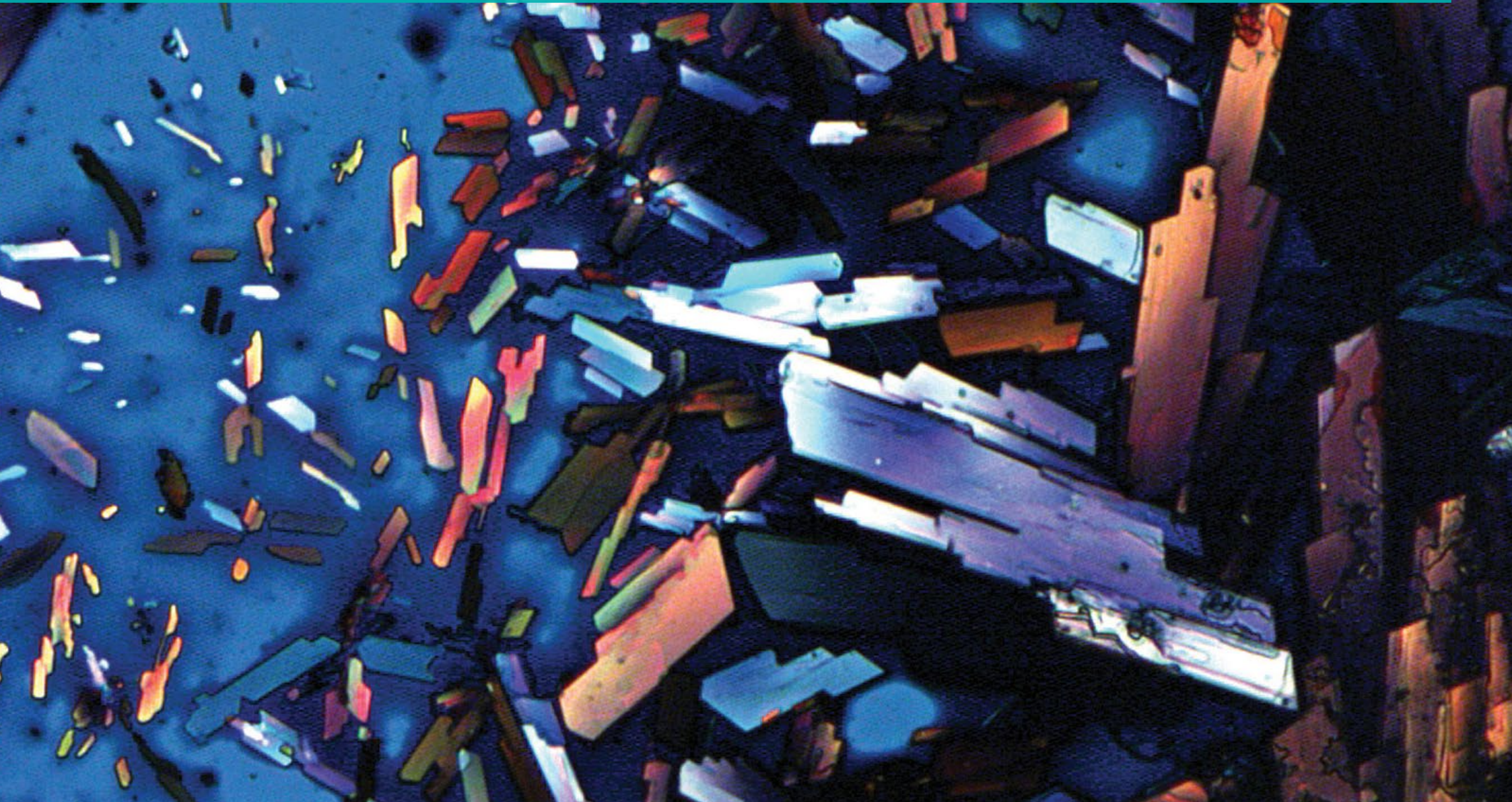


# ANNUAL CENSUS 2012



Research for Ireland's Future





# SCIENCE FOUNDATION IRELAND (SFI) CENSUS 2012

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# EXECUTIVE SUMMARY

The SFI Census of the holders of SFI's major grant categories<sup>1</sup> is conducted annually and provides information on research outputs, team compositions, collaborations and funding.

This is the sixth year that the Census has been conducted and the key results are summarised below:

- Forms were returned for 445 active awards and these directly supported 2,815 individuals in 2012.
- A total of 5,792 publications were reported in 2012, a 1% increase on the 2011 number.
- A third of individuals who left SFI funded teams in 2012 took up employment in industry, 60% of these were with companies based in Ireland.
- There were 17 spin out companies reported in 2012, from both active and inactive awards, up from 10 in 2011. 14 of these were from active awards.
- In addition to spin out companies, a number of other pre-commercial outputs were produced in 2012 from active awards: 147 Invention Disclosures, 80 Patents Filed, 25 Patents Awarded, 20 Standards Contributed to and 30 Licensed Technologies<sup>2</sup>.
- There was a 20% increase in the number of companies, government departments and the non-government organisations (NGO) collaborating with SFI researchers in 2012. This means that there are 772 organisations working on 1,163 collaborations with SFI funded researchers. This includes 275 Multinational Corporations (MNCs) and 428 Small-Medium Enterprises (SMEs), the fastest growing category of organisations working with SFI researchers (+27% on 2011).
- Academic to academic collaborations decreased by 7% in 2012 to 2,391 collaborations. Within this, national collaborations decreased by 15%, collaborations with EU countries increased by 6% and collaborations with non-EU countries decreased by 20%.
- SFI funded researchers secured an additional €171m in non-SFI funding in 2012, or an increase of 10% on external funding secured in 2011. Funding secured from the European Union (EU) increased by 21% in one year, to €68m.

The following section contains a short report on the key highlights of the 2012 Census, which is followed by more detailed tables on the results of the 2012 Census.

1 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 of Science Engineering & Technology (CSET), SFI Strategic Research Clusters (SRC), SFI Research Professor Recruitment Award (RP), SFI Charles Parson Award (CP), US Ireland R&D Partnership Programme (US IRL) and the SFI Starting Investigator Research Grant (SIRG).

2 Although Invention Disclosures, Patents, Spin Outs and Licenses are reported here as arising from SFI-funded research, it is important to stress that SFI does not produce these outputs directly. These are the product of the research and commercialisation ecosystem and are dependent upon Enterprise Ireland (EI), the HEI Technology Transfer Offices (TTOs) and other stakeholders.

# CENSUS REPORT

## SFI People and Awards<sup>3</sup>

### Census Response Rates

	People			Awards		
	Total	Active	Inactive	Total	Active	Inactive
<b>Form Sent</b>	869	422	447	1407	449	958
<b>Form Returned</b>	572	418	154	1025	445	580
<b>Response Rate</b>	65.8%	99.1%	34.5%	72.9%	99.1%	60.5%

- ▶ The Census form was sent to 869 researchers representing 1,407 active and inactive awards. The overall response rate was 66% for individual Investigators and 73% for awards.
- ▶ For active awards, the response rate was 99% for both individual Investigators and awards.
- ▶ The results of the census are therefore based on 572 respondents representing 1,025 awards, broken out as 418 active award holders<sup>4</sup> and 154 inactive award holders<sup>5</sup>.
- ▶ The 1,025 awards are made up of 445 active awards and 580 inactive awards.

### Respondents and Awards

- ▶ This year, of respondents, there were a total of 445 active awards held by 418 individuals. This represents a net loss of 37 individual Investigators and 66 awards.

