

CURRICULUM VITAE

1. **Name:** Hannu Lennart Mikael Fortelius ORCID 0000-0002-4851-783X
Sex: Male
Date: 10 May, 2017
2. **Date and place of birth:** 1 February, 1954, Helsinki, Finland
Citizenship: Finnish
Place of Residence: Helsinki, Finland
3. **Academic Degrees:** PhD, Zoology, University of Helsinki, Finland, 31 October 1985; Lic Phil, University of Helsinki, 1981; MSc, University of Helsinki, 1977
Title of Docent: Zoo-palaeontology (eläinpaleontologia), University of Helsinki, 3 February, 1986
4. **Language skills:** Swedish, Finnish and English: fully trilingual; other Nordic languages and German: fluent reading, functional speaking.
6. **Current positions:** Since 1 January 2004, Professor (professori) of Evolutionary Palaeontology, Department of Geology, University of Helsinki
 Since 1 May 2015, Kristine Bonnevie Professor, Centre for Ecological and Evolutionary Synthesis (CEES), University of Oslo (20%).
Current affiliations: Instructor, Turkana Basin Institute Field School, Stony Brook University (2013 -); Visiting Research Fellow, Institute of Vertebrate Palaeontology and Palaeo-anthropology, Chinese Academy of Science, Beijing (2008 -); Research Associate, Finnish Museum of Natural History (2011 -); Visiting Researcher, Centre for Ecological and Evolutionary Synthesis (CEES), University of Oslo (2015-); Research Awardee, Natural History Museum, Berlin (2016)
7. **Previous work experience:**
Employment:
 2001-2003: Acting Professor (vs professori) of Environmental Geology, Univ. of Helsinki
 1996-2001: Professor (professori mvs) of Ecological Palaeontology, Univ. of Helsinki
 1993-1996: Senior Research Fellow (vanhempi tutkija), Academy of Finland
 1991-1992: Acting Senior Research Fellow (vs vanhempi tutkija), Academy of Finland
 1988-1990: Acting Personal Extraordinary Professor (vs henkilökohtainen ylimääräinen professori) of Palaeontology, University of Helsinki
 1984-2003: Curator (intendentti) of Palaeontology, Finnish Museum of Natural History
 1982-1984: Research Associate (tutkimusassistentti), Academy of Finland

Major international projects directed:
 - NOW Database, 1993- (general coordinator). The world leading and widely used public database of mammal localities and species of the Neogene of the Old World (<http://www.helsinki.fi/science/NOW/>). The NOW database enabled the rise of novel, spatially resolved and trait-based approaches to palaeobiology now known as ecometrics.

- Multinational and multidisciplinary fieldwork in the continental Neogene of the Ankara region, Turkey (1989-1995). Directed jointly with Prof. John Kappelman, Austin, Texas, and Prof. Berna Alpagut, Ankara). Geological, sedimentological, geochemical, taphonomical and palaeontological fieldwork. Participants from Turkey, Finland, USA, France, United Kingdom, The Netherlands, and Sweden.
- Multinational and multidisciplinary fieldwork in the continental Neogene of Shaanxi Province, China (1996-2001). Directed jointly with Prof. Qiu Zhuding, Beijing. Similar to the Turkish campaign but on a smaller scale. Partners from China, Finland, USA, France, United Kingdom, and Sweden.
- Establishing an astronomically calibrated time scale for the classical fossil mammal localities of the Baode Red Clay (2003-2006). Directed jointly with Profs. Zhang Zhaoqun and Zhou Liping, Beijing. Official Sino-Finnish Scientific and Technological Cooperation Project. Partners from China, Finland, USA, and France.
- Palaeontology and Palaeoenvironments of Middle Miocene primate-bearing beds of Damiao, Inner Mongolia (2007-2010). Directed jointly with Prof. Zhang Zhaoqun, Beijing. Partners from China, Finland, and USA.
- Coordinator of the INSPE project, designed to restart mammal palaeontology in the Islamic Republic of Iran (2006-). High-level collaboration with Iranian authorities. Partners from Iran, Finland, Japan, France, China, Finland, and France. Inactive for some years, it has recently been reactivated under the leadership of my former student Anu Kaakinen.
- Leader of the Palaeontology Team of the Orce Research Project (“First human occupation and its paleoecological context on the basis of the Plio-Pleistocene in the Guadix-Baza Basin. Archaeological Zone of Orce Basin (Granada, Spain)” (2017 - 2021). This is a major international and multidisciplinary undertaking, coordinated by the University of Granada with funding from the Regional Government of Andalusia, Spain.

