



FLAGSHIP PROGRAMME

The northern fleet of excellent science, successful collaboration and solutions for tomorrow

The Finnish Flagship Programme provides a new, unique way of doing R&D&I in Finland. Substantial, long-term funding is granted for six large ecosystems, Flagships, each operating in their specific field.

The Programme promotes active collaboration between research, business and society in the field of each Flagship. This supports future knowledge and know-how, and helps to create solutions to societal challenges, develop new business opportunities, and contribute to sustainable growth.

Attractive, large ecosystems and hubs for excellent people with high ambitions

THE FINNISH FLAGSHIPS REPRESENT

- effective mix of **cutting-edge research**
- **long-term plan** for eight years
- versatile **societal impact** e.g. in support of sustainable growth and development
- close **collaboration** with business, industry and society
- high ambition level
- excellent working facilities, infrastructures and **strong commitment** from host organisations
- **high-quality research and proven impact**, peer-reviewed by an international panel of experts and selected by the Academy of Finland, Research Council of Finland.

THE FINNISH FLAGSHIPS

- BREAKING THE ICE FOR A BETTER FUTURE

Finnish strengths

A high-class education and research system

High quality research environments,
including infrastructures

Strong collaboration and innovation culture

Continuous investments in R&D

Gender equality



ACADEMY OF FINLAND

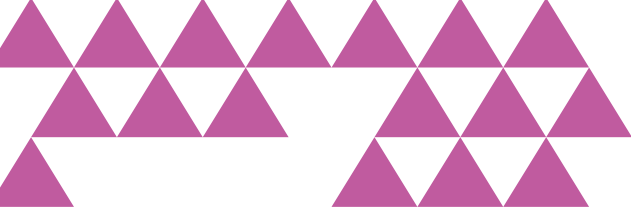
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6Genesis

– 6G-Enabled Wireless Smart Society & Ecosystem

The **6Genesis** flagship focuses on developing future wireless technologies aiming at defining fundamental 6G technologies. The flagship will support the industry in finalizing the 5G standard by carrying out large scale pilots in targeted vertical applications with an operator-grade test network. It will also develop essential technology components needed for 6G, targeting areas such as wireless connectivity, device and circuit technologies, distributed intelligent computing and novel applications of these.



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Researchers: 200



FCAI

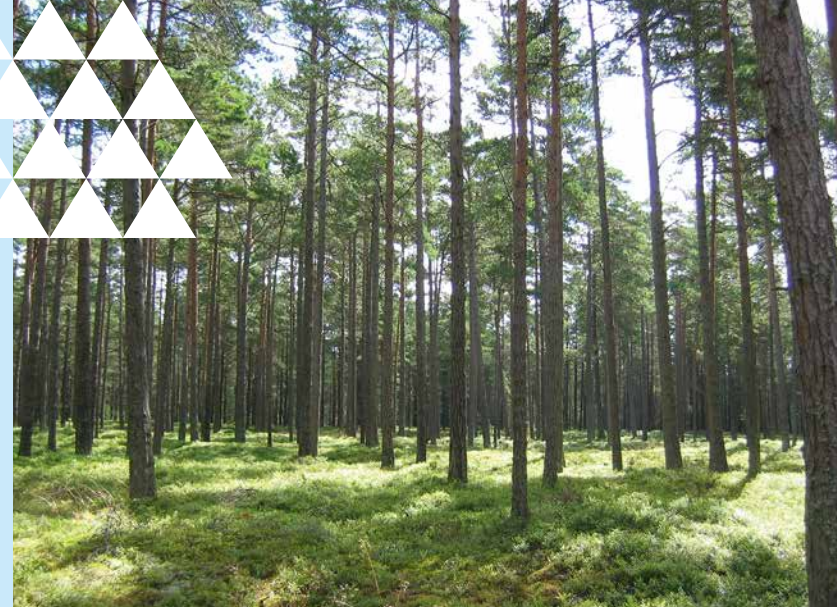
– Finnish Center for Artificial Intelligence

The mission of the **FCAI** flagship is to create real artificial intelligence for real people in the real world.

The research is based on top-tier expertise in machine learning, especially probabilistic modelling and deep learning, and on multidisciplinary collaboration with experts from other fields. The activities of FCAI span a wide spectrum of fields, versatile training and cooperation with the industry sector.



Director: Academy Professor **Samuel Kaski**, Aalto University
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FinnCERES

– Competence Centre for the Materials Bioeconomy

The **FinnCERES** flagship focuses on future solutions in bioeconomy and materials research. Researchers in the flagship aim to develop novel lignocellulose-based materials from forestry resources for future industrial production in international markets.

These completely new materials could be widely adopted in several areas of application: textiles, wearables, household products, air and water purification systems, next-generation catalysts and energy harvesting systems, among others.

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iCAN

– Digital Precision Cancer Medicine Platform

The **iCAN** flagship builds on a strong basis in precision cancer medicine (PCM), and connects it in a novel way with the ongoing digital health revolution, leveraging on Finland's strengths, such as healthcare registries and a digitised healthcare system. The flagship aims to facilitate breakthrough discoveries leading to improved treatments and quality of life for cancer patients. Within the flagship's pilot projects, patients with colorectal, breast or ovarian cancer or leukaemia have an opportunity to participate at all stages of research.

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INVEST

– Inequalities, Interventions and New Welfare State

The **INVEST** flagship aims at improving wellbeing and skill development among Finnish children, young people and early adults. At the same time, the flagship will develop a new welfare state model that is more equal, better targeted to different life stages and more anticipatory than the current model, as well as economically and socially sustainable.

Director: Professor **Jani Erola**, University of Turku
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PREIN

– Photonics Research and Innovation

The **PREIN** flagship brings together actors of the Finnish photonics ecosystem in an integrated network that covers the whole path from basic to applied research and to further development and commercialisation of disruptive photonic technologies. This will facilitate the transfer of results from the research towards innovative application in telecommunications, biomedicine, healthcare, energy and environmental engineering, manufacturing and consumer products and other societal benefits.

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