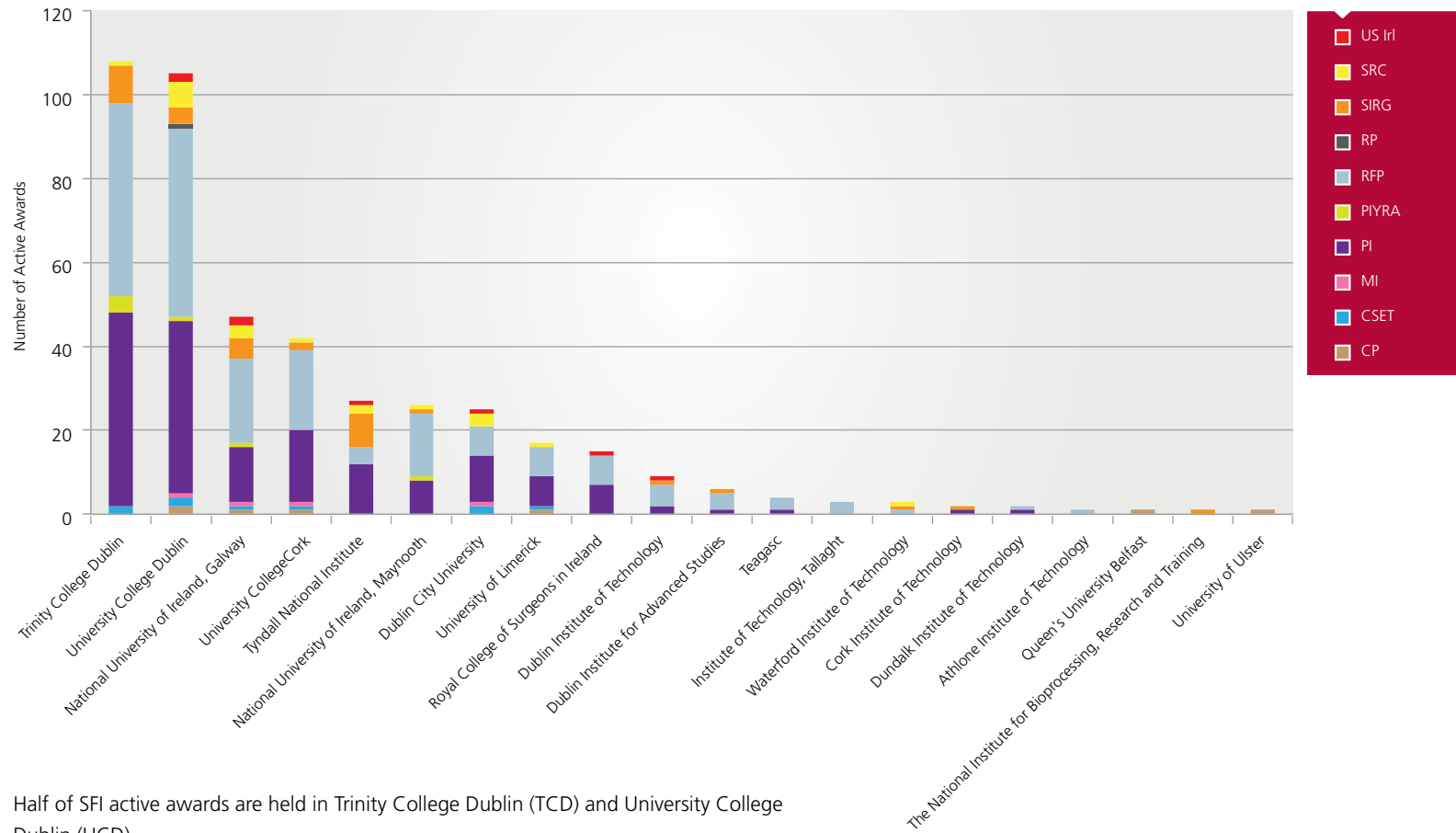
	Number of Active Awards 2012	Number of Active Awards 2011	Difference	% Difference
CP	7	7	0	0.0%
CSET	9	9	0	0.0%
MI	4	4	0	0.0%
PI	168	173	-5	-2.9%
PIYRA	7	10	-3	-30.0%
RFP	188	265	-77	-29.1%
RP	1	2	-1	-50.0%
SIRG	34	14	20	142.9%
SRC	19	19	0	0.0%
US Irl	8	8	0	0.0%
<b>Total</b>	<b>445</b>	<b>511</b>	<b>-66</b>	<b>-12.9%</b>

<sup>3</sup> Active Awards refer to awards that received funding from SFI in 2012 and will continue to receive funding from SFI in 2013. Inactive awards are considered "expired" by SFI i.e. on the 31/12/2012 they were no longer receiving funding from SFI.

<sup>4</sup> Note active award holders may also hold inactive awards in their portfolio.

<sup>5</sup> These award holders only hold inactive awards and are no longer on SFI's "books".

Figure 1: Number of Active Awards of each type held by Higher Education Institute (HEI)



▶ Half of SFI active awards are held in Trinity College Dublin (TCD) and University College Dublin (UCD).

## Research Team Compositions

Table III: Research Team Composition by Gender (SFI Funded Team Members) as at 31/12/2012

	Male		Female		Total
	Number	% of Total	Number	% of Total	
Award Holders	337	81%	81	19%	418
Co-Principal Investigators	74	90%	8	10%	82
Management Staff	19	56%	15	44%	34
Postdoctoral Researchers	479	68%	229	32%	708
PhD Students	764	66%	401	34%	1165
Masters Students	42	64%	24	36%	66
Technicians	37	74%	13	26%	50
Administrators	6	9%	58	91%	64
Research Assistants	65	57%	50	43%	115
Education & Outreach Staff	6	27%	16	73%	22
Other	59	65%	32	35%	91
<b>Total</b>	<b>1888</b>	<b>67%</b>	<b>927</b>	<b>33%</b>	<b>2815</b>

Table IV: Research Team Composition by Nationality (SFI Funded Team Members) as at 31/12/2012

	Irish		EU (Non-Irish)		Non-EU		Total
	Number	% of Total	Number	% of Total	Number	% of Total	
Award Holders	294	70%	91	22%	33	8%	418
Co-Principal Investigators	55	66%	19	24%	8	10%	82
Management Staff	29	85%	5	15%	0	0%	34
Postdoctoral Researchers	280	40%	243	34%	185	26%	708
PhD Students	646	55%	263	23%	256	22%	1165
Masters Students	40	60%	13	20%	13	20%	66
Technicians	38	76%	6	12%	6	12%	50
Administrators	56	87%	6	10%	2	3%	64
Research Assistants	68	59%	24	21%	23	20%	115
Education & Outreach Staff	20	90%	1	5%	1	5%	22
Other	60	66%	18	20%	13	14%	91
<b>Total</b>	<b>1586</b>	<b>56%</b>	<b>689</b>	<b>25%</b>	<b>540</b>	<b>19%</b>	<b>2815</b>

Table V: Research Team Composition by Gender (All Funding Sources<sup>6</sup>) as at 31/12/2012

	Male		Female		Total
	Number	% of Total	Number	% of Total	
Award Holders	337	81%	81	19%	418
Co-Principal Investigators	89	88%	12	12%	101
Management Staff	30	59%	21	41%	51
Postdoctoral Researchers	1090	65%	585	35%	1675
PhD Students	1829	62%	1120	38%	2949
Masters Students	157	62%	98	38%	255
Technicians	87	66%	45	34%	132
Administrators	22	16%	115	84%	137
Research Assistants	159	56%	127	44%	286
Education & Outreach Staff	6	26%	17	74%	23
Other	163	66%	85	35%	248
<b>Total</b>	<b>3969</b>	<b>63%</b>	<b>2306</b>	<b>37%</b>	<b>6275</b>

Table VI: Research Team Composition by Nationality (All funding sources<sup>7</sup>) as at 31/12/2012

	Irish		EU (Non-Irish)		Non-EU		Total
	Number	% of Total	Number	% of Total	Number	% of Total	
Award Holders	294	70%	91	22%	33	8%	418
Co-Principal Investigators	65	64%	24	24%	12	12%	101
Management Staff	40	78%	10	20%	1	2%	51
Postdoctoral Researchers	719	43%	548	33%	408	24%	1675
PhD Students	1652	56%	630	21%	667	27%	2949
Masters Students	166	65%	37	15%	52	20%	255
Technicians	106	80%	13	10%	13	10%	132
Administrators	121	88%	14	10%	2	2%	137
Research Assistants	183	64%	54	19%	49	17%	286
Education & Outreach Staff	21	91%	1	4%	1	5%	23
Other	149	60%	48	20%	51	20%	248
<b>Total</b>	<b>3516</b>	<b>56%</b>	<b>1470</b>	<b>23%</b>	<b>1289</b>	<b>21%</b>	<b>6275</b>

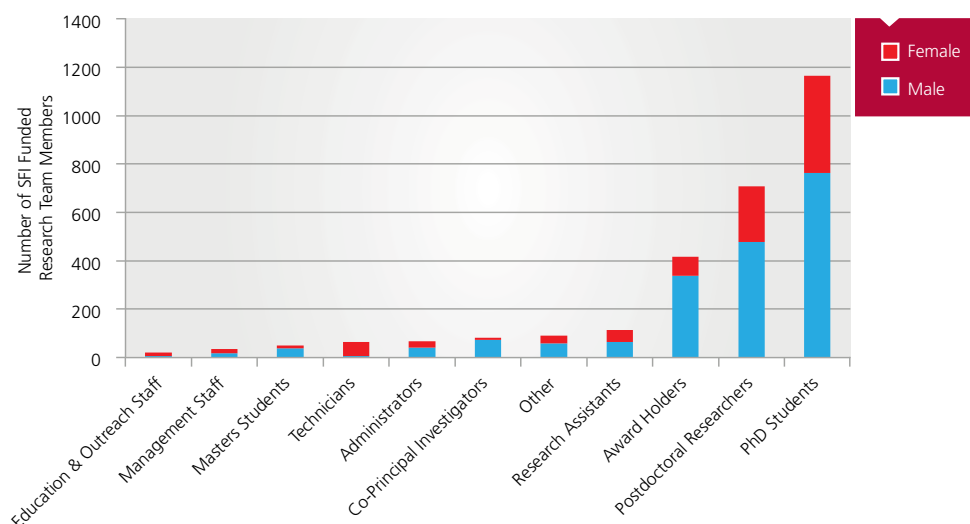
<sup>6</sup> This includes team members that are funded from SFI and/or other funding bodies.

