

SCIENCE FOUNDATION IRELAND

SFI Centres for Research Training Programme 2018

Call for Submission of Proposals

KEY INFORMATION

Call launch	31 May 2018
Webinar	6 June 2018, 14:00 Dublin, Ireland local time
Deadline for submission of EoIs	26 June 2018, 13:00 Dublin, Ireland local time
Deadline for submission of full proposals	5 September 2018, 13:00 Dublin, Ireland local time
Interviews of applicant groups	October/November 2018

For further information on the Centres for Research Training Programme not included in this call document contact: crt@sfi.ie

Terms of Reference

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All responses to this Call for Submission of Proposals will be treated in confidence and no information contained therein will be communicated to any third party without the written permission of the applicant except insofar as is specifically required for the consideration and evaluation of the proposal or as may be required under law, including the Industrial Development (Science Foundation Ireland) Act, 2003, the Industrial Development (Science Foundation Ireland) (Amendment) Act 2013 and the Freedom of Information Acts 1997 and 2003.

Version 2: Amended 13 June 2018, Updated Page 30, named supervisor CV template

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Section 1. Programme Overview

1. Introduction

Innovation 2020¹ sets out the roadmap for continuing progress towards the goal of making Ireland a Global Innovation Leader, driving a strong sustainable economy and a better society, underpinned by excellent research. Alongside support for continued investment in excellent research in areas of strategic importance, Innovation 2020 outlines a commitment to the development of a talented and skilled workforce and researcher base that can respond to emerging industrial and societal needs.

As part of this commitment, Science Foundation Ireland (SFI) is pleased to launch the **SFI Centres for Research Training** programme which will provide funding for the training of postgraduate students in areas of identified skills needs. Building on research excellence, the purpose of the **Centres** will be to provide cohorts of academically outstanding future research leaders with the skills and knowledge required to address the future challenges of an ever-changing work environment. A set of Guiding Principles below outlines the features of these Centres, including a cohort training model as well as close engagement with enterprise in defining programmes of training, with the goal of developing a pipeline of highly trained, well-networked research talent.

Following a consultative process and in recognition of nationally and internationally identified skills needs², the inaugural SFI Centres for Research Training 2018 Call will operate on a **thematic basis**, and will accept applications aligned with the broad area of **Data and ICT Skills for the Future**. The scope of this thematic area, which is described in detail below, encompasses the development of innovative software- and hardware-based information and communications technologies (ICT) as well as the diffusion of ICT as a key enabling technology in other application areas of science and technology. Furthermore, Project Ireland 2040³ declares the Government's plans to drive Ireland's innovation ecosystem through the support of a Disruptive Technologies Innovation Fund. Considering the potential disruptive effect that may result from the convergence of ICT and other sectors, applications to the SFI Centres for Research Training Call are encouraged that include a focus on student training in the development and adoption of disruptive technologies in future technology areas.

2. Guiding Principles for SFI Centres for Research Training

- The **cohort model is a defining feature of the SFI Centres for Research Training** providing sufficient scale and sustainability to allow for the development and delivery of innovative training opportunities for students. Furthermore, integration within and between cohorts will **expose students to the wider scientific relevance of their research, encourage peer-to-peer learning and facilitate the establishment of networks that will enhance their research, employability and leadership potential**.
- SFI Centres for Research Training will be required to **build partnerships with enterprise** in the design and delivery of training programmes to ensure that postgraduates have the necessary skillsets to meet the needs of enterprise and to attract investment to Ireland through the availability of a high-value talent pipeline. As part of this training, students will be required to undertake **placements** in enterprise, other non-academic establishments, or in the groups of international collaborators.

¹ <https://dbei.gov.ie/en/Publications/Publication-files/Innovation-2020.pdf>

² For example, National Skills Bulletin 2017 <http://www.solas.ie/SolasPdfLibrary/NSB.pdf>; European Commission Data Market Study <https://ec.europa.eu/digital-single-market/en/news/final-results-european-data-market-study-measuring-size-and-trends-eu-data-economy>

³ <http://www.gov.ie/en/project-ireland-2040>

- SFI Centres for Research Training will be embedded in **environments of research excellence** where there exists a **critical mass of supervisors** conducting leading research in their fields and **cutting-edge infrastructure**.
- SFI Centres for Research Training will provide **world-class training** to be delivered by thought leaders in the field, which may be delivered nationally, internationally or online. Students will be equipped with **transversal skills including entrepreneurship and innovation** to enable them to adapt and react to rapidly evolving workplaces.
- Students will participate in an **inter-/multidisciplinary training programme** and will gain a heightened appreciation for how their research contributes to society and the economy through engagement with a broad spectrum of stakeholder groups, such as enterprise, public agencies and end-users.
- SFI Centres for Research Training will provide a **student-focused postgraduate research experience** with appropriate supports and mentorship to facilitate students' career development. Students will be empowered to select their supervisors and define their research projects, as well as to tailor elements of their training programme to meet their career goals. The student voice will be present in the oversight and execution of these Centres.
- SFI Centres for Research Training will **complement and add value to existing postgraduate training** opportunities, with the differentiating features focussed on the cohort nature of the programme and the thematic alignment to identified national workforce development requirements.
- SFI Centres for Research Training will focus on providing **world-class training to doctoral students**. Where there is justification for a need, doctoral training courses that are also compatible with Research Masters degrees may be designed, delivered and funded through SFI Centres for Research Training.

3. Programme Remit and Thematic Area

Applications will be accepted within the Thematic Area of **Data and ICT Skills for the Future** which fall within **SFI's legal remit**⁴. For the purpose of this call, the scope of this thematic area will cover SFI Centres for Research Training whose vision is either or both:

- To enable underpinning software- and hardware-based technologies in relevant areas of research in computer science, information science, data science, data analytics, artificial intelligence, machine learning, security, privacy, robotics, artificial/virtual reality, mathematics, statistics, networks and communications;
- To explore potentially transformative applications of these technologies in research sectors that align with any of the National Priority Areas⁵, which are grouped under six themes (ICT, Health and Wellbeing, Food, Energy, Climate Action and Sustainability, Manufacturing and Materials and Services and Business Processes).

Applications are therefore invited whose research and training programme aligns primarily with at least one of the Research Priority areas under the **ICT Theme**, namely, **“Future Networks, Communications and Internet of Things”**, **“Data Analytics, Management, Security, Privacy, Robotics and Artificial Intelligence (including Machine Learning)”** or **“Digital Platforms, Content and Applications, and Augmented Reality and Virtual Reality”**. Applications may also potentially align with a secondary “application” Priority Area.

⁴ <http://www.sfi.ie/about-us/about-sfi/what-we-do/>

⁵ <https://dbei.gov.ie/en/Publications/Research-Priority-Areas-2018-to-2023.html>

SFI does not envisage funding Centres for Research Training that overlap significantly in their vision. It is therefore recommended that applicant groups and institutions collaborate in areas of mutual interest in the preparation and submission of bids.

A key feature of the SFI Centres for Research Training is the cohort-based approach to research training which provides an opportunity for **multi- or interdisciplinary research** to be pursued. SFI recognises that in order to take a holistic approach that the Centre for Research Training may include a number of PhD projects that border non-STEM disciplines, particularly in areas such as policy and ethics. As such, **SFI may consider providing a small proportion of funding for such research⁶**. In this context, SFI will only consider funding non-STEM research in cases where such research **directly informs** the development of scientific and technological aspects of the overarching vision and programme of research of the Centre for Research Training and where strong justification is provided that these activities are required for the delivery of the scientific/engineering programme of research. It is expected that the applicants leading the SFI Centre for Research Training will have demonstrable track records in the relevant STEM area.

4. Objectives

The specific objectives of the SFI Centres for Research Training Programme are:

1. To develop a pipeline of highly trained, well-networked research talent in areas of strategic priority for Ireland;
2. To establish world-class, cohort-based, interdisciplinary training programmes within environments of research excellence;
3. To equip postgraduates for ever-evolving workplaces through the provision of transversal, cross-sectoral and discipline-specific skills training programmes and individual career development support;
4. To build partnerships with enterprise and other external bodies in the development and delivery of innovative programmes of research and training;
5. To enhance intersectoral and international mobility of research postgraduates to promote knowledge transfer and innovation;
6. To leverage non-SFI funding for postgraduates to grow the scale and breadth of the Centre for Research Training;
7. To contribute to improving gender balance in all aspects of postgraduate training;
8. To encourage inter-institutional collaboration and efficiency in the provision of excellent postgraduate student training.

5. Programme Scale

It is envisaged that in the region of four to six SFI Centres for Research Training will be funded under the current call. Applicant groups and institutions are encouraged to collaborate in areas of mutual interest to develop large-scale programmes that will enrol up to 30 postgraduate students per year. In multi-institutional Centres for Research Training, the host research body of the lead applicant will act as the lead institution, but students will be enrolled and funded at the partner institutions. Where there is strong justification in areas of demonstrable strategic importance that fall within the thematic area, for example owing to limited supervisory capacity in that area, applications for Centres for

⁶See additional guidance for applicants at <http://www.sfi.ie/about-us/about-sfi/what-we-do/>

Research Training of a smaller scale will be considered, with a minimum annual intake of 15 students being permitted (see Table 1).

Table 1: Overview of scale of SFI Centres for Research Training

Average Number of students per cohort*			Total number of students per Centre from four annual cohorts
SFI funded	Minimum additional leverage**	Total	
12-24	3-6	15-30	60-120

*Although it is expected that there will be a consistent intake each year, some variation such as during the ramp-up period is acceptable.

**A minimum of one additional student must be leveraged for every four funded by SFI.

Successful Centres for Research Training will be required **to leverage a minimum of one additional student for every four funded by SFI**. This non-SFI *cash contribution* must cover all costs associated with a student and may include contributions from partner organisations, such as enterprise, charity philanthropy or public agencies, or institutional funding. It is important to note that SFI Centres for Research Training are being established to *increase* the number of postgraduate research students in Ireland and funding already committed for other activities may not count as funding leverage.

