs, which guide long-term care staff in having peer support groups for their residents to help them develop and maintain satisfying interpersonal relationships with each other and decrease social isolation.

"Java is a great innovation," says Sheron Parmar, Director, Quality and Transformation at CapitalCare. "The results of the implementation were so overwhelmingly positive that CapitalCare committed to implementing the program in six of its main sites. Within the first three months of the Adoption Initiative, we were providing more than 15 Java Clubs throughout six of our centres. We had wonderful support from CABHI to help us do this."

The initiative also provided some organizations the opportunity to self-reflect.

"This experience reminded our organization that the adoption and sustainability process is more complex than we thought," says Mario Lemay, Director of Organizational Effectiveness. "It's allowed us to pinpoint our challenges and consciously work toward strengthening our capacity in this area," added Peggy Cmiel, Director of Clinical Operations, at San Francisco Campus for Jewish Living.

There is now a second round of the Early Adoption Initiative in the works, which will build and expand on the success of the first.

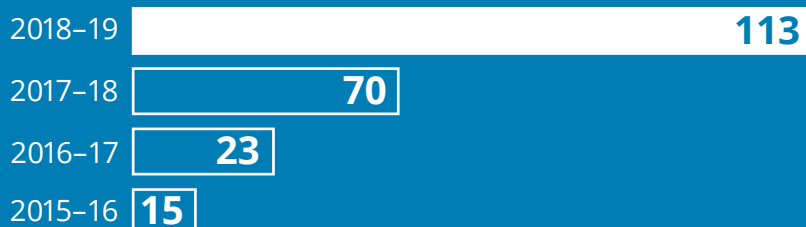
As CABHI sources and accelerates the most promising innovations to shape the future of healthy aging, it's equally important to make sure healthcare organizations are ready and able to adopt them. Ultimately, the CABHI-SQLI collaboration built a foundational model for a supportive, co-learning partnership that builds and grows receptive cultures of innovation in the seniors' care sector – ready to respond to, and adopt, tomorrow's promising innovations.



CULTURE OF INNOVATION

CABHI builds a strong culture and community of innovation in the seniors' health and residential care sector.

221 PRACTICES, PRODUCTS, PROCESSES, AND SERVICES EVALUATED



1,990

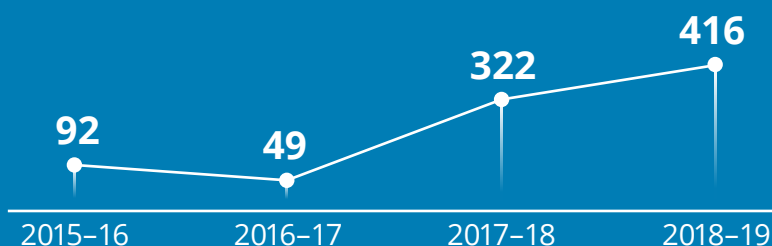
highly-qualified personnel engaged in CABHI projects

2018-19
850

2017-18
845

2016-17
295

PROJECTS HAVE 879 LINKAGES TO PARTNERING AND COLLABORATING ORGANIZATIONS



90%

of surveyed strategic partners reported CABHI has positively impacted the advancement of Canada's technology and innovation ecosystem pertaining to aging and brain health while the remaining 10% anticipate it

87%

of surveyed researcher and developer respondents reported CABHI positively impacted their ability to design multi-partner, world-class research projects

7

regional impact partnership programs supporting **21 projects** to ensure spread across the ecosystem in ways that address unique regional priorities



* Subsequent to the development of this report, partnerships were developed with Japan, the UK, Newfoundland and Labrador, and Northwest Territories.

