

# Brain Breakthroughs

*It's About Time*



Thank you for helping  
make breakthroughs  
possible.

With your support, we  
have now reached 50%  
of our fundraising goal!

2020 CAMPAIGN UPDATE

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

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

Sadly, 1 in 3 Canadians will be affected by a brain disease, disorder, or injury. However, because of the generous benefaction of donors like you, we are accelerating our pace of discovery and our clinical partners are in the process of solving the biggest challenges to brain health that lay before us.

I am pleased to share that, with your help, our *Brain Breakthroughs* campaign is half-way to our \$35 million fundraising goal. Your donations are already hard at work: doubling the number of beds in the Seizure Investigation Unit, recruiting clinician researchers and fellows in the Stroke Program, and launching the BC Brain Wellness Program.

On behalf of VGH & UBC Hospital Foundation, thank you. Your support will 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 are honoured to share the updates that follow in this report as we wish you to know the profound impact your gift is having on Brain Breakthroughs. We are proud of what we have accomplished, but the campaign to push our boundaries of knowledge in brain health continues and I hope you will continue to advocate for, and support, this important cause.

Donors like you are fueling the work of amazing physicians and researchers, creating Brain Breakthroughs here at VGH, UBC Hospital, Djavad Mowafaghian Centre for Brain Health and GF Strong Rehabilitation Centre.

Sincerely,



**ANGELA CHAPMAN**

PRESIDENT & CEO

VGH & UBC HOSPITAL FOUNDATION



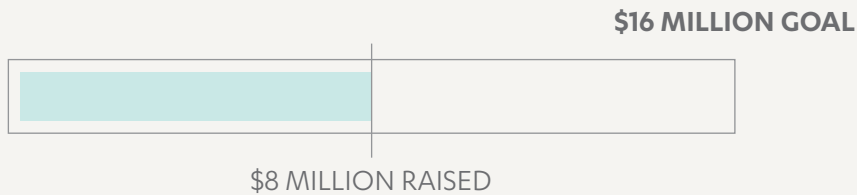
“As someone who has experienced a stroke, I understand firsthand the importance of having the right care team at your side when you need it. I wouldn’t be here today were it not for the timely attention and care I received from the team of doctors and nurses at VGH. I am forever grateful for the care that I received from the Vancouver Stroke Program team, especially Dr. Philip Teal, which is one of the reasons why I agreed to be the Honourary Chair of the *Brain Breakthroughs* campaign.



It was my pleasure and privilege to celebrate the official launch of this campaign at the 2019 Night of a Thousand Stars Gala with a \$1 million gift from my family. Health is so important and you don’t truly appreciate it until you lose it. On behalf of the 1 in 3 Canadians who will be impacted by a brain injury, disease, or condition in their lifetime, thank you for supporting this vital campaign.”

– **JOSEPH SEGAL, OBC, LL.D**  
HONOURARY CAMPAIGN CHAIR

# TOOLS & EQUIPMENT



## EPILEPSY

With your help, the Epilepsy Program at Vancouver General Hospital, led by **Dr. Yahya Aghakhani**, has doubled its capacity to treat patients in the critical Seizure Investigation Unit (SIU).

The highly specialized SIU is the only one of its kind in BC and evaluates patients with difficult to diagnose seizures in order to determine if they have epilepsy that can be surgically treated or another type of psychiatric and/or neurological disorder.



## PARKINSON'S

Deep Brain Stimulation (DBS) is a life-changing surgical procedure that eases and in some cases removes symptoms of Parkinson's in patients who do not respond to standard medication therapy. VGH and UBC Hospital are the only places in the province offering the curative benefits of DBS. Philanthropy has provided critical funding to purchase instrumentation to increase capacity for DBS surgery at UBC Hospital, **giving hope to people where there was none before.**

“Thank you for your continued support! We will utilize this equipment funding to support the increased number of DBS surgeries we are now performing at UBC Hospital.”

**DR. CHRIS HONEY**  
NEUROSURGEON,  
VGH & UBC HOSPITAL

# RESEARCH & DISCOVERY

**\$7 MILLION GOAL**

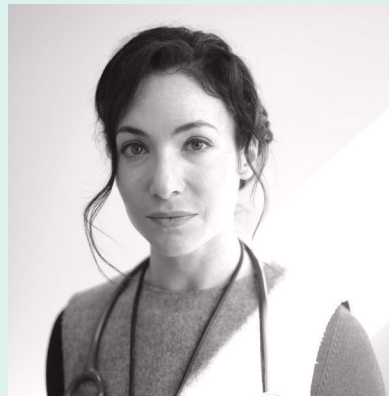


\$2.5 MILLION RAISED



## DEPRESSION

**Dr. Trevor Hurwitz**, Director of the BC Neuropsychiatry Program at UBC Hospital, recently published a paper looking at the immediate effects of limbic surgery on patients struggling with severe depression. For patients that do not respond to standard treatments including psychotherapies, medication, and electroconvulsive treatment, limbic surgery may help alleviate pain and suffering and prevent suicidal thoughts therefore potentially saving lives. Dr. Hurwitz is also studying how focused and targeted surgery can be done with less side effects.