Reviewers will assess applications in terms of value for money (see Review Criteria in Section 16) and therefore applications that demonstrate significant non-SFI contributions may be more competitive.

5.1. Funding

All funding requests must be clearly and specifically justified and reviewers will be requested to assess the value for money of the budget requested from SFI. To provide applicants with indicative estimates of maximum funding levels, it is expected that the *average* request for the costs associated with a single student will not exceed €40,000 per annum in direct costs, unless strong justification can be provided for higher costs. Other costs are limited to the cost of a single programme manager and operational costs up to a maximum amount of €40,000 per annum. A *sample* calculation for the maximum allowed budget for an SFI Centre for Research Training of the maximum size is provided in the table below.

Table 2: Indicative permitted direct costs for a SFI Centre for Research Training

	SFI	Non-SFI*
Cost per student per annum	€40,000	€40,000
Cost per student (4 years)	€160,000	€160,000
Number of SFI funded PhD students in cohort	24	6
Cost per Cohort	€3,840,000	€960,000
Number of Cohorts	4	4
Total Student Cost	€15,360,000	€3,840,000
Programme Manager per annum (for 7.5 years)**	€75,000	-
Operational Costs per annum (for 7 years)	€40,000	-
Total operations costs	€842,500	-
Total Cost of CRT	€16,202,500	€3,840,000

*Non-SFI contributions to operational costs are permitted but are not mandatory.

**Salary scales for programme managers may vary and usual increments will apply (please see Section 9.11). Programme Managers may be funded for 6 months in advance of the intake of students to assist in the recruitment and set-up of the training programme.

Eligible Costs

Student costs include all costs associated with the research and training of students in the Centre for Research Training. Eligible student costs may include, but are not limited to:

- Student stipend and fees;
- Research materials and consumables;
- Training (including where relevant, course development, fees, travel, career development, etc. Average student costs for cohort-wide training should also be included here);
- Placement costs (including travel and subsistence);
- Travel costs to conferences as allowed in SFI's Grant Budget Policy.⁷

The Operations component of the budget is expected to fund central running costs of the Centre for Research Training. Eligible operational costs may include but are not limited to

- Programme Manager;
- Costs for supervisors to attend training directly related to supervision and the provision of postgraduate training and education;
- Costs for facilitating events or Education and Public Engagement activities directly related to activities funded under the Centre for Research Training;
- Other Operational Costs, such as development of a website for the SFI Centre for Research Training.

Ineligible Costs

Ineligible costs are outlined in SFI's Grant Budget Policy.⁷ It is noted that in the Centre for Research Training Programme, no staff costs other than stipends and fees for research postgraduates enrolled in the Centre for Research Training and the cost of a programme manager are permitted. Non-EU fees may not be requested. Equipment may also not be requested under this call, other than one laptop or desktop computer per student.

Overheads

SFI Centres for Research Training will require significant intra- and inter-institutional coordination to deliver world-class programmes that are aligned with the strategic priorities of institutions and the needs of the Irish economy. To enable Research Bodies to deliver the most competitive programmes of research and training, overheads will be payable to Research Body(ies) hosting these Centres. It is expected that overheads will be utilized for the payment of exceptional costs in the provision of services, training and support, **over and above the indirect costs of hosting students already covered by their fees**. This would include facilitation of strategic institutional collaboration, international collaboration, competitive recruitment of students, and to provide a demonstrable enhancement to the postgraduate student experience in the Centre. Applicants will be required to include a statement on how overhead contributions will be used to support the SFI Centre for Research Training (see Section 9.11).

⁷ <http://www.sfi.ie/funding/sfi-policies-and-guidance/budget-finance-related-policies/index.xml>

The overhead contribution to the host Research Body is reflected as a percentage (currently 30%) of the “modified” total direct costs (i.e., total direct costs less the cost of equipment) of SFI’s contribution.

6. General Eligibility

The eligibility criteria set down below must be met by the Lead Applicant, Co-Applicants and Named Supervisors and Research Bodies on the closing date for submissions **5 September 2018, 13:00 Dublin, Ireland local time**. Any submissions to the programme that are deemed ineligible on that date will be eliminated from the programme without review.

In addition to the specific eligibility conditions outlined below, the Lead Applicant, Co-Applicants and Named Supervisors and Research Bodies must comply with SFI’s General Terms and Conditions.⁸

6.1. Eligibility of Applicant Group

<p>Lead Applicant (Centre Director)</p>	<p>Definition:</p> <p>The Lead Applicant is nominated as the Centre for Research Training Director. The Lead Applicant will have overall responsibility for delivery of the vision of the SFI Centre for Research Training. The Lead Applicant will serve as the primary point of contact for SFI on the award, during the review process, and if successful, during the course of the award.</p> <p>The Lead Applicant will be designated as the lead investigator and Centre Director of a funded Centre for Research Training and has primary responsibility and accountability for delivery of the research and training programme within the funding limits awarded and in accordance with the terms and conditions of SFI.</p> <p>In the case that co-applicants are located at a different SFI-eligible Research Body than the Lead Applicant, the grant will be administered through the Research Body of the Lead Applicant.</p> <p>Eligibility:</p> <p>Applicants must:</p> <ul style="list-style-type: none"> • Upon receipt of an award, be a member of academic staff / contract researcher (with a contract that covers the period of the grant) at an eligible Research Body; • Recognised by the Research Body as an independent investigator with independent office and research space at the host Research Body for which he/she will be fully responsible for at least the duration of the SFI grant; • Have held a PhD for a minimum of five years (i.e., the PhD must have been conferred in or before 2013); • Hold a minimum of five senior-author, peer-reviewed, primary-research publications;
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⁸ <http://www.sfi.ie/funding/sfi-policies-and-guidance/sfi-general-terms-and-conditions/>

	<ul style="list-style-type: none"> • Have previously secured one independent research grant that includes support for at least one full-time equivalent (travel awards and fellowships do not apply); • Have a proven track record of mentoring and supervising postgraduate research students; • Be able to commit sufficient effort to lead the Centre for Research Training, particularly if they are in receipt of other significant awards from SFI. <p>Lead applicants may be included as a lead or co-applicant on only one application under the SFI Centres for Research Training Call 2018. They may be included as Named Supervisors on other applications.</p>
<p>Co-Applicant</p>	<p>Definition: A Co-Applicant has a well-defined, critical and continuing role in the proposed programme of research and training. For applications that involve more than one institution, a co-applicant from each research body must be included. There must be two co-applicants (i.e., three Applicants in total), except in cases where there are more than three institutions involved in the application, in which case an additional co-applicant per institution should be included.</p> <p>A Co-Applicant will be designated as a co-lead investigator in a funded Centre for Research Training. A co-lead investigator would be expected to work closely with the lead investigator in the management and direction of a funded Centre for Research Training.</p> <p>Eligibility: The same eligibility requirements apply as for the Lead Applicant.</p> <p>Co-applicants may be included as a lead or co-applicant on only one application under the SFI Centres for Research Training Call 2018. They may be included as Named Supervisors on other applications.</p>
<p>Named Supervisor</p>	<p>Definition: A named supervisor is an academic member of staff who will supervise a postgraduate research project within a Centre for Research Training. Named Supervisors will have budgetary responsibility for the research expenses for that postgraduate student’s <i>research</i> project within an SFI Centre for Research Training. Budgetary responsibility for the <i>training</i> expenses will remain with the lead/co-investigator(s) of the Centre for Research Training.</p> <p>At the time of application, it is expected that a sufficient number of Named Supervisors are included to demonstrate the capacity of the Centre for Research Training to accommodate the requested number of students. However, during the course of the award, additional Named Supervisors may be added to the Centre for Research Training. An appropriate process for the inclusion of new Named Supervisors must be put in place. New Named Supervisors must be approved by SFI before inclusion in the Centre for Research Training. In addition, co-supervision by non-academic mentors may be permitted although these individuals are not to be listed as “Named Supervisors”.</p>

	<p>Eligibility:</p> <ul style="list-style-type: none"> • Upon receipt of an award, be a member of academic staff / contract researcher (with a contract that covers the period of supervision) at an eligible Research Body; • Be recognised by the Research Body as an independent investigator with independent office and research space at the host Research Body for which he/she will be fully responsible for at least the duration of supervision; • Have held a PhD for a minimum of three years (i.e., the PhD must have been conferred in or before 2015); • Hold a minimum of three senior-author, peer-reviewed, primary-research publications; • Have the authority to supervise postgraduate research students or be provided with appropriate supports and mentorship by the Centre for Research Training to do this.
<p>Partner Organisation</p>	<p>Definition: A Partner Organisation may be:</p> <ul style="list-style-type: none"> a) a relevant non-academic institution, such as a government agency, representative body, philanthropic organisation or non-governmental organisation; b) an enterprise partner; <p>It is expected that a Partner Organisation will contribute to the research and/or training agenda of the Centre for Research Training. A Partner Organisation may or may not make a financial contribution to the budget of the Centre for Research Training. If a Partner Organisation is contributing to the budget of the Centre for Research Training, this contribution may be in the form of cash or in-kind costs.</p> <p>Each Partner Organisation will nominate a representative to be included as the main point of contact between that organisation and the SFI Centre for Research Training.</p> <p>Elements of individual research projects may involve other academic or non-academic collaborators, but only partners who will contribute to the overall vision or budget of the Centre for Research Training should be included as a Partner Organisation.</p>

6.2. Gender Strategy

SFI's Gender Strategy,⁹ published in 2016, sets out a target for 30% of SFI's portfolio of award holders to be female and for research teams to be composed of at least 40% of each gender by 2020. These targets should be embedded at all levels of the SFI Centres for Research Training, and in those processes used for the recruitment of students, inclusion of Named Supervisors, and the appointment of individuals at the Executive level in the Centre. Collectively these approaches will ensure that

⁹ <http://www.sfi.ie/resources/SFI-Gender-Strategy-2016-2020.pdf>

students are embedded in an environment that promotes gender equality, supported by appropriate role models and mentors.

