

ANNUAL PLAN 2015

Executive Summary

Scientific research yields new knowledge that can, in many cases, be adopted by enterprise, incorporated into high-value goods and services, and exported into world markets, thus leading to jobs, increased national income and improved standards of living. As outlined in Science Foundation Ireland's (SFI) strategy document, Agenda 2020¹, the Foundation will continue to focus on scientific excellence, and to couple that with an equal focus on impact to realise the benefits of the scientific effort for the Irish economy and Irish society.

During 2014, the Foundation made great strides in the implementation of its strategic plan, details of which are provided in SFI's Annual Review of Agenda 2020². Key areas of progress included the funding of five large scale Research Centres, adding to the existing seven Research Centres launched in 2013. Partnerships were established with industry to fund high quality oriented basic and applied research projects. Partnerships with The Royal Society, The Irish Cancer Society and The Department for Employment and Learning in Northern Ireland were also established, thus widening the opportunities for the Irish Research Community. Additionally in 2014, SFI launched a major effort for the recruitment of scientific leaders into Ireland to further strengthen research activities in areas of importance; this initiative will continue into 2015. In addition to the expansion of SFI's funding remit to include applied research, the Foundation continues to fund excellent basic research, thus ensuring a vibrant research continuum where the discovery of new and transformative ideas is enabled.

SFI reviews its funding mechanisms on an ongoing basis against international benchmarking, in the context of its strategic priorities and technology foresight. The objective of this continuous assessment is to ensure that all SFI programmes continue to deliver Government policy and the strategic objectives of the Foundation and that the appropriate structures and opportunities are available for the Irish research community to support the delivery of excellent science with impact.

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¹ SFI Agenda 2020; Published 2012

² 2014 Review of Agenda 2020

Key objectives for SFI during 2015 will include, but are not limited to:

- The provision of continuing support to the twelve SFI funded Research Centres in the attainment of their targets;
- 2. Building capacity in the Irish research arena through
 - a. The strategic recruitment of excellent top tier research leaders;
 - b. the provision of early and mid-career opportunities;
 - c. the enablement of short term visiting fellowships;
- 3. The development of partnerships with other national and international funding entities, and with enterprise and industry;
- 4. Optimisation of SFI's support for the attainment of the collective national H2020 funding targets;
- 5. Education and engagement with the public to drive STEM awareness and involvement
- The development of a new initiative to engage with the public to identify key societal challenges where the research community could make a significant impact

The Foundation will continue to work closely with its funded researchers to ensure that the outputs and impacts of state funded research are captured and communicated to Government, enterprise and the General Public. Awareness of the impact of ongoing research activities in Ireland is of paramount importance. The data gathered from funded researchers also serves as the basis on which many planning and programmatic decisions are made, as well as providing SFI with the evidence required to monitor SFI's key performance indicators.

An overview of SFI's remit and proposed activities in 2015 is provided in Section 1; timelines for SFI 2015 Programme Plan are provided in Section 2:

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Section 1 Overview of Science Foundation Ireland remit and activities in 2015

The Remit of Science Foundation Ireland (SFI)

SFI funds **oriented basic** and **applied research** in the areas of science, technology, engineering, and mathematics (STEM) which promote and assist the development and competitiveness of industry, enterprise and employment in Ireland. The Foundation also promotes and supports the study of, education in and engagement with STEM, and an awareness and understanding of the value of STEM to society and to the growth of the economy in particular.

SFI funds research within areas identified on the basis of an assessment of Ireland's economic potential as set out in the recommendations of the National Research Prioritisation (NRP) Steering Group report³. The majority of public funds for research must now be directed towards the fourteen priority areas outlined in the report and therefore SFI continues to focus the remit of appropriate programmes in these priority areas. In addition, and with the evolution of research priorities, new and emerging Strategic Areas of Opportunity related to science or technology may be prescribed with due regard to (a) economic and social benefit; (b) long term industrial competitiveness or (c) environmentally sustainable development.

Applied Research and the Role of SFI

SFI's portfolio of funded research includes both oriented basic and applied research. SFI funded research includes strong representation across the research continuum, representing technology development progress from idea and concept through to prototype and product development in larger industry facing awards.

