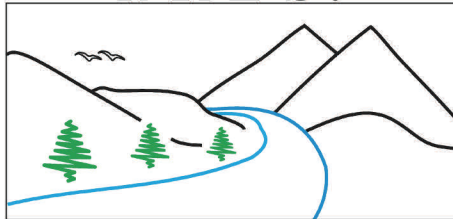


NRESi



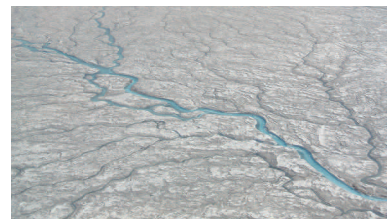
"Our environment is our future"

For **ELluminatE** information and link to the webcast: http://www.unbc.ca/nres/nresi_webcast.html

RESEARCH COLLOQUIUM SERIES

Dr. Åsa Rennermalm

Asst. Professor, Dept. of Geography, Rutgers University



Friday

Mar. 22, 2013

3:30 - 4:30

LECTURE THEATRE

7-158

GREENLAND ICE SHEET MELTDOWN: A PERSPECTIVE FROM THE GROUND

During a few warm days in early July 2012, a melt event encompassing nearly the entire Greenland ice sheet was captured by satellites for the first time since observations began in 1979. This milestone event put the Greenland ice sheet into the spotlight once again, reminding society of its enormous freshwater reservoir that holds the potential to raise global sea levels up to 7 meters. Earlier observations have shown decade-long speed up, thinning, and retreat of glacier tongues extending into fjords. But the extreme surface melting observed in 2012 represents another type of mass loss: runoff.

In this seminar I will discuss Greenland ice sheet's dramatic change over the last decades and present findings from my field research in southwest Greenland. Here, I have collected unique river discharge observations providing opportunities to better understand the complex Greenland ice sheet hydrology. My research demonstrates a growing importance of meltwater export from higher elevations, and the ice sheet's large capability to internally retain meltwater up to several months and years. This provides insights into how much ice sheet runoff actually reach surrounding oceans and contribute to global sea level change.