<sup>7</sup> This includes team members that are funded from SFI and/or other funding bodies.

## Gender

- The ratio of male to female award holders is 80:20. This ratio has been consistent over the past five years.
- For the overall team, the ratio of male to female is two thirds to one third. As in previous years, this shows that there is a loss of female researchers in the progression from postdoctoral research level to award holder.

Figure II: *Gender Breakdown of Research Teams (SFI Funded Members) as at 31/12/2012*



## First Destination of Departing Team Members

A total of 627 team members left SFI funded research groups in 2012, compared to 535 people in 2011 (+17%). Of these, more than half (56%) remained in Ireland, while 45% moved abroad, in a similar trend to recent years.

Leaver destinations	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Industry	81	40.1%	121	59.9%	202	32.2%
Postdoctoral research in HEI	96	50.8%	93	49.2%	189	30.1%
Other	26	46.4%	30	53.6%	56	8.9%
Lecturers/Permanent researchers in HEI	31	57.4%	23	42.6%	54	8.6%
PhD research in HEI	14	38.9%	22	61.1%	36	5.7%
Specialist Courses	8	36.4%	14	63.6%	22	3.5%
Unemployment	8	36.4%	14	63.6%	22	3.5%
Career Break	7	38.9%	11	61.1%	18	2.9%
Technicians in HEI	5	29.4%	12	70.6%	17	2.7%
Maternity Leave	2	25.0%	6	75.0%	8	1.3%
Teachers (primary/secondary)	1	50.0%	1	50.0%	2	0.3%
Short term secondment to another institute	0	0.0%	1	100.0%	1	0.2%
<b>Total</b>	<b>279</b>	<b>44.5%</b>	<b>348</b>	<b>55.5%</b>	<b>627</b>	<b>100.0%</b>

## Nationality

- 30% of SFI award holders are non-Irish, compared to 23% in 2011.
- 46% of SFI funded teams are non-Irish, excluding SFI award holders.
- Within this group, 60% of SFI funded Postdoctoral Researchers and 45% of PhD Students are international students/researchers.



## All Departing Team Members

- ▶ A third of individuals (32.2%) who left SFI funded teams in 2012 went into industry, a slight increase on 2011 (30.7%). Within this cohort, 60% took up employment with industry in Ireland, while 40% moved into industry abroad.
- ▶ 30% of leavers proceeded to postdoctoral research, half of these staying in Ireland and half overseas.
- ▶ There was a slight increase in the number of individuals staying in Ireland (56%) and for these, industry remains the largest employer (35%).

## Departing Postdoctoral Researchers

- ▶ The largest cohort of leavers from SFI funded teams were Postdoctoral Researchers (259 individuals or 41%). Just over half of these Postdoctoral Researchers (52%) left Ireland, the vast majority of these (63%) to take up Postdoctoral or Lecturer/Researcher positions in international Higher Education Institutes (HEIs). Of the half that remained in Ireland, 52% moved to Postdoctoral or Lecturer/Researcher positions in Irish HEIs.
- ▶ Industry as a first destination, both in and outside Ireland, attracted 28% of Postdoctoral Researchers.

## Departing PhD Students

- ▶ 225 PhD Students departed SFI funded teams this year. Over half of these (54%) stayed in Ireland, in a reversal of the trend seen in the past 2 years. Almost 35% of PhD Students took up positions in industry, while 42% continued on to postdoctoral positions.

Figure III: First Destination of Departing Postdoctoral Researchers in 2012

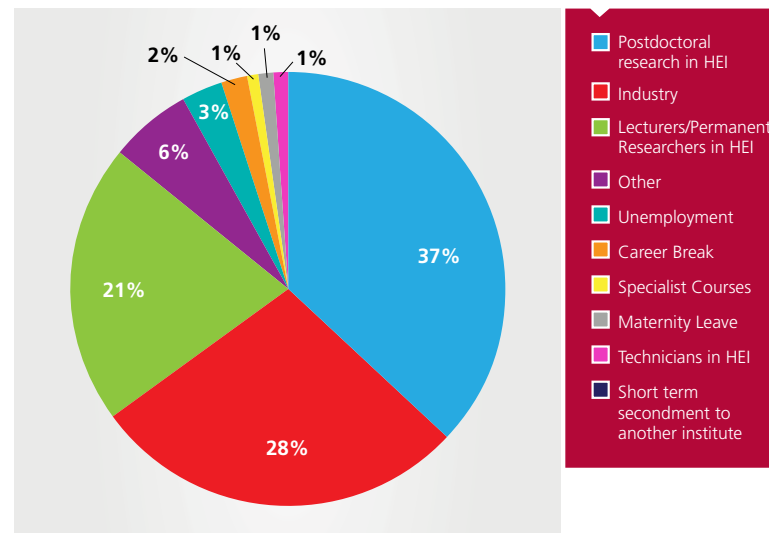
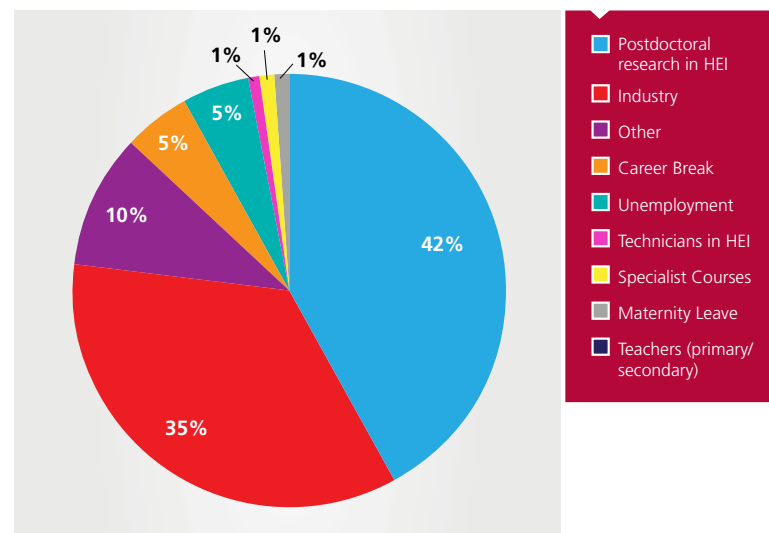


Figure IV: First Destination of Departing PhD Researchers in 2012



## Academic Outputs

A total of 5,792 publications were reported in 2012 by SFI funded researchers from active awards. This is a 1% increase on the number of publications reported in 2011. 3,351 publications were attributed to SFI funding while 2,441 were attributed to other funding sources. As there was no change in the number of publications attributed to SFI funding, the increase in the total number of publications is attributable to funding from other sources.

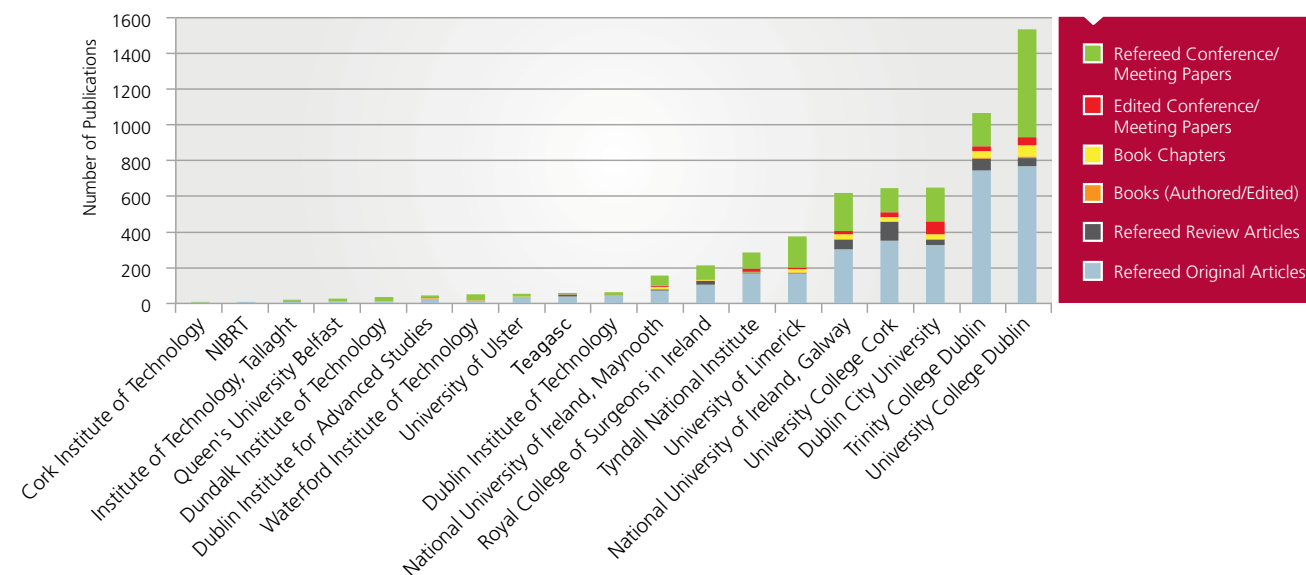
In addition there were 735 publications reported from inactive SFI awards.