CABHI'S REACH TO DATE



\$84 M+

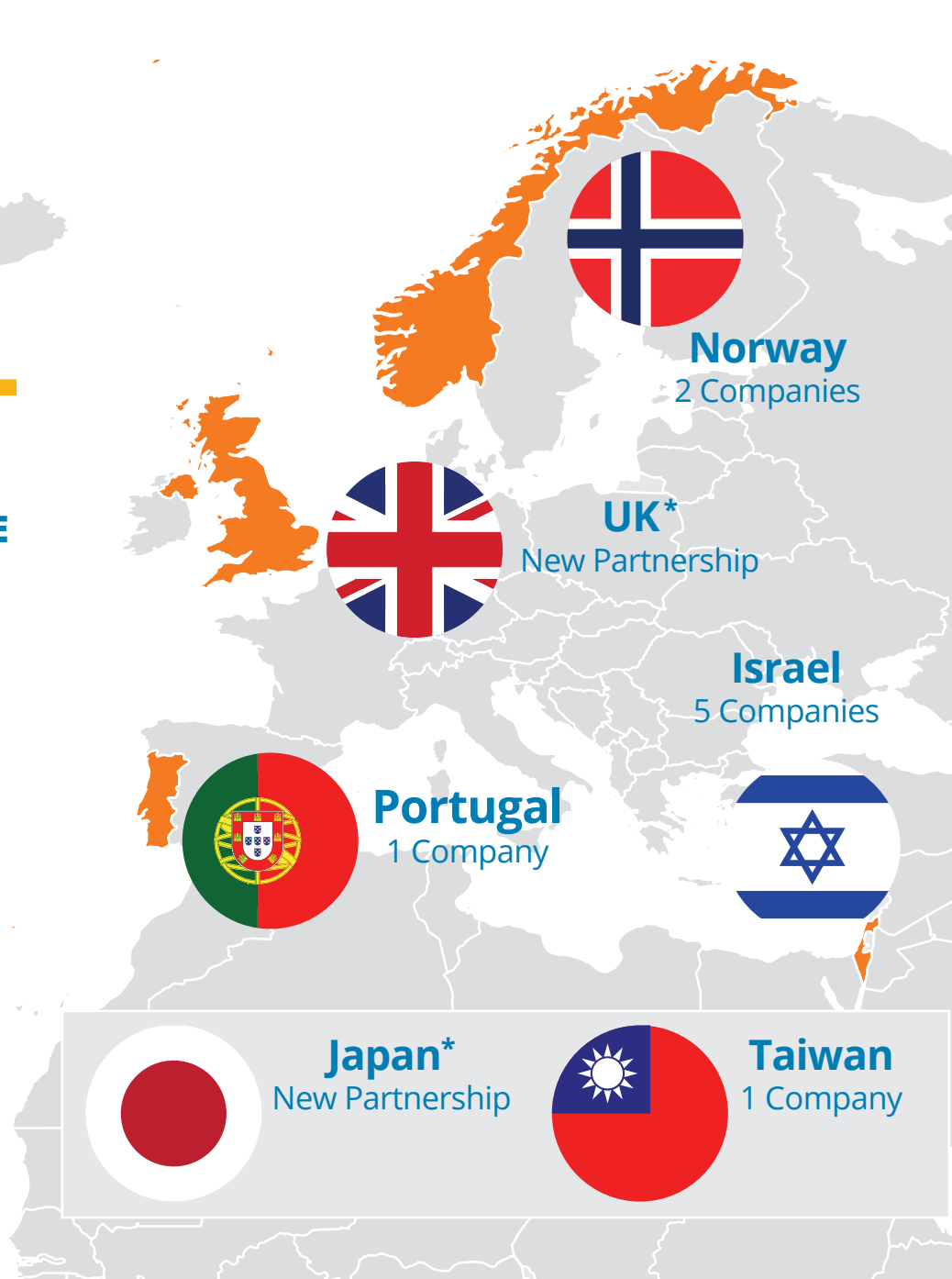
**FUNDING DIRECTED
TOWARDS HEALTHCARE
INNOVATIONS**

88%

of all surveyed respondents reported it would have been at least somewhat difficult to acquire CABHI-style support from another provider

96%

of all surveyed respondents reported that engagement with the CABHI network has been valuable



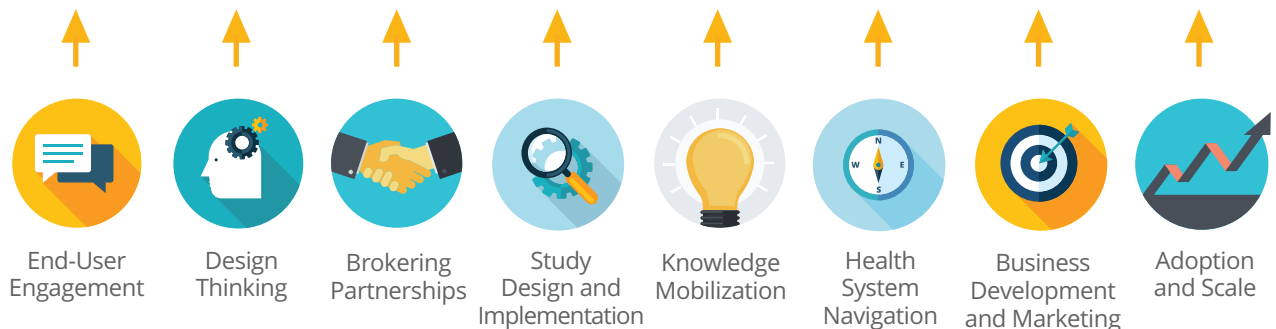
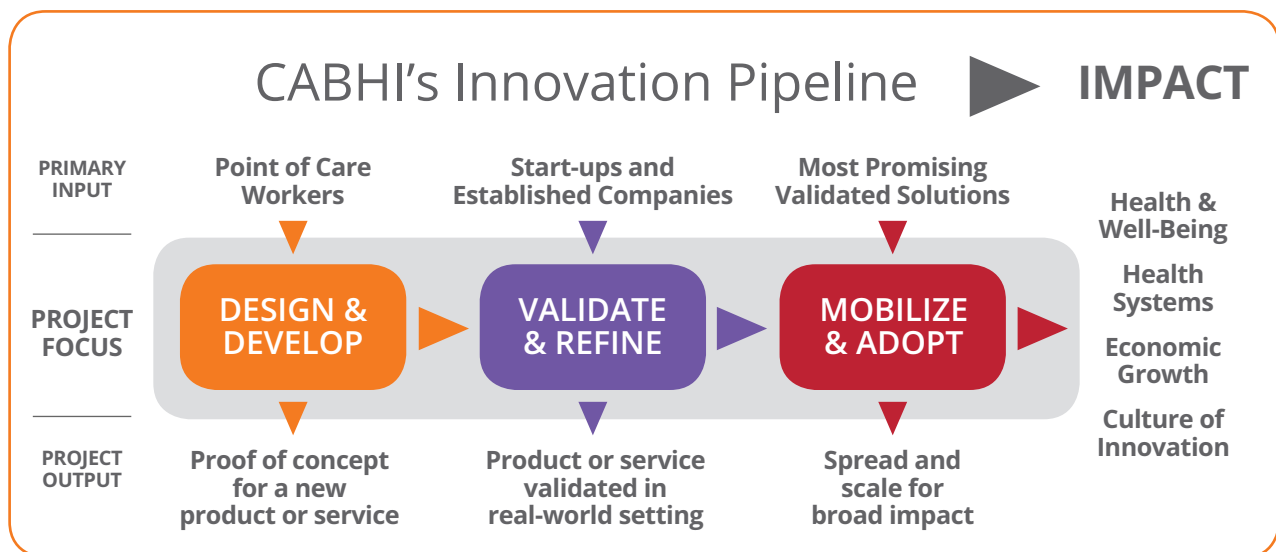
210+
PROJECTS
LAUNCHED



