



Research for Ireland's Future

Science Foundation Ireland (SFI)

Census 2008





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SFI Census 2008 Executive Summary

SFI Census 2008 was conducted amongst the holders of SFI's major grant categories. These are: SFI Principal Investigator (PI), SFI President of Ireland Young Researcher Award (PIYRA), SFI Principal Investigator Career Advancement Award (PICA), SFI Maths Initiative (MI), SFI Research Frontiers Programme (RFP), SFI Centres for Science, Engineering and Technology (CSET), SFI Strategic Research Clusters (SRC), SFI Research Professor Recruitment Award (RP) and SFI Charles Parsons Energy Research (CP)¹. The census results are presented in summary form under nine key headings, as follows:

1. Respondents & Awards
2. Research Team Compositions
3. First Destinations of Departing Team Members
4. Academic Outputs
5. Pre-Commercial Outputs - by HEI
6. Pre-Commercial Outputs - by Award
7. Industry - Research Collaborations
8. Academic Collaborations
9. Funding Information

¹ CP awards have not yet formally transferred from Department of Communications, Energy and Natural Resources (DCENR) to Department of Enterprise, Trade and Employment (DETE) / SFI

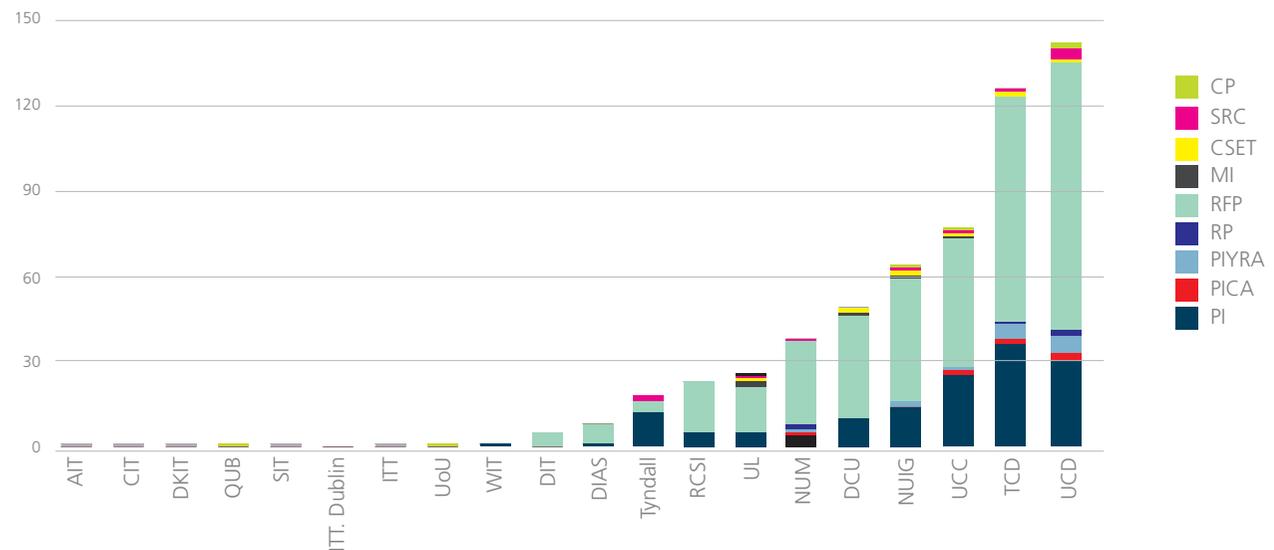
² In 2005 less than 20% of SFI's Strategy for Science, Technology & Innovation (SSTI) PIs were located within CSETs or SRCs. By 2008 this reached over 40%.

³ Collaborative grants such as CSETs and SRCs are conducted across multiple HEIs. However, they are only represented here by the Primary/Host HEI.

1. Respondents & Awards

There were 587 active awards at 31 December 2008, held by 516 grant holders. This represents a modest growth over 2007 levels in terms of grants and grant holders. However, it should be noted that such figures mask the considerable investment in a smaller number of new, large grants in 2008 (e.g. one new CSET and five new SRCs), reflecting the shifting profile of SFI's grant portfolio towards larger, enterprise-linked, clustered research². Figure 1.1 illustrates the awards by HEI³.

Fig. 1.1 Number of Awards held by HEI





2. Research Team Compositions

These 587 grants directly supported 2,806 researchers. The profile of this cohort is described in terms of gender, role (Award Holder, PhD student, Post Doc etc.), and nationality (Irish, EU-non Irish, non-EU) in Table 2.1.

Gender:

Whilst the overall gender split is approximately two thirds male/one third female, sub-analysis shows that there is a loss of female researchers at the point of progression from team members (65% male/35% female) to grant holders (80% male/20% female). This is consistent with internationally observed trends.

Nationality:

Just over half of the SFI researchers are of Irish nationality, with a further quarter from other EU counties, and the balancing 20% are from outside the EU.

Role:

PhD students (41%), Post Docs (24%) and grant holders (18%) make up the majority of the SFI teams.

Figure 2.1 shows the composition of SFI research teams by award type (i.e. programme)⁴.

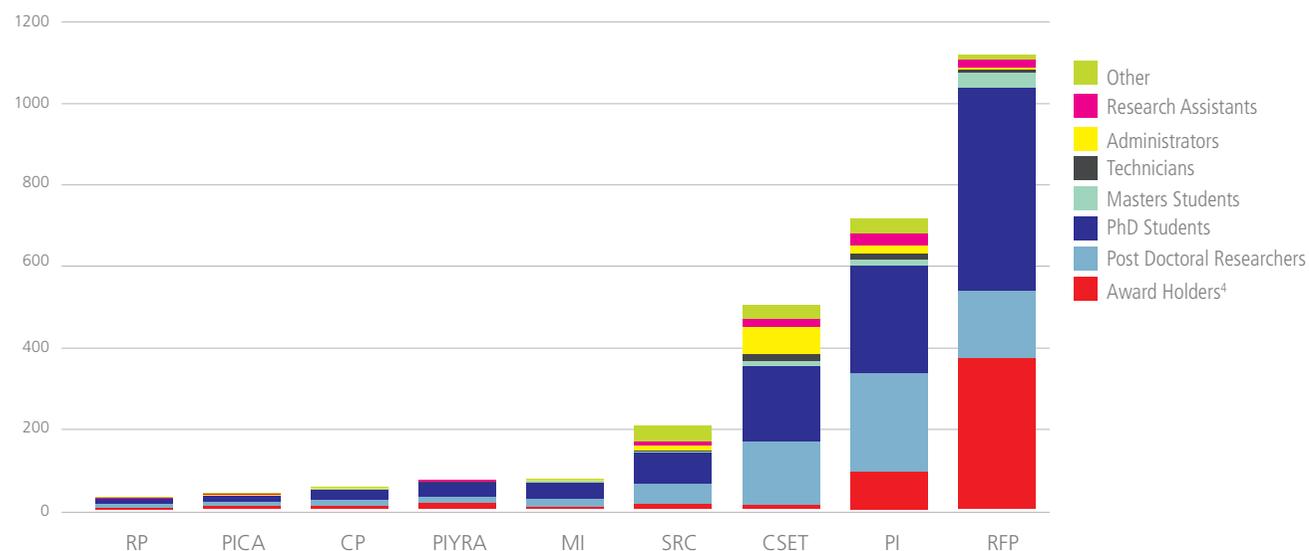
Team Leveraging:

The 516 grant holders leveraged non-SFI funding to support a further 3,082 research team members, representing a leveraging factor of 134% i.e. these grant holders are successfully accessing significant non-SFI funding (data not shown). When the core SFI teams and the leveraged team members are combined (totalling 5,888 researchers), the gender and nationality profiles are very similar to that presented above. The role profile is broadly similar too except for the grant holder reduction (18% to 9%).

Table 2.1: Composition of Research Teams at 31-12-2008 (SFI funded team members)

	Male	Female	Irish	EU (Non Irish)	Non-EU	Total	Category as % of Total
Award Holders	412	104	324	146	46	516	18%
Administrators	31	79	93	9	8	110	4%
Masters Students	44	30	41	14	19	74	3%
Other	105	29	75	37	22	134	5%
PhD Students	696	457	609	271	273	1153	41%
Post Doctoral Researchers	461	225	256	239	191	686	24%
Research Assistants	40	48	58	21	9	88	3%
Technicians	31	14	31	8	6	45	2%
Total	1820	986	1487	745	574	2806	100%
Gender/Nationality as % of Total	65%	35%	53%	27%	20%	100%	

Fig. 2.1: Composition of SFI Funded Team by Award Type



⁴ Where a respondent holds more than one award, the first award mentioned in the Census form is the primary award. For the nine other CSET/SRC with PI/RFP awards, the CSET or SRC is taken as the primary award.



The majority of researchers are in RFP (40%), PI (25%) and CSET (18%) teams⁵. As the SRC programme is still in relative infancy its contribution in this context is small. However, it would be expected to grow significantly in 2009. It is noteworthy that RFP accounts for almost half (500) of the 1,153 PhD students.

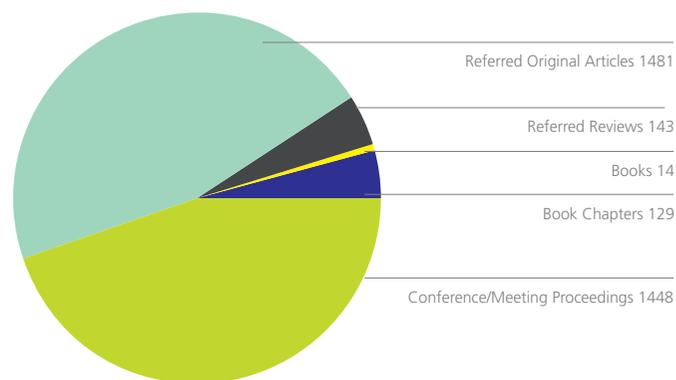
3. First Destinations of Departing Team Members

410 team members departed SFI funded research teams in 2008. 57% remained in Ireland with the balancing 43% going abroad, reflecting a pattern similar to that observed in the 2007 Census. For example, of the 200 departing Post Docs, 35% went on to another Post Doc, 25% secured Lecturer/Permanent Researcher posts and 16% went into Industry, similar to the profiles observed in 2007. Of the 126 graduating PhDs, 57% proceeded to a Post Doc position and 23% went into Industry, again similar to the profiles observed in 2007⁶.

4. Academic Outputs

A total of 3,215 peer reviewed publications were produced in 2008, as shown in Figure 4.1

Fig. 4.1 Publication Output in 2008



⁵ While the Census reports data for 11 of the 12 SRCs funded in December 2007, in reality several of these have been slow to get started and hence their relatively minor contribution here.

⁶ A recent longitudinal study by SFI of the current locations of past SFI team members, suggests that the proportion of departed team members going into industry increases substantially with time, suggesting on increased absorption by industry on second + destination career moments.



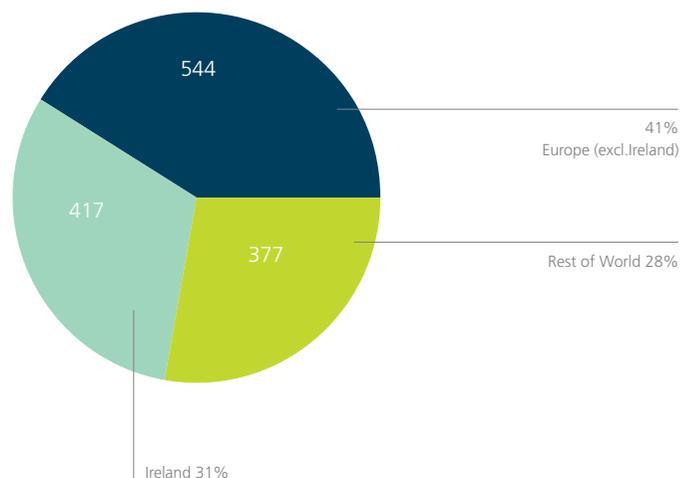
Table 4.1 further categorises these publications by award type. In terms of quantity, RFP and PI account for two thirds of publication output.

However, as this data is purely quantitative it is essential to point out that this takes no account of quality. In this context a recent study by the Irish Universities Association (IUA) showed that in 2008 Ireland appeared in the Thompson Scientific *'Top Countries in All Fields'* (citation impact) at 19th place in the world, up from 36th in the world in 2003⁷.

In addition to publication output, Irish based researchers engaged in 1,338 academic collaborations in 2008 with researchers at home and abroad. Figure 4.2 shows the breakdown of the locations of these collaborations.

Table 4.1 Publication Output in 2008 (in Numbers)										
	PICA	RP	SRC	CP	PIYRA	MI	CSET	PI	RFP	Total Output by Publication Type
Refereed, Original Articles	6	36	36	26	38	105	257	544	433	1481
Refereed Reviews	1	2	3	2	7	3	24	57	44	143
Books	-	1	-	-	-	1	9	3	-	14
Book Chapters	5	4	2	-	3	3	39	28	45	129
Conference/ Meeting Proceedings	17	12	26	71	60	70	248	345	599	1448
Total by Award	29	55	67	99	108	182	577	977	1121	3215

Fig. 4.2 Academic Collaborations by Country



⁷ International peer review improved Irish research ranking (Correspondence), nature, Vol. 460, 20 August 2009.



5. Pre-Commercial Outputs and Collaborations ⁸

In terms of more direct pre-commercial outputs Census 2008 reported a total of 135 Invention Disclosures, 97 Patents Pending, 13 Patents Awarded, 3 Spin Outs and 22 Licences. Most of these figures represent significant increases on 2007 levels and are indicative of a system that is growing in commercialisation capacity. The CSET & PI programmes are the primary instruments of delivery across these categories of outputs (the SRC programme is only in its first year and can be expected to grow into a more significant contributor in the future). A summary of these outputs by award type is presented in the following tables.

The Census also reports that there has been a strong growth in collaborations with companies in 2008. 402 collaborations were reported, involving 311 distinct organisations and 161 researchers. 170 and 108 were Multi National Corporations (MNC) and Small to Medium Enterprises (SME) respectively, illustrating a good spread of activity across the enterprise range.

Table 5.1 Number of Invention Disclosures arising from SFI funding in 2008 - by Award Type

	PI	PICA	PIYRA	Res Prof	RFP	MI	CSET	SRC	CP	Total
Total Number of Invention Disclosures	58	1	4	-	23	-	47	2	-	135

For example, there was a total of 135 invention disclosures reported, 58 from PI awards, 1 from PICA, 4 from PIYRA, 23 from RFP, 47 from CSETs and 2 from SRCs.

Table 5.2 Number of Pending Patents arising from SFI funding in 2008 - by Award Type

	PI	PICA	PIYRA	Res Prof	RFP	MI	CSET	SRC	CP	Total
Total Number of Pending Patents	48	1	4	-	17	1	26	-	-	97

Table 5.3 Number of Awarded Patents arising from SFI funding in 2008 - by Award Type

	PI	PICA	PIYRA	Res Prof	RFP	MI	CSET	SRC	CP	Total
Total Number of Awarded Patents	9	-	-	-	-	-	4	-	-	13

Table 5.4 Number of Spin Out Companies arising from SFI funding in 2008 - by Award Type

	PI	PICA	PIYRA	Res Prof	RFP	MI	CSET	SRC	CP	Total
Number of Spin Outs	1	-	-	-	-	-	2	-	-	3

Table 5.5 Licences arising from SFI funding in 2008 - by Award Type

	PI	PICA	PIYRA	Res Prof	RFP	MI	CSET	SRC	CP	Total
Total Number of Licences	7	-	1	3	1	-	8	2	-	22

⁸ Although Invention Disclosures, Patents, Spin Outs and Licences are reported here as arising from SFI-funded research, it is important to stress that they require critical input from numerous Science Technology Innovation (STI) stakeholders, such as Technology Transfer Offices (TTOs), Enterprise Ireland (EI), HEI etc.



