



# DEFY GRAVITY

## 2021-2022 IMPACT REPORT

Hydrocephalus Canada Award

**Prepared for: Hydrocephalus Canada** 

## ABOUT THE U OF T TEMERTY FACULTY OF MEDICINE

The University of Toronto's Temerty Faculty of Medicine spans the breadth of health fields, from clinical medicine and rehabilitation science, to the fundamental sciences and translational research.

More than a quarter of all Canadian physicians train at U of T, making Temerty Medicine the single largest medical educator in the country. Here, our more than 1,000 medical students, 2,800 graduate students, and over 3,600 clinical residents and fellows learn from a community of more than 8,000 expert clinical and research faculty members. Combined with our more than 61,000 alumni, they form a premier global network of medical and healthcare talent with extraordinary reach and impact.

In addition to educating new generations of health professionals, we are also a research powerhouse. Temerty Medicine ranks in the global top-10 for publications and citations in the 50 highest-impact journals in medicine and related fields.

Toronto has one single medical school, world-class teaching hospitals, a remarkably diverse population and leading expertise in health policy and management — all in the context of a single-payer health system. It is also the home of the Toronto Academic Health Science Network (TAHSN) — a network of 14 renowned teaching and research hospitals, all affiliated with the University of Toronto. While other cities may share some of these attributes, only in Toronto are all of these strengths combined in one place.

Given these strengths, we are consistently ranked as the best faculty of medicine in Canada, and as one of the best in the world for clinical medicine (#3: *NTU Rankings 2021*, #5: *US News & World Report 2022* and #5: *Times Higher Education 2022*). No other university in Canada — and few in the world — matches our capacity to advance health and health care on a global scale.

## ABOUT DEFY GRAVITY

Defy Gravity: The Campaign for the University of Toronto is the largest alumni engagement and fundraising effort in Canadian history. Harnessing the leadership, generosity and compassion of U of T's vast global community, the campaign will strengthen the University's commitment to inclusive excellence and accelerate its work on the biggest challenges facing the world.

Defy Gravity reflects U of T's long history of challenging the impossible to create a more caring and inclusive world through the ingenuity and resolve of its faculty, students, alumni and supporters which is critical today in addressing racial injustice, climate change, technological disruption and more.

With remarkable strengths across a broad range of disciplines, U of T is one of the few institutions worldwide that can bring a comprehensive approach to solving these complex social, economic and health issues. Our community will make U of T an even more powerful engine of progress and reinforce our commitment to excellence, equity and inclusion, creating more opportunities and supportive spaces for talented people from every background and circumstance to come together and discover, learn, create, collaborate and thrive.





On behalf of the University of Toronto's Temerty Faculty of Medicine, we are pleased to share this update on the Hydrocephalus Canada Award and to thank you for helping advance health research, education and care here in Canada and beyond.

Every day, we are reminded of the integral role philanthropy plays in supporting our important mission — enabling us to persevere in our efforts to find innovative and collaborative solutions to the world's most profound health challenges. It is a mission that is more important and relevant than ever, as Temerty Medicine clinicians, researchers, learners and alumni join together in building a brighter, healthier future for all.

As we look to our exciting future, we also want to reflect on and recognize those whose generosity has helped us get to where we are today.

In this spirit, we are delighted to share the enclosed update about the impact of your support. We hope you enjoy reading about the activities and achievements enabled by your generosity, and that you take great pride in knowing that you are contributing to better health.

Should you have any questions about this update, or if there is any additional information we can provide, please do not hesitate to contact John Maize at <u>john.maize@utoronto.ca</u> or by telephone at 647.526.4036.

Together, we are delivering better health outcomes more equitably all over the world. Thank you, once again, for your generosity and support.

**Trevor Young**, MD, PhD, FRCPC, FCAHS Dean, Temerty Faculty of Medicine Vice Provost, Relations with Health Care Institutions University of Toronto

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**Darina Landa** Executive Director, Advancement Temerty Faculty of Medicine University of Toronto

### 2021-2022 HYDROCEPHALUS CANADA AWARD AT THE TEMERTY FACULTY OF MEDICINE



#### **CLAIRE MAZZIA**

MD Program Temerty Faculty of Medicine University of Toronto I would like to start off by thanking Hydrocephalus Canada for giving me this award. It was a pleasure to work on the Spinal Cord Injury, Urogenital Health and Pregnancy (SCI-UP) project this summer under the supervision of Dr. Anne Berndl.

I am a second-year medical student at the Temerty Faculty of Medicine. I grew up in Toronto and did my undergraduate degree at the University of Guelph.

I have always been interested in the challenges people face with regards to their reproductive health, and eager to support in any way I can. Empowering people with physical disabilities to make informed decisions about their sexual and reproductive health seemed like a great way to do this. The work I am doing through the SCI-UP project has the potential to make a big impact as, unfortunately, the amount of research addressing the wide range of health issues facing people with disabilities leaves many patients' questions unanswered. The SCI-UP is a research project that aims to answer some of these questions. Bladder dysfunction is an issue that significantly impacts the quality of life of some people living with neurological deficits. Bladder function is also often impacted during pregnancy. Many people with spinal cord injuries are of reproductive age and may be interested in pursuing pregnancy. However, there is no evidence to help inform patients and their healthcare providers regarding having a pregnancy after a spinal cord injury and how that will impact their bladder health. This summer I was recruiting participants and working with data we collected from hundreds of people with spinal cord injury (SCI) around the world, with the goal of addressing these types of questions and many more that we hope will enable people with SCI to make educated decisions about their health.

Thank you for your generous support.

Sincerely,

Claire





## CREMS SUMMER PROGRAM 2022: RESEARCH PROJECT SUMMARY

#### **PROJECT TITLE:** The impact of pregnancy on bladder health in people with spinal cord injury.

#### **PROJECT SUPERVISOR**

Dr. Anne Berndl Assistant Professor, University of Toronto Director, Accessible Care Pregnancy Clinic, Sunnybrook Health Sciences Centre

#### BACKGROUND

Spinal cord injuries (SCI) often affect bladder function requiring medical intervention to achieve social continence and to prevent infections and kidney damage. Women with SCI have specific considerations during pregnancy, especially surrounding bladder health. The effect of pregnancy and birth on long-term urogenital health in women with SCI is unknown, however this information is essential to provide evidence-based prenatal care.

#### AIM

The aim of this study is to compare the difference in the Neurogenic Bladder Symptom Score (NBSS), a validated scoring system, between people with SCI who have, and have not, had a pregnancy over 20 weeks.

#### **METHODS**

Data collected from the Spinal cord injury and urogenital health study will be used. Pregnancy history and NBSS score will be assessed using both descriptive and comparative analysis. Possible contributing and confounding variables such as level of spinal cord injury and use of mobility devices will be included in this analysis.

#### SIGNIFICANCE

Little is currently known about SCI and pregnancy, and although people with SCI can successfully have a pregnancy, the impact of pregnancy on their bladder function is unknown. The information gathered from this study is hoped to provide new insights, which may inform this key aspect of preconceptual counselling, which may have a significant impact on quality of life for people with SCI, and guide future management.



