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Science Foundation Ireland

Excellence and Impact

US-Ireland R&D Partnership Programme

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Science Foundation Ireland**



Overview

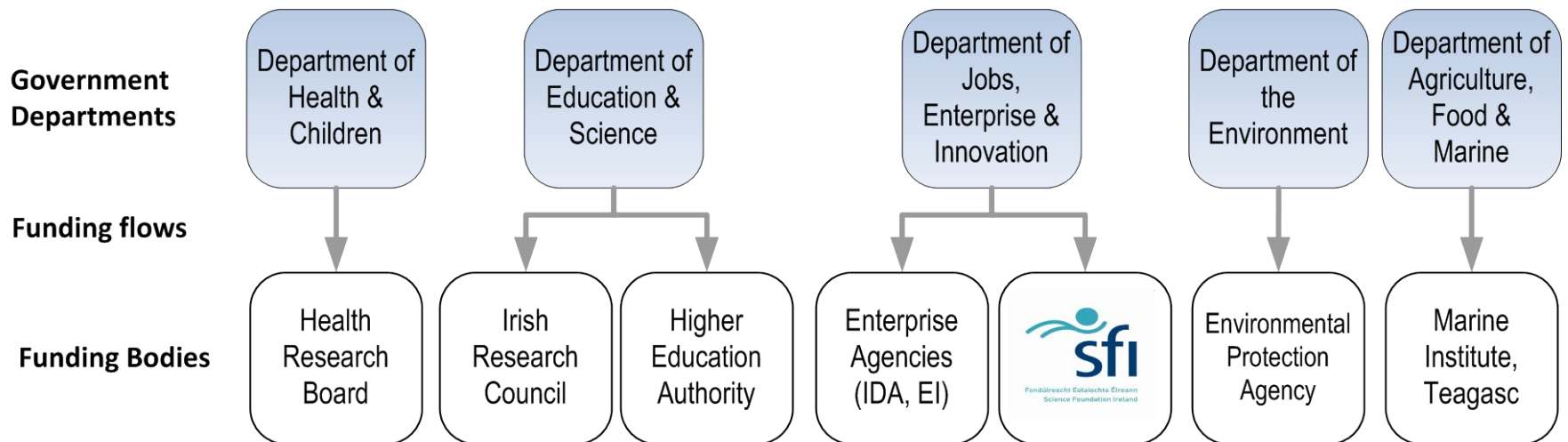
- **SFI**
- **US-Ireland R&D Partnership programme**
 - Foundations, Aims, Themes
- **Investigator-led programme**
- **Planning grants**
- **Centre-to-Centre mechanism**
- **Summary**



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SFI HISTORY & CONTEXT

Irish Funding Agencies



“SFI WILL BUILD AND STRENGTHEN SCIENTIFIC AND ENGINEERING RESEARCH AND ITS INFRASTRUCTURE IN THE AREAS OF GREATEST STRATEGIC VALUE TO IRELAND’S LONG TERM COMPETITIVENESS AND DEVELOPMENT”

Founded in
2000

Officially
established in
2003

€1.7bn
Spend

€2bn
Commitment

by SFI since
2001

As at 31 December 2013

732 Active Awards
with future commitments totaling
€460m

SFI Agenda 2020

Excellence and Impact

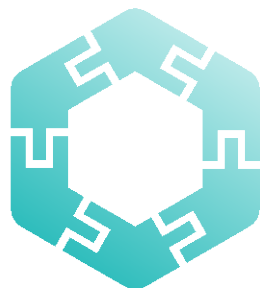


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1 To be the Best science funding agency in the world at creating impact from excellent research and demonstrating clear value for money invested

2 To be the exemplar in building partnerships that fund excellent science and drive it out into the market and society



3 To have the most engaged and scientifically informed public

4 To represent the ideal modern public service organisation, staffed in a lean and flexible manner, with efficient and effective management.