In addition to the high level of company collaborations evident in the CSET and SRC programmes, a high level of collaborations was reported for the PI and RFP programmes, as shown in Table 5.6⁹

These figures are reflective of the growing role of SFI research groups in attraction of high tech Foreign Direct Investments (FDI) to Ireland – in 2008 over 40% of Industrial Development Authority, Ireland (IDA) ‘wins’ were in the Research Development and Innovation (RD&I) space, with SFI groups directly involved in one third of these and indirectly involved in a majority of the remainder. Given that SFI research groups were integral to almost half the high tech spin outs from the HEI sector in 2008 (two from CSETs and one from the PI programme), it is clear that SFI is making an impact in the emerging start up activities of the HEI system.

Appendix A contains a list of the companies reported as working with SFI researchers.

Figure 5.1. SFI Research Group Collaborations With Companies

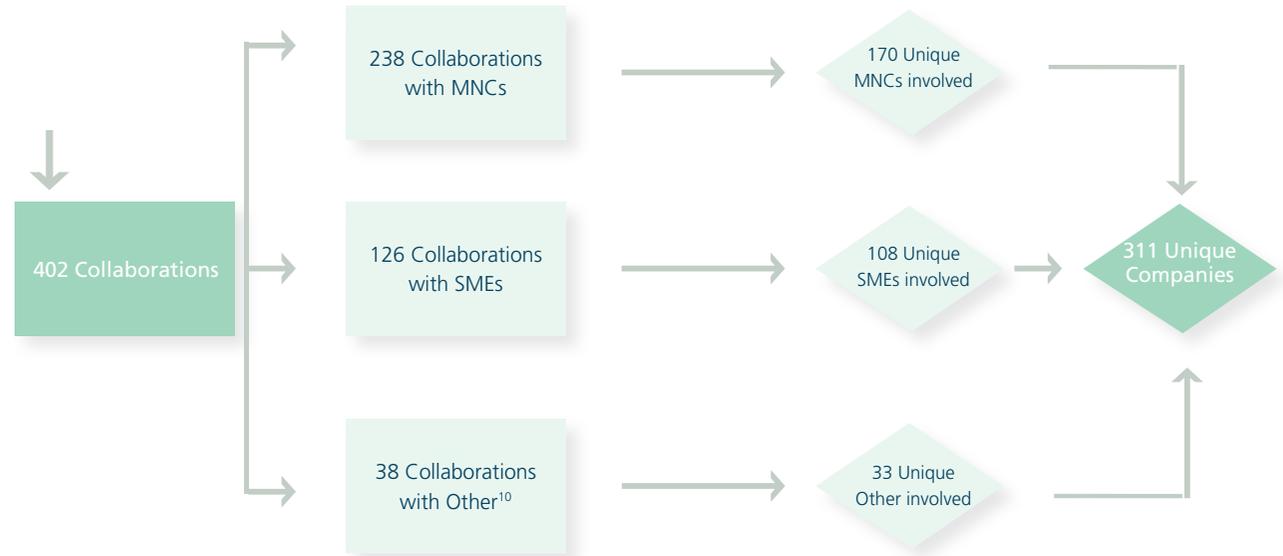


Table 5.6 No of Unique ‘Organisations’ in collaborations by Programme

	MNC	SME	Other	Total
CSET	50	24	2	76
SRC	34	31	6	71
PI	48	23	2	73
PIYRA	6	3	1	10
PICA	3	1	0	4
MI	13	4	3	20
RFP	28	29	7	64
CP	17	3	14	34
RP	3	4	1	8

⁹ The total number here will not equal the 311 unique organisations in Figure 5.1 because it refers to unique companies within an award category; the same company may be collaborating within several award categories

¹⁰ “Other” refers to State or Semi - State Bodies / Companies, Private Foundations, etc.



6. Funding Information

Census 2008 reports that SFI researchers secured multi-annual non SFI awards worth €184m in 2008¹¹. Given that SFI invested a multi-annual commitment of €244m in 2008 this represents an overall ‘leveraging’ of external funding by SFI groups of about 75%. Whilst most of this leveraging was via national sources (e.g. Higher Education Authority (HEA) at €30m and EI at €23m), the largest source was the European Union (EU) at €32m. The split of the €184m leveraged funding by award type is noteworthy. As shown in Figure 6.1, the RFP programme is responsible for over half the reported leverage, the PI programme accounting for 25% and the balance spread across remaining programmes.

The degree of dependency of SFI grant holders upon SFI funding, based upon their groups’ total research spend in 2008, is illustrated (by award type) in Figure 6.2. A relatively even distribution is evident from ‘very low dependency’ (where less than 20% of the groups’ 2008 research spend was from SFI) to ‘high dependency’ (where between 60% and 80% of the groups’ 2008 research spend was from SFI). However, there is a cohort of groups (entailing 177 SFI awards, mostly RFP and PI) where the groups are very dependent upon SFI for funding.

The full SFI Census 2008 document follows.

Fig. 6.1 Overall leveraged funding received, split by Award Category

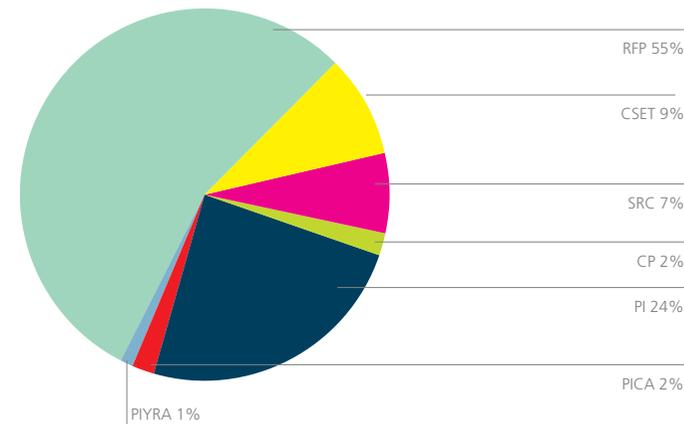
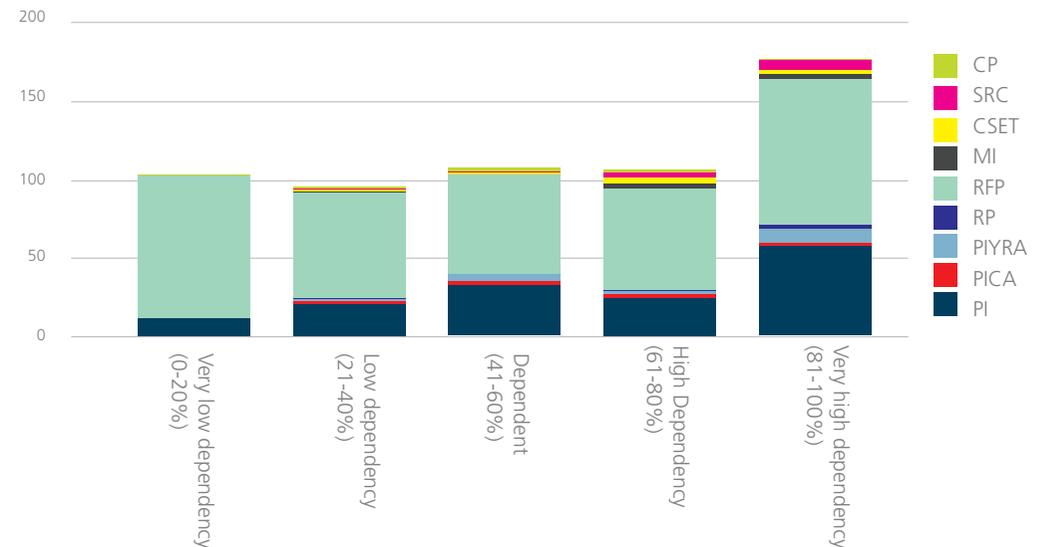


Fig. 6.2 Dependency of Research Groups on SFI by Award (based on spend in 2008)



¹¹ A degree of duplicate/over-reporting is suspected. For instance, the level of funding secured from EU sources is close to the total amount secured by all Irish researchers in 2008 (i.e. SFI and all other funded researchers). It is possible that, due to the multi-partner nature of many grants, duplicate reporting has occurred.

Appendix A:

List of companies¹ collaborating with SFI, CSET, SRC, PI and RFP Awards

¹ Respondents were requested to classify collaborations as MNC, SME or Other. While every effort has been made to ensure companies are classified and named correctly, some errors may have occurred.



A1. MNCs Collaborating with CSET Awards

Alcatel-Lucent (Ireland)	Hospira, Inc.	
Alchemy Software Development (Europe)	Humana	SDL Enterprise Technology (Ireland)
Analog Devices (Ireland)	IBM (Ireland)	Siemens Corporate Research (USA)
Becton Dickinson, Inc.	IBM Research (USA)	Smith & Nephew (Ireland)
Bosch	Intel (Ireland)	SpeechStorm (Ireland)
British Telecom (BT) (UK)	Inverness Medical Innovations, Inc.	Symantec
British Telecom (BT) (Ireland)	Iona Technologies, Plc.	TDK
ChangingWorlds (Europe)	Kugler Maag CIE GmbH	Telfonica R&D
Charles Rivers Laboratories	L M Ericsson Ltd. (Ireland)	Vitalograph (Ireland) Ltd.
Cisco Systems Internetworking (Ireland) Ltd.	Medtronic (Ireland)	Vodafone (Ireland)
Citco (Ireland)	Microsoft (Ireland)	Walt Disney Imagineering Research & Development, Inc..
Dai Nippon Printing Co. Ltd.	Microsoft Research	Xilinx Research Labs (Ireland)
Ericsson (Ireland)	Motorola (Ireland)	
FAST Search and Transfer (Microsoft Subsidiary)	NEC Communications Systems	
Fidelity Investments (FISC) Ireland Ltd.	Nortel Networks (Ireland) Ltd.	
Foster Miller, Inc.	Openlink Software (USA) Ltd.	
FXP Palo Alto Laboratory, Inc. (FXPAL)	Oracle	
GlaxoSmithKline (Ireland)	Saab Combitech Systems AB	
Global Currency Exchange	Samsung Electronics	
Hewlett - Packard (HP) (Ireland)		



A2. SMEs collaborating with CSET Awards:

Alimentary Health Ltd.	Enfer Scientific Ltd.
Ámic, AB	FairView Analytics Ltd.
Audit Diagnostics (Ireland)	Helix Health Management Ltd.
Biosurfit, SA	Rovsing Ireland Ltd.
Cellix Ltd.	Snap-on Diagnostics
Celtrak Ltd.	Socowave
Critical Path (Software), Inc.	Sporttracker
Cyntelix Corporation Ltd.	Storm Technology Ltd.
Debian	Tecnomen
DecaWave	Valentia Technologies
Dyomics GmbH	VistaTEC
Ehrke & Partner	Signals, Inc.



A3. MNCs collaborating with SRC Awards		
Agilent Technologies (Ireland) Ltd.	Fugro-BKS	Norkom Technologies
Aixtron AG	Genzyme Ireland	Organon (Ireland) Ltd. (subsidiary of Schering-Plough)
Analog Devices (Ireland)	GlaxoSmithKline (Ireland)	Pfizer (Ireland)
Arup	Helsinn Chemicals (Ireland)	Pfizer Animal Healthcare
Bausch & Lomb (Ireland)	Hewlett-Packard (HP) (Ireland)	Roche (Ireland)
Boston Scientific	IBM (Ireland)	SAFC Hitech Ltd. (Sigma Aldrich Fine Chemicals)
Bristol-Myers Squibb (Ireland)	Intel (Ireland)	Schering Plough (Avondale Company)
Cisco (Ireland)	Intervet Schering Plough Animal Health	Seagate Technology LLC (UK)
Covidien (Ireland)	Janssen Pharmaceutical Ltd.	Telefonica R&D
De Puy (Ireland)	L M Ericsson Ltd. (Ireland)	Thermo Fisher Scientific Inc. (Cellomics) (Europe)
Dionex Corporation (UK & Ireland)	Medtronic (Ireland)	
Eli Lilly S.A. (Ireland)	Merck Sharp and Dohme (Ireland)	



A4. SMEs collaborating with SRC Awards		
Alimentary Health Ltd.	eSpatial	Opsona Therapeutics
APC Biotechnologies Services Inc.	FireComms Ltd.	Pavement Management Services Ltd.
Biomining Inc.	Glantreo	Proxy Biomedical Ltd.
Biotrin International Ltd.	Glebe Laboratories	RoBioSystems Ltd.
Cellix Ltd.	Holfeld Plastics Ltd.	SensL Ltd.
Cellology Ltd.	Idiro Technologies	Sigmoid Pharma
Celtic Catalysts Ltd.	Impedans Ltd.	Straatum
Creganna	Intune Networks	Zerusa Ltd.
Eblana Photonics	Lexas Research Ltd.	Warwick Effect Polymers (WEP)
Elastin Specialties, Inc.	NeoSurgical	
EnBio	Marigot Ltd.	



A5. MNCs collaborating with PI Awards		
Alcatel Thales III-V Lab	EMC (Ireland) Ltd.	QinetiQ
Alcatel-Bell	Ericsson (Ireland)	RavenPack
Alcatel-Lucent (Ireland)	Ericsson (UK)	SAES Getters S.p.A.
Alcatel-Lucent (USA)	FibroGen (USA)	Schering-Plough (Netherlands)
Alcatel-Lucent Deutschland AG	Genentech Inc.	Seagate Technologies LLC (UK)
Analog Devices (Ireland)	GlaxoSmithKline (UK)	Seagate Technologies LLC (USA)
Astra Zeneca	Huawei Technology Co. Ltd.	Shimadzu Corporation
Bayer CropScience (France)	IBM (Ireland)	Sony (Ireland)
BioVail Technologies	IBM (USA)	Synopsys International Ltd. (Ireland)
British Telecom (BT) (UK)	Intel (Ireland)	Wyeth BioPharma (Ireland)
British Telecom (BT) (Ireland)	Intel (USA)	Wyeth (USA)
BT Research & Venturing (UK)	Kerry Group (USA)	Xilinx Research Labs (USA)
Carbery	Marvell Technology Group Ltd	
Cisco (Ireland)	Medtronic (Ireland)	
Cisco (USA)	Nokia (Finland)	
Clearwire (USA)	Nortel (Canada)	
Crea Tec Fischer & Co. GmbH	Novartis (Italy)	
Elan Corporation, Plc. (Ireland)	Novartis (UK)	

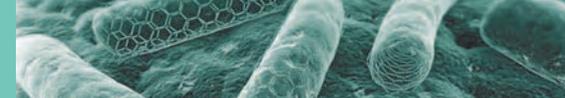


A6. SMEs collaborating with PI Awards

Armac Systems	NaturalMotion Ltd.
Asylum Research (UK) Ltd.	NIMA Technology Ltd.
Bimeda BioScience Ltd.	Opsona Therapeutics
Centre for Integrated Photonics (CIP) Ltd.	Pharmatrin Ltd.
Eblana Photonics	Princeton Lightwave Inc.
Eudaemon Consulting Ltd.	Prognosys Biosciences
Glebe Laboratories	SensL Ltd.
Intune Networks	Sigmoid Pharma
ManOpt Systems Ltd.	TaconicArtemis GmbH
Marigot Ltd.	TreeMetrics
Merrion Pharmaceuticals Plc.	Vysera Biomedical
MetaOme	



A7. MNCs collaborating with RFP Awards		
ABB AB	FibroGen, Inc.	New Boliden (Ireland)
Alcatel Thales III-V Lab	GeoAcoustics Ltd.	Renault
Alcatel-Lucent	GlaxoSmithKline (UK)	Rio Tinto
Bayer MaterialScience (Germany)	Innolume GmbH (Germany)	Rolls-Royce (Canada) Ltd.
Bell Labs (Ireland)	Intel (Ireland)	Siemens Medical Research (Ireland)
BHP Billiton	Itasca Consulting Group, Inc.	VOCO GmbH
Bourns, Inc.	Medtronic (USA)	
Bruker BioSpin GmbH	Medtronic (Netherlands)	
Cardinal Health Inc.	Mendel Biotechnology, Inc..	
De Beers	Merck KGaA	
EDF	Movidia (Ireland) Ltd.	



