

REPORT

ON **YOUR** SUPPORT



Toronto General & Western
Hospital Foundation

Health News For Donors Making a Difference

Fall 2011



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Dr. Taufik Valiante and
Whitney Goulstone

Surgery Brings Hope

“I’m going to die,” thinks Whitney Goulstone as she lies on the ground, her body jerking violently. Her mother looks on in horror and dials 9-1-1. Whitney was experiencing her first grand mal seizure. Although Whitney had experienced vision disturbances since the age of 13, her epilepsy went undiagnosed until University. Despite medication, Whitney’s seizures got worse, increasing in both severity and frequency. “They graduated to where I could not speak during them,” explains Whitney. “I would lose my balance and I started to suffer injuries.”

In 2007, Whitney began a new medication that helped control the seizures, and for a while it looked like things were improving. It was during this hopeful time that Whitney became pregnant with her first child. But when her son Andrew was five weeks old the seizures returned, threatening to harm not just herself but her baby too.

“All my independence had been taken away.”

Another new medication helped for a time. All was going well until she was pregnant with her daughter Lillian in 2009. “One time I woke up and needed seven stitches to my head.” As a sign of Whitney’s lessening control, a baby monitor was now being used to watch over mom instead.

A trip to the Emergency Room at Toronto Western Hospital revealed toxicity in her liver, likely brought on by an allergic reaction to the seizure medication. “At this point I was in a wheelchair,” explains Whitney. “I could not bathe or dress myself. All my independence



Whitney with her children Andrew and Lillian

had been taken away.” At possibly the lowest point in her life, she turned to the Epilepsy Monitoring Unit for hope.

Dr. Taufik Valiante, Co-Director of the Epilepsy program at the Krembil Neuroscience Centre determined she was a good candidate for a type of specialized brain surgery that offers relief for people with drug-resistant epilepsy. Dr. Valiante is one of the few neurosurgeons in Canada to offer the procedure. On November 8th, 2010 the first surgery involved the placement of a grid directly on Whitney’s brain to monitor her seizures. During the six-hour surgery that followed on November 25th, Dr. Valiante successfully removed a large lesion believed to be the main source of Whitney’s seizure activity.

“I have not had a seizure since,” says Whitney with amazement. “I can put my kids to bed. I am a part of their lives again.” Grateful and excited for the chance to begin a new chapter in her family’s life, Whitney looks to the future with hope. “I’m not saying I’m never going to have another seizure,” she says. “But I’m not waiting around for one to happen. I am not looking over my shoulder.”

Hear more about our epilepsy program from Dr. Taufik Valiante at the November 11th **Behind the Scenes** lecture. See details on page 8 (back cover).

Our Epilepsy Program needs your help. To learn more about the Brain Campaign, please see pages 4 & 5.

A Discovery Two Decades in the Making:

McEwen Centre for Regenerative Medicine Senior Scientist Discovers 'Pure' Human Blood Stem Cell

For the first time since stem cells were discovered in Toronto 50 years ago, scientists affiliated with Toronto General Hospital have isolated a human blood stem cell in its purest form – a single stem cell capable of regenerating the entire blood system. This breakthrough opens the door to more effectively treating cancer and other debilitating diseases by harnessing the power of these life-producing cells.

“This discovery means we now have an increasingly detailed road map of the human blood development system including the much sought after stem cell,” says principal investigator John Dick, Senior Scientist at the McEwen Centre for Regenerative Medicine and Toronto General Research Institute.

“We have isolated a single cell that makes all arms of the blood system, which is key to maximizing the potential power of stem cells for use in more clinical applications. **Stem cells are so rare that this is a little like finding a needle in a haystack.**”



Dr. John Dick, Senior Scientist, McEwen Centre for Regenerative Medicine

“Ever since stem cell science began,” says Dr. Dick, “scientists have been searching for the elusive mother lode – the single, pure stem cell that could be controlled and expanded in culture prior to transplantation into patients.”

This discovery is the one Dr. Dick has personally been seeking since 1988 when he developed the first means of studying human blood stem cells by transplanting them into immune-deficient mice. “Back then, our goal was to define single human stem cells. With advances made in technology, 23 years later, we have.”

Fighting Depression: New Study to Find Answers

What if there were a biologically-based test for depression that would guide treatment selection in much the same way that blood-based markers and diagnostic imaging are used in other areas of medicine? That is the goal of a major new study by Dr. Sidney Kennedy, Psychiatrist-in-Chief at University Health Network.

