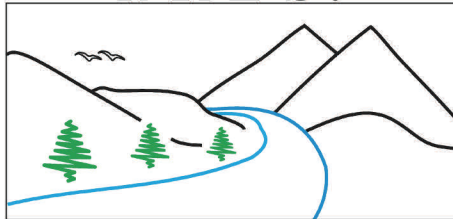


**NRESi**



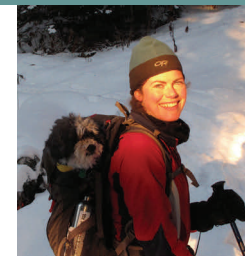
"Our environment is our future"

For **Eluminate** information and link to the webcast: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)

## RESEARCH COLLOQUIUM SERIES

### Sonja Ostertag

PhD Candidate, UNBC



**Friday**

**Mar. 1, 2013**

**3:30 - 4:30**

**LECTURE THEATRE**

**7-158**

### A COMMUNITY-BASED APPROACH TO ASSESSING THE RISK OF MERCURY TOXICITY IN BELUGA WHALES FROM THE WESTERN CANADIAN ARCTIC

In 2008, four researchers traveled by boat to Hendrickson Island, NT, in the Beaufort Sea, for a comprehensive beluga study. Beluga whales (*Delphinapterus leucas*) are hunted by Inuvialuit for subsistence and continue to be a valued and healthy part of the diet in the Arctic. The objective for this study was to assess the neurotoxicological risk of mercury exposure for whales from the eastern Beaufort Sea beluga population. Mercury reaches levels associated with neurotoxicity in this population of beluga whales. Therefore, the forms of mercury present in brain tissue were analyzed and a biomarker approach was used to study the relationship between mercury concentration and potential neurochemical variation. Our results suggest that mercury exposure was associated with neurochemical variation, but not unusual behaviour, in the population studied. The community-based participatory approach used by the team increased communication and dialogue, which are integral aspects of respectful and empowering research relationships.

Joint Seminar with Northern Studies In honour of **NATIONAL POLAR DAY**