72,000+
CABHI WEBSITE
VISITORS



103+
UNIQUE TRIAL
SITES



Innovation Themes

In just four years, CABHI has become the pre-eminent innovation accelerator in the aging and brain health sector with a targeted focus on dementia. CABHI is also establishing a strong leadership presence beyond Canada's borders.

CABHI achieves its objectives through funding a portfolio of programs and providing specialized acceleration services designed to support the development of new products, services, and practices as they move through the innovation pipeline. CABHI funds solutions that align with these current strategic themes:

Aging in the place of one's choice: Solutions that enable older adults with dementia to maximize their independence, so they can live in their desired setting

Aging Indigenous or rural populations (new): Supporting the healthy aging of Knowledge Keepers or older adults in Indigenous or rural communities

Caregiver support: Solutions that support informal or formal caregivers in their care for older adults living with dementia

Care coordination and navigation: Solutions that help older adults with dementia, caregivers, and healthcare providers coordinate care and care transitions

Cognitive health: Solutions that improve brain health or that support the identification and assessment of adults at risk for developing dementia or cognitive impairment

CABHI's Focused Program Impact

In 2018–19, we further refined the focus of our funding programs. CABHI awarded a total of \$13.2 million to fund an additional 73 projects. In our Spark, I²P², and RCP² programs, we greatly improved engagement during the application and review process. The introduction of brain crunch seminars during the application phase allowed us to improve the awareness and understanding of our programs, which led to greater quality of applications and increased geographic spread. The inaugural I²P² Pitch Day enabled reviewers to engage directly with applicants, improving and informing the selection process. We signed partnerships with five additional provinces, bringing the total to seven, enabling us to reach populations that typically have few opportunities to innovate. Overall, these targeted improvements have resulted in a more diverse and higher quality portfolio of applicants and projects.



Core Programs



Spark Program

Recognizing that the best ideas often come from individuals working at the point-of-care, Spark captures and nurtures grassroots ideas created by point-of-care and service delivery staff. The program provides funding up to \$50,000 per project to support the development and testing of early-stage innovations within CABHI's associated network of healthcare and service provider organizations.

CALL 1	CALL2	CALL 3
31 Projects	36 Projects	31 Projects
\$1.46M	\$1.73M	\$1.45M
FUNDING AWARDED	FUNDING AWARDED	FUNDING AWARDED



Industry Innovation Partnership Program (I2P2)

Bridging the gap between innovation and adoption by connecting industry with trial partners and supporting them through validation. Innovators obtain robust evidence in real-world care settings to inform commercialization decisions, and seniors benefit from early opportunities to test new products and services. I2P2 provides funding to support trial partner costs up to \$500,000 with matching funds for industry partner.

CALL 1	CALL2	CALL 3
7 Projects	10 Projects	10 Projects
\$1.50M	\$3.29M	\$2.29M
FUNDING AWARDED (matched by industry)	FUNDING AWARDED (matched by industry)	FUNDING AWARDED (matched by industry)



Researcher-Clinician Partnership Program (RCP2)

Connecting practicing clinicians with researchers, RCP2 helps partners refine, test, validate, and disseminate innovative products and services in real-world settings, translating research discoveries to clinical impact. The program promotes collaboration during all stages of innovation development to help improve uptake on implementation. RCP2 provides up to \$500,000 in funding per project to the host institution.

