TULANET

Postdoctoral Programme for Finnish Research Institutes

Progress Report 16 January 2026

Sanna Marttinen

TULANET | Postdoctoral Programme *for* Research Institutes

Tutkimuslaitosten yhteenliittymä Tulanet

Contents

Finnish Partnership for Research Institutes (Tulanet)

Latokartanonkaari 9
FI-00790 Helsinki, Finland

Linkedin.com/company/tulanet
@TulanetFI

www.tulanet.fi

TULANET

Executive Summary

The Postdoctoral Programme of Finnish Research Institutes is a joint initiative of twelve Finnish research institutes. Its purpose is to strengthen expertise in fields that are critical for society and the economy, while promoting sustainable solutions and long-term competitiveness.

Between 2025 and 2028, the programme will recruit 85 postdoctoral researchers to fixed-term positions across research institutes operating under six administrative sectors. The programme is funded with EUR 40 million in government R&D funding.

The programme has been launched according to plan. During the initial phase, participating organisations jointly agreed on common principles for recruitment and research implementation. By the end of 2025, a total of 76 postdoctoral researchers had been recruited. These positions attracted more than 3,700 applications, indicating strong international interest. Of the selected researchers, 37% will relocate to Finland from abroad.

The research carried out in the programme focuses on three broad areas of societal impact:

1. strengthening competitiveness and economic growth
2. improving security, health, and well-being
3. supporting nature, the environment, and climate sustainability

Overall, the programme contributes to the key priorities of Finland's multi-annual R&D funding plan. It also puts into practice several principles for developing the national research and innovation system, including strengthening collaboration, internationalisation, and the societal impact of research.

1 Background and objectives of the Programme

The Postdoctoral Programme is a joint initiative of twelve Finnish research institutes. It aims to strengthen research and innovation capabilities in areas that are strategically important for Finnish society and business, while supporting the development of sustainable solutions and long-term competitiveness.

The programme will run from 2025 to 2028 and includes 85 fixed-term positions for postdoctoral researchers across participating institutes. It is funded through EUR 40 million in government R&D funding allocated to the institutes through the national budget.

The institutes involved in the programme represent six different administrative sectors, bringing together a broad range of expertise and perspectives.

In this programme, the postdoctoral phase refers to the early stage of a researcher's career after completing a doctoral degree. It is designed to support the transition to independent research and to strengthen career prospects across different sectors, including academia, industry, and public administration.

Postdoctoral researchers carry out ambitious, high-quality research within clearly defined thematic areas. Their work takes place at the interface of research institutes, businesses, and public authorities, helping to ensure that research is closely connected to real-world needs.

The programme has four main objectives:

1. to support business investment in research, development, and innovation (RDI)
2. to strengthen expertise in fields that are important for society and the economy
3. to increase collaboration between different sectors
4. to promote the mobility of researchers both within Finland and internationally

In the longer term, the programme aims to contribute to sustainable economic growth and improved productivity in Finland.

This report focuses on the programme's initial phase and presents the results of the first recruitment rounds.

2 Status of postdoctoral recruitment

The programme has progressed according to plan. By the end of 2025, 76 out of the planned 85 postdoctoral positions had been filled, and 62% of the selected researchers had already started their work. Recruitment for the remaining positions was launched towards the end of the year.

Table 1. Research institutes participating in the postdoctoral programme, the number of allocated postdoctoral positions, and the proportion of positions filled (%) as of 31 December 2025.

Research institute	Number of allocated positions	Share of positions filled* (%)
VTT Technical Research Centre of Finland Ltd.	23	87
Natural Resources Institute Finland (Luke)	14	93
Finnish Environment Institute (Syke)	10	120
Finnish Geospatial Institute/ National Land Survey of Finland (FGI/NLS)	7	100
Finnish Meteorological Institute (FMI)	7	114
Finnish Institute for Health and Welfare (THL)	7	0
Geological Survey of Finland (GTK)	4	75
VATT Institute for Economic Research	4	100
Finnish Food Authority	4	100
Finnish Institute of Occupational Health (FIOH)	3	133
Finnish Medicines Agency (Fimea)	1	100
Radiation and Nuclear Safety Authority (STUK)	1	0
TOTAL	**85**	**89**

* The rate of positions may exceed 100% in some institutes. This can occur when shorter contract periods are used or when joint recruitments allow multiple researchers to be appointed within the allocated funding.