Many concepts and ideas emanating from Research Institutions are too early stage to entice investors to provide support. Companies can equally find it difficult to justify investing in early stage ideas where the risk is high; they may instead wait until the market evolves by which time there is a higher likelihood that they will have been left behind and missed the opportunity. It is recognised that partnering with academic institutions can help reduce technological risks; production of prototypes can help to

³ http://www.forfas.ie/publications/featuredpublications/title,8958,en.php

build a case for commercialisation and working closely with government bodies can help overcome regulatory hurdles. A partnership approach can therefore significantly de-risk investment for industry. With the expansion of SFI's remit to fund applied research, SFI will further enable this process by fostering academic-industry linkages to bring research outcomes closer to market and this is enabled by a number of SFI funding mechanisms, most notably the SFI Partnerships, SFI Spokes and SFI Research Centres Programmes.

In the same way that the funding decisions of the Foundation in the review of oriented basic research are based on scientific excellence with impact, these same criteria are upheld in the review of applied research. SFI is focused on funding innovative projects based on novel scientific or engineering approaches which successfully demonstrate potential for significant and impactful technology advancement. The most successful partnerships connect industry and academia in a truly collaborative way.

Key Activities in 2015

Support of the SFI Research Centres

Centres & Spokes

At the start of the 2015, SFI will be supporting twelve SFI Research Centres, committing ~€320M in direct costs and involving up to 300 industry partners from both the multi-national and SME sectors who are committing ~€190M cash and in-kind contributions in the SFI Research Centres. Approximately 50% of the partners are from the SME sector and 50% from the MNC sector. Seven of these centres were funded in 2013 and the remaining five in late 2014.

During 2015, SFI will enable new partners to join these existing SFI Research Centres via the **SFI Spokes Programme.** The Spokes programme supports the expansion and sustainability of Research Centres, enabling the addition of new capabilities, new industry and academic partners, and support for new projects with existing partners. Opportunities are available for funding through both a fixed and rolling mechanism.

Capacity Building and Recruitment

Recruitment

A vibrant research landscape necessitates an influx of new research talent to both complement and strengthen existing research activities, and to grow and develop expertise in emerging areas of importance. Recruitment initiatives during 2015 will include:

- Implementation of the Targeted Research Professorship Programme which will support the recruitment of top tier research talent and leadership in key areas of strategic importance. The purpose of the Research Professorship Programme is to assist Irish Research Bodies in the recruitment of world-leading scientists and engineers who will build the national research base and enhance Ireland's reputation as a centre of excellence for research. Submission of a full proposal is by SFI invitation only. The Programme provides funding of up to €5M per successful award over a five year period (in addition to a 30% overhead contribution). In addition to the ongoing targeted call, the Research Professorship programme operates in all areas of SFI's remit on a rolling call basis.
- Provision of research opportunities to early-career investigators from outside of Ireland through the President of Ireland Young Researcher Award (PIYRA) programme.
- Enhancement of the European Research Council (ERC) support mechanisms to provide significant funding for the recruitment of ERC award holders to Ireland.

Support for Early and Mid-Career Researchers

SFI clearly recognises the necessity to support early and mid-career researchers and provides a number of mechanisms in that regard. These include the President of Ireland Young Researcher (PIYRA) award, the Wellcome Trust Research Career Development Fellowship (RCDF), the Royal Society University Research Fellowship (URF), the Starting Investigator Research Grant (SIRG) and the SFI Career Development Award (CDA). Researchers appointed under these fellowship schemes are expected to be strong candidates for permanent posts in universities at the end of their fellowships. In order to build capacity in key areas of strategic importance, SFI will also

in 2015 be targeting the international recruitment of early career researchers in defined areas. It is also anticipated that programmes will be modified to include incentives for diversity and gender-balance within the research ecosystem. These career development schemes also provide a pipeline of potential future applicants to the ERC.

In recognition of the number of researchers who ultimately find employment in the private sector, SFI launched an Industry Fellowship Scheme for the first time in 2013 and this will continue with two rounds of evaluation in 2015. The Technology Innovation Development Award (TIDA) programme will also continue to provide opportunities for entrepreneurial training of researchers at all career stages.

SFI Partnerships with other funding agencies and Enterprise / Industry

Partnerships - Other funding bodies

During 2015, SFI will continue to fund excellent science in collaboration with national and international funding agencies, including the HRB and the Wellcome Trust (WT) through the SFI-HRB-WT Biomedical Partnership; the Royal Society through the University Research Fellowship; the Irish Research Council and the Higher Education Authority through PhD programmes; with Teagasc and the Department for Employment and Learning Northern Ireland (DELNI) (and potentially other agencies) through the Investigators programme (IvP2015). The US Ireland programme will also continue to be supported by SFI in collaboration with the HRB and partner agencies in the US (National Science Foundation (NSF) and the National Institutes of Health (NIH)) and in Northern Ireland (the Health & Social Care R&D Division (HSC R&D), the Department for Employment and Learning Northern Ireland (DELNI) and Invest Northern Ireland (InvestNI)).