CALL 1	CALL2	CALL 3
9 Projects	7 Projects	5 Projects
\$4.07M	\$2.59M	\$1.98M
FUNDING AWARDED	FUNDING AWARDED	FUNDING AWARDED



Knowledge Mobilization Partnership Program (KMP2)

Funded successfully in 2017–18, the goal of KMP2 was to help clinicians, managers, researchers, and academics drive the adoption of solutions that were successfully validated within their environments. Following stakeholder feedback, we discontinued the program and redirected funding towards building knowledge mobilization roadmaps and embedding support services into existing projects in our pipeline.

CALL 1
10 Projects
\$2.10M
FUNDING AWARDED

Regional and Strategic Programs

Canada-Israel Collaboration Program (CICP)

Companies from Israel compete for the opportunity to refine and validate their solutions with Canadian healthcare organizations through this program, created in partnership with CABHI and the Israel Innovation Authority (IIA).

CALL 1	CALL2	CALL 3
1 Project \$225K FUNDING AWARDED (matched by IIA)	2 Projects \$474K FUNDING AWARDED (matched by IIA)	1 Project \$250K FUNDING AWARDED (matched by IIA)

New Brunswick Program

Supporting researcher and clinician teams partnered with industry to trial and evaluate New Brunswick-based innovations through the Seniors' Care Strategic Innovation Fund (SCSIF), in partnership with the New Brunswick Health Research Foundation.

CALL 1	CALL2
4 Projects \$400K FUNDING AWARDED (matched by NBHRF and industry)	4 Projects \$207K FUNDING AWARDED (matched by NBHRF and industry)

Quebec Program

Helping researcher and clinician teams who want to test Quebec-based solutions, the Quebec Researcher-Clinician Partnership Program (QRCP²) is offered in partnership with four academic centres.

CALL 1
2 Projects \$350K FUNDING AWARDED (matched by partners)

Saskatchewan Program

Advancing Saskatchewan-based innovations by researcher and clinician teams to support projects that address aging and brain health, including a special focus on innovations for Indigenous and rural populations. This program is in partnership with the Saskatchewan Health Research Foundation.

CALL 1
5 Projects \$122K FUNDING AWARDED (matched by SHRF)

Nova Scotia Program

Supporting advanced-stage research, including projects in Indigenous and rural communities, the Nova Scotia Aging and Brain Health Innovation Program (NSABHI) is a collaboration with the Nova Scotia Health Research Foundation (NSHRF).

CALL 1
2 Projects \$100K NSHRF FUNDING

Alberta Program

Providing matching funding for market-ready innovations built by small and medium-sized enterprises that are ready for testing in Alberta, the Accelerating Innovations into Care for Aging and Brain Health (AICE-ABH) is a partnership with Alberta Innovates.

Manitoba Program

Funding is available to health system providers for market-ready innovations built by innovators from around the world, including projects addressing aging and brain health for Indigenous and rural populations. The Accelerating Innovations for Aging and Brain Health program is a collaboration with Research Manitoba.

Strategic Opportunity Fund (SOF)

Supporting large, strategic initiatives, projects, and partnerships that are aligned with CABHI's mission but not captured by our other competitive programs, the Strategic Opportunity Fund is by invitation only, following a preliminary proposal.

Brain Health Foundations Program (BHFP)

Levering the expertise of clinicians, researchers, and residents from Baycrest and the Rotman Research Institute to support validation and testing, CABHI developed this program to streamline and accelerate innovations. Funded by the contributions of the Baycrest Foundation.

Mentorship, Capital and Continuation Program (MC²)

Supporting projects that have already successfully applied to one of our competitive funding programs, MC² provides two phases of support: (1) additional advisory services and mentorship; and, (2) assistance to help meet a key milestone, such as making a first sale.

Looking Ahead: Amplifying Long-Term Impact



Dr. William Reichman, President & CEO, Baycrest; the Honourable Ginette Petitpas Taylor, Minister of Health; Pauline Tardif, CEO, Alzheimer Society of Canada; and Laura Tamblyn Watts, National Director of Law, Policy and Research, CARP, at announcement of the federal government's release of Canada's First Dementia Strategy in June 2019.

Our vision for CABHI 2025 is to build upon a strong foundation and amplify our impact. Following extensive research, broad consultations with stakeholders, and input from experts in seniors' care, innovation, aging, and dementia, we have identified the next steps for increasing the impact of our programs and services. Amplifying our impact will enhance the health and well-being of Canadians, increase efficiencies for healthcare systems, expand Canadian products and services to new markets, and boost the Canadian economy.

