## Curriculum Vitae: Ole Humlum

Updated: 22 September 2010.

**Title:** Professor

Degrees: B.Sc., M.Sc., Ph.D.

Address: Physical Geography, Institute of Geosciences, University of Oslo, box 1047 Blindern, N-

0316 Oslo, Norway. **Phone:** +47 22855804 **Fax:** +47 22844485

E-mail: Ole.Humlum@geo.uio.no

Personal university web page: http://www.geo.uio.no/geogr/staff/olehum.html

#### Birth:

21. July 1949

#### **Education:**

1976, January: M.Sc. in Glacial Geomorphology, Inst.Geogr., University of Copenhagen

- 1976 November: Prize Essay Gold Medal, University of Copenhagen
- 1980 June: Ph.D. in Glacial Geomorphology, Inst.Geogr., University of Copenhagen

#### **Other Formal Qualifications:**

- 1994, Education and Qualification as Pedagogical Mentor at the Faculty of Science, University of Copenhagen, Copenhagen.
- 1997, Qualification as Full Professor in Physical Geography, Department of Physical Geography, Lunds University, Sweden; rated as no. 2 (well-qualified, same as no.1) among 15 applicants. Main scientific topics represented at this department: Geomorphology, Climatology, Satellite imagery analysis and Geographical Information Systems (GIS).
- 1998, Qualification as Full Professor in Geography (Theme: Global Change), Institute of Geography, University of Copenhagen, Denmark; rated as no.2 (highly qualified, same as no.1) among 6 applicants. Main scientific topics represented at this department: Geomorphology, Climatology, Soil Science, Satellite imagery analysis, Geographical Information Systems (GIS), Human Geography.
- 1999, Qualification as Full Professor in Physical Geography, The University Centre on Svalbard (UNIS), Norway; rated as no.1 among 26 applicants.
- 2002, Qualification as Full Professor in Physical Geography, Institute of Geosciences, The University of Oslo, Norway; rated as no.1 among 12 applicants.

## **Professional Experience:**

- July 1980: Post.Doc, Institute of Geography, University of Copenhagen, Denmark
- January 1982: Post.Doc., Danish Science Research Council, Denmark
- June 1983: Scientific Director, Arctic Station, Qegertarsuaq (Godhavn), Greenland
- August 1986: Associate professor, Arctic Geomorphology, Inst.Geogr., University of Copenhagen
- April 1995: Pedagogical Mentor, Faculty of Science, University of Copenhagen, Denmark
- February 1996: Special Consultant, GeoBasis Programme, Danish Polar Center (DPC), Copenhagen
- February 1997: Honorary Senior Lecturer, Depart. Geography., University of St. Andrews, Scotland
- February 1998: Visiting Associate Professor, Faroese Natural Museum, Tórshavn, Faroe Islands
- August 1998: Associate professor, Arctic Geomorphology, Inst.Geogr., University of Copenhagen

- September 1999: Full Professor, Physical Geography, The University Centre in Svalbard (UNIS), Svalbard, Norway.
- January 2001-August 2003: Head of the Geological Department, The University Centre in Svalbard (UNIS), Svalbard, Norway.
- September 2003-now: Full Professor II, Physical Geography, The University Centre in Svalbard (UNIS), Svalbard, Norway.
- January 2003-now: Full Professor, Physical Geography, The University of Oslo, Department of Geography, Norway.
- September 2007-June 2008: Visiting Scholar, University of St. Andrews, School of Geography and Geosciences, Scotland.

### **Areas of Research Interest:**

- Glacial- and periglacial geomorphology, with main emphasis on the climatic control on glacial and periglacial geomorphic activity in cold-climate, high-relief areas, past as well as present.
- Landforms derived from bedrock weathering in high-relief areas, with special emphasis on rock glaciers.
- Permafrost and associated landforms.
- Climate variability and associated geomorphological response.
- Scientific applications of numerical modelling in geomorphology; e.g. modelling of glacier masse balance based on meteorological values (and vice versa), plus active layer and permafrost thermal characteristics.
- Reconstruction of Quaternary ice sheets, glaciers and periglacial environments in the North Atlantic region.
- Historical and modern climatology (modern dataseries as well as the use of documentary and early instrumental records for the reconstruction of late Holocene climate) of the North Atlantic region, in particular the Faroe Islands, Greenland and Svalbard.
- The impact of climate on societies (human dimensions) in the North Atlantic region.
- Comparison and integration of different climate proxy series.
- Arctic and Antarctic climate, past and present.
- Wavelet analysis of climate and meteorological series.

