
Personal details and date of CV

Peltola (earlier Sorsa), Heli Maarit

ORCID: 0000-0003-1384-9153

Date of CV: April 25, 2025

Degrees

17/5/1995 PhD (Agr. and For.), Faculty of Forestry, University of Joensuu (UJOE), Finland

22/2/1991 Degree of Lic. (Agr. and For.), Faculty of Forestry, UJOE

01/07/1988 B.Sc. (Agr. and For.), Faculty of Forestry, UJOE

12/05/2002 Title of Docent, Silvicultural Sciences, UJOE

(Universities of Joensuu and Kuopio merged to University of Eastern Finland (UEF) in 2010)

Current employment

01/02/2013– Professor in Silvicultural Sciences (permanent position), School of Forest Sciences, UEF, Joensuu campus

Previous work experience

9/2012–1/2013 Acting Professor in silvicultural sciences, School of Forest Sciences, UEF

1/2010–8/2012 Senior researcher in silvicultural sciences, School of Forest Sciences, UEF

8/2006–12/2009 Senior researcher in silvicultural sciences, Faculty of Forestry, UJOE

8/2004–7/2006 Acting Professor in silvicultural sciences, Faculty of Forestry, UJOE

2/2002–7/2004 Senior researcher in silvicultural sciences, Faculty of Forestry, UJOE

1/2000–1/2002 Senior researcher (also Administrative Co-ordinator of the Centre of Excellence of Academy of Finland), Faculty of Forestry, UJOE

8/1995–12/1999 Post doc / Researcher, Faculty of Forestry, UJOE

8/1992–7/1995 Junior fellow, Academy of Finland

5/1990–7/1992 Research assistant, Academy of Finland

(Academy of Finland (AF) renamed as Research Council of Finland (RCF) in 2023)

Career breaks

Motherhood leave 9.10.1991–5.9.1992.

Research funding and grants

2024–2028 Horizon Europe consortium project (SingleTree: Optimizing multifunctional forest-based value chains with single tree information and application of digital technologies) under HORIZON-JU-CBE-2023. Consortium leader NIBIO; Heli Peltola UEF PI and WP2 leader (UEF, 556 322 €) (14 partners).

2022–2026 Horizon 2020 consortium project (INFORMA: Science-based INtegrated FORest Mitigation mAnagement made operational for Europe) under HORIZON-CL6-2021-CLIMATE-01-09: Enhancing science-based knowledge on EU forests', including old-growth forests, capacities to mitigate climate change. Consortium leader: Universitat Politècnica de València, Heli Peltola UEF PI (UEF, 525 000 €) (14 partners).

2023–2025 Academy consortium project (MULTIRISK, Digital technologies, risk management solutions and tools for mitigating forest disturbances), Academy of Finland (AF) / Research Council of Finland (RCF) 1,795 M€. Heli Peltola UEF PI (UEF 599 478 €), other partners: University of Helsinki (UH, consortium leader) and Finnish Geospatial Research Institute (FGI) of the National Land Survey of Finland.

2022–2026 Academy consortium project (PREFER, Precision nutrient management – a tool for mitigation of climate change and environmental loading in boreal forestry), AF / RCF 999 894 €; Heli Peltola UEF and Consortium PI (UEF 399 952 €), other partners: Natural Resources Institute Finland (Luke) and UH.

2018–2022 Academy project (OPTIMAM, Direct and value-based trade-offs for ecosystem goods and services in multi-objective management of boreal forests under changing climate), AF 499 896 €, Heli Peltola UEF PI.

2015–2021 SRC Consortium project (FORBIO, Sustainable, climate-neutral, and resource-efficient forest-based bioeconomy), Strategic Research Council of AF 6,098 M€, Heli Peltola Consortium and UEF/For. PI (1,452 M€). Other partners: UEF/Dept. of Chem., Finnish Meteorological Institute (FMI), Luke, European Forest Institute (EFI), and Finnish Environment Institute (Syke).

2013–2016 Joined Finnish Chinese Forest Research Call – project (EXTREME, Sensitivity of carbon sequestration and biomass production to the foreseen climate change, climatic variability, and weather extremes: comparative analyses on desert and boreal forest ecosystems), AF 536 752 €, Heli Peltola Consortium and UEF PI. Other partner: Beijing Forestry University, China (NSFC).

2012–2016 Academy consortium project (ADAPT, Adaptation of forest management to climate change: uncertainties, impacts and risks to forests and forestry in Finland). AF 881 126 €, Heli Peltola Consortium and UEF PI (490 486 €), another partner: FMI.

2008–2010 Academy project (Impacts of temporal and spatial variability of critical weather events and forest management on the risk of wind and snow induced damage in forest stands), AF 296 580 €, Heli Peltola UJOE/UEF PI.

2003–2005 Finnish-Swedish Basic Research, Wood Material Science Research Programme (AF, FORMAS and MMM), Heli Peltola (UJOE) PI of Sub-project (Influence of environmental factors, forest structure and silvicultural practices on Scots pine, Norway spruce and birch properties), AF 172 840 €. Consortium leader, Finnish Forest Research Institute (FFRI, former Luke), another partner: Skogforsk, Sweden.

