

# NRESi WEEKLY NEWS

## April 13 - 17, 2015

A newsletter for faculty, staff, students and the community  
who participates in the  
Natural Resources & Environmental Studies Institute  
and NRES Graduate Programs



### NRESi NOTES

Hello everyone,

Happy last day of classes! Congratulations to faculty and students for another great year. Also, best wishes to those NRESi members who will be wrapping up their university careers and looking forward to retiring!

It was great to see so many attend last night's NRESi Annual Lecture! If you'd like to hear more from David Hughes' research, join us for today's colloquium for a second, follow-up talk. Both lectures will also be added to our video archive in the coming weeks. There has been a lot of media interest on our event and David's work. See our 'In the News' section for links to some of the coverage!

Also today, **Friday, April 17th at 10:30 in 5-177 or via [Livestream](#)** is a Special Lecture by Dr. Regine Hock from the Geophysical Institute at the University of Alaska, Fairbanks. Her presentation is titled: World-Wide Glacier Wastage - Implications for Sea-Level and Streamflow. All are welcome to attend!

NRESi is organizing, in partnership with the Biochemistry & Molecular Biology Program and the Northern Medical Program, the **2015 Undergraduate Thesis Presentation Day**. This year's event will take place on **Thursday, April 30th from 9am to 2:30 in 6-205/211**. All are welcome to attend! Refreshments and lunch will be provided. Please RSVP to me by Thursday, April 23rd.

Leanne Elliott  
NRESi Research Manager

### FROM THE DIRECTOR & RESEARCH MANAGER

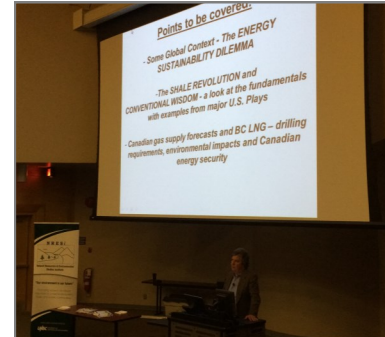
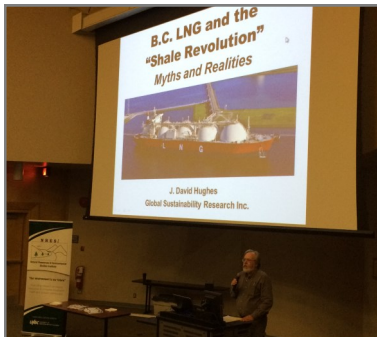
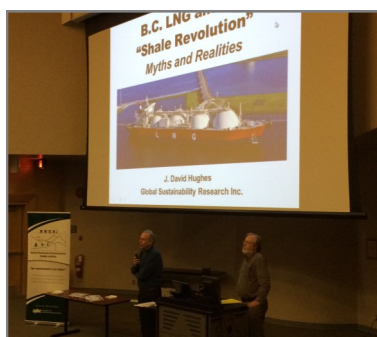


A special by-invitation dinner was held in the Bentley Centre ahead of NRESi's Annual Lecture for NRESi members and community partners.

Photo credit: L. Elliott

Left: Darwyn Coxson, NRESi's Director, welcomes attendees to NRESi's 2015 Annual Lecture. Centre: Paul Sanborn, NRESi Steering Committee Member, introduces our Guest Lecturer, David Hughes. Right: David Hughes presents this year's NRESi Annual Lecture.

Photo credits: L. Elliott



**REMINDER:** Share your information about recent publications, grants, and/or other honours you may have received with others interested in future NRESi issues.

**PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: [leanne.elliott@unbc.ca](mailto:leanne.elliott@unbc.ca)**

**We're on the web at : [www.unbc.ca/nres-institute/newsletter](http://www.unbc.ca/nres-institute/newsletter)**

## UPCOMING EVENTS

## NRESi SPECIAL LECTURE

### Dr. Regine Hock

Geophysical Institute  
University of Alaska, Fairbanks



#### World-wide glacier wastage - implications for sea-level and streamflow

Glaciers have retreated and thinned around the world over the last decades. All glaciers outside the ice sheets in Greenland and Antarctica contribute approximately just as much to current global sea-level rise as the two large ice sheets combined. In addition to sea-level rise, wastage of these glaciers affects local river systems. As glaciers melt at a faster rate they will initially provide increased water to downstream reaches. However, this will be followed by a reduction in runoff as the glaciers dwindle. I will present global scale assessments and 100-year projections of glacier mass changes and the implications on sea-level and streamflow including some case studies from Alaska.