Forging Ahead to Address Dementia

CABHI will continue to provide essential input to the Government of Canada's National Dementia Strategy, ensuring that we are positioned to support its implementation, together with our partners.

Over the next five years, we will increase the number of projects in our pipeline primarily through the Spark, I²P², and strategic programs. We will actively identify synergies among projects and connect them with promising solutions in the broader ecosystem to benefit from shared distribution channels for maximum access and impact.

Strengthening Collaborations and Networks

CABHI will strengthen and expand partnerships with organizations that align with our mandate, including an exciting new partnership as the implementation and commercialization partner for the Canadian Consortium for Neurodegeneration in Aging (CCNA). This Partnership and others created with dementia-focused research organizations will provide essential new conduits for university and hospital-based researchers and clinicians to move quickly from ideas to impact while minimizing duplication with foundational research funding mechanisms. Such partnerships will also enable us to exponentially expand our network of advisers and test sites.

CABHI will continue to act as a bridge between research and adoption and grow its vibrant community of innovators, disseminators, and adopters.

We will also increase our partnerships with incubators, accelerators, and venture capital firms, creating a two-way flow of projects and direct entry into our programs to speed intake, maximize the potential for success, and help innovators mitigate the valley of death between the design and market launch stages, where many projects may fail without proper guidance and support.

Empowering Innovators

CABHI guides innovators each step of the way for each project, supporting them with specialized foundational and acceleration services that provide scientific advice, training in innovation and health systems, identification of procurement options, and guidance in the development of marketing plans in CABHI's specialized area of expertise aging and brain health. By linking with select distribution channels and consortia of organizations as dissemination partners, CABHI will facilitate increased direct market launches and first customer opportunities for innovators across Canadian, US, and international markets.

To enable more innovators to better understand the value and impact of their solutions and to access critical input from end-users, CABHI will expand the Seniors Advisory Panel (SAP) to create the Lived Experiences Advisory Panel (LEAP). Our goal is to have 1 million LEAP members by 2025, enabling CABHI innovations to be informed by the lived experiences of a much greater diversity of older adults across Canada, including Indigenous and rural populations, and individuals from a broad range of geographic, cultural, and racial backgrounds.

Driving a Culture of Innovation

We will continue to drive a culture of innovation through our Spark program and by facilitating more on-site and remote design sessions at organizations across Canada and in select locations in the United States, encouraging point-of-care staff to develop and test innovations in real-world settings. Following the success of last year's inaugural What's Next Canada: Aging and Brain Health Innovation conference, we plan to host the event annually to showcase Canadian companies and connect them with investors from around the world.

CABHI's Aging and Brain Health Innovation platform (AB-HIP) is a scaleable model that translates best practices for implementing, validating, and adopting projects in the aging and brain health sector. Moving forward, CABHI is seeking partnerships with select organizations interested in replicating this model, to cultivate hubs of innovation activity that can in turn, support their regional networks.

We will also expand our Scientific Officers Program (SOP) based on the success of last year's pilot program. The pilot included scientists from the Rotman Research Institute who provided expertise to innovators to ensure

the success of validation trials, helped facilitate new initiatives and broker partnerships, served as scientific reviewers, mentors, and helped CABHI disseminate knowledge. We look forward to expanding the SOP to include scientists based in locations across Canada through partnership with organizations like the CCNA and others.

Adding Value to the Canadian Economy and Healthcare System

Since its inception in 2015, CABHI has been leveraging funds at a significantly higher rate than would be possible with a traditional project-funding model. Our investments have encouraged other organizations to commit additional funds to support our programs: On average, for every \$1 of CABHI funding invested into a project, an additional \$0.78 has been levered from other sources.

To date, CABHI has directed more than \$84 million to programs and projects, with more than \$33 million coming from non-government sources. CABHI projects have stimulated significant economic activity, with more than \$37 million directed to new and sustained jobs, with an estimated average annual income of \$75,000 per full-time position. An analysis of 12 CABHI-funded innovations showed that they are forecasted to generate more than an estimated \$33 million in savings to the healthcare system over the next few years.

Examples of savings that will be realized: reducing cost and complications associated with pressure ulcers, mitigating unnecessary and avoidable trips to the ER, enabling healthcare institutions to redeploy allied health resources across the care continuum, and empowering clinicians to provide the most appropriate care in the right setting at the right time.

Through the provision of these savings and efficiencies, the health ministries and agencies can redeploy these savings to more appropriate care pathways – contributing to effective and efficient healthcare delivery.

CABHI solutions are increasingly at the appropriate stage of readiness to be adopted to provide more effective care in the community.

As we strategically increase the number of projects, innovators, partners, and investors from Canada and other countries, our positive impact on the Canadian economy and its health systems will continue to grow in the future.

Building Lasting Partnerships

Partnerships enable CABHI to inspire a culture of innovation, build a strong network, and leverage resources and expertise. They help us accelerate the commercialization and adoption of innovations that make a meaningful difference to the health and well-being of seniors.

