

SFI Annual Programmes Plan 2023

1. Summary

Science Foundation Ireland's 2023 programme plan has been developed to align with the implementation of SFI's strategy, Shaping Our Future, and to support the delivery of the Government's research and innovation strategy – Impact 2030. The plan will focus support on:

- Mid-career and established Investigators via the SFI Frontiers for the Future and the SFI Research Professorship programmes
- Early-career researchers through the SFI-IRC Pathway Programme
- Challenge-based funding approaches through the National Challenge Fund, supported by the EU's Recovery and Resilience Facility and the SFI Future Innovator Prize
- Opportunities for researchers to build strategic collaborative partnerships across Ireland, Great Britain and Northern Ireland through the Co-Centres Programme.
- The new ARC Programme supported by the European Regional Development Fund will focus on accelerating early-stage, cutting-edge research to commercialise impact
- National and international collaborations with partner research funding organisations
- Education and Public Engagement programmes
- Excellent and impactful research through the network of SFI Research Centres
- Fellowship opportunities in industry, SFI and the public sector
- Industry partnerships through the SFI Strategic Partnerships and Spokes Programmes
- Investment in state-of-the-art research infrastructure

Creating our Future invited the people of Ireland to consider how research can contribute to the creation of a better future for themselves and their communities. As an all of Government endeavour, the aim was to create an opportunity for the public to have their say and contribute to the future direction of Irish research and innovation. Over 18,000 submissions were received, analysed and synthesised into 16 thematic areas. The ideas have been made public so that they may spark a research or project question. They are also there so that the conversation may continue. Everyone is encouraged to look at these areas and continue the dialogue in their own setting. Please visit www.creatingourfuture.ie

2. Investigator-led Research (including International Programmes)

2.1. SFI Frontiers for the Future

A key action of the SFI strategy is to deliver 140 investigator grants every year to support excellent research, and to attract and develop top talent. The SFI Frontiers for the Future Programme is the primary mechanism to achieve this goal and provides access to funding for high risk/high reward projects as well as larger scale awards with clearly defined impacts. Women researchers are encouraged and supported, as well as emerging researchers, and those coming back from industry or long-term leaves-of-absence.

In 2023, the programme will be run in partnership with Geological Survey Ireland (GSI) and the Children's Health Foundation (CHF). SFI is open to forging new co-funding partnerships with agencies and organisations.

The programme comprises two streams: Projects and Awards

- SFI <u>Frontiers for the Future Projects</u> provide funding for high-risk/high-reward research that facilitates highly innovative and novel approaches to research deadline 14th April 2023.
- SFI Frontiers for the Future Awards provides larger scale funding for innovative, collaborative and excellent research programmes accepting applications from 14th April 2023. The SFI Frontiers for the Future Awards stream has been expanded to facilitate recruitment of top talent.

2.2. SFI-IRC Pathway Programme

The SFI-IRC Pathway Programme supports talented postdoctoral researchers from all research disciplines to develop their track record and become independent research leaders.

The SFI-IRC Pathway Programme is open to postdoctoral researchers (2 years post PhD) in the STEM and AHSS fields. SFI coordinates the overall programme, while acting as lead agency for all STEM-related applications, while the IRC leads on all AHSS applications.

Early career researchers should also consider submission of proposals under the Royal Society University Research Fellowship (URF) scheme.

2.3. SFI Research Professorship Programme

A key objective of Shaping Our Future is to recruit world-leading researchers and rising stars to move to Ireland. The SFI Research Professorship Programme facilitates this objective and continues to operate as a rolling call.

2.4. US-Ireland R&D Programme

The US-Ireland R&D Programme is a tri-jurisdictional scheme, involving Ireland, the US and Northern Ireland, which includes US-Ireland Investigator calls with the National Science Foundation (NSF) and the National Institutes of Health (NIH), and the US-Ireland Centre-to-Centre calls with the NSF. The partner agencies in the Republic of Ireland are SFI and the Health Research Board (HRB), in the US are the NIH and the NSF, and in Northern Ireland are the Department for the Economy (DfE), and the Health and Social Care agency R&D Division (HSC R&D).

2.5. SFI-Royal Society Partnership

The SFI-Royal Society partnership will continue to support Ireland-based applicants under the Royal Society University Research Fellowship (URF) scheme. The Royal Society has recently changed the duration of their University Research Fellowships from 5 to 8 years. Deadlines are set by the Royal Society.