**Friday, APRIL 17<sup>th</sup>, 2015**

**10:30 pm - 11:30 pm**  
**Room: 5-177**

To participate remotely on Livestream: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)

## UPCOMING EVENTS

## NRESi COLLOQUIUM

### David Hughes

Geoscientist, Independent Energy Policy Analyst &  
Formerly with Geological Survey of Canada



#### The Energy Sustainability Dilemma: BC LNG, Oil, and the Shale Revolution

Hydrocarbons make up more than 80% of current energy supply. Since 1850, world energy consumption has grown 50-fold, per capita consumption has grown 9-fold, and world population has increased by 5.5 times. Oil is the number one source of energy in the world followed by coal and natural gas. Non-hydro renewables, such as wind, solar, biofuels and biomass make up a mere 2.7% of world consumption and 1.6% of Canadian consumption. Projected growth in energy consumption through 2035 suggests that the world will then be consuming 70 times as much energy as in 1850, with more than 70% of it provided by hydrocarbons. Where will this energy come from? Canadian energy policy is firmly set on liquidating its finite, non-renewable energy assets as quickly as possible via gas and oil exports. This lecture will examine the looming energy sustainability dilemma in the light of Canada's future prospects along with the costs of current energy policies in terms of environmental impact and Canada's long term energy security.

**Friday, APRIL 17<sup>th</sup>, 2015**

**3:30 pm - 4:30 pm**  
**Room: Weldwood Theatre (7-238)**

To participate remotely: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)

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## DISSERTATION DEFENSE NOTICE

### GRADUATE DISSERTATION DEFENCE

Mr. Raju Aryal is a candidate for the degree:

**Doctor of Philosophy in Natural Resources and Environmental Studies**

Mr. Aryal will be defending his dissertation entitled:

**“Simulating Past and Future Mass Balance of Place Glacier Using a Physically-Based, Distributed Glacier Mass Balance Model”**

Supervisor: **Dr. Peter Jackson**

Date: **April 17, 2015** Time: 1:00pm Room: 10-4520 (PG Campus)

## DISSERTATION DEFENSE NOTICE

### GRADUATE DISSERTATION DEFENCE

Ms. Faye Hirshfield is a candidate for the degree:

**Doctor of Philosophy in Natural Resources and Environmental Studies**

Ms. Hirshfield will be defending her dissertation entitled:

**“The Impact of Ice Conditions on Local Scour Around Bridge Piers”**

Supervisor: **Dr. Jueyi Sui**

Date: **April 24, 2015** Time: 9:00am Room: 6-306 (PG Campus)

## PUBLICATIONS

Hernández-Henríquez, M. A., **Déry, S. J.**, and Derksen, C., 2015: Polar amplification and elevation-dependence in trends of Northern Hemisphere snow cover extent, 1971-2014, *Environmental Research Letters*, **10**, 044010, doi: 10.1088/1748-9326/10/4/044010.

Trubilowicz, J. W., Chorlton, E., **Déry, S. J.**, and Fleming, S. W., 2015: Satellite remote sensing for water resource applications in British Columbia, *Innovation*, **19(2)**, 18-20.

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## IN THE NEWS

The news in this section and next is from NRESi's social media connections to UNBC and others. See the original posts and hear the latest first by [following us!](#)

NRESi's 2015 Annual Lecture guest presenter, David Hughes, was interviewed a number of times as he made his way across northern BC, doing his talk on LNG and energy. He was on CBC Daybreak North on Monday, as well as a number of other local media channels. Here are three of the Prince George articles: [PG Citizen](#), [250 News](#), and [My Prince George Now](#).

## UPCOMING GRAD STUDENT EVENT

### CTLT Instructional Skills Workshop for Graduate Students!!

The Centre for Teaching, Learning, and Technology invites all graduate students at UNBC to join us for a 3 day Instructional Skills Workshop on **May 19, 20, and 21st, 2015**. \*\*Please note Registration Deadline is Monday, May 11th.\*\* **To register please fill out the attached online form:** <http://tinyurl.com/spring2015-GS-ISW>

Join experienced ISW facilitators for an intense three day workshop designed to assist new and experienced educators be more effective teachers. Participants will discuss and practice a variety of teaching approaches in a supportive, peer-based atmosphere. This interactive workshop will cover the spectrum of instructional practices from lesson planning and delivery to gathering feedback.

If you have any questions, please contact Amy Blanding at [blanding@unbc.ca](mailto:blanding@unbc.ca). Please note that the workshop can only allow 12 people, so early registration is highly suggested!

#### ISW Program Goals

\* Widely recognized as a forum for peer-based instructional development, the ISW is designed to strengthen instructors' skills through intensive, yet practical exercises in learner-centered teaching.

Mixing small and large group interaction, the workshop will engage participants in:

- \* generating effective feedback and discussion
- \* planning and delivering "mini-lessons" ( you will do 3 lessons)
- \* developing participatory instructional techniques
- \* listening actively
- \* learning and teaching collaboratively

\* Through the workshop, facilitators will provide constructive feedback, encouraging participants to experiment and attempt new methods not normally used in their discipline. A digital recording will be used to provide an individualized record of progress and participants will be actively engaged in the feedback process. A unique and rewarding experience, the ISW not only builds skills and confidence, but also enables participants to learn from and foster partnerships with colleagues from other disciplines.

\* Participants successfully completing the entire 3-day program will receive a Certificate of Completion.

\* ISW participants should note that in addition to the 3 days of "in-class" work, there is also some homework. In other words, participants are advised to reserve time outside of class time for this additional work and avoid scheduling other activities.