The positions attracted strong interest: a total of 3,729 applications were submitted for the 76 positions filled. This reflects both high competition and the programme's international visibility.

Of those selected, 37% will relocate to Finland from abroad, while 63% were already living in Finland at the time of application. In terms of nationality:

- 50% are Finnish citizens
- 8% are citizens of other EU countries
- 42% are citizens of non-EU countries

These figures highlight the programme's role in attracting international talent to Finland while also strengthening the domestic research base.

One postdoctoral position is implemented jointly with a university. In this case, the researcher is employed by both organisations and works across them on a weekly basis, strengthening collaboration between institutions.

It should be noted that the fill rate of positions may exceed 100% in some institutes. This can occur when shorter contract periods are used or when joint recruitments allow multiple researchers to be appointed within the allocated funding.

Table 2. Key figures from the first recruitment rounds (as of 31 December 2025)

	Number
Postdoctoral positions open / filled	76 positions open / 76 filled
Total number of applications	3,729
Place of residence of selected postdoctoral researchers	
- **residing in Finland at the time of application**	48 persons
- **relocating to Finland**	28 persons
Nationality at the time of application	
- **Finnish**	38 persons
- **other EU country**	6 persons
- **non-EU country**	32 persons

3 Common principles

During the initial phase of the programme, the participating organisations jointly developed a shared postdoctoral policy. This policy sets out common principles for recruitment and for the implementation of research. The principles are formulated as recommendations, allowing flexibility to account for the specific needs and practices of each research institute.

As a general rule, recruitment is carried out through international calls in order to attract the best possible candidates. National calls may be used where there are justified reasons related to the nature of the research.

The recommended criteria for selecting postdoctoral researchers are as follows:

- The doctoral degree has been awarded within the past five years
- In justified cases, this period may be extended to a maximum of ten years (for example, due to parental leave, military or civilian service, long-term illness, or work outside academia)
- Applicants who have received permission to defend their doctoral thesis may also be considered
- Current employees of the research institutes may also be eligible for selection

The standard duration of a postdoctoral position is three years. However, organisations may, for specific reasons, divide their allocated resources among several researchers—for example, when combining funding from different sources to strengthen collaboration or impact. In all cases, each researcher is allocated at least 18 person-months of programme funding. All positions are full-time.

Each postdoctoral researcher is supported by a designated scientific supervisor. The supervisor provides guidance, monitors the progress of the research, and supports the researcher's career development and professional networking, taking into account their individual starting point.

4 Selection of research topics and recruitment implementation

Each research institute was responsible for selecting its research topics and carrying out recruitment, in line with its own practices while taking into account the jointly agreed recommendations.

Research topics were chosen based on several key criteria, including:

- their societal relevance
- their importance for business and industry
- identified skills gaps in the field
- their national and international significance

At many institutes, close collaboration with industry is an integral part of strategy and research planning. Ongoing dialogue with companies has helped ensure that the selected postdoctoral research topics respond to current and emerging needs in the business sector. In addition, topic selection was influenced by sector-specific research strategies, ongoing projects, and needs related to security of supply and comprehensive security.

The research topics of the postdoctoral researchers recruited in the first phase are presented in Annex 1. Overall, the societal impact of the research focuses on three broad areas:

- competitiveness and the economy
- security, health, and well-being
- nature, the environment, and climate

These impact areas will be examined in more detail in future reporting.

Recruitment processes began in autumn 2024. By the end of 2025, 84% of the filled positions had been recruited through international calls. In some cases, national recruitment was used where it was justified by the specific requirements of the research.

Positions were advertised through discipline-specific channels. The programme also collaborated with Business Finland's Work in Finland service to promote opportunities internationally. In addition, the programme was presented at recruitment events aimed at international experts.

5 Programme governance and monitoring

The programme is led by Johanna Buchert, Director General of the Natural Resources Institute Finland (Luke). Day-to-day coordination is managed by Sanna Marttinen, Executive Director of Tulanet, the Finnish Partnership for Research Institutes.

The programme is overseen by a steering group composed of the Directors General of the participating research institutes. The steering group also engages regularly with representatives from the ministries responsible for guiding the institutes, as well as with representatives from industry. This ensures that different sectoral perspectives are taken into account in guiding the programme.

