

The University of Helsinki is a multidisciplinary research university that ranks among the best in the world and the top ten among European universities. The university has some 36,000 degree students.

The Department of Geosciences and Geography (<https://www.helsinki.fi/en/faculty-of-science/faculty/geosciences-and-geography>) at the Faculty of Science is the leading research and education unit in its field in Finland. In addition to research in geology, geophysics and geography, research into seismology and official duties in the field of seismology is carried out at the department. The staff at the department numbers some 100. Institute of Seismology belongs to the Department of the Geosciences and Geography. The Institute performs research, education, continuous Earth monitoring, and helps government and private organisations in their projects requiring seismological expertise.

The Faculty of Science invites applications for

ONE POSTDOCTORAL RESEARCHER

starting from August 2021 for a fixed-term employment contract until 31 July, 2023. A six-month trial period applies. The work will be carried out in the scope of the multi-disciplinary and multi-institutional SEISMIC RISK project [<https://www2.helsinki.fi/en/projects/seismic-risk>] led by the University of Helsinki, VTT (Technical Research Center of Finland), and GTK (Geological Survey of Finland). The project focuses on the evaluation, mitigation, and communication of seismic hazard and risk in an urban environment with a strong focus on small-magnitude earthquakes induced in the context of geothermal energy production.

The scarcity of earthquake ground motion data in stable continental interiors such as the Fennoscandian shield requires the updated ground-motion models to be augmented by seismic wavefield simulations. The candidate is expected to be involved in the integration of ground motion observations and simulation results for a modern probabilistic seismic hazard assessment (PSHA) adapted to the Finnish environment.

Data mining focuses on seismic records obtained during the 2018 and 2020 stimulations in the Helsinki area. The seismic-wave propagation solver SeisSol is used in collaboration with LMU and TUM Munich project partners to target high-frequency wave field simulations to assess the variability of ground motion patterns in relation to observations. The results of the study will play a pivotal role in ongoing and future geothermal energy developments throughout Finland.

Finland is a member of EU, has high quality free schooling (also in English), generous family benefits and healthcare, and was recently ranked as the best country in the world for expat families and in the world's top ten most livable cities. Finland and the Helsinki region possess top expertise in sciences in terms of a vibrant talent pool, leading research, strong support services and functioning collaboration networks. For more information about working at the University of Helsinki and living in Finland, please see <https://www.helsinki.fi/en/university/working-at-the-university>.

The starting salary of the postdoctoral researcher will be ca. 3300–3700 euros/month, depending on the appointees' qualifications and experience. Furthermore, the University of Helsinki offers comprehensive services to its employees, including occupational health care and health insurance, sports facilities, and opportunities for professional development.

How to apply

For further information, please contact research director Annakaisa Korja, annakaisa.korja(at)helsinki.fi and/or professor Gregor Hillers, gregor.hillers(at)helsinki.fi [bit.ly/HILatHEL].

To apply, please submit a single-file pdf document including your CV, list of publications, the names and contact information of at least two referees to these two email addresses and using the University of Helsinki Recruitment System by clicking the Apply for the position button below. Applicants who are employees of the University of Helsinki must submit their applications via the SAP HR portal. Evaluation of applications starts immediately until the position is filled.