

BREAKTHROUGH

Fall 2015 Newsletter | Issue 1

Welcome to the first issue of Breakthrough – a newsletter focused on activities and stories relevant to our community of donors, of which you are an integral part.

Philanthropic investments are one of the key drivers of innovation at SickKids. They give our researchers, clinicians and educators the resources to explore new ideas, drive breakthroughs, and deliver the best possible care. Such gifts are more important than ever as we seek to overcome challenges like government fiscal restraint and aging infrastructure while seizing new opportunities presented by rapidly evolving technology and the shift towards more collaborative care.

We are so grateful to those who make up our major giving community, including the Nowak Family, whose story you'll read about in the following pages. Their motivation to give back to SickKids is rooted in gratitude for the care their daughter received and hope of helping other families in the future.

We hope this newsletter will bring our SickKids Family closer and serve as a forum for sharing stories about what inspires each of us to give back and work together to realize our shared vision: Healthier Children. A Better World.

Sincerely,



Ted Garrard,
President and CEO
SickKids Foundation

A ROBOTIC ARM TO SAVE BRAINS LIKE CAMRYN'S.

The Nowak family supports robotic surgery: minimally invasive, maximally effective.

*Camryn Nowak
enjoying a day
on the slopes*



David and Allyson Nowak know that the way forward in surgical technique is the precision and dexterity of image-guided robotics.

They've come to this understanding through personal experience. One of their two daughters, Camryn, had a lazy eye when she was a baby. Persistent investigation revealed that the issue was more serious: Camryn had a benign, inoperable brain tumour on her brain stem. Dr. Jim Drake, the head of

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Neurosurgery at SickKids, and the Director of the Centre for Image Guided Innovation and Therapeutic Intervention (CIGITI), performed brain surgery when Camryn was six – a procedure called an endoscopic ventriculostomy (ETV). In 2014, Camryn needed further emergency surgery, to insert a shunt that allows fluid from her brain to drain into her stomach. Again, it was performed by Dr. Drake.

Camryn is a skier, and has just earned her blue belt in karate. Her personality lights up a room. Camryn is thriving as a result of the care she has received at SickKids. The Nowaks want to help other families experience positive outcomes from difficult diagnoses: that's why they've engaged with the work of Dr. Drake.

“Camryn has benefitted from the generosity of others who supported SickKids’ research before us, and we want to carry that forward. Dr. Drake and his colleagues have made an incredible difference in our daughter’s life and we are inspired by the research he is conducting. What they are doing could be transformational for many families.”

Dr. Drake is a champion of the KidsArm, the first image-guided robotic surgical arm in the world specifically designed for paediatric surgery. The impact it can have has made apostles of the Nowak family. The Nowaks want to put medical tools like the KidsArm, which can operate precisely in small and delicate spaces, into the hands of surgeons – allowing them to rapidly (up to ten times faster than conventional surgery) and safely perform minimally invasive surgeries.

To this end, the Nowaks have made a leadership gift to SickKids. Says David Nowak, “Camryn has benefited from the generosity of others who supported SickKids’ research before us, and we want to carry that forward. Dr. Drake and his colleagues have made an incredible difference in our daughter’s life and we are inspired by the research he is conducting. What they are doing could be transformational for many families.”



Dr. Drake explains the advantages of robotic surgery

MEET DR. MICHAEL SALTER, CHIEF OF RESEARCH, SICKKIDS RESEARCH INSTITUTE



“Our researchers make pioneering discoveries and develop new paradigms for understanding the fundamental underpinnings of health, as well as of disease. The outstanding quality and impact of our research is reflected in the funding and recognition it receives. I am proud to be a part of the world leading research which we at SickKids generate.”

Dr. Michael Salter is a world-leading neuroscientist who has made pioneering contributions to our understanding of the fundamental molecular and cellular mechanisms of normal and pathological neuroplasticity. He has been a member of the SickKids Research Institute since 1989, holding a number of leadership positions, including Head of the Program in Neurosciences & Mental Health and Associate Chief, Science Strategy and Commercialization. In July 2015, Dr. Salter took over new responsibility as Chief of Research.

2015 SURGICAL ROBOT CHALLENGE

SickKids surgical robotics team beats the world's best.

