



ses

school of environmental sciences

The Research Seminar Presentation by

Jonathan Stemeroff

will be held on

Wednesday March 23, 2016

At 10:45 am

ALEXANDER HALL 337

Title: Irrigation Control Strategies for Medicinal Cannabis in Controlled Environments

The medicinal Cannabis industry in Canada needs high quality and standardized products for prescribed patient care. To provide this bio-pharmaceutical product, research needs to be completed in the production of Cannabis relating to standardization and optimization of production procedures. For medicinal purposes, the two main compounds of interest are cannabidiol (CBD) and tetrahydrocannabinol (THC), both secondary metabolites. For medicinal Cannabis, the main goal is to grow plants with high levels of these secondary plant metabolites, and to ensure standardized levels present in all plants for more accurate prescription doses and assessment of treatment outcomes. Irrigation is an important part of producing an optimized plant in terms of its secondary metabolites. For this research, irrigation amount and frequency will be related to the production of secondary plant metabolites in Cannabis. To make this connection, an in situ stem psychrometer will be used to provide a measure of plant water status indicating the use of water in the plant throughout the day. Using a psychrometer allows for high-resolution data collection giving the ability to fine-tune adjustments to the irrigation protocols. These high-resolution measurements will allow for the development of irrigation practices that adhere to the required plant water status and optimize production of secondary plant metabolites.

Everyone is welcome to attend

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