We are grateful to work with a diverse network of dedicated partners in Canada and internationally. Their resources, infrastructure, and expertise have led to dozens of project launches in Canada, sparked interest for more collaborations with new global partners, and provided Canadian seniors with access to cutting-edge innovations.

INTERNATIONAL / NATIONAL PARTNERS

AGE-WELL NCE
Aging2.0
Alzheimer Society of Canada
AMDA: The Society for Post-Acute and Long-Term Care Medicine
Canadian Consortium on Neurodegeneration in Aging
Canadian Foundation for Healthcare Improvement
CIHR Institute of Aging
Direct Supply
Health Innovation Hub Ireland
Innovation Norway
Ireland Smart Ageing Exchange
Israel Innovation Authority
LeadingAge
Mary Furlong and Associates
Research Canada
Revera
Saint Elizabeth Health Care
Seniors Quality Leap Initiative
The International Federation on Ageing

PROVINCIAL PARTNERS

Alberta Health Services
Alberta Innovates
Alberta Seniors Health Strategic Clinical Network
Alzheimer Society London and Middlesex
Centre of Excellence on Longevity (CEEXLO)
CommuniTech
Institute for Knowledge Mobilization - Ottawa
JLABS
Li Ka Shing Knowledge Institute - St. Michael's Hospital
MaRS
MaRS EXCITE
MaRS Venture Services
New Brunswick Health Research Foundation
Nova Scotia Health Authority
Nurse Practitioners' Association of Ontario
OCAD University
Ontario Brain Institute
Ontario Centres of Excellence
Ontario Chief Health Innovation Strategist
Ontario Long Term Care Association
Ontario Network of Entrepreneurs
Ontario Telemedicine Network
Regional Innovation Centres
Research & Innovation Services - York University
Research Manitoba
Research Nova Scotia
RUIS McGill Centre of Excellence on Longevity
Saskatchewan Health Research Foundation
Support for Memory Loss Foundation
The Dementia Society of Ottawa and Renfrew County
Think Fresh
Toronto Central LHIN
ventureLAB
Winnipeg Fire Paramedic Service

INDUSTRY PARTNERS

3Scape Systems
Ably Medical AS
AceAge Inc.
Ambient Activity Technologies
BrainFx
Brainmarc
BrainsWay
B-TEMIA Inc.
Careteam Technologies Inc.
Catalyst Healthcare Ltd.
Centivizer Inc.
Cogniciti Inc.
Crosswater Digital Media LLC
Curiato Inc.
Darmiyan, Inc.
Duolingo, Inc.
eChart Healthcare
Greybox Solutions
Health QR
HeartBeat Technologies Ltd.
Hip-Hope Technologies Ltd.
IBM
InteraXon Inc.
Intuition Robotics
LifeAssist Technologies, Inc.
Linked Senior, Inc.
MEMOTEXT
MindfulGarden Digital Health, Inc.
Motitech AS
Pharmacy Access Solutions Inc.
Quanta Computing
RetiSpec
Right Health
Routinify
SafelyYou
SWORD Health
TELUS Health
Trualta
uCarenet Technologies Inc.
X2AI

RESEARCH & CARE PROVIDER PARTNERS

Arborstone Enhanced Care
Assistive Technology Clinic
Atrium Health
Baycrest Health Sciences
Bruyère
Bruyère Research Institute
Canadian Academy of Geriatric Psychiatry
Capital Care Group Inc.
CBI Health Group
Centre for Addiction and Mental Health
Champlain Dementia Network
CIUSSS de la Capitale-Nationale
CIUSSS du Centre-Sud de l'Île-de-Montréal
CIUSSS Estrie-CHUS
Dalhousie University
Fraser Health Authority
Glenrose Rehabilitation Hospital
Good Samaritan Delta View Care Centre
Grand River Hospital
Hamilton Health Sciences
Health PEI - Queen Elizabeth Hospital

Hebrew Rehabilitation Center
Huron Community Family Health Team
Island Health
Jewish Senior Living Group
Juravinski Hospital
Kawartha Regional Memory Clinic
Kingston Health Sciences Centre
Loch Lomond Villa
Lumacare
Mackenzie Health
Mackenzie Innovation Institute
McMaster University
New Brunswick Institute for Research, Data and Training
Ontario Retirement Communities Association
Ontario Shores Centre for Mental Health Sciences
OpenLab
Pack4U Ontario
Primacare Living Solutions
Providence Health Care - Vancouver
Providence Healthcare - Ontario
Queen's University, School of Rehabilitation Therapy
Red Deer Primary Care Network
Research Institute for Aging
Responsive Group Inc.
Saskatchewan Health Authority - Royal University Hospital
Schlegel Villages
Seneca College
Sinai Health System
Social Planning Council of Ottawa
Southlake Regional Health Centre
St. Michael's Hospital
St. Peter's Hospital
Stonebridge Community Services
Sunnybrook Research Institute
The Brenda Strafford Foundation Ltd.
The Centre for Family Medicine Family Health Team
The Glebe Centre
The Ottawa Hospital Research Institute
The Perley and Rideau Veterans' Health Centre
The Research Institute of St. Joe's Hamilton
Timiskaming Home Support
Toronto General Hospital
Toronto Grace Health Centre
Toronto Memory Program
Toronto Rehabilitation Institute, UHN
Trillium Health Partners
UBC Hospital
Université de Moncton
University Health Network
University of Alberta
University of Florida
University of New Brunswick
University of New Brunswick-Saint John
University of Saskatchewan
University of Toronto
University of Waterloo
VHA Home HealthCare
West Park Healthcare Centre
Western University
William Osler Health System
Women's College Hospital
Yee Hong Centre for Geriatric Care
York Care Centre
York University
YouQuest - Young Onset Dementia Association