#### **Professional Memberships:**

- International glaciological Society (IGS)
- Quaternary Research Association (QRA)
- Royal Danish Geographical Society (RDGS)
- International Permafrost Association (IPA)

#### **Professional Services:**

- Treasurer, Royal Danish Geographical Society (1989-1995).
- Member of the board, Knud Rasmussens Foundation, Denmark (since 1991).
- Water power consultant, Greenland Technical Organisation (GTO, 1984-86).
- Editor, Greenland Home Rule Office, Pilersuiffik, Denmark.
- Secretary for the INQUA Working Group on Geospatial Analysis of Glaciated Environments (GAGE, 1994-1999).
- Member of the Commission on Telemetry, the Danish Ministry for Research, 1994-1996.
- Co-opted member of the Executive Committee for the International Association of Geomorphologists (IAG, 1997-2001).
- Co-chair for the Working Group on Periglacial Processes and Environments, International Permafrost Association (IPA, 1998-2003).
- Ex-Officio member IGU (International Geographical Union) Commission on Climate Change and Periglacial Environments (1998-2003).
- Official IPA (International Permafrost Association) liaison officer to IAG (International Association of Geomorphologists, since 1998).

- Official IAG liaison officer to IPA (since 1998).
- Member of the Working Group of the Circumpolar PhD Network in Arctic Environmental Studies (CAES Network), since 2000.
- Chair of the Norwegian section of the International Association of Geomorphologists (IAG);
  since May 2003.
- Co-ordination committee member of the ESF-funded network 'Permafrost and Climate in Europe in the 21th Century (PACE21); since April 2003.
- Head of the Norwegian Research Council's Commision for promotion of Professors in Geography; since May 2004.
- International member of the Advisory Board for the Abisko Scientific Research Station, Northern Sweden. The Royal Swedish Academy of Sciences, since June 2004.
- Co-chair for the International Permafrost Association (IPA) working group on 'Periglacial Landforms, Processes and Climate', together with Norikazu Matsuoka, Univ. Tsukuba, Japan, since July 2004.
- Co-chair for the Norwegian Research Group on Cryospheric processes, sediments and landforms (CRYONOR), together with S. O. Dahl (Univ. Bergen) and I. Berthling (NTNU), since May 2005.
- Member of the Norwegian Scientific Academy for Polar Research since April 21, 2008. The Academy was established March 27, 2008.

#### **Scientific Research Projects:**

- 1977 (P1): Danish Iceland Expedition to Mýrdalsjökull; directed by J. Krüger, funded by the Danish Natural Science Research Council (SNF).
- 1979 (P2): Danish Iceland Expedition to Mýrdalsjökull; directed by J. Krüger, SNF-funded.
- 1982 (P3): Danish Iceland Expedition to Mýrdalsjökull; directed by J. Krüger, SNF-funded.
- 1983-1986 (P4): Geomorphological and climatologically investigations on Disko Island, central W Greenland, funded by SNF.
- 1987 (P5): The Geomorphology of Disko Island, central W Greenland, , funded by SNF.
- 1988 (P6): Glaciological investigations at the Mittivakkat glacier, Ammassalik District, SE Greenland, funded by SNF.
- 1989 (P7): The glaciomarine sedimentology at tidewater glaciers, central W Greenland, funded by SNF.
- 1990-1992 (P8): Landscape studies at the Mittivakkat glacier, Ammassalik District, SE Greenland, funded by SNF.
- 1992 (P9): Topographical and geomorphological mapping in the Zackenberg area, NE Greenland, funded by SNF.
- 1991-1993 (P10): Local Younger Dryas reglaciation in Skåne and Halland, southern Sweden. In collaboration with University of Lund, Sweden, funded by the Swedish Natural Research Council (NRF).
- 1992-1993 (P11): The geomorphology and glaciology of the James Ross Island, Antarctica, funded by SNF and Instituto Antarctico Argentino, Buenos Aires, Argentina.
- 1993-1995 (P12): Analytic landscape studies in E- and W-Greenland, Ammassalik District and Disko Island, funded by SNF.
- 1994-1995 (P13): Evolution of Danish Weichselian periglacial valleys, funded by SNF.
- 1995-1997 (P14): Quaternary landscape evolution on the Faeroe Islands, funded by SNF.
- 1995-1997 (P15): The Arctic Landscape: Interactions and Feedbacks among Physical Geographical and Biological Processes, a Biological and Geoenvironmental Arctic System Research Project. Funded by SNF.
- 1997-1998 (P16): Guest at the University of St. Andrews (Scotland), February 1997-January 1998, funded by SNF. Rock glaciers in Scotland.
- 1998 (P17): Guest at the University of Tórshavn (Faroe Islands), February-July 1998, funded by SNF. Geomorphology of the Faeroe Islands.
- 1998 (P18): Rock Glaciers in Disko Island, Central West Greenland, 1998, funded by the Commission for Scientific Research in Greenland (KVUG).