SFI Partnership Programme

The SFI Partnership Programme allows SFI and the research community to engage with industry, charities and other entities to co-fund outstanding initiatives which will build research strength in Ireland. A number of awards were made during 2014 arising from bespoke academic-industry partnerships as well as through co-funded calls for

proposals. During 2015, this flexible funding mechanism will continue to fund both individual and co-funded partnerships to aid development and retention of talented researchers, foster industrial collaborations and develop capacity in areas of emerging importance.

In addition, SFI will be working with sister agencies Enterprise Ireland and the IDA to ensure that opportunities for research partnerships with industry are maximised, with particular focus on developing research capacity in areas of strategic national importance such as Advanced Manufacturing, Energy and Sustainable food.

SFI Industry Fellowship

The purpose of the SFI Industry Fellowship programme is to promote the exchange of people at all levels between academia and industry (both SME and MNC). Fellowship funding is provided across the entire academic salary scale for awards up to two years. In 2014, the Programme was expanded and the eligibility criteria widened. The call will remain open in 2015 with two evaluation rounds.

Partnership via the Research Centres

As outlined above, the SFI Research Centres and Spokes funding model is based on robust partnerships with industry exemplified by cost-sharing on collaborative research. It is also anticipated that during 2015 new opportunities for linkages between SFI Research Centres and similar international centres of scale will be announced. For example, expansion of the US Ireland Programme to enable such links between National Science Foundation (NSF) and SFI funded centres is anticipated, leading in turn to enhanced potential for Research Centres in attracting industry partners.

Optimising SFI's support for Horizon 2020

2014 saw the implementation of Horizon 2020, the EU's new funding programme for research and innovation which was launched at the end of 2013. With a budget of over €70bn for the seven year period to 2020, it represents a significant source of support for research and innovation. The importance of winning funds in H2020

programmatic calls has been emphasised repeatedly to the SFI Research Community and in particular the SFI Research Centres, where H2020 targets have been set. Additional funding has been provided by SFI to fund EU grants managers in the Research Centres to co-ordinate European activity and to support the Centre in achieving its Horizon 2020 targets. European funding should be complementary and additive to national funding.

SFI offers additional support to ERC award holders via the ERC Support Programme, and offers a development grant to those applicants who reviewed well at ERC but were not funded owing to availability of funding. During 2015 SFI will be making a number of changes to the current ERC Support programme by offering further incentives for recruitment when an ERC awardee moves to an Irish research body during the course of their ERC award.

In order to further incentivise and enable the research community in the leverage of funding from Horizon 2020, the Investigators Programme 2015 will be a broadly themed call which will include the research topics identified in the Horizon 2020 pillars - Societal Challenges and Industrial Leadership. In their proposals, applicants will be requested to include plans for future submission of applications to Horizon 2020. It will be expected that relevant national and international collaborators including those from academia and industry and also, where appropriate, from the humanities and social sciences, will be involved. In this way, the Investigators programme will serve as an accelerator and support programme for Horizon 2020. SFI will provide extensive feedback to applicants which will also assist in the development of future applications to Horizon 2020. Moreover, with the aim of creating an Irish funding coalition aimed at supporting Irish researchers to attain Horizon 2020 funds, it envisaged that the Investigators Programme 2015 will be adapted to allow multiple Irish agencies to contribute to the overall fund. The number and extent of the other collaborating agencies at time of writing, is yet to be determined.

Education and Public Engagement

The remit of SFI includes the provision of funding to promote the study of, education in and awareness of science, technology, engineering and mathematics (STEM). This is implemented through the SFI Discover programme. The vision of SFI Discover is that

Ireland will have a highly engaged and scientifically informed public through the programme guiding, catalysing and inspiring the best in STEM education and public engagement. In 2015 SFI will be growing both investment and activity in the education and public engagement area in particular in enabling engagement activity within the 12 SFI Research Centres, the broadening of support for broadcast programmes and a comprehensive programme to support the 20th celebrations of national Science Week. SFI Discover will continue to grow the Smart Futures initiative increasing its reach to include awareness amongst parents of career opportunities in STEM. Through the Discover funding call SFI will continue to support innovative engagement projects in 2015 and will also implement a deeper engagement with teachers in primary science through the Discover Primary Science and Maths initiative. At post primary level SFI Discover will work with the Junior Cycle for Teachers group to implement professional development workshops for teachers in support of the new Junior Cycle science curriculum. Space will underpin many of the activities in play in 2015 as part of SFI Discover's role as the ESERO Ireland office.

