

## Environmental Science Graduate Program Student Seminar Series

## Introduction to the Maternal Stress & the Microbiome Study

Therese Rajasekera
Smith 3150 | 11/8/19 | 2:00 - 3:00 pm

Therese is a first-year PhD student in ESGP, specializing in Environmental Public Health, co-mentored by Tamar Gur and Darryl Hood. Her interests lie at the nexus of maternal history of adversity, subsequent offspring neurodevelopmental



effects, and the mechanisms of this transmission. She is currently conducting an observational clinical study with the goal of characterizing maternal gestational stress and its potential effects on offspring via the gut and vaginal microbiome.

## **Abstract:**

Stress is a ubiquitous component of the human experience and regularly impacts our daily lives. Decades of research have demonstrated that stress can be both adaptive and maladaptive, even leading to increased susceptibility to a host of diseases. Furthermore, pregnancy is a critical period during which stress experienced by the expectant mother can have detrimental impacts on the developing fetus. The current literature supports the intergenerational transmission of maternal gestational stress, however the underlying biological mechanisms require further research. To this end, the ongoing Maternal Stress & Microbiome Study aims to understand one potential mechanism of this transmission: the maternal gut and vaginal microbiome.