- 1999-2001 (P19): Geomorphic Activity in coastal Greenland at Glacier Equilibrium Line Altitudes. Funded by SNF.
- 1999-2001 (P20): Linking land and sea at the Faroe Islands: Mapping and understanding North Atlantic changes (LINK). Funded by SNF (4,000,000 dkkr).
- 2003 (P21): Linking land and sea around Svalbard and the Faroe Islands (NORDLINK). Funded by the Nordic Council Of Ministers under the Nordic Arctic Research Programme (NARP) (80.000 dkkr).
- 2003-2005: Permafrost in Northern Europe Permafrost Distribution and dynamics in Iceland and Norway. Funded by the Norwegian Research Council.
- 2003-2006: Glacial and periglacial geomorphology in South Norway (2.300.00 NOK; NFR and Oslo University).
- 2007-2009: Permafrost Observatory Project: A Contribution to the Thermal State of Permafrost in Norway and Svalbard (TSP NORWAY). Project leader Dr. H.H.Christiansen, UNIS. (5.500.000 NOK; NFR).
- 2007-2010: Climate change effects on high arctic mountain slope processes and their impact on traffic in Svalbard (CRYOSLOPE Svalbard). Project leader Dr. H.H.Christiansen, UNIS. (3.000.000 NOK; NFR).

#### **Scientific Referee:**

- Since 1981: *Danish Journal of Geography/Geografisk Tidsskrift*, Royal Danish Geographical Society, University of Copenhagen, Copenhagen.
- Since 1987: Arctic and Alpine Research, Institute of Alpine and Arctic Research, University of Boulder, Boulder, Colorado, USA
- Since 1988: Journal of Glaciology, International Glaciological Society, Cambridge, England.
- Since 1988: Annals of Glaciology, International Glaciological Society, Cambridge, England.
- Since 1989: Geografiska Annaler, University of Stockholm, Stockholm, Sweden.
- Since 1990: Meddelelser om Grønland, Geoscience, Copenhagen.
- Since 1991: *Boreas*, University of Oslo, Oslo.
- Since 1997: Permafrost and Periglacial Processes (PPP), Wiley, U.K.
- Since 1998: Journal of Quaternary Science (JQS), Wiley, U.K.
- Since 1998: The Holocene, Edward Arnold, U.K.
- Since 1998: Fonds zur Förderung der wissenschaftlichen Forschung (FWF), Austria.
- Since 2000: *The Research Council of Norway*.
- Since 2000: The Royal Geological Society of London.
- Since 2004: Earth Surface Processes and Landforms, UK.
- Since 2004: *Human Ecology An Interdisciplinary Journal*, UK.
- Since 2007: *Energy and Environment*, UK.

#### **Publications:**

Please see separate sheet.

