**Curriculum vitae with track record for Professor Jostein Bakke**

**ROLE IN PROJECT**

Project manager  Collaborator

**Curriculum Vitae**

**PERSONAL INFORMATION**

Family name, First name: Bakke, Jostein

Kids; 6, 9 and 11 years old

ORCID: http://orcid.org/0000-0001-6114-0400

Date of birth: 29.11.1972

Nationality: Norwegian

URL for web site: [www.uib.no/persons/Jostein.Bakke](http://www.uib.no/persons/Jostein.Bakke)

* **EDUCATION**

2004 PhD – Title: Late Weichselian and Holocene glacier fluctuations along a south-north coastal transect in Norway – climatic and methodological implications. Doctor Scientiarum thesis, University of Bergen, ISBN 832-497-0207-7. Faculty of Social science/Department of Geography/University of Bergen, Norway; Supervisors: Svein Olaf Dahl and Atle Nesje

1999 Master

Faculty of Social science/ Department of Geography, University of Bergen, Norway and The University Centre in Svalbard (UNIS) 2002

* **CURRENT POSITION**

2011 – Professor in Quaternary Geology, leader for Quaternary Earth Systems research group (Department of Earth Science) and leader for RG6 – Research group for natural climate variability (Bjerknes Centre for Climate Research), Faculty of Mathematics and Natural sciences, University of Bergen/ Norway

2015 - Thematic network leader, University of the Arctic (UArctic): Polar ice, climate and land dynamics

* **PREVIOUS POSITIONS**

2012 – 2015 Co-leader PAGES Arctic 2k network

2010 – 2011 Professor in Physical Geography

Faculty of Social science/ Department of Geography, University of Bergen/ Norway

2008 – 2011 Associate professor in Physical Geography

Faculty of Social science/ Department of Geography, University of Bergen/ Norway

2011 Visiting scientist, Climate System Research Center, UMASS, US (6 months)

2007 Guest scientist, Climate Geology, ETH Zurich, Switzerland (6 months)

2005 Guest scientist Department of Geography, St Andrews University, UK (4 months)

2004 – 2008 Post Doc, Bjerknes Centre for Climate Research/University of Bergen/ Norway

* **FELLOWSHIPS AND AWARDS**

2011 – 2012 Fulbright Arctic Chair Award (6k €), Visiting scientist, Climate System Research Center, UMASS, US

* **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

2011 – 4 Postdocs/ 6 PhD/ 12 Master Students, Faculty of Mathematics and Natural sciences

/Department of Earth science, University of Bergen/ Norway

2004-2011 2 PhD students/36 master students, Dept. of Geography, University of Bergen, Norway

* **TEACHING ACTIVITIES**

2011 – *Under graduate level*, Introduction to geology (GEOV101), Excursions and practical’s in geology (GEOV102), *Graduate level;* Field and laboratory course in quaternary geology (GEOV226), Master level field excursion in quaternary geology (GEOV322), Terrestrial paleoclimatology – webinar series together with UMASS (GEOV323), University of Bergen/ Department of Earth science/Norway

* **ORGANISATION OF SCIENTIFIC MEETINGS**

2016 2 sessions, European Geosciences Union General Assembly

2015 45th Arctic workshop (international meeting); 120 participants / Norway

2014 Younger Dryas workshop (international meeting; 30 participants / Norway

2011 Amundsen Day – 100 years celebration – race to the South Pole; 80 participants, NASA-GISS and The Explorers Club, NYC, USA

2008-2015 Convenor: 4 sessions, European Geosciences Union General Assembly; 3 sessions American Geophysical Union Fall Meeting: Topic includes Late Glacial and Holocene climate variability; 1 session, 33rd International Geological Congress, Norway; 1 session, Nordic geographers meeting, Norway.

* **INSTITUTIONAL RESPONSIBILITIES**

2011 – 2015 Member (leader and co-leader) of several selection committees for research, postdoctoral, PhD and technical positions, University of Bergen/Norway

2015 Member of Strategic board – climate research at University of Bergen/Norway

2014 Member of committee evaluation Education in renewable energy, University of Bergen / Norway

* **COMMISSIONS OF TRUST**

2011 – Reviewer for National Science Foundation, USA (once a year)

2011 – Reviewer for the Danish Research Council, Denmark (once a year)

* **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2012 – Member, Research Network “*PAGES*” (2013-2016; leader PAGES Arctic 2k)

2004 – Member, European Geophysical Union

2004 – Member, American Geophysical Union

* **MAJOR COLLABORATIONS**

R. Bradley Lake sediments, paleoclimate, UMASS, USA (joint papers)

W. D`Andrea Biogeochemistry, LAMONT, Columbia University, USA (joint papers)

J. Schaefer Cosmogenic dating, LAMONT, Columbia University, USA (joint papers)

D. Sache Biogeochemistry, hydrogen isotopes, GFZ Poznan, Germany (project collaboration)

N. Balascio Tephra chronology, William & Mary Collage, USA (joint papers)

A. Hirt Palaeomagnetism and environmental magnetism, ETH, Switzerland (laboratory collaboration)

O.H. Otterå NorESM, paleomodelling, forcing, Uni Research, University of Bergen, Norway