8. **Research funding as well as leadership and supervision:**

Major research grants, last 5 years:

2010-2014: Academy of Finland: The Dynamics of Taxon Extinction in the Fossil Record. 700 000 euro (full cost model, total budget about 1 000 000 euro).

2014-2018: Academy of Finland: "The Ecological Context of Human Origins and its Evolutionary Significance (ECHOES): Six Million Years of Changing Herbivore Resource Use in the Turkana Basin". 696 000 euro (total about 1 140 000 euro).

2017-2020: Norwegian Research Council (one of three PIs). Drivers of evolutionary change: understanding stasis and non-stasis through integration of micro- and macro-evolution. About 1 million euro.

Past and present postdoctoral researchers active in my group:

Salaried postdocs: Jan van Dam (2002 - 2003), Alistair Evans (2004 - 2007), Laura Säilä (2010 -). Independently funded local postdocs: Liu Liping (2005 – 2010), Anu Kaakinen (2005 -), Jussi Eronen (2006 -), Kai Puolamäki (2006 -), Emilia Kosonen (2009 -). I also have a postdoc-like relationship with two independently funded young researchers abroad: Lee Hsiang Liow in Oslo (2006 -) and Pasquale Raia in Naples (2010 -).

Major contributions to the early careers of excellent researchers:

One of my first graduate students was Jukka Jernvall, now world-leading developmental and evolutionary biologist and Academy Professor at the University of Helsinki. Together with developmental biologist Irma Thesleff we trained him with the explicit idea of creating a scientist who understood both sides of evolution, development and the fossil record and thereby helped launched him on a spectacular career. During the last decade I have seen the rapid development of my former graduate student Jussi T. Eronen into a phenomenally productive, independent young researcher with a broad collaborative network and an emerging group of his own. I feel I contributed to the steeply rising international research career of my former postdoc Alistair R. Evans, currently Research Fellow at Monash University, Melbourne. In recent years I have had the privilege of mentoring my gifted postdoc (now Tenure Track Professor) Indre Zliobaite towards an independent career in science.

9. **Merits in teaching and pedagogical competence:**

Involvement in curriculum planning and the implementation of courses: With a few early exceptions I have planned and implemented all my teaching myself. I have also been part of planning and implementation of several new courses based on team teaching, most recently my department's "flagship" course for freshmen, *Dynamic Earth* (Dynaaminen maa). In March 2013 I have taught the two-week *Vertebrate Paleontology Module* in the Turkana Basin Institute Field School (Stony Brook University) in Turkwel, Kenya (<http://www.turkanabasin.org/fieldschool/>). I have been invited to repeat the performance every year since, including 2017.

Supervised doctoral dissertations: Jukka Jernvall (1995), Suvi Viranta (1996, jointly with Lars Werdelin, Stockholm), Pirkko Ukkonen (2001), Liu Liping (2003), Anu Kaakinen (2005, jointly with JP Lunkka, Oulu); Jussi Eronen (2006, jointly with Jukka Jernvall, Helsinki), Diana Pushkina (2007), Majid Mirzaie Ataabadi (2010), Hui Tang (2013, jointly with Dr. Jussi Eronen, Helsinki and Dr. Arne Micheels and Prof. Bodo Ahrens, Frankfurt). Of these, all except two are currently employed in an academic position.

