

A close-up photograph of two hands clasped together in a supportive grip. One hand is light-skinned and the other is dark-skinned, both with red nail polish. The background is a soft, out-of-focus pinkish-purple.

WOMEN'S BRAIN HEALTH INITIATIVE IMPACT REPORT 2020



Women's Brain
Health Initiative



WOMEN'S BRAIN HEALTH INITIATIVE (WBHI)

Combating Brain-Aging Diseases that Disproportionately Affect Women

WHAT IS BRAIN HEALTH?

Brain health is overall cognitive vitality; maintaining a clear and active mind as we age.

WHY FOCUS ON WOMEN'S BRAIN HEALTH?

Most of us are afraid of Alzheimer's, dementia, depression and other mental health and neurodegenerative illnesses, however, awareness of how to protect our brain health is limited. Worse still, the stigma associated with these disorders often prevents us from seeking a diagnosis and getting treatment, yet early diagnosis and proper care can prevent or delay disease progression.

Many disorders associated with brain aging inexplicably affect women, and there has been a lack of research to understand why.

TAKING SEX (BIOLOGICAL FACTORS) AND GENDER (SOCIAL INFLUENCES) INTO ACCOUNT IS NECESSARY FOR EQUALITY IN HEALTH AND PRECISION MEDICINE.

Statistics show that women make up almost half of our workforce and are our primary caregivers. Women's good health drives our families, our communities, and our economy.

WHY WOMEN'S BRAIN HEALTH INITIATIVE MATTERS

Women's Brain Health Initiative (WBHI) is a Canadian and U.S. charitable foundation established in 2012 dedicated to protecting the brain health of women.

Our mandate is to fund research to combat brain-aging disorders that disproportionately affect women, and to create compelling preventative health awareness and education programs, grounded in science, so that there is a greater understanding of the best ways to prolong cognitive vitality.

COVID-19 TESTED ALL OF US...

COVID-19 tested all of us in ways both unexpected and unprecedented. When the lockdowns were first imposed in March 2020, we quickly altered course from the in-person events that are a signature of ours (such as From Her Lips to Our Ears®, Raising the Bar, and Healthy Bodies, Healthy Minds), hoping that circumstances might improve by autumn. Before long, though, it was clear that large gatherings would be impossible throughout 2020 – a heartbreaking, but necessary, measure.

Fortunately, our team had the ability to work from home and we began exploring alternative means for WBHI to reach more and teach more, which included hosting a series of virtual events. It was a revelation. Through the use of video-teleconferencing platforms, we have been able to connect with so many more people (even if we did miss the personal contact).

The pandemic has been a difficult period for many charities. That is why we are especially grateful to our many generous donors and partners, and our incredible team, for everything that has been done over the past year to keep pushing forward with the cause of women's brain health. We are eternally grateful for the support that allowed us to continue to grow.



