I got a European view of all disciplines. Then I came back to Finland and was appointed Vice-President of the Finnish Research Council - Academy of Finland. In July 2006 I started my new position as Director of Biocenter Finland where I focused on life sciences again. I was in the Prime Min-
ister’s Research and Innovation Council where we directly advised legislation and government action on targeting of funding. I was also on the advisory boards of the Commissioner for Research and Innovation of the European Innovation Council of the EU Commission, and a privilege to be able to influence, but it also carries a lot of responsibility.

While being a PI and member of the Medical Research Council in Finland, I was appointed as Finnish scientific Delegate to EMBL Council as well as EMBO, and later I became EMBC President. I started to see something like a wakeup call. I decided I will not go back to the bench and my profession, expect for cancer, connections he is now exploring at the University of Eastern Finland. "My project is focused on how genetic mutations in FUS proteins affect the function of ribonucleoprotein complexes which contributes to amy- otrophic lateral sclerosis (ALS)," says Gadgil, who is a PhD student in Anu Makarow’s lab in Finland. "I met a postdoctoral researcher from the University of Eastern Finland during a poster session. We wondered if similar mechanisms might also contribute to prostate cancer and put together a project proposal."

Meet scientists from the EMBO communities

Johanna Ivaska International and interconnected

Cancer Researcher and Professor of Molecular Cell Biology, University of Turku, and EMBO Member

Ask what she likes most about being a researcher in Finland. Johanna Ivaska points to a great working environment, international connections, and stunning nature. Finland is small, but it is very collaborative - the level of science and new facilities are excellent," says Ivaska, who is Professor of the University of Turku Research Center and a native Finn. "Things also function well, you can have a great work balance and Finland is amazing in every season - many foreign researchers and post docs stay for years."

Ivaska leads a multi-disciplinary team of 17 researchers that studies how in- tegrins interact and how they affect cell migration. "We want to know how cancer cells interact with their environment," she explains. "Our group program involves immune cross-talk between tumours and sur- rounding tissues, affecting every aspect from initiation to spread and drug sensitivity. We carry out both fundamental and translational research. It's exciting to combine unexpected discoveries with learning how drugs are developed."

Yilin Kang

From bench to bedside

Postdoctoral Research Fellow, University of Helsinki, and EMBO Postdoctoral Fellow

EMBO Postdoctoral fellow Yilin Kang says passion, positivity and a life-long ambition to work in both fundamental and translational research guided her decision to move from Australia to Finland. "My research always focused on mioschondria, the powerhouse of cells – I become interested in their immune defenses," says Kang, who is a postdoctoral researcher in the lab of Anu Makarow. "Mitochondrial dysfunction is in different ways and life stages, we still do not completely understand how and why."

Kang’s fellowship provides skills and connections that will benefit her sci- ence long into the future. “The EMBO Postdoctoral Fellowships enabled me to move across continents, follow my passion, and expand my network,” Kang says. “It was also important to find a group leader who is an inspir- ing mentor. Anna has a constant posi- tive energy that keeps her students motivated, and my group is really supportive and diverse. In Finland I see many women in leadership roles. The country has a superb scientific en- vironment and social welfare system. It’s great to be here.”

Ankur Gadgil

New directions

Visiting PhD Student, University of Eastern Finland, and EMBO Short-Term Fellow

A fruitful exchange of ideas led EMBO Short-Term Fellow Ankur Gadgil’s research from neurological disor- ders to cancer; connections he is now exploring at the University of Eastern Finland. "My project is focused on how genetic mutations in FUS proteins af- fect the function of ribonucleoprotein complex which contributes to amy- otrophic lateral sclerosis (ALS)," says Gadgil, who is a PhD student at Anu Makarow’s lab in Finland. "I met a postdoctoral researcher from the University of Eastern Finland during a poster session. We wondered if similar mechanisms might also contribute to prostate cancer and put together a project proposal."

Gadgil settled quickly into life in Finland, where he is spending three months. "I am in a growing team. If I want to go into industry or start a lab of my own, it is easy to do from my experiences here. I am making a lot of international connections. EMBO does a fantastic service to life science- ers. It’s been an amazing opportunity. Apart from my scientific ambitions, another dream is to work in the subcontinent of India - the Finnish education system is amongst the best in the world and I want to see how they do things and take inspiration."