Of the total number of SFI funded publications from active awards, 37% have a named co-author with an address other than Ireland and 40% are available in open-access repositories.

	CP	CSET	MI	PI	PIYRA	RFP	RP	SIRG	SRC	US Irl	Total from SFI Funding	Other Funding Sources	Total
Total Research Outputs	135	726	117	1060	22	480	5	82	706	18	3351	2441	5792
Outputs with non-Irish co-author	37.8%	30.6%	43.6%	44.6%	231.8%	40.6%	80.0%	34.1%	7.2%	33.3%	36.8%	38.0%	37.3%
Outputs available in Open Access Repositories	15.6%	49.4%	26.5%	43.8%	63.6%	50.6%	0.0%	32.9%	23.7%	61.1%	39.9%	26.4%	34.2%
SFI Accredited Outputs	63.0%	79.6%	62.4%	83.7%	90.9%	80.4%	100.0%	76.8%	86.0%	77.8%	81.1%	30.2%	59.7%

- Of the 5,792 publications reported, 37% were published with an international co-author, 34% are available in open access repositories and 60% accredited SFI.

Figure V: Publication Output in 2012 by HEI



## Pre-Commercial Outputs<sup>8</sup>

Table IX: Summary of Pre-Commercial Outputs in 2012 (Active Awards)

	Total
Invention Disclosures	147
Patents Filed	80
Patents Awarded	25
Standards Contributed	20
Spin Outs Reported	14
Licensed Technologies	30

Table X: Summary of Pre-Commercial Outputs in 2012 (Inactive Awards)

	Total
Invention Disclosures	16
Patents Filed	15
Patents Awarded	10
Standards Contributed	0
Spin Outs Reported	3
Licensed Technologies	0

### Spinouts

14 spin out companies were reported this year from active awards compared to 9 in 2011 and 4 in 2010. This represents a 56% increase on 2011. In addition, 3 spinout companies were reported from inactive awards in 2012.

### Licensed Technologies

There were 30 licenced technologies reported in 2012 from active awards compared to 38 reported in 2011 and 22 in 2010. This represents a 21% decrease on 2011.

### Invention Disclosures

147 invention disclosures were reported from active awards in 2012 compared to 160 in 2011 and 150 in 2010. This represents an 8% decrease on 2011. There were also 16 invention disclosures reported from inactive awards, compared to 10 in 2011.

Table XI: Summary of Pre-Commercial Outputs by HEI - Active Awards in 2012

Research body	Invention Disclosures	Patents Filed	Patents Awarded	Standards Contributed
Dublin City University	18	5	1	2
Dublin Institute of Technology	4	0	0	1
Dundalk Institute of Technology	0	1	1	2
National University of Ireland, Galway	13	6	1	3
National University of Ireland, Maynooth	1	1	1	0
Royal College of Surgeons in Ireland	3	5	0	0
Trinity College Dublin	28	23	9	2
Tyndall National Institute	13	7	0	0
University College Cork	13	7	2	2
University College Dublin	36	13	3	1
University of Limerick	4	6	5	7
University of Ulster	2	2	0	0
Waterford Institute of Technology	12	4	2	0
<b>Total</b>	<b>147</b>	<b>80</b>	<b>25</b>	<b>20</b>

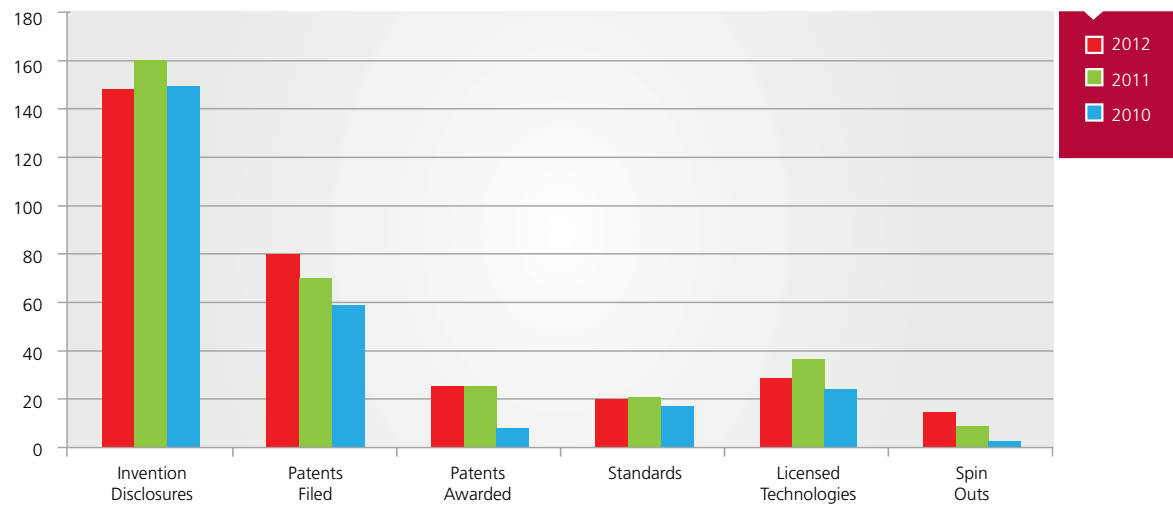
### Patents

There were 80 patents filed in 2012, compared to 72 patents filed from active awards in 2011. This represents an 11% increase from the previous year. The number of patents awarded in 2012 was consistent with the numbers awarded in 2011 with 25 patents awarded in both years. The number of patents filed for inactive awards doubled in 2012 to 15, while the number of patents awarded increased from 2 in 2011 to 10 in 2012.

### Standards

The number of standards contributed to in 2012 from active awards was 20 compared to 21 in 2011 and 18 in 2010.

<sup>8</sup> Although Invention Disclosures, Patents, Spin Outs and Licenses are reported as here as arising from SFI-funded research, it is important to stress that SFI does not produce these outputs directly. These are the product of the research and commercialisation ecosystem and are dependent upon Enterprise Ireland (EI), the HEI Technology Transfer Offices (TTOs) and other stakeholders.

**Figure VI:** *Number of Pre-Commercial Outputs in 2012-2010 (Active Awards)*

## Non-Academic Collaborations

There was a 12% increase in the number of collaborations between SFI researchers and companies, government departments and the non-government organisation (NGO) sector in 2012, i.e. 1,163 collaborations in total versus 1,035 in 2011. This builds on previous growth with a total increase over the last three years of 34%.

There was a corresponding increase of 20% in the number of organisations collaborating with SFI funded researchers, i.e. 772 organisations in 2012 compared to 642 in 2011 or an additional 130 organisations working with SFI researchers.

The number of collaborations with multinational corporations (MNCs) increased by 5% and involved 275 MNCs in 2012.

There was a 24% increase in the number of collaborations with small-medium enterprises (SMEs). Correspondingly, the number of SMEs working with SFI researchers showed a 27% increase and there are now 428 SMEs working with SFI researchers. This is the largest growing category of organisations working with SFI researchers. It is worth noting that in 2008, there were 108 SMEs collaborating with SFI researchers, which increased to 165 in 2009, 245 in 2010, 337 in 2011 and now is at 428, which represents just under a 300% increase in 5 years.

The overall number of collaborations reported with government/semi-state bodies and private foundations, charities and NGOs stayed the same compared to 2011. However, there were more of these individual organisations working with SFI researchers in 2012, 69 in 2012 compared to 59 in 2011 or a 17% increase.

Collaborative research is the primary objective of 50% of collaborations. The number of collaborations with a legal agreement in place has been steadily increasing and now stands at 59%.