A8. SMEs collaborating with RFP Awards	
Acorn Water	Lipo Technologies, Inc.
BIAS GMBH	Lombard Medical Technologies (LMT)
Butler Manufacturing Services (BMS)	Lyncée Tec SA
Commissioning Services Ltd. (CSL)	MobaNode
Creganna	NanoSight Ltd.
Denator AB	Nerviano Medical Sciences
Digital Domain	ODB-Tec, GmbH
Glantreo	Original Solutions Ltd.
Glebe Laboratories	Science and Technology Research Partners Ltd.
Handy Baby Products Ltd.	TechWorks Marine Ltd.
Hanley Measurement Controls Ltd.	Wikki
Innolume, Inc. (USA)	Wirelite Sensors
Isotron	Zealand Pharma
JAM Media	Warwick Effect Polymers (WEP)
Latronics GmbH	

Research for Ireland's Future

SFI Census 2008
Full Report





SFI Census 2008 Full Report

The census form was sent to 548 SFI funded researchers in the following award categories: PI, PIYRA, PICA, MI, RFP, RP, CSET, SRC and Charles Parsons¹. There were 525 census forms returned, corresponding to a response rate of 96%.

The following sections present the key findings from the census:

1. Respondents & Awards
2. Research Team Compositions
3. First Destinations of Departing Team Members
4. Academic Outputs
5. Pre-Commercial Outputs - by HEI
6. Pre-Commercial Outputs - by Award
7. Industry - Research Collaborations
8. Academic Collaborations
9. Funding Information

Note for reading the tables:

Award holders were asked to fill in one form only if they held multiple awards from the following categories²: PI, PIYRA, PICA, MI, RFP, RP, CP.

SRC and CSET award holders were requested to fill out a separate form for the SRC or CSET.

For example: If an award holder held a PI-like award and an SRC or CSET award, he/she was requested to fill in two separate forms.

If an award holder held a PI and an RFP, he/she was requested to only fill in one form with information for both awards.

Where a respondent holds more than one award, the first award mentioned in their census form is used as the primary award. For collaborative awards, such as CSETs or SRCs, which are conducted across multiple HEIs, publications are assigned to the primary/host HEI.

Thus there were **516** individuals who completed the census but **525** census forms returned i.e. nine award holders hold both a CSET/SRC and PI or RFP award.

The breakdown of the nine overlapping awards is: three CSET with PI, two SRC with PI and four SRC with RFP. For these awards the CSET or SRC award is taken as the primary award.

These 525 forms cover a total of **587** awards held.

¹ CP awards have not yet formally transferred from Department of Communications, Energy and Natural Resources (DCENR) to Department of Enterprise, Trade and Employment (DETE) SFI

² See Glossary of terms at the end of the document



Section 1: Respondents & Awards

Table 1.1: Award Holders

Male	412
Female	104
Total Number of Respondents	516

Table 1.2: Total Number of Respondents - by HEI

HEI	Total Number of Respondents
AIT	1
CIT	1
DKIT	1
QUB	1
SIT	1
ITT, Dublin	1
ITT	1
UoU	1
WIT	1
DIT	5
DIAS	8
Tyndall	14
RCSI	21
UL	24
NUIM	36
DCU	43
NUIG	54
UCC	67
TCD	105
UCD	130
Total	516

Fig. 1.1 Award Holders (516)

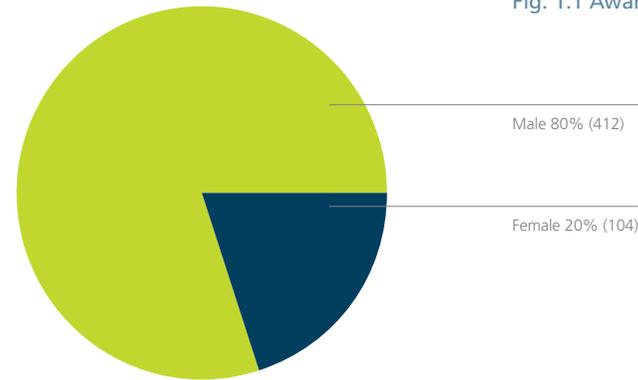
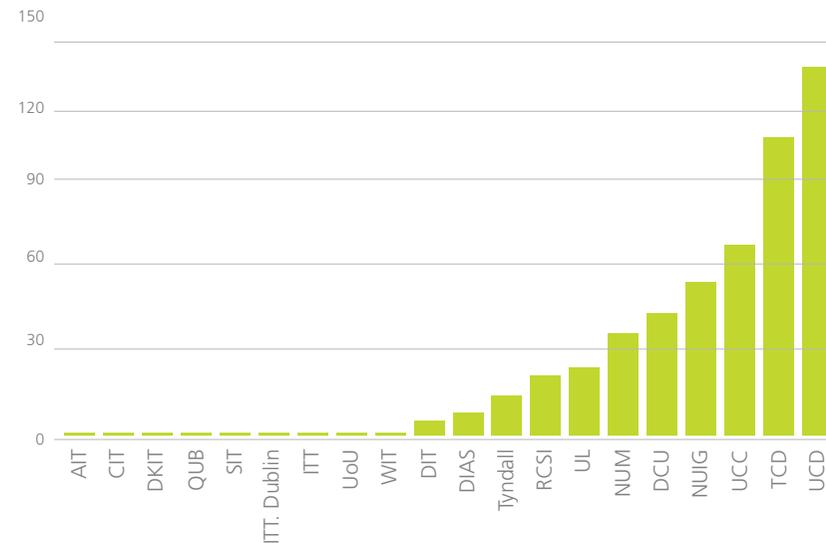


Fig. 1.2 Total No. of Respondents by HEI



Please see glossary for abbreviations

Section 1: Respondents & Awards



Table 1.3: Total Number of Awards held by Respondent and by HEI in 2008

	Total number of Respondents by HEI	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total No of Awards Held
AIT	1	-	-	-	-	1	-	-	-	-	1
CIT	1	-	-	-	-	1	-	-	-	-	1
DKIT	1	-	-	-	-	1	-	-	-	-	1
QUB	1	-	-	-	-	-	-	-	-	1	1
SIT	1	-	-	-	-	1	-	-	-	-	1
ITT, Dublin	1	1	-	-	-	-	-	-	-	-	1
ITT	1	-	-	-	-	1	-	-	-	-	1
UoU	1	-	-	-	-	-	-	-	-	1	1
WIT	1	1	-	-	-	-	-	-	-	-	1
DIT	5	-	-	-	-	5	-	-	-	-	5
DIAS	8	1	-	-	-	7	-	-	-	-	8
Tyndall	14	12	-	-	-	4	-	-	2	-	18
RCSI	21	5	1	1	-	18	-	-	-	-	25
UL	24	5	-	-	-	16	2	1	1	1	26
NUIM	36	4	1	1	2	29	-	-	1	-	38
DCU	43	10	-	-	-	36	1	2	-	-	49
NUIG	54	14	-	2	-	43	1	2	1	1	64
UCC	67	25	2	1	-	45	1	1	1	1	77
TCD	105	36	2	5	1	79	-	2	1	-	126
UCD	130	30	3	6	2	94	-	1	4	2	142
Total	516	144	9	16	5	381	5	9	11	7	587

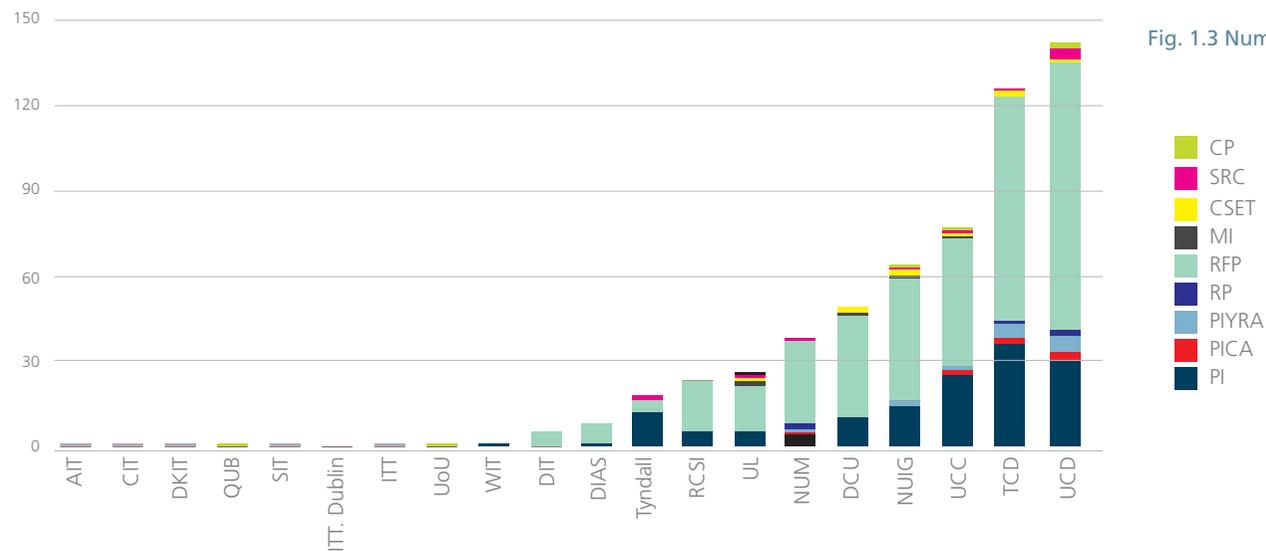




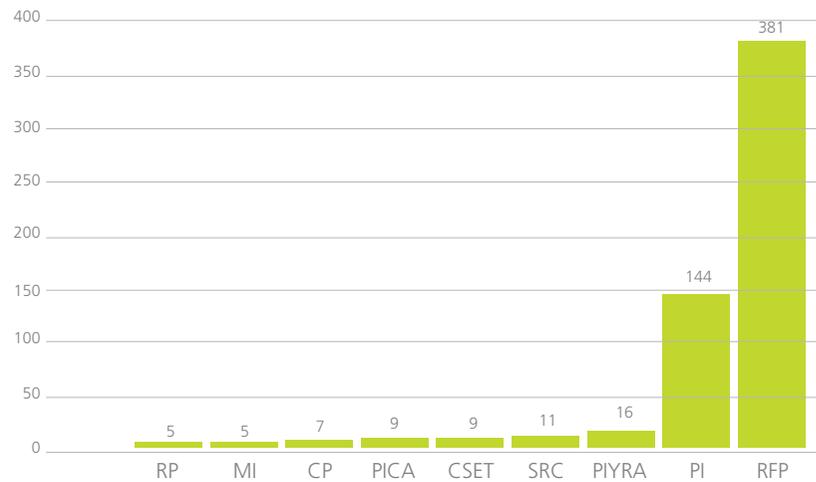
Table 1.4: Total Number of Respondents - by Nationality

China	1
Denmark	1
Iceland	1
Iraq	1
Norway	1
Poland	1
Singapore	1
South Africa	1
Switzerland	1
Trinidad & Tobago	1
Brazil	2
Czech Republic	2
Israel	2
Romania	2
Australia	3
Belgium	3
France	3
India	3
Sweden	3
Canada	4
Spain	4
Netherlands	5
Russian Federation	8
Italy	9
United States of America	12
Germany	32
United Kingdom	85
Ireland (Republic)	324

Table 1.5: Total Number of Awards held by Respondent by Gender in 2008

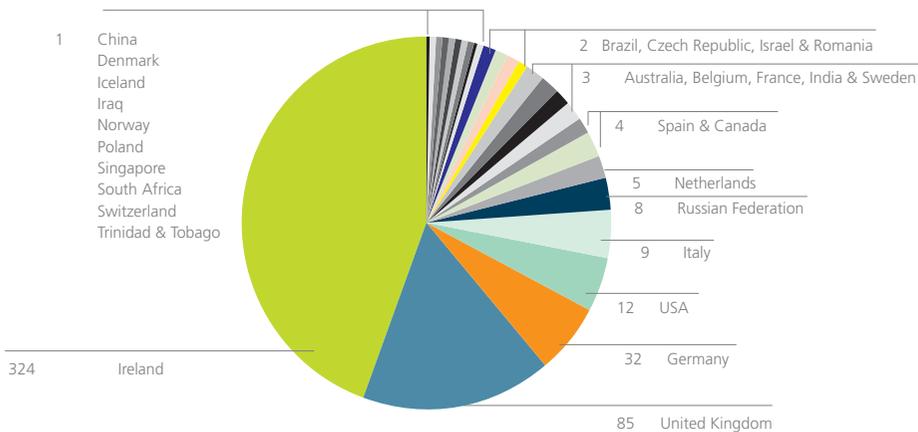
Gender	RP	MI	CP	PICA	CSET	SRC	PIYRA	PI	RFP	Total No of Awards Held
All	5	5	7	9	9	11	16	144	381	587
Male	5	5	7	-	9	11	11	123	303	474
Female	-	-	-	9	-	-	5	21	78	113

Fig. 1.5 SFI Awards Held



The 516 respondents are made up of 28 nationalities

Fig. 1.4 Nationality of Respondents





Section 2: Research Team Composition

Table 2.1: Composition of Research Teams at 31-12-2008 (All funding sources³)

	Male	Female	Irish	EU - Non-Irish	Non-EU	Total	Category as % of Total
Award Holders	412	104	324	146	46	516	9%
Administrators	42	128	144	15	11	170	3%
Masters Students	202	116	146	98	74	318	5%
Other	341	127	301	110	57	468	8%
PhD Students	1638	1102	1517	604	619	2740	47%
Post Doctoral Researchers	960	500	591	492	377	1460	25%
Technicians	104	112	159	36	21	216	4%
Total	3699	2189	3182	1501	1205	5888	100%
Gender/Nationality as % of Total	63%	37%	54%	25%	20%	100%	

