## International collaboration

ARC takes an active share in a large, international research program as a partner in Arctic Science Partnership (ASP) which also encompasses Greenland Institute of Natural Resources and University of Manitoba, Canada.

Paramount to ASP is a large-scale international and interdisciplinary collaboration with the purpose of ensuring a more coherent effort in the Arctic region.

The ASP fosters a critical exchange of knowledge and provides scientists with a joint logistical platform, drawing on the numerous facilities administered by each institution, including research vessels, field stations and laboratory facilities.

# Education and Communication

Education and communication comprise two focal activities of the Arctic Research Centre.

Educational programs are designed to be anchored locally in Aarhus, Greenland and Canada, respectively, enabling individual courses to grapple with problems encountered in the immediate surroundings and build local knowledge and expertise.

The continuous dissemination of knowledge to the public, with the aim of promoting local ownership and community-level action in the context of irrevocable climate change is a key issues for both Arctic Research Centre and Arctic Science Partnership.

Arctic Research Centre was launched in 2012 and is funded by Aarhus University, together with a number of external foundations.

#### Address:

Arctic Research Centre (**ARC**) C.F. Møllers Allé 8, bldg. 1110 DK-8000 Aarhus C Denmark

For more information, visit our websites:

Arctic Research Centre: http://arctic.au.dk Arctic Science Partnership: http://asp-net.org

### CONTACT

Centre Director Professor Søren Rysgaard (SoRy@natur.gl)

Co-lead Professor Jesper Madsen (jm@dmu.dk)

Centre manager Christina Almann Levisen (levisen@biology.au.dk) Phone: +45 8715 6695 / +45 2094 7108



An interdisciplinary research centre at Aarhus University

JNIVERSITET





# Research at the top of the world

The Arctic is under pressure. Climate change imposes critical challenges to its vulnerable ecosystems, communities and indigenous populations.

To study the full impact of the changes in the Arctic and the mechanisms behind these, Aarhus University has established Arctic Research Centre (ARC) to identify viable solutions to the burning issues at hand.

The centre brings together researchers from a wide variety of sciences. This collaborative formation promotes synergy and continuous consolidation of specialist knowledge, and it ensures an integration of state of the art results from both fundamental and applied research, as well as data from monitoring programs.

# Focus areas

Joint research campaigns form the cornerstone of ARC. During field periods, specialists from various disciplines unite forces as they carry out investigations in locations of mutual interest. The 2013 joint field campaign will take place around Nuuk, Greenland, and in 2014 and 2015, the target locations are Northeast Greenland and the Arctic Ocean between Canada and Greenland, respectively.

Across water, land and atmosphere, ARC investigates:

- Ongoing changes in ice-ocean interactions, snow and ice extent, permafrost thaw and their combined consequences for Arctic ecosystems and societies
- Feedbacks between the Arctic and Earth climate systems
- Proxies for predicting future changes in ocean currents, weather systems and ecosystems
- Impact of climate change on the Arctic population's lifestyle and disease patterns
- Pollutant transport to the Arctic and exposure consequences on ecosystems and humans