CASTING A WIDE NET FOR EXCELLENCE

A conversation with Professor **MARK FERGUSON** Director-General of Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland

Science Foundation Ireland, the national foundation for investment in scientific and engineering research, funds basic and applied research in science, technology, engineering and mathematics (STEM) and promote Ireland's reputation. Professor Mark Ferguson became the Director General of Science Foundation Ireland and Chief Scientific Adviser to the Irish government in 2012. He has experience in academia and industry, and is passionate about translating scientific research findings into economic and societal impact.

What makes Ireland a destination for researchers?
Over the years Ireland has forged a reputation for research and creative discovery, built on our research institutes with state-of-the-art facilities, as well as collaborations between academia and industry, funding from our government and from the EU, and an excellent indigenous and international talent pool. Ireland has a small population, with a very open economy and is keen to recruit talent from outside its borders.

What is the aim of Science Foundation Ireland?
As well as funding basic and applied research across Ireland, we want to recruit and retain talented and world-leading researchers. This will allow us to grow R&D in science, technology, engineering and mathematics in the Republic of Ireland, and promote collaborations between academia and industry.

How are you supporting research?
One of the challenges faced by Ireland is that it is a small country with a population of around 4.8 million, and its expertise is distributed across seven universities and 15 institutes of technology. But it is a country with a strong collaborative environment. At the heart of this we created the SFI Research Centres to act as centres of excellence. These are research hubs based in a physical location, but incorporating researchers from across Ireland, bringing them into research groups and collaborations wherever they are.

With €355 million from the government and €190 million from industry, we founded seven SFI Research Centres in 2013 and five more in 2015. These focus on supporting solid science that has an impact on the economy, society, public health, environment and policy, and are attracting EU funding. Focus areas include healthcare, food, big data, nanotechnology, renewable energy and digital content, amongst others.

We have just launched four new centres; in smart manufacturing, biological resources, additive manufacturing, and diagnosis, monitoring and treatment of chronic and rare neurological diseases. The funding for each centre is for six years, and is worth up to €5 million in direct costs annually. We expect to expand to 20 centres in all, some to be operative in the longer term.

Who would you like to bring to Ireland?
We are looking to support and develop, as well as recruit, junior and senior researchers from Ireland and elsewhere. We are helping universities and other higher education institutes to attract people with a lot of experience, or a lot of potential, through our SFI Research Professorship programme and our SFI President of Ireland Future Research Leaders programme.

WE WANT TO RECRUIT AND RETAIN TALENTED AND WORLD-LEADING RESEARCHERS AND RESEARCH GROUPS.

The SFI Research Professorship programme aims to help institutions attract world-class scientists and engineers to leadership positions in basic and applied research, to build the national research and enterprise base. It awards up to €1 million in direct costs annually for up to five years, to cover research expenses for the SFI Research Professor and his or her research team. Applications are by invitation only, after an expression-of-interest phase, and the funding is awarded after an exhaustive international peer review process.

SFI President of Ireland Future Research Leaders programme targets early or mid-career researchers with three to 15 years' experience post-PhD (or equivalent), and an outstanding research track record. It aims to attract a new generation of research leaders to Ireland, provides up to €1 million in direct costs over five years, with an additional €250,000 in start-up expenses.

What's next for research in Ireland?
Ireland's strategy for science, known as Innovation 2020, was launched in December 2015. It aims to build up both Irish society and the economy through research and development. Part of the plan is to increase the total investment in R&D, by both the private and public sectors, to 2.5% of the gross national product (GNP). This means growing investment to more than €5 billion by 2020, an increase of more than €2 billion over the 2015 figure.

SFI is also working to increase the participation of women in STEM careers, with an aim to increase the proportion of female award holders to 30% by 2020, widening the pool of potential applicants and increasing excellence in research.

Science Foundation Ireland sfi For what's next

Science Foundation Ireland sfi For what's next

Ireland Funds Great Research...

Maybe it's your turn to join us!

Science Foundation Ireland (SFI) employs various mechanisms for both international collaboration and the recruitment of excellent researchers to Ireland.

- SFI Research Professorship Programme aims to attract outstanding senior research talent to Ireland, with awards of up to €5 million (direct costs).
- President of Ireland Future Research Leaders Award aims to recruit to Ireland outstanding emerging research leaders in both scientific and engineering domains, with awards of up to €1 million (direct costs).
- ERC Development Programme supports ERC applicants to resubmit to the ERC through an Irish Higher Education Institution.

Science Foundation Ireland funds across the career spectrum from early-stage to mid-stage career researchers to emerging research stars and up to established highly-esteemed research leaders, through individual and collaborative awards.

We also have a number of exciting opportunities for international partnerships, fellowships and conferences.

#BelieveInScience

To find out more visit www.sfi.ie
or follow us on Twitter @ScienceIrel