2 MSc and 2 PhD OPPORTUNITIES
IN COMPARATIVE TRANSCRIPTOMICS, PLANT PHYSIOLOGY AND REMOTE SENSING OF VEGETATION

2 MSc and 2 PhD opportunities are available in the Global Change Molecular Plant Physiology group at the Department of Biology, University of Toronto Mississauga, supervised by Prof. Ingo Ensminger. We are using physiological, molecular, genomic and remote sensing tools to study plant performance in a changing climate. Open projects are related to the following areas: 1. Comparative Transcriptomics and Plant Physiology, 2. Plant Phenotyping and Remote Sensing of Vegetation.

DUTIES - Area 1. Successful applicants will investigate the function of genes involved in climate adaptation. A combination of phenotyping and RNA-Seq approaches will be used to identify climate relevant genes and probe their contributions to cold hardiness, drought hardiness and heat stress responses.

Area 2. Successful applicants will assess leaf optical properties of vegetation using a drone and hyperspectral sensors and determine functional traits at the leaf level using biophysical methods.

Applicants are expected to work in an interdisciplinary research project with collaborators at several Canadian universities and the Canadian Forest Service.

PROFILE - Applicants should have a strong background in plant biology, plant physiology, molecular biology (Area 1) or remote sensing (Area 2) and related disciplines. Excellent quantitative and writing skills are required. Experience with programming languages such as Python, and Rcran tools for the analysis of large data sets is a plus. Applicants must be willing and able to conduct fieldwork in all seasons.

HOW TO APPLY - Please email your application as a single PDF to Ingo Ensminger (ingo.ensminger@utoronto.ca) with the following subject line: MSc/PhD Opportunities fall 2016. Also include a cover letter with a brief statement of your research interests (max. 1 page), your CV, and contacts for two letters of recommendation. Review of applications will begin immediately and continue until the positions are filled (Possible starting dates are between November 2016 to February 2017).

For more information please contact Ingo Ensminger (ingo.ensminger@utoronto.ca, +1 905 569 4599) or check http://www.utm.utoronto.ca/ensminger/.