When we think of healthcare, nurses, doctors, hospitals, and informal caregivers likely come to mind. And rightly so, given the tremendous role they play, especially when the health need is urgent – and an especially stark reminder through our current healthcare crisis. Often overlooked is the care provided to people outside of the formal healthcare system, the care they receive from their community.
By now you have heard a lot about the COVID-19 virus and its impact in Canada and around the world, including some mandatory self-isolation in parts of Europe and elsewhere. While trying to maintain a safe distance from others during this time is a good idea, we cannot forget about those who are the most vulnerable, including people living with dementia, stroke or neurodegenerative diseases.

During the current pandemic, many regions are reducing elective surgeries and clinic services, so resources are available to manage the COVID-19 outbreak. This is an unprecedented challenge to our society and health care system; but there are some easy things we can do to ensure the health and well-being of some of the most vulnerable members of our society – those living with dementia, stroke and neurodegenerative diseases.

Read full article [here](#), check out the [infographic](#) from ONDRI and watch Dr. Rick Swartz interview with [CTV](#) on Your Metro Morning on April 1, 2020 about the four simple ways to care for our elderly.
OBI – GEEK: Supporting Care in the Community

Earlier last year in May, OBI announced the first three recipients under the newly launched Growing Expertise in Evaluation and Knowledge Translation (GEEK) program. The program supports community-led organizations which aim to improve the lives of people with brain disorders.

OBI had the opportunity to meet the 2019 GEEK, program participants and caregivers in action and thriving in their respective cities. You can also watch a heart-warming video from OBI-GEEK Christian Horizons.

Active Lives Active Giving – Active Lives After School Dufferin (Orangeville); Educational Pathway to Employment – Christian Horizons (Toronto); Brief Intensive Case Management – Acquired Brain Injury – Ontario Brain Injury Association (Nipissing District).
Katie’s Run

Katie’s Run held its 8th Annual event in Haliburton, Ontario to raise funds for epilepsy research. The theme for this year was ‘Loss’ and the community was invited to share their personal stories on how epilepsy has created and manifested loss in their lives. Katie’s Run has been at the forefront of raising awareness and fundraising for epilepsy research in the province, raising up to $250,000 in eight years. This year, Katie’s run was able to gather over $60,000. The funds raised will support EpLink and its research into SUDEP and their partnership with the Clinic to Community program. Watch personal stories of loss shared by the community here.

AGE-WELL National Impact Challenge

AGE-WELL held its National Impact Challenge: Startup Edition on July 26, 2019. The Startup Edition recognizes top startups and supports entrepreneurship in Canada’s technology and aging sector. This year five finalists pitched at each of three regional events held in Montreal, Vancouver and Toronto, explaining how their technology-based solution can support healthy aging. OBI’s ONtrepreneurs iMerciv was one of the finalists in the Toronto region.

Garth Smith, OBI’s Vice President, Business Development & Partnerships shared the judging panel with Brianna Croft, SE Futures; Bill Jarvis, Ran Manor, Baycrest and Sandra McKay, VHA Home HealthCare. The evaluation criteria were based on their business model, impact on the community especially the aging population and acceleration of neurotechnology in Canada. The AGE-WELL National Impact Challenge aired on Zoomer TV and can be found here.

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<td>$60,000 Funds Raised</td>
<td>150+ Attendees</td>
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<tr>
<td>Recognition of OBI Model</td>
<td>Recognition of OBI Model</td>
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<td>Money Leveraged</td>
<td>Evidence-based Care in Community and Clinic</td>
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Walk for Dravet Syndrome Research

The 8th Annual Dravet Walk took place at the Constance Bay Community Centre on Saturday, September 21, 2019. The walk was a family event that included a 3km walk, face painting, balloons, silent auction, fundraiser BBQ, raffles, and entertainment to raise money for Dravet Syndrome research. To date, Dravet Walk has raised almost $400K since its inaugural walk in 2012 – and this year they raised over $36,000 in partnership with OBI and EpLink. All proceeds from the walk will support recruitment of children with Dravet Syndrome for a clinical study of cannabis extract for the treatment of epilepsy.