New Initiatives in 2015

At the end of 2014, following engagement with the Research Centres, SFI established a Research Centre Director's Fund to provide support to the Centres to attain targets set against agreed Key Performance Indicators. Within defined criteria, the Centres will have the opportunity to fund activities which promise significant gain to one or more of SFI's KPIs. In particular, activities that do not have an obvious and readily accessible alternative source of funding available will be considered, as will opportunities that benefit the centre as a whole. Eligible activities will include the funding of visiting fellows, entrepreneurial training, entrepreneurs in residence, activities relating to collaboration with International Centres, development of research capacity in key areas including but limited to Advanced Manufacturing. During 2015, it is anticipated that the Director's fund will be made available to all twelve Centres where compelling cases for funding can be made and the success of the first iteration of the initiative is established.

SFI plans to explore how it can **engage the public in a consultation** to identify research needs amongst the Irish population. SFI will consult with a range of societal interested

parties including business, charities, public bodies, academia and schools to generate a shortlist of challenges that could serve as a platform for inspiration and prioritisation for future strategic investments in innovation by SFI.

Section 2

SFI PROGRAMMES - 2015 PLAN

SFI operates a number of programmes, not all of which are active every year.

Details are provided below for Programmes that were launched during 2014 where a funding decision will be made during 2015. Please refer to the SFI website for full details.

PROGRAMME LAUNCHED 2014	Anticipated Decision Timeframe
SFI Investigators Programme (IvP)	Q2 2015
SFI Industry Fellowship (second round of funding)	Q2 2015
SFI Research Centres – Spokes : Fixed Call	Q2 2015
SFI Targeted Research Professorship Programme	Q1-Q4 2015
SFI-NSF-Graduate Research Opportunities Worldwide (GROW)	Q2 2015
SFI STEM Education Scholarships (IRC Postgraduate Scholarship Scheme)	Q2 2015
SFI Science Policy and Innovation Postgraduate Scholarships (IRC Postgraduate Scholarship Scheme)	Q2 2015
St Patrick's Day Science Medal	Q1 2015

The following programmes will be open for submissions in 2015. Please refer to the SFI website for full details.

PROGRAMME	Anticipated Launch Timeframe *	Anticipated Decision Timeframe
SFI Investigators Programme (IvP)	Q 1 2015	Q1 2016
SFI / EI Technology Innovation Development Award (TIDA)	Q 1 2015	Q4 2015
SFI Industry Fellowship**	Q 1 2015	Q4 2015
SFI Discover Programme	Q2 2015	Q4 2015
SFI St. Patrick's Day Science Medal	Q2 2015	Q1 2016
SFI Starting Investigator Researcher Grant	Q3 2015	Q2 2016
SFI Career Development Award	Q3 2015	Q2 2016
SFI Research Centres – Spokes: Fixed Call	Q4 2015	Q2 2016
SFI Fellowship Programme	Q2 2015	Q3 2015
SFI-HRB-Wellcome Trust (WT) Biomedical Research Partnership	WT deadlines	
SFI-Royal Society University Research Fellowship	RS deadlines	
SFI Research Centres – Spokes: On-going Rolling Call	Rolling	
US-Ireland R&D Partnership Programme	Rolling	
SFI-NSF-Graduate Research Opportunities Worldwide (GROW)	NSF deadlines	
SFI ERC Support Programme	Rolling	
SFI ERC Development Programme	Rolling	
SFI President of Ireland Young Researcher Award	Rolling	
SFI Research Professorship Programme	Rolling	
SFI Partnerships Programme	Rolling	
SFI Conferences and Workshops	Rolling	
SFI Discover Opportunistic	Rolling	
SFI STEM Education Postgraduate Scholarships (IRC Postgraduate Scholarship Scheme)	Q4 2015	Q2 2016
SFI Science Policy and Innovation Postgraduate Scholarships (IRC Postgraduate Scholarship Scheme)	Q4 2015	Q2 2016
Employment Based Postgraduate Programme (IRC Postgraduate Scheme)	Q2 2015	Q4 2015

^{*}The planned launch dates are indicative and are subject to change, e.g. in response to alterations in SFI's budget, staffing resources, new schemes SFI may develop and Government policy / priorities. Precise deadline dates will be available on the SFI website in early 2015

^{**}Industry Fellowship: Two deadlines (June & December 2015 tbc)

SFI PROGRAMMES - OVERVIEW

Science Foundation Ireland offers a range of funding schemes which support scientists and engineers to create both research excellence and impact. The following table delineates how SFI programmes support a broad range of researchers and research activities.