OUR IMPACT ON AWARENESS

WOMEN'S BRAIN HEALTH DAY

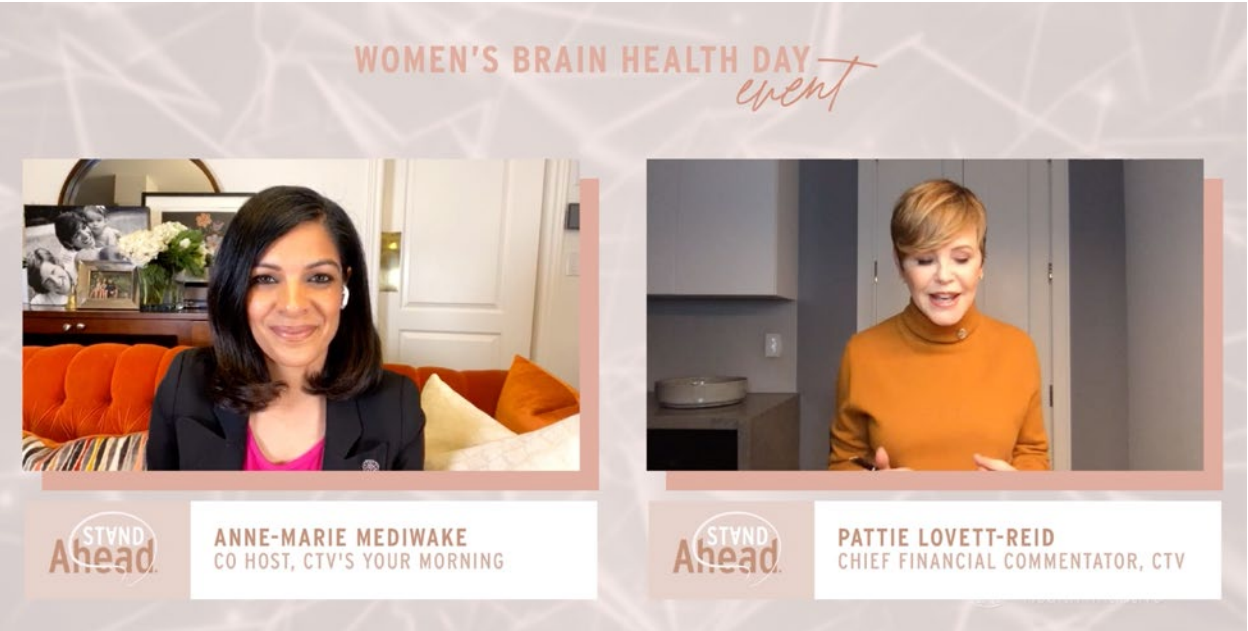
Thanks to our efforts, December 2nd was officially declared Women's Brain Health Day in 2019 by the Government of Canada as an opportunity to highlight the importance of brain health and the necessity of incorporating sex and gender considerations into research.

The second Women's Brain Health Day was both memorable and inspiring. In the midst of a global pandemic that upended all of our lives, like everyone else, Women's Brain Health Initiative (WBHI) quickly adapted. It was quite remarkable that on the evening of December 2, 2020, over 1,500 supporters from across North America joined together (from the comfort of their respective homes) to share important messages for the cause of women's brain health.

Thanks to Presenting Sponsor Richardson Wealth, and hosted by CTV's Anne-Marie Mediwake and Pattie Lovett-Reid, the live virtual event featured scientific insights from leading researchers such as Dr. Gillian Einstein and Dr. Nicole Gervais, as well as words of wisdom and support from a cross section of women and men of great accomplishment, including acclaimed actors Marcia Gay Harden and Peter Gallagher, and broadcaster Katie Couric. The event also featured special musical performances by Beverly Mahood, Sean Jones, Chantal Kreviazuk, and Amy Sky.

Federal Health Minister Patty Hajdu helped kick off the event, noting that Women's Brain Health Day is "a very important day to acknowledge the research and the need for more to understand why women are disproportionately affected by brain-aging disorders like Alzheimer's disease and dementia."

Toronto Mayor John Tory also delivered a message in support of the cause and announced that the City of Toronto sign in Nathan Phillips Square would be lit up in purple to mark the occasion. In a Twitter post, he said: "Today we commit to working together to help combat brain-aging diseases that impact women."



OUR IMPACT ON RESEARCH

To find answers for our daughters and granddaughters, and women in our lives, WBHI invests in research that better meets the needs of women.

WBHI created and funds the world's first Research Chair in Women's Brain Health & Aging, awarded to Dr. Gillian Einstein at the University of Toronto. 2020 marked the fourth year of funding the research of the Chair to discover how midlife events affect later women's brain health and answer the question as to why more women than men have Alzheimer's disease.

WBHI initiated and funds the Sex & Gender cross-cutting theme of the Canadian Consortium on Neurodegeneration and Aging (CCNA), a multifaceted national research effort involving more than 350 researchers and clinicians who are studying age-related neurodegenerative diseases, including Alzheimer's disease and other types of dementia.

Each of the 19 teams has a 'sex and gender champion' - a researcher who is responsible for promoting and integrating sex and gender considerations throughout the lifetime of the research project. Each Champion possesses (or acquires) expertise in the study of sex as a biological variable and/or gender as a social determinant of health, and takes on the role of an educator, mentor, consultant, facilitator, advocate, co-investigator, or principal applicant. Following best practices means if the research shows a difference between men and women then the next step is to ask why. It's the 'why' which is the key to discovery. 2020 was the fifth year of CCNA funding.



Peter Gallagher

THE STAND AHEAD® CHALLENGE

Women's Brain Health Day also featured the second annual Stand Ahead® Challenge, with this year's challenge being a memory task devised by Laura Tramontozzi during long hours of card playing throughout the pandemic lockdown. Participants were asked to look at seven playing cards for ten seconds, and then turn them over and try to recall them all - not an easy feat.



