

# David Whipp

*Professor, University of Helsinki*

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🏠 [davewhipp.github.io](https://davewhipp.github.io) - 👤 [www.helsinki.fi/geodynamics](https://www.helsinki.fi/geodynamics) (group)

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## Education

**Ph.D., Geology**, University of Michigan, Ann Arbor, MI, USA. 2003-2008

**B.S., Geology (Physics minor)**, University of Michigan, Ann Arbor, MI, USA. 1998-2002

## Experience

**Professor**, Department of Geosciences and Geography, and Helsinki Institute of Sustainability Science (HELSUS), University of Helsinki, Helsinki, Finland. 2021-present

**Adjunct of the Faculty of Graduate Studies**, Department of Earth Sciences, Dalhousie University, Halifax, NS, Canada. 2013-2023

**Associate professor**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2017-2020

**Assistant professor**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2013-2016

**Postdoctoral fellow**, Department of Oceanography, Dalhousie University, Halifax, NS, Canada. 2009-2012

**Postdoctoral fellow**, Géosciences Rennes, University of Rennes 1, Rennes, France. 2008-2009

**Geoscientist (intern)**, ExxonMobil Exploration Company, Houston, TX, USA. 2007

**Research assistant**, Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA. 2003-2008

**Laboratory assistant**, Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA. 2001-2003

**Tech consultant and Sites rover**, Campus Computing Sites, University of Michigan, Ann Arbor, MI, USA. 2000-2002

## Publications

Publication list also available in Google Scholar. \* = student as lead author, † = shared first authorship.

### Books

H. Tenkanen, V. Heikinheimo, and **D. M. Whipp**. Introduction to Python for Geographic Data Analysis. CRC Press (expected publication in 2023). **In progress**, online at <https://pythongis.org/>.

### Journal articles

V. Peltonen, S. Kultti, N. Putkinen, V. Rinterknecht, A. Hall, and **D. M. Whipp**. Reducing uncertainty in source area exploration of mineralized glacial erratics using terrestrial cosmogenic radionuclide dating. *Journal of Geochemical Exploration.*, **under review**.

D. Grujic, M. Bernet, I. Coutand, and **D. M. Whipp**. Fast crustal cooling caused by the end of exhumation. **in revision**.

S. Fan, M. Murphy, **D. M. Whipp**, J. Saylor, P. Copeland, A. Hoxey, M. Taylor, and D. Stockli. Megathrust Heterogeneity, Crustal Accretion, and a 2022

Topographic Embayment in the Western Nepal Himalaya: Insights from the Inversion of Thermochronological Data. *Tectonics*, doi:

10.1029/2021TC007071, 2022.

**D. M. Whipp**<sup>†</sup>, D. A. Kellett<sup>†</sup>, I. Coutand, and R. A. Ketcham. Short communication: Modelling competing effects of cooling rate, grain size and radiation damage in low temperature thermochronometers. *Geochronology*, 4, 143-152, doi: 10.5194/gchron-4-143-2022, 2022.

A. E. Rintamäki, G. Hillers, T. A. T. Vuorinen, T. Luhta, J. M. Pownall, C. Tsarsitalidou, K. Galvin, J. Keskinen, J. T. Kortström, T.-C. Lin, P. B. Mäntyniemi, K. J. Oinonen, T. J. Oksanen, P. J. Seipäjärvi, G. Taylor, M. R. Uski, A. I. Voutilainen, and **D. M. Whipp**. A seismic network to monitor the 2020 EGS stimulation in the Espoo/Helsinki area, southern Finland. *Seismological Research Letters*, doi: 10.1785/0220210195, 2021.

2021

J. Schütt\* and **D. M. Whipp**. Controls on continental strain partitioning above an oblique subduction zone, Northern Andes. *Tectonics*. doi: 10.1029/2019TC005886, 2020.