There is no question donations drive developments. Thanks to multiple donor families, including the Nowaks, Dr. Drake and his team from SickKids not only participated in one of the largest international meetings devoted to surgical robotics – the Hamlyn Robotics Symposium hosted by Imperial College, London – but the CIGITI lab team, under Thomas Looi, won the 2015 Surgical Robot Challenge.

The SickKids proposal – a device that attaches to a multi-armed robotic Da Vinci surgical system – is a novel, miniaturized 1.4 mm concentric tube grasping forceps. Prospective uses include neurosurgery, heart surgery, and trans-oral surgery.

The key advantages of this design are its very small size, and the ability to rapidly change the tools, called ‘hot swapping’. These advantages embody what Dr. Drake wants to advance in surgical technique: delicacy, the ability to work at a finer scale, and speed. All of which allows surgeons to operate, increasingly and successfully, in situations previously deemed inoperable.

Innovation like this has impact: more positive surgical outcomes lie ahead for SickKids kids and their families.

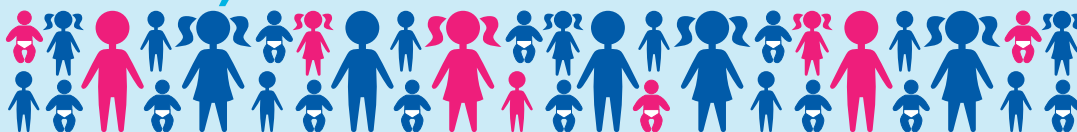
Camryn Nowak explores a robotic tool at SickKids



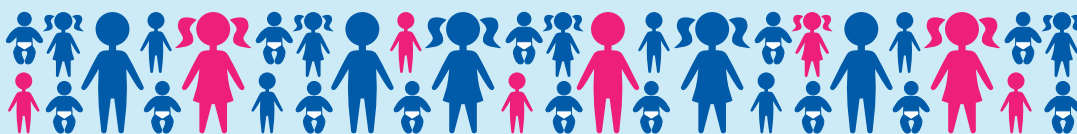
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DID YOU KNOW?

100,000+ CHILDREN



Each year, more than 100,000 children rely on the lifesaving care provided at SickKids.



292,317

Total number of ambulatory visits (clinics + emergency)

12,206

Total operating room cases (in-patient + day surgeries)



PATIENT UPDATE

KAEL: "I'M BACK!"

Kael's at home after over 400 days of 'life on pause'.

Kael is truly a rare kid. He's one of the few recorded cases in the world of an immune-deficiency disorder called Stat 1 mutation. He was diagnosed through genetic testing at SickKids when he was 5. Accompanying this diagnosis was some tough news: Kael was unlikely to live past 12.

Kael in physiotherapy at SickKids



His parents, Emily and Andrew, wanted to do whatever it took to give him more time, in hope of finding a cure. To help Kael live longer and healthier, a bone marrow transplant was the best option. And his brother was a match.

After his transplant at SickKids, Kael faced almost every challenge possible. Complications, coupled with over 400 days in isolation, meant Kael had to re-learn to walk.

Today, however, he's back. He's back on the family farm, where his mom can look out the window and see him playing with his brothers and his sister. He's back at school, and he's back on the ice, playing hockey. He still needs to be careful –

infection is a constant concern, so he wears a mask when he's out and about. But he's back to being 8, and doing what he loves. At first, his decision to join his school cross-country team worried his mom. He's still weak and taking nourishment from a tube. It didn't faze Kael: when he came last in a race (with his sister and friends running right beside him), Kael didn't let his condition define him. He handled it like a pro. "Its OK," he said, "it was my first race."

Spirit like Kael's, and his family's hope, are what your donations support. Thank you for getting Kael back to living life – unpause.

Visit www.sickkidsfoundation.com/unpause to see more of Kael's story and stories of other children like him.

Kael at bat today



WAYS TO GIVE

Did you know there are many ways you can have a tremendous impact on SickKids? You can donate stocks, leave a gift in your will, or donate your life insurance or RRSPs. If you are considering a legacy or would like more information, please contact your SickKids representative.



SickKids Foundation Major Gifts Team (from left to right): Colin Hennigar, Alicia Leon, Katie Graham, Rebecca Page, Anne-Marie Newton, Ayala Beck, Nancy Horvath, Beth Weintrop, Jennifer Ashcroft (not pictured: Denise Higashi)



For more information, please visit www.sickkidsfoundation.com.