Dr. Gillian Einstein

As always, at the heart of the initiative was fundraising to support research and educational programs that better support the needs of women. For the second year in a row, WBHI's valued partner Brain Canada generously matched all donations for women's brain research up to \$250,000.



Sean Jones

THANKS TO MANY EXTRAORDINARILY GENEROUS DONATIONS, WBHI SUCCESSFULLY RAISED \$750,000.

The money is already being put to good use, funding a variety of research projects on sex and gender across the country.

In the first two years of Women's Brain Health Day, more than \$1,000,000 has been raised for research and \$250,000 for education. WBHI is in the process of creating a new series of educational initiatives, focused on preventative health, which will be unveiled in the months to come.



Dr. Ruth Karola Westheimer

In its short history, the Stand Ahead® Challenge has already become a powerful tool for standing up against research bias and raising awareness to combat brain-aging diseases that disproportionately affect women.



OUR IMPACT ON PREVENTATIVE HEALTH

DOING SOMETHING TODAY, CAN LEAD TO A BETTER BRAIN TOMORROW.

WBHI preventative health education programs target women, caregivers, and those affected by dementia, but also reach a broader audience, including millennials, and are designed to shift how society views and manages brain health, highlighting unique risks for women, so that we can all spend more years living productively and independently.

The quality of brain health and dementia prevention information that we share through these initiatives, along with our robust use of social media, influencers, and blog posts, has positioned WBHI as a trusted and sought-after content provider.

In 2020 we built on the success of our past initiatives and developed new platforms to communicate the prevention information, including:

- » **Mind Over Matter® Magazines** - Evidence-based, easy to understand articles in a high-quality magazine produced semi-annually in English and French and distributed to households and doctors' offices nationally.
- » **Mind Over Matter® Book Club and Social Group Program** – Remote communities and special interest groups access copies of Mind Over Matter® magazines free of charge.
- » **Engaging Millennial Minds®** - Annual series of events by millennials geared for millennials, focused on how they can best safeguard their brain health.
- » **Memory Morsels®** - A website filled with recipes, superfoods and tips for better brain health and reinforced with several social media mediums.
- » **Your Minds Matter™** - Virtual panel discussions on preventing brain-aging diseases in women.
- » **Brain Buzz®** - Impactful one-to-two-minute videos that give the public compelling evidence-based information on the best ways to protect their brain health.

MIND OVER MATTER® MAGAZINES

Mind Over Matter® magazines advocate healthy living and effective ways to reduce dementia and other cognitive impairment risk. The easy to understand, evidence-based articles are a practical resource for maintaining healthy minds. The content promotes compassion, tackles stigma, and lends support to those living with dementia and brain health illnesses, and those who care for them.

Thanks to the ongoing and tremendous support from our partners Brain Canada Foundation and Health Canada, WBHI created and produced two editions of MIND OVER MATTER® in 2020. Our 10th, volume was distributed in May, and along with matched funding from The Citrine foundation of Canada, our 11th edition was produced in November. Printed in both English and in French, 137,500 copies of each edition were distributed to households across Canada through The Globe and Mail, The Toronto Star, to doctors' offices, and at WBHI events and speaking engagements. Volumes 12 and 13 are slated for 2021.

Each edition is also available as an e-zine, accessible from the WBHI website. <https://womensbrainhealth.org/mind-over-matter-magazine>



THE BOOK CLUB & SOCIAL GROUP INITIATIVE

Requests for Mind Over Matter® magazines continued throughout 2020. We now have 172 Book & Social Group clubs in Canada, 14 from the U.S., and 1 from Europe, providing even more people and diverse communities with access to the valuable brain health information contained in the magazines. Individual requests, which were successfully fulfilled totalled 712.



THE CALM AFTER THE STORM



ENGAGING MILLENNIAL MINDS®

Engaging Millennial Minds® is a series of education events geared to both women and men twenty to forty years of age. Each event includes scientific evidence plus practical tips for incorporating the key information into their lives to prolong their cognitive health. Thanks to RBC, 2020 showcased our fourth series with two of the three events presented virtually.

Each event is one of our outreach initiatives that enables WBHI to share its content with the millennials who join us.