2020

D. Grujic, K. Ashley, M. Coble, I. Coutand, D. Kellett, K. Larson, **D. M. Whipp**, M. Gao, and N. Whynot. Deformational temperatures across the Lesser Himalayan Sequence in eastern Bhutan and their implications for the deformation history of the Main Central Thrust. *Tectonics*. doi: 10.1029/2019TC005914, 2020.

A. Koptev, T. A. Ehlers, M. Nettesheim, and **D. M. Whipp**. Response of a rheologically stratified lithosphere to subduction of an indenter-shaped plate: Insights into localized exhumation at orogen syntaxes. *Tectonics*. doi: 10.1029/2018TC005455, 2019.

2019

**D. M. Whipp** and T. A. Ehlers. Quantifying landslide frequency and sediment residence time in the Nepal Himalaya. *Science Advances*, 5(4). doi: 10.1126/sciadv.aav3482, 2019.

M. Nettesheim\*, T. A. Ehlers, **D. M. Whipp**, and A. Koptev. The influence of upper-plate advance and erosion on overriding plate deformation in orogen syntaxes. *Solid Earth*, 9, 1207-1224. doi: 10.5194/se-9-1207-2018, 2018.

2018

K. R. Landry\*, I. Coutand, **D. M. Whipp**, D. Grujic, and J. K. Hourigan. Late Neogene tectonically driven crustal exhumation of the Sikkim Himalaya: Insights from inversion of multithermochronologic data. *Tectonics*, 35(3):833–859. doi: 10.1002/2015TC004102, 2016.

2016

**D. M. Whipp**, C. Beaumont, and J. Braun. Feeding the 'aneurysm': Orogen-parallel mass transport into Nanga Parbat and the western Himalayan syntaxis. *Journal of Geophysical Research: Solid Earth*, 119(6):5077–5096. doi: 10.1002/2013JB010929, 2014.

2014

M. A. Murphy, M. H. Taylor, J. Gosse, C. R. P. Silver, **D. M. Whipp**, and C. Beaumont. Limit of strain partitioning in the Himalaya marked by large earthquakes in western Nepal. *Nature Geoscience*, 7(1):38–42. doi: 10.1038/ngeo2017, 2014.

I. Coutand, **D. M. Whipp**, D. Grujic, M. Bernet, M. G. Fellin, B. Bookhagen, K. R. Landry, S. K. Ghalley, and C. Duncan. Geometry and kinematics of the Main Himalayan Thrust and Neogene crustal exhumation in the Bhutanese Himalaya derived from inversion of multithermochronologic data. *Journal of Geophysical Research: Solid Earth*, 119(2):1446–1481. doi: 10.1002/2013JB010891, 2014.

**D. M. Whipp**, T. A. Ehlers, J. Braun, and C. D. Spath. Effects of exhumation kinematics and topographic evolution on detrital thermochronometer data. *Journal of Geophysical Research: Earth Surface*, 114(F4). doi: 10.1029/2008JF001195, 2009.

2009

T. F. Schildgen, T. A. Ehlers, **D. M. Whipp**, M. C. van Soest, K. X. Whipple, and K. V. Hodges. Quantifying canyon incision and Andean Plateau surface uplift, southwest Peru: A thermochronometer and numerical modeling approach. *Journal of Geophysical Research: Earth Surface*, 114(F4). doi: 10.1029/2009JF001305, 2009.

**D. M. Whipp** and T. A. Ehlers. Influence of groundwater flow on thermochronometer-derived exhumation rates in the central Nepalese Himalaya. *Geology*, 35(9):851–854. doi: 10.1130/G23788A.1, 2007.

K. W. Huntington, T. A. Ehlers, K. V. Hodges, and **D. M. Whipp**. Topography, exhumation pathway, age uncertainties, and the interpretation of erosion rates from thermochronometer data. *Tectonics*, 26(4) . doi: 10.1029/2007TC002108, 2007.