Table 2.2: Composition of Research Teams at 31-12-2008 (SFI Funded Team members⁴)

	Male	Female	Irish	EU - Non-Irish	Non-EU	Total	Category as % of Total
Award Holders	412	104	324	146	46	516	18%
Administrators	31	79	93	9	8	110	4%
Masters Students	44	30	41	14	19	74	3%
Other	105	29	75	37	22	134	5%
PhD Students	696	457	609	271	273	1153	41%
Post Doctoral Researchers	461	225	256	239	191	686	24%
Research Assistants	40	48	58	21	9	88	3%
Technicians	31	14	31	8	6	45	2%
Total	1820	986	1487	745	574	2806	100%
Gender/Nationality as % of Total	65%	35%	53%	27%	20%	100%	

Fig. 2.1 Gender Breakdown of Team Members

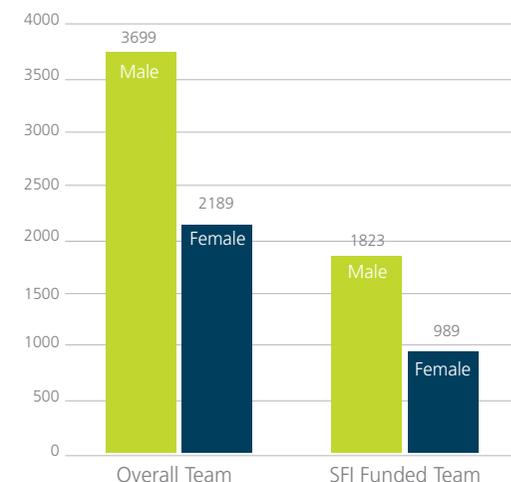
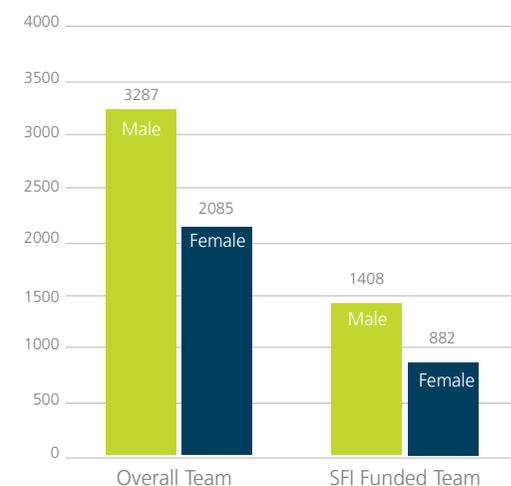


Fig. 2.1(a) Gender Breakdown of Team Members (Excluding Award Holders)



³ All funding sources refers to all funding received from SFI and other sources. It is also referred to as "overall team".

⁴ Excludes team members funded from sources other than SFI



Fig. 2.1(b) Gender Breakdown of Overall Team Members

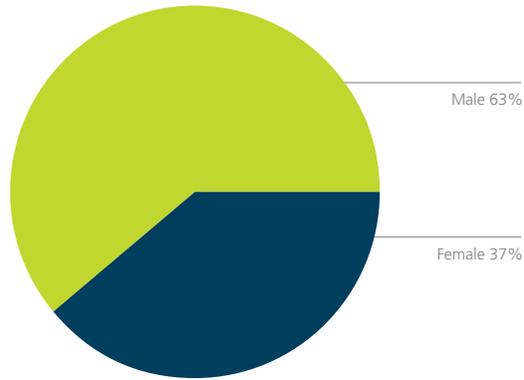


Fig. 2.2(a) Gender Breakdown of SFI Funded Team Members

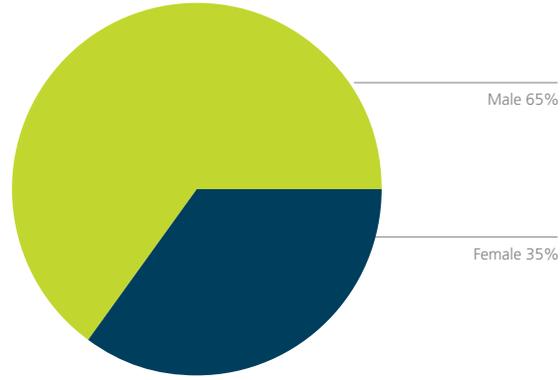


Fig. 2.2(c) Gender Breakdown of Award Holders

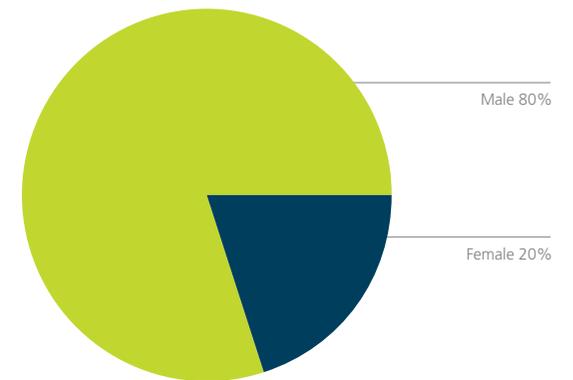


Fig. 2.1(c) Gender Breakdown (Excluding Award Holders) of Overall Team Members

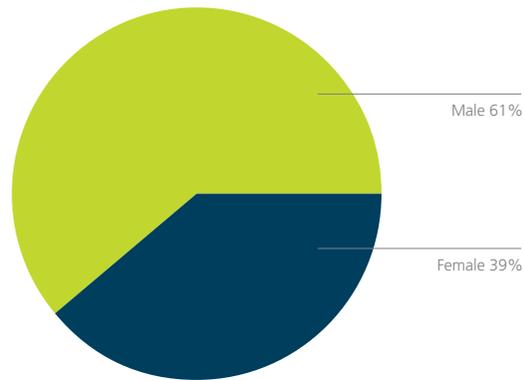


Fig. 2.2(b) Gender Breakdown (Excluding Award Holders) of SFI Funded Members

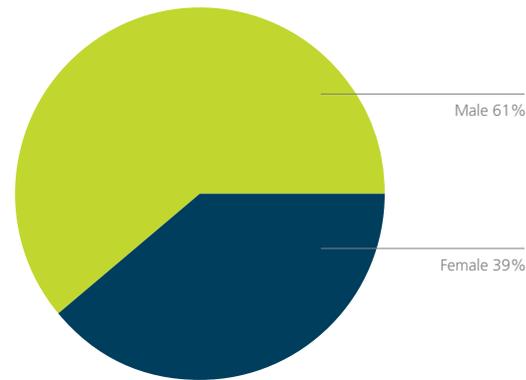




Fig. 2.1(d) Breakdown of Overall Teams by Role

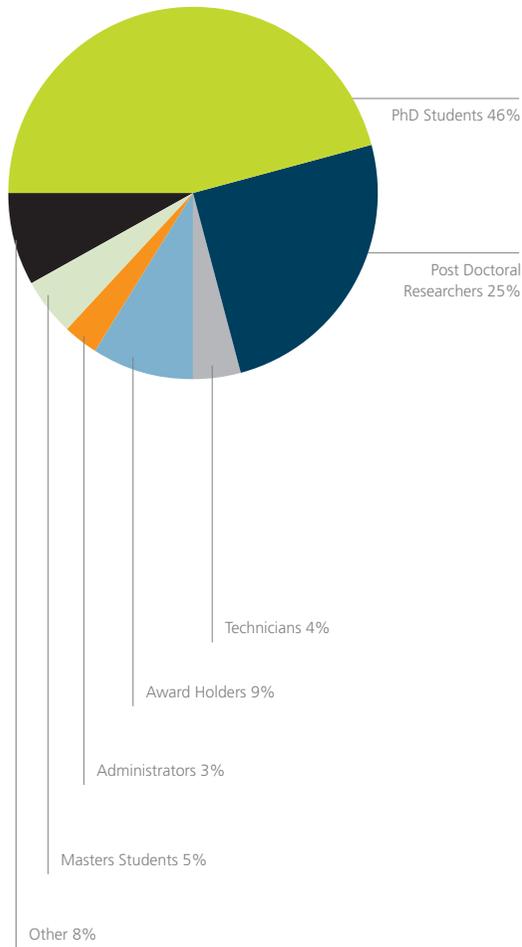


Fig. 2.1(e) Overall Team Composition by Nationality

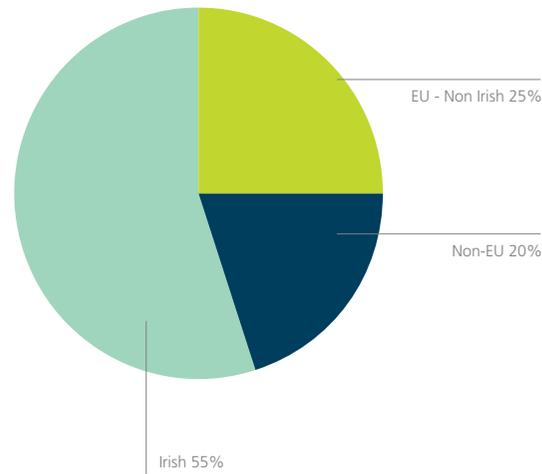


Fig. 2.2(d) Breakdown of SFI Funded Teams by Role

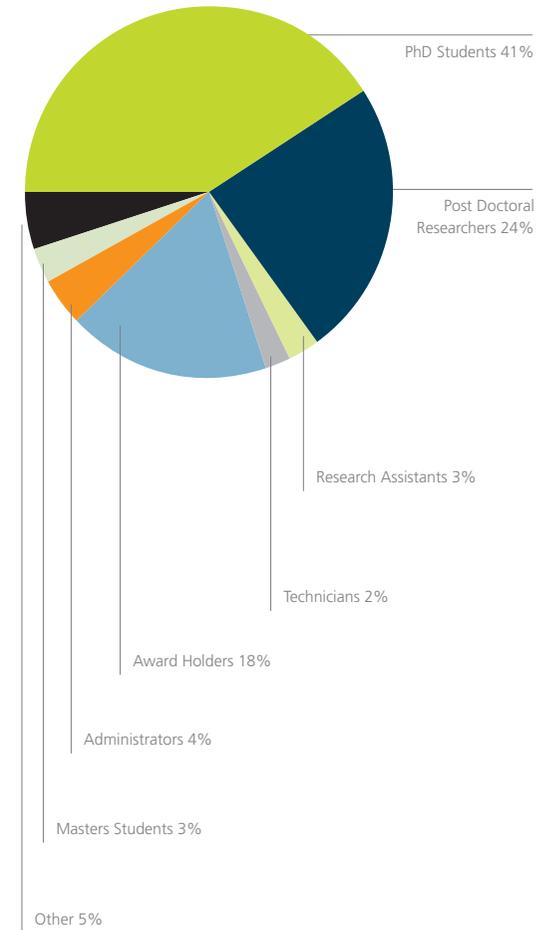


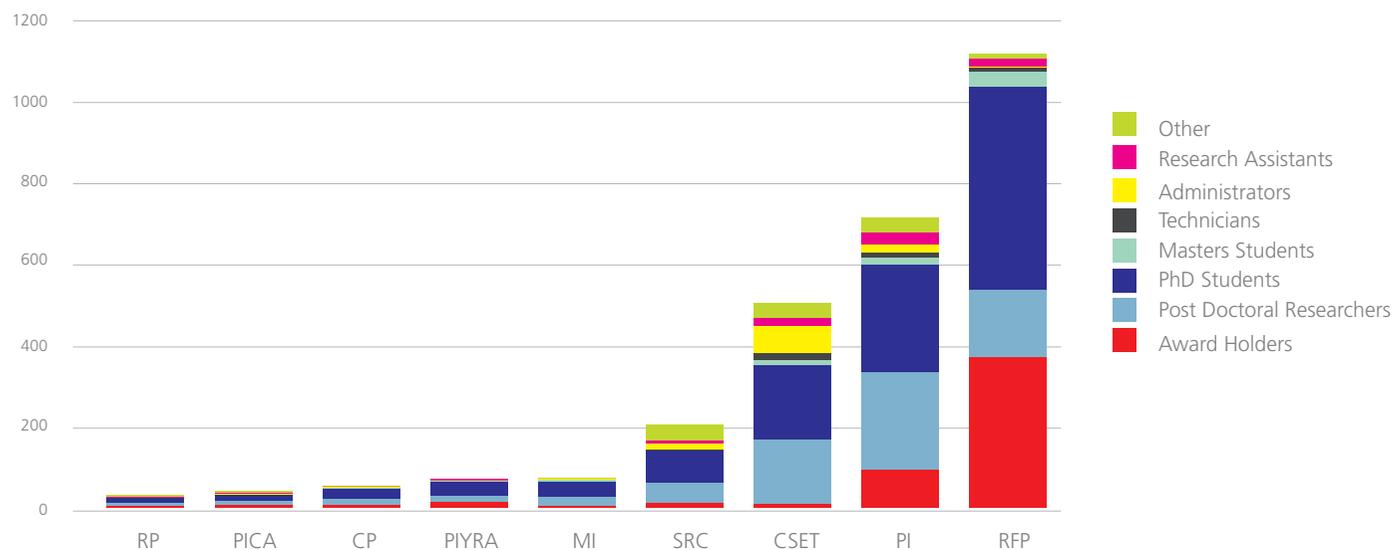


Table 2.3: Composition of SFI funded Team by Award Type

	Award Holders ⁵	Post Doctoral Researchers	PhD Students	Masters Students	Technicians	Administrators	Research Assistants	Other	Total	Award Category as % of Total Team
RP	3	9	12	-	-	1	2	3	30	1%
PICA	6	11	14	-	1	2	3	3	40	1%
CP	6	17	24	2	-	3	-	1	53	2%
PIYRA	14	15	35	1	2	-	3	-	70	2%
MI	4	22	39	3	1	2	1	1	73	3%
SRC	11	50	78	2	2	13	8	41	205	7%
CSET	9	158	185	12	17	66	20	36	503	18%
PI	92	240	266	16	13	20	31	37	715	25%
RFP	371	164	500	38	9	3	20	12	1117	40%
Total	516	686	1153	74	45	110	88	134	2806	
Role as % of Total Team	18%	24%	41%	3%	2%	4%	3%	5%		100%

For example, the 371 RFP awards holders have 164 Post-Doc researchers, 500 PhDs, 38 Masters Students, 9 Technicians, 3 Administrators, 20 Research Assistants and 12 Other, on RFP teams.

Fig. 2.3: Composition of SFI Funded Team by Award Type



⁵ Where a respondent holds more than one award, the first award mentioned in their census form is used as the primary award. For the nine CSET/SRC with PI/RFP awards the CSET or SRC award is taken as the primary award.

