



Polar research  
at the University  
of Bergen

Susanne Mikki, dr. scient. University  
Library

# Aim and design of the study

1. Based on a questionnaire, researchers within polar research at the University of Bergen are located
2. Based on this core group, publications are retrieved
  - Publications are filtered by belonging to polar research (manually)
  - Publications are analyzed by co-authors at the University of Bergen, position and faculty
3. Publications are analyzed
  - By co-publishing countries
  - By co-publishing institutions
4. Findings are compare to other studies

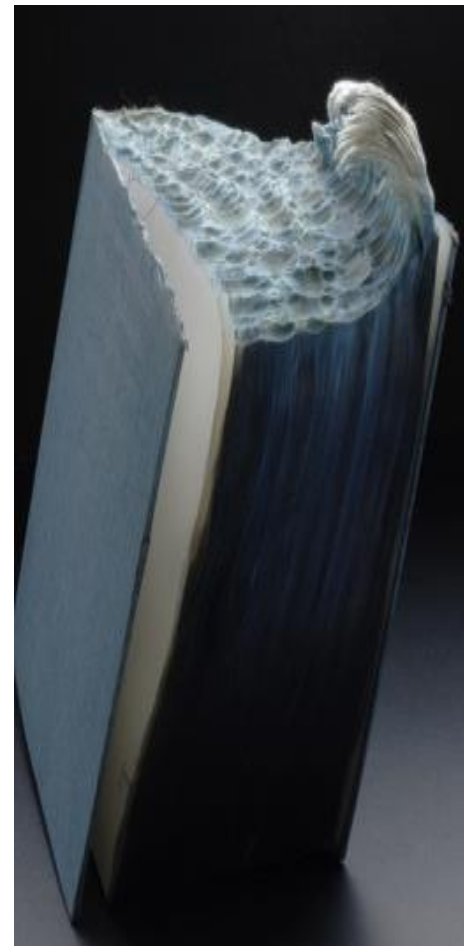


# Data source

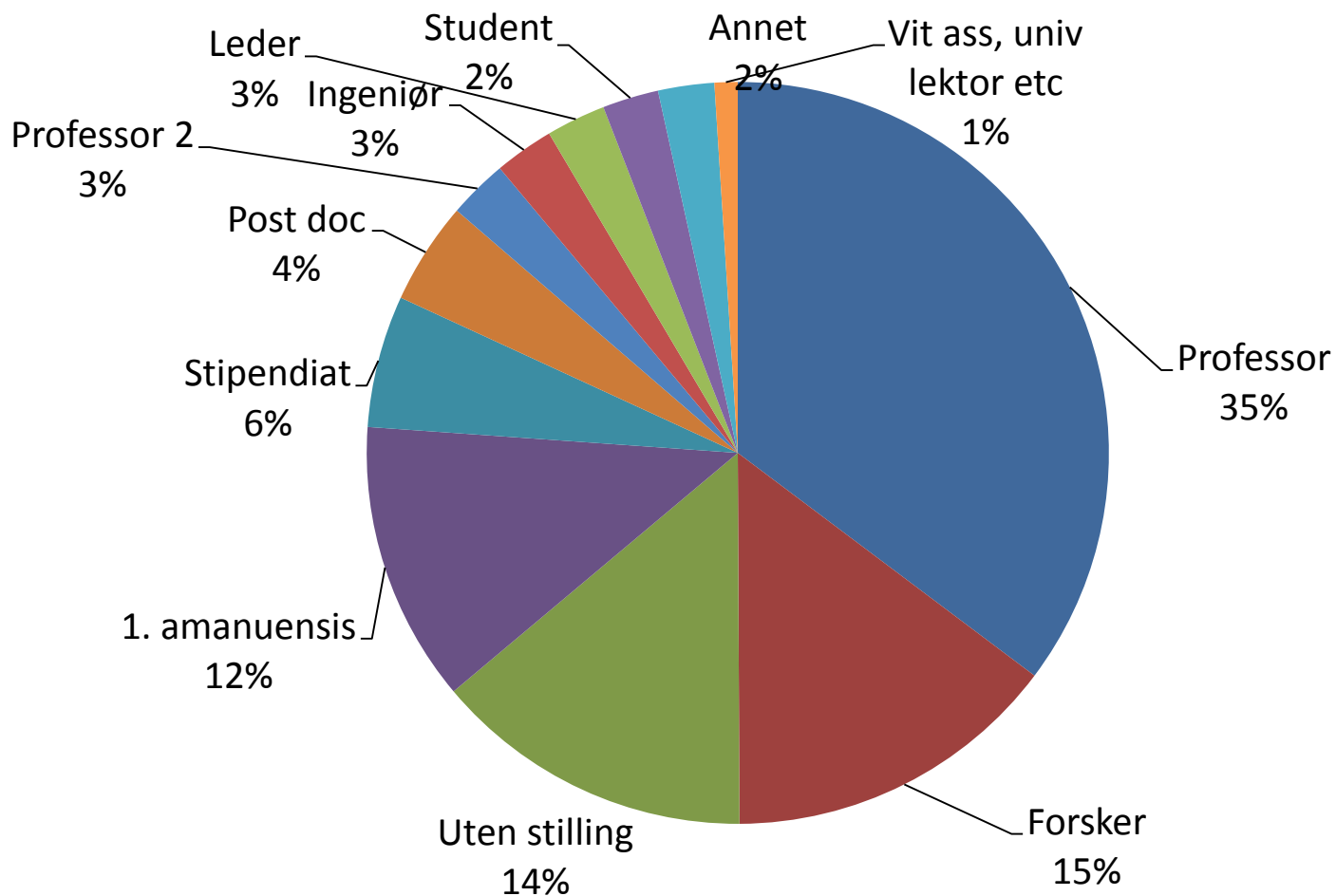
- **CRISTIN**
  - CRISTIN is a national, authoritative system for documenting scholarly publications.
  - Even though CRISTIN is a national system, the University of Bergen data access is restricted to publications of the University's publications only. For benchmarking reasons other studies have been consulted.
  - Included publications
    - Publications which state the University of Bergen as an affiliation
    - Publications which are scholarly according to approved publishing channels
  - Investigated time period : **2009-2012**.