Figure VII: Number of companies working with SFI researchers from 2008-2012

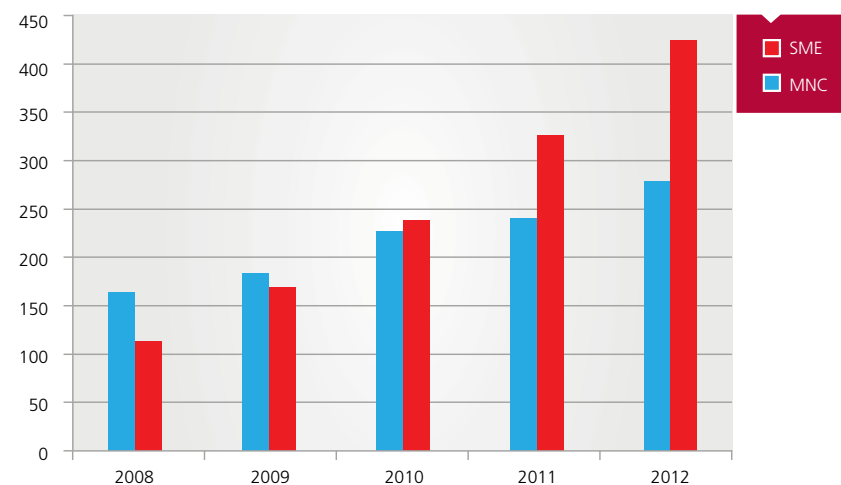


Table XII: 2012-2011 Comparison of Non-Academic Collaborations (Active Awards)

	Collaborations 2012	Collaborations 2011	% Change	Organisations 2012	Organisations 2011	% Change
Multinational Corporations	540	515	+5%	275	246	+12%
Small Medium Enterprises	527	424	+24%	428	337	+27%
Government Departments or Semi-State Bodies	70	73	-4%	44	38	+16%
Private Foundations/Charities/Non-Government Organisations (NGO)	26	23	+13%	25	21	+19%
<b>Total by Award</b>	<b>1163</b>	<b>1035</b>	<b>+12%</b>	<b>772</b>	<b>642</b>	<b>+20%</b>

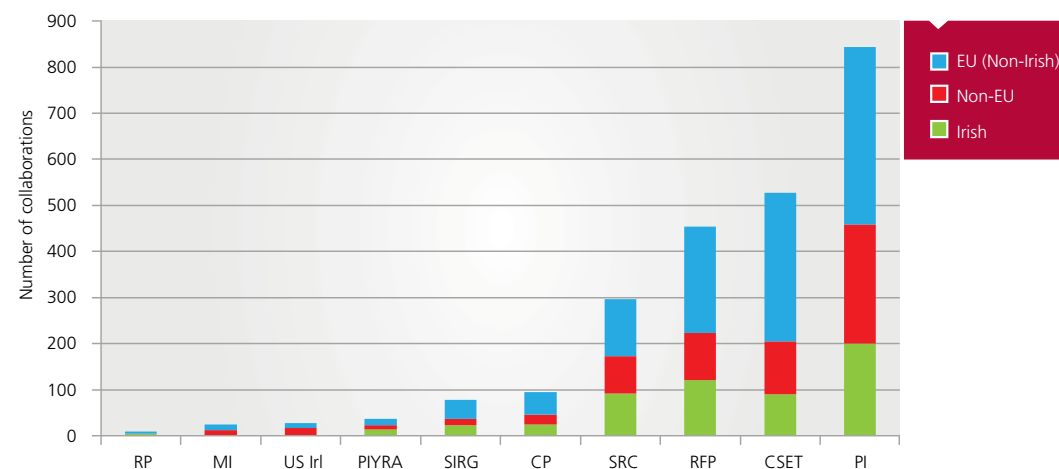
## Academic-Academic Collaborations

- There were 2,391 academic-academic collaborations in 2012, a decrease of 7% on 2011. The majority of this decrease was due to less national collaboration between Irish groups, which may reflect the consolidation of research funding into larger research groups.
- 76% of these collaborations are with international partners.
- The largest cohort of academic collaborations is with European academic institutes (50%). These academic collaborations are primarily for the purpose of access to/provision of material, equipment, software, data (59.2%), while the purposes of joint publication/research (42.9%) and building networks and relationships (35.2%) remain important factors in engaging with external institutes.

Table XIII: Academic Collaborations in 2012 by Objective – Active Awards in 2012

	Collaborations	% of Collaborations with this Objective
Access to/provision of material, equipment, software, data	1582	59.2%
Joint publication/Research	1146	42.9%
Training and Career & Professional Development (CPD)	942	35.2%
Building networks & relationships	183	6.8%
Licence development	117	4.4%
Other	34	1.3%
Start-up development	14	0.5%

Figure VIII: Academic Collaborations in 2012 by Award Type and Region



## International Events

There was a 35% increase in the number of international events attended in 2012. SFI researchers played an active role in international conferences, from organising to presenting at these events.

Table XIV: Breakdown of Location and Member roles at International Events in 2012

	Ireland	EU (excluding Ireland)	Outside EU	Total
Host	179	41	18	238
Programme Committee Member	188	241	137	566
Invited Speaker	448	846	478	1772
Oral Presentation of a Paper	466	962	514	1942
Poster Presented	770	841	449	2060
Meeting participant	637	573	196	1406
<b>Total</b>	<b>2688</b>	<b>3504</b>	<b>1792</b>	<b>7984</b>

**Note:** These figures are not mutually exclusive. For example, an individual could have both hosted and presented a paper at an event.

## External Funding

- ▶ The Amount of additional funding obtained by SFI researchers increased by 9.6% to €171m in 2012.
- ▶ Funding leveraged from the Irish Exchequer increased by 7% in 2012.
- ▶ Funding leverage form Non-Irish Exchequer sources increased by 12%.
- ▶ The ratio of funding secured from Irish Exchequer to Non-Irish Exchequer is approximately 40:60.
- ▶ Funding secured from the EU has increased by 21% to €68m in 2012.
- ▶ Funding secured from Enterprise Ireland has increased by 36% to €27m in 2012.
- ▶ There have also been large increases in funding from the Wellcome Trust (226%), Teagasc (267%), and The Department of Agriculture, Fisheries and Food (195%), although these are primarily due to a handful of large awards secured in 2012.

Table XV: Amount of non-SFI Funding secured by SFI Funded Researchers in 2012 (By Source for Active Awards, amounts in €s)

	External Funding Leveraged	% change from 2011
EU	68,192,006	21%
Enterprise Ireland	27,374,828	36%
Private Enterprise	13,955,898	-16%
HRB	10,204,870	30%
IRCSET	10,056,983	18%
Wellcome Trust	9,209,422	226%
HEA	5,003,623	-74%
Department of Agriculture Fisheries and Food	5,332,902	195%
Other Irish Government Source	4,883,721	55%
Other International Government Source	3,521,326	12%
Charity/Non-Profit Organisation (Irish)	2,977,130	-65%
Teagasc	2,621,790	267%
EPA	1,118,648	-19%
Charity/Non-Profit Organisation (International)	2,488,559	75%
Other International Interest Organisation	1,294,715	-5%
NIH	1,371,530	8%
Marine Institute	62,000	55%
Other Source	388,439	-55%
DCENR	810,000	32%
NSF	172,500	-72%
<b>Total</b>	<b>171,040,890</b>	<b>10%</b>

Table XVI: Amount of External Funding secured by SFI Funded Researchers in 2012 by Irish Exchequer vs Non-Irish Exchequer and National vs International Funding Sources (Active Awards, amounts in €s)

	Irish Exchequer	Non-Irish Exchequer	National	International
EU		68,192,006		68,192,006
EI	27,374,828		27,374,828	
Private Enterprise		13,955,898		
HRB	10,204,870		10,204,870	
IRCSET	10,056,983		10,056,983	
Wellcome Trust		9,209,422		9,209,422
HEA	5,332,902		5,332,902	
Department of Agriculture Fisheries and Food	5,003,623		5,003,623	
Other Irish Government Source	4,883,721		4,883,721	
Other International Government Source		3,521,326		3,521,326
Charity/Non-Profit Organisation (Irish)		2,977,130	2,977,130	
Teagasc	2,621,790		2,621,790	
EPA	1,118,648		1,118,648	
Charity/Non-Profit Organisation (International)		2,488,559		2,488,559
Other International Interest Organisation		1,294,715		1,294,715
NIH		1,371,530		1,371,530
Marine Institute	62,000		62,000	
Other Source		388,439		
DCENR	810,000		810,000	
NSF		172,500		172,500
<b>Total by Source</b>	<b>67,469,365</b>	<b>103,571,525</b>	<b>70,446,495</b>	<b>86,250,058</b>
<b>Total Amount</b>	<b>171,040,890</b>		<b>156,696,553<sup>9</sup></b>	

9 It is not possible to classify all funding sources as national or international, for example, private enterprise; therefore, this figure is less than the total external funding secured figure of €171,040,890



# ANNUAL CENSUS 2012

## TABLES AND GRAPHS

### SFI People and Awards

Table 1.1: Response rates

	People			Awards		
	Total	Active	Inactive	Total	Active	Inactive
Form Sent	869	422	447	1407	449	958
Form Returned	572	418	154	1025	445	580
<b>Response Rate</b>	<b>65.8%</b>	<b>99.1%</b>	<b>34.5%</b>	<b>72.9%</b>	<b>99.1%</b>	<b>60.5%</b>

