

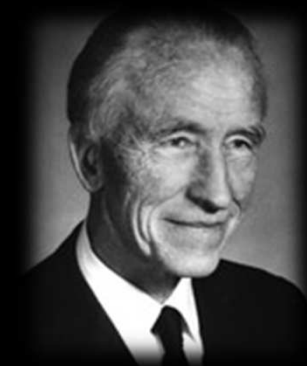
# Bjerknes Centre for Climate Research



Photo: Stian Rondestveit

# Bjerknes Centre for Climate Research

- ❑ Named after Vilhelm and Jack Bjerknes
- ❑ University of Bergen, UNI Research AS, Nansen Centre, Institute of Marine Res.
- ❑ National centre of excellence, 2003-2012. Direct funding from government 2010-2021
- ❑ 150 scientists, 25 nationalities. Recruiting from top institutions
- ❑ Past, present and future climate. Observations, theory and modeling
- ❑ Largest Nordic climate research centre, among top-five Europe
- ❑ Coordinates Earth System modeling, national research training.



# Research groups

□ RG1: Climate model development and projections

□ RG2: Climate predictions and regional scenarios

□ RG3: Carbon cycle and biogeochemistry

□ RG4: Large scale atmosphere-ocean dynamics

□ RG5: Atmosphere, cryosphere and ocean proces.

□ RG6: Natural variability – extending instr.l records

□ RG7: Paleoclimate - from greenhouse to icehouse



# Internally funded projects

IPCC: IPCC AR5 work (2 yrs)

*A. Sorteberg (UiB)*

IMMUNITY: Multi-decadal natural climate variability

*O.H.Otterå (UNI)*

PRACTICE: Predictability of Arctic / North Atlantic climate

*Tor Eldevik (SKD-UiB)*

REGSCEN: Regionalisation of climate scenarios

*A.B. Sandø (IMR), Stefan Sobolowski (UNI)*

DYNAWARM: Dynamics of past warm climate

*B. Risebrobakken (UNI), Camille Li (UiB)*

SEALEV: Ice sheet dynamics and sea level change

*J.E.Ø. Nilsen (NERSC)*

BIOFEEDBACK: Biogeochemical feedbacks in the climate system

*A. Olsen (UiB), Jerry Tjiputra (UNI)*

**Total budget 70 MNOK from SKD, 100 MNOK in kind.  
New projects will start spring 2015.**



# Externally funded projects (starting 2014)

- ❑ RCN: KLIMAFORSK call. 9 of 13 projects to Bjerknes centre  
FRINAT call: 4 research projects, 2 postdoc stipends  
(Decadal prediction, ocean carbon update, northern MOC, ...)
- ❑ NordForsk: GREENICE. Predictability Arctic climate
- ❑ EU: Preface, 9 M€. 28 partners, 9 European, 9 African countries (Tropical Atlantic – predictability and impacts)  
Ice2Ice (EU synergy). 12,6 M€. 4 partners, 2 countries  
(Ocean - Sea ice – Greenland ice. Paleo, modern, future)
- ❑ 12 Feb. SFI proposal on climate services submitted

# Research training

## **Norwegian Research School in Climate Dynamics (RCN)**

- 3 MNOK / year for 8 yrs. Ca 80 PhD students in Norway.  
(summer schools, workshops, graduate conferences, various support actions, )

## **Norwegian – North America partnership in climate (SIU)**

- Ca 600 KNOK / year. 4+4 yrs. Mobility, internationalization.
- ACDC summer schools 2009 – 2016

# Advanced Climate Dynamics Courses

ACDC  
**ACDC2009: "AMOC variability"**  
 UiB Marine Research station, Bergen  
 - Advanced Climate Dynamic Courses



ACDC  
 Summer school on Ice – Ocean Interactions  
 June 2010, MIT Fablab, Lyngen, Norway  
 - Advanced Climate Dynamic Courses



ACDC  
 Summer school on Landscapes and Climate  
 August 2012, Snøheim, Dovre, Norway  
 - Advanced Climate Dynamic Courses



ACDC  
**ACDC2013: "Dynamics of the last Deglaciation"**  
 Nyksund, Vesterålen, Norway  
 - Advanced Climate Dynamic Courses



ACDC  
**Next ACDC in 2014 will on the "Dynamics of the Greenland Ice Sheet"**  
 - Advanced Climate Dynamic Courses



**16<sup>th</sup> – 31<sup>st</sup> of August, 2014, Arctic Station, Disko Island, West Greenland**

**Target:** Advanced PhD candidates and early career scientists.

**Goal:** To mix students and lecturers with empirical/proxy and dynamical training within climate science and focus on understanding the basic principles and dynamics behind changes to the Greenland ice sheet in the past, present and future.

**Lecturers:** Fiamma Straneo (WHOI), Kerim H. Nisancioglu (UiB), Patrick Heimbach (MIT), David Battisti (University of Washington), Camilla Snowman Andresen (GEUS), Øyvind Paasche (UiB), Helen Seroussi (JPL), Natalya Gomez (Harvard), Christian Schoof (UBC).

Open for applications end-January at: <http://www.uib.no/rs/acdc/>