#### Symposia and Workshop Organiser:

- Linking land and sea around Svalbard and the Faroe Islands (NORDLINK). Funded by the Nordic Council Of Ministers under the Nordic Arctic Research Programme (NARP), June 7-10 2003, Tórshavn, Faroe Islands, in co-operation with H.H. Christiansen (Norway).
- European Geosciences Union (EGU) 1st General Assembly 2004, Nice 25-30. April 2004, Session on 'Periglacial Morphology and Environments', in co-operation with J. Vandenberghe (Netherlands).
- Permafrost and Climate in Europe (PACE21), Permafrost Workshop in Longyearbyen, Svalbard, 8-13. September 2004, in co-operation with H.H. Christiansen (Norway) and Charles Harris (UK).
- 2<sup>nd</sup> European Conference on Permafrost (EUCOP II), 12-16 June 2005, Potsdam, Germany. Session on 'Periglacial landforms and cryogenic processes', co-chaired with Matti Seppälä.

• 3<sup>nd</sup> European Conference on Permafrost (EUCOP III), 13-17 June 2010, Longyearbyen, Svalbard, Norway. Member of the International Organising Committee.

#### **Editorial Work:**

- 1987-now: Member of the editorial board of Geografisk Tidsskrift, Royal Danish Geographical Society, University of Copenhagen, Copenhagen.
- 1991-1992: Editor, Greenland Home Rule Office, Grønlands Hjemmestyre, Afdelingen for Undervisningsmidler, Pilersuiffik, Circumpolar Atlas, Copenhagen.
- 1996-now: Member of the editorial board of Geografiska Annaler, Sweden.
- 1999-2000: Member of the editorial board for *Atlas over Grønland*. Royal Danish Geographical Society, Copenhagen.
- 2000-now: Member of the editorial board of Norwegian Journal of Geography, Norway.
- 2003: Guest Editor (with Professor Norikazu Matsuoka, University of Tsukuba, Japan), Permafrost and Periglacial Processes, Special Issue: Monitoring Periglacial Processes: New Methodology and Technology.
- 2005: Guest Editor (with Dr. Ketil Isaksen, Norwegian Meteorological Institute, Norway), Norwegian Journal of Geography, Special Issue: Proceedings of the PACE21 (Permafrost and Climate in Europe) Permafrost Workshop in Longyearbyen, Svalbard, 8-13. September 2004.
- 2006-now: Member of the editorial advisory board for Zeitschrift für Gletscherkunde und Glazialgeologie.
- 2007-2008: Associate Editor, Proceedings of the Ninth International Conference on Permafrost, University of Alaska Fairbanks, June 29–July 3, 2008.
- Since 2010. Associate Editor, Geografiska Annaler.

## **Appointment of Full Professors; member of the Evaluation Board:**

- 2003.11.21: Finland, University of Turku, Department of Physical Geography. Professor Jukka Käyhkö (member of the evaluation board).
- 2004.10.01: Norway, University of Oslo, Institute of Geosciences, Department of Physical Geography. Professor Andy Kääb (head of the evaluation board).

#### Appointment of Associate Professors; member of the Evaluation Board:

- 1999.06.23: Sweden, University of Stockholm, Department of Physical Geography.
- 2001.01.18: Sweden, University of Stockholm, Department of Physical Geography.
- 2003.05.20. University of Trondheim, Department of Geography: Dr. Ivar Berteling.
- 2003.09.10. University Centre in Svalbard (UNIS), Department of Geology: Dr. Alexander Wolfe.

# Doctoral Thesis; Member of the Evaluation Board, Official Faculty Opponent or External Examiner:

- 1997.01.15: Sweden, University of Göteborg, Faculty of Science, Department of Physical Geography: Johan Kling: *Sorted Circles and Polygons in northern Sweden, Distribution and Processes*, 105 pp (1. opponent).
- 1997.11.28: Sweden, University of Stockholm, Department of Physical Geography: Clas Hättestrand: *Ribbed Moraines and Fennoscandian Palaeoglaciology*. 120 pp (member of the evaluation board).
- 1998.02.13: Sweden, University of Lund, Department of Quaternary Geology: Gunnar Andersson: *Deglaciation pattern and dynamics in the Bolmen area, southwestern Sweden.* 70 pp (member of the evaluation board).
- 2004.04.30: Denmark, University of Copenhagen, Faculty of Science, Geological Museum: Arní Hjartanson: *The Skagafjördur unconformity, North Iceland and its geological history* (member of evaluation board and 2<sup>nd</sup> opponent).