* **CAREER BREAKS**

01.04. – 01.08.2005 Paternity leave with Bjørn Johan Bakke

31.09 – 01.12.2007 Paternity leave with Oskar Bakke

30.04 – 31.09.2010 Paternity leave with Karolina Bakke

* **REVIEWER**

Nature Geoscience, Quaternary Science Review, the Holocene, Climate of the Past, Geology, Boreas, Norwegian Journal of geology (5-10 papers every year)

**Publications**

The number-one target for my research has been to develop better tools for describing and differentiating the various sediment components deposited in distal glacial-fed lakes and to up-scale those results to interpretable climate signals. I have authored and co-authored 36 peer review publications, including in the high-ranking Nature Geoscience and Science journals. According to Google Scholar, these have been cited a total of 1402 times, and I have an h-index of 20. I have worked extensively with lake sediments and paleoclimatic reconstructions on multi-decadal to centennial resolution and have developed new methods for reconstructing glaciers. In 2009 I published in a new explanation for how rapid climatic instability terminated the last ice age in Scandinavia and northern Europe based on new high resolution analyses from a distal glacier-fed lake.

Ten representative publications and number of citations (excluding self-citations; Google Scholar):

1. Van der Bilt, W., **Bakke, J.**, Vasskog, K., D`Andrea, W.J., Bradley, R. and Olafsdottir, S. 2015: Reconstruction of glacier variability from lake sediments reveals dynamic Holocene climate in Svalbard. *Quaternary Science Review*s, 126, 201-218. (Citation 0)
2. **Bakke, J.**, Trachel, M., Kvisvik, B.C., Nesje, A. and Lyså, A. (2013): Numerical analyses of a multi-proxy data set from a distal glacier-fed lake, Sørsendalensvatn, western Norway. *Quaternary Science Reviews*, 73, 182–195. (Citations 12)
3. **Bakke, J.** and Paasche, Ø. (2011): Sediment core and glacial environment reconstruction. *In*: Encyclopaedia of Snow, Ice and Glaciers. *Ed.*: V.P. Singh, P. Singh & U.K. Haritashya, Springer. (Citations 27)
4. **Bakke, J.,** Dahl, S.O., Paasche, Ø., Kvisvik, B., Simonsen, J., Bakke, K. and Nesje, A. 2010: A complete record of Holocene glacier variability at Austre Okstindbreen, northern Norway: an integrated approach. *Quaternary Science Reviews*, 29, 1246-1262. (Citations 42)
5. **Bakke, J**., Lie, Ø., Heegaard, E., Dokken, T., Haug, G., Birks, H.H., Dulski, P. and Nilsen., T. 2009: Rapid oceanic and atmospheric changes during the Younger Dryas cold period. *Nature Geoscience*. DOI: 10.1038/NGEO439. (Citation 121)
6. **Bakke, J.**, Lie,Ø., DahlS.O., Nesje A.,and BjuneA.E. 2008: Strength and spatial patterns of the Holocene wintertime westerlies in the NE Atlantic region. *Global and Planetary Change.* 60 (1-2) s. 28-41. doi:10.1016/j.gloplacha.2006.07.030. (Citation 75)
7. Nesje, **Bakke, J.**, Dahl, S.O., Lie, Ø. And Matthews, J.A 2008: Norwegian mountain glacier in the past, present and future. *Global and Planetary Change*. 60 (1-2), 10-27. (Citation 144)
8. **Bakke, J**., Dahl, S.O., Paasche, Ø. and Nesje, A. 2005: Glacier fluctuations, equilibrium-line altitudes and palaeoclimate in Lyngen, northern Norway during the Lateglacial and Holocene. *The Holocene*, 15, 4, 518-540. (Citation 82)
9. **Bakke, J**., Dahl, S.O. and Nesje, A. 2005: Lateglacial and early-Holocene palaeoclimatic reconstruction based on glacier fluctuations and equilibrium-line altitudes at northern Folgefonna, Hardanger, western Norway. *Journal of Quaternary Science*, 20, 179-198. (Citation 48)
10. **Bakke, J**., Lie, Ø., Nesje, A., Dahl, S.O. and Paasche, Ø. 2005: Utilizing physical sediment variability in glacier-fed lakes for continuous glacier reconstructions during the Holocene, Folgefonna, western Norway. *The Holocene,* 15, 2, 161-176. (Citation 67)

I have published several monographs, book chapters in collective volumes, the following is the most recent:

