

1. Personal details**Full names:** Jaana Kaarina Bäck**Born:** 1961**Nationality:** Finnish**Website:** tuhat.helsinki.fi/portal/en/person/jkback**2. Education and degrees completed:**

2010: title of docent in Forest-atmosphere interactions, Univ. of Helsinki (UHEL), Finland

1998: title of docent in Plant ecophysiology, Univ. of Oulu, Finland

May 1994: PhD (Physiological plant ecology), University of Oulu, Finland

Sep 1985: M.Sc. (Environmental Sciences), University of Kuopio, Finland

3. Current position:

8/2013 – Professor in Forest-Atmosphere Interactions, Institute for Atmospheric and Earth System Research INAR/Forest Sciences, Faculty of Agriculture and Forestry, UHEL

4. Previous work experience:

1/2007 - 1/2012 Research coordinator, Dept. of Physics, UHEL

8/2004 - 12/2006 Research fellow, Dept. of Forest Sciences, UHEL

1/1998 - 7/2004 Post-doctoral fellow, Acad. of Finland

1/1995 - 12/1998 Assistant in Plant Ecology, Univ. of Oulu

10/1985 - 7/1996 Research fellow, Univ. of Oulu and Acad. of Finland

5. Career breaks:

1997-98 Parental leave (son born in Feb 1997) 12 months

1999-2003 Parental leave (twin daughters born in Jan 2000) 37 months

6. Personal research funding and grants (most recent ones):

2018-2020 Marie Curie individual fellowship (EU grant no 798293) to Pille Mänd, BioVOLHum, funding total 191 325 € (JB as PI)

2017- 2020 Mechanisms, pathways and patchiness of the Arctic ecosystem responses and adaptation to changing climate (ClimEco) Acad. of Finland, funding total 499 647 € (JB as consortium leader and PI)

2017 Advance-LTER (Long-Term Ecosystem and socio-ecological Research Infrastructure), EU-H2020, funding to UH 170 000 € (JB as WP leader and PI at UHEL)

2017 - 2021 INTERACT I3 (H2020), funding to UH 345 850 € (JB as PI at UHEL, PI M. Johansson, Lund Univ)

2017-2021 INAR RI Ecosystems (Acad of Finland), funding total 1.7 M€ (JB as consortium leader and PI)

2015-2018 eLTER I3 (European Long-Term Ecosystem and socio-ecological Research Infrastructure), EU-H2020, funding to UH 146 000€ (JB as UHEL PI, PI: M. Mirtl, EEA)

2014-2019 Finnish CoE in 'Atmospheric Science – From Molecular and Biological processes to The Global Climate' (Acad. of Finland); funding total 5.7 M€ (JB as Faculty PI, PI: M. Kulmala, UHEL)

2012 – 2016 Infrastructure for Analysis and Experimentation on Ecosystems ESFRI Preparatory Phase (FP7) (ANAEE-PP), funding to UHEL 415 000 € (JB as WP leader and PI at UHEL, PI: Abad Chabbi, INRA)

7. Leadership and supervision experience

supervising postdoctoral researchers: 3 ongoing (9 altogether)

supervising undergraduate and post-graduate students/doctoral students: 4 ongoing (main supervisor), 12 ongoing (co-supervisor or member in follow-up group), 8 finished

experience as leader of research work: Since 2011, leading the 'Ecosystem processes' -research group (www.helsinki.fi/metsaymparisto/index.html), and in charge of the ecosystem research at the SMEAR measurement network www.atm.helsinki.fi/SMEAR/. Total obtained funding: 4.4 M€**8. Teaching experience****MSc level:** Tree ecophysiology (FOR211), 5 ECT, UHEL; Forests and peatlands as modifiers of atmospheric composition (FOR217), 5 ECT, UHEL; Climate Now (ATM302), 5 ECT, MOOC course, UHEL**PhD/advanced level:** Advanced Analysis of Atmosphere-Surface Interactions and Feedbacks (ATM003), 5 ECT, UHEL; Analysis of atmosphere-surface interactions and feedbacks (ATM309), 5 ECT, UHEL