The Canadian Depression Biomarker Network is a Canada-wide initiative focused on collecting the biological and clinical data needed to develop the right treatments for the right patients – a truly

personalized approach to medicine. Currently, first line treatments for depression only achieve remission in 30% of patients and many patients are treatment resistant. By identifying biomarkers of depression in Major Depressive Disorder and Bipolar Disorder, researchers hope to improve the odds by using this information to inform diagnosis, treatment and prevention of mood disorders.

This initiative is thanks in part to a landmark gift from Lundbeck Canada.

The Brain Campaign

Think about this:

- 6 million Canadians suffer from a neurological disease
- Every 12 minutes someone develops blindness or vision loss
- Stroke is the #1 cause of adult disability in Canada
- 10,000 Canadians are diagnosed with a brain tumour each year

Alzheimer's. Parkinson's. Neuromuscular Diseases. Tumours. Stroke. Spinal Cord Injuries. Epilepsy. Eye Disease. Depression. We all know someone affected by one of these conditions. The key to curing all these conditions lies in the brain.

Diseases of the brain are poised to be a major public health threat in the years to come. As death rates for heart disease and cancer go down, disability and death rates from neurological diseases are on the rise. We are living longer but, simply put, our brains weren't designed to last that long. There is an urgent need to find answers.

The Brain Campaign by the Numbers

The Krembil Neuroscience Centre at Toronto Western Hospital features Canada's largest concentration of neurologists, neurosurgeons, neuroradiologists and neuroscientists. We are considered among the top in the world for Parkinson's and Alzheimer's research and rank in the top 5 in North America for vision research.

We've already raised \$60M to bring the world's best scientists, clinicians, neurologists and neurosurgeons together in a state of the art research tower. Now we've got to give them the tools, labs and support staff they need to advance patient care and develop more cures and world-first treatments for diseases of the brain.

Support our Brain Campaign! Your gift will ensure that the Krembil Neuroscience Centre has the resources it needs to provide the best in neuroscience research and treatment – today, tomorrow and in the years to come. To find out more or to donate, please visit braincampaign.ca or call Louise Aspin at 416-340-3632.

What's needed now:

People \$75 million



We need to give our top doctors and surgeons protected time so they can concentrate on their next breakthrough. We need to recruit young, talented scientists to push discovery forward. Establishing positions such as Chairs and Fellowships provide secured funding so we can retain our senior scientists.

Equipment \$40 million



Thanks to advances in imaging technology, we can now see and treat abnormalities in the brain, eye and spine. We need a new dedicated Positron Emission Tomography (PET) scan machine for our Imaging experts. We also need to equip the state-of-the-art lab space in the new Krembil Discovery Tower.

Facilities \$85 million



We need to completely renovate our Surgical Centre to accommodate the growing complexity of brain and spine surgery. Surgical suites will be completely reconfigured to include diagnostic equipment. If our surgeons "can see it, they can treat it."



Toronto Western: Firsts in Neuroscience

- 1996: Outpatient craniotomy for brain tumour removal
- 2001: First in North America to use deep brain stimulation to treat patients with advanced stage Parkinson's disease
- 2003: Use of Deep Brain Stimulation for treatment of drug resistant depression
- 2009: Outpatient craniotomy for aneurysm
- 2009: First in Canada to use laser-based brain bypass surgery
- 2010: Use of Deep Brain Stimulation for Alzheimer's disease
- 2010: First Canadian stem cell transplant program for eye disease
- 2011: Identification of 5 genes responsible for late-onset Alzheimer's disease

Brain Campaign: Epilepsy

Epilepsy affects 300,000 Canadians and there is currently no cure. The Krembil Neuroscience Centre is home to the largest adult epilepsy program in Canada. But we need your support to offer hope to more patients.

Urgent funding priorities include:

- The creation of a Chair in Epilepsy Surgery to research brain function and the causes of epileptic seizures.
- A Medical Fellowship to give trainees an opportunity to learn how to diagnose and classify epilepsy using advanced imaging technology.
- A Surgical Fellowship to prepare trainees with the specialized skills necessary to perform both diagnostic and therapeutic operations. This Fellowship will help underserved patients who could benefit from epilepsy surgery.