# Main results (2009-2012)

- Core group of polar researchers: 64
- 263 publications by the core group have been classified «polar»
  - Ca 14% are gold open access
- These publications involved 269 authors from the University of Bergen
- 150 publications (ca 60%) had a co-author from abroad
- Co-authors came from
  - 30 different countries in addition to Norway
  - 242 institutions in addition to The University of Bergen

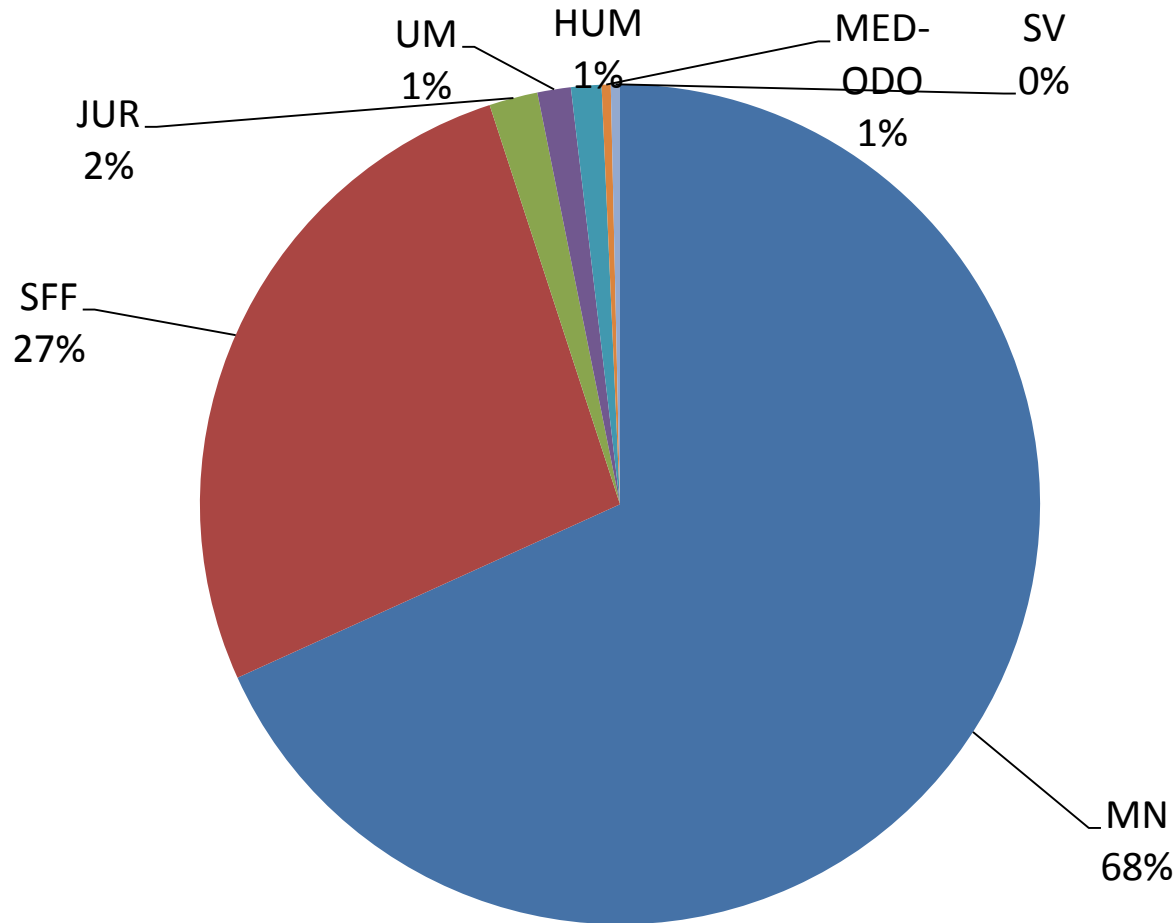