Section 2: Research Team Composition

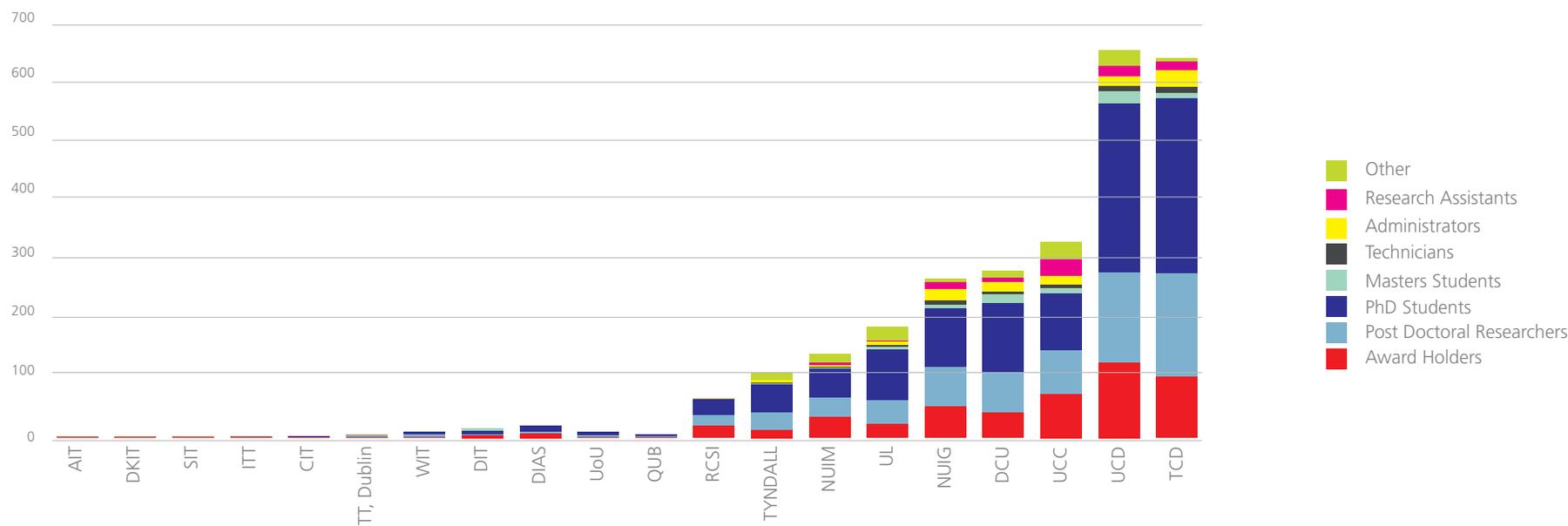


Table 2.4: Composition of SFI Funded Team - by HEI

	AIT	DKIT	SIT	ITT	CIT	ITT, Dublin	WIT	DIT	DIAS	UoU	QUB	RCSI	Tyndall	NUIM	UL	NUIG	DCU	UCC	UCD	TCD	Total
Award Holders	1	1	1	1	1	1	1	5	8	1	1	21	14	36	24	54	43	67	130	105	516
Post Doctoral Researchers	-	-	-	1	-	3	5	1	3	4	2	18	30	34	41	68	70	74	154	178	686
PhD Students	1	1	1	-	2	-	4	6	10	5	3	27	48	49	86	101	119	99	291	300	1153
Masters Students	-	-	-	-	-	1	-	4	-	-	-	1	1	2	6	5	14	9	21	10	74
Technicians	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	9	5	6	9	10	45
Administrators	-	-	-	-	-	-	-	-	-	-	-	-	4	3	6	19	17	15	16	30	110
Research Assistants	-	-	-	-	-	-	1	-	-	-	-	-	-	5	1	12	7	28	19	15	88
Other	-	-	-	-	-	-	-	-	-	-	-	1	14	14	24	6	13	30	26	6	134
Total	2	2	2	2	3	5	11	16	21	10	6	68	113	144	191	274	288	328	666	654	2806

For example there are 101 PhD students in NUIG that are working on a SFI funded research team

Fig. 2.4: Composition of SFI Funded Team by HEI





Section 3: First Destinations of Departing Team Members

Table 3.1 Departing PhDs

	In Ireland	Outside Ireland	Total	% Total
Post Doctoral Researchers in HEI	52	20	72	57%
Industry	19	10	29	23%
Specialist Courses	1	0	1	1%
Teachers (Primary/Secondary)	1	0	1	1%
Other	15	8	23	18%
Total	88	38	126	100%

Fig. 3.1(a) Departing PhDs - Where did they go?

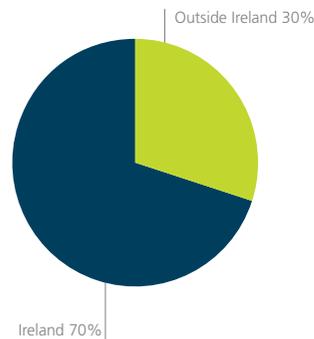


Fig. 3.1(b) Departing PhDs - What did they do?

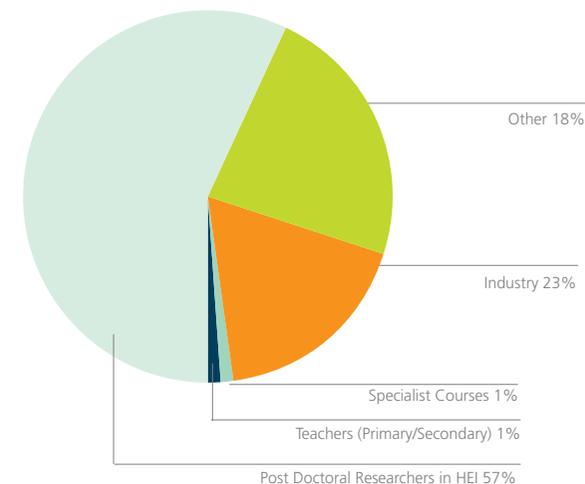


Table 3.2 Departing Masters

	In Ireland	Outside Ireland	Total	% Total
PhD Research in HEI	4	6	10	30%
Technicians in HEI	-	2	2	6%
Industry	9	2	11	33%
Specialist Courses	-	2	2	6%
Other	6	2	8	24%
Total	19	14	33	100%

Fig. 3.2(a) Departing Masters - Where did they go?

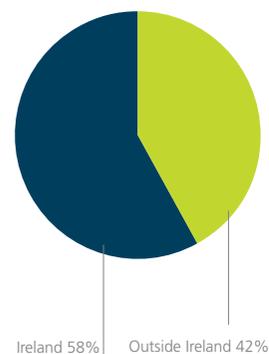


Fig. 3.2(b) Departing Masters - What did they do?

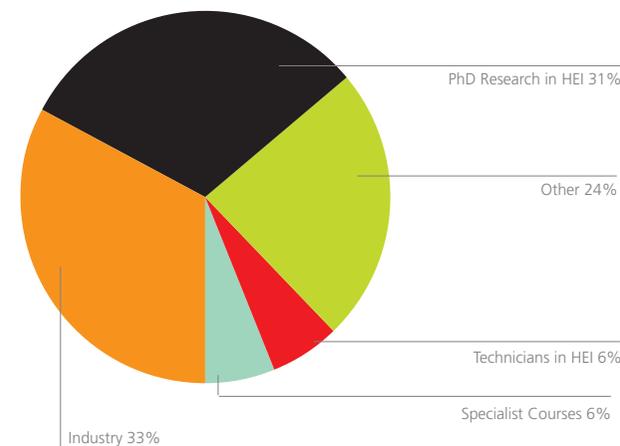




Table 3.3 Departing Post-Docs				
	In Ireland	Outside Ireland	Total	% Total
Lecturers/Permanent Researchers in HEI	22	28	50	25%
Post Doctoral Researchers in HEI	34	36	70	35%
Technicians in HEI	4	1	5	2.5%
Industry	23	9	32	16%
Specialist Courses	1	1	2	1%
Other	14	27	41	20.5%
Total	98	102	200	100%

Fig. 3.3(a) Departing Post-Docs - Where did they go?

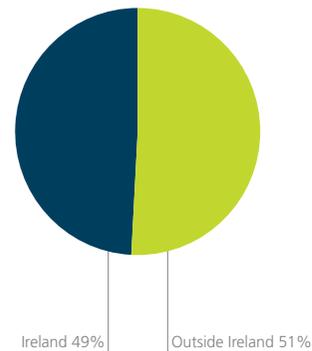


Fig. 3.3(b) Departing Post-Docs - What did they do?

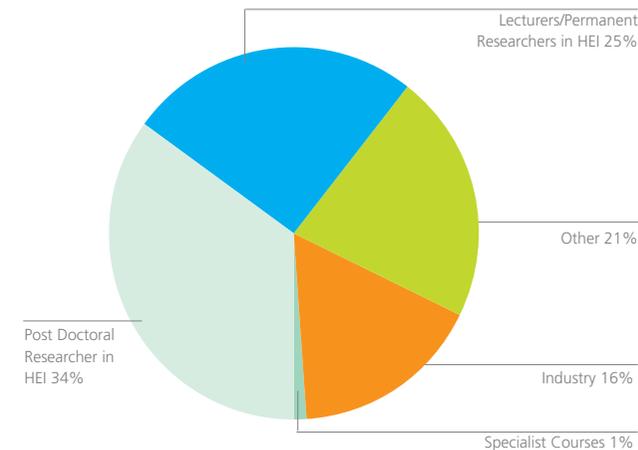


Table 3.4 Departing Research Assistants				
	In Ireland	Outside Ireland	Total	% Total
PhD Research	4	5	9	22%
Masters Research	1	3	4	10%
Technicians in HEI	2	3	5	12%
Industry	2	6	8	20%
Specialist Courses	3	-	3	7%
Other	9	3	12	29%
Total	21	20	41	100%

Fig. 3.4(a) Departing Research Assistants - Where did they go?

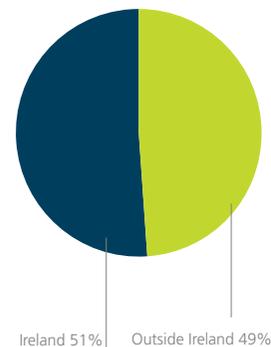


Fig. 3.4(b) Departing Research Assistants - What did they do?

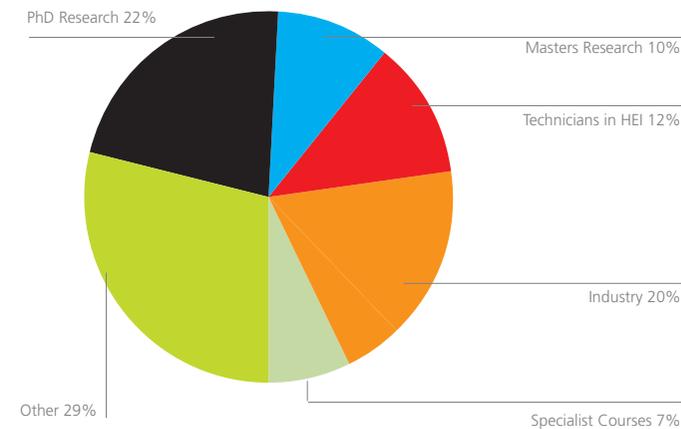




Table 3.5 Departing Technicians

	In Ireland	Outside Ireland	Total	% Total
Technicians in HEI	2	2	4	40%
Industry	2	2	4	40%
Specialist Courses	1	-	1	10%
Teachers (Primary/Secondary)	1	-	1	10%
Total	6	4	10	100%

Fig. 3.5(a) Departing Technicians
Where did they go?

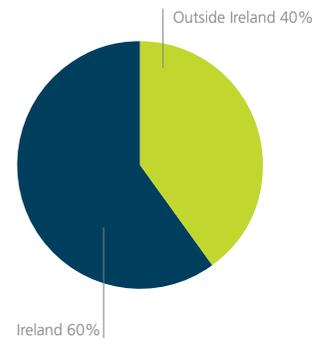


Fig. 3.5(b) Departing Technicians - What did they do?

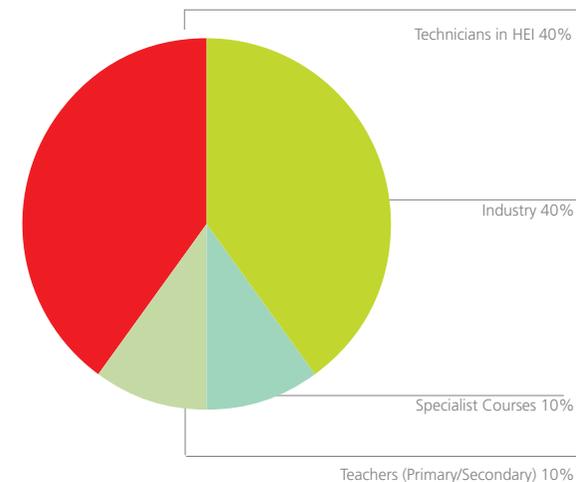


Table 3.6 All Departing Team Members

	In Ireland	Outside Ireland	Total	% Total
Lecturers/Permanent Researchers in HEI	22	28	50	12%
Post Doctoral Research in HEI	86	56	142	35%
PhD Research	8	11	19	5%
Masters Research	1	3	4	1%
Technicians in HEI	8	8	16	4%
Industry	55	29	84	20%
Specialist Courses	6	3	9	2%
Teachers (Primary/Secondary)	2	-	2	0%
Other	44	40	84	20%
Total Leavers	232	178	410	100%

Fig. 3.6(a) All Departing Team Members
Where did they go?

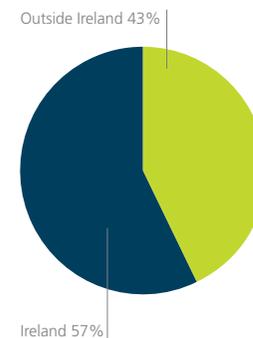
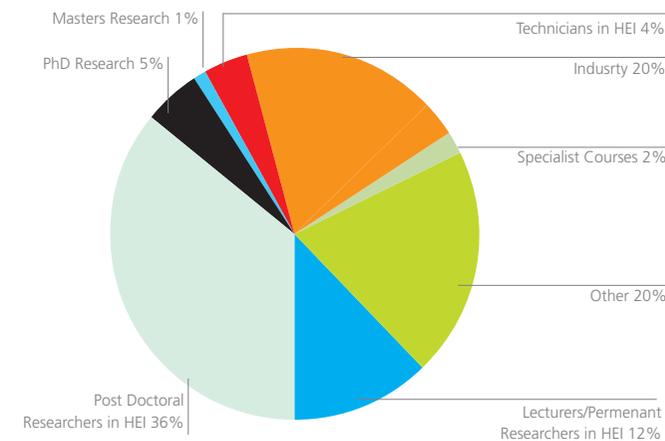


Fig. 3.6(b) All Departing Team Members
What did they do?