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US-IRELAND R&D PARTNERSHIP PROGRAMME



US-Ireland R&D Partnership Programme

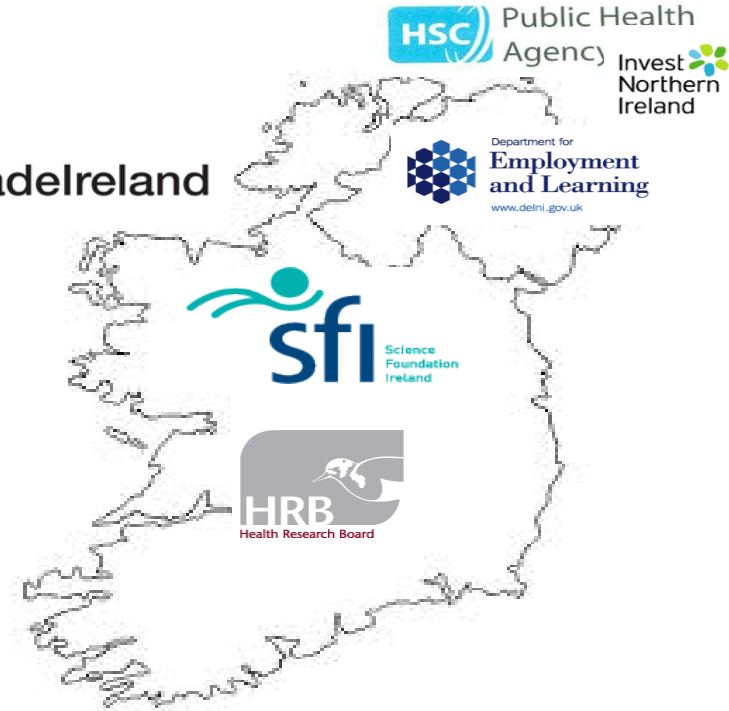


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- A unique initiative involving funding agencies across three jurisdictions: **United States of America (USA), Republic of Ireland (RoI) & Northern Ireland (NI)**.
- Launched in July 2006
- Tri-partite proposal involving at least one PI from each jurisdiction – *'single proposal, single review'*
- The scientific peer review is facilitated by the National Science Foundation (**NSF**) and National Institutes of Health (**NIH**)
- The relevant funding agencies contribute to the research costs of researchers in their jurisdiction
- Pre-approval from RoI and NI funding agencies required



Partner Agencies/ Jurisdictions involved



**US-Ireland R&D Partnership reflects the principles of the Good Friday Agreement -
Equality, partnership and mutual respect**

Aims

- Increase level of collaborative R&D by linking scientists and engineers in partnerships across the three jurisdictions
- To address crucial technology, environmental and healthcare research questions
- That will
 - generate valuable discoveries and innovations, transferrable to the marketplace;
 - lead to enhancements in health, disease prevention and healthcare; and
 - expand educational and career opportunities in science and engineering.
- **Five thematic areas:** Sensors and Sensor Networks, Nanoscale Science and Engineering, Telecommunications, Energy & Sustainability, and Health



Application Process

- Each proposal must have a minimum of one Principal Investigator from each jurisdiction
- Joint “tri-partite” proposal is submitted to NSF/NIH from the U.S. PI’s home institution.
- PIs from Ireland and Northern Ireland will be identified as Senior Personnel in the proposal
- BEFORE the proposal is submitted to the NSF/NIH it must be submitted to the RoI and NI funding agencies *no later than 6 weeks* in advance of the NSF/NIH deadline for pre-approval
- Additional **pre-approval step** required for proposals to be submitted to the **NIH** – 12 weeks in advance of proposal submission

SFI Role in Review Process

- Pre-approval of RoI budget
- Ensures that proposal is within remit
- Ensures that the RoI applicant is eligible
- Ensures that there is significant contribution from the RoI investigator
- Acts as a gateway to the HRB for relevant health-related proposals
- If supportive, SFI writes a **funding commitment letter** outlining budget approval, subject to NSF/NIH approval – letter to be included in the full proposal application to NIH/NSF
- Liaises with the NI and US agencies
- Informs the US agency about the application and sends the funding commitment letters to them

NIH/NSF Role in Review Process

- Once pre-approved by the RoI and NI agencies, the Irish agencies send the **Funding Commitment Letters** to the US funding agency which are included in the full proposal submission to NSF/NIH
- Proposals are submitted via the US host institution and evaluated in accordance with the standard *NSF/NIH merit review criteria*
- Review will be conducted using the *NSF/NIH merit review process*, including conflict of interests and confidentiality policies.
- Inform US-Ireland partner agencies **IF the application is to be funded** and send the reviews/summary statement – does not happen if the application is not successful

SFI-Applicant eligibility criteria



- Must have a contract that covers the period of the grant at an eligible research body
- The applicant must hold, or have held, an SFI research award as either lead Principal Investigator (PI) or co-PI.
- If the applicant is not an SFI awardee, s/he must be/have been lead PI on a **competitively awarded, internationally peer-reviewed research grant** worth more than €200k.
- Only one US-Ire award per person: if an applicant has been successful in securing a US-Ire award, they will not be entitled to apply for a second award until the last 18 months of their first award.