# ***Polar publications by position***



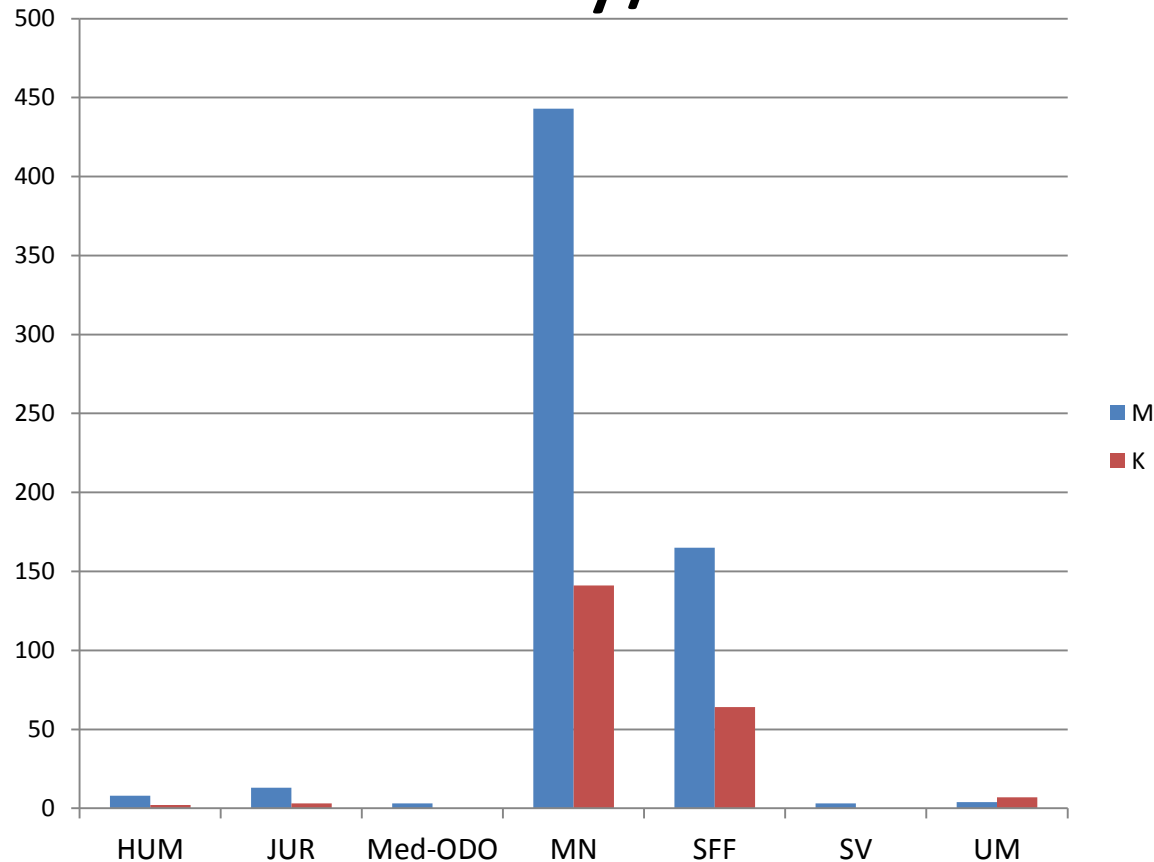
*Category Uten stilling include persons who at the time of publishing no longer were affiliated to The University of Bergen, but stated it as their address on the publication.*

# ***Polar publications by faculty/unit***



All authors count, double counting occurs when an author belong to more than one faculty.

# Polar publications by gender and faculty/unit



All authors count, double counting occurs when an author belong to more than one faculty.