Section 4: Academic Output

	PICA	RP	SRC	CP	PIYRA	MI	CSET	PI	RFP	Total Output
Refereed, Original Articles	6	36	36	26	38	105	257	544	433	1481
Refereed Reviews	1	2	3	2	7	3	24	57	44	143
Books	-	1	-	-	-	1	9	3	-	14
Book Chapters	5	4	2	-	3	3	39	28	45	129
Conference/ Meeting Proceedings	17	12	26	71	60	70	248	345	599	1448
Total by Award	29	55	67	99	108	182	577	977	1121	3215

Fig. 4.1(a) Publication Output in 2008

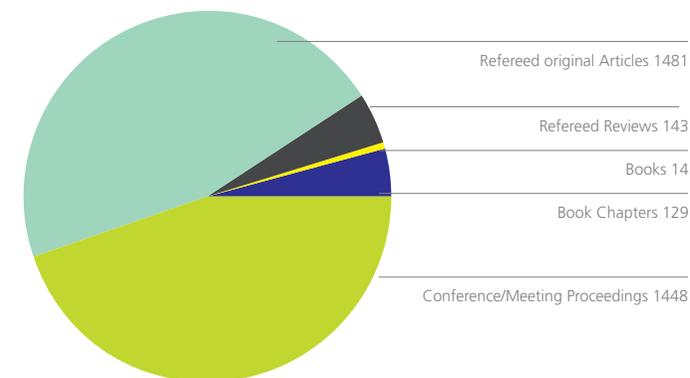
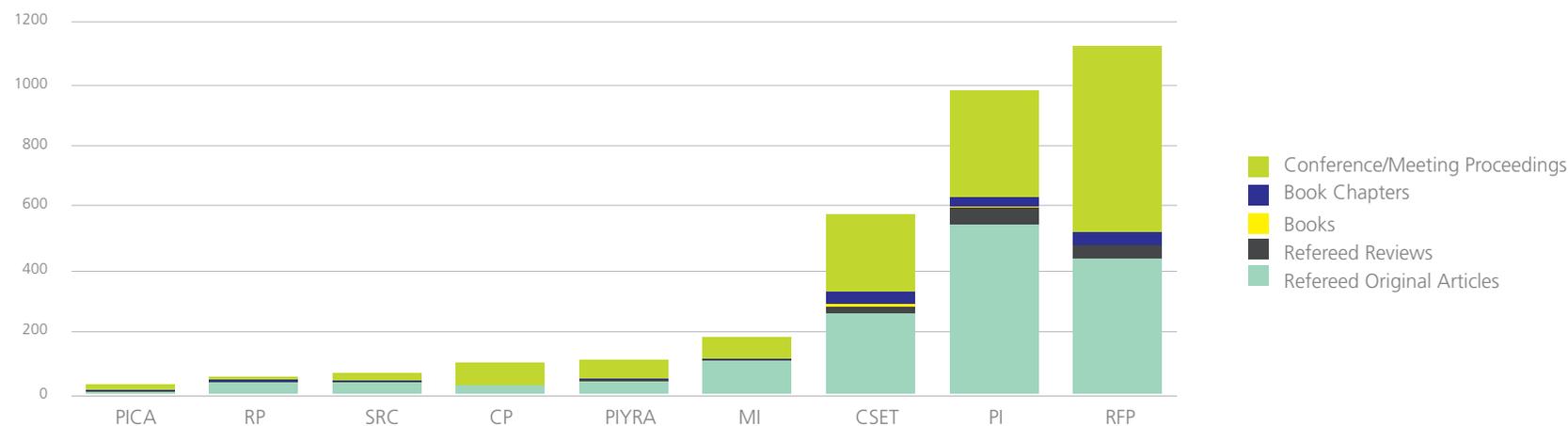


Fig. 4.1(b) Publication Output in 2008 by Award



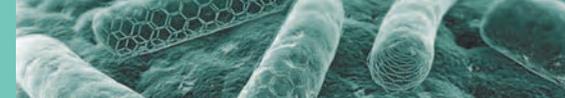
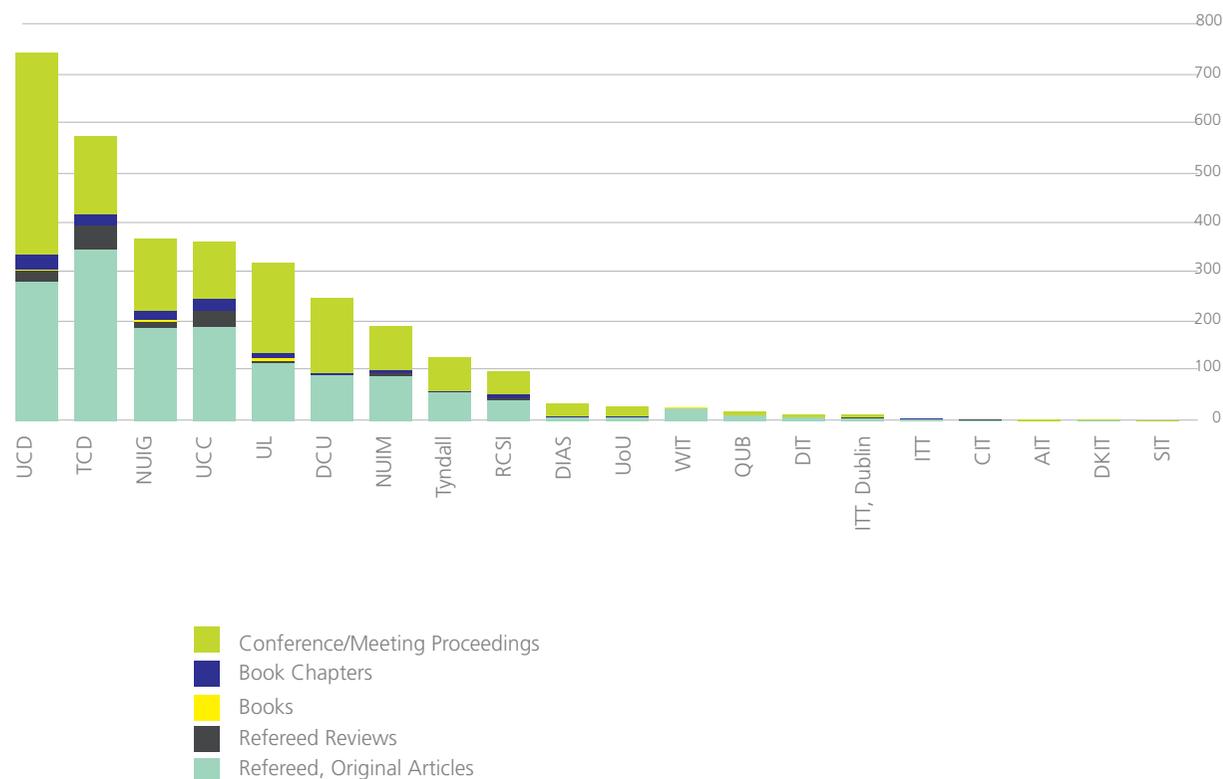


Table 4.2 Publication Output by HEI in 2008

HEI	Refereed Original Articles	Refereed Reviews	Books	Book Chapters	Conference/ Meeting Proceedings	Total
UCD	282	24	2	30	410	748
TCD	348	49		22	160	579
NUIG	188	14	3	19	146	370
UCC	190	33	2	23	116	364
UL	117	6	6	10	183	322
DCU	92	2		3	153	250
NUIM	91	7		5	91	194
Tyndall	58			3	69	130
RCSI	41	6		8	46	101
DIAS	8			1	28	37
UoU	8			2	19	29
WIT	26		1		1	28
QUB	12				7	19
DIT	7			1	6	14
ITT, Dublin	6	1			6	13
ITT	4			1		5
CIT	2	1		1		4
AIT					3	3
DKIT	1				2	3
SIT					2	2
Total	1481	143	14	129	1448	3215

Fig. 4.2(a) Publication Output by HEI



Section 5: Pre-Commercial Outputs - by HEI⁶

Summary of Output (excl. publications) by HEI																				
	AIT	CIT	DCU	DIAS	DIT	DKIT	NUIG	NUIM	RCSI	SIT	ITT, Dublin	TCD	ITT	Tyndall	UCC	UCD	UL	WIT	Other HEI	Total
Total Respondents by HEI	1	1	44	8	5	1	55	36	21	1	1	107	1	15	68	133	24	1	2	525
Table 5.1 Number of Invention Disclosures⁷																				
Number of Respondents that have Invention Disclosure	-	-	5	-	-	-	5	2	3	-	-	7	-	6	9	12	1	-	-	50
Total Number of Invention Disclosures	-	-	22	-	-	-	20	2	9	-	-	20	-	13	22	25	2	-	-	135
Table 5.2 Number of Pending Patents																				
Number of Respondents that have a Pending Patent	-	-	6	-	-	-	5	3	2	-	-	7	-	3	5	11	1	-	-	43
Total Number of Pending Patents	-	-	14	-	-	-	12	3	6	-	-	22	-	11	11	16	2	-	-	97
Table 5.3 Number of Awarded Patents																				
Number of Respondents that have an Awarded Patent	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	1	-	-	-	4
Total Number of Awarded Patents	-	-	-	-	-	-	-	-	-	-	-	2	-	9	-	2	-	-	-	13
Table 5.4 Number of Spin Out Companies																				
Number of Respondents that have a Spin Out Company	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	-	-	3
Total Number of Spin Outs	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	-	-	3
Table 5.5 Number of Licences																				
Number of Respondents that have Licences produced	-	-	-	-	-	-	2	1	-	-	-	4	-	-	1	2	-	-	-	10
Total Number of Licences	-	-	-	-	-	-	3	5	-	-	-	6	-	-	4	4	-	-	-	22
Table 5.6 Number of Standards contributed to																				
Number of Respondents that have contributed to a Standard	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	-	2	1	-	6
Total Number of Standards	-	-	-	-	-	-	9	-	-	-	-	-	-	-	1	-	2	3	-	15

⁶ Although Invention Disclosures, Patents, Spin Out and Licences are reported here as arising from SFI-funded research, it is important to stress that they require critical input from numerous STI stakeholders, such as TTOs, EI, HEIs etc.

⁷ For example, 5 of the 44 respondents from DCU reported 22 Invention Disclosures and 6 reported 14 Pending Patents.



Fig 5.1 Invention Disclosures - by HEI

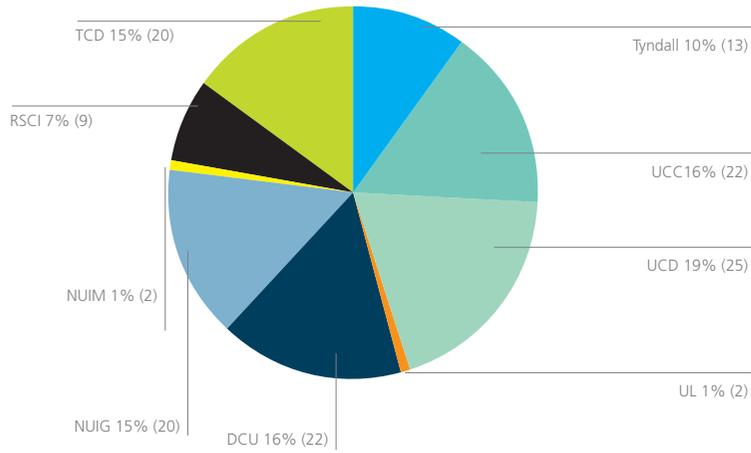
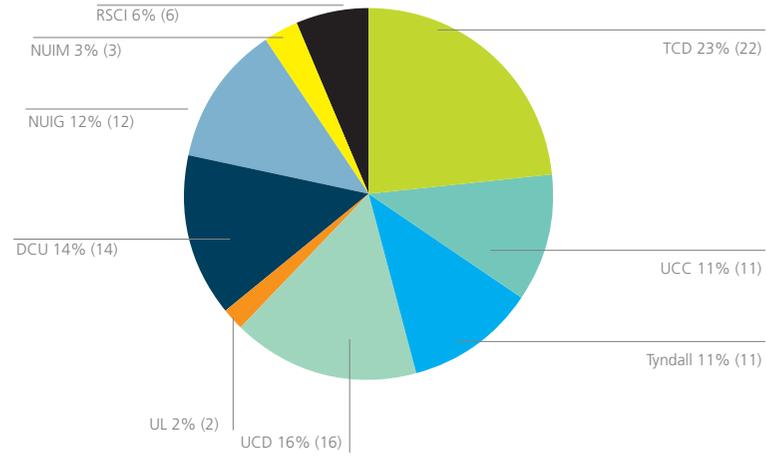


Fig 5.2 Number of Pending Patents - by HEI



For example, TCD reported 20 Invention Disclosures, accounting for 15% of the total 135 Disclosures reported.

Fig 5.3 Number of Awarded Patents - by HEI

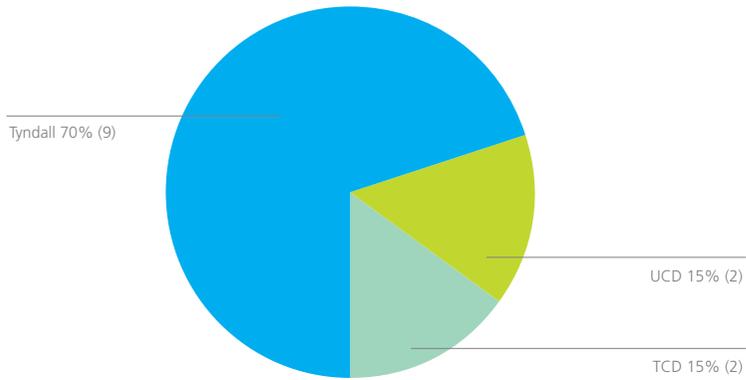
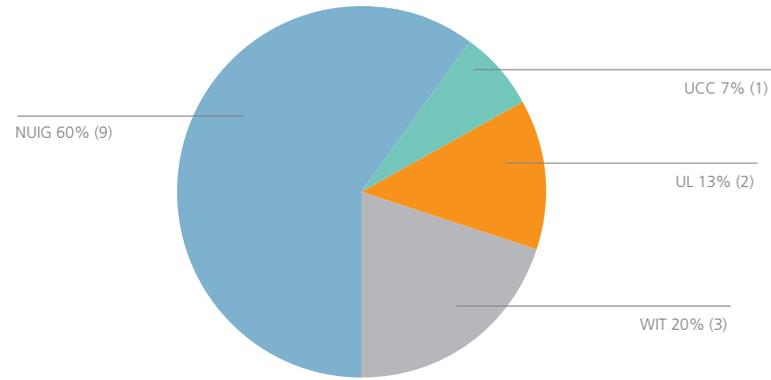


Fig 5.4 Number of Standards Contributed to - by HEI





Section 6: Pre-Commercial Outputs - by Award

Table 6.1 Number of Invention Disclosures arising from SFI funding in 2008 - by HEI and Award Type

	PI	PICA	PIYRA	RFP	CSET	SRC	Number of Invention Disclosures by HEI
DCU	2	-	-	3	17	-	22
NUIG	2	-	-	2	16	-	20
NUIM	-	-	-	2	-	-	2
RCSI	2	-	-	7	-	-	9
TCD	10	-	-	3	7	-	20
Tyndall	13	-	-	-	-	-	13
UCC	16	-	-	2	4	-	22
UCD	11	1	4	4	3	2	25
UL	2	-	-	-	-	-	2
Total Number of Invention Disclosures - by Award Type	58	1	4	23	47	2	135

For example: RCSI reported a total of nine Invention Disclosures in 2008, two arising from PI awards and seven from RFP awards



Table 6.2 Number of Pending Patents arising from SFI funding - by Patent Office and Award Type

	PI	PICA	PIYRA	RFP	MI	CSET	Total by Patent Office
Irish	7	1	2	4	1	7	22
EU	21	-	-	4	-	1	26
USA	16	-	2	6	-	11	35
United Kingdom	2	-	-	3	-	4	9
Other	2	-	-	-	-	3	5
Total by Award Category	48	1	4	17	1	26	97

For example: There were seven Pending Patents at the Irish Patents Office in 2008 arising from PI awards.