10. **Awards, prizes and honours:**

Professor E.J. Nyströms pris (the Finnish Academy of Science and Letters, 2017)
Humboldt Research Award (Alexander von Humboldt Stiftung, 2015)
Member of the Finnish Academy of Science and Letters (elected 2005)
Member of the Finnish Society of Sciences and Letters (elected 1996)
Fellow of the Linnean Society of London (elected 1993)
Chair of the Geological Society of Finland (2001)

11. **Other academic merits:***Examination of students for the doctoral degree*

Tania King 1997 University of London (external examiner); Jørn Hurum 1997 University of Oslo (senior); Stephen Williams 1999 University of Göteborg (member of examination committee); Ki Andersson 2003 Uppsala University (member of examination committee); Mark Tummers 2004 University of Helsinki (external examiner); Kristin Maureen Ko-

varovich 2004 University of London (external examiner); Loic Costeur 2005 Université Claude Bernard Lyon 1 (jury member); Vebjørn Veiberg 2007 University of Oslo (opponent); Barnaby Crocker 2008 University of London (external examiner); Philippa Brewer 2008 University of New South Wales (external examiner); Sarah Joomun 2010 University of London (external examiner); Melanie Monroe 2011 University of Uppsala (opponent); Mikael Manninen 2013 University of Helsinki (pre-examiner).

Publishing activities

Finnish Zoological and Botanical Publishing Board (1990-2008; chair 1995-97)
 Evolutionary Ecology Research, editor (2001-)
 PNAS, guest editor (2015)
 Palaeobiodiversity and Palaeoenvironments, editorial board member (2009-)
 Evolutionary Theory, editorial board member (1988-2010)
 Evaluation of manuscripts for many journals including Nature, Science, PNAS, Nature Communications, Scientific Reports, Geology, American Naturalist, Evolution...

Evaluation of major grant applications and awards

I have a frequent record of reviewing of grant proposals for, among others, The National Science Foundation, European Research Council, LABEX, The Leverhulme Trust, The L.S.B. Leakey Foundation, The National Geographic Society, INTAS, Fonds zur Förderung der wissenschaftlichen Forschung, Smithsonian Institution, The Finnish Cultural Foundation, Alexander von Humboldt Stiftung, Natural Environment Research Council, OTKA, Alberta Ingenuity Fund, and, my favourite, The Horse Betting Levy Board.

Positions of scientific trust and administration

ESF Programme on Environments and Ecosystem Dynamics of the Eurasian Neogene (EEDEN), 2000-2004 (vice chair) See <http://www.esf.org/eeden/>
 International Union of Biological Sciences (IUBS), National Committee of Finland, 1998- (vice chair 2001- 2002, chair 2004-)
 IUBS Programme on Integrated Climate Change Biology (iCCB), 2007-2012 (co-chair, with C. Scheidegger and N.C. Stenseth; programme office remains in Helsinki).
 Evolution of Terrestrial Ecosystems Consortium, 1996- (member)
 The Paleobiology Database (PBDB), 2002- (member) See <http://paleodb.org/>
 Scientific adviser to the National Research Council (USA), Board on Earth Sciences and Resources (2007)
 Evaluation of the Senckenberg Nature Museum and Research Institute, 2013 (test-evaluator)
 Evaluation of the EVEREST Graduate School, University of Tübingen, Germany (2015)
 Division of Biogeoscience, Department of Geosciences and Geography, University of Helsinki, Head (2015 -)
 Scientific Council of the Waldemar von Frenckell Foundation (2006 - , chair 2012 -).
 Directory Board of the Finnish Museum of Natural History (1997- , chair 2007-2008)
 University of Helsinki, Committee on Human Skeletal Collections (1999-2000; chair)
 University of Helsinki, Faculty of Science, scientific expert group “Matias” (2010-).