CABHI Governance and Leadership

We wish to thank our board and committee members for their commitment and dedication to advancing CABHI's mandate. Their experience and expertise guide our strategic direction and support the achievement of our mission and vision.

Steering Committee

William Reichman

President and Chief Executive Officer

Allison Sekuler

Vice-President, Research and Sandra A. Rotman Chair in Cognitive Neuroscience, Baycrest; Managing Director, Rotman Research Institute; Managing Director, CABHI

Rosanne Aleong

Director, Research, Innovation & Translation

Mel Barsky

Director, Business Development

Joni Kent

Executive Vice-President, Corporate Services & Chief Human Resources Officer

Brian Mackie

Vice-President, Finance & Chief Financial Officer

Ron Riesenbach

Vice-President, Innovation & Chief Technology Officer

Bianca Stern

Executive Director, Health Innovations

Ryan Webster

Director, Finance and Operations, CABHI; Director, Finance, Rotman Research Institute

CABHI Board of Directors

Jeff Blidner (Chair)

*Chief Executive Officer of Brookfield's Private Funds Group,
Chairman of Brookfield Renewable Partners and Chairman of Brookfield Business Partners*

John Albright

Co-Founder and Managing Partner, Relay Ventures

Sara Diamond

President, OCAD University

Ken Dryden

Member of the Baycrest Centre Board of Directors

William Reichman

President and Chief Executive Officer, Baycrest

Shirlee Sharkey

President and CEO, Saint Elizabeth Health Care

Katie Smith Sloan

President and CEO, LeadingAge

Tonya Surman

Founding CEO, Centre for Social Innovation

Andrew Szende

Founding CEO, Electronic Child Health Network

Rachel Simeon (Observer)

Assistant Deputy Minister, Ministry of Economic Development, Job Creation and Trade

Innovation Advisory Council

The Innovation Advisory Council comprises business leaders from leading international organizations with expertise in the innovation space. Eager to share their valuable experiences in overcoming failures and achieving great successes, they provide valuable insight and guidance that helps to fine tune CABHI's innovation goals and tactics, and advance the scale-up and commercialization of innovative solutions.

Jordan Banks (Co-Chair)

Co-Founder, Thunder Road Capital

Murali Doraiswamy (Co-Chair)

*Professor of Psychiatry and Behavioral Sciences,
Duke Institute for Brain Sciences*

Gretchen Addi

Independent Design Consultant

Ed Brown

*Founder and CEO, Ontario Telemedicine
Network (OTN)*

Ted Chang

*Chief Technology Officer, Vice President and
General Manager, Quanta Computer Inc.*

Howard Chertkow

*Chair in Cognitive Neurology and Innovation, and
Senior Scientist at Baycrest's Rotman Research
Institute (RRI)*

Candice Faktor

Partner, Faktory Ventures

Howard Feldman

*Director, Alzheimer's Disease Cooperative Study,
University of California*

Mary Furlong

CEO, Mary Furlong & Associates

Ariel Garten

Founder, Interaxon

Franca Gatto

*Director, Aging, Seniors and Dementia Division,
Centre for Health Promotion, Public Health Agency
of Canada*

Steve Irvine

Founder & CEO, Intergrade.AI

Samir Sinha, MD, DPhil FRCP

Director of Geriatrics, Sinai Health System

Gary Small

*Parlow-Solomon Professor on Aging;
Professor of Psychiatry & Biobehavioral Sciences,
David Geffen School of Medicine at UCLA;
Director, UCLA Longevity Center; Director, Geriatric
Psychiatry Division*

Glenn Smith

*Elizabeth Faulk Endowed Professor and Chair,
Department of Clinical and Health Psychology,
University of Florida Health*

Jason Tafler

Founder & CEO, Unyte Health Inc.