Table 6.3 Number of Pending Patents arising from SFI funding - by HEI and Award Type

	PI	PICA	PIYRA	RFP	MI	CSET	Total by HEI
DCU	6	-	-	2	-	6	14
NUIG	4	-	-	2	-	6	12
NUIM	1	-	-	2	-	-	3
RCSI	2	-	-	4	-	-	6
TCD	12	-	-	1	-	9	22
Tyndall	11	-	-	-	-	-	11
UCC	5	-	-	2	-	4	11
UCD	5	1	4	4	1	1	16
UL	2	-	-	-	-	-	2
Total by Award Category	48	1	4	17	1	26	97

Table 6.4 Number of Awarded Patents arising from SFI funding - by Award Type

	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total
Total Number of Awarded Patents	9	-	-	-	-	-	4	-	-	13

Section 6: Pre-Commercial Outputs - by Award



Table 6.5 Awarded patents arising from SFI funding - by Jurisdiction of Patent

	PI	CSET	Total Number of Patents by Jurisdiction
Ireland {Republic}	9	1	10
USA	-	3	3
Total by Award Category	9	4	13

For example: Three Patents awarded in the USA arose from CSER Awards.

Table 6.6 Awarded Patents arising from SFI funding - by HEI and Award Type

	PI	CSET	Total Number of Patents by HEI
TCD	-	2	2
Tyndall	9	-	9
UCD	-	2	2
Total by Award Type	9	4	13

For example: Nine Awarded Patents arose from PI awards in Tyndall

Total 6.7 Number of Spin Out companies arising from SFI funding - by Award Type

	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total No of Spin Outs
No of Spin Outs	1	-	-	-	-	-	2	-	-	3

Table 6.8 Licences arising from SFI funding - by Award Type

	Total	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP
Total Number of Licences	22	7	-	1	3	1	-	8	2	-

Table 6.9 Total Number of Members of Standards Bodies - by Role within the Sub Group

	PI	CSET	CP	Total by Member Category
Chair	3	-	-	3
Member	1	7	1	9
Other	1	2	-	3
Total by Award Type	5	9	1	15

For example: Three PI award holders hold the position of Chair within Standards Bodies

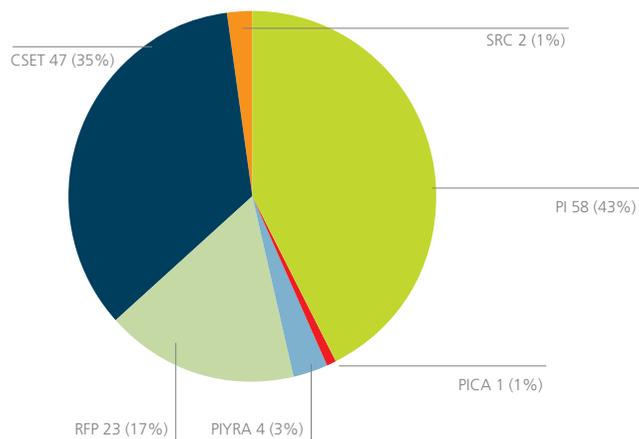
Table 6.10 Number of Successful Contributions to this Standard/Specification

Number of Successful Contributions	PI	CSET	CP	Total by Contribution
1	4	7	1	12
2	-	1	-	1
3	-	1	-	1
5	1	-	-	1
Total by Award Type	9	12	1	22

For example: One CSET made two successful contributions to Standards in 2008



Fig 6.1 Number of Invention Disclosures by Award



For example, the CSET awards accounted for 35% (47) of the total 135 Invention Disclosures reported.

Fig 6.2 Number of Pending Patents by Award

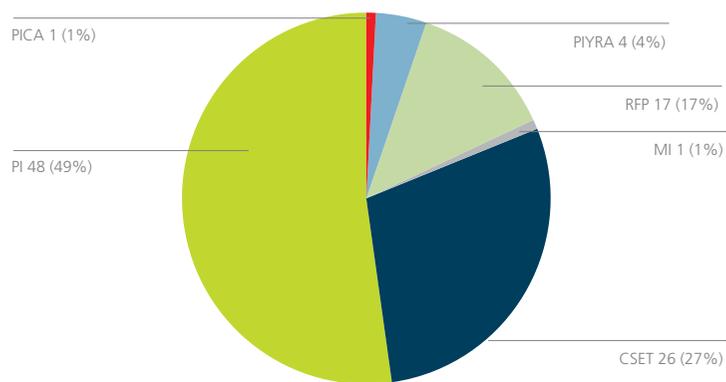


Fig 6.4 Number of Awarded Patents - by Award

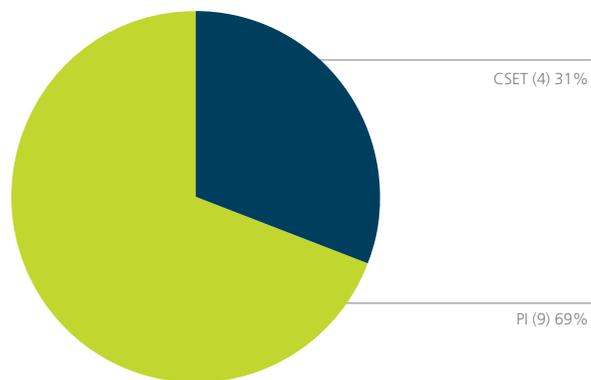
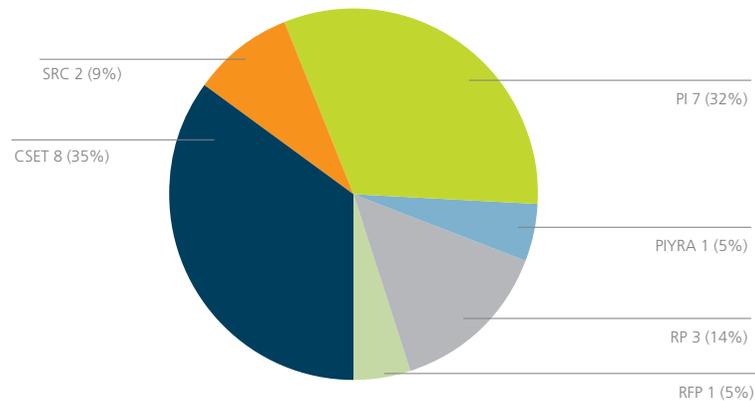


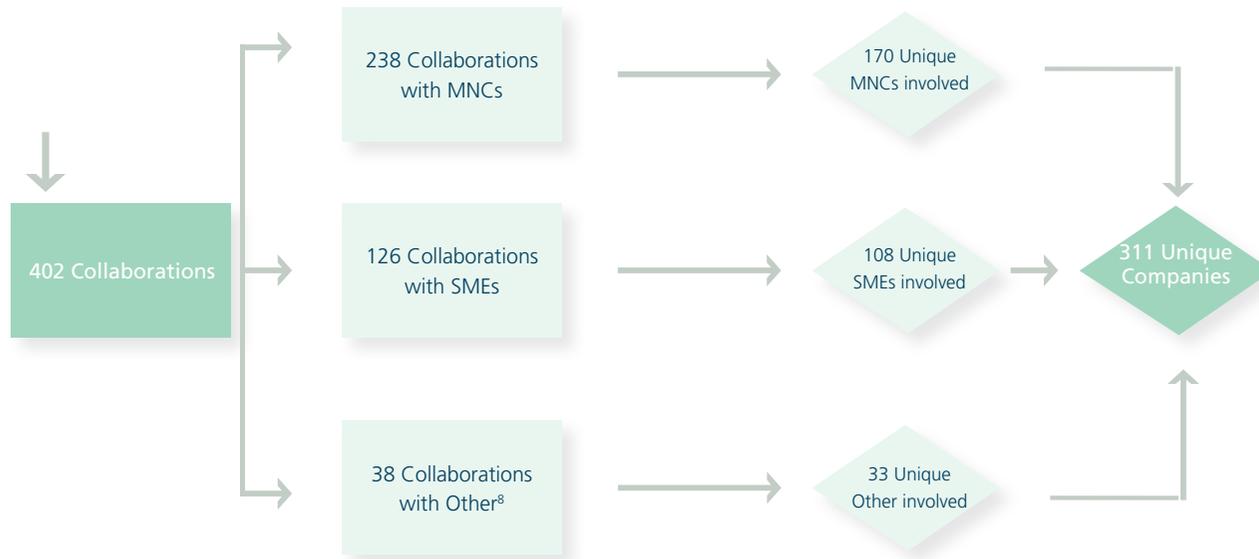
Fig 6.8 Number of Licences - by Award





Section 7: Industry - Research Collaborations

Summary of Collaborations between SFI-funded Researchers and Industry



There were 402 Research - Industry Collaborations reported in the SFI census involving 311 Unique/Distinct Companies

⁸ "Other" refers to State or Semi-state bodies/companies, Private Foundations, etc.



Table 7.1: Industry - Research Collaborations - by Award Type

	MNC	SME	Other	Total
CSET	58	24	2	84
SRC	42	33	6	81
PI	63	25	2	90
PIYRA	6	3	1	10
PICA	3	1	-	4
MI	14	4	3	21
RFP	32	29	7	68
CP	17	3	16	36
RP	3	4	1	8
Total	238	126	38	402

 Table 7.2: Number of Unique/Distinct Companies involved in Collaborations - by Award Type⁸

	MNC	SME	Other	Total
CSET	50	24	2	76
SRC	34	31	6	71
PI	48	23	2	73
PIYRA	6	3	1	10
PICA	3	1	-	4
MI	13	4	3	20
RFP	28	29	7	64
CP	17	3	14	34
RP	3	4	1	8

Table 7.3: Number of Collaborations with Legal Agreements

	MNC	SME	Other	Total
CSET	20	10	1	31
SRC	6	11	4	21
PI	26	14	-	40
PIYRA	3	1	1	5
PICA	-	-	1	1
MI	4	-	-	4
RFP	14	8	2	24
CP	1	-	-	1
RP	0	1	-	1
Total	74	45	9	128

Table 7.4: Number of Unique Companies with Legal Agreements - by Award Type

	MNC	SME	Other	Total
CSET	18	10	1	29
SRC	6	10	4	20
PI	23	14	-	37
PIYRA	3	1	1	5
PICA	-	-	1	1
MI	4	-	-	4
RFP	12	8	2	22
CP	1	-	-	1
RP	-	1	-	1
Total	67	44	9	120

Legal Agreements in Place

There are 128 collaborations with legal agreements in place involving 120 unique companies. This corresponds to 32% of collaborations or 39% of unique companies.

⁸ Note: The total number here will not equal the 311 companies in the first graph because it refers to unique companies within an award category: the same company may be collaborating within several award categories.



Section 8: Academic Collaborations

Table 8.1: Academic Collaborations - by Region

Ireland	417	31%
Europe	544	41%
Rest of World	377	28%
Total	1338	100%

For example there are 417 collaborations with academic partners in Ireland

Table 8.2: Academic Collaborations - by Award Type

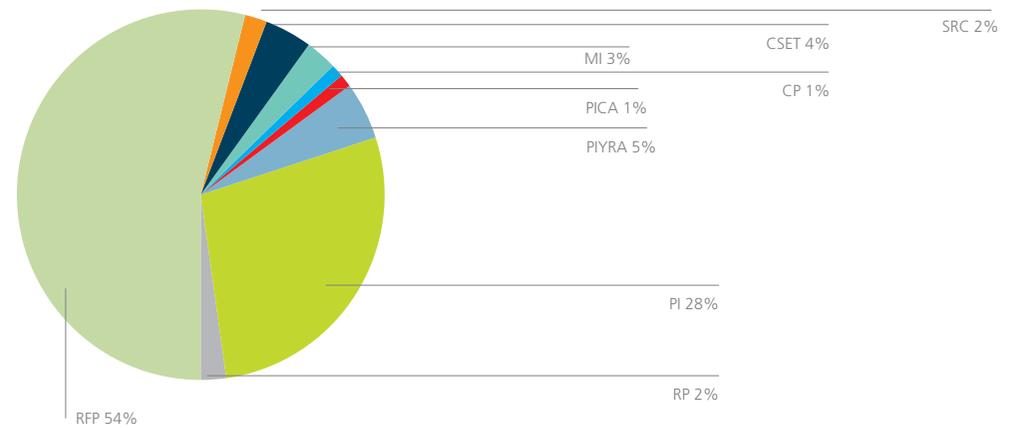
CSET	55
MI	34
CP	22
PICA	14
PIYRA	60
PI	371
RP	26
RFP	723
SRC	33
Total	1338

For example. RFP award holders have 723 academic collaborations in place broken down by (see table 8.3): 216 based in Ireland, 310 in Europe and 197 in Rest of World.

Table 8.3: Academic Collaborations - by Award and Region

	Ireland	Europe	Rest of World	Total
CSET	20	21	14	55
MI	5	15	14	34
CP	9	11	2	22
PICA	2	9	3	14
PIYRA	30	15	15	60
PI	122	139	110	371
RP	5	10	11	26
RFP	216	310	197	723
SRC	8	14	11	33
Total	417	544	377	1338

Fig. 8.2 Academic Collaborations - by Award Category





Section 9: Funding Information

Table 9.1 Total Spend for Research Groups in 2008¹⁰

	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total Number of Awards in Each Range
€0 - €50,000	9	-	-	-	68	-	-	-	-	77
€50,001 - €100,000	9	-	-	-	69	-	-	-	-	78
€100,001 - €150,000	15	2	-	-	63	2	-	-	-	82
€150,001 - €200,000	16	2	5	-	39	-	-	-	-	62
€200,001 - €250,000	17	2	3	1	31	1	-	-	-	55
€250,001 - €300,000	13	-	5	-	25	-	-	-	-	43
€300,001 - €350,000	7	1	-	-	7	-	-	-	-	15
€350,001 - €400,000	5	-	-	-	13	-	-	1	-	19
€400,001 - €450,000	11	-	-	-	16	-	-	-	-	27
€450,001 - €500,000	10	-	-	2	14	1	-	2	3	32
More than €500,000	32	2	3	2	36	1	9	8	4	97
Total Awards	144	9	16	5	381	5	9	11	7	587

For example, a spend of €0 - €50,000 in 2008 was reported on nine PI awards and 68 RFP awards.

¹⁰ Total spend includes SFI and other sources.



Table 9.2 Total Spend for Research Groups in 2008 - by HEI

	AIT	CIT	DCU	DIAS	DIT	DKIT	NUIG	NUIM	RCSI	SIT	ITT, Dublin	TCD	ITT Tyndall	UCC	UCD	UL	WIT	Other Institutes	Total Respondents by Funding Range	
€0 - €50,000	1	-	8	4	1	-	7	11	3	-	-	12	-	1	10	16	3	-	-	77
€50,001 - €100,000	-	1	3	1	1	-	9	6	3	1	-	15	1	-	12	22	2	-	-	77
€100,001 - €150,000	-	-	10	-	-	-	5	4	2	-	-	17	-	2	7	23	7	-	-	77
€150,001 - €200,000	-	-	5	-	-	-	7	4	3	-	-	14	-	2	1	15	3	-	-	54
€200,001 - €250,000	-	-	3	-	-	-	6	5	5	-	1	9	-	1	6	11	2	-	-	49
€250,001 - €300,000	-	-	4	1	1	-	3	-	1	-	-	10	-	2	5	6	1	-	-	34
€300,001 - €350,000	-	-	-	-	-	-	-	-	1	-	-	-	-	-	6	5	-	-	-	12
€350,001 - €400,000	-	-	2	-	-	-	-	1	-	-	-	7	-	2	-	5	-	-	-	17
€400,001 - €450,000	-	-	2	1	1	-	4	2	-	-	-	3	-	-	3	6	1	-	-	23
€450,001 - €500,000	-	-	1	-	1	1	4	2	1	-	-	3	-	1	5	5	1	-	-	25
More than €500,000	-	-	6	1	-	-	10	1	2	-	-	17	-	4	13	19	4	1	2	80
Total Respondents by HEI	1	1	44	8	5	1	55	36	21	1	1	107	1	15	68	133	24	1	2	525

For example, one respondent from AIT reported a 2008 spend of between €0 - €50,000.