It is expected that SFI's Gender Strategy targets for the applicant (30%) and supervisor (40%) groups are met at the application stage. Gender balance should also be a consideration in the recruitment of students, with a target of at least 40% for each gender. If there are perceived challenges in meeting these targets, the applicant group will be required to provide clear justification for these challenges and lay out specific measures as to how they will address any imbalances during the term of the award. The gender breakdown of students, Named Supervisors, Lead and Co-Investigators of funded Centres for Research Training will be reported to SFI annually and will be considered as part of progress reviews. Failure to meet targets will require that the Centre for Research Training outline actions to redress any imbalance and may result in partial rescinding of the award.

6.3. Eligibility of Research Body

The Research Body is the body responsible for the overall financial and administrative coordination of research programmes supported by research grants from SFI. A list of eligible Research Bodies¹⁰ is available on the SFI website. The award will be administered by the host Research Body of the Lead Applicant.

It is expected that the Research Body will:

- Have the authority to confer Doctoral/Research Masters degrees, or must be associated with an organisation with the authority to do so;
- Adhere to best practice guidelines, including but not limited to the National Framework for Doctoral Education¹¹ and QQI Statutory Quality Assurance Guidelines for Providers of Research Degree Programmes,¹² in their support of students participating in the research and training programme set out in an SFI Centre for Research Training;
- Be responsible for ensuring that the quality of the research meets the standards of the postgraduate research degree being undertaken by that student;
- Will work with the Governance Committee outlined in Section 7.6 to ensure that all relevant quality assurance standards are met in the research and training programme being delivered through the SFI Centre for Research Training.

In the case that more than one Research Body is involved in an SFI Centre for Research Training, it is expected that each one satisfies the above requirements and that all Research Bodies will have necessary agreements in place in advance of the award commencing, such that all students can undertake all elements of the described research and training programme. This may include but is not limited to the recognition of credits taken at other institutions, joint supervision where applicable, researcher exchange and placements, and joint monitoring of progression and quality assurance.

7. Centre for Research Training Structure

7.1. Student Cohorts

The cohort model is a defining feature of the SFI Centres for Research Training. SFI Centres for Research Training will annually recruit cohorts of students, which are, for the purpose of this programme, defined as a group of students undertaking research projects and a programme of

¹⁰ <http://www.sfi.ie/funding/sfi-eligible-research-bodies/>

¹¹ http://hea.ie/assets/uploads/2017/04/national_framework_for_doctoral_education_0.pdf

¹² https://www.qqi.ie/Publications/Publications/Research_Degree_Programmes_QA_Guidelines.pdf

training that fall within the vision of the Centre for Research Training. Although students may select individual training modules according to their individual development plans, there will be sufficient measures in place to ensure integration of the cohort(s) to encourage interaction, networking and peer-to-peer learning. Adequate student representation must also be present in the execution of the Centre for Research Training, which will include student representation in the governance committee and may also include funding, with appropriate justification, for initiatives such as student-led activities.

Adequate information must be made available to students regarding choice of supervisor and research project, programme requirements, student and supervisor roles and responsibilities, as well as clear information on registration, assessment, progression, and feedback mechanisms.

SFI Centres for Research Training will deliver a student-focused postgraduate research experience and students should be empowered, with appropriate guidance, to define their individual research and training programme. This may include selection of their supervisor, definition of their research project, planning of optional training and identification of suitable placements. Appropriate measures should be in place, for example, research rotations before final selection of a supervisor/project or provision of appropriate guidance, to ensure that students are sufficiently informed about these choices.

7.2. Research Programme

The core element of a postgraduate research programme is a significant and original contribution to the body of knowledge in a given domain through the completion of a research project. It is expected that students who participate in SFI Centres for Research Training will undertake research projects that represent excellent research conducted in a world-class research environment. The content and breadth of the research programme must be such that it satisfies the requirements for the conferral of the research degree by the host institution or degree-awarding body.

7.3. Training Programme

Complementing the research project, it is expected that the training programme forms a significant part of a student's experience in the Centre for Research Training. The training element will differentiate itself from individual structured postgraduate research programmes through the **cohort structure** and through **close engagement with enterprise in its design and delivery**. In the design of the training programme, applicants should be cognisant of the national guidelines set out in the National Framework for Doctoral Education¹¹ and the Irish Universities' PhD Graduate Skills Statement¹³, as well as considering international best practice. Research and training activities must be accredited and allocated ECTS credits. A clear description of mandatory training and optional training opportunities must be available to students throughout the duration of the programme. A student's training programme must be agreed as part of their individual development plan.

SFI Centres for Research Training will provide **world-class training** elements to be delivered by thought leaders or centres of excellence in the field, which may be delivered **nationally, internationally or online**. In addition, Applicants must **engage closely with their non-academic partners** in the development of appropriate training programmes to address skills needs in the labour market and potentially to adapt the training programme in response to changing needs over the course of the award. Applicants are encouraged to develop **innovative approaches to the delivery of training** and tailor courses to the specific sectors that they are targeting through the Centre.

¹³ <https://www.iaa.ie/publication/view/iaa-graduate-skills-statement-brochure-2015/>

The SFI Centres for Research Training will be differentiated from existing structured programmes in the HEI through the cohort model and bespoke training that will be offered in the domain area of the Centre for Research Training. However, **it is not the intention of this programme to duplicate high-quality training opportunities that are already well established within the HEIs.** As such it is expected that some elements of the training programme will be delivered through existing courses. Conversely, where new training is developed as part of the Centre for Research Training, it is acceptable and encouraged, **where no additional costs to the Centre for Research Training are incurred,** for postgraduate students, who are not members of the Centre but to whom elements of the training programme would be of particular relevance, to participate in those.

It is expected that an appropriate balance of training will be provided, including **mandatory research skills** (research integrity, ethics, etc.), **transversal skills** (e.g., project management, entrepreneurship, etc. as well as cross-sectoral skill such as design thinking, etc.) and **discipline-specific skills** (theoretical and practical training as well as industry relevant knowledge). As mentioned above, we encourage applicants to be innovative in the development of training programmes, which might, for example, include certain transversal skills being delivered within a discipline-specific enterprise environment.

In line with SFI's endorsement of the **National Policy Statement on Ensuring Research Integrity in Ireland**¹⁴, all students enrolled in an SFI Centre for Research Training will receive appropriate training in Research Integrity. In addition, it is expected that training in relevant areas of Responsible Research and Innovation will be provided.

Placements

Experiential learning placements are a mandatory element of training programmes in the SFI Centres for Research Training. The primary purpose of a placement is to expose students to other sectors and career paths, as well as to begin to build their professional networks, with the ultimate goal of enhancing students' employability and mobility in academic and non-academic sectors. Placements may be directly related to the specific research project being undertaken by the student or may be in a different area. A placement may be either in a non-academic environment or in an academic research group outside the Republic of Ireland. The minimum expected duration of a placement will be 12 weeks in total (either as a single consecutive period or distributed over a longer period, e.g., 2 days a week for 30 weeks), but may be longer if this is compatible with completion of the student's research project. Additional funding requests to cover extensions to the duration of research degrees on the basis of having undertaken a placement are not permitted.

Appropriate support should be provided to the student in the selection and organisation of a placement with clear consideration of the desired outcomes of the placement for both the student and provider.

7.4. Career Support

Appropriate career support will be provided to all students that participate in an SFI Centre for Research Training, delivered by a suitably qualified or experienced person. All students must develop, with appropriate guidance, an individual development plan. The student should have full ownership of this plan, which should be put in place at the beginning of the research and training programme and be reviewed at regular and defined intervals over the course of the programme. Career support should include making students aware of educational opportunities, career options and long-term

¹⁴ <http://www.iaa.ie/wp-content/uploads/2014/06/National-Policy-Statement-on-Ensuring-Research-Integrity-in-Ireland-2014.pdf>

career development. Non-academic partners are encouraged to be involved in the provision of career support through mentorship or other activities.

7.5. Supervision

Supervisory procedures must be clearly laid out for both students and supervisors. This will include the make-up and responsibilities of the supervision committee, procedures for selection of a supervisor, training and mentorship for supervisors, and feedback mechanisms. All supervisors must be adequately informed and engaged with the research and training programme set out in the SFI Centre for Research Training and must provide postgraduate students under their supervision with the appropriate support and opportunity to complete all elements of the programme.

7.6. Management and Governance

Centres for Research Training will be expected to put in place appropriate management and governance structures. This will include an Executive Management Committee, which will be led by the Director, and will be responsible for the management and administration of the Centre for Research Training, as well as the delivery of its vision, within the funding limits of the award.

A Governance Committee will be established with the primary function of ensuring that the vision of the Centre for Research Training is being delivered by the Executive Management Committee. They will have oversight of procedures including but not limited to recruitment, induction, inclusion of new supervisors, feedback mechanisms and gender balance. They may also advise the Executive Committee on the evolution of the vision in response to changing needs reflected by feedback from external or internal stakeholders. Applicants should consider the QQI Statutory Quality Assurance Guidelines for Providers of Research Degree Programmes¹⁵ in defining the specific functions of the Governance Committee. The Governance Committee will also assist the host research body in fulfilment of their oversight and reporting requirements as primary holders of the Centre for Research Training award. In addition to the Executive Committee, membership of the Governance Committee should include relevant representatives of the Host Research Body(ies) (Deans of Graduate Studies, Vice Presidents for Research, or their delegates) and student and supervisor representatives, and may include further members as appropriate, such as external representatives from academic or non-academic organisations.

8. Economic and Societal Impact

In 2017, the Irish Government spent an estimated €770 million on scientific research and development¹⁶. As with all public spending, it is necessary to demonstrate and articulate the potential impact and benefits of scientific research and training.

SFI Centres for Research Training will build on research excellence to deliver world-class, postgraduate research and training programmes. The primary output of these centres will be highly trained research talent in strategically important areas, as highlighted by the thematic area to which applications to this call are open. Although scientific excellence is both necessary and paramount, it is not sufficient, and applications to this call must clearly articulate the potential for economic and societal impact.

¹⁵ <https://www.qqi.ie/Publications/Publications/Research Degree Programmes QA Guidelines.pdf>

¹⁶ <https://dbei.gov.ie/en/Publications/Publication-files/R-D-Budget-Survey-Report-2016-2017.pdf>

What is meant by Impact?