# *Co-publications by country*

Country	Number of UiB publications	Country	Number of UiB publications
Storbritannia	35	Spania	5
USA	33	Portugal	4
Tyskland	28	Kina	3
Frankrike	23	Nederland	3
Island	20	Tsjekkia	2
Sverige	17	Australia	2
Danmark	14	Romania	1
Ukjent	13	Italia	1
Finland	11	Taiwan	1
Østerrike	10	Chile	1
Canada	7	Færøyene	1
Sveits	7	Irland	1
Rusland	7	Belgia	1
Japan	7	Argentina	1
Polen	5	New Zealand	1
		<b>Grand Total</b>	<b>265</b>



# Comparing with a study by Aksnes et al. Norwegian partnership based on WoS data

Landnavn	Antall UiB publikasjoner	Landnavn	Antall UiB publikasjoner
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**WoS**

# Comparing with a study by Science Metrix

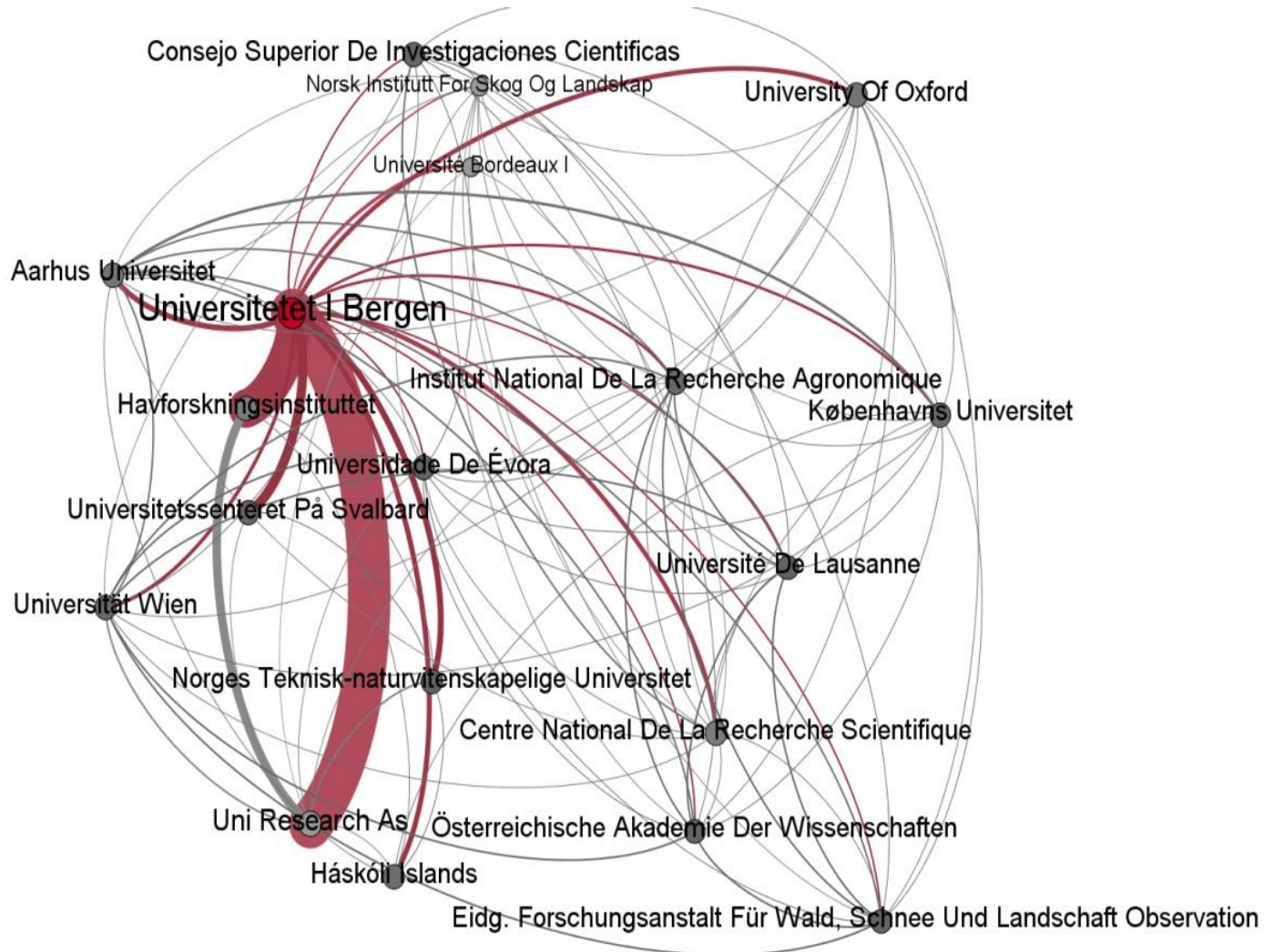
## UiB partnership based on SCOPUS data

Rank	UiB (CRISTin)		UiB (SCOPUS, 58 land)
1	Storbritannia	↔	United Kingdom
2	USA	↔	United States
3	Tyskland	↔	Germany
4	Frankrike	↗ ↘	Denmark
5	Island	↖ ↗	France
6	Sverige	↔	Sweden
7	Danmark	↖ ↗	Switzerland
8	Finland	↖ ↗	Canada
9	Østerrike	↖ ↗	Iceland
10	Canada	↖ ↗	Russia
11	Sveits	↖ ↗	Finland
12	Russland	↖ ↗	Netherlands
13	Japan	↖ ↗	Spain
14	Polen	↖ ↗	Japan
15	Spania	↖ ↗	Australia

