

## Chantal Rytz - University of Calgary

**Project:** *Reproductive Lifespan, Menstrual Cycle Regularity and Risk of Adverse Cardiovascular Outcomes*



### Biography

Chantal is a born and raised Calgarian, and, after receiving a Bachelor's of Science in Medical Biochemistry from UBC in 2016, returned to Calgary to complete a Master's of Science in Cardiovascular and Respiratory Sciences in 2019. Chantal's master's thesis examined exercise-induced changes in oxidative stress in older adults, and how cardiovascular risk factors and biological sex impact such levels. Her work was nominated for a University of Calgary Graduate Medal and a Western Association of Graduate Schools (WAGS) Distinguished Master's Thesis Award.

These sex-related differences inspired Chantal to continue her studies as a PhD student at the University of Calgary with Dr. Sofia Ahmed, assessing sex and gender considerations in cardiovascular health. Chantal is passionate about translating her research into understandable, everyday science for the benefit of the public, and uses her evidence-based knowledge as a platform to advocate for improved cardiovascular health of individuals in her community and beyond. In her spare time, Chantal enjoys doing anything outdoors, and is an avid downhill skier, mountain biker, hiker and fly fisher.

### Project Summary

Menstrual cycle irregularities are increasingly recognized as a potential risk factor for adverse cardiovascular outcomes, and the role of sex hormone variations (i.e., estrogen) in cardiovascular risk has been identified as an important area of research. This is not only an



important factor to consider when assessing cardiovascular health in cisgender (i.e., gender identity aligns with sex assigned at birth) women, but also in menstruating individuals who do not identify as women, such as transgender (i.e., gender identity does not align with sex assigned at birth) men and non-binary/gender non-conforming individuals.

Currently, the majority of menstruating Albertans are unaware of cardiovascular disease symptoms, risk factors and their own personal risk status. Together, with the lack of knowledge regarding cardiovascular health and risk management, as well as the increasing acknowledgement from the healthcare community of this issue as a priority in healthcare, there is a significant opportunity for both education and engagement of patients, their families, and multidisciplinary healthcare providers in order to improve cardiovascular outcomes and quality of life in these individuals.

The goal of my proposed PhD research program is to evaluate the associations between menstruation and reproductive lifespan, including onset of menarche and menopause, on cardiovascular risk throughout the life course of both cisgender women and transgender men. This program of research has the potential to make an important impact on menstruating individual's cardiovascular health in Alberta and beyond.