Table 9.3 Dependency of Research Groups' 2008 Spend on SFI - by award

	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total No of Awards in % grouping
Very Low Dependency (0-20%)	11	-	-	-	91	-	-	-	1	103
Low dependency (21-40%)	20	2	1	1	67	1	1	1	1	95
Dependent (41-60%)	32	3	4	-	64	-	1	1	2	107
High Dependency (61-80%)	24	2	2	1	65	2	4	3	2	105
Very High Dependency (81-100%)	57	2	9	3	94	2	3	6	1	177
Total Number of Awards by Award Type	144	9	16	5	381	5	9	11	7	587



Table 9.4 Dependency (in percentage terms) of Research Groups on SFI - by Award (based on spend in 2008)

	PI	PICA	PIYRA	RP	RFP	MI	CSET	SRC	CP	Total No of Awards in % grouping
Very Low Dependency (0-20%)	8%	0%	0%	0%	24%	0%	0%	0%	14%	18%
Low Dependency (21-40%)	14%	22%	6%	20%	18%	20%	11%	9%	14%	16%
Dependent (41-60%)	22%	33%	25%	0%	17%	0%	11%	9%	29%	18%
High Dependency (61-80%)	17%	22%	13%	20%	17%	40%	44%	27%	29%	18%
Very High Dependency (81-100%)	40%	22%	56%	60%	25%	40%	33%	55%	14%	30%
Total Number of Awards by Award Type	144	9	16	5	381	5	9	11	7	587

For example, 8% of PI Awards had a very low dependency (0 - 20%) on SFI in 2008, based on spend in 2008.

Figure 9.3(a) Dependency of Research Groups on SFI - by Award (based on spend in 2008)

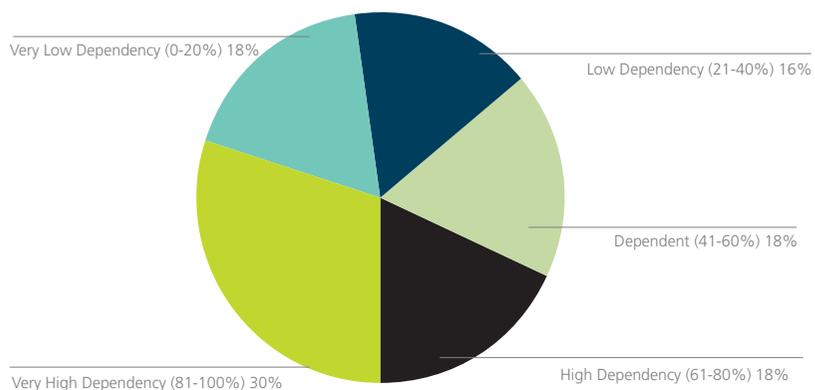


Figure 9.3(b) Dependency of Research Groups on SFI - by Award (based on spend in 2008)

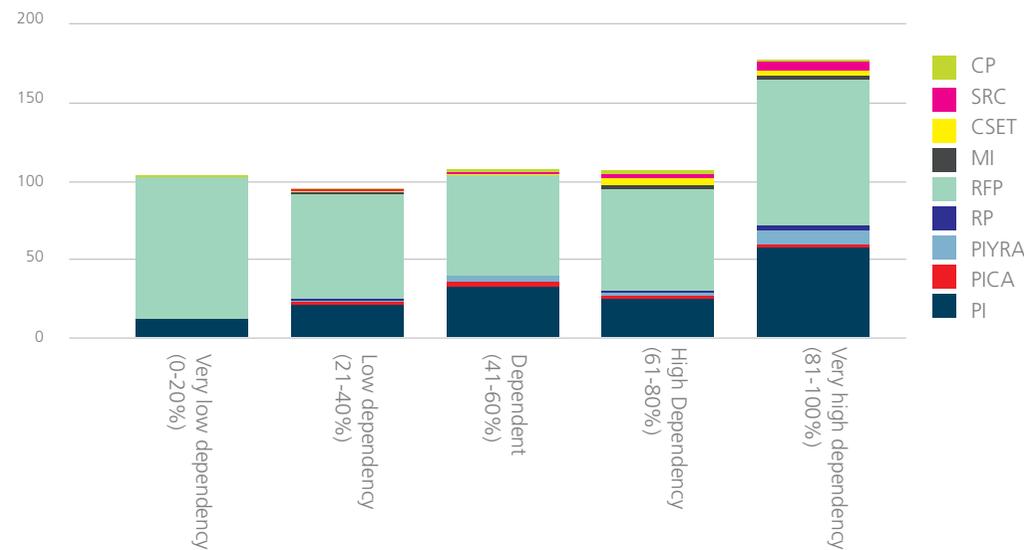




Table 9.5 Research Groups' 2008 Spend from SFI - by HEI

% of Spend	AIT	CIT	DCU	DIAS	DIT	DKIT	NUIG	NUIM	RCSI	SIT	ITT, Dublin	TCD	ITT Tyndall	UCC	UCD	UL	WIT	Other Institutes	Total Respondents by Range	
0-20%	1	-	8	6	2	1	11	7	6	-	-	18	-	-	13	22	6	-	-	101
21-40%	-	-	8	1	1	-	10	3	4	1	-	10	-	3	14	25	6	1	1	88
41-60%	-	1	9	-	-	-	9	5	5	-	1	24	1	1	13	19	2	-	1	91
61-80%	-	-	7	-	2	-	12	6	1	-	-	22	-	1	9	24	3	-	-	87
81-100%	-	-	11	1	-	-	13	15	5	-	-	33	-	10	19	43	7	-	-	157
Total No of Respondents by HEI	1	1	44	8	5	1	55	36	21	1	1	107	1	15	68	133	24	1	2	525

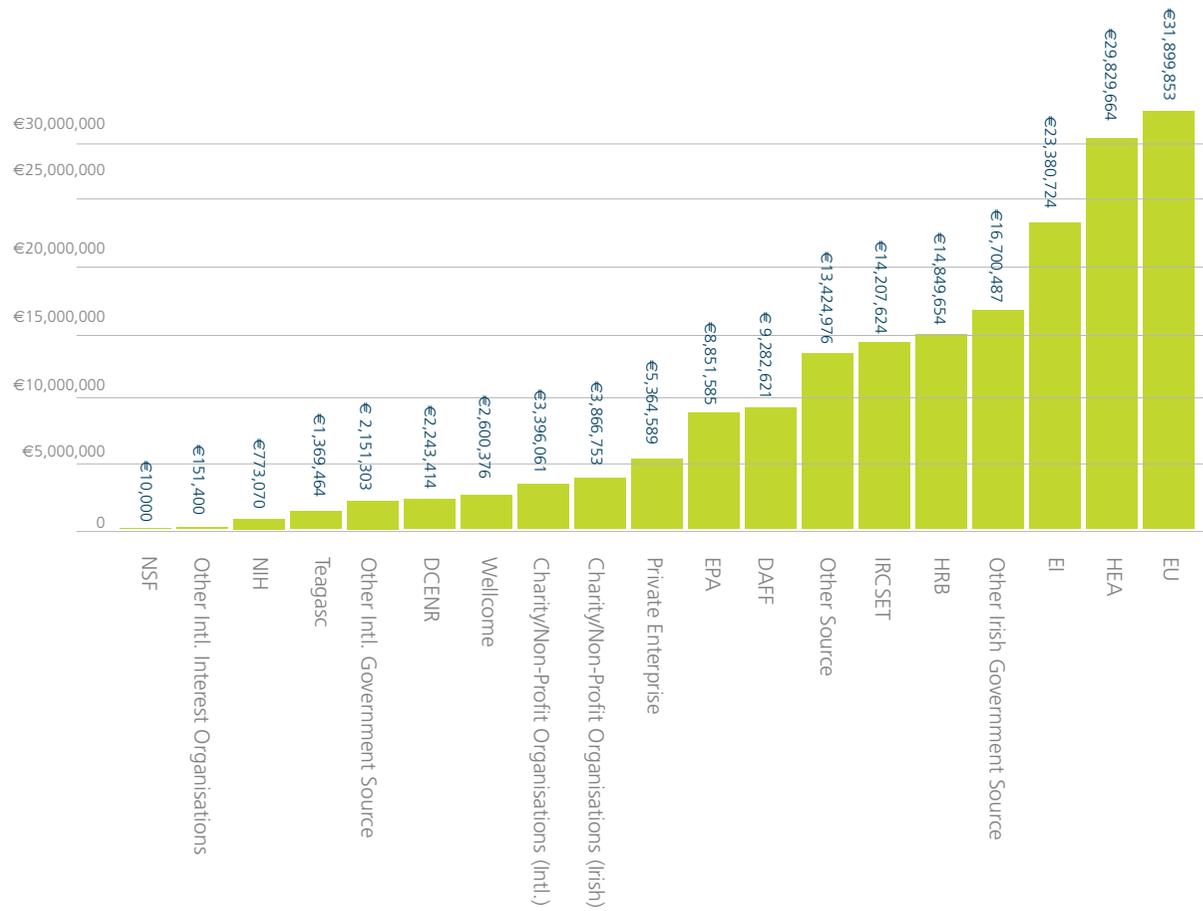
Table 9.7 Amount of Funding Reported by SFI Funded Researchers by Source (Euros)¹¹

	DCENR	EI	EU	HEA	HRB	IRCSET	NSF	Teagasc	Wellcome	NIH	EPA	DAFF	Charity/ Non-Profit Organisations (Irish)	Charity/ Non-Profit Organisations (Intl.)	Other Irish Government Source	Other Irish Intl. Government Source	Private Enterprise	Other Intl. Interest Organisations	Other Source	Total by Award
PI	€8,000	€2,202,544	€731,319	€229,893	€4,385,350	€1,142,439	-	€62,000	€1,017,665	€39,791	€1,541,001	€733,000	€1,242,303	€28,850	€4,408,133	461,020	€1,246,647	€5,000	€1,158,926	€ 44,143,881
PICA	-	€3,500	€34,000	€1,000	€1,656,000	459,186	-	-	€10,000	-	-	€93,610	-	-	€50,000	-	€76,992	-	€2,000	€ 4,056,288
PIYRA	-	€20,000	€10,500	€0,000	€30,000	391,850	-	-	€10,000	-	-	€100,000	€0,000	€1,000	€96,666	-	€56,000	-	€5,000	€ 2,081,016
RP	€7,457	€10,000	€15,000	-	€15,000	25,000	-	€3,000	-	-	-	-	-	€30,000	€8,253	€7,916	-	-	€110,000	€ 831,626
RFP	€20,500	€12,496,149	€4,280,188	€16,229,771	€6,574,989	€916,584	€10,000	€25,750	€44,711	€11,516	€6,218,652	€1,906,011	€2,024,450	€1,625,967	€1,183,782	€1,054,200	€2,497,100	€146,400	€10,388,050	€ 98,754,770
MI	-	-	€100,000	-	€47,000	135,000	-	-	-	€10,763	-	-	-	-	€47,000	€0,763	-	-	€30,000	€ 800,526
CSET	-	€575,794	€3,435,500	€6,950,000	€112,297	€35,556	-	€0,714	€5,000	-	€30,000	-	€30,000	€110,427	€2,219,000	€140,488	€120,050	-	€99,000	€ 16,823,826
SRC	€7,457	€1,422,737	€1,373,346	€1,215,000	€1,329,018	524,509	-	€80,000	€463,000	€1,000	€1,011,932	€150,000	€150,000	€769,817	€1,144,653	€1,916	€67,800	-	€2,000	€ 13,754,185
CP	€1,600,000	€50,000	€90,000	€4,000	-	77,500	-	€8,000	-	-	-	-	-	-	€3,000	€25,000	-	-	€10,000	€ 3,107,500
Total by Source	€2,243,414	€23,380,724	€1,899,853	€29,829,664	€4,849,654	€4,207,624	€10,000	€1,369,464	€2,600,376	€73,070	€8,851,585	€2,282,621	€3,866,753	€3,396,061	€16,700,487	€2,151,303	€5,364,589	€151,400	€3,424,976	€ 184,353,618

¹¹ A degree of duplicate/over-reporting is suspected. For instance, the level of funding secured from EU sources is close to the total amount secured by all Irish researchers in 2008 (i.e. SFI and all other funded researchers). It is possible that, due to the multi-partner nature of many grants, duplicate reporting has occurred.



Fig. 9.6 Amount of Funding received by Source (Euros)





Glossary of Terms

AIT	Athlone Institute of Technology	NSF	National Science Foundation, USA
CIT	Cork Institute of Technology	NUIG	National University of Ireland, Galway
CP	Charles Parsons Award	NUIM	National University of Ireland, Maynooth
CSET	SFI Centres for Science, Engineering and Technology	PI	SFI Principal Investigator Programme
DAFF	Department of Agriculture, Fisheries and Food	PICA	SFI Principal Investigator Career Advancement Award
DCENR	Department of Communications, Energy and Natural Resources	PIYRA	SFI President of Ireland Young Researcher Award
DCU	Dublin City University	QUB	Queen's University Belfast
DETE	Department of Enterprise, Trade and Employment	RCSI	Royal College of Surgeons Ireland
DIAS	Dublin Institute for Advanced Studies	RD&I	Research, Development and Innovation
DIT	Dublin Institute of Technology	RFP	SFI Research Frontiers Programme
DKIT	Dundalk Institute of Technology	RP	SFI Research Professor Recruitment Award
EI	Enterprise Ireland	SIT	Sligo Institute of Technology
EPA	Environmental Protection Agency	SME	Small-Medium Enterprise
EU	European Union	SRC	SFI Strategic Research Clusters
FDI	Foreign Direct Investment	SSTI	Strategy for Science, Technology & Innovation 2006 - 2013
HEA	Higher Education Authority	TCD	Trinity College Dublin
HEI	Higher Education Institutions	Teagasc	The Irish Agriculture and Food Development Authority
HRB	Health Research Board	Tyndall	Tyndall National Institute
IDA	Industrial Development Authority, Ireland	UCC	University College Cork
IRCSET	Irish Research Council for Science, Engineering and Technology	UCD	University College Dublin
ITT, Dublin	Institute of Technology, Tallaght	UL	University of Limerick
ITT	Institute of Technology, Tralee	UoU	University of Ulster
MI	SFI Mathematics Initiative	USA	United States of America
MI	Maths Initiative	Wellcome	Wellcome Trust, UK
MNC	Multi-national Corporation	WIT	Waterford Institute of Technology
NIH	National Institute of Health, USA	IUA	Irish Universities Association

Research for Ireland's Future

Science Foundation Ireland

Wilton Park House
Wilton Place
Dublin 2
Ireland

t: + 353 1 607 3200

f: + 353 1 607 3201

e: info@sfi.ie

w: www.sfi.ie