Some SFI programmes operate with deadlines; others are available on a rolling call basis. Not all SFI programmes will be active every year. The suite of programmes that will be offered by SFI in any one year is determined by a number of factors including the available budget, the priority requirements of the research community, the ability to capitalise on partnering opportunities and national needs.

Most SFI programmes support research on a multi-annual basis, usually 3-6 years. Thus in any one year 60-80% of available funding is already assigned to previous commitments. As awards are completed, funding is then made available for new programmes.

RECRUITMENT

SFI offers programmes to support the recruitment of outstanding scientists and engineers to work in Ireland.

- SFI President of Ireland Young Researcher Award
- SFI Research Professorship Scheme / SFI Targeted Research Professorship
- SFI Starting Investigator Research Grant
- ERC Development Programme
- ERC Support Scheme
- SFI Fellowship Programme

EARLY and MID-CAREER RESEARCHERS

Early career researchers are supported by SFI through several programmes, including awards which enable researchers to obtain their first independent grant.

- SFI President of Ireland Young Researcher Award
- SFI Starting Investigator Research Grant
- SFI Career Development Award
- SFI-Royal Society University Research Fellowship Scheme
- ERC Development Programme
- ERC Support Scheme
- Employment Based PhD Programme (IRC)
- SFI Science Policy PhD Fellowship Programme
- SFI STEM PhD Programme
- SFI-NSF-Graduate Research Opportunities Worldwide (GROW)
- Wellcome Trust Schemes
- SFI Fellowship Programme

OUTSTANDING INDIVIDUALS

SFI supports world-class researchers to carry out their work in Ireland

- SFI Investigators Programme
- SFI Research Professorship Scheme / SFI Targeted Research Professorship
- SFI President of Ireland Young Researcher Award
- SFI-HRB-Wellcome Trust Biomedical Research Partnership
- ERC Development Programme
- ERC Support Scheme

LARGE SCALE CENTRES

SFI provides funding to enable large groups of researchers to come together and address major research challenges, in conjunction with industry and/or partner institutions

- SFI Research Centres Programme
- SFI Research Centres: Spokes
- SFI-HRB-Wellcome Trust Biomedical Research Partnership

LEVERAGING EXTERNAL FUNDING

SFI offers programmes which leverage external (e.g. European, Industry) funding, and also provide incentives for Irish-based researchers to compete for such funding

- ERC Development Programme
- ERC Support Scheme
- Support for European Joint Programming Initiatives
- SFI-HRB-Wellcome Trust Biomedical Research Partnership
- SFI Partnerships
- SFI Research Centres
- SFI Research Centres Spokes

ENTERPRISE & INDUSTRY FACING

SFI provides supports for the early stages of commercialisation research, often in conjunction with industry

- SFI Research Centres
- SFI Research Centres Spokes
- SFI Partnership Scheme
- SFI/EI Technology Innovation and Development Award
- SFI Industry Fellowship
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INFRASTRUCTURE

SFI supports the provision of world-class research facilities in Ireland

- SFI Research Infrastructures Call
- SFI-HRB-Wellcome Trust Biomedical Research Partnership

INTERNATIONAL

SFI's Internationally-focused programmes help to develop links with top international research institutions and important enterprise markets. In addition they highlight Ireland's standing as a top research-performing nation.

- US-Ireland R&D Partnership Programme
- SFI Conferences and Workshops
- SFI Industry Fellowship
- SFI-NSF-Graduate Research Opportunities Worldwide (GROW)
- SFI St. Patrick's Day Science Medal

NETWORKING & EXTERNAL ENGAGEMENT

Through personnel exchange programmes, and support for Conferences and Workshops, SFI enables researchers to come together, debate current research challenges/findings, work towards common goals, and engage in science outreach. Through a variety of outreach programmes, SFI aims to have a scientifically informed public and aims to engage children to study and pursue a career in STEM subjects.