In the context of a Centre for Research Training, impact may be described as *the demonstrable contribution that excellent research and training makes to the economy and society*. A key impact of the SFI Centres for Research Training is expected to be in the development of Ireland's human capital, not only through meeting the current and future needs of Ireland's labour market, but also through the development of highly trained talent with the potential to create and attract new job opportunities and become leaders of the future. Applications to this programme must clearly articulate both the need and the relevance of the cohort-based research and training model and the resulting added value of funding a Centre for Research Training, in contrast to funding individual research projects.

Impact embraces the diverse ways in which research-related knowledge and skills benefit individuals. SFI has developed detailed guidelines on research impact which are available on the SFI website.¹⁷

Applicants are encouraged to consult the impact guidance documentation and to listen to the Impact webinar provided on the SFI website.

Impact Statement

An **Impact Statement (maximum of three pages)** is a requirement in applications to SFI Centres for Research Training. The Impact Statement should articulate the planned and potential impact of the proposed research and training programme. SFI recognises that impact can take time and in many cases is unforeseen; as such, it is not possible to predict all impacts at the time of submission. However, applicants are advised to make full use of the space provided to make a strong, unambiguous, and **realistic** impact case with appropriate emphasis and an objective view on how long it may require for the potential impact to be fully realised.

Reviewers will be asked to assess the potential impact and the likelihood of the delivery of that impact, as described in the Impact Statement. Please see the review criteria in Section 16 for more details.

The statement should be as specific as possible and provide information that reviewers will find helpful in assessing the potential impact of the proposed research activity. Appropriate plans, milestones and deliverables associated with the potential impact should also be indicated. Plans to utilise appropriate alternative funding sources to assist with achieving impact should be included, where relevant.

The Impact Statement should be written primarily in lay, non-technical language. It should be as specific and comprehensive as possible and it should cover potential economic and societal impacts by answering the following overarching questions:

- **What** additional skills and training will the proposed Centre for Research Training offer over and above existing programmes to enhance their employability and leadership potential? (*e.g., cohort experience, innovative approaches to training, interdisciplinarity, experiential learning, relevance to non-academic sectors*)
- **Who** will benefit from the proposed research and training activities in this area? (*e.g., students, supervisors, enterprise, public, policy makers, other stakeholders*)
- **How** will stakeholders benefit from the proposed research and training activities in this area? (*e.g., skills availability of postgraduate research students, increased capacity and competitiveness of workforce, establishment of new academic and enterprise partnerships, attracting new investment to Ireland, ability to address significant national/international challenges, policy change and development, increased public engagement in STEM.*)

¹⁷ <http://www.sfi.ie/funding/award-management/research-impact/>

- **When** will there be a benefit from this research and training? (*e.g., over what timeframe might the expected benefits of the proposed research and training programme be realised, will there be lasting benefits beyond the graduation of students such as building relevant networks*)
- **Where** will the benefit of this research be realised? (*e.g., Ireland, Europe, which sectors will prospectively employ graduates*)

Applicants are encouraged to consider the objectives of this call, SFI and National Policy including SFI's Agenda 2020, Innovation 2020 and Project Ireland 2040, and to review the SFI 'Research Impact' guidance documentation before writing their impact statement.

Section 2. Application Preparation and Submission

9. Application Procedure

Applicants are required to submit the following documentation:

- Expression of Interest (to be submitted via e-mail)
- Full proposal (to be submitted via SESAME)

9.1. SESAME

For the Centres for Research Training 2018 Call, full proposal submissions will be accepted only through SESAME, SFI's grants and awards management system.

Access to SESAME is controlled by staff at the Research Office of your host Research Body. Please follow your internal organisational process to request this access.

Once you have been registered by your Research Office, **you will receive an email** containing:

1. Username
2. Password
3. SFI PIN number
4. SESAME website address

Your **username** and **password** are needed to log in to SESAME. The Co-Applicant's PIN number must be provided to the Lead Applicant, in order to be associated with the same application. This PIN number is also stored in your **contact profile** on SESAME.

SFI's grants and awards management system, SESAME, is accessed using the Internet; no additional software needs to be installed. You can access SESAME online from any location. The configuration of some browsers and internet infrastructure (popup blockers, firewalls, etc.) can restrict an individual's access to the internet and as a result to the SESAME system. If you are having any such difficulties please contact your organisation's internal IT support team.

The SESAME system is accessed using the following Internet address:

<https://grants.sfi.ie>

Please see the **SESAME Researcher User Guide**¹⁸ for more detailed information.

SESAME enables:

- Individual researchers to apply online for SFI grants.
- Host Research Bodies to review and authorise all applications.

Individuals may only submit as Lead or Co-Applicant on one proposal to the SFI Centres for Research Training Programme. If an individual submits as Lead Applicant on more than one proposal, these

¹⁸ <http://www.sfi.ie/funding/award-management-system/>

applications will be returned without review. Individuals may engage as named supervisors or as representatives of partner organisations on multiple proposals. See Section 6 for further details.

Once submitted by the host research body to SFI through SESAME, an application cannot be withdrawn and subsequently modified for resubmission in the same call, regardless of the date of submission.

Full proposals must be submitted online through SESAME to SFI by the Research Office of the Lead Applicant's research body before the call deadline.

Applicants are **strongly advised** to familiarise themselves with the SESAME Researcher User Guide¹⁸ before they submit their proposal to SESAME. Applicants should closely follow the instructions provided below.

9.2. ORCID ID

ORCID¹⁹ provides a unique identifier for all researchers which can then be linked to their different research works across different platforms. SESAME is integrated with ORCID making it possible for researchers with a SESAME Research Profile to connect directly to an ORCID ID from their profile.

There are a number of benefits to creating an ORCID ID, which include the following:

- ORCID allows you to pull information from different platforms creating a centralised reference to your different works (e.g. publications, patents, awards) in one location.
- Your ORCID ID is a unique identifier which distinguishes you from other researchers with a similar name.
- Using the ORCID ID assists in making your research works more visible to funders and publishers.

As part of the integration of SESAME with ORCID, it is possible for researchers to import publication data from ORCID directly into their SESAME Research Profile. For the Centres for Research Training 2018 Call, **Lead and Co-Applicants** are required to link their SESAME Research Profiles to an ORCID ID **before an application can be submitted**.

9.3. Expression of Interest

Applicant groups intending to submit a full proposal application to the call *must* prepare an **Expression of Interest** using the template in Section 13. This **must be submitted to crt@sfi.ie by the Research Office of the Host Research Body of the Lead Applicant no later than the 26th June 2018, 13:00 Dublin, Ireland local time**. Submission of this Expression of Interest is mandatory and full proposals will not be accepted from applicant groups for whom this information has not been received.

Expressions of Interest will not be assessed for eligibility or quality. Applications will not be declined at this stage of the process. However, where SFI deems that there is significant overlap between the proposals outlined in the Expressions of Interest, the names and research bodies of those lead applicants, and the titles of the proposed SFI Centres for Research Training may be shared between those applicants so that they may consider submission of a combined or refocused application. No

¹⁹ <http://orcid.org/>

further information will be shared. By submission of an Expression of Interest to SFI, applicants consent to sharing of this information.

9.4. General Guidelines for Preparation of a Full Proposal

The Full Proposal Programme Document should be formatted in accordance with the general guidelines specified below. Applications to the Centres for Research Training programme consist of a proposal submitted online through SESAME to SFI by the Research Office of the applicant’s research body. Applicants should carefully follow the instructions below and in the SESAME Researcher User Guide to complete the various sections of the application. A checklist is provided in Appendix A at the end of this document. Please contact your Research Office well in advance in order to obtain registration details for SESAME.

- **All text in uploaded PDFs** should be provided in Times New Roman font or similar, with minimum font size of 12, and at least single-line spacing as well as a minimum margin size of 2.5cm. Text in diagrams may be in any clearly legible font.
- Uploads in SESAME must be submitted in **Adobe or Microsoft PDF format only.**
- The number of pages in uploads must not exceed the specifications for any given section. **Applications that do not comply with these requirements will be deemed ineligible and will be returned without review.**
- Appendices or other unsolicited documentation are not permitted. **Applications that include such unsolicited documentation will be returned without review.**
- The currency to be used is the **Euro (€).**

Applicants must upload the following documents under “Programme Documents” during submission of their applications. As detailed above, all documents should be uploaded in PDF format. Applicants are recommended to submit a single, merged PDF to ensure that the final document included in the application appears in the format and order they intend. All documents will be checked that they adhere to page limits and those that do not will be returned without review.

Section	Page Limit
Research and Training Programme (incl. references)	15 pages
Indicative Student Training Programme	2 pages
List of all supervisors	n/a
Impact Statement	3 pages
Support from Host Research Body(ies)	2 pages
Budget templates	n/a
- Student budget	
- Operational budget	
- Centre for Research Training budget	
Budget justification	3 pages

Applications not adhering to these requirements, or with incomplete content, will be deemed ineligible and will not be accepted for review, regardless of the date of submission.

It is the responsibility of the applicant to ensure that eligible proposals are received by SFI on, or before, the deadline indicated. In order to safeguard against ineligibility, applicants are reminded to adhere rigorously to the guidelines in the call documentation and to review the proposal document prior to submission in SESAME.

Applications cannot be withdrawn and subsequently modified for re-submission in the same call.

9.5. Eligibility Questionnaire

Lead Applicants are required to complete the eligibility questionnaire upon commencing an application to the Centres for Research Training 2018 Call (see Section 6 for eligibility details).

Please note that the Lead Applicant completes the eligibility questionnaire on his/her behalf as well for the Co-Applicant(s), where applicable.

9.6. Proposal Summary

a) Proposal Title

The proposal title should clearly convey the nature of the research to be undertaken, in up to 30 words. **The title must begin with the words “SFI Centre for Research Training”.** The title should not contain confidential details, given that the titles of funded proposals are published by SFI.