Budget available



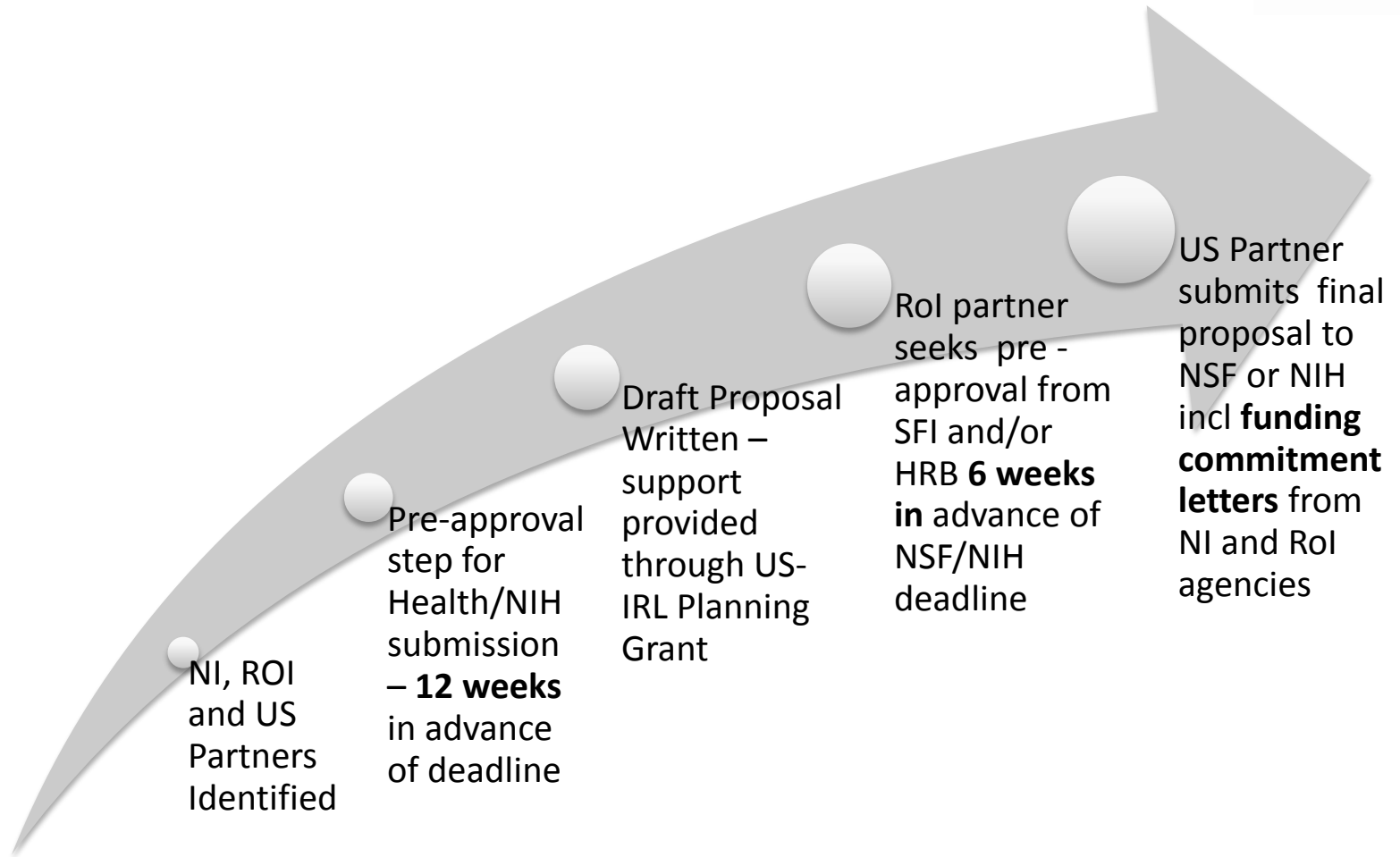
- Rol applicants can apply to SFI for **direct costs** of up to €350k for a 3-5 year duration. In addition to the direct costs, SFI also makes an overhead, contribution to the host research body.
- SFI eligible costs are: Staff, materials and consumables, equipment and travel.
- NI applicants can apply to DELNI/Invest NI for total costs of up to £320k
- US applicant budget subject to NSF/NIH conditions