**D. M. Whipp**, T. A. Ehlers, A. E. Blythe, K. W. Huntington, K. V. Hodges, and D. W. Burbank. Plio-Quaternary exhumation history of the central Nepalese Himalaya: 2. Thermo-kinematic and thermochronometer age prediction model. *Tectonics*, 26(3). doi: 10.1029/2006TC001991, 2007.

#### Software

**D. M. Whipp**. Tc1D: a 1D thermal and thermochronometer age prediction model for quantifying rates of geodynamic and geomorphic processes. doi: 10.5281/zenodo.7124271

**D. M. Whipp** and R. A. Ketcham. tcplotter: a Python package for creating and customizing thermochronometer age and closure temperature plots. doi: 10.5281/zenodo.5958939.

#### Grants and funding

Funding includes only amounts over 5000€

#### Under review

**Research infrastructure funding**, Academy of Finland, Finland, 961 620€ (Project total: 1 956 596€). Consortium PI.  
DATA-EPOS: Modern and efficient metadata and data handling platforms for FIN-EPOS

2024-2028

#### Research funding

**Academy Project**, Academy of Finland, Finland, 501 081€. Sole PI.  
Exploiting Thermochronometer sensitivity to RAdiation damage to quantify rates of Craton exhumation through Time (EXTRACT)

2023-2027

**Project funding**, Renlund foundation, Finland, 37 992€. Sole PI.  
Building quantitative links between geodynamics and metamorphism in the Paleoproterozoic: Insight into emplacement of orogenic gold deposits

2021-2023

**Academy Project**, Academy of Finland, Finland, 451 763€. Sole PI.  
What controls deformation in a 'bent' 3D orogen? The effects of spatially variable rock strength, erosion and mass transport on the tectonics of the Bolivian Andes

2014-2018

**Three-Year Research Project**, University of Helsinki, Helsinki, Finland, 145 000€. Sole PI.  
What controls strain partitioning at obliquely convergent ocean-continent margins? 3D dynamics of crustal deformation along the western Andean margin

2014-2017

**ACEnet Research Fellowships Program**, Atlantic Canada Computational Excellence Network (ACEnet), Canada, \$40 000 [CAD]. Co-PI with C. Beaumont.  
3-D plateau formation and evolution from numerical model experiments

2010-2012

#### Infrastructure

**Faculty of Science internal infrastructure funding**, University of Helsinki, Helsinki, Finland, 90 000€. Sole PI.  
Geosciences high-performance computing cluster (geo-hpcc)

2016

**Department of Geosciences and Geography internal infrastructure funding**, University of Helsinki, Helsinki, Finland, 120 000€. Sole PI.  
Computational infrastructure for Earth Sciences

2014

Computing  
allocations

- PRACE Preparatory Access**, Partnership for Advanced Computing in Europe (PRACE), Brussels, Belgium, 200,000 core-hours. Sole PI. 2014  
Nested DOUAR: Coupling high and low resolution finite element models to solve 3D geologic problems
- Compute Canada National Resource Allocation**, Compute Canada, Toronto, ON, Canada, 109 core-years. Co-PI with J. Allen and C. Beaumont. 2012  
Modelling the three-dimensional dynamics of geologic systems: From sub-sea salt to the Himalayan peaks

Awards and honors

- Teacher of the Year**, Vasara Ry (Geology student organization), University of Helsinki, Finland. 2020
- Exceptional Reviewer**, Lithosphere, Geological Society of America. 2014
- Outstanding Graduate Student Instructor Award**, Rackham Graduate School, University of Michigan, Ann Arbor, MI, USA. 2007
- Outstanding Graduate Student Instructor Award**, Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA.
- Outstanding Student Paper Award**, Tectonophysics Section, American Geophysical Union Fall Meeting. 2006
- Camp Davis Field Geologist Award**, Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA. 2003