2.6 SFI-EPSRC Partnership

SFI will continue its partnership with the UK Engineering and Physical Sciences Research Council (EPSRC).

2.7. European Initiatives

The 2023 programme will provide for European co-funding support for the EU QuantERA and EU Bluebio programmes. We have also agreed to join the newly developed EU Partnership for Personalised Medicine under the Horizon Europe Framework programme, which is one of several EU Partnerships that is being scoped.

The ERC Support Programme has been reopened to attract ERC award holders to Irish Higher Education Institutions.

The SFI Supplemental Grant for Displaced Researchers – Ukraine remains open.

3. Challenge Research, Innovation, Entrepreneurship and Commercialisation

3.1. National Challenge Fund – funded by the EU's Recovery and Resilience Facility

The <u>National Challenge Fund</u> provides ambitious researchers with the opportunity to make a difference by developing solutions to key challenges in the areas of Green Transition and Digital Transformation.

The National Challenge Fund is a €65 million research fund that consists of eight challenges. In total, it aims to fund approximately 90 research teams with up to €250k over 18 months to develop their ideas. Under each challenge stream, a number of teams will then be awarded follow-on funding of up to €500k before going on to compete for prizes between €1-€2 million.

Applications are open for the next four challenges under the National Challenge Fund, which are the <u>Healthy Environment for All Challenge</u>, <u>Energy Innovation Challenge</u>, <u>Digital for Resilience Challenge</u>, and <u>OurTech Challenge</u>.

The Sustainable Communities and Future Food Systems Challenge will launch in Q2 2023.

During 2023, SFI will continue to run challenges under the auspices of the SFI Future Innovation Prize in collaboration with other agencies.

3.2. SFI ARC Programme - Accelerating Research to Commercialisation

SFI's new ARC Programme will accelerate early-stage, cutting-edge research to commercial impact readiness, driving innovation and supporting Ireland's commercialisation pipeline. The programme is supported by the European Regional Development Fund (ERDF). The ARC Programme will drive regional development through a network of three hubs, each working in areas aligned with Ireland's smart specialisation strategy. It will develop entrepreneurial scientists and engineers that are primed from an early stage to exploit the commercial potential of their research endeavours.

3.3. SFI-NSF I-Corps@SFI Entrepreneurial Training Programme

The I-Corps@SFI Programme, which supports evidence-based entrepreneurship training, will be supported in 2023 in collaboration with the National Science Foundation (NSF).

4. Education and Public Engagement

4.1. SFI Discover Programme

The SFI Discover Programme Annual Call will run in 2023, supporting projects that broaden STEM awareness and engagement with STEM, strengthen STEM education activities, build capacity for public engagement, and contribute to the development of a talent pipeline in STEM areas.

The SFI Science Week Call will run in 2023, to support digital and in-person activities that broaden nationwide access and public engagement during Science Week.

The SFI-RTÉ Joint Initiative Agreement will be continued into 2023, subject to review by both parties.

A key focus of these initiatives remains the implementation of recommendations of <u>Creating Our Future</u> through ongoing public engagement.

5. Fellowships - Science Policy and Researcher Engagement beyond academia

5.1 Industry RD&I Fellowships

Shaping Our Future aims to continue to develop SFI's Fellowship programmes, including Industry Fellowships, to support life-long learning and knowledge exchange across academia, industry and public service. The programme will launch in 2023, with two deadlines for proposal submissions, Q2 2023 and Q4 2023.

5.2. SFI Fellowship Programme

The SFI Fellowship Programme provides a training opportunity for the research community to engage in the role of science policy and administration within SFI, while providing expertise and support across a range of SFI functions.

5.3. SFI Public Service Fellowship

The SFI Public Service Fellowship is under development and will relaunch in 2023.

5.4. SFI Science Policy Research Programme

The SFI Science Policy Research Programme is under development.

5.5. SFI Maternity/Adoptive Leave Allowance

SFI continues to support Maternity/Adoptive Leave allowance awards, in line with SFI's Gender Strategy.

6. Research Centres and Enterprise Partnerships

SFI has developed a research ecosystem where academia and industry collaborate effectively, driving research out into the market and society. Shaping Our Future will build on this success through driving deeper industry research and innovation engagement.