Table 1.2: Total Number of each Award Type by Award Holder in 2012

	Total Number of Awards	Number of Active Awards 2012
CP	7	7
CSET	9	9
MI	6	4
PI	304	168
PICA	7	0
PIYRA	17	7
RFP	608	188
RP	6	1
SIRG	34	34
SRC	19	19
US Irl	8	8
<b>Total</b>	<b>1025</b>	<b>445</b>

Table 1.3: SFI Award Holders 2012

	Award Holders*		Number of Active Awards		Number of Awards** [Active + Inactive]	
	Count	%	Count	%	Count	%
Female	81	19.4%	86	19.3%	195	19.0%
Male	337	80.6%	359	80.7%	830	81.0%
<b>Total</b>	<b>418</b>	<b>100.0%</b>	<b>445</b>	<b>100.0%</b>	<b>1025</b>	<b>100.0%</b>

\* Relates to active award holders who have returned data

\*\* Relates to returned awards

Figure 1.1: Award Holders 2012

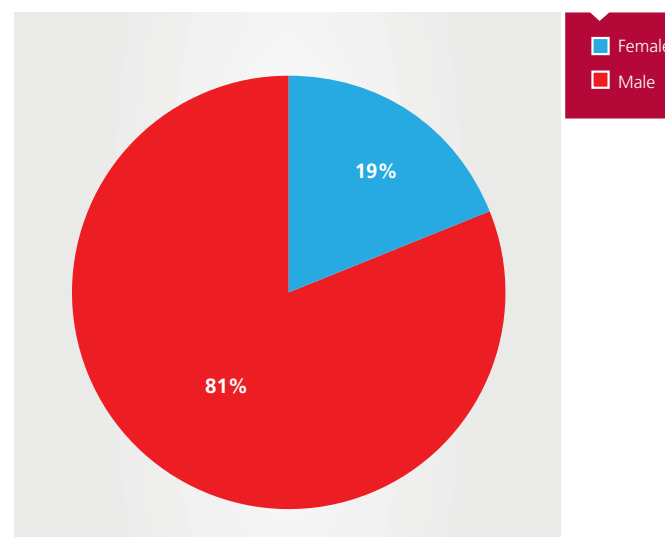


Table 1.4: SFI Active Award Holders 2012 by Gender

	Number of Active Award Holders		% of Active Award Holders by HEI	
	Count	%	Count	%
Female	81	19.4%	86	19.3%
Male	337	80.6%	359	80.7%
<b>Total</b>	<b>418</b>	<b>100.0%</b>	<b>445</b>	<b>100.0%</b>

Table 1.5: SFI Active Award Holders by HEI in 2012

	Number of Active Award Holders	% of Active Award Holders by HEI
Trinity College Dublin	100	23.9%
University College Dublin	99	23.7%
National University of Ireland, Galway	45	10.8%
University College Cork	39	9.3%
National University of Ireland, Maynooth	25	6.0%
Tyndall National Institute	24	5.7%
Dublin City University	22	5.3%
University of Limerick	17	4.1%
Royal College of Surgeons in Ireland	14	3.3%
Dublin Institute of Technology	9	2.2%
Dublin Institute for Advanced Studies	6	1.4%
Teagasc	4	1.0%
Waterford Institute of Technology	3	0.7%
Institute of Technology, Tallaght	3	0.7%
Dundalk Institute of Technology	2	0.5%
Cork Institute of Technology	2	0.5%
University of Ulster	1	0.2%
The National Institute for Bioprocessing Research and Training	1	0.2%
Queen's University Belfast	1	0.2%
Athlone Institute of Technology	1	0.2%
<b>Total</b>	<b>418</b>	<b>100.0%</b>

Figure 1.2: SFI Active Award Holders by HEI in 2012

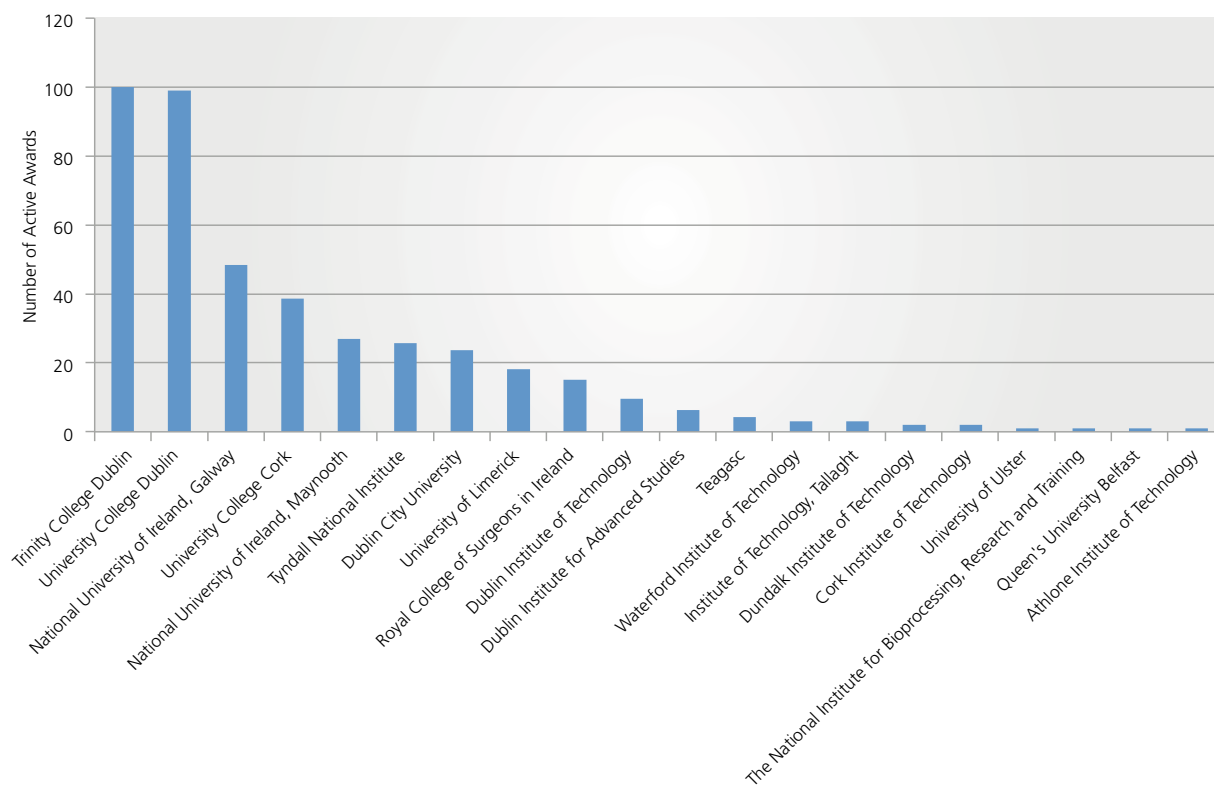


Table 1.6: Total Number of Active Awards of Each Award Type held by Respondents and by HEI in 2012

	CP	CSET	MI	PI	PIYRA	RFP	RP	SIRG	SRC	US Irl	Total Number of Active Awards
Trinity College Dublin	-	2	-	46	4	46	-	9	1	-	108
University College Dublin	2	2	1	41	1	45	1	4	6	2	105
National University of Ireland, Galway	1	1	1	13	1	20	-	5	3	2	47
University College Cork	1	1	1	17	-	19	-	2	1	-	42
Tyndall National Institute	-	-	-	12	-	4	-	8	2	1	27
National University of Ireland, Maynooth	-	-	-	8	1	15	-	1	1	-	26
Dublin City University	-	2	1	11	-	7	-	-	3	1	25
University of Limerick	1	1	-	7	-	7	-	-	1	-	17
Royal College of Surgeons in Ireland	-	-	-	7	-	7	-	-	-	1	15
Dublin Institute of Technology	-	-	-	2	-	5	-	1	-	1	9
Dublin Institute for Advanced Studies	-	-	-	1	-	4	-	1	-	-	6
Teagasc	-	-	-	1	-	3	-	-	-	-	4
Institute of Technology, Tallaght	-	-	-	-	-	3	-	-	-	-	3
Waterford Institute of Technology	-	-	-	-	-	1	-	1	1	-	3
Cork Institute of Technology	-	-	-	1	-	-	-	1	-	-	2
Dundalk Institute of Technology	-	-	-	1	-	1	-	-	-	-	2
Athlone Institute of Technology	-	-	-	-	-	1	-	-	-	-	1
Queen's University Belfast	1	-	-	-	-	-	-	-	-	-	1
The National Institute for Bioprocessing Research and Training	-	-	-	-	-	-	-	1	-	-	1
University of Ulster	1	-	-	-	-	-	-	-	-	-	1
<b>Total</b>	<b>7</b>	<b>9</b>	<b>4</b>	<b>168</b>	<b>7</b>	<b>188</b>	<b>1</b>	<b>34</b>	<b>19</b>	<b>8</b>	<b>445</b>