Invited talks

- University of Turku**, Department seminar, Department of Geography and Geology, Turku, Finland. 2019
- 16th International Conference on Thermochronology (Thermo 2018)**, Session 2: Diffusion / annealing kinetics and thermal modelling, Quedlinburg, Germany. 2018
- University of Lausanne**, Department seminar, Institute of Earth Sciences, Lausanne, Switzerland. 2017
- European Geosciences Union General Assembly**, Session TS7.8: Mountain building processes, from top to bottom: the Zagros-Himalaya-Tibet orogenic system, Vienna, Austria.
- American Geophysical Union Fall Meeting**, Session T42B: Sedimentary Basin Records of Convergent Orogenic Systems, San Francisco, CA, USA. 2016
- University of Potsdam**, Colloquium talk, Institute of Earth and Environmental Science, Potsdam, Germany.
- American Geophysical Union Fall Meeting**, Session EP23G: From High Peaks to Level Plains: Using Thermochronometry to Study the Evolving Geosphere, San Francisco, CA, USA. 2014
- University of Tübingen**, Earth System Dynamics Research Group seminar, Department of Geosciences, Tübingen, Germany. 2013
- Joseph Fourier University**, Grand séminaire, Institut des Sciences de la Terre, Grenoble, France. 2011
- Geological Society of America Annual Meeting**, Session T46: Linking Shallow to Deep Crustal Processes in Arc and Collisional Orogens, Portland, OR, USA. 2009
- Joseph Fourier University**, Seminar talk, Laboratoire de géodynamique des chaînes alpines, Grenoble, France.
- Dalhousie University**, Department seminar, Department of Earth Sciences, Halifax, NS, Canada. 2007

## Conference activity

### Organization

- Session chair**, NetherMod 2017 - XV International Workshop on Numerical Modelling of Mantle and Lithosphere Dynamics, Putten, Netherlands. 2017  
“Global modelling of early and recent Earth”
- Session co-convener**, Nordic Geological Winter Meeting, Helsinki, Finland. 2016  
“Dynamics and evolution of the lithosphere from Archean to present”  
“Interactions between climate, erosion and tectonics”
- Steering committee**, Lithosphere 2014 symposium, Turku, Finland. 2014
- Session co-chair**, 28th Himalayan Karakorum Tibet Workshop and 6th International Symposium on Tibetan Plateau Joint Conference, Tübingen, Germany. 2013  
“Crustal Doming, Exhumation and Lateral Extrusion”
- Session co-convener**, Geological Society of America Annual Meeting, Denver, Colorado, USA. 2010  
“Orogeny: From rigid plates to diffuse lithospheric deformation”, one of several sessions celebrating the 30th anniversary of the Structural Geology and Tectonics Division of the GSA

## Teaching

Links: 🏠 = course homepage, 🔄 = course GitHub page, 📺 = course YouTube channel

### Main courses

- Department of Geosciences and Geography, University of Helsinki, Helsinki, 2013-present Finland.
- Current Topics in Global Geophysics Research
  - Geo-Python (with Henrikki Tenkanen and Vuokko Heikinheimo) 🏠🔄📺
  - Geodynamics 📺
  - Introduction to Lithospheric Geodynamic Modelling (with Lars Kaislaniemi) 🏠🔄
  - Introduction to Quantitative Geology 🏠🔄📺
  - Lithospheric Structure and Dynamics (with Ilmo Kukkonen)
- Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2018
- Conducting scientific research (with Tapani Rämö) 🏠

### Short courses

- Low-temperature thermochronology**, GeoDoc short course, University of Helsinki, Helsinki, Finland. 🏠📺 2017  
Co-taught with Ilmo Kukkonen and invited lecturers Cécile Gautheron, Christoph Glotzbach, and Clare Warren
- Introduction to lithospheric geodynamic modelling**, Nordic Geological Winter Meeting, Helsinki, Finland. 🏠 2016  
Co-taught with Lars Kaislaniemi
- Software Carpentry Bootcamp**, University of Helsinki, Helsinki, Finland. 🏠 2015  
Co-taught with Joona Lehtomäki
- Introduction to Lithospheric Geodynamics**, Geological Survey of Finland, Espoo, Finland.  
Co-taught with Lars Kaislaniemi

