

# Brain Breakthroughs

*It's About Time*



Thank you for helping  
make breakthroughs  
possible.

With your support, we  
have now reached 80%  
of our fundraising goal!

2022 CAMPAIGN UPDATE

[BRAINBREAKTHROUGHS.CA](https://brainbreakthroughs.ca)

**VGH+**  
**UBC** hospital  
foundation

Brain disease, disorder and injury are incredibly complex and difficult to care for. One in three Canadians will be impacted by one of these in their lifetime, but there is hope. Thanks to donors like you, we are making great strides every year to improve their outcomes and solve the biggest challenges facing us today.

Today, we are proud to share the *Brain Breakthroughs* campaign has raised **80% of our \$35 million fundraising goal**. Your support has led to multiple advancements in brain health, from state-of-the-art neurosurgical equipment to help remove brain tumours, the massive expansion of the BC Brain Wellness Program, to funding fellowships for future medical superstars at our hospitals.

You keep vital research moving forward, help current patients receive rapid and more accurate diagnoses, and obtain the most up-to-date treatments for conditions such as Alzheimer's, dementia, Parkinson's, stroke, epilepsy, traumatic brain injuries, concussion, neuromuscular diseases, MS and more.

We hope you find yourselves reflected in these achievements. The advancements these researchers and clinicians make today are only possible because of the support you gave them.

From the bottom of my heart, **thank you**.



**ANGELA CHAPMAN**  
PRESIDENT & CEO  
VGH & UBC HOSPITAL FOUNDATION

ANGELA CHAPMAN STANDS IN FRONT OF THE 3T MRI CONSTRUCTION SITE AT VGH.



**\$35 MILLION CAMPAIGN GOAL**



80% RAISED

# TOOLS & EQUIPMENT

When you or a loved one are injured, you want the best minds in medicine to be equipped with the best tools for the job. Your gifts this year have empowered our clinicians with state-of-the-art technology, so they can provide world-class care for the body's most complex organ.

## **BREAKTHROUGHS IN IMAGING**

The new 3T MRI—a multi-year complex capital project which began construction in 2021—empowers clinicians to view even the smallest shifts in the brain with a level of clarity that far surpasses any other image currently available. This will provide more precise, timely diagnostics to otherwise difficult to assess neurological conditions like epilepsy, brain tumours and forms of stroke.

## **EMPOWERING BRAIN SURGERY**

When removing a brain tumour, our neurosurgeons need state-of-the-art tools to heal patients while protecting the body's most complex organ. This remarkable robotic microscope empowers them to do just that—and now we're securing a second one. These tools help surgeons identify where to make cuts without ever stopping during surgery or taking their hands off the patient.

## **INNOVATIVE DEPRESSION TREATMENT**

The Psychiatry team at UBC Hospital is researching what they hope to be a new standard of care for patients suffering from depression through 'Transcranial Focused Ultrasound Stimulation.' It is a non-invasive brain stimulation device which can temporarily affect or alter brain activity, which they believe could be used to treat patients who are non-responsive to traditional treatments.

Signs of depression often include: feelings of emptiness, fatigue, suicidal thoughts.

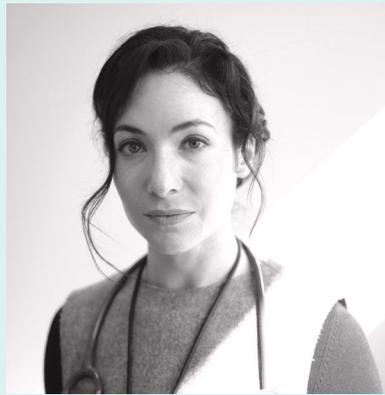
## RESEARCH & DISCOVERY

The breakthroughs of tomorrow start with the research of today. You are supporting the experts at VGH and UBC Hospital uncover the mysteries of the brain, helping transform treatments and improve patient outcomes.



### THE NEURO ICU SHINES

**Dr. Myp Sekhon** spends his days providing expert care to those in need and conducting life-saving research. Between time in the ICU, working firsthand with patients suffering from a vast array of conditions, and time in the lab, researching how to improve the future of health care, Dr. Sekhon is a special mind. Most recently Dr. Sekhon discovered firm links between cardiac arrest and neurological injury, with the help of others on the team including rising star **Dr. Ryan Hoiland**.