HEALING POWER OF ART

Creative activities are therapy for the mind. Attendees discovered the role art can play in health, wellness, and managing stress with special guest, Art Therapist Or Har-Gil, all while enjoying an art workshop with oil and chalk pastels, as well as a full watercolour experience.



THE HEALING POWER OF ART



THROUGH THE WEEDS

THROUGH THE WEEDS

An enlightening one-hour livestream panel discussion on the highs and lows of cannabis to our health and wellbeing with special guests Family Doctor and Chair Medical Cannabis at OMA Dr. Marni Brooks, Sunnybrook Hospital Internist Dr. Mireille Norris, and Primary Care Nurse Practitioner Katie Langille.

THE CALM AFTER THE STORM

In these current volatile, uncertain and rapidly changing times, participants in this virtual event learned how to manage their stress and explored an edge that helped them survive and thrive, thanks to special guest Dr. Ellen Choi.

CHEW ON THIS

An engaging culinary experience with Celebrity Chef and Restaurateur Mark McEwan, who expertly described how to prepare delicious healthy foods from his personal kitchen. Viewers were sent out the ingredient lists beforehand and were able to virtually cook alongside Chef McEwan.



CHEW ON THIS





MEMORY MORSELS®



Our brains are affected by what we eat. Research has shown that one of the best ways to keep our brain working the way we want is to eat right. Even as we age chronologically, we can keep our brain healthy by adding smart foods and eliminating harmful choices from our diet.

Memory Morsels® is a social media initiative dedicated to nutrition and brain health, including leading chefs (featured foodies), delicious recipes, superfoods, and tips (our morsels) about what to eat and why.

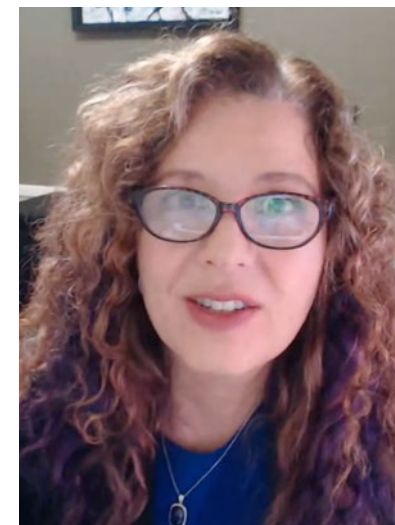
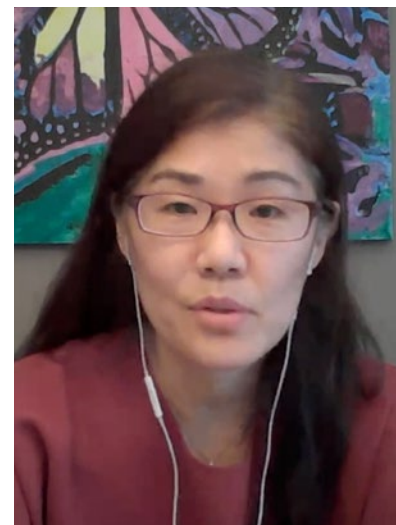
Each Featured Foodie and their delicious recipes are showcased in one of the Mind Over Matter® magazines. 2020 featured author, Dr. Tara Weir, doctor and wellness consultant in Volume 10, and Registered Dietician Kaleigh McMordie was showcased in Volume 11.

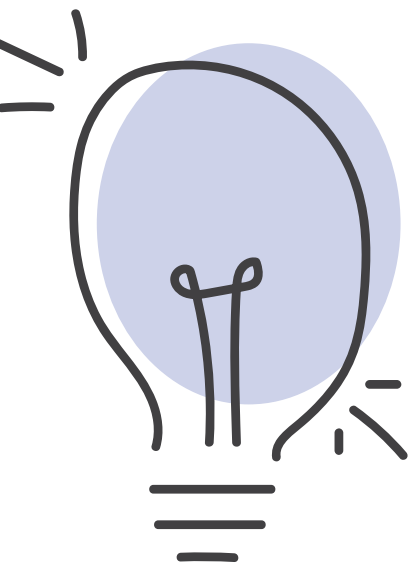


YOUR MINDS MATTER™

An exclusive virtual discussion for RBC clients, Investment Advisors, and staff to learn and hear about the most up-to-date research and scientific information on the best ways to protect their cognitive health, their physical well-being, and the important role our healthy brains contribute to our overall health as they age.

