

## Saskatchewan Researcher Receives CIHR Funding to Explore Dysmenorrhea and Chronic Pain in Emerging Adolescence

**Principal Investigator:** Dr. Michelle Gagnon **Co-Investigators:** Drs. Krista Baerg, Marta C. Erlandson, Jennifer L. Gordon, and Sarah McQuillan

Pain is universal. Pain during the menstrual cycle, however, is not. Dysmenorrhea is characterized by frequent, painful menstrual cramps and commonly begins within a few years of the start of menstruation. This condition can greatly disrupt everyday life for those who experience it, with one in four adolescents who menstruate rating the pain as severe or very severe, and many forced to miss school. While up to ninety percent of adolescents who menstruate experience dysmenorrhea, treat-



Dr. Michelle Gagnon Associate Professor Psychology and Health Studies University of Saskatchewan

ment is limited, and the typical onset and trajectory of dysmenorrhea remain underexplored. There is also a growing body of research suggesting that untreated pain early in life may actually lead to permanent changes to the way a person processes pain in later life. In this way, poorly treated dysmenorrhea may actually increase the risk of other chronic pain conditions later in life.

To directly explore this possibility, Dr. Michelle Gagnon, an Associate professor of Psychology and Health Studies at the University of Saskatchewan, and her team have proposed an observational, longitudinal study of children in early adolescence, successfully funded by CIHR in the spring 2022 project grant competition. This study will use a biopsychosocial approach and be conducted in three phases. Prior to the start of menstruation, the first phase will assess children's health status and psychological and social functioning with the aim of identifying pre-menarche influences of dysmenorrhea. The second phase will follow children until menstruation begins. The third and final phase will re-assess health status, psychological and social functioning, as well as the emergence of any new chronic pain conditions, annually for three years. Following children longitudinally will allow Dr. Gagnon and her team to examine the relationship between pre-existing pain, dysmenorrhea from its onset and any factors that may contribute to the condition.

Investigating dysmenorrhea in emerging adolescence may provide crucial clues as to which children are particularly susceptible to developing this condition. The results of this project may further inform care and aid development of prevention and education programs for parents of children at risk for dysmenorrhea and chronic pain. Says Gagnon: "menstrual pain is so often normalized, especially in youth. Our work is aimed at providing the evidence to show how detrimental ignoring this issue can be to the long-term health of youth who struggle with this pain. I'm thrilled that funders have recognized the value of providing resources to this area of research as we work, ultimately, towards helping youth get the help they need and deserve for their pain."