### TRANSFORMING STROKE CARE NATIONWIDE

**Dr. Thalia Field**, a leader in the Vancouver Stroke Program, led the writing group for the first Canadian guidelines on management of cerebral venous thrombosis (a type of blood clotting in the brain leading to stroke), directly influencing care across the country. She is also leading several studies examining the best ways to measure subtle outcomes in stroke survivors to improve long-term recovery.

The Vancouver Stroke Program is dedicated to improving all aspects of stroke care, from prevention through to post-stroke recovery.



### **INTERNATIONAL LEADERS IN MS RESEARCH**

**Dr. Jacqueline Quandt** and her team at UBC have made significant strides in the medical understanding of multiple sclerosis (MS), gaining international recognition for their work in modeling of progressive MS based on gene mutations, and identifying biomarkers to distinguish subtypes.

Dr. Quandt is now recruiting new team members thanks to donor support.



### **A WORLD-FIRST IN BRAIN RESEARCH TECH**

A world-first, researchers are creating a 3D model of the brain using actual brain cells. This technology will empower researchers to mimic what is happening in the brain in a lab setting. Utilizing this tech, **Dr. Haakon Nygaard** is furthering Alzheimer's research with the goal to improve treatments, prevention, and ultimately find a cure.



### **AI AND PARKINSON'S DISEASE**

**Dr. Martin McKeown** and his team are utilizing Artificial Intelligence (AI) to learn features of Parkinson's disease through video recordings. This allows clinicians to rapidly improve assessment of disease severity—even from the comfort of a patient's home. Dr. McKeown has also developed a lightweight, wearable device to normalize brain rhythms in Parkinson's patients, improving their motor function and preventing falls.

## PEOPLE & CARE

Donations fund fellowships so that VGH can recruit the very best talent—the people you’d want by your side if you suffered a brain disorder. They will save lives and further develop innovative treatments, right here in BC. Here are a few of those individuals funded this past year.



**DR. JOHN GORMAN**  
VANCOUVER STROKE PROGRAM

Stroke fellow **Dr. John Gorman** has been an active mind in stroke quality initiative research, particularly focused on structured communications for continuity of care. In addition to his stroke specialist training at VGH, Dr. Gorman recently completed a six-month dedicated thrombosis training at McMaster University.



**DR. GRACE SERRANO**  
EPILEPSY PROGRAM

A former Chief Resident in her past studies in neurology, **Dr. Grace Serrano** is now a fellow in VGH’s comprehensive Epilepsy Program. Her work in this vital field will influence care in our province for the nearly 50,000 individuals who live with this condition.



**DR. MAHER RIAD ARABI**

EPILEPSY PROGRAM

**Dr. Maher Riad Arabi** was named the Joseph Chung Epilepsy Clinical Fellow. He is studying with experts at VGH to better understand and treat epilepsy patients suffering from all degrees of complexity.



**DR. BUSHRA SULTANA**

NEUROMUSCULAR PROGRAM

**Dr. Bushra Sultana** is a neuromuscular fellow at VGH. She completed her medical and neurology training at Université de Montréal, where she developed an interest for neuromuscular diseases under the supervision of her passionate mentors. She is pursuing this fellowship to become a skilled neuromuscular specialist and electromyographer and plans to use the expertise to care for her patients with compassion and competence.