With over 3,000 participants, and moderated by Women's Brain Health & Aging Research Chair Dr. Gillian Einstein, the expert panel included Dr. Maria Natasha Rajah, Director, Brain Imaging Centre, Douglas Research Centre, Full Professor, Department of Psychiatry, McGill University, Dr. Liisa Galea, Professor, Department of Psychology, Centre for Brain Health, Director, Graduate Program in Neuroscience Lead, Women's Health Research Chair Cluster, UBC, Scientific Advisor, Women's Health Research Institute, UBC, and Dr. Theresa Liu-Ambrose, PhD, PT, Professor, Department of Physical Therapy, Canada Research Chair in Physical Activity, Mobility, and Cognitive Health, Research Director, Vancouver General Hospital Falls Prevention Clinic, Director, Aging, Mobility, and Cognitive Neuroscience Laboratory, UBC.





BRAIN BUZZ®

Time is precious, and attention spans short. A new initiative launched in 2020 under the moniker BRAIN BUZZ®, WBHI created a series of 16 impactful short videos that give the public compelling evidence-based information on the best ways to protect their brain health.

Topics for BRAIN BUZZ® include nutrition, exercise, mental stimulation, social engagement, sleep, stress reduction techniques, lifestyle choices that increase risk for cognitive decline, and unique risks for women, among others. BRAIN BUZZ® videos are hosted on our website and shared through our database and social channels. Check them out at brainbuzzvideos.org.

** This Buzz made possible thanks to The Citrine Foundation of Canada.*

+ This Buzz made possible thanks to RBC

^ This Buzz made possible thanks to Home Instead



MIND WHAT YOU EAT

As you are making choices about what to chew on, digest this: research has shown that eating certain foods (such as leafy greens, whole grains, poultry, fish, nuts, berries, and even dark chocolate) could help reduce your chances of prematurely aging your brain. Foods to avoid include red meats, butter and margarine, cheese, and fried or fast food.



MUSIC IS MEDICINE FOR YOUR MIND

Listen up! Research has shown that music can stimulate your brain, keep your brain engaged as you age, and help with memory. It is a total brain workout! Listening to and playing music can make you feel happier, reduce blood pressure, and increase sleep quality. No matter what your age, it is never too late to fill your life with music.



CALM YOUR MIND

As we live through uncertain times, we need to keep our stress levels down. Mindfulness meditation has been proven to keep our brain healthy. The practice of mindfulness meditation involves focusing on a particular object, thought, or activity, which is usually the breath or the body. Check out Brain Buzz™ for some helpful tips to try mindfulness meditation at home.



TRUTH OR MYTH?*

Starting to forget? Alzheimer's is not inevitable. You can reduce your risk and stay brain healthy longer by modifying your lifestyle. The younger you start making healthy brain choices, the more you can protect yourself against brain-aging disorders - especially if you are a woman.



WHAT DREAMS ARE MADE OF*

Want a reason to get a good night's sleep? Studies have shown that sleep is extremely important to boost brain health. A sleep-deprived brain may be more vulnerable to diseases such as Alzheimer's. When you sleep, your brain runs a "clean cycle" to remove the day's metabolic debris - an action that might protect against the disease.



USE IT OR LOSE IT*

Your memory is like muscle strength, you either use it or lose it. The more you work out your brain, the more you process and remember information. You need to keep learning and developing new skills. But not all activities are equal; the best brain exercises break your routine and challenge you to use and develop new brain pathways.



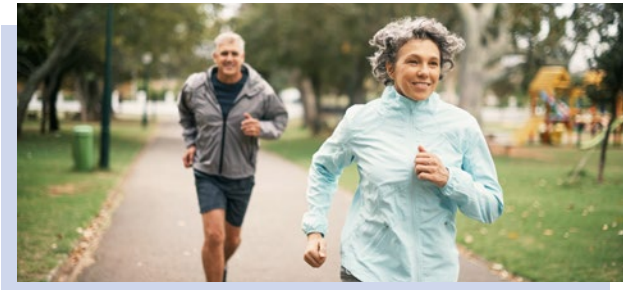
THE HEART OF THE MATTER

Heart disease is the leading cause of death for women, but symptoms for women may be different than men. Research shows that individuals with heart issues (such as high blood pressure) can also be at risk for Alzheimer's disease. Protecting your heart can help keep your brain healthy.