## *Co-publishing institutions*

	Number of publications
Uni Research AS	50
Havforskningsinstituttet	40
Nansen Senter for Miljø og Fjernmåling	20
Universitetet i Oslo	15
Akvaplan Niva AS	14
Universitetssenteret på Svalbard	11
University College London	7
Norges teknisk-naturvitenskapelige universitet	7
Aarhus Universitet	6
Norsk institutt for naturforskning	6
Universitetet for miljø- og biovitenskap	6
Háskóli Islands	6
Norsk institutt for vannforskning	6
Laboratoire des Sciences du Climat et de l'Environnement	6
The International Institute for Applied Systems Analysis	6
Leibniz-Institutes für Ostseeforschung Warnemünde	6
Nasjonalt institutt for ernærings- og sjømatforskning	6
Alfred-Wegener-Institut für Polar- und Meeresforschung	5
Centre national de la recherche scientifique	5
Oulun yliopisto	5
Helsingin yliopisto	5
Hokkaido Daigaku	5
University of Oxford	5

# *Co-publishing network, national and international institutions*

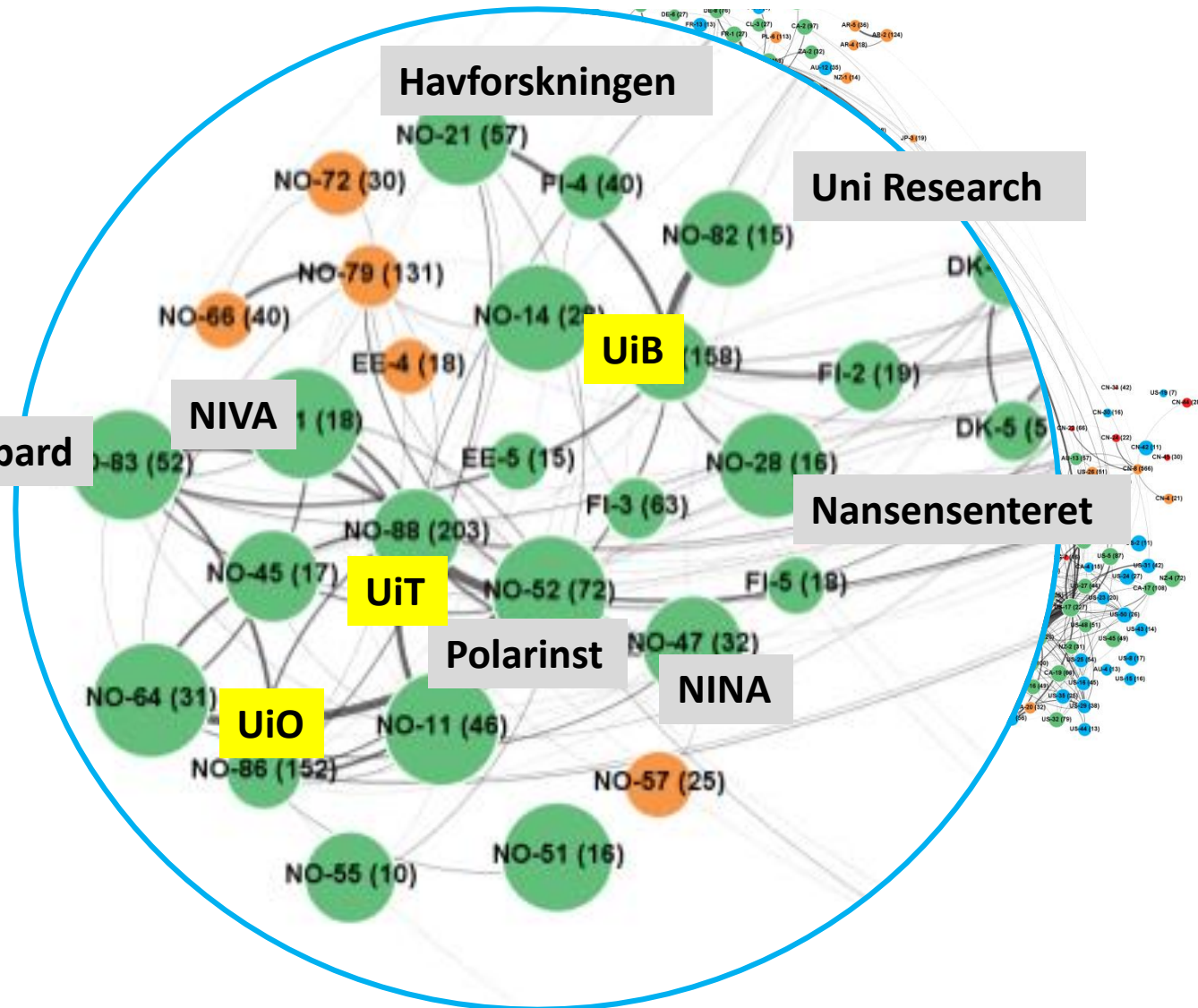


# Co-publishing network (SCOPUS, 2010-12, Science Matrix)

Diameter and colour proportional with specialisation and impact

Breadth proportional with number of co-publications

Numbers in brackets indicate sum of publications (fractional counting)