Dr. Joseph Martin Named for Induction to the Canadian Medical Hall of Fame

Congratulations to Dr. Joseph Martin, Former HMS Dean Martin, honored by the Canadian Hall of Fame for his ability to promote collaboration in building and expanding the institutional foundations of medical education and science in North America. Dr. Martin was a key figure in the development of the Ontario Brain Institute, where he served as co-chair of the working group that laid the foundations of OBI. Dr. Martin was also a member of the inaugural Science Advisory Council for OBI.
Linda Lee Awarded Joule Innovation Grant for MINT

Congratulations to Dr. Linda Lee for winning the Joule Innovation Access grant for her MINT Memory Clinics initiative. In the past thirty years practicing family medicine, Dr. Lee recognized gaps in how people living with dementia and other memory disorders were cared for. With her team she developed the MINT Memory Clinic model, that helps patients to be well cared for by their family doctor along with other healthcare professionals— as a Multispecialty Interprofessional Team (MINT). Through this model, primary care teams build their capacity to care for patients living with dementia, and support their caregivers. In turn, patients receive integrated care closer to home, right in their community. Through the MINT model, wait times to receive dementia care has been reduced by nearly 50 percent. Since launching in 2006, OBI has been an early supporter of the MINT model. Find a MINT Memory Clinic location near you.

ONDRI Friends and Family Day

ONDRI held its Friends and Family Day on September 19, 2019 in London, Ontario. The day was co-organized with the patients and community advisory members to allow researchers to share study findings and engage with participants on a range of topics. Family Days are designed for patients and caregivers to connect, network and share information about the research and technology advancements in brain disorders.
OBI’s Patient Engagement Work Recognized in Ontario Catalogue

The Ontario SPOR SUPPORT Unit (OSSU) commissioned the Knowledge Translation (KT) Program at St. Michael’s Hospital–Unity Health Toronto to map organizations in Ontario supporting patient engagement in research. Patient and family engagement is a key principle of OBI’s work. It ensures that our research is relevant to the needs of the patient community and facilitates the translation of that research into information, practices, and policy that improve brain health. OBI is featured (pg. 48) under one of the not-for-profits that advocate for patients to improve their quality of life through awareness, education and research for the well-being of all Ontarians. Find catalogue here.

OBI ONtrepreneur Wins ElevateR Pitch

Congratulations to OBI’s 2019 ONtrepreneur, Maryam Nabavi who won the ElevateR pitch competition against 32 startups on September 25, 2019.

Babbly is developing an AI-powered speech recognition platform to monitor brain development in infants.

Elevate unites the world’s innovators to solve society’s biggest challenges and invites a worldwide audience to collaborate with Canada’s thriving innovation ecosystem.
In December 2019, OBI launched the web version of the year-end report ‘OBI Year in Review’. The theme for the report being ‘Lab to Life’ highlights the organization’s purpose of bringing science and knowledge back to the community and to improve brain health for all Ontarians. OBI’s collaborative model and approach to science is the cornerstone of our work and we thank our partners in helping support our work. Take a look at the full report here.
MINT Memory Clinics (Primary Care Collaborative Memory Clinics), are a proven model that helps patients to be well cared for by their family doctor and other health professionals. Each of the health care professionals is specially trained in caring for people living with dementia and memory disorders and work together in a Multispecialty Interprofessional Team (MINT).

New MINT Memory Clinics are opening in Sarnia and Mississauga, through support from OBI, United Way Sarnia–Lambton, and others that will help deliver dementia care closer to home.

Read full story on how an estimated 3000 Sarnians who live with dementia often face long wait and travel times for treatment.

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**Dr. Tom Mikkelsen on CTV**

OBI’s President & Scientific Director, Dr. Tom Mikkelsen, made an appearance on CTV Morning on November 29, 2019. In his interview he touched upon how Ontario is leading the way in brain health through a collaborative model of research.