Shauna Turner

Independent Director, Coast Capital Savings

Peter Whitehouse

*Professor of Neurology at Case Western
Reserve University*

Lou Woolf

President & CEO, Hebrew Senior Life

Jennifer Zelmer

*President and CEO, Canadian Foundation
of Healthcare Improvement*

Seniors Advisory Panel

End-user input is critical for success in the marketplace. The CABHI Seniors Advisory Panel provides advice and support to CABHI-funded innovations, from the perspective of their lived experience.

Founded in 2016, the Panel is a group of older adults and caregivers with broad professional and life experience. Many members have been caregivers to loved ones who are experiencing, or have experienced, brain health issues.

SAP represents the voice of the consumer. The Panel provides valuable end-user input to CABHI projects at all stages of development, including: focus group feedback to help evaluate initial project concept; comments on prototypes and/or project evaluation criteria; and constructive critiques of packaging, labelling, pricing, or marketing materials.



Ron Beleno

Toby Belkin

Laurie Bernick

Deborah Bernstein

Ruth Cymerman

Sue Drohan

Ian Goldman

Anne Kerr

Ann Laski

Rene Pardo

Hilary Randall-Grace

Rachel Schlesinger

Walter Seaton

Bev Shukyn

Linda Somers

Eva Ticktin

Financial Report

SOURCE OF FUNDS	2018-2019	TOTAL PROGRAM-TO-DATE
Cash Contributions		
Public Health Agency of Canada	\$12,000,000	\$32,000,000
Ministry of Economic Development, Job Creation and Trade	\$4,700,000	\$18,800,000
Industry Partners	\$294,081	\$394,081
Other Funding	\$190,332	\$266,365
Total	\$17,184,413	\$51,460,446
Matching & In-Kind Contributions		
Baycrest	\$1,200,000	\$4,800,000
Baycrest Foundation*	\$3,989,631	\$10,889,631
Industry Partners	\$4,329,998	\$9,094,303
Other Partners	\$5,259,275	\$8,731,309
Total	\$14,778,904	\$33,515,243
TOTAL CABHI SOURCE OF FUNDS	\$31,963,317	\$84,975,689
USE OF FUNDS		
Programs		
Spark Program	\$1,428,346	\$4,623,586
Industry Innovation Partnership Program (I ² P ²)	\$4,031,446	\$6,467,322
Researcher-Clinician Partnership Program (RCP ²)	\$3,940,426	\$6,589,774
Knowledge Mobilization Partnership Program (KMP ²)	\$195,549	\$2,871,357
Regional Impact Programs	\$1,062,296	\$1,416,100
Strategic Programs	\$1,801,551	\$8,492,038
Project Support & Implementation	\$2,181,612	\$7,963,733
Industry Partners	\$4,329,998	\$9,094,303
Other Partners	\$5,259,275	\$8,731,309
Brain Health Foundations Program	\$3,182,150	\$10,082,150
Capital & Equipment	\$360,000	\$1,351,193
Total	\$27,772,649	\$67,682,864
Operations		
Program Administration	\$2,944,316	\$11,756,241
Capital & Equipment	\$46,352	\$736,584
Total	\$2,990,668	\$12,492,825
Indirect Support		
Rent & Facilities	\$1,200,000	\$4,800,000
Total	\$1,200,000	\$4,800,000
TOTAL CABHI USE OF FUNDS	\$31,963,317	\$84,975,689

*Baycrest Foundation fundraising in support of CABHI as of March 31, 2019: funding utilized (\$10.9 million), funding received/restricted (\$8 million), funding pledged for future use (\$6.1 million).

testimonials



The benefit of the Sleep Kit is the sleep. It's so important for our residents to have sleep. It affects their everyday life, their mood throughout the day, their willingness to participate in any type of activity.

– Lorie Yerxa, Nurse, speaking about the Sleep Kit



To me, the beauty of the app is that it brings common caregiver needs together in one accessible space. The different features help me create an ecosystem of caregiving for my mom that I can manage on my own or share with others.

– Karim Munjee, caregiver, on the Dementia Talk App



Our company and CABHI share the ultimate goal of ensuring positive health outcomes and improving quality of life for seniors, while improving the economics of our healthcare system. Collaborating with CABHI assists our organization to quantify the positive impact and ROI of our products to benefit individuals with dementia and their caregivers across Canada and globally.

– Michiel Rauws, CEO, X2AI



While CABHI's Spark program funding allowed GeriMedRisk to evaluate its feasibility and impact on patient outcomes with research, its support extended well beyond. CABHI's team provided valuable expertise and opportunities to evolve from a project to a sustainable program.

– Joanne Ho, Geriatric Clinical Pharmacologist and Founder, GeriMedRisk



We recognize that CABHI and its I²P² program have provided essential brokering, access to Canadian researchers and healthcare providers, financial support, as well as resources and services to bring our vision of global expansion and impact to life. CABHI has played an important role in our Canadian success to date.

– Jon Ingar Kjenes, CEO, Motitech



**CENTRE FOR AGING
+ BRAIN HEALTH
INNOVATION**
Powered by Baycrest

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