Tulanet is responsible for programme reporting to the Secretariat of the Research and Innovation Council. The necessary data is collected through surveys from both the research institutes and the postdoctoral researchers.

Information on the progress of the programme is also communicated through the programme's website, helping to ensure transparency and accessibility for a wider audience.

6 Alignment with national R&D policy

The Postdoctoral Programme of Finnish Research Institutes supports several key priorities outlined in Finland's multi-annual plan for government R&D funding (Figure 1).

By promoting ambitious, high-quality research, the programme strengthens expertise in areas that are important for both society and the economy. This, in turn, is expected to encourage increased investment in research, development, and innovation (RDI) by businesses.

The programme also forms part of a broader continuum linking education, research, and working life. It helps develop researchers' skills and prepares them for demanding roles across different sectors, including industry, public administration, and academia.

As a joint initiative spanning six administrative sectors, the programme strengthens collaboration across organisational and sectoral boundaries. It also supports closer cooperation between research institutes, universities, and businesses.

International recruitment plays a key role in the programme. It increases the number of highly skilled professionals in Finland and strengthens the international networks of researchers, which contributes to the overall quality and impact of research, including through collaboration with companies.

Many of the research topics funded through the programme are linked to areas identified as strategic priorities for Finland's R&D activities. In this way, the programme contributes to building national expertise in fields that are critical for future growth and resilience.

Figure 1. Main policy priorities of the multiannual plan for government research and development funding (Finnish Government 2024; figure source: Finnish Government 2025)

In addition, the programme puts into practice several key principles for developing Finland's research and innovation system, as defined by the Parliamentary RDI Working Group (2021; Figure 2). In particular, it promotes:

- the scientific and societal impact of research
- the leverage private R&D investments
- high-quality research
- collaboration across sectors
- internationalisation
- the recognition of global challenges and the development of solutions to address them.

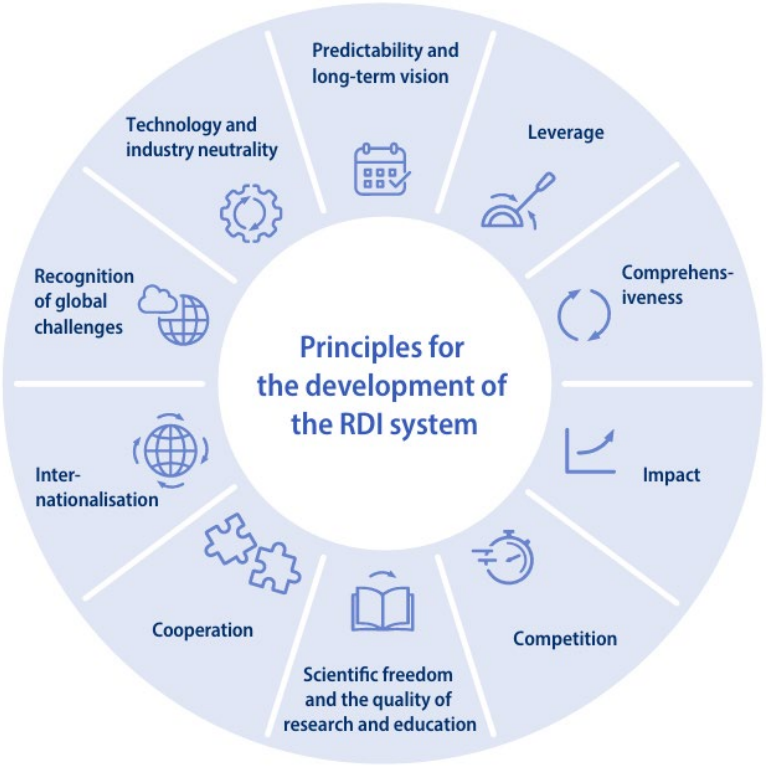

Figure 2. Principles for developing the research and innovation (RDI) system as defined by the Parliamentary RDI Working Group (2021) (figure source: Finnish Government 2024).