- SFI Conferences and Workshops
- SFI Industry Fellowship
- SFI Partnership Scheme
- SFI Discover Programme

SYNOPSIS OF ALL SFI PROGRAMMES

For detailed information, including eligibility criteria and important dates, for each programme, please visit www.sfi.ie and please sign up to SFI e-alerts to be notified of new call launches. Please note that not all programmes are active every year.

PROGRAMME	BRIEF DESCRIPTION	REMIT AREA
FOR <u>ALL</u> PROGRAMMES SFI WILL ONLY FUND RESEARCH TOPICS THAT ARE COVERED BY THE LEGAL REMIT OF THE FOUNDATION. PLEASE REFER TO INDIVIDUAL CALL DOCUMENTS FOR FURTHER DETAILED ELIGIBILITY CRITERIA THAT WILL APPLY TO SPECIFIC CALLS ¹		
SFI Research Centres Programme	SFI Research Centres link scientists and engineers in partnerships across academia and industry to address crucial research questions, foster the development of new and existing Ireland-based technology companies, attract industry that could make an important contribution to Ireland and its economy, and expand educational and career opportunities in Ireland in science and engineering. They are structured on a hub & spoke model consisting of a number of targeted projects undertaken in partnership with industry that connect into a central hub containing the platform research and core operations. Research Centres Programme calls may be open or themed – generally rotating between the two formats in sequential calls.	14 NRP areas or Aligned with thematic areas identified in specific calls or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact (e.g. a sustained track record of major industrial funding, significant international funding and/or spin out activities)
SFI Research Centres: Spokes	To promote the further development of SFI Research Centres to incorporate new areas of research, new industrial and academic collaborators. The Spokes Programme includes both a rolling component and a fixed deadline component. Proposals will be accepted at any time (rolling call) if 50% or more of the costs are paid for in cash by the industry partners.	14 NRP areas or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact (e.g. a sustained track record of major industrial funding, significant international funding and/or spin out activities)
SFI Partnerships	Science Foundation Ireland will engage with partners to co-support outstanding initiatives which will build research strength in Ireland. The programme will fund projects or people (for a limited time) to aid development and retention of talented researchers, foster industrial collaborations and develop capacity in areas of emerging importance.	All areas covered by SFI's legal remit
SFI / El Technology Innovation	The TIDA Feasibility Study programme is designed to enable researchers to focus on the first steps of an	14 NRP areas or Any area under SFI's legal remit,

Development Award (TIDA)	applied research project which may have a commercial benefit if further developed. Researchers who have the scientific and technical capability to produce novel technologies and who are keen to develop a better understanding of the commercialisation process are especially encouraged to apply for this award. Convergent applications from researchers within different disciplines are also encouraged.	where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI Industry Fellowship Programme	To promote the exchange of people at all levels between academia and industry (both SME and MNC). Fellowship funding is provided across the entire academic salary scale for awards up to 1 year full time or 2 years part time (renewable competitively).	14 NRP areas or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI Investigators Programme (IvP)	SFI's Investigator Programme supports the development of world class research capability and human capital in areas of science, engineering and mathematics that demonstrably support and underpin enterprise competitiveness and societal development in Ireland. To this end, SFI funds outstanding people with innovative ideas and strategic partnerships, recognising that excellence remains a paramount criterion in the research it funds. Investigator Programme calls may be open or themed – generally rotating between these two formats on an annual basis.	or Aligned with thematic areas identified in specific calls Also open to Investigators, working in fields covered by SFI's legal remit, who have been successful at obtaining European Research Council Funding.
SFI Research Professorship Programme	The recruitment of world leading scientists and engineers will build the national research and enterprise base, and enhance Ireland's reputation as a centre of excellence for research. The SFI Research Professorship Programme is intended to support national strategic priorities by assisting research bodies in their recruitment of world-leading researchers for Professorial Chairs, or similar research leadership positions in targeted scientific areas. The programme may also act as a mechanism to support the recruitment of individuals that possess a strong industry background, as well as directorship roles in established research centres within Ireland.	14 NRP areas or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI Starting Investigator Research Grant (SIRG) Programme	The SFI Starting Investigator Research Grant (SIRG) Programme provides an opportunity for excellent early-career investigators to carry out independent research and gain important experience on which to build their future research careers.	All areas covered by SFI's legal remit

