



# 2022-2023 IMPACT UPDATE FOR HYDROCEPHALUS CANADA HYDROCEPHALUS CANADA AWARD AT THE TEMERTY FACULTY OF MEDICINE



**CLAIRE MAZZIA** 

MD Student

Temerty Faculty of Medicine, University of Toronto

I would like to thank you for awarding me the Hydrocephalus Canada award. It was incredibly fun and rewarding to have worked under the supervision of Dr. Anne Berndl on the Spinal Cord Injury, Urogenital Health and Pregnancy (SCI-UP) project this summer.

I am a third-year medical student at the Temerty Faculty of Medicine. I grew up in Toronto and did my undergraduate degree at the University of Guelph. It was at Guelph I discovered my love for clinical research, a passion which led me to pursue a project at CREMS. My work at CREMS was broad and collaborative; I worked to generate and communicate new findings which will enable healthcare professionals to better serve people with SCI (Spinal Cord Injuries).

This past year has been a big one for SCI-UP. Our organization presented posters at three different conferences and research days, including an oral presentation. We also completed a multivariate analysis on bladder and bowel outcomes in people with SCI.

This award and associated financing enabled our team to augment work on several aspects of the study, including a new abstract that was accepted at the FIGO World Congress of Gynecology and Obstetrics in October 2023. This prestigious conference is being held in Paris, and I will have the incredible opportunity to present our findings, learn from other world-class researchers, and represent SCI-UP on a global stage. Your incredible support has helped make this possible.

In the future I hope to make our results easily accessible to the public and healthcare providers. The results from SCI-UP will be communicated in a way that is clear, and easy to understand, and which will empower people with physical disabilities, especially people with spinal cord injury, to make informed decisions about their own health.

Thank you again for generously establishing the Hydrocephalus Canada Award. I am deeply humbled and appreciative for the opportunity to do this work.

Sincerely, Claire Mazzia





## CREMS SUMMER PROGRAM 2023 AT THE TEMERTY FACULTY OF MEDICINE: RESEARCH PROJECT SUMMARY

#### PROJECT TITLE

The impact of pregnancy on bowel 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 bowel function, and knowledge surrounding this impact is limited especially in those assigned female at birth. Pregnancy can also have an impact on bowel function and continence. The effect of pregnancy and birth on long-term bowel health in people 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 NBDS (Neurogenic Bowel Dysfunction Score), 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 NBDS 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 bowel 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.







Claire Mazzia and Dr. Anne Berndl