After entering the Proposal title and selecting “Save Draft” a Proposal ID is automatically generated by SESAME. Additional fields now appear in the SESAME application form.

b) Duration of Award Requested

Enter the duration (in months) of the award requested. SFI Centres for Research Training will be 90 months in duration (6 months is allowed for set-up and recruitment in advance of the first intake of students in the academic year 2019/20). Please note that you must select 96 months in the Sesame application form, but the award will have a duration of 90 months and costs may be requested only for this period.

c) Primary Priority Area

Select the Priority Area to which the proposed research most closely aligns with. This must be one of the three Priority Areas under the ICT Theme to align with the thematic area.

d) Secondary Priority Area

If your proposal also aligns with another Priority Area, please select it here.

e) Research Area (Primary)

Select a primary SFI research area from the drop-down menu, which best describes the proposed research.

f) Research Area (Secondary)

Select a secondary SFI research area from the drop-down menu, which best describes the proposed research.

- g) How does the proposal align with SFI's legal remit**
Use the textbox provided to describe (max. 250 words) how their proposal aligns with SFI's legal remit.
- h) Ethical Issues**
Applicants are required to answer the questions related to Ethical Issues in the Sesame Application Form.

9.7. Lead/Co-Applicant Details

There must be a lead applicant and two co-applicants (i.e., three Applicants in total) associated with each application. In cases where there are more than three institutions involved in the application, an additional co-applicant per institution may be included.

- a) Applicant Commitment to Project**
Indicate the percentage time commitment, as a percentage of the total working time of the Applicant, to the proposed Centre for Research Training. This should represent a substantial time commitment to the overall management of the Centre for Research Training.
- b) Applicant CV (max. 6 pages)**
A CV of the Applicant, prepared using the template provided in Section 11, must be completed and uploaded.
- c) Publications to Date**
Provide summary information on the total numbers of publications to date. Values should be entered for the number of publications attributed directly to the Applicant (see Section 6 for the eligibility criteria relating to publications).
- d) Supervisory Experience**
Provide summary information on supervisory history of the Applicant to date. Indicate the total numbers of graduated MSc and PhD students, the number currently under supervision, and the number of staff currently under supervision.

To add Co-Applicants to a proposal, **enter their surname and SESAME SFI PIN**. This will allow them access to the draft proposal.

The Co-Applicant(s) must login to SESAME to provide details relating to the summary of publications, and the supervisory experience, as is the case for the Lead Applicant; in addition, they must agree to the Terms and Conditions of the proposal, as part of this login procedure.

SESAME does not permit two individuals to concurrently modify a proposal. The Lead Applicant must close the proposal to allow the Co-Applicant to make modifications, and vice versa.

Please note that the Co-Applicant and/or the Lead Applicant may choose to complete fields or upload documentation that are common to both applicants (e.g., scientific summaries, research descriptions, etc.); **however, only the Lead Applicant can submit an application.**

9.8. Expired, Current and Pending Support of Lead Applicant and Co-Applicant(s)

The Lead Applicant and Co-Applicant(s) must report on expired, current and pending funding.

- The applicant should include details of any financial support received over the previous ten years. This should include competitive research funding received from funding agencies (international and national), charities, industry, etc.
- For each current and pending grant listed, the applicant should provide a brief description of the research. Applicants must also indicate their time commitment to these other projects, as a percentage of their total working time.
- For pending grants, please include the expected decision date in the description box.
- If the applicant is solely a Collaborator on a research project, the grant should not be included here; only awards where the applicant is either the Principal Investigator or Co-Investigator should be listed.
- The portion of research funding claimed in an applicant's name must be an accurate and fair reflection of their responsibility in the projects listed and will be verifiable as such. SFI may conduct audits to verify such claims and reserves the right to reject proposals where the above principle of proportionality is not observed.
- This section of the proposal will be reviewed as part of the applicant's track record. Applicants with extremely large numbers of expired grants over the previous ten years may be selective with which funding grants to include in this section. The most prestigious grants and those most relevant to the proposed research should be included.

Research funding may be added directly to the application or added from the applicant's profile (see the SESAME Researcher User Guide). If this section is left blank it will indicate that the applicant has NO expired, current or pending funding. Both the Lead and Co-Applicant(s) need to complete this section within SESAME.

Please ensure that research funding added to the profile of the Lead Applicant, or the profile of the Co-Applicant, has actually been included in the application.

The applicant must complete the textbox detailing potential overlap between current and pending funding and the proposed research in this application. For each current and pending grant listed above, the applicant must clearly indicate any overlap with this application.

9.9. Named Supervisors

Named Supervisors are included as Collaborators, selecting the category "Funded Investigator". Include the name, contact information and other requested details for all Named Supervisors. Only academic Named Supervisors will be considered. Co-supervision by an industry partner is permitted, but these members of the Centre for Research Training should be included as a Partner Organisation (see below).

CVs (max. 1 page), prepared using the template in Section 12, **must** be uploaded for all Named Supervisors.

At the time of application, it is expected that a sufficient number of Named Supervisors are included to demonstrate the capacity of the Centre for Research Training to accommodate the requested number of students. However, during the course of the award, additional Named Supervisors may be added to the Centre for Research Training. A process for the inclusion of new Named Supervisors must be put in place. New Named Supervisors must be approved by SFI before inclusion in the Centre for Research Training.

9.10. Partner Organisation(s)

Partner Organisations are included as Collaborators, selecting the category “Academic” or “Industrial” as appropriate. Include the name, contact information and other required details of partner organisations, if any.

Once all collaborator information has been entered, the collaborator may then be associated with the proposal by the Lead Applicant.

9.11. Main Body of Proposal

a) Keywords (max. 15)

List a number of descriptors (max. 15) that best characterise the subject of your proposal.

b) Scientific Abstract (max. 200 words)

Provide a summary of the proposed vision of the Centre for Research Training.

c) Research and Training Programme (max. 15 pages)

Applicants are requested to provide a description of the proposed research programme structured according to the headings below.

In the preparation of this section, applicants should ensure that their proposal reflects the Guiding Principles for SFI Centres for Research Training provided in Section 2. Applicants should carefully consider the review criteria in Section 16 to ensure that sufficient information is presented for the reviewers to assess their application in all aspects.

1. *Vision for the Centre for Research Training*
2. *Applicant Group and Research Environment*
3. *Training programme*
4. *Engagement with enterprise and mobility*
5. *Execution and Delivery of the Centre for Research Training*

A full list of all references should be provided within the 15-page Research and Training Programme. The reference list should include the following details: author(s), title of article, name of publication, date of publication, and other appropriate details (such as volume, pages).

d) Indicative Student Research and Training Programme (max. 2 pages)

The indicative student research and training programme should outline the activities that a typical student in the Centre for Research Training will undertake during their research degree programme. Please include whether elements are mandatory/optional/cohort-based; how many ECTS credit points would be associated with an activity, if applicable; when the student would likely undertake them; what the expected learning outcomes will be; and whether they will be delivered as part of the standard structured programme through the host Research Body where the student is enrolled or whether it will be delivered through the Centre for Research Training. Any other relevant training elements not included in this indicative programme should also be included in this document.

e) List of supervisors

Provide a tabular list of all applicants and supervisors, including their host institution and department, and the title of a project they might offer as part of the Centre for Research Training.

f) Impact Statement (max. 3 pages)

The Impact Statement should be as specific as possible and provide information that reviewers will find helpful in assessing the potential impact of the proposed research activity. Appropriate milestones and deliverables associated with the potential impact should be indicated; see Section 8 for further details.

g) Support from the Host Research Body(ies) (max. 2 pages)

Describe the infrastructure, facilities space and services to be provided by the Host Research Body(ies). This should include details of the office, laboratory, computing, animal or other facilities as necessary, where the research will be done, including equipment that will be available, where relevant. Training courses, career development supports, involvement of graduate studies offices, or any other relevant contributions to the provision of postgraduate education should be included here.

As described in Section 5.1, overheads will be payable to Host Research Body(ies) to deliver the most competitive programmes of research and training through the SFI Centres for Research Training. Overheads must be used for the provision of services, training and support over and above the costs of hosting students already covered by payment of their fees. Host Research Body(ies) must clearly describe how overhead income will be used to support the operation, sustainability and impact of the Centre, and to support strategic institutional and international collaboration, recruitment of students and enhancement of the student experience.

The Host Research Body should also comment on how it will support the Centre Director, and describe the reporting structure which has been / will be put in place within the Research Body.

In addition, a letter of support must be included from the Lead Applicant's Host Research Body and from the Host Research Body of the Co-Applicants and Named Supervisors, if different (see letters of support section).

h) Proposed Budget

Applicants are required to provide the following budgetary information through completion of the **Excel Budget Template** provided on the SFI Centres for Research Training webpage²⁰:

- (i) A detailed budget for the cost of a single student in the Centre for Research Training over the course of their degree.
- (ii) A detailed budget for the operational costs of the Centre for Research Training. In this section, there are corresponding tables for cash and in-kind contributions from partner organisations. Such financial contributions will not contribute to the minimum number of additional students required for an application to this programme.
- (iii) A summary budget of the SFI request will be generated for inclusion in the SESAME budget template.

²⁰ www.sfi.ie/funding/funding-calls/centres-for-res-training

- (iv) A further summary budget of the total Centre for Research Training including partner organisation contributions will also be generated and should be included in the proposal document as an additional page.

The completed budget template should be uploaded in Microsoft Excel format to SESAME using the Budget Template upload button.

Applicants must follow SFI's Grant Budget Policy.⁷ Budgets should be prepared on a project year basis (i.e., Year 1, Year 2, Year 3 etc.) at the application stage and should cover 4 cohorts of students.

Staff costs

The only permitted staff costs are stipends and fees for research postgraduate students and for a programme manager. No further staff costs will be considered. Requests for non-EU fees for postgraduate students are not permitted under the SFI Centres for Research Training Call 2018. Programme Manager salaries should adhere to institutional scales, which must be provided, and clear rationale and justification must be provided with reference to the relevant role description. The Research Body must make provision for an open and transparent recruitment process.

Equipment

Equipment may not be requested under this programme, with the exception of one laptop or desktop computer for each student.