- 2004.09.21: Norway, University of Oslo, Faculty of Mathematics and Natural Sciences, Department of Earth Science:s, Department of Physical Geography: Lars Karlöf: *Temporal and spatial variability of snow accumulation and redistribution, and its impact on the interpretation of ice cores* (head of the evaluation board).
- 2004.10.22: Norway, University of Bergen, Faculty of Mathematics and Natural Sciences, Department of Earth Science: Øyvind Paasche: Paleoclimate Variability of Arctic Norway Constrained by Physical Parameters of Lake Sediments. (member of evaluation board and 2<sup>nd</sup> opponent).
- 2005.01.11: Scotland, University of St. Andrews, School of Geography and Geosciences: Lindsey Nicholson: *Modelling melt beneath supraglacial debris: implications for the climatic response of debris-covered glaciers*.141 pp. (External Examiner).
- 2006.02.10: Norway, University of Oslo, Faculty of Mathematics and Natural Sciences, Department of Earth Science:s, Department of Physical Geography: Gaute Lappegard: *Basal Hydraulics of Hard-Bedded Glaciers: Observations and Theory Related to Engabreen, Norway* (head of the evaluation board).
- 2010.06.04: Sweden, University of Stockholm, Department of Physical Geography and Geology. Timothy Johnsen: *Late Quaternary ice sheet history and dynamics in central and southern Scandinavia*. Member of the evaluation board.

#### **Institutional evaluations:**

• 2005-2006: GEUS (Greenlandic and Danish Geological Survey), programme area 5, 'Nature and Environment'. Final Report 3. March 2006, head of the evaluation panel.

### Research supervision (M.Sc and Ph.D):

Please see separate sheet.

## **University Teaching Themes:**

- Physical Geography
- Glaciology
- Glacial geomorphology
- Periglacial geomorphology
- Permafrost and Climate
- Climatic geomorphology
- The Physical Geography of the Arctic
- Geomorphic mapping using aerial photos
- History of geomorphology
- Statistics for geographers.

## Administration, main points only:

- 1983-1986: Scientific Director, Arctic Research Station, Godhavn, Greenland.
- 1986-1997: Member of the Institute Council, Institute of Geography, University of Copenhagen.
- 1988-1991: Member of the Study Board, Institute of Geography, University of Copenhagen.
- 1993-1995: Head of the EDB-board at the Institute of Geography, University of Copenhagen.
- 1996-1997: Member of the Study Board, Institute of Geography, University of Copenhagen.
- 2001-2003: Head of the Department of Geology, The University Centre on Svalbard (UNIS), Norway.
- 2003-2008: Co-Chair of the Department of Physical Geography, Institute of Geosciences, University of Oslo.

#### **International personal contacts:**

Please see separate sheet.

## **Contact Information:**

- Department of Physical Geography, Institute of Geosciences, University of Oslo, Box 1042 Blindern, N-0316 Oslo, NORWAY. Email: Ole.Humlum@geo.uio.no. Phone front disk: +47 228 54 215. Phone direct: +47 228 55 804. Fax: +47 228 54 215.
- The University Centre on Svalbard (UNIS), Norway. Tel: +47 7902 3300; Fax: : +47 7902 3301; E-mail: oleh@unis.no

## Web-links:

- Personal web page: <a href="http://www.geo.uio.no/geogr/staff/olehum.html">http://www.geo.uio.no/geogr/staff/olehum.html</a>
- Institute of Geosciences, University of Oslo: http://www.geo.uio.no
- The University Center in Svalbard (UNIS): http://www.unis.no
- International Permafrost Association (IPA): http://www.geo.uio.no/ipa/
- International Association of Geomorphologists (IAG): <a href="http://www.ttu.edu/~geomorph/">http://www.ttu.edu/~geomorph/</a>
- www.climate4you.com