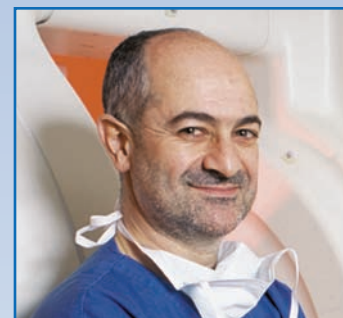
4 Ways to Keep Your Brain Healthy

1. Feed your brain. To keep your brain functioning well, choose snack foods rich in omega-3s such as walnuts and almonds or those with antioxidants like blueberries.
2. Give your brain a workout. Mentally stimulating activities like crosswords or sudoku can help strengthen brain cells and the connections between them.
3. Get your zzzz's. You need adequate rest to keep your brain in shape. Take a nap when you're tired and be sure to get a good night's sleep.
4. Relax. Chronic stress is bad for your brain and your body. Keep your stress levels in check by practicing deep breathing, yoga or meditation.

Meet some of the Doctors Making Breakthroughs Happen



Dr. Michael Fehlings
First in the world to use adult stem cells to repair and regenerate the injured spinal cord.



Dr. Mark Bernstein
First in the world to perform outpatient awake brain surgery.



Dr. Andres Lozano
Ranks #1 in the world in the field of Deep Brain Stimulation as measured by scientific citations.



Dr. Peter St George-Hyslop
First in the world to discover the genetic links to Alzheimer's disease.



Dr. Bryce Taylor

Thanks to Dr. Bryce Taylor's 11-year tenure as Surgeon-in-Chief, UHN's surgical department has achieved an international reputation for innovation and improved surgical outcomes for thousands of patients.

Q. What motivated you to get into medicine?

A. My desire to become a doctor came right after a fireman and a farmer. I think I was about 10 at the time. Sadly, it was not a burning desire to help humanity, but an occupation that I thought might be interesting to follow! In high school, I was taken to St. Joseph's Hospital by the surgeon-father of a classmate, and shown a couple of operations, one performed by Dr. George Pennel, an icon on Canadian Orthopedic Surgery. I was hooked from that moment.

Q. What do you enjoy most about your job?

A. The people...the patients, colleagues, bosses, managers. In fact all staff in our organization who gave me the greatest gift...wanting to come to work every day.

Q. You served for over a decade as Surgeon-in-Chief. What achievement are you most proud of?

A. The scientific and clinical advances are the standard measures of success, and our academic staff members have produced many of those. But I think the element that I'm happiest with is that our world-renowned surgeons still put patients and TEAM first....and don't forget, when I first started as Surgeon-in-Chief, we had two endowed chairs in surgical services, and when I left, we had over 30! Great testament to accomplishment, and to generosity of our donors.

Q. What's your favourite book?

A. I read a lot, and so my favourite is probably the one I'm reading at any given time. As it happens, I've just finished "The Paris Wife", an historical novel about Ernest Hemingway's first marriage to Hadley Richardson (created by Paula McClain and written as Hadley in the first person). Fascinating to see how the author filled in dialogue and events from her imagination, always respecting the facts of Hemingway's life as we know them.

Q. What inspires you?

A. The miracle of life in all its millions of forms....a starry night sky in the country.....stories, whether they be in movies, books or in real life, are keys to the heart if they illustrate the human condition.....the incredible generosity of our benefactors who understand that so many of our advances and future promise of discovery depend on them.

Dr. Taylor will be a feature speaker, along with The Globe and Mail's Financial Columnist, Tim Cestnick, on Tuesday, October 25th at 2:30 p.m. at Toronto General Hospital. For more information or to RSVP, please call Rebekah Valenti at 416-603-5300 or email legacy@uhn.ca.

Supporters leave a Legacy for Life



Al and Bernie Profit celebrating their 50th wedding anniversary

When doctors told Al Profit he only had a few months to live, he and his beloved wife of 52 years, Bernie, decided they'd better get their affairs in order. Practical people by nature, they set about revising their Wills and deciding on charitable gifts.

“We wanted to give back to the causes we believe in,” says Al, who has been a monthly donor to the Toronto General & Western Hospital Foundation since 2006.

As the months went by, Al continued to fight the illnesses that affected his heart, spine, lungs and brain. But in a sad twist of fate, Bernie was diagnosed with a rare form of cancer called cholangiocarcinoma. “By the time you know you’ve got it, it’s too late,” explains Al.

Within eight months, Al lost his dear Bernie to cancer, burying her ashes in the plot originally set aside for him. He takes comfort in knowing that the Bernice Elizabeth Profit and Allan Ross Profit Endowment Fund to support the Krembil Neuroscience Centre at Toronto Western Hospital will make a difference to patients in the years to come. “We trust that the funds in the endowment will be able to help future patients to a positive outcome,” says Al.

