

school of environmental sciences

The Research Seminar Presentation by

## Mary Beckmann

will be held on

Tuesday March 13, 2018

At 1:00 pm

## **ALEXANDER HALL 265**

Quantitative Assessment of Human Enteric Viruses in Land-Applied Municipal Biosolids

As the human population increases along with their biological waste, more questions arise regarding storage and safe handling of this material. Research has acknowledged the importance of examining nutrient recycling through repurposing non-agricultural source material, as it provides an environmentally sustainable alternative to inorganic fertilizers. In Ontario alone, 40% of the 300 000 dry metric tonnes of municipal biosolids that are produced at Water Resource Recovery Facilities are land-applied annually as an organic fertilizer. As such, it is essential to address concerns regarding biosafety of these materials to mitigate risks in both handlers of biosolids, as well as potential health risks that may arise following land-application. This research will aim to provide a quantitative assessment of the presence of significant enteric viral pathogens through qPCR and cell culturing methods to influence best management practices in land application.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS\*6900)