SFI Career Development Award (CDA)	SFI's Career Development Award Programme supports excellent early- and mid-career investigators who are already in an independent academic position and who obtain their salary either from the organisation with which they are employed or from an alternative funding source. The award provides an opportunity to extend research activities by allowing teams to be built or expanded.	All areas covered by SFI's legal remit
SFI President of Ireland Young Researcher Award	The President of Ireland Young Researcher Award (PIYRA) is Science Foundation Ireland's most prestigious award to recruit and retain outstanding young researchers. This programme emphasises the importance that Science Foundation Ireland places on the early development of research careers. The award recognises outstanding engineers and scientists who, early in their careers, have already demonstrated or shown exceptional potential for leadership at the frontiers of knowledge.	All areas covered by SFI's legal remit
SFI-Royal Society University Research Fellowship	This scheme is for outstanding scientists in the Republic of Ireland who are in the early stages of their research career and have the potential to become leaders in their field. The scheme provides the opportunity to build an independent research career. The scheme covers all areas of the life and physical sciences, including engineering, but excluding clinical medicine and any researcher addressing a direct biomedical question.	Please see the Royal Society website for details
SFI ERC Support Programme	The SFI ERC support programme supports the Irish host institutions of awardees of the ERC Starting and Advanced Grant schemes. This programme will assist Irish host institutions in providing the appropriate support to ERC awardees. Awards may also be made when an ERC awardee moves to an Irish institution during the course of their ERC award. This programme will increase the benefits for institutions and applicants of applying to the ERC award schemes, increase Irish participation in the ERC programmes, increase institutional support of ERC awardees and increase Ireland's success rate in the ERC award schemes.	All areas covered by SFI's legal remit
SFI ERC Development Programme	This programme supports researchers who have submitted a proposal to the ERC, been deemed fundable, but not funded due to a lack of programme budget. The objectives of the ERC Development Programme are to encourage unsuccessful ERC applicants, either Irish based or willing to relocate to an Irish Institution for their resubmission, to resubmit to the ERC in a future call, to encourage new submissions to the ERC from Irish-based investigators, and to increase success in obtaining funding through ERC award schemes.	All areas covered by SFI's legal remit

SFI Research Infrastructure Programme	The overall goal of the SFI Research Infrastructure Call is to support the research community in building and sustaining the required infrastructural capacity to accomplish high quality, high impact and innovative research in areas of science and engineering that demonstrably enhance and underpin enterprise competitiveness and development in Ireland in a timely manner.	14 NRP areas or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI Conferences and Workshops	Science Foundation Ireland's Conferences and Workshops Programme provides support for the organisation of national and international meetings that enable Irish research bodies to contribute to international scientific debate, encourage industry-informed research, and foster academic-industrial collaborations to build a competitive advantage for Ireland. There are different award types within the Conference and Workshop Programme, namely Conferences, Exceptional Conferences, Workshops, and Conference Bids.	All areas covered by SFI's legal remit
SFI Fellowship Programme	Science Foundation Ireland offers researchers as well as research body staff, the opportunity to experience an internship at the Foundation. The internship provides a broad base of experience in research administration, and gives successful awardees the opportunities to engage with academic, government and industrial stakeholders	All areas covered by SFI's legal remit
SFI Discover Programme	The SFI Discover Programme will support national and regional projects in STEM education and outreach in Ireland with the aim of engaging and scientifically informing the general public. The Programme will fund both large scale national and regional projects as well as smaller local events concerning public engagement, education and outreach and STEM careers awareness.	All areas covered by SFI's legal remit
SFI St. Patrick's Day Science Medal	The SFI St. Patrick's Day Science Medal will be awarded annually to a distinguished Irish scientist or engineer living and working in the USA. The medal will recognize individuals who are not only outstanding in their fields of expertise but who also have demonstrably assisted researchers in Ireland in either academia or industry – via mentorship, supervision, collaboration, industrial development, entrepreneurship etc., or who have made significant contributions to developing the research ecosystem in Ireland.	All areas covered by SFI's legal remit
US-Ireland R&D Partnership Programme	The Governments of the United States of America, Ireland and the Northern Ireland Executive have come together for a unique initiative to advance	Nanoscale Science & Engineering Sensors & Sensor Networks