6.1. Co-Centres - Collaboration for Transformative Research and Innovation

<u>The Co-Centre Programme</u> is an exciting opportunity for researchers to build strategic collaborative partnerships across Ireland, Great Britain and Northern Ireland through the formation of a Co-Centre. The programme will establish virtual Centres of distributed excellence. These Centres will link researchers across

academia and industry to perform cutting-edge research in areas of mutual economic, societal, health and environmental importance. Co-Centres will be structured according to the existing SFI model and will be funded by SFI (through the Shared Island fund), Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) and UK Research and Innovation (UKRI), and co-funded by industry. The programme, which recently launched with a deadline of March 16th 2023, will focus on two thematic areas: Climate, and Sustainable and Resilient Food Systems.

6.2. Spokes Programme

The Spokes Programme is a rolling call programme that enables SFI Research Centres to apply together with industry partners for additional funding to support new collaborative research projects at any time.

6.3. Strategic Partnerships

The <u>SFI Strategic Partnerships</u> Programme supports novel co-investment partnerships with the private sector including industry, philanthropy and charitable organisations, in areas of strategic importance.

7. Research Infrastructure

A key action from Shaping Our Future is to Invest in state-of-the-art research infrastructure programmes which will facilitate high-quality, excellent research.

The current reserve list will be kept open until end of Q1 2023. A new call will launch in H1 2023.

8. Cohort-based Doctoral student training

Innovate for Ireland is a new collaborative PhD cohort training programme between industry and the Government of Ireland. This new initiative will seek to attract cohorts of PhD students to undertake research in Ireland that tackles national and global grand challenges. The programme is under development.

Overview of 2023 - Planned Programme Calls

Note dates are indicative and subject to final SFI Board and Executive agreement.

1. Programmes launched during 2022 or earlier, with a 2023 funding decision (Currently under review)

Programme	Call Deadline (2022)	2023 Award Decision
		Timeframe
SFI Frontiers for the Future 2021 (Awards)	Q4	Q1 2023
		Q2/3 2023
		Q4 2023
SFI/IRC Pathway Programme (2022)	Sept 14 th 2022	Q2 2023
SFI Research Centres 2016 Phase II	March 20 th 2022	Q1 2023

Deadline in 2023

Programme	Call Deadline	Award Decision
	(2023)	Timeframe
SFI Frontiers for the Future 2022 (Projects)	Q2 2023	Q4 2023/Q1 2024
	Q2	Q4 2023
SFI Frontiers for the Future 2022 (Awards)		Q1 2024
		Q3 2024
National Challenge Fund:		
- Healthy Environment for All Challenge	Q1 2023	Q2 2023
- Energy Innovation Challenge,	Q1 2023	Q2 2023
- Digital for Resilience Challenge	Q1 2023	Q2 2023
- OurTech Challenge	Q1 2023	Q2 2023
- Sustainable Communities Challenge	Q2 2023	Q3 2023
- Future Food Systems Challenge	Q2 2023	Q3 2023
Co-Centres	Q1 2023	October 2023

2. Fixed Deadline Calls to Open in 2023

Programme	Call Launch	Call Deadline	Award
			Decision
			Timeframe

SFI ARC Programme	Q1	Under development	Under development
SFI Public Service Fellowship	Q3 2023	Q3 2023	Q4 2023
Research Infrastructure	H1 2023	H1 2023	Q4 2023
SFI Frontiers for the Future (Projects)	Q4 2023	Q1/2 2024	Q4 2024
SFI Industry RD&I Fellowship	Q1 2023	Deadline 1: Q2 2023 Deadline 2: Q4 2023	Q4 2023 Q1 2024
SFI Discover Programme Annual Call	Q2 2023	Q3 2023	Q4 2023
SFI Discover Programme Science Week Call	Q1 2023	Q2 2023	Q3 2023
SFI Fellowship	Q2 2023	Q2 2023	Q3 2023
SFI/IRC Pathway 2023 Programme	H2 2023	H1 2024	H2 2024
Science Policy Research Programme	Under development	Under development	Q4 2023

3. Rolling Calls Open during 2023

Programme
SFI Strategic Partnerships
Frontiers for the Future (Awards) from April 14th 2023
SFI Research Professorship
SFI Spokes Programme
Maternity/Adoptive Leave Allowance

SFI Discover Programme Opportunistic Funding Mechanism
ERC Support Programme
SFI Supplemental Grant for Displaced Researchers - Ukraine

4. International Partnerships Open in 2023. Deadlines as scheduled by Lead Agency

Programme
US-Ireland R&D Partnership Programme
SFI-Royal Society University Research Fellowship
EPSRC-SFI Standard Research Grants (rolling)
SFI/NSF I-CORPS@SFI Entrepreneurial Training Programme
SFI – NSF Student Mobility Programme