1. Paasche, Ø. and **Bakke, J.** 2015: The Fleeting Glaciers of the Arctic In:The New Arctic. Ed: Evensgård, B., Larsen, J. And Paasche, Ø., Springer, 79-95, DOI 10.1007/978-3-319-17602-4.
2. **Bakke, J.** and Paasche, Ø. 2011: Sediment core and glacial environment reconstruction. *In*: Encyclopaedia of Snow, Ice and Glaciers. *Ed.*: V.P. Singh, P. Singh & U.K. Haritashya, Springer, 268-277, ISBN 978-90-481-2641-5.
3. **Bakke, J.,** 2008: Breer og klima (Glaciers and climate), In: Breboka – håndbok i brevandring. Revidert utgave. Ed: S. Haslene. DNT Fjellsport, chapter 12, 213-237, AIT trykk Otta.
4. Lie, Ø., **Bakke, J.,** Dokken, T., Risebrobakken, B. and Nesje, A. 2006: The Climate Signal in Glaciers - Evidence for Shifting North Atlantic Atmospheric Circulation. In: Price, M. F. (ed.) Global Change in Mountain Regions. Sapiens Publishing, Dunkow. ISBN: 0-9552282-2-0. p 54-55.
5. **Bakke, J.**, Dahl, S.O., Nesje, A. and Lie, Ø. 2006: Winter precipitation anomalies during the Holocene, observed through reconstructed glacier fluctuations along the west coast of Norway. In: Price, M. F. (ed.) Global Change in Mountain Regions. Sapiens Publishing, Dunkow. ISBN: 0-9552282-2-0. p 51-52.
6. **Bakke, J.**, Lie, Ø., Nesje, A., Dahl, S.O. and Paasche, Ø. 2006: Utilizing physical sediment variability in glacier-fed lakes for continuous glacier reconstructions during the Holocene, northern Folgefonna, western Norway. In: Price, M. F. (ed.) Global Change in Mountain Regions. Sapiens Publishing, Dunkow. ISBN: 0-9552282-2-0. p 53-54.

**Selected invited presentations to peer-reviewed, internationally established conferences etc.**

1. **Bakke, J.**, Wittmeier, H., Schaefer, J., Vasskog, K. and Røthe, T. (2014): Late Glacial and Holocene glacier fluctuations at high Northern latitude. C52B-04 - AGU, 19/12 2014 (keynote).
2. **Bakke, J**. 2011: Shifting Climate States of the Polar Regions. Seminar series, Climate System Research Centre, University of Massachusetts, 15/7.
3. **Bakke, J**., Dahl, S.O., Kvisvik, B., Bradley, R., Årnes, I., Balascio, N., Birks, H.H. and Haug, G. 2011: Synchronous inter-hemispheric alpine glacier advances during the Antarctic Cold Reversal. CSRC seminar series, University of Massachusetts, 28/10.
4. **Bakke, J**. 2011: Glacier at the rim of the poles as palaeo archives. Five Colleges Seminar Series, Dept. of Geoscience, University of Massachusetts, US, 2/12
5. **Bakke, J.** & Paasche, Ø. 2010: Sediment core and glacial environment reconstruction - a method review, EGU2010-13699, Vienna 2 - 7 May (keynote).
6. **Bakke, J**. 2008*:* Sediment-climate linkages in distal glacial-fed lakes, Ötzi, Schnidi and the Reindeer Hunters: Ice Patch Archaeology and Holocene Climate Change, Symposium 21-22 August 2008, Oeschger Centre, Bern (keynote).
7. **Bakke, J.** 2007: Glaciers and lakes at the rim of the northern North Atlantic. Climate Geology, ETH Zurich 24/09
8. **Bakke, J.** 2006: Global Climate change – natural variability or human impact?: Norwegian society of Geography, conference title: Norway in a globalised world: 23-24.03.06 (keynote)
9. **Bakke, J.** 2005: Glaciers and climate: Reconstructions of Holocene glacier variations from lake sediments along a south-north transect in Norway. *Klimakolloquiums-Vorträgen, Institute of Geography, University of Bern*, *Switzerland*, 16 November 2005.

**Research expeditions led by the applicant (selection)**

Preparation, coordination and supervision of the following fieldwork campaigns:

* 2015: One month to Indian part of Himalaya
* 2012 and 2014. One month each year to Svalbard
* 2011/2012: Two months field campaign to South Georgia
* 2008: Eight week field campaign to South Georgia, South Atlantic (3 crew members).
* 2006: Four week field campaign to Polar Urals, Russia (5 crew members)
* 2000−2009: Annual field campaigns to Northern Norway funded through the projects NORPAST2, NORPEC and ARCTREC (1-13 crew members)
* 2003: Field campaign to Grenoble and the French Alps, PACLIVA (3 crew members)

**Prizes and Awards**

Fulbright Arctic Chair Award 2011/2012