### Guest lectures

- Geochronology and Thermochronology**, Department of Earth Sciences, Dalhousie University, Halifax, NS, Canada. 2010-present  
Guest lectures in years 2010, 2019, 2021, 2022

**Geo-Python**, Department of Geography and Geology, University of Turku and Department of Geology and Mineralogy, Åbo Akademi University, Turku, Finland. 2019

**Geological Processes/Dynamic Earth (Introductory geoscience course)**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2015-2018

Assistant teaching Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA 2003-2007

- Earth Surface Processes and Soils laboratory
- Geology of the Rockies, University of Michigan Camp Davis, WY, USA
- Introduction to Geology laboratory/discussion
- Introduction to Oceanography laboratory

## Supervision

### Postdoctoral

researchers **Sean Kelly**, Geological Survey of Canada, Dartmouth, N.S., Canada. 2023-present  
Co-supervised with Dawn Kellett (GSC)

**Lars Kaislaniemi**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2015-2018

### Doctoral

researchers **Ann-Kathrin Maier**, Institute of Seismology, University of Helsinki, Helsinki, Finland. 2024-present

**Leevi Tuikka**, Institute of Seismology, University of Helsinki, Helsinki, Finland.

**Miisa Häkkinen**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2021-present  
Co-supervised with Jon Pownall and Pentti Hölttä (GTK)

**Veikko Peltonen**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2020-present  
Co-supervised with Seija Kultti

**Tuija Luhta**, Institute of Seismology, University of Helsinki, Helsinki, Finland. 2019-present  
Co-supervised with Timo Tiira

**Matthias Nettesheim**, Department of Geosciences, University of Tübingen, Tübingen, Germany. 2017-2021  
Co-supervised with Todd Ehlers

**Jorina Schütt**, Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. 2014-2018

### Masters students

**Ida-Maria Hanski**, Master's Program in Geology and Geophysics, University of Helsinki, Helsinki, Finland. 2020-present  
Co-supervised with Tuija Luhta and Kati Oinonen

**Leevi Tuikka**, Master's Program in Geology and Geophysics, University of Helsinki, Helsinki, Finland. 2021-2023

**Aleksi Rantanen**, Master's Program in Geology and Geophysics, University of Helsinki, Helsinki, Finland. 2018-2021

**Yijun Wang**, Master's Program in Geology and Geophysics, University of Helsinki, Helsinki, Finland. 2019-2020

**Lotta Ylä-Mella**, Master's Program in Geology and Geophysics, University of Helsinki, Helsinki, Finland. 2017-2020  
Co-supervised with Ilmo Kukkonen