Brain disorders affect 1 in 3 Ontarians. Through collaborative partnerships, OBI is working to shrink the time it takes for research to get to the community - whether it’s by investing in data standardization through Brain-CODE, to understand diseases and ask better questions, funding ONtrepreneurs across the province or supporting key programs and initiatives in the community through GEEK, OBI is working to support brain health from a number of avenues to ultimately improve brain health for all. Watch full interview [here](#).
Genome Testing for Siblings with Autism May Detect Diagnosis Before Symptoms Appear

A 10-year study conducted by Dr. Stephen Scherer, Senior Scientist and Director of The Centre for Applied Genomics (TCAG) at SickKids, Director of the McLaughlin Centre at the University of Toronto, is the first to quantify the predictive value of genomic testing for autism.

The study supported by several organizations including OBI, found that the presence of an ASD-relevant CNV (copy number variant) in a sibling had a high likelihood of predicting a future diagnosis of ASD or atypical development. This marks the first time that scientists have been able to quantify the predictive value of CNVs in determining these diagnoses. Read full paper here.

New paper from POND – Taking a Diagnosis Agnostic Approach to Brain and Behavior in Neurodevelopmental Disorders

A recent paper by Dr. Azadeh Kushki uses a machine-learning approach to examine variability and overlaps across three different neurodevelopmental disorders and sheds light into the validity of existing diagnosis labels. Dr. Kushki is a POND researcher – OBI’s neurodevelopmental research program. Read full paper here.
OBI x Praxis Pitch Competition

In May 2019, OBI and Praxis joined forces to accelerate investments in research, commercialization and care for brain disorders and spinal cord injury (SCI).

To further this agreement, OBI and Praxis co-hosted a pitch event to further spinal cord injury innovative solutions on November 27, 2019 to transform the lives of those living with spinal cord injury.

A grand prize of $10,000 CAD was awarded to Trexo Robotics that includes opportunities to participate in the Praxis Spinal Cord Institute’s commercialization program.

Trexo robotics is building one of the first exoskeleton devices designed specifically for children with disabilities.

Winterlight Labs Raises $5.6M in Series A Funding in Round Led by Hikma Ventures.

OBI ONtrepreneur, Winterlight Labs is developing a proprietary Artificial Intelligence (AI) technology that melds computational linguistics, cognitive neuroscience, and machine learning to help healthcare professionals assess and analyze patients’ cognitive health – including memory, thinking and reasoning – from vocal markers captured in short snippets of speech on a tablet computer.

Winterlight Labs raised $5.6M in series A funding in round led by Hikma Ventures. The funding will enable the company to “reshape the way healthcare systems track, screen for and assess the effectiveness of treatments for various central nervous system diseases”, Liam Kaufman, Co-founder and CEO of Winterlight Labs. Read full story here.

METRICS

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<td>$5.6M Leveraged</td>
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<td>Collaborative Partnerships</td>
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CP-NET Keeps the Community Engaged at Science & Family Day

CP-NET, OBI’s Cerebral Palsy (CP) research program, continued its strong tradition of sharing the latest knowledge on CP with the community at its seventh annual Science and Family Day. Held on October 5, 2019, coinciding with World CP Day, the event brought together families of children with CP, clinicians, researchers and local organizations at the Abilities Centre in Whitby, ON. This year’s event centered on the themes of mental health in children with CP and shifting the focus to ability from disability. Among the packed day of presentations, attendees had the opportunity to learn about the latest findings in CP-NET research, as well as listen to panels covering the experiences of people living with CP in dealing with mental health challenges and using strengths to navigate transitions into adulthood.

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<td>90+ Attendees</td>
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A Winning Communication Strategy: CP-NET Video Wins in CIHR IHDCYH Talk Video Competition

CP-NET’s video, "I Can Talk!" recently won special commendations in the 2019 CIHR Institute for Human Development, Child and Youth Health (IHDCYH) Talks Video Competition.

Featuring CP-NET’s work on the C-BiLLT, this video highlights how technology can help provide a voice to non-verbal children and youth with cerebral palsy, allowing them to share their ideas, interests and intellect they may otherwise be unable to verbally communicate. The video was lauded for its use of interviews with caregivers and youth with CP covering how people can best interact with individuals using assistive devices. Congratulations!