US-Ireland PLANNING GRANTS



- Travel grants are available from SFI for the RoI lead applicant, and from Invest NI for the NI applicant to develop the tri-partite proposal with US and NI partners
- ***NOT a pre-requisite for submitting a full proposal*** – to facilitate development of the tri-jurisdictional proposal
- Budget available
 - up to €5,000 direct costs for RoI applicants
 - Up to £3,000 for NI applicants - INI
- Please allow at least a month for review of the planning grant proposal

Review Process



Success of the partnership programme



- **Nineteen successful projects**
 - Sensors (5), Nanotechnology (7), Health (3), Telecommunications (1), Energy & Sustainability (3)
- **Investment across 3 jurisdictions: €31.5m**
- **73 investigators from**
 - 2 Northern Ireland universities, 8 universities and institutes in Ireland and 22 US institutions
- **Training (NI and RoI)**
 - 44 Post doctoral researchers, 45 PhD and Masters students, 11 Research assistants and technical posts

Projects funded to date

1. Prof. Catherine Godson, UCD – HEALTH (DIABETES)
2. Prof. Gerry McElvaney , RCSI – HEALTH (CYSTIC FIBROSIS)
3. Dr. Brian Ward, NUIG – SENSORS
4. Dr. Brian Ward, NUIG – SENSORS
5. Prof. Eugene O'Brien, UCD – SENSORS
6. Prof. Richard O'Kennedy , DCU– SENSORS
7. Dr. Paul K. Hurley & Prof. Greg Hughes, TYNDALL – NANO
8. Dr. Suresh C. Pillai, DIT – NANO
9. Dr. Alan O'Riordan, TYNDALL – NANO/SENSORS
10. Dr. Guillaume Huyet, CIT/TYNDALL – NANO/Telecoms/Energy
11. Dr. Chris Bleakley, UCD – TELECOMS
12. Dr. Kenneth Gavin, UCD – ENERGY
13. Prof. Danny Kelly, TCD – NANO
14. Prof. Martyn Pemble, TYNDALL – Energy
15. Dr. Donal Leech, NUIG – SENSORS for HEALTH
16. Dr. Michael Nolan, TYNDALL – ENERGY
17. Dr. Paul K. Hurley & Prof. Greg Hughes, TYNDALL – NANO
18. Prof. Peter Parbrook, TYNDALL – Nano
19. Prof. Jagdish Vij, TCD - Nano



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US Partner Institutions



- The Broad Institute and Massachusetts Institute of Technology
- Woods Hole Oceanographic Institution
- University of Maine and NOAA
- University of Texas at Dallas
- University of North Carolina at Chapel Hill
- Scripps Institution of Oceanography
- University of Cincinnati
- University of Alabama at Birmingham
- Rice University
- Georgia Institute of Technology
- University of Texas at Austin & University of Rhode Island
- University of California at Los Angeles (UCLA)
- Colorado State University
- Stanford University
- University of Connecticut
- Kent State University
- Illinois Institute of Technology
- Northwestern University

Impact



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- The US-Ireland programme is facilitating the building of **strategic international partnerships** and **diversifying the funding sources** for Ireland's scientific base, key objectives of SFI's Agenda 2020
- SFI Agenda 2020 targets an increase in **joint funding instruments** of which the US-Ireland programme is a key example – IvP 2014/2015
- Increasing the **international profile** of SFI-funded researchers evident through international collaborative conference presentations and publications and potentially form the basis of **H2020 applications**
- Supporting projects which are **aligned with areas of potential economic impact** to Ireland
- **Training of Irish based students and postdocs** and facilitating exposure to international labs