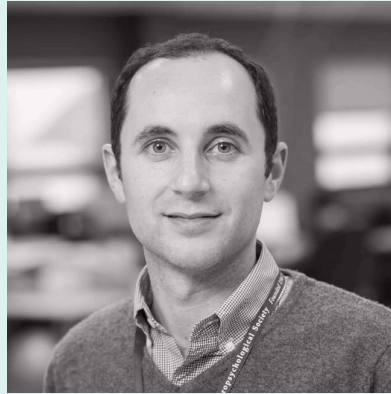
## STROKE

**Dr. Thalia Field**, co-director of the Vancouver Stroke Research Program at VGH, started the first study ever to look at rates of stroke and cognitive issues in people living with congenital heart disease. By identifying risk factors and catching 'silent' strokes earlier on, we will improve outcomes and survival rates for people with congenital heart disease, who live with an increased risk of stroke.



### **MULTIPLE SCLEROSIS (MS)**

Dr. Jacqueline Quandt, a neuropathologist at the Djavad Mowafaghian Centre for Brain Health, published a paper showing how lowering levels of the ARNT2 gene can help promote neuronal cell growth and increase production of myelin. Scientists believe that myelin damage can cause diseases like MS. This breakthrough may help discover new therapies to treat and/or slow down the progression of MS in the future.



### **CONCUSSION**

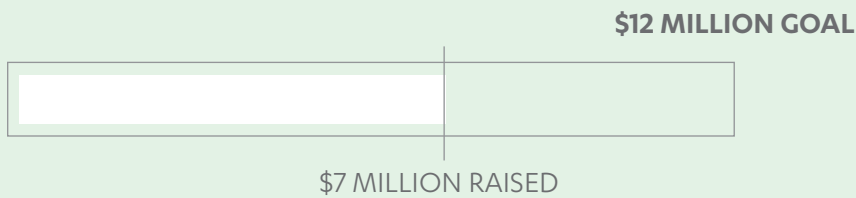
Dr. Noah Silverberg, an Assistant Professor at UBC and former psychologist at GF Strong Rehab Centre, published pilot study results from his intervention focused on enabling family physicians to routinely screen and initiate treatment for mental health complications following a concussion. When mental health symptoms are identified sooner, people are more likely to be able to return to school and work sooner.



### **ALZHEIMER'S DISEASE**

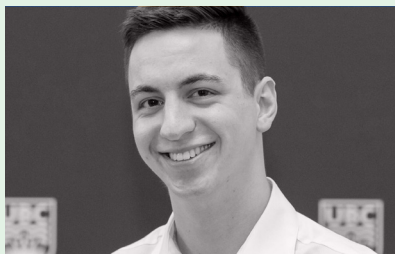
Dr. Haakon Nygaard, Director, Clinic for Alzheimer's and Related Disorders at UBC Hospital, published a research study showing that certain medications may increase the protein levels responsible for the growth and survival of healthy brain cells in Frontotemporal Dementia (FTD). This may help develop therapies to treat this type of Dementia, as well as open up new avenues of future discovery.

# PEOPLE & CARE



## TOMORROW'S HEALTH CARE LEADERS

Philanthropy is critical to recruiting fellows to pursue specialty training at VGH and UBC Hospital. Clinical fellows are medical doctors who have completed their degree and general residency program, and are undergoing additional training in a health specialty. As the provincial referral centre for most neurological conditions, fellows come to work side-by-side with the hospital's leading specialists, while providing direct care to patients and contributing to ground-breaking research projects. As a critical member of the hospital care team, fellows help improve patient outcomes and their quality of life. We are pleased to introduce some of our exceptional fellows from this past year:



**DR. RYAN HOILAND**  
NEURO-INTENSIVE CARE UNIT



**DR. HSIEN LEE LAU**  
VANCOUVER STROKE PROGRAM



**DR. MAHSA SADEGHI**  
VANCOUVER STROKE PROGRAM



**DR. JOSHUA LAI**  
NEUROMUSCULAR DISEASE UNIT



PHYSIOTHERAPIST SALLY STELLING LEADING A COGNITIVE BRAIN EXERCISE AT BC BRAIN WELLNESS PROGRAM KICK OFF EVENT, OCTOBER 2019.

## BC BRAIN WELLNESS PROGRAM

The BC Brain Wellness Program launched on October 5th, 2019 and has established a provincial network of wellness programs to support people living with chronic brain disorders, their care partners, and healthy agers. In the inaugural year, the program has provided over 200 hours of free classes involving over 450 participants in over 20 different types of activities. **Dr. Silke Cresswell**, a movement disorders neurologist who regularly sees patients with Parkinson's, believes that lifestyle choices can play a major role in the prevention and trajectory of brain diseases and injuries.





# 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**

Director of Marketing, Grosvenor Americas

### **Wayne Henderson**

Managing Director, Henderson Capital Group Inc

### **Ping Mah**

Member, Community Leader

### **Ali Pejman**

Partner, Fort Capital Partners

### **John C. Scott**

Scott Construction Group, Chair & Founder

### **Gail Silverberg**

Senior Manager, Commercial Banking, CIBC

## VANCOUVER COASTAL HEALTH LEADERS

### **Dr. Philip Teal**

Head of Neurology, Vancouver Acute

### **Dr. Kristine Chapman**

Director, Neuromuscular Disease Unit, VGH

### **Dr. Silke 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