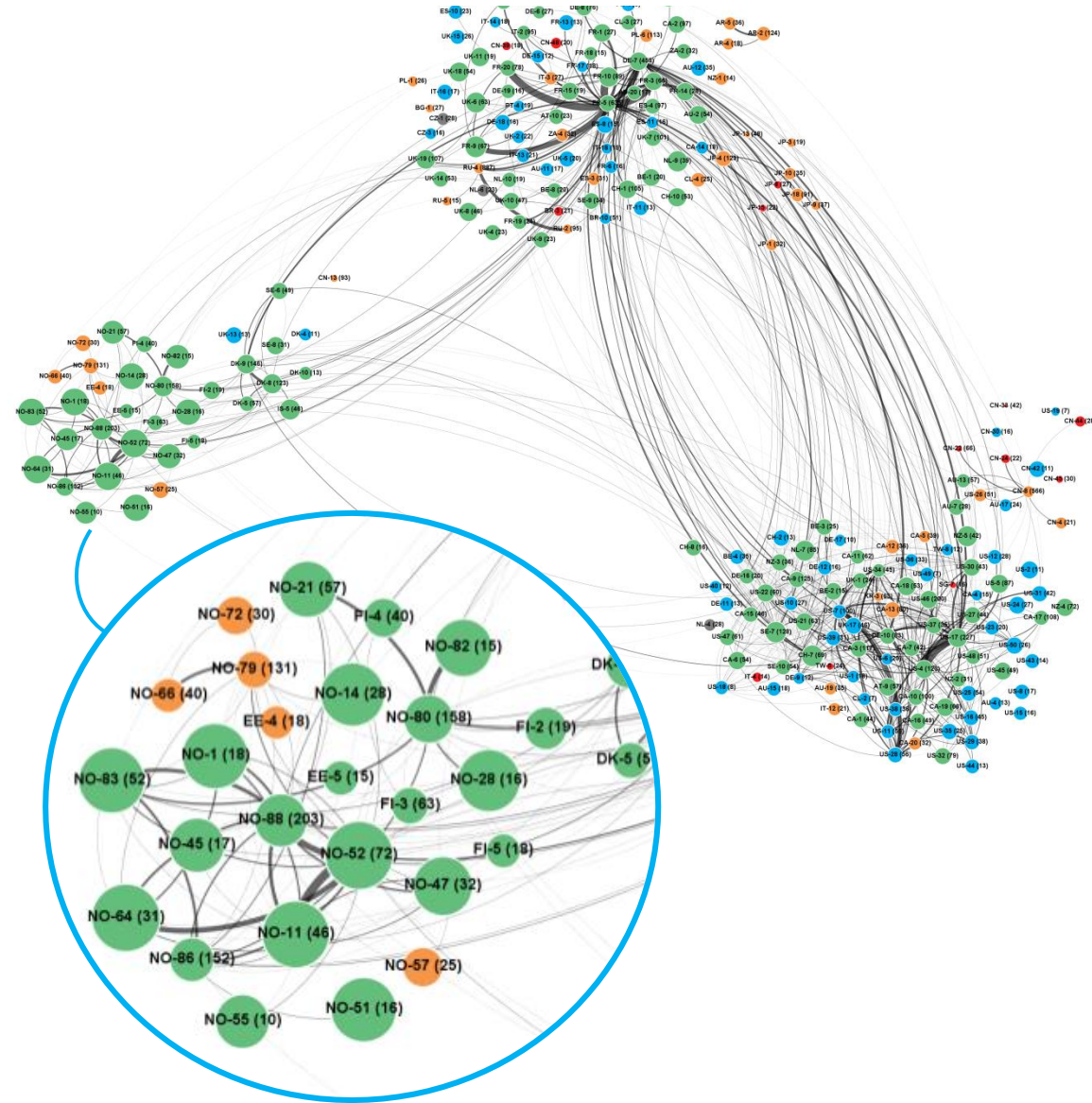




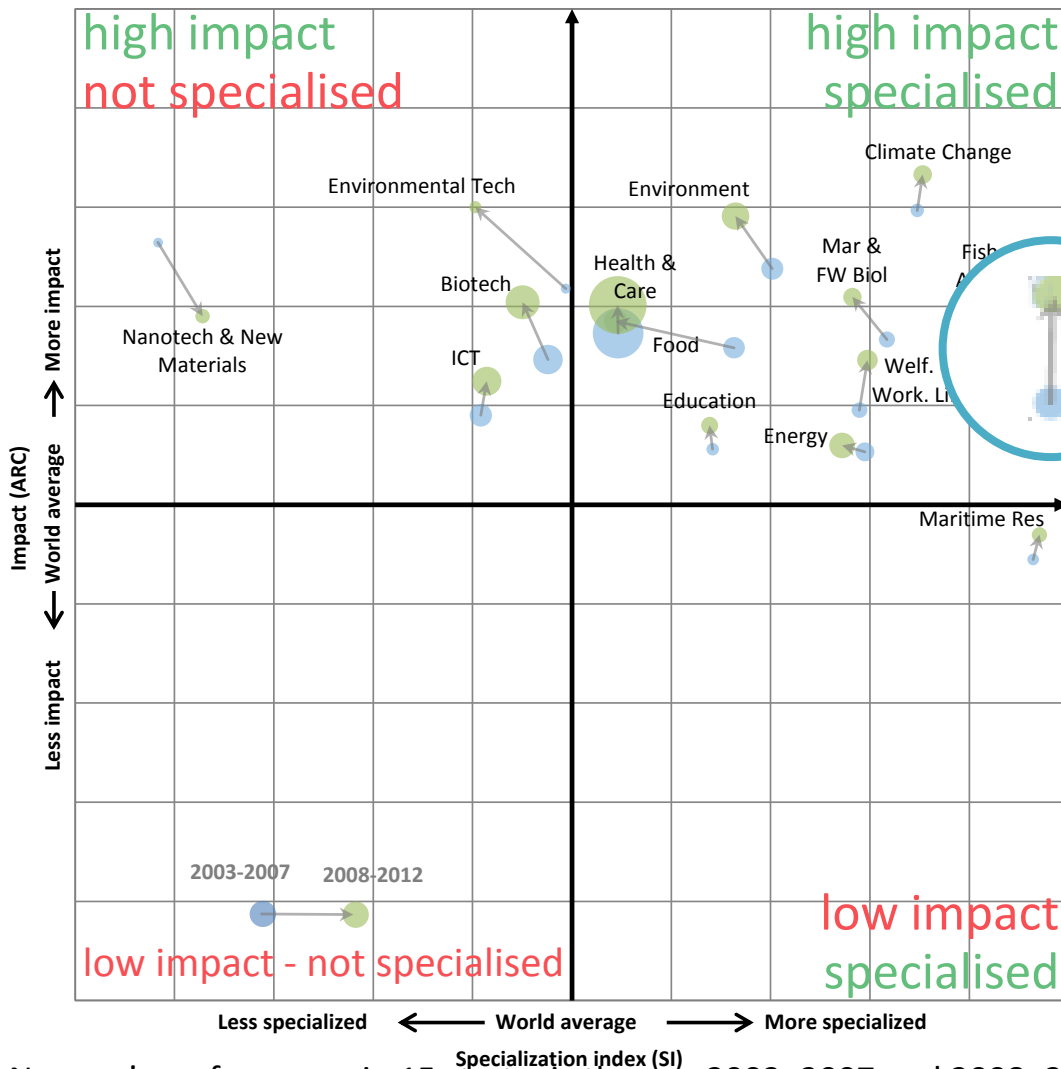
# Performance and Collaboration Profiles by Theme – Arctic & Antarctic

## Results on organisational level

- network consists of a European (top), US (lower right) and Nordic cluster (lower left)
- in the Nordic cluster, U. of Tromso (NO-88) is central hub
- most Norwegian institutions have high SIs and ARIFs
- U. of Copenhagen (DK-9) ranks 5<sup>th</sup> in terms of centrality and acts as hub between Nordic and two other clusters
- Norway could deploy its strong relation with U. of Copenhagen to increase opportunities to collaborate more with European and US clusters