1998–2001 Wood Wisdom Research Programme, Heli Peltola (UJOE) PI of Sub-project (Effects of silvicultural management on the physical and chemical properties of wood), AF 152 000 €. Consortium leader FFRI.

Research supervision and leadership experience

Supervision of Post Docs (11) at UJOE / UEF: Elisa Männistö (1-4/2025), Mir Salam (5/2024–), Laura Pikkarainen (7/2022–), Veli-Pekka Ikonen (6/2012–12/2013), Ane Zubizarreta Gerendiain (1/2013–11/2016), Jinnan Gong (11/2013–4/2016); Xia Zhou (6–12/2016), Tendry Randriamanana (9–12/2016 & 3–6/2017), Katri Nissinen (2018–2020), Ranjith Gopalakrishnan (1/2018–5/2021), Olalla Díaz-Yáñez (10/2018–6/2020).

Principal supervisor for doctoral dissertations (25) at UJOE / UEF: Mir Salam 2024, Laura Pikkarainen 2022, Norul Sobuj 2021, Eino Levkoev 2019, Laith AlRahahleh and Mikko Tikkinen 2018, Ben Wang & Xin Jia 2017, Piritta Torssonen, Inka Pippuri & Terhi Vilén 2015, Hilppa Gregow, Yoshima Puentes Rodriques & Antti J. Lukkarinen 2013, Jaume Gort-Oromi 2010, Ane Zubizarreta Gerendiain 2009, Veli-Pekka Ikonen 2008, Jordi Garcia-Gonzalo 2007, Elemer Briceño-Elizondo & Hongheng Zeng 2006, Antti Kilpeläinen, Leena Kärkkäinen & Juho Matala 2005, Ari Talkkari 2001, Marja-Leena Päätaalo 2000.

Co-supervisor for doctoral dissertations (4): Johanna Routa & Zhenming Ge 2011, Liisa Huttunen 2009, Mart-Jan Schelhaas 2008.

Ongoing supervision of PhD students (7): Fan Yang, Kalle Kemppainen, Petra Peltola, Diana-Cristina Simon, Olli Muhonen, Mikko Pelto-Arvo, and Johanna Jetsonen.

Supervised over 90 completed M.Sc. theses.

Awards and honours

The decoration Knight First Class of the Order of the White Rose of Finland by the President of the Republic of Finland Sauli Niinistö 2020; Carola and Carl-Olof Ternryd's award by Linnaeus Academy's Research Foundation, Sweden 2020; Cajander Silver Medal by Finnish Society of Forest Science 2024 (also in 2014 Cajander Bronze Medal); Member of the Finnish Academy of Science and Letters, Finland 2018; Good teacher of the year -award, University of Joensuu 2005.

Other key academic merits

Leader (captain) and UEF PI (since Dec 1, 2022) of the UNITE flagship (Forest-Human-Machine Interplay - Building Resilience, Redefining Value Networks and Enabling Meaningful Experiences), funded through the Flagship Program of Research Council of Finland (RCF) 2020-2028 (Peltola UEF Co-PI and leader of WP3 Smart Decision support, in 2020–2022). Other partners: Finnish Geospatial Research Institute (FGI) of the National Land Survey of Finland (FGI), National Resources Institute of Finland (Luke) and University of Tampere (TAU). Total funding by RCF for the flagship in 2020-2024 13,107 M€ and in 2024–2028 12,042 M€ (of which 6,45M€ for 9/2024–6/2026).

Leader of FOBI (Forests and Bioeconomy) UEF Research Community 2020–2023 (contributed by three faculties and 10 departments/schools) and the BORFOR (Forests, Global Change and Bioeconomy) UEF Research area 2015–2020, coordinated by the School of Forest Sciences (contributed also by the Department of Environmental and Biological Sciences) at UEF.

Leader of Doctoral programme in Forests and Bioresources (FORES) 2022–2023 at the School of Forest Sciences, UEF and Doctoral programme in Science, Forestry and Technology (LUMETO) of the Faculty of Science, Forestry and Technology 2023–.

Scientific and societal impact

Key positions of trust, expert positions, and assignments:

1.1.2019–31.12.2021 Membership of Research Council for Biosciences, Health, and the Environment (BTY), Academy of Finland

13.8.2020–31.12.2023 Membership of Finnish Climate Change Panel, Finland

24.8.2023 – 30.6.2027 Membership of Forest Council, Finland

2014- Memberships of Steering group (2014–2020) and Executive committee (2021–) for the updating of Finnish forest management guidelines for practical forestry (<https://tapio.fi/>)

2024–2027 Memberships of Steering Group for Publication Forum, Finland

Peer-reviewed scientific articles: 226

Promoting open science and research: Hetemäki, L., Kangas, J. & Peltola, H. (eds.). 2022. Forest Bioeconomy and Climate Change. Managing Forest Ecosystems. Vol. 42, 257 p. Springer. <https://doi.org/10.1007/978-3-030-99206-4>. This open access book is directed at forest and environment sector stakeholders and decision makers, as well as the research community, the broader education sector, and the media.