



Lecture and Lunch Series Event

Saturday February 18th, 2012
10:00am to 2:15pm

This is a free event.

Event Schedule

10:00 am - On-site Registration and Coffee
10:30 am

10:30 am - Opening Remarks
10:50 am

MORNING LECTURES

11:00 am - **Session 1A – “Northern Research Basins: History, Importance and Legacy”**
11:55 am

The Northern Research Basins (NRB) Working Group has been bringing together circumpolar scientists specifically hydrologists concerned with snow, permafrost, and societal/industrial water requirements for the last 35+ years. This talk will focus initially on its history, its importance in addressing timely issues, such as climate change, northern development, and its legacy, i.e. the training and mentoring of the next generation of northern scientists. I will use the recent 17th NRB Symposium & Workshop that Canada organized through the Eastern Canadian Arctic (Iqaluit-Pangnirtung-Kuujuuaq) to underscore some of my points.

Speaker: Professor Kathy Young

Kathy Young, a professor in York University's Department of Geography, Faculty of Liberal Arts and Professional Studies, is an Arctic hydrologist whose long-term research is focused on improving our understanding of the inter-relationships between climate, hydrology and ecology of permafrost environments. Professor Young is presently investigating the hydrology of large complex wetland systems situated in broad climatic settings (Polar Desert vs. Polar Oasis climates) and geomorphic landscapes (e.g. moraine, coastal, bedrock). She has published approximately 51 refereed articles and another 117 non-refereed reports or conference papers. Young's publications in recent years reflect her interest in various aspects of northern hydrology, microclimate and her experience of working in northern environments.

OR

Session 1B – “Reimagining our response to youth homelessness” A Canadian and Global Perspective

The Canadian response to youth homelessness has evolved in a very uneven way. While some communities have developed effective programs, it is safe to say that on the whole, the Canadian response continues to emphasize a combination of emergency supports and law enforcement. Elsewhere in the world, countries are developing coordinated systems approaches that emphasize prevention and rapid rehousing. In this presentation, Dr. Stephen Gaetz makes the case for a radical reform of how we approach youth homelessness in Canada. Drawing from research conducted on strategic responses to youth homelessness in Canada, the United States, the United Kingdom and Australia, He proposes a research-informed framework for addressing youth homelessness that is based on a model of prevention. This framework will outline key components of an effective strategy and highlight clear examples from around the world of how these components are applied in practice, bearing in mind the unique policy contexts in which they occur.

The purpose is to shift our thinking about youth homelessness, and to provide people with ideas about how to adapt and implement strategies aimed at ending youth homelessness.

Speaker: Professor Steve Gaetz

Stephen Gaetz is an Associate Professor in the Faculty of Education and is the Director of the Canadian Homelessness Research Network and the Homeless Hub (<http://www.homelesshub.ca>) the first comprehensive and cross-disciplinary web-based clearinghouse of homelessness research in the world. Prior to coming to York University, Gaetz worked in the Community Health Sector, both at Shout Clinic (a health clinic for street youth in Toronto) and Queen West Community Health Centre in Toronto. His research has focused on the economic strategies, health, education and legal and justice issues of people who are homeless, as well as solutions to homelessness from both a Canadian and international perspective. Professor Gaetz continues to play a leading role internationally in knowledge dissemination in the area of homelessness. Under Professor Gaetz's leadership, York played host to the Canadian Conference on Homelessness in 2005 – the first research conference of its kind in Canada.

Noon - 12:45 LUNCH
pm

AFTERNOON LECTURES

12:45 pm - 1:45 pm **Session 2A – “Snow on Mars”**

The NASA Phoenix spacecraft landed on Mars during the summer of 2008 and York University led the contribution of instruments for atmospheric measurements. One of these instruments was a LIDAR that emitted laser light to detect dust and clouds. It was found that the atmosphere of Mars was similar to Earth in several ways. For example, it was observed that dust in the atmosphere on Mars is very similar to what is observed above deserts on Earth. The most significant discovery was that clouds in the atmosphere of Mars were observed to be similar to cirrus clouds on Earth, and ice crystals precipitate from these clouds to the surface of Mars. Thus it snows on Mars. We now know that precipitation plays a role in the hydrological cycle on Mars and this is an important factor in the geological history of water on Mars. The mission will be described from the original instrument design, through the operations on Mars, to the interpretation of the measurements.

Speaker: Professor Jim Whiteway

Jim Whiteway was born and raised in the Toronto area, took his undergraduate degree in Engineering Physics from Queen's University in Kingston, then obtained his Ph.D. in Physics from York University. After working for several years at the University of Wales in Aberystwyth, he returned to Toronto when he was awarded a Canada Research Chair at York University. He is presently the Director of the Centre for Research in Earth and Space Science at York. His area of specialty is atmospheric physics and this involves laser remote sensing from various platforms such as aircraft and spacecraft. Usually his work is carried out in remote areas ranging from the Canadian Arctic to tropical Australia. Following on this theme, he has recently led the Canadian component of the NASA Phoenix mission to Mars.

OR

Session 2B – “How do we see and move at the same time?”

Anyone who has tried to take photographs knows the importance of holding the camera still. We are almost never still but retinal movement is removed either physically (by corrective eye and head movements) or perceptually to give us the impression of a stable world despite our moving retinal images. And in fact retinal movement can be useful in unconsciously combining with non-visual

sensory information to help guide our movements around the world and help us to stabilize and orient our bodies. In unusual environments, such as in space or underwater, or as a result of disease or aging, these processes may begin to fail. I will discuss these issues and suggest some ways in which our research may contribute towards counteracting such problems.

Speaker: Professor Laurence Harris

Dr. Laurence Harris is the director of the Centre for Vision Research at York University, one of the largest and most highly respected vision research groups in the world. He is also the director of the Multisensory Integration Laboratory which seeks to investigate how information from different senses is combined by the brain. Examples include the visual and balance systems role in orientation and self motion perception; and vision and localizing events in space and time. Dr. Harris is a professor of psychology, biology and kinesiology and has been the chair of the Psychology department at York University. He is the author of over 100 scientific articles and has edited nine books on topics pertaining to Vision. He is the Editor-in-chief of the journal "Seeing and perceiving: a multisensory science."

1:45 pm - Information Networking and Event Adjourns
2:15 pm

Event Admission is free and an RSVP is required. The form is available online at
Registration: <http://www.yorku.ca/yorkcirc/lectures/rsvp.html>.

Event The Lecture and Lunch Series event will take place on York University's Keele Campus in the
Location: **Accolade West Building.**

For directions to York University's Keele Campus, by car or public transit, visit www.yorku.ca/yorkweb/maps/keele.htm and click on the relevant link under the Transit and Driving Directions heading.

If you plan to drive, the closest public parking lot is located in the Student Services parking garage. The rate for parking is \$7.00.