Materials and Consumables

It is recognised that the exact nature of the research projects will not be known at the point of application, so costs for typical projects should be estimated with clear justification. If the type of projects within a Centre for Research Training may differ significantly, an appropriately averaged cost should be provided in the budget spreadsheet with an explanation provided in the budget justification.

Access Charges

Access charges may be sought for use of infrastructure where SFI pre-approved access charge plans are in place or for use of other shared facilities or national test-beds, which are required as part of the proposed research. The requested access charges should be specified in the budget and justified in the budget justification section.

Note: SFI funding may not be used to fund access to facilities, where access by the research community has already been provided for by alternate Exchequer funding.

Training Costs

The costs of development and delivery of the training programme for the cohort may be requested, with appropriate justification, as outlined in the sections above. Requests may not be made for costs associated with training or support that would be delivered as part of the existing structured programmes within the Host Research Body and covered by the student's fees.

The budget template for costs of an average single student should be prepared using realistic estimates of the research and training costs and reflect the schedule of the research and

training programme. In cases where training will be delivered as a cohort-wide activity, the cost should be included as the average cost per student.

Placement costs for travel and subsistence may be requested at a maximum amount of €1,800 per student per month. It is expected that placements will typically last for three months. For longer placements, justification should be provided. Placements are part of the student's training programme and costs for longer-term placements to complete significant elements of the research project are not permitted. Additional funding requests to cover extensions to the duration of research degrees on the basis of having undertaken a placement are not permitted.

i) Budget Justification (max. 3 pages)

All information required to complete the Budget Justification can be found in the previous sections and in Section 7 of SFI's Grant Budget Policy.⁷ This document must be uploaded as part of the "Programme Documents" section of the SESAME application form.

9.12. Letter(s) of Support

Applicants must include the following letters of support with their proposals:

- A letter of support from the Research Body of the Lead Applicant and each Co-Applicant. These letters should comment on the infrastructure, services and support available to the proposed Centre for Research Training. They should also name the Lead Applicant, Co-Applicant(s), and/or Named Supervisor(s) from their Research Body who are listed on the application and include an endorsement of their eligibility. The letter of support from the Lead Applicant's Research Body should also describe what services and supports will be made available to the proposed Centre for Research Training Director.
- A letter of support from each Partner Organisation outlining their intention to participate in the proposed Centre for Research Training. Letters of support should outline any previous history of collaborations with the academic applicants and outline how the partnership aligns itself with the current and future needs of the Partner Organisation. If the Partner Organisation is making a cash or in-kind contribution, the letter of support should describe the level of commitment, both in terms of cash and in-kind contributions and the time period for which the contribution is being made. At the application stage, applicants will be required to detail commitments that account for the minimum number of leveraged students in the first cohort of postgraduate students. Applicants will then be expected to maintain non-SFI contributions as described above, and failure to do so on an on-going basis may result in a reduction in or termination of SFI's contribution to the budget.

Letters of Support can be uploaded directly to the Letter(s) of Support section of the SESAME application form.

9.13. Excluded Reviewers (max. 3)

Provide up to three individuals or organisations (e.g., companies) that you request SFI to exclude from acting as postal reviewers for reasons of competition.

9.14. Research Body Approval

It will be noted that Research Body submission of an application represents their approval of an application and agreement, as well as those of the Lead and all Co-Applicants, to the SFI Grant General

Terms and Conditions²¹. Submission must only be made by an authorised Research Body representative. In particular, the Research Body is approving:

- Eligibility of each Lead Applicant/Co-Applicant and Named Supervisor;
- That the Lead Applicant and each Co-Applicant are recognised as an employee of one of the collaborating the Research Bodies for the duration of the award;
- That the requested budget including salaries/stipends, equipment, travel and consumables are in line with accepted institutional and national guidelines;
- The availability of infrastructure within the institution as outlined by the applicant group in the research proposal;
- That the proposed research programme has not been funded by other sources;
- That relevant legal and ethical approval has been or will be sought and will be granted prior to the award commencing;
- That the relevant licences will be in place at the time of award;
- That the details provided in relation to research funding history (i.e., current, pending or expired grants, as detailed in the application) are valid and accurate;
- That permission from all team members and collaborators has been obtained, such that SFI may receive their personal information, and may process such data for the purpose of peer review;

9.15. Applicant Agreement to Terms and Conditions

It should be noted that submission of an application represents an agreement to SFI's Grant General Terms and Conditions²¹.

9.16. Proposal Submission

A PDF of the proposal is available in SESAME and should be reviewed prior to submission to enable validation of an application. The responsibility for verifying that the proposal is ready for submission lies with the Applicant(s) in this regard. A submission is made initially to the Research Office of the Lead Applicant for approval, prior to final submission by the Research Office to SFI.

Proposals must be received by SFI no later than 5 September 2018, 13:00 Dublin, Ireland local time.

Please contact the Research Office well in advance in order to obtain registration details for SESAME and to become familiar with any internal Research Body submission deadlines.

After the submission deadline, applications will not be accepted by SESAME. Therefore, they will not be reviewed by SFI.

Applicants will receive a notification from SESAME periodically when the status of their proposal changes. Alternatively, the status of a proposal (e.g., where a proposal is pending Research Office approval or is under review at SFI) is displayed in SESAME.

²¹ <http://www.sfi.ie/funding/sfi-policies-and-guidance/sfi-general-terms-and-conditions/>

10. SFI Policies and Positions

In advance of applying to any SFI programme, applicants are expected to be familiar with all relevant national and SFI policies including, but not limited to, the following:

Clinical Trials – Research programmes that include clinical trials as part of the study (see Section 5.6) must adhere to the **SFI Clinical Trial and Clinical Investigation Policy**,²² as well as with the requirements set out by the Health Products Regulatory Authority (HPRA).

Animal Usage – Applicants intending to use animals in their research projects are obliged to comply with the **SFI Use of Animals in Research Policy**,²³ and should also ensure that their studies are in line with the HRA's position on the use of animals in research.

Research Integrity – SFI places high importance on ensuring research integrity and endorses the **National Policy Statement on Ensuring Research Integrity in Ireland**.²⁴ All applicants and institutions are expected to abide by this policy and the **European Code of Conduct for Research Integrity**.²⁵

Doctoral Education – For postgraduate students funded by SFI, the host Research Body is expected to adopt the principles, standards and good practice for doctoral education as described in the **National Framework for Doctoral Education (2015)**,²⁶ which SFI has endorsed.

Intellectual Property Management – *Intellectual Property (IP) should be managed according to the policies set out in the Government publication: Inspiring Partnership - the National IP Protocol 2016*.²⁷ *In cases where additional guidelines are specified by SFI they must also be followed. The IP arrangements are the responsibility of the Research Body and shall reflect the collaborative nature of the project, the level of cash and in-kind commitment made by the Industry Partner and compliance with State Aid Regulations.*

Gender Strategy – Research should fully consider potential biological sex and socio-cultural gender dimensions as key analytical and explanatory variables. As articulated in the **SFI Gender Strategy**,²⁸ applicants are recommended to demonstrate that they have considered any potential sex/gender aspects in their proposed research programme.

Appeals Process - This policy establishes procedures and responsibilities for the appeal of the declination of a proposal by SFI.²⁹

State Aid - All SFI funding granted under this call will be subject to and must be compliant with State aid law. As such, proposals must be designed to ensure that any funding received from SFI does not, directly or indirectly, give rise to the granting of State aid.

Potential applicants are referred to the guidance provided by the European Commission in Section 2 of its **2014 Framework for State aid for research and development and innovation (2014/C 198/01)**.³⁰ If in any doubt as to the interpretation or application of this guidance, potential applicants are advised to seek independent legal advice.

²² <http://www.sfi.ie/funding/sfi-policies-and-guidance/ethical-and-scientific-issues/index.xml>

²³ http://www.sfi.ie/resources/SFI-Policy-on-the-Use-of-Animals-in-Research_June_2016.pdf

²⁴ <http://www.iaa.ie/wp-content/uploads/2014/06/National-Policy-Statement-on-Ensuring-Research-Integrity-in-Ireland-2014.pdf>

²⁵ https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf

²⁶ http://hea.ie/assets/uploads/2017/04/national_framework_for_doctoral_education_0.pdf

²⁷ <http://www.knowledgetransferireland.com/ManagingIP/KTI-Protocol-2016.pdf>

²⁸ <http://www.sfi.ie/resources/SFI-Gender-Strategy-2016-2020.pdf>

²⁹ <http://www.sfi.ie/funding/sfi-policies-and-guidance/other/>

³⁰ [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0627\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0627(01)&from=EN)

Child Protection – Where relevant, applicants and Research Bodies are required to comply with the provisions of the **Children First Act 2015**,³¹ and the **National Guidance for the Protection and Welfare of Children 2017**.³² It is the responsibility of the Research Body to ensure that they are compliant with all applicable law.

Data Protection Policy – **The General Data Protection Regulation** is a legal framework that sets out guidelines for the collection and processing of personal information of individuals within the European Union.³³ Applicants are advised that they must be compliant with this regulation if they collect or process personal data.

SFI may collect, use and disclose personal data provided in the application and/or otherwise obtained under, or in connection with, the application for processing the submission, for the performance of its statutory powers and functions, and for the general activities of SFI. Further details regarding SFI's collection, use and disclosure of personal data, and the rights of individuals with respect to any personal data held by SFI, are available in the **SFI Privacy Statement**.³⁴

During peer-review procedures, information may be sent to external experts in countries outside of the European Economic Area, including countries that are not recognised by the European Commission as having adequate data protection laws. By submitting an application to SFI, the Research Body and members of the Research Team are agreeing that they consent to the processing and transfer of personal information in this way.

During the application process or at any time thereafter, SFI may contact the Research Body, the Principal Investigator, or any member of the Research Team with regard to funding opportunities, activities or events organised by SFI or other relevant bodies, or for the purposes of monitoring and evaluation (including, but not limited to, the collection of scientific data or data relating to the application process). SFI may choose to authorise a third party to contact the Research Body, the Principal Investigator or any member of the Research Team on its behalf.