STAY TWO STEPS AHEAD OF MEMORY LOSS*

Dancing is not only a great body workout - it is a great brain workout too. Dance requires mental, physical, emotional, and social skills, and helps to improve strength, endurance, and balance. Some of the many benefits of dancing include pumping blood to your brain, building new neural pathways, and helping to prevent depression. So, dust off your dancing shoes!



PUMP UP YOUR BRAIN*

Exercise is not only good for your body, but also your brain. Getting your heart pumped helps blood and nutrients flow to your brain and removes waste. Studies have shown that just ten minutes of exercise a day can boost your brain power. So pump up your brain to prevent or slow down the progression of cognitive decline.



CONTROL & PEACE OF MIND+

We are living longer than ever before, which is why we have to think about the long term and plan for the unplanned. Most of us have a will but not a power of attorney (POA), which impacts you while you are still alive. Find out more about appointing someone to make important decisions on your behalf when you are unable to do so yourself.



HEAD ON*

A large study found those with a concussion or traumatic brain injury had a 24% increased risk of dementia. And chances are higher the younger you are. Current research also indicates that women suffer from concussions differently than men. Women have an increased risk of getting a concussion, have more severe symptoms, and take longer to recover.



BREAKING BAD*

You know your choices today will affect your future. But they could also affect your brain health. Discover the top ways you are speeding up the decline of your brain, including lack of sleep and exercise, too much stress and crappy food, and not saying close to friends and family. Break the bad if you want a life filled with good brain health!



HANDLE WITH CARE*

Finding out someone you love has been diagnosed with Alzheimer's comes with a mixture of emotions. The journey is different for everyone, and it is important to plan ahead and create a support system. You know your loved one best and you can be a champion for her or his well-being. Find out the tips that can help you as you care for your loved one.



DO YOU HAVE THE GUTS?*

We have a 'second brain' in our guts. Signals pass back and forth between the belly and the brain. When one is inflamed, the other is too. Irritable Bowel Syndrome (IBS) is associated with anxiety and depression and more studies show the link between our gut and digestion, mood, and health. Learn how to keep your gut and brain happy and healthy.



DON'T SUGAR COAT IT*

Sugar and salt are present in many of the foods that we consume as part of our everyday diets. But studies show a startling link between your sweet tooth and your chance of developing Alzheimer's. We also consume too much salt which negatively impacts our cognitive functioning as well. For the health of your brain, we need to cut back on the excess.

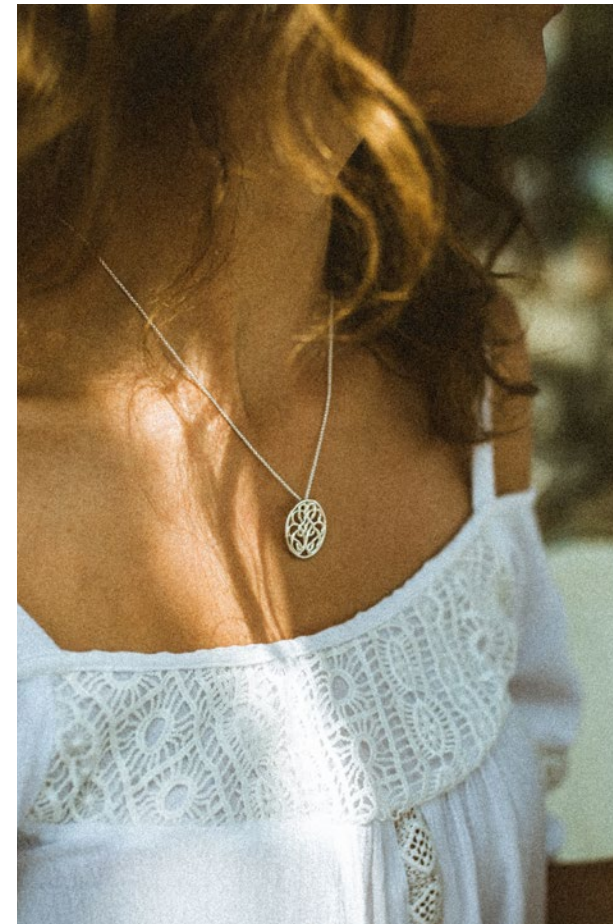


CELEBRATE THE LITTLE THINGS

With so much going on right now, it is more important than ever to celebrate the good in our life. Big goals can seem overwhelming and almost impossible at times. We need to celebrate small victories every day, not just the big ones. Taking a moment to celebrate small victories builds your confidence, motivation, and happiness a little bit at a time.