Perspectives from Marja Makarow

Director of Biocenter Finland

Former EMBC President, former Finnish EMBC and EMBL Delegate

You are a molecular cell biolo-
gist and have taken up several roles in research policy or go-
vernance, including at the EMBC. What was your motivation for this path?

After my PhD at the University of Helsinki, I got an EMBO Fellowship for postdoctoral research in cell biology under Professor Heldin at EMBL. I learned that an international community with creative ideas and backgrounds, outside the basic research and funding frameworks, could support quality research. I had the opportunity to model the EMBL concept when I was in charge of the EMBL concept when I was in charge of the Finnish EMBC and EMBL Delegate for Research of the University of Helsinki again. When I became Vice President for Governance, including at the EMBC, I had the opportunity to model the EMBL concept when I was in charge of the EMBL concept when I was in charge of the Finnish EMBC and EMBL Delegate for Research of the University of Helsinki again. When I became Vice President for Governance, including at the EMBC, I had the opportunity to model the EMBL concept when I was in charge of the EMBC. I was appointed as Finnish scientific Delegate to EMBL Council as well as EMBO, and later I became EMBC President. I started to see something like a wakeup call. I decided I will not go back to the bench and my profession, except for cancer, connections he is now exploring at the University of Eastern Finland. "My project is focused on how genetic mutations in FUS proteins affect the function of ribonucleoprotein complexes which contributes to amyotrophic lateral sclerosis (ALS)," says Gadgil, who is a PhD student in Anu Makarow’s lab in Finland. "I met a postdoctoral researcher from the University of Eastern Finland during a poster session. We wondered if similar mechanisms might also contribute to prostate cancer and put together a project proposal."

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EMBO opportunities

EMBO Postdoctoral Fellowships

Fund scientific projects for a period of up to two years. Applicants can apply at any stage of their research career. Applications open all year round.

EMBO Scientific Exchange Grants

Support international collaborations and the transfer of expertise. Grants are available to enable three-month visits to the applicants’ laboratories. Applications open all year round.

EMBO New Venture Fellowships

Support early-career scientists to explore topics outside their current area of research. Applications close on 1 June 2021.

EMBO Core Facility Fellowships

Support training of core facility staff. Applications open all year round.

EMBO Lectures

Jury together scientists to present and discuss their latest discoveries. Application deadline: 1 March and 1 August.

EMBO Workshops

Provide practical training in new techniques for researchers and core facility staff. Application deadlines: 1 March and 1 August.

EMBO/EBBS Lecture Courses

Cover topics in biotechnology, molecular biology and related areas. Applications open all year round.

The EMBO Gold Medal

Awarded annually to young scientists for outstanding contributions to the life sciences in Europe. Application deadline: 1 January.

EMBO provides funding and assists event organizers in promoting events and creating websites. Lecture and childcare grants are also available.

EMBO Practical Courses

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Key figures

Population: 5.5 million
R&D spending: 2.4% of GDP
Public research expenditure: 8.5% of researchers employed in Finland
Patents: 1,152
Universities: 17 with 122,000 students annually

Focus on Finland

Finland has a world-renowned education system, with its tuition fees up to pre-competitive levels. A large proportion of Finland’s labor force holds a tertiary education. There are over one million publications by Finnish authors, which is a high number of doctoral graduates.

Finland is home to around 17,000 life science experts. The country is especially strong in fields such as neuroscience, cancer, structural biology, bioinformatics, and genomics. Finland benefits from a network of public organizations that works closely with research institutions and the private sector.

Facts and figures

Research expenditure on research and development (GERD) in Finland in 2019 was 2.8% of GDP. Business enterprises funded 54% of GERD expenditure. The French government’s share was 27.4% and 15.5% was funded from abroad. Researchers based in Finland have been successful in obtaining funding through Horizon 2020 projects, European Research Council grants and Marie Skłodowska-Curie Actions, and from EMBO initiatives such as Biocentrum Finland open up access to technology platforms in researchers across the country.

In 2020, the European Patent Office granted 3,200 organizations and 95 SMEs involved in 5300 projects. The European Commission, which funds a significant portion of research projects in Finland, has one of the world’s largest prizes for scientific achievements, the Millennium Technology Prize, awarded every year jointly by the Technology Academy Finland.

The government has set out an ambitious roadmap to increase GERD to 3.0% of GDP by 2026. This contains targets to attract international talent and funding.