7 References

Parliamentary RDI Working Group (2021). Final report. Publications of the Finnish Government 2021:95. (in Finnish; key findings summarised in English-language government materials). https://julkaisut.valtioneuvosto.fi/handle/10024/163709

Finnish Government (2024). Multiannual plan for the use of government research and development funding. Publications of the Finnish Government 2024:41. https://julkaisut.valtioneuvosto.fi/handle/10024/165699

Finnish Government (2025). Monitoring and assessment alan for the use and impact of Government R&D funding. Publications of the Finnish Government 2025:91.

Appendix 1.

Research topics of the postdoctoral researchers recruited by the end of 2025, by research institute.

Research institute	Research topic
VTT	1. AI Impact in science technology and innovation 2. Computational materials science applications 3. Corrosion behaviour of materials in aggressive conditions 4. Electrochemical biosensor development 5. Material development for new powder metallurgical and additive manufacturing applications 6. Design and simulation of microwave photonic systems for di erent applications 7. Quantum computing for material modelling 8. Cryogenic integrated circuit development 9. Ship energy system simulation 10. Quantum photonics integrated circuits 11. Photonics based wearable sensors to develop new measurement and signal analysis techniques 12. Gasification and synthesis gas processing 13. Integration of AI into XR (AR/VR) environments 14. Nanoelectronics and neuromorphic computing 15. Radio-frequency integrated circuits 16. Quantum error correction 17. CO2 storage by mineralisation 18. Isotope separation for fusion energy 19. Metal-organic frameworks for critical element detection and separation 20. Automated fungal strain development
Luke	1. Sustainability assessment of bio-based products 2. Economic and scientific modelling of resource-based production systems and value chains 3. Forest management, promoting sustainable forest growth 4. Forest breeding, development of breeding methods 5. Modelling of forest damage 6. Strategic management and foresight in the natural resources business 7. Development of aquaculture technology 8. Artificial intelligence and new technologies in primary production 9. Diverse farming practices 10. Impacts of land-use changes on fisheries 11. Assessment and development of companies' esg practices through 12. Utilization of carbohydrate-rich side streams 13. Agroecology and soil microbiology
Syke	1. Hydroeconomic approach to the management of nutrient and carbon cycles in the catchment area 2. Transformative policy assesment 3. Promoting climate resilience at the interface of science, decision-making and business 4. Satellite observations and bio-optical modelling 5. Circular economy market 6. Methods for calculating the nature footprint 7. Nature-based solutions to combat climate change 8. Financing the sustainability transformation 9. Sustainable living 10. Sustainable business innovations

	11. Circular economy in construction 12. Socio-ecological resilience
FGI/NLS	1. Integrating optical atomic clock measurements into Finland's vertical reference 2. Resilience and security of GNSS systems 3. AI-Enhanced FAIRification of geospatial data in Geoportti 4. Advancing close-range land monitoring through multi-modal point cloud processing 5. Mitigating tropospheric and source structure errors in VGOS 6. Developing geospatial data pipelines from measurement to end-users 7. Monitoring forest disturbances and crop traits via advanced drone remote sensing
FMI	1. AI methods in global high resolution climate modelling 2. Regional-scale machine learning weather prediction 3. Assessing CO2 fluxes with machine learning and satellite observations 4. Analyzing satellite observations using machine learning methods 5. Severe convective storm research in boreal and Arctic regions 6. Greenhouse gases and the carbon cycle 7. Sun-induced fluorescence, SIF 8. The use of artificial intelligence in urban air quality modelling
GTK	1. Multichannel seismic sounding as a research method for scientific research of the seabed and geotechnical properties 2. Novel geochronology as a tool for ore deposit research and mineral system models 3. Groundwater and heat transport processes in deep fault zones
VATT	1.-4. Innovations and related labour market and education research
Finnish Food Authority	1. Whole genome sequencing of bacteria as a tool for promoting common health 2. Harmful substances to the national composition database 3. Veterinary virology and next-generation sequencing techniques 4. Diverse (bacterial) genome analyses and long-read sequencing to aid in the management of animal diseases and zoonoses
FIOH	1. Risks and opportunities of datafication and artificial intelligence in the socio-technical transformation of working life 2. The role and competence of young wage and salary earners in the sustainability transformation of working life 3. Women's health, working conditions, work-life balance, well-being and work ability 4. Mental health and attachment to working life among young adults
FIMEA	1. Factors promoting the optimal implementation of pharmacotherapy and medication safety