Participation: Your commitment to the workshop for the entire three days--attendance during the hours listed above is important for your success in the program. You will be working in small groups for most of the workshop. We have found that it is critical for the success of each small group's work together that participants do not have any other appointments during the workshop hours. Participants in previous workshops have also highlighted that it is important not to try to conduct regular university business during the 3-day program.

The ISW is dependent on group interaction and activity, requiring a certain number of participants per group. Last minute cancellations may cause the cancellation of the entire workshop. We require 5 days notice of cancellation if you change your mind and cannot participate. If you have to cancel before the workshop starts or if you are otherwise unable to complete the workshop once it has started, you will not receive a Certificate of Completion.

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## OTHER UNBC EVENTS

### TERRACE LECTURE SERIES

4837 Keith Avenue  
Terrace, BC  
Room 147  
12:00pm - 1:00pm

### Development of a Food Security Program at the University of Northern British Columbia

Dr. Phil Burton, Associate Professor and NW Regional Chair, UNBC Northwest  
Wednesday, April 22, 2015

There is widespread interest in local food production and sustainable agriculture in northern B.C. The extent to which young people are interested in these issues as a career is uncertain, however. Considerations in the development of a 'Sustainable Food Systems' undergraduate program, including options for regional delivery, will be discussed. Community input is invited.

This presentation will also be available to remote participants by following on [Livestream](#).

## OTHER UNBC EVENTS

### Planning for environmental and social changes

Dr. Mina Di Marino - Candidate for a Faculty Position in ENPL  
Wednesday, April 22, 2015  
1:30 pm – 2:45pm  
Canfor Theatre, 6-213

The presentation is an overview of previous, current, and future work. Being part of several research projects has allowed me to develop a multidisciplinary background and gain solid skills in two challenging topics. The presentation will go through the most representative research projects in which I have taken part as principal or co-investigator.

The first part of the presentation is dedicated to the sustainable planning for cities and urban regions that addresses environmental, ecological and social issues. The second part refers to the current research (and future work) on the change of living and working practices in the urban regions due to the development of Information Technology and the growing flexibility of work arrangements.

The sustainable planning research results focus on how to develop strategies and interventions in urban and rural settings through various planning systems (such as strategic planning and land use planning), in order to maintain wildlife habitats, to prevent loss of agricultural lands, to preserve significant scenic resources, and to enhance recreational resources. To this end sites planning and design can be used to inspire more creative and ecologically informed plans and to help mitigate the negative impacts of development. Also, working experiences with other experts from different agencies, local communities and politicians about the preservation of environmental values are presented. The areas of study are located in Lombardy Region (Italy) and in the metropolitan regions of Milan and Montreal.

The current research, covered in the second section of the presentation, is related to the studies on the ongoing transition from the industrial society (of things) to a service economy (of experience), the residential mobility (change in individual/household residential location) and daily-to-weekly mobility (individual/household travelling within and between cities and urban regions). These phenomena are increasingly characterizing contemporary society. The working time and work arrangements are more and more flexible. The development of the Internet and the advance of virtual and mobile digital services are radically transforming the way of living and working. The area of study is located in the metropolitan region of Helsinki. Results about new multi-local people.

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## SUSAN STEVENSON SCHOLARSHIP FUND

As its first project of this kind, the Natural Resources and Environmental Studies Institute (NRESi) is building a fund to support a scholarship in memory of wildlife ecologist and NRESi member Susan Stevenson. During a 35-year career built primarily in the BC central interior, Susan designed and implemented important research and inventory projects related to mountain caribou habitat, lichen biology, and silvicultural systems, collaborating with a diverse range of researchers, and gave generously of her expertise to the next generation of scientists. Susan exemplified the Institute's values of interdisciplinary curiosity and unselfish collaboration, and enriched the lives of all those who worked and studied with her. The Institute invites you to join it in supporting the Susan Stevenson Scholarship Fund:

1. Visit UNBC Development Office's website: [www.unbc.ca/giving](http://www.unbc.ca/giving)
2. Click on the grey **Make a Gift** button
3. Enter the information requested
4. When you reach the question of **Please direct my donation to:** select **Other**
5. ***Important*** - In the **Comments** area, add that you would like your gift to be contributed to the **Susan Stevenson Scholarship Fund**

## SHARE YOUR PHOTOS & STORIES

Do you have a favourite photo, story or update from your research that you would like to share with your fellow members and the broader NRESi community in the newsletter? Send them to Leanne to include in an upcoming edition!

## COLLOQUIUM ARCHIVE

Did you miss a colloquium or special lecture? Visit NRESi's webcast archive to catch up! This can be found through the following link: <http://www.unbc.ca/nres-institute/colloquium-series/archived-colloquium-series>

## ARCHIVE OF PAST EVENTS

Information, links, proceedings, and other information from past NRESi hosted and co-led events can be found at: <http://www.unbc.ca/nres-institute/special-events>. This site currently includes information about the Forest Tenure events (Annual Lecture and workshop) and a link to the Cumulative Effects Workshop site.

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