	<b>Nelli Metiäinen</b> , Master's Program in Geography, University of Helsinki, Helsinki, Finland.	2017-2019
	<b>Niclas Blomqvist</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. Now: Geologist, Pöyry Finland Oy	2014-2016
Bachelors theses	<b>Minttu Pekkala</b> , Bachelor's Program in Geoscience, University of Helsinki, Helsinki, Finland.	2021-2023
	<b>Leevi Tuikka</b> , Bachelor's Program in Physical Sciences, University of Helsinki, Helsinki, Finland.	2018-2020
	<b>Lotta Ylä-Mella</b> , Bachelor's Program in Physical Sciences, University of Helsinki, Helsinki, Finland.	2016-2018
	<b>Jennifer Hällsten</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland. Co-supervised with Jorina Schütt	2016-2017
Visiting researchers	<b>Mehrnoosh Ghadimi</b> , Department of Physical Geography, University of Tehran, Tehran, Iran.	2017-present
Supervisory committee	<b>Niina Junno</b> , Doctoral student, Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	2021-present
	<b>Toni Luoto</b> , Doctoral student, Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	2020-present
	<b>Tsarsitalidou, Christina</b> , Doctoral student, Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	
	<b>Riikka Fred</b> , Doctoral student, Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	2020-2022
	<b>Ville Virtanen</b> , Doctoral student, Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	
	<b>Suoya Fan</b> , Doctoral student, Dept. of Earth and Atmospheric Sciences, University of Houston, Houston, TX, USA.	2019-2021
	<b>Rémi Vachon</b> , Doctoral student, Dept. of Earth Sciences, Uppsala University, Uppsala, Sweden.	2018
	<b>Janice Allen</b> , Doctoral student, Dept. of Earth Sciences, Dalhousie University, Halifax, NS, Canada. Now: Imperial Oil, Canada	2011-2016
	<b>Gabe Creason</b> , Masters student, *Department of Earth Sciences, Dalhousie University, Halifax, NS, Canada. Now: Ph.D. student, Oregon State University	2012-2015
	<b>Kyle Landry</b> , Masters student, Department of Earth Sciences, Dalhousie University, Halifax, NS, Canada.	2011-2014
Undergraduate researchers	<b>Bérénice Cateland</b> , Geosciences, University of Bordeaux, Bordeaux, France.	2021
	<b>Leevi Tuikka</b> , Department of Physics, University of Helsinki, Helsinki, Finland.	2017-2019
	<b>Christoph Brendel</b> , Institute for Geology, University of Hamburg, Hamburg, Germany.	2019
	<b>Jugraj Singh</b> , Rajiv Gandhi Institute of Petroleum Technology, Jais, Uttar Pradesh, India.	

<b>Marta Girbau</b> , Department of Geology, Universitat Autònoma de Barcelona, Barcelona, Spain.	2018
<b>Miro Pütz</b> , Institute of Geophysics, University of Hamburg, Hamburg, Germany.	2016
<b>Niclas Blomqvist</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland.	2014
<b>Chris Spath</b> , Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, MI, USA. Co-supervised with Todd Ehlers	2006–2008
<b>Nick Olds</b> , Department of Geological Sciences, University of Michigan, Ann Arbor, MI, USA. Co-supervised with Todd Ehlers	2004

## Professional training

<b>As a Supervisor</b> , University of Helsinki, Helsinki, Finland. Supervisor training program organized by the university to support supervisors in managing their teams.	2023
<b>Learning in Higher Education (UP1)</b> , Centre for University Teaching and Learning, University of Helsinki, Helsinki, Finland. Five credit introductory course for university pedagogy.	2020
<b>Unilead leadership program</b> , Faculty of Science, University of Helsinki, Helsinki, Finland. Leadership program organized by the Faculty of Science for the University of Helsinki supervisors to support them in their managerial duties and develop their leadership skills.	2019
<b>Classroom observation</b> , Center for Research on Learning and Teaching, University of Michigan, Ann Arbor, MI, USA. A short course on how to conduct and share classroom observations.	2007