9. Experience of organising scientific meetings

- 2016-2020 Elected Co-chair, Gordon Research Conference on Biogenic Volatiles and Atmosphere
2014 Co-convener, session 4 'Extreme events and environments', 4th iLEAPS Science Conf., Nanjing
2013 Co-chair, EGU General Assembly Session 'Boreal forest chemistry and physics' AS4.10/BG2.18
2010-2012 Member of organizing committee, Annual meetings of the Cryosphere-Atmosphere Interactions in Changing Arctic Climate (CRAICC)
2010 Member, organizing committee, World Congress of Resource Modeling Association, Finland
2007 Chair, 1st Finnish-Estonian VOC workshop, Hyytiälä, Finland

10. Patents, inventions, awards and honours

- 2017 Pro Scientia –award, given by the Finnish Academy of Sciences and Letters, Dec 13 2017
2018 Open Science Award, given by University of Helsinki

11. Other key scientific or academic merits

- 2008 - Pre-examiner 3 times: Mikhail Paramonov, UHEL Physics; Elina Häikiö, Univ of Eastern Finland; Delia Pinto, Univ of Eastern Finland
2014- Opponent/committee member (PhD thesis) 4 times: Kaisa Hartikainen, Univ. of Eastern Finland; Rajendra Ghimire, Univ of Eastern Finland; Ylva van Meeningen, Lund University, Sweden; Michelle Schollert, Univ of Copenhagen, Denmark
2012 - External evaluator, Docentship 3 times: Minna Kivimäenpää, Univ. of Eastern Finland; Juha Heijari, Univ. of Eastern Finland; Vesa Palonen, UHEL Physics
2013- Member in grant review panels: NERC Standard Grants, UK; Open Programme, Netherlands; VR, Sweden; UHEL, Finland; Technology Academy Finland

Referee in: Atmospheric Environment, Agricultural and Forest Meteorology, Agronomy Research, Analytical Chemistry, Biogeosciences, Boreal Environment Research, Chemosphere, Critical Rev. in Biotechnology, Cryosphere, Environmental and Experimental Botany, Environmental Monitoring and Assessment, Environmental Pollution, Forest Ecology and Management, New Phytologist, Plant Cell & Environment, Sensors, Silva Fennica, Tellus B, Tree Physiology.

Administrative responsibilities:

- 2017- Deputy member at Faculty Board (Faculty of Agriculture and Forestry)
2016- Vice chair of the Master Programme ATM-MP and Doctoral Programme ATM-DP (UHEL)
2016- 2018 Member, Helsinki Life Sciences Center Infrastructure Board
2014- Member in SMEAR Board of Directors
2014- 2017 Vice chair, Department of Forest Sciences (infrastructures)
2011 –2014 Board Member in the Earth Science Women's Network European Committee
2010 – 2015 Member in Scientific Steering Committee of the Nordic CoE 'Cryosphere-Atmosphere Interactions in a Changing Arctic Climate' (CRAICC)
1/1994 – 12/1996 Member of the Board at the Faculty of Sciences, Univ. of Oulu

Key roles in international research projects or research infrastructures

- 2016- Core team member, eLTER ESFRI
2012- 2016 Steering committee member in EU-FP7 AnaEE ESFRI Preparatory Phase Project

Invited international keynote lectures

- 2018 Gordon Research Conference on Biogenic Volatiles and Atmosphere

12. Memberships and positions of trust in scientific societies

Positions as member or editor on editorial boards of scientific and scholarly journals

- 2018- Associate Editor, Forests and the atmosphere (*Frontiers in Forests and Global Change*)
2015-2017 lead author, European Academies of Science Advisory Council (EASAC) 'Multi-functionality and Sustainability in the European Union's Forests' (www.easac.eu/home.html)
2016- Board Member, Finnish Zoological and Botanical Publishing Board
2012- Guest Editor, 'Interactions between climate change and the Cryosphere: SVALI, DEFROST, CRAICC' in *Biogeosciences, Atmospheric Chemistry and Physics, and Cryosphere*
2006 – 2012 Subject Editor (Forests) in *Boreal Environment Research*