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<td>2000+ Views</td>
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Supporting Ontario’s Brain Health Community: OBI’s Event Funding Program

OBI recognizes the role that events play in sharing knowledge, fostering relationships and building community, as well as how much work goes into organizing them.

The Event Funding program is designed to support not-for-profit organizations in Ontario’s brain health community to increase their capacity of work for improving brain health and wellness across Ontario. Successful events in this program realize OBI’s principles of integration and collaboration – bringing together all members of the brain health community and working collectively to improve the wellness of Ontarians.

The Event Funding program will be changing its funding periods this year to better align with when organizations plan their events. For 2020, applications will be due in mid-April for events taking place June 1 – October 31; and in mid-September for events taking place November 1 – March 31, 2021.

Due to public health requirements to maintain physical distance, OBI’s Event Funding is temporarily on hold until directive from the Chief Public Health Officer of Canada.

Please visit the Event Funding page for more information.

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<td>$549,022 Invested to Date</td>
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Family Research Day

POND, OBI’s neurodevelopmental disorders (NDD) research program, hosted its sixth annual Family Research Day November 16, 2019. This year’s event was a highlight of the program and its patient community, sharing the latest findings in POND research followed by questions and lively discussions between the community and POND researchers. Presentation topics were informed by the patient community, covering breaking research in genetics, the benefits of and promoting physical activity in children with NDDs, and mental health. The day additionally provided a stage for the POND’s patient advisory committee’s work and expansion of a new Youth Council to increase young patients’ involvement in research.

OBI Convenes Research Ethics Boards to Discuss Data Sharing

The fundamental purpose of Brain-CODE is to enable research data sharing and collaboration. Brain-CODE enables greater insights into the data with the ultimate goal of driving faster translation of discoveries towards positive patient outcomes. At the same time, data sharing and big data analytic methods compel us to rethink ethical oversight and data privacy protections, such as ensuring meaningful consent, especially when data is highly sensitive.

The meeting between OBI and the Chairs and Delegates of Research Ethics Boards from across Canada was held to continue building relationships between OBI and the respective institutions. Research Ethics Boards review and approve research studies and are responsible for the ongoing ethical oversight of research involving human participants. Topics on the agenda included a presentation by Adrian Thorogood, McGill University, on The Emerging Landscape of Privacy and Data Sharing and round table discussions on how to better adapt informed consent language to fit evolving demands of research while reassuring study participants that the privacy and protection of their data is a top priority.
Translational Research Talks – Health Innovation

Garth Smith, VP of Business Development & Partnerships shared a panel with Bob Bell, Christopher Yip and Sandy Schwenger to discuss the stagnant incentives structures, culture accountabilities and information systems that add barriers to health innovation. By addressing these barriers through a collaborative approach that benefits the entire community, there can be an exponential scale-up and spread of healthcare innovations.

Neurocenter Finland Visits OBI

Neurocenter Finland aims to accelerate national and international research collaboration in the field of neuroscience, to connect research with practical patient care as well as with social and health innovations, and to promote new, brain health-related growth companies.

Following a similar mission as OBI’s, Neurocenter Finland paid OBI a visit to learn more about our organizational structures, Brain-CODE OBI’s informatics platform and the effectiveness of our model.

Garth Smith, VP of Business Development & Partnerships at OBI, will deliver a talk on “Comments from Canada: How things are done at the Ontario Brain Institute” in response to a presentation on “Can AI make a true change in the neuro field – case HUS” by the Chief Innovation Officer, neurosurgeon Miikka Korja from Helsinki University Hospital.
The MindWorks Exhibit at the Ontario Science Centre

Do you know what makes you, you? In April 2019, the Ontario Science Centre (OSC) launched the MindWorks exhibition in collaboration with OBI as the Knowledge Partner from September 28, 2019 to September 30, 2020.

The mind-bending display guides you through a hands-on, bodies-on exploration of why you think, feel and react the way you do. You get an inside look at how supermarket displays capture our attention; the unreliability of memory; and how the brain’s tendency to organize information into categories can result in unintentional bias.