	scientific progress in fields that will have a significant impact on the health, well-being and economic prosperity of all their citizens. Under the US-Ireland R&D Partnership, a 'single-proposal, single-review' mechanism is facilitated by the National Science Foundation (NSF) and National Institutes of Health (NIH) who accept submissions from tri-jurisdictional teams to a number of their existing funding programmes. The "US-Ireland R&D Partnership" links scientists and engineers in partnerships across academia and industry to address crucial research questions; fosters new and existing industrial research activity that could make an important contribution to the respective economies: and expands educational and research career opportunities in science & engineering.	Telecommunications Energy & Sustainability Health (Areas covered by the 14 NRP areas)
SFI-NSF-Graduate Research Opportunities Worldwide (GROW)	The SFI-NSF GROW programme enables NSF Graduate Research Fellows to carry out research visits in Irish Research Centres who have agreed to participate in the scheme. The agreement aims to strengthen the internationalization of the Irish centres of excellence and to give U.S. fellows the opportunity to gain international experience in a research environment at the highest level. NSF funds the student scholarships and travel expenses and SFI provides additional living expenses for the fellows whilst based in Ireland.	14 NRP areas or Aligned with thematic areas identified in specific calls or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI-HRB-Wellcome Trust Biomedical Research Partnership	The Wellcome Trust, in partnership with SFI and the HRB, will fund biomedical and clinical research in the Republic of Ireland under the auspices of the SFI-HRB-Wellcome Trust Biomedical Research Partnership. In line with their strategic research agendas, SFI and the HRB will co-fund with the Wellcome Trust successful biomedical and clinical science applications under the following Trust funding schemes: Investigator Awards, Fellowships, including Principal Research Fellowships (PRFs), Strategic Awards and new schemes for collaborative research and seed funding. The Wellcome Trust will be responsible for the administration of grant applications and awards made under this Partnership. Note that most other Wellcome Trust Schemes are also open to applicants based in Ireland	Please see the Wellcome Trust website for details
European Joint Programming Initiative (JPI)	Through SFI, the HRB and DAFM Ireland is currently participating in a number of member-states Joint Programming Initiatives: Neurodegenerative diseases (JPND), and A Healthy Diet for a Healthy Life (HDHL). These initiatives are now in the	All areas covered by SFI's legal remit

	implementation phase with calls to be launched and developed over to course of 2015	
Centres of Excellence in Neurodegeneration (CoEN) Initiative	The network of Centres of Excellence in Neurodegeneration (CoEN) is an international initiative involving research funders in number of countries including in the UK (Medical Research Council), Canada (Canadian Institute of Heath Research), Germany (DZNE), and Ireland (SFI). The aim of the CoEN initiative is to build productive links between recognised national centres of excellence in neurodegeneration in order to accelerate progress in understanding the mechanisms of Neurodegenerative Diseases as well as the identification of new therapeutic approaches.	All areas covered by SFI's legal remit
Employment Based Postgraduate Programme	The Irish Research Council's Employment Based Postgraduate Programme provides postgraduate researchers with an employment-focused educational experience. More specifically, the Programme offers researchers the opportunity to undertake a Master's or PhD degree while employed by a private company or public organisation based in the Republic of Ireland. SFI will be co-sponsoring a number of awards under this scheme.	14 NRP areas or Any area under SFI's legal remit where strong evidence can be provided of significant industrial relevance and strong economic impact
SFI Science Policy PhD Fellowship Programme	Science Foundation Ireland's Policy PhD Fellowship programme provides postgraduates with a research experienced that focuses on the various aspects of RD&I investment and its impact in small advanced nations such as Ireland. The outputs will prove invaluable to the Foundation and the Irish Government in assessing the impact of their investment to date and the delivery of future investments	All areas covered by SFI's legal remit
SFI PhD Fellowships in STEM Education	Science Foundation Ireland's PhD Fellowships in Science Technology Engineering and Maths Education (STEM) is designed to support the requirement for fourth level professionals in STEM education to educate and prepare teachers at all levels but especially in primary and post-primary schools. This will include the effective implementation of STEM education and evidence-based research into teaching and learning in the STEM disciplines.	All areas covered by SFI's legal remit

¹ For the majority of SFI's programmes, alignment is required with (i) at least one of the National Research Priority (NRP) areas or (ii) an area underpinning the National Research Priority areas or (iii) a strategic area of opportunity as identified in a themed call. For certain programmes involving partnership with major national or international research entities or for programmes aimed at (i) researchers at an earlier stage of development; (ii) research dissemination; (iii) and/or public engagement, applications will be considered within the broader SFI legal remit. Details are provided in the relevant call document. The fourteen priority areas in the National Research Prioritisation Exercise are abbreviated above as "NRP areas".