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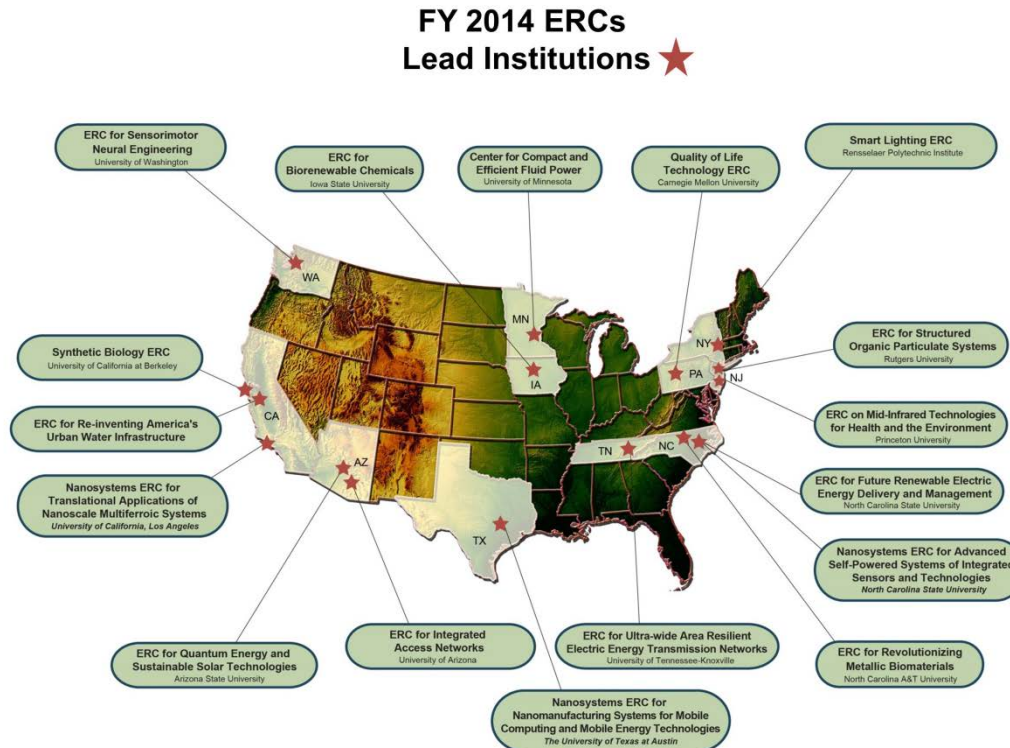
CENTRE-TO-CENTRE MECHANISM

Centre-to-Centre mechanism

- To date, the programme has been **investigator-led**
- **New mechanism** under development **to link Centres in the three jurisdictions**
- Networking with the NSF-lead on the Engineering Research Centres to discover potential synergies as a starting point
- **Two Centre-to-Centre partnerships currently under development** to undergo peer review in 2015
- **Budget available:**
 - In line with Partnership programmes, RoI applicants can apply for *up to a max.* of 50% of the total cost of the project
 - NI applicants - £320K max

NSF-funded ERCs

- Engineering Research Centres have been identified as the Centres currently involved in this collaboration <http://erc-assoc.org/>



Memorandum of Understanding with NSF



- **Updated and signed in late September 2014**
- **Three agencies involved: NSF, DEL NI and SFI**
- **Four thematic areas: Nano, Sensors, Energy & Sustainability and Telecoms**
- **Updated MoU refers to Centre-to-Centre collaborations**

Proposed mechanism

- **Contact your relevant funding agency**
- **Intention to apply**
 - submit a 2-page EoI to their funding agency which is assessed by the partner agencies
- **Tri-jurisdictional centres proposal is developed**
 - submitted to the NSF 5 weeks in advance of the ERC annual site review together with the ERC's annual report
- **Proposal is reviewed by the site review panel**
 - the review is shared with DEL NI and SFI to aid a joint funding decision.

Current focus

- **Pathfinding the mechanism with two pilot partnerships to be reviewed this year**
- **Proposal structure and corresponding evaluation criteria have been defined**
- **Guidance document will be made available once the process has been piloted**

Summary



- **US-Ireland call open on a rolling call basis for the investigator-led proposals**
 - Deadlines set by NSF and NIH
 - SFI and/or HRB : RoI-based agencies
 - DEL NI, INI and HSC R&D : NI-based agencies
- **19 projects funded to date with a number currently under review at NSF/NIH**
- **Centre-to-Centre mechanism under development**
 - 2 proposals to be reviewed in 2015
- **Email: USIreland@sfi.ie or USIreland@hscni.net or USIreland@delni.gov.uk**
- **Web Page: <http://www.sfi.ie/funding/funding-calls/open-calls/us-ireland-rd-partnership-programme/>**
- **NIH grant writing webinar available and NSF resource page under development.**



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Thank you

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