Figure 1.3: Number of Active Awards of each type held by Higher Education Institute (HEI)

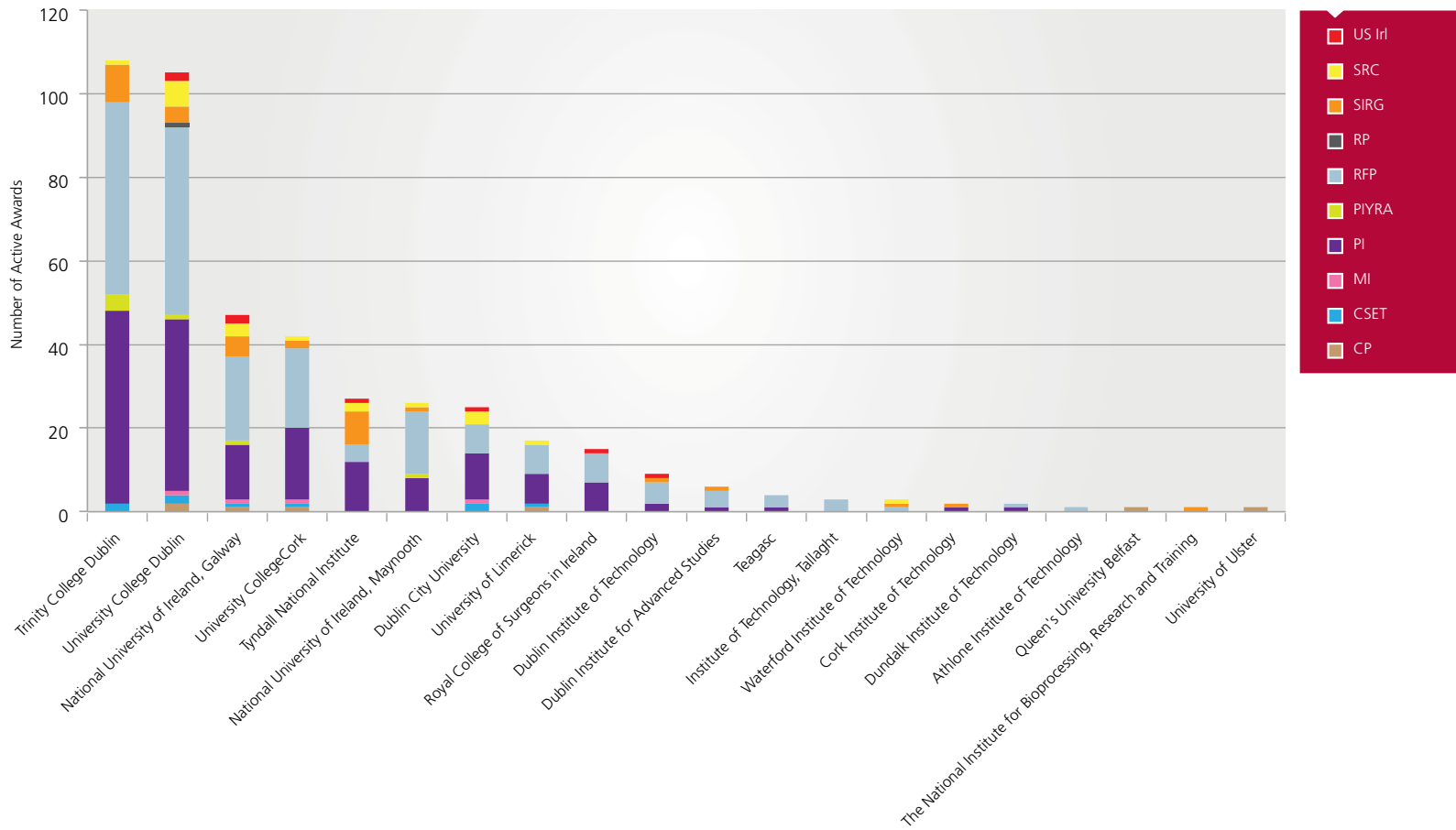


Table 1.7: SFI Active Awards by Nationality of Award Holder in 2012

	Number of Active Award Holders	% of Active Award Holders of this Nationality
Ireland	294	70.3%
United Kingdom	38	9.1%
Germany	17	4.1%
United States	12	2.9%
Italy	9	2.2%
Australia	5	1.2%
Canada	4	1.0%
China	4	1.0%
Sweden	4	1.0%
India	3	0.7%
Netherlands	3	0.7%
Russian Federation	3	0.7%
Spain	3	0.7%
Belgium	2	0.5%
Bulgaria	2	0.5%
Denmark	2	0.5%
France	2	0.5%
Switzerland	2	0.5%
Austria	1	0.2%
Czech Republic	1	0.2%
Greece	1	0.2%
Hungary	1	0.2%
Iceland	1	0.2%
Israel	1	0.2%
Malaysia	1	0.2%
Portugal	1	0.2%
Serbia	1	0.2%
<b>Total</b>	<b>418</b>	<b>100.0%</b>

Table 1.8: Total Number of Active Award Holders by Region of Nationality in 2012

	Active Award Holders		Number of Active Awards	
Ireland	294	70.3%	313	70%
EU (non-Irish)	91	21.8%	97	22%
Non-EU	33	7.9%	35	8%
<b>Total</b>	<b>418</b>	<b>100.0%</b>	<b>445</b>	<b>100%</b>

Figure 1.4: Nationality of Award Holders in 2012

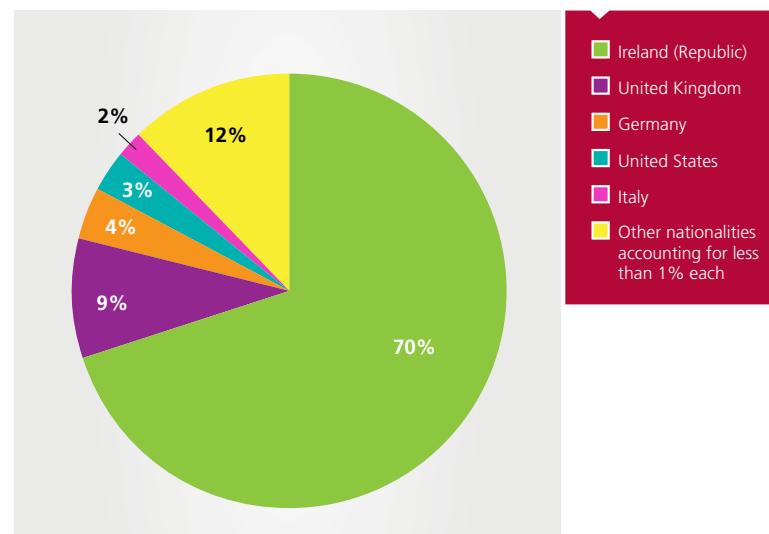
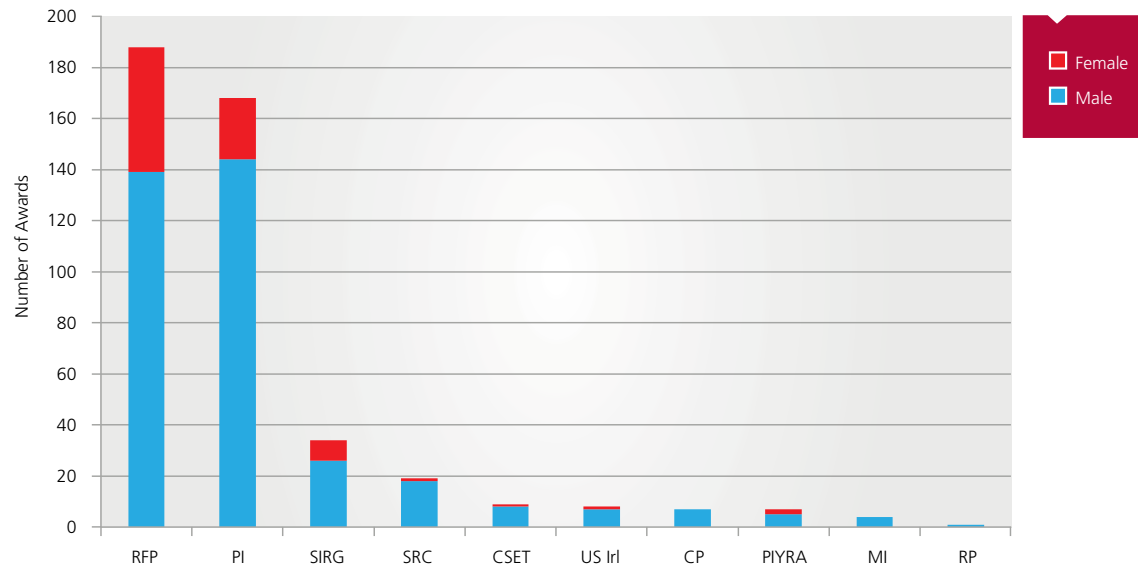