Current SFI policies and positions will be reviewed on a regular basis; applicants are advised to consult the policy information in advance of submission of a proposal.

³¹ <http://www.irishstatutebook.ie/eli/2015/act/36/enacted/en/pdf>

³² http://www.tusla.ie/uploads/content/Children_First_National_Guidance_2017.pdf

³³ <https://www.euqdp.org/>

³⁴ <http://www.sfi.ie/privacy/>

11. Lead/Co-Applclicant Full Proposal CV Template (max. 6 pages per applicant)

Applicant Details (max. 3 pages)

NAME AND CONTACT DETAILS

CAREER PROFILE (Education and Employment)

Include details of any adjunct positions held and include year of PhD

If you wish you may provide details of any career breaks or periods of part-time work, for example parental or long-term sick leave.

HISTORY OF MENTORING AND SUPERVISION

Please outline your experience and vision for supervision of research masters or doctoral students. This information will complement details on numbers of current and completed MSc and PhD students, directly under your supervision, as well as details of previous and current post-doctoral staff, that have been directly entered into SESAME. If relevant, please discuss the destinations of previous students that you have supervised.

RESEARCH AREA

*Briefly describe how your research aligns with the research area of the Centre for Research Training. **Please include the title of a project that you could potentially offer to a student enrolled in the Centre for Research Training.***

KEY ACHIEVEMENTS (Research and Impact)

Give details of up to five achievements that have provided significant impact or which have greatly influenced any field in science, technology, engineering or mathematics. Any type of achievement may be included in this section, and applicants are encouraged to elaborate on the various ways in which they have influenced researchers and their disciplines, or demonstrated significant economic and/or societal impact(s). For each example, provide an outline of the stated achievement, what specific role was played by the applicant, and how the field and, where relevant, the wider community and society have benefitted or have been influenced as a result. References to published material may be added as required.

Publication Details (max. 3 pages)

SENIOR-AUTHOR PUBLICATIONS

Detail up to 10 senior-author (first, joint-first or last author) primary research publications, which will confirm, where relevant, that the applicant meets the eligibility requirements for publications for this programme. Refer to the appropriate section of this call document for details on senior-authorship requirements. Note that publications where the applicant claims joint-first authorship will only be accepted as senior-author publications where the article clearly verifies this.

OTHER PUBLICATIONS

Applicants should list any other publications (where they are a senior author or otherwise) that they wish to be considered as part of this application. Applicants should ensure that their primary research outputs are prioritised, but reviews, essays and other secondary research articles may also be listed.

12. Named Supervisor CV Template (max. 1 page per supervisor)

NAME AND CONTACT DETAILS

CAREER PROFILE (Education and Employment)

Include details of any adjunct positions held and include year of PhD

If you wish you may provide details of any career breaks or periods of part-time work, for example parental or long-term sick leave.

HISTORY OF MENTORING AND SUPERVISION

Please outline your experience and vision for supervision of research masters or doctoral students. Please include numbers of current and completed Masters and PhD students, directly under your supervision, as well as details of other staff currently under your supervision:

Masters Students graduated	PhD Students graduated	Masters Students currently supervising	PhD Students currently supervising	Other Staff currently supervising

If relevant, please outline the destinations of previous students that you have supervised.

RESEARCH AREA

*Briefly describe how your research aligns with the research area of the Centre for Research Training. **Please include the title of a project that you could potentially offer to a student enrolled in the Centre for Research Training.***

SELECTED PUBLICATIONS

Detail up to 3 senior-author (first, joint-first or last author) primary research publications, which will confirm that the Named Supervisor meets the eligibility requirements for publications for this programme. Refer to the appropriate section of this call document for details on senior-authorship requirements. Note that publications where the applicant claims joint-first authorship will only be accepted as senior-author publications where the article clearly verifies this.

13. SFI Centres for Research Training Expression of Interest

PROGRAMME NAME: SFI Centres for Research Training 2018	CLOSING DATE FOR RECEIPT OF EXPRESSIONS OF INTEREST 26 th June 2018, 13:00 Dublin, Ireland local time (to be submitted by the Research Office of the Host Research Body of the Lead Applicant by e-mail to crt@sfi.ie)
TITLE OF PROPOSAL (up to 30 words) SFI CENTRE FOR RESEARCH TRAINING IN...	
FULL NAME OF LEAD AND CO-APPLICANT(S)	NAME OF HOST RESEARCH BODY(IES)
ALIGNMENT WITH THEMATIC AREA (up to 250 words) <i>Please describe clearly how the proposed SFI Centre for Research Training aligns with the thematic area of this call.</i>	
ABSTRACT (up to 500 words) <i>Please briefly outline the vision for the proposed research and training programme to be delivered through the SFI Centre for Research Training.</i>	

14. Application Checklist

Section	DESCRIPTION	REQUIREMENTS
Proposal Summary	Title	Up to 30 words
	Duration	90 months
	Select Primary and Secondary Priority Areas	Select from list
	Select Primary and Secondary Research Areas	Select from list
	Justification of alignment with SFI's Legal Remit	Max. 250 words
	Provide requested information on Ethical Issues	See Sesame application for details
Lead/Co-applicant details	Complete mandatory Sesame Profile information	Mandatory profile fields marked in red
	ORCID iD	Link Sesame profile to ORCID iD
	Percentage Time Commitment	
	CV – use template provided	Max. 6 pages
	Summary info – publication/ supervisory	
Named Supervisors details	Name/Contact details etc.	
	CV for each Named Supervisor – use template provided	Max. 1 page
Partner Organisation(s) Details	Name/Contact details etc.	
Expired, Current or Pending Support of Applicants	Expired, Current & Pending Funding	Max. 1000 words
Main Body of Proposal	Keywords	Max. 15 words
	Scientific Abstract	Max. 200 words
	Research and Training Programme (incl. references)	15 pages
	Indicative Student Training Programme	2 pages
	List of all supervisors	n/a
	Impact Statement	3 pages
	Support from Host Research Body(ies)	2 pages
	Budget templates (use Excel template provided) - Student budget - Operational budget - Centre for Research Training budget	n/a
	Budget justification	3 pages
Budget	Complete budget form and upload Excel template	n/a
Letters of Support	Partner Organisation(s)	Max. 2 pages
	Host Research Body of the Lead Applicant	Max. 2 pages
	Host Research Body of Co-Applicant(s) if in a different Research Body	Max. 2 pages
Excluded reviewers	Up to three individuals may be excluded from reviewing the full proposal	

Section 3. Proposal Review

15. Proposal Review Process

The submission of an application to SFI shall be construed as consent by the applicants to participate in the peer review process.

Proposals will be assessed through a two-stage review process comprising postal review of a full proposal followed by interview panel review of applicant groups, both carried out by international experts.

For each proposal under evaluation, SFI will solicit between four and six written reviews (i.e., postal review) from international experts in the appropriate STEM field. This will include reviewers who have experience in postgraduate training and education. Reviewers will appraise the application based on the review criteria set out below.

Based on the evaluations submitted by the postal reviewers, SFI will select those proposals that have sufficiently demonstrated the capacity to meet the objectives of the programme. Applicants whose proposals receive sufficient support based on the ranking of the postal reviewers will progress to the Interview Panel stage. Applicants not selected to progress to the Interview Panel will be notified at this stage.

The Interview Panel will comprise individuals with leadership experience in delivering postgraduate training and may also include representatives from enterprise sectors relevant to the thematic area of the call. Details of the structure and operation of the final panel will be released when invitations are issued.

The Interview Panel will be provided with all documentation relating to each application, including the proposal, budget and postal reviews. The Interview Panel will use the same criteria as the Postal Reviewers to assess the application. They will be tasked with identifying fundable proposals and will provide SFI with a list of such proposals ranked in order of priority for funding. The ranked list of fundable proposals will inform the final decision by the SFI Executive Committee and SFI Board as to which Centres for Research Training proposals are to be funded.

Selection of reviewers is at the sole and exclusive discretion of SFI. The identity of experts who serve as postal reviewers shall remain confidential and shall not be disclosed to the applicants. However, decisions resulting from the evaluation will be provided to the applicants, including relevant review comments, following the conclusion of the SFI review process. SFI shall not be liable for the release of information concerning proposals to third parties by those individuals involved in the merit review process.

Should circumstances arise, SFI reserves the right to modify the review process. Applicants will be notified of any relevant modification to the review procedure. The final funding decisions are at the sole and exclusive discretion of SFI.

16. Review Criteria

Applications to the 2018 SFI Centres for Research Training Programme will be evaluated by rigorous international peer review on the basis of the following high-level criteria:

1. **Quality, significance and relevance of the strategy and vision for the Centre for Research Training;**
2. **Quality, significance and relevance of the Applicant Group and Research Environment;**
3. **Quality, significance and relevance of the proposed training programme, including engagement with enterprise and measures to increase mobility;**
4. **Quality, significance and relevance of the proposed execution and delivery of the Centre for Research Training including the value for money;**
5. **Quality, credibility and relevance of the Impact Statement.**

Each of the five review criteria will carry equal weighting (20%). A more detailed description of the review criteria is provided below. Applicants are encouraged to consider these carefully in the preparation of their application.