## Professional service

<b>Member</b> , Finnish national International Lithosphere Program (ILP) committee.	2022-present
<b>Associate editor</b> , Tektonika, <a href="https://tektonika.online">https://tektonika.online</a> .	2022-2024
<b>Review panel member</b> , German Research Foundation Priority Programs (SPP 2017: Mountain Building Process in Four Dimensions), Berlin, Germany.	2020
<b>Preparatory committee member</b> , AdriaArray project.	2019-present
<b>Judge</b> , Outstanding Student Poster and PICO Award, European Geosciences Union General Assembly, Vienna, Austria.	2016-2018
<b>Judge</b> , Outstanding Student Paper Awards, American Geophysical Union Fall Meeting, San Francisco, CA, USA. Did not attend/judge in 2015	2013-2016
<b>Scientific expert in review panel</b> , Fennovoima nuclear power company, Helsinki, Finland.	2013-2015
<b>Referee</b> .	2007-present
<b>Journals</b> : Basin Research, Chemical Geology, Earth and Planetary Science Letters, Earth-Science Reviews, Earth Surface Processes and Landforms, G-cubed (Geochemistry, Geophysics, Geosystems), Geological Society of America Bulletin, Geology, Geophysica, Geoscientific Model Development, International Journal of Earth Sciences, Journal of Geology, Journal of Geophysical Research - Earth Surface, Journal of Geophysical Research - Solid Earth, Journal of South American Earth Sciences, Lithosphere, Nature Communications, Nature Geoscience, Science, Tectonics, Tectonophysics	
<b>Research project proposals</b> : German Research Foundation, Natural Sciences and Engineering Research Council of Canada, The Royal Society	



UK (International Collaboration Awards), UK Natural Environment Research Council, US National Science Foundation (Earth Sciences Postdoctoral Fellowship program, Geomorphology and Land Use Dynamics program, Tectonics program)

## University service

<b>Director</b> , Masters program in Geology and Geophysics, University of Helsinki, Helsinki, Finland.	2022-present
<b>Board member</b> , Doctoral program in Geosciences, University of Helsinki, Helsinki, Finland.	
<b>Deputy director</b> , Institute of Seismology, University of Helsinki, Helsinki, Finland.	2020-present
<b>Deputy member</b> , Department of Geosciences and Geography management group, University of Helsinki, Helsinki, Finland.	2018-present
<b>Member</b> , Department of Geosciences and Geography communications group, University of Helsinki, Helsinki, Finland.	
<b>Vice director</b> , Masters program in Geology and Geophysics, University of Helsinki, Helsinki, Finland.	2021-2022
<b>Leader</b> , Department of Geosciences and Geography well-being group, University of Helsinki, Helsinki, Finland.	2018-2022
<b>Steering group member</b> , Bachelor's Programme in Science (in English), University of Helsinki, Helsinki, Finland.	
<b>Steering group member</b> , Masters program in Geology and Geophysics, University of Helsinki, Helsinki, Finland.	2017-2020
<b>Preparatory group member</b> , BSc of Science in English degree, University of Helsinki, Helsinki, Finland.	2017-2018
<b>Co-coordinator geoscience seminar</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland.	2013-2018
<b>Department council member</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland.	2015-2017
<b>Co-coordinator of Solid Earth Geophysics Masters program</b> , Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland.	2014-2016
<b>Graduate Student Mentor</b> , Department of Geological Sciences, University of Michigan, Ann Arbor, Michigan, USA.	2007-2008

## Community outreach

<b>Guest lecture</b> , Kumpula Campus, University of Helsinki, Finland. Introduction to the geodynamics of the Himalayan orogen for visiting high school students from the Germal School Helsinki	2020
<b>Guest lecture</b> , Institute of Seismology, University of Helsinki, Helsinki, Finland. Introduction to my general areas of research on mountain evolution for visiting high school students from Tampere, Finland	2015
<b>Presenter</b> , Science Bazaar, University of Helsinki, Helsinki, Finland. Presentation on mountain systems to the audience of undergraduate students present for their orientation at the Kumpula Science Campus of the University of Helsinki	2013
<b>Guest lecture</b> , Melbourne High School, Melbourne, FL, USA. Introduction to the geology and culture of Nepal related to reading of Jon Krakauer's Into Thin Air for eleventh grade English students	2007

## Memberships

European Geosciences Union	2014-present
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Geological Society of America  
American Geophysical Union

2005-present  
2003-present

## Languages

Native: English  
Basic: Finnish, French, German

## Personal

Birth date: 9 March 1980  
Citizenship: USA  
Residence: Finland (Permanent resident)

Last updated: December 2023