"As a provincially-funded organization, one of our core objectives is to educate the public about their brain health," said Dr. Tom Mikkelsen, President & Scientific Director, Ontario Brain Institute. "Our partnership with the OSC allows us to make knowledge accessible, digestible and fun; enabling people to manage their own health and wellness and improving life quality."

The partnership with the OSC includes three public talks, the Great Conversations – The Mind Series and a weekend full of activities – Your Brain Matters.

Great Conversations – The Mind Series Science Meets Psychedelics
As part of our partnership with the Science Centre, OBI hosted the first talk of the Mind series on March 7, 2020.

Speakers Drs. Anne Wagner and Norman Farb discussed cutting-edge research findings on the use of psychedelics to treat PTSD, anxiety and depression. Watch full public talk here.

METRICS

100+ Attendees

86+ Views Online

OUTPUTS

Collaborative Partnerships

Advanced Knowledge
OBI Public Talks – F-Words: Finding the Ability in Disability

Medical researchers have become increasingly aware of the fact that coming up with the best possible treatments doesn’t just involve cutting-edge work in a lab. It can sometimes involve changing the way they think about those they’re trying to help.

The “F-Words in Childhood Disability,” a 2011 paper by Peter Rosenbaum of McMaster University and Jan Willem Gorter of McMaster Children’s Hospital identify six words, all starting with the letter “F,” that they believe can help health professionals do a better job of improving the lives of kids with neurological and physical challenges. Dr. Rosenbaum and Gorter are a part of OBI’s CP-NET, a cerebral palsy research program. Watch full public talk here.

ONDRI’s Dr. Rick Swartz Presents at the MINT Memory Clinic Booster Day

OBI’s community partner MINT Memory Clinic invited Dr. Rick Swartz to deliver a video presentation at their Booster Day on February 26, 2020 in Thunder Bay. The presentation on Vascular Cognitive Impairment targeted towards health care specialists discussed the updated care practices for stroke patients.

Watch full video here.
Nanology Labs Win $200,000

Congratulations to OBI’s ONtrepreneur Mohammad Ali Amini of Nanology Labs, on winning the 2020 MEDTEQ investment pitch for $200,000.

Nanology Labs developed safe and smart MRI contrast agents for early detection of brain tumors. A revolutionary non-toxic MRI contrast agent Manganescan™, uses the element manganese to illuminate early stage tumors, specifically in the brain. Early stage detection provides clinicians advance knowledge for diagnosis, better treatment options and patient outcome.

Congrats to Dr. Walter Swardfager on the Cardiometabolic Award

A shout out to Dr. Walter Swardfager on winning the 2019 HSRLCE/CHFS/BI-LILLY Cardiometabolic Award. This award will help him advance his innovative and ground-breaking research, which includes the use of oxylipin profiles through ONDRI – OBI’s Neurodegenerative disorders research program.

CONNECT Partners with Organizations to Map Patients’ Perspectives

OBI’s concussion IDP, CONNECT published a collaborative research paper to help understand the benefits, challenges and motivators to engaging stakeholders in research by gathering perspectives of adults with lived experience of concussion. The object of this study is to provide insight on how to improve research quality and relevance. Read full paper here.
Epilepsy Priority Setting Partnership (PSP)

Research is vital to finding better ways to improve the health and well-being of people living with brain disorders. With community input, research can be guided to address priorities that matter most to patients and clinicians. We are working with patient communities to set priorities for brain disorder research that align with their needs.

On February 29, 2020 the first survey for the Epilepsy Priority Setting Partnership (PSP) between OBI, EpLink (OBI’s epilepsy research program), and the James Lind Alliance (JLA) closed. The survey received over 500 responses from across Canada from individuals who live with epilepsy or seizures, their caregivers and family members, and their health care providers.

These responses concerned questions related to diagnosis, treatment, day-to-day management and co-occurring conditions. OBI is currently in the process of reviewing these responses against current evidence to determine evidence uncertainties. These uncertainties will be brought back to the epilepsy community to vote on to create a “top 10” list of research priorities.