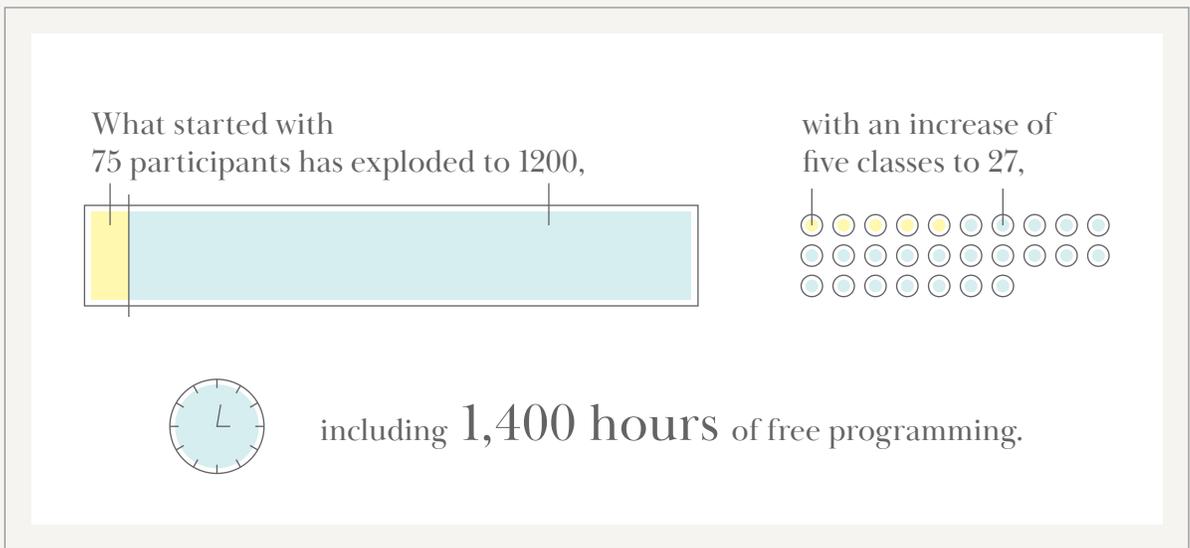
### **CARING FOR THE CARERS**

Caregiving is a difficult and challenging position many loved ones are thrust into, and they need our support. The Dementia Caregivers Clinic program—now officially launched—is providing caregivers with new tools for distress tolerance, increased access to counselling and psychiatric consultations, in-home care support for dementia patients, delivering new standards of care across the Lower Mainland.

The Dementia Caregivers Clinic's first in-person patient group opened in October 2021.

## BRAIN WELLNESS EXPANDS PROVINCE-WIDE

Since launching in 2019, the BC Brain Wellness Program has greatly expanded to supplement traditional medical care with lifestyle interventions like exercise, nutrition, music, stress reduction and community building. Since moving online, this program has served as a lifeline for many during the pandemic, and has allowed for anyone across the province to easily access these resources.



## REAL PEOPLE, REAL IMPACT

*“When I first started the Brain Wellness Program, I had just turned 75, and it was the first time in my life I actually felt old. And that was because of the physical deterioration I was noticing. That has been turned around—I don’t feel that way anymore. Now I just feel the zest for life has renewed again. **It helps in so many different ways: physically, emotionally, mentally, spiritually.** It’s like a ray of sunshine.”* – Josee, BC Brain Wellness Program participant

# CAMPAIGN CABINET

We are grateful to the following volunteer cabinet members who are partnered with us to raise awareness and funds to help make brain breakthroughs possible.

## COMMUNITY LEADERS

### **Joseph Segal, Honourary Chair**

President & Founder, Kingswood Capital Corp

### **Dr. Angus Reid, Co-Chair**

Chair, Angus Reid Institute

### **Andrew Reid, Co-Chair**

Founder & CEO, Rival Technologies

### **Rita Andreone**

Corporate Director

### **Hamid Eshghi**

President, Djavad Mowafaghian Foundation

### **Patti Glass**

Vice President, Corporate Marketing & Communications  
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### **Wayne Henderson**

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### **Jane Manning**

Retired Special Ed Educator

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### **George Richards**

President, GEMS Management Services Ltd

### **John C. Scott**

Chair & Founder, Scott Construction Group

### **Gail Silverberg**

Senior Manager, Commercial Banking, CIBC

### **Hani Zayadi**

Corporate Director

## VANCOUVER COASTAL HEALTH LEADERS

### **Dr. Philip Teal**

Head of Neurology, Vancouver Acute

### **Dr. Kristine Chapman**

Director, Neuromuscular Disease Unit, VGH

### **Dr. Silke Appel-Cresswell**

Movement Disorder Neurologist & Associate Professor

### **Dr. Thalia Field**

Stroke Neurologist & Associate Professor

### **Dr. Haakon Nygaard**

Director, UBC Hospital Clinic for Alzheimer Disease and Related Disorders

### **Dr. Jacqueline Quandt**

Associate Director, UBC Hospital MS Research Program

### **Dr. Lynn Raymond**

Director, Djavad Mowafaghian Centre for Brain Health

### **Dr. Gary Redekop**

Head, Department of Surgery

### **Dr. Jon Stoessl**

Professor & Head, Neurology, UBC

# Thank you for supporting Brain Breakthroughs



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