1. **Quality, significance and relevance of the proposed research area and strategy/vision for the Centre for Research Training, including:**
 - **Alignment to strategic priorities** of the Centres for Research Training Call;
 - Justification of **need for postgraduate researchers** in this area in Ireland, including ability to recruit sufficient students and demand in the workforce;
 - Justification of **need for cohort** approach;
 - **Vision** for what the Centre for Research Training will deliver for Ireland;
 - Excellence of proposed **research vision** of the Centre for Research Training.
2. **Quality, significance and relevance of the Applicant Group and Research Environment, including:**
 - Quality of lead and co-applicants, including **track record of leadership and postgraduate education**;
 - Ability of applicants to **deliver vision** of the Centre for Research Training;
 - Quality and **cohesiveness** of overall applicant group including Named Supervisors;
 - Quality of research environment, including **critical mass of expertise**, access to **state-of-the-art facilities** in area of research and to relevant **international and intersectoral networks**.
3. **Quality, significance and relevance of the proposed training programme, including engagement with enterprise and measures to increase mobility:**
 - Quality and **innovativeness of training programme** to deliver learning outcomes;
 - Demonstrable **added value of the Centre** over and above existing and established research postgraduate training opportunities;
 - Quality of actions to ensure **horizontal and vertical cohesion of cohort**;
 - Quality of proposed **career support** provisions;
 - Relevance and depth of **engagement with enterprise** on the design and delivery of the training programme;
 - Quality and relevance of proposed **placement scheme**;
 - Access to relevant **enterprise and international networks**;

- 4. Quality, significance and relevance of the proposed execution and delivery of the Centre for Research Training including the value for money:**
- Quality of **recruitment** plans for requested number of students, and inclusion of national and international recruitment
 - Appropriateness of proposed **management and governance structures**;
 - In **multi-institutional applications**, how will this aspect of the execution be managed;
 - Quality of **admission/supervision/monitoring/assessment** procedures;
 - Quality of **supports for supervisors**;
 - Quality of **gender and diversity** plans;
 - **Value for money** of requested budget from SFI;
 - Level of **contributions from non-SFI sources**.
- 5. Quality, credibility and relevance of the Impact Statement, including:**
- The likelihood, scale and value of the **societal and/or economic effect** the proposed programme will have for Ireland
 - The relevance of the proposed **stakeholders and beneficiaries** identified in the Impact Statement
 - The plans that the Applicants have put in place to increase the **potential for economic and/or societal impacts**
 - The proposed **timeframe** for the benefits of the research to be realised

Section 4. Award Management

17. Progress Reporting Requirements

The State has made a significant investment via SFI into scientific research and, as such, it is the responsibility of SFI to monitor the progress and outcomes of all the funding it administers. Therefore, all SFI award holders are required to report on emerging outputs and impacts for the duration of their awards and for up to five years beyond. The progress reporting requirements for awards made under the SFI Centres for Research Training Programme are inclusive of **Annual Reports**, completion of the annual stocktake of SFI **Research Outputs** (formerly referred to as the SFI Census) and the completion of a **Researcher Snapshot**.

The annual report is used to monitor the progress of individual awards against the overall objectives of the SFI Centres for Research Training programme and associated Key Performance Indicators (KPIs), as set out in SFI's Strategic Plan, Agenda 2020. Each of the SFI Centres for Research Training call objectives, with expected outputs, is discussed in turn below.

- *To develop a pipeline of highly trained, well-networked research talent in areas of strategic priority for Ireland*

SFI expects awards funded under the SFI Centres for Research Training Programme to develop human capital, knowledge and technologies in industrial and commercial sectors of importance to Ireland, as specified in Government documents such as the Action Plan for Jobs, the Report of the Research Prioritisation Steering Group, Innovation 2020 and Project Ireland 2040. Award holders will be asked to report on how their activities align with defined areas of national economic importance, where relevant, with reference to areas defined in the report of the NRP Steering group, other themes referred to in Innovation 2020 and relevant current government policy.

Award holders will be asked to report on the number of students graduating from the SFI Centre for Research Training. Award holders will furthermore be required to report on the first and subsequent destination of these researchers for five years post-graduation.

- *To establish world-class, cohort-based, interdisciplinary training programmes within environments of research excellence*

It is SFI's expectation that SFI Centres for Research Training maintain the cohort structure throughout each students training. As indicators of cohort activity award holders will be required to report on student driven activities, student contributions to innovation in the cohort training programme and networks. The collaborative, interdisciplinary and cohort-based attributes of the Centres for Research Training will be of particular focus at the mid-term review.

To date, SFI funding has produced high-quality, high-impact publications that have resulted in Ireland rising to be among the top 20 nations in international bibliometric rankings of repute. Agenda 2020 sets a target for Ireland to maintain its position in these rankings. SFI's expectation is that the grants made through the SFI Centre for Research Training Programme will contribute significantly to this target. Award holders are asked to report on all refereed journal and conference publications and international presentations directly supported by the grant. This support must be acknowledged in all publications.

Awards made under the SFI Centres for Research Training programme will be granted with reference to both scientific excellence and impact. In the Strategic Impact section of the annual

report, award holders are provided with a list of 11 impact statements or declarations and are asked to prioritise those that are relevant to the outputs on their award. Narrative must then be provided with additional details justifying the options chosen, with cross reference to relevant metrics included in the Researcher Profile. These data will help towards quantifying the types of impacts arising from the awards SFI has made under the SFI Centre for Research Training 2018 call.

- *To equip postgraduates for ever-evolving workplaces through the provision of transversal, cross-sectoral and discipline-specific skills training programmes and individual career development support*

In addition to encouraging excellence as demonstrated by a range of outputs as described above, it is SFI's expectation that integration within and between cohorts will expose students to the wider scientific relevance of their research, encourage peer-to-peer learning and facilitate them to build networks that will enhance their research, employability and leadership potential. Award holders will be required to report on all training and career support provided to students.

- *To build partnerships with enterprise and other external bodies in the development and delivery of innovative programmes of research and training*

In addition to seeking financial contributions from industrial partners/other external bodies, SFI Centres for Research Training are expected to deepen the intellectual partnership between industry and academia. To that end, award holders are encouraged to co-create training programmes with partner organisations, encourage students to undertake joint projects and publications with partner organisations and facilitate the placement of students within partner organisations.

Award holders will be asked to report on the financial contributions (cash and in-kind) made by partner organisations to the running of the SFI Centre for Research Training and to describe how those contributions supported and facilitated the research and training programme of the SFI Centre for Research Training. Award holders will also be asked to report on the number of joint projects and training modules undertaken with partner organisations, the number of academic publications with partner organisation co-authors and the number of student placements undertaken in partner organisations. Award holders will be asked to report on all academic and enterprise engagements relevant to the award.

- *To enhance intersectoral and international mobility of research postgraduates to promote knowledge transfer and innovation*

Graduates of SFI Centres for Research Training are expected to find employment in a wide range of sectors including those of specific need to Ireland. The mandatory longitudinal tracking of Centres for Research Training graduates previously discussed will facilitate SFI's monitoring of this objective.

As indicators of potential graduate mobility, award holders will be required to report on the number and type of student placements undertaken, the number and type of networking opportunities provided through the training programme, the number of training modules delivered by partner organisation staff as a measure of exposure to different career paths, and the career support provided through the training programme.

- *To leverage non-SFI funding for postgraduates to grow the scale and breadth of the Centre for Research Training*

A key purpose of SFI Centres for Research Training is to increase the number of PhD and Masters graduates in research areas of strategic priority for Ireland.

SFI expects that researchers based in Ireland will obtain research funding from as wide a range of sources as possible. In support of this, award holders will be asked to report on the number of students within the Centre for Research Training supported through non-SFI funding. The full resources to support a minimum of one additional student for every four funded by SFI must be secured by the Centre for Research Training. Applicant groups that secure larger amounts of non-SFI contributions may be viewed more favourably at the mid-term review.

Award holders will be asked to report on any externally funded projects that are secured by the Centre for Research Training. Additionally, award holders will be asked to report on the role of the Centre for Research Training in enabling any further successful applications to Irish, EU or international funding initiatives.

- *To contribute to improving gender balance in all aspects of postgraduate training*

SFI is committed to removing and mitigating any existing or perceived factors that may limit the participation of women in Science, Technology, Engineering and Mathematics (STEM) careers, and to redressing the gender imbalance amongst SFI award holders, of which 28% are female (Source: SFI Research Outputs 2017).

Award holders will be required to report on the gender breakdown of students, Named Supervisors, Lead and Co-Investigators of funded Centres for Research Training. Gender breakdown will be considered as part of progress reviews. Failure to meet targets will require that the Centre for Research Training outline actions to redress any imbalance and may result in partial rescinding of the award.

- *To encourage inter-institutional collaboration and efficiency in the provision of excellent postgraduate student training*

Clear value for money invested is an important consideration for all awards granted by SFI. SFI strongly encourages collaboration between institutions to increase the synergistic benefits to students of the CRT training model and to ensure resource efficiency.

Award holders will be required to report all inter-institutional training programmes, networks and career supports provided to students.

The SFI Grants and Awards Management System, SESAME, is the primary conduit for annual reporting. SFI Centres for Research Training award holders will be requested to submit their annual report by 31st January every year to report on activity during the previous calendar year (January – December). The Standard Report template which is available on SESAME must be used. An additional final report must be submitted (also using the Standard Report template) within 3 months of the expiration date of the award. In addition to the annual report, award holders are also obliged to keep their SESAME Research Profile updated, as the annual stocktake of SFI Research Outputs is drawn directly from the data entered into the Research Profile; this must also be updated and completed by 31st January every

year. SFI reporting procedures³⁵ and information³⁶ on the entry of data into the Research Profile are available on the SFI website.

The reporting requirements for awards made under the SFI Centres for Research Training Programme must be adhered to. Individuals who hold the primary responsibility for reporting and who fail to comply with reporting requirements, run the risk of having their grant payments suspended and their eligibility to apply for funding in forthcoming SFI calls affected.

18. Progress Site Reviews

Each recipient of an SFI Centre for Research Training Award will be subject to progress review assessment performed by international peer reviewers during the period of the award. These progress reviews are typically held at the midway point of the award. The panel is asked to assess the progress and direction of the research and training programme, the quality of the team and partnerships, the management of the budget and the potential impact of the research and training programme. The commitment of the research body as outlined in the letter of support along with progress against the objectives set out for the Centres for Research Training Programme 2018, will also be assessed. The outcome of such a review will be taken into consideration in the assessment of future applications to the Foundation. As stated in the SFI Grant General Terms and Conditions,³⁷ the Foundation reserves the right to terminate an award if, in the opinion of the Foundation, progress is not deemed to be satisfactory.

³⁵ <http://www.sfi.ie/funding/award-management/reporting-procedures/index.xml>

³⁶ <http://www.sfi.ie/funding/award-management-system/>

³⁷ <http://www.sfi.ie/funding/sfi-policies-and-guidance/sfi-general-terms-and-conditions/>