For more information and to receive a free will planning kit, contact Anita Nielsen at 416-603-5541. You may also take our planned giving survey online at www.alegacyforlife.ca

Virtual Ward to Help Improve Patient Outcomes

In an effort to reduce patient complications and prevent hospital re-admissions, the Centre for Innovation and Complex Care at Toronto General Hospital and Toronto Western Hospital is participating in a new model of care called the Virtual Ward. The Virtual Ward is designed to support patients in the weeks immediately following discharge. In addition to TGH and TWH, this collaborative project also involves Toronto Central Community Access Centre, St. Michael’s Hospital, Sunnybrook Health Sciences Centre and Women’s College Hospital.

High-risk, complex patients “admitted” to the Virtual Ward will benefit from 24/7 access to an interdisciplinary care team including a doctor, pharmacist, care coordinators, a team assistant and nursing support. With the patient and the patient’s family doctor, the team will develop an individualized care plan with the aim of improving health outcomes.

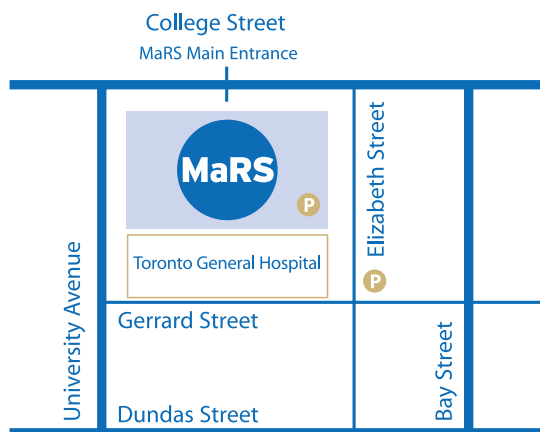
How to Save a Life in 5 minutes or less

Did you know that every 3 days someone dies in Ontario waiting for a life-saving transplant? Ontario suffers from a chronic shortage of donated organs and tissue. Registering to become an organ donor only takes a few minutes but could one day make a life-saving difference to someone in need.

One donor can save up to 8 lives through organ donation and enhance the lives of up to 75 others through tissue donation. Right now, more than 1,500 people in Ontario are waiting for an organ transplant and thousands more are waiting for a tissue transplant. To give the gift of life, visit www.giftoflife.on.ca

Get Behind-the-Scenes

On Friday, November 11th, hospital supporters are invited to a special presentation featuring Dr. Taufik Valiante, Neurosurgeon at Toronto Western Hospital. The event will be held in the MaRS auditorium at 2 p.m. Refreshments will be served at 1:30 p.m. Seating is limited. Please RSVP to Rebekah Valenti at 416-603-5300 or 1-877-846-4483 or behindthescenes@uhn.on.ca



Upcoming Events

Diwali – A Night to Shine

October 16, 2011

Extravagant gala fundraiser with proceeds to support the Emergency Departments of Toronto General Hospital and Toronto Western Hospital www.uhndiwali gala.com

7th Annual Grand Cru Culinary Wine Festival

October 27-29, 2011

Proceeds to support scientific research and fund key program areas at Toronto General Hospital and Toronto Western Hospital, including the McEwen Centre for Regenerative Medicine, University Health Network www.grandcru.ca

Respiro

October 29, 2011

Gala fundraiser supporting the Lung Transplant Unit at Toronto General Hospital

No Strain on the Vein

November 4, 2011

Gala fundraiser supporting Arteriovenous Malformation (AVM) Clinic and Gamma Knife Centre at Toronto Western Hospital www.nostrainonthevein.com

Gentle Ben Charity Challenge

November 23/24-27, 2011

An ultimate golf and pro sports getaway to Dallas, Texas in support of cancer research and support programs, and the McEwen Centre for Regenerative Medicine www.gentlebengolf.ca

Parkinson's Peloton Ongoing Campaign

An international group of recreational and competitive cyclists raising funds for Parkinson's disease research at the Krembil Neuroscience Centre, Toronto Western Hospital www.theparkinsonspeloton.ca

Host Your Own Event!

Visit www.tgwhf.ca for details or contact Amber Bernard at amber.bernard@uhn.ca or 416-340-4800 ext. 6279. We look forward to exploring your ideas with you and offering guidance to help you reach your philanthropic goals.

Toronto General & Western Hospital Foundation

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Registered Canadian Charitable Organization Number: 12386 4068 RR0001

For more information or to donate online, please visit: www.tgwhf.ca



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