# Polar research in Norway



- In international context, Norway show

- High degree of specialisation
- High and increasing impact

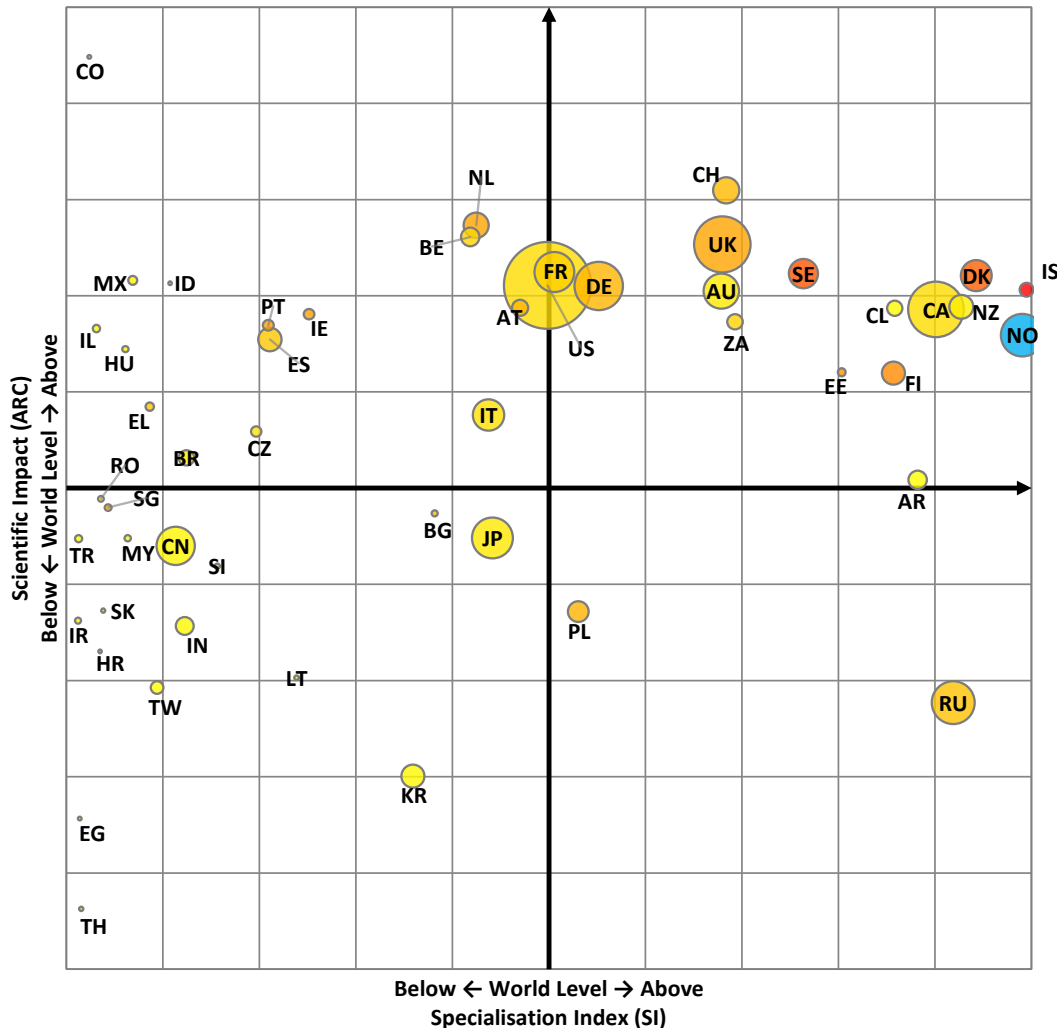
- Axis show world average
- Everything within the first quadrant lies over world average
- Diameter proportional with number of articles (fractional counting)

Norway's performance in 15 strategic themes 2003–2007 and 2008–2012

Kilde:

- Science-Metrix. (2014). Bibliometric Study in Support of Norway's Strategy for International Research Collaboration. *Interim Report*.
- SCOPUS

# Collaborating countries – Polar research



- Norway and Iceland most specialised, high degree of collaboration them between
- Diameter proportional with number of articles: Norway, Iceland, Canada, Switzerland, Denmark, UK, US and New Zealand are most important actors
- Colour intensity proportional to degree of collaboration with Norway: Increased collaboration with Canada, US and New Zealand may be beneficial according Science Matrix

Kilde:

- Science-Metrix. (2014). Bibliometric Study in Support of Norway's Strategy for International Research Collaboration. *Interim Report*.

- SCOPUS



# Kilder

- Mikki, S. (2014). Polarforskning ved UiB - en bibliometrisk undersøkelse: Universitetet i Bergen.
  - CRISStin-data
- Aksnes, D. W., Rørstad, K. & Røsdal, T. (2012). Norsk polarforskning – forskning på Svalbard. Ressursinnsats og vitenskapelig publisering – indikatorer 2010: NIFU.
  - WoS-data
- Science-Metrix. (2014). Bibliometric Study in Support of Norway's Strategy for International Research Collaboration. *Interim Report*.
  - SCOPUS-data
- Polarforskningsnettverket. <http://www.uib.no/polar>
- Carved Book Landscape Sculptures by Guy Laramée