This partnership helps give a voice to Canada’s epilepsy community to inform research around the priorities that matter to them most and address their needs. For more details check out our page.
OBI on What’s Next Canada Conference Speaker Panel

OBI was invited to join a panel of speakers at the What’s Next Canada Conference, organized by Centre for Aging + Brain Health Innovation. The session titled, “Investor Panel: What does it take to secure funding?”, focused on the rationale behind investment in aging and brain health and what innovators need to focus on to secure funding.

Moderated by Mary Furlong, Mary Furlong & Associates the panel included Sam Ifergan, Founder and Managing Partner of iGan Partners and Anna Han, Senior Lead of Industry Relations Portfolio Management at OBI.

OBI Portfolio Companies at ApplySci Conference

A delegation of OBI portfolio companies attended the ApplySci Conference, February 11 and 12, 2020. Founders of the OBI portfolio company delegation – Babbly, Netramark, CurvAi, Zentrela and LUCID were featured on panels discussing the current challenges and potential avenues for startups and neurotechnology to develop into a robust industry.

Curated by ApplySci, this conference attracts world-class researchers and innovators in neuroscience, neurotechnology and digital health to address the intersection of technology and healthcare. OBI’s portfolio companies had the opportunity to showcase the strength of Ontario’s neurotechnology industry, as well as reach potential investors to bring their products to the market.

OBI ONtrepreneurs lead a panel discussion on “Future Brain Health” promoting Ontario’s Neurotech, led by Garth Smith, OBI’s VP of Business Development & Partnerships.
WIN

$50,000 TO BUILD
YOUR NEUROTECH COMPANY

Ontario Brain Institute’s ONtrepreneurs Program offers
• $50,000 in funding
• Mentorship from experts
• Entrepreneurship training
• Access to neurotech community

APPLICATION DEADLINE: MAY 1, 2020

For more details, visit: braininstitute.ca/ontrepreneurs-program
In the News

- RetiSpec received the investment of $500,000 USD from the Alzheimer's Drug Discovery Foundation (ADDF) to fund the accelerated development of retinal imaging technology for the early detection of Alzheimer's disease.
- Vena Medical won the first prize ($25,000) at the Sunnybrook Next Generation's 2019 Hawk's Nest that happened in MaRS Discovery District.
- Nanology Labs receives investment from FACIT for early-stage cancer innovations from the Prospects Oncology Fund.
- Ottawa's Welbi wins funding at Silicon Valley pitch competition for $25K USD
- iMerciv hires 2 centennial college students with $75k NSERC grant (WIMTACH)
- How 'Memory Clinics' Can Help Families Deal with Dementia
- From senior care to pharma, new speech-analyzer tool addresses gaps, meets needs
- 7 can’t-miss holiday highlights at the Ontario Science Centre
- High-quality stem cells enable researchers to better study almost any disease
- AGE-WELL conference spotlights exploring the future of technology and aging
- Major upgrade for MRI facility: Queen's University announces new state-of-the-art equipment for Centre for Neuroscience Studies.
- 7 Career Boosting Reasons To Being Healthy & Fit
- A new powered wheelchair helps boost independence for users, thanks to new tech
- Predicting silent strokes to curing aching muscles caused by statin drugs
- Can we change how we think?
- Brain clue signals anxiety, depression in some kids
- Two Canadian startups receive grants from Microsoft's AI for accessibility initiative
- AGE-WELL tech competition returns for 2020
- CANADA: The struggle faced by Canadian adults with autism

"the views expressed in the publication are the views of OBI and do not necessarily reflect those of Ontario"
The Ontario Brain Institute is a not-for-profit organization that accelerates discovery and innovation, benefiting both patients and the economy. Our collaborative ‘team science’ approach promotes brain research, commercialization and care by connecting researchers, clinicians, industry, patients, and their advocates to improve the lives of those living with brain disorders. Welcome to Brain Central. Visit www.braininstitute.ca for more information. Follow us on Twitter (@OntarioBrain). Funding provided, in part by, the Government of Ontario.