Table 1.9: Total Number of Active Awards by Award Holder and Gender in 2012

	Active Total	Female	Male
CP	7	0	7
CSET	9	1	8
MI	4	0	4
PI	168	24	144
PIYRA	7	2	5
RFP	188	49	139
RP	1	0	1
SIRG	34	8	26
SRC	19	1	18
US Irl	8	1	7
<b>Total</b>	<b>445</b>	<b>86</b>	<b>359</b>

Figure 1.5: SFI Awards Held by Gender in 2012



## Research Team Compositions

Table 2.1: Research Team Composition (SFI Funded Team Members) as at 31/12/2012

	Number	Category as % of Total
Award Holders	418	14.8%
Co-Principal Investigators	82	2.9%
Management Staff	34	1.2%
Postdoctoral Researchers	708	25.2%
PhD Students	1165	41.4%
Masters Students	66	2.3%
Technicians	50	1.8%
Administrators	64	2.3%
Research Assistants	115	4.1%
Education & Outreach Staff	22	0.8%
Other	91	3.2%
<b>Total</b>	<b>2815</b>	<b>100.0%</b>

Table 2.2: Research Team Composition by Gender (SFI Funded Team Members) as at 31/12/2012

	Male	Female	Total
Award Holders	337	81	418
Co-Principal Investigators	74	8	82
Management Staff	19	15	34
Postdoctoral Researchers	479	229	708
PhD Students	764	401	1165
Masters Students	42	24	66
Technicians	37	13	50
Administrators	6	58	64
Research Assistants	65	50	115
Education & Outreach Staff	6	16	22
Other	59	32	91
<b>Total</b>	<b>1888</b>	<b>927</b>	<b>2815</b>

Table 2.3: Research Team Composition by Nationality (SFI Funded Team Members) as at 31/12/2012

	Irish	EU (Non-Irish)	Non-EU	Total
Award Holders	294	91	33	418
Co-Principal Investigators	55	19	8	82
Management Staff	29	5	0	34
Postdoctoral Researchers	280	243	185	708
PhD Students	646	263	256	1165
Masters Students	40	13	13	66
Technicians	38	6	6	50
Administrators	56	6	2	64
Research Assistants	68	24	23	115
Education & Outreach Staff	20	1	1	22
Other	60	18	13	91
<b>Total</b>	<b>1586</b>	<b>689</b>	<b>540</b>	<b>2815</b>

Table 2.4: Research Team Composition (All Funding Sources)

	Total	Category as % of Total
Award Holders	418	6.7%
Co-Principal Investigators	101	1.6%
Management Staff	51	0.8%
Postdoctoral Researchers	1675	26.7%
PhD Students	2949	47.0%
Masters Students	255	4.1%
Technicians	132	2.1%
Administrators	137	2.2%
Research Assistants	286	4.6%
Education & Outreach Staff	23	0.4%
Other	248	4.0%
<b>Total</b>	<b>6275</b>	<b>100.0%</b>

Table 2.5: Research Team Composition by Gender (All Funding Sources) as at 31/12/2012

	Male	Female	Total
Award Holders	337	81	418
Co-Principal Investigators	89	12	101
Management Staff	30	21	51
Postdoctoral Researchers	1090	585	1675
PhD Students	1829	1120	2949
Masters Students	157	98	255
Technicians	87	45	132
Administrators	22	115	137
Research Assistants	159	127	286
Education & Outreach Staff	6	17	23
Other	163	85	248
<b>Total</b>	<b>3969</b>	<b>2306</b>	<b>6275</b>

Table 2.6: Research Team Composition by Nationality (All Funding Sources) as at 31/12/2012

	Irish	EU (Non-Irish)	Non-EU	Total
Award Holders	294	91	33	418
Co-Principal Investigators	65	24	12	101
Management Staff	40	10	1	51
Postdoctoral Researchers	719	548	408	1675
PhD Students	1652	630	667	2949
Masters Students	166	37	52	255
Technicians	106	13	13	132
Administrators	121	14	2	137
Research Assistants	183	54	49	286
Education & Outreach Staff	21	1	1	23
Other	149	48	51	248
<b>Total</b>	<b>3516</b>	<b>1470</b>	<b>1289</b>	<b>6275</b>



## First Destination of Departing Team Members

The tables and graphs below indicate the destinations of the team members who left SFI-funded research teams in 2012.

Table 3.1: Departing Postdoctoral Researchers in 2012

Destination	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Postdoctoral research in HEI	53	55.8%	42	44.2%	95	36.7%
Industry	34	46.6%	39	53.4%	73	28.2%
Lecturers/Permanent researchers in HEI	31	57.4%	23	42.6%	54	20.8%
Other	11	68.8%	5	31.3%	16	6.2%
Unemployment	1	14.3%	6	85.7%	7	2.7%
Career Break	0	0.0%	5	100.0%	5	1.9%
Specialist Courses	2	66.7%	1	33.3%	3	1.2%
Maternity Leave	1	33.3%	2	66.7%	3	1.2%
Technicians in HEI	1	50.0%	1	50.0%	2	0.8%
Short term secondment to another institute	0	0.0%	1	100.0%	1	0.4%
<b>Total</b>	<b>134</b>	<b>51.7%</b>	<b>125</b>	<b>48.3%</b>	<b>259</b>	<b>100.0%</b>

Table 3.2: Departing PhD Students in 2012

Destination	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Postdoctoral research in HEI	43	45.7%	51	54.3%	94	41.8%
Industry	33	42.3%	45	57.7%	78	34.7%
Other	12	52.2%	11	47.8%	23	10.2%
Career Break	6	54.5%	5	45.5%	11	4.9%
Unemployment	6	54.5%	5	45.5%	11	4.9%
Technicians in HEI	0	0.0%	3	100.0%	3	1.3%
Specialist Courses	2	100.0%	0	0.0%	2	0.9%
Maternity Leave	0	0.0%	2	100.0%	2	0.9%
Teachers (primary/secondary)	1	100.0%	0	0.0%	1	0.4%
<b>Total</b>	<b>103</b>	<b>45.8%</b>	<b>122</b>	<b>54.2%</b>	<b>225</b>	<b>100.0%</b>

Table 3.3: Departing Masters Students in 2012

Destination	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Industry	4	18.2%	18	81.8%	22	32.4%
PhD research in HEI	6	33.3%	12	66.7%	18	26.5%
Other	1	8.3%	11	91.7%	12	17.6%
Specialist Courses	3	42.9%	4	57.1%	7	10.3%
Technicians in HEI	2	40.0%	3	60.0%	5	7.4%
Unemployment	1	33.3%	2	66.7%	3	4.4%
Career Break	1	100.0%	0	0.0%	1	1.5%
<b>Total</b>	<b>18</b>	<b>26.5%</b>	<b>50</b>	<b>73.5%</b>	<b>68</b>	<b>100.0%</b>

Table 3.4: Departing Research Assistants in 2012

Destination	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Industry	7	33.3%	14	66.7%	21	32.8%
PhD research in HEI	8	47.1%	9	52.9%	17	26.6%
Specialist Courses	1	10.0%	9	90.0%	10	15.6%
Technicians in HEI	2	33.3%	4	66.7%	6	9.4%
Other	2	40.0%	3	60.0%	5	7.8%
Maternity Leave	1	33.3%	2	66.7%	3	4.7%
Teachers (primary/secondary)	0	0.0%	1	100.0%	1	1.6%
Unemployment	0	0.0%	1	100.0%	1	1.6%
<b>Total</b>	<b>21</b>	<b>32.8%</b>	<b>43</b>	<b>67.2%</b>	<b>64</b>	<b>100.0%</b>

Table 3.5: Departing Technicians in 2012

Destination	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Industry	3	37.5%	5	62.5%	8	72.7%
PhD research in HEI	0	0.0%	1	100.0%	1	9.1%
Technicians in HEI	0	0.0%	1	100.0%	1	9.1%
Career Break	0	0.0%	1	100.0%	1	9.1%
<b>Total</b>	<b>3</b>	<b>27.3%</b>	<b>8</b>	<b>72.7%</b>	<b>11</b>	<b>100.0%</b>

Table 3.6: All Departing Team Members in 2012

Leaver destinations	Outside Ireland	% Outside Ireland	Within Ireland	% Within Ireland	Total	% of Total Leavers
Industry	81	40.1%	121	59.9%	202	32.2%
Postdoctoral research in HEI	96	50.8%	93	49.2%	189	30.1%
Other	26	46.4%	30	53.6%	56	8.9%
Lecturers/Permanent researchers in HEI	31	57.4%	23	42.6