GIFT GIVING WITH PURPOSE

Women's Brain Health Initiative offers a collection of symbolic items as corporate gifts that give back, ideal for clients and employees to commemorate achievements, special occasions, women's events, or holidays. Visit hopeknot.org to find out more.



THE HOPE-KNOT®

The Hope-Knot is a powerful icon and international symbol of the importance of brain health, designed exclusively for Women's Brain Health Initiative by jeweller Mark Lash, to create awareness and escalate concern over the unchecked growth of dementia and other brain-aging diseases that disproportionately affect women.

The Hope-Knot is a loose visual likeness of the brain and is available as a pin, pendant, cufflinks or earrings, a silk scarf, and a few other items. Wearing a Hope-Knot indicates support and recognition that women's grey matter matters.

WITH GRATITUDE

We are truly inspired by the resilience, fortitude, and creativity of the many dedicated friends, supporters, and team members of Women's Brain Health Initiative.



MARK LASH



THE POSLUNS
FAMILY

MARGARET
NIGHTINGALE

SYLVIA
SOYKA

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AMPLIFYING THE IMPACT OF YOUR DONATION

WBHI LEVERAGED UP ITS DONOR SUPPORT WITH MATCHING FUNDS BY PARTNERING ON SEVERAL OF ITS INITIATIVES INCLUDING;

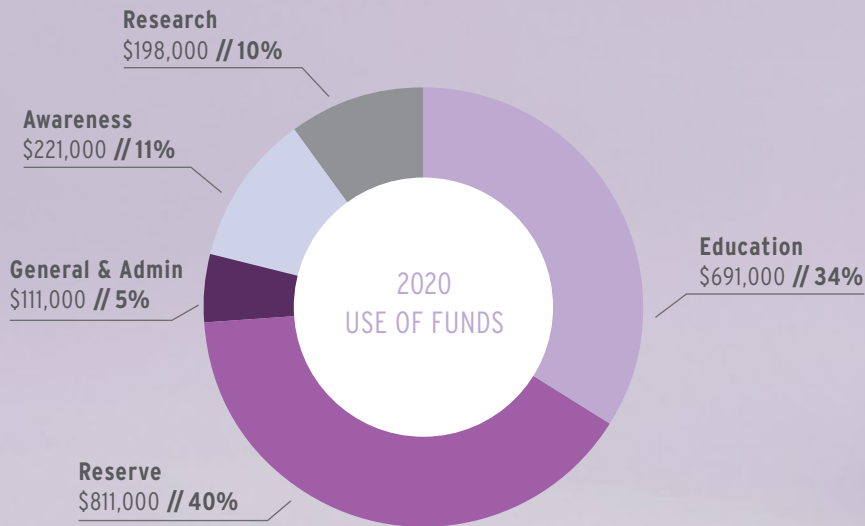
- » Mind Over Matter® with Brain Canada Foundation and Health Canada and The Citrine Foundation of Canada
- » Women's Brain Health and Aging Research Chair with CIHR, OBI, and The Alzheimer's Society of Canada
- » The Stand Ahead Challenge® with Brain Canada Foundation and Health Canada and The Citrine Foundation of Canada

YOUR DOLLARS AT WORK

WBHI raises funds for research and preventative health education initiatives through its knowledge-learning events, through sales of its exclusive Hope-Knot® product, through private donations, and funds received from corporations and foundations.

In 2020 Women's Brain Health Initiative raised just over \$2 million CDN. \$1.2 million (60%) was used for the activities, programs and operations of the charity. \$800,000 (40%) was held for future activities.

Right now, more than ever, women's interests, needs and voices are powerful catalysts for achievement, consumerism and great global influence. Women's Brain Health Initiative works with partners and donors that want to better meet the needs of women.



**WE MATTER BECAUSE
YOU MATTER.**



Follow us for daily brain health tips
@womensbrains

WBHI.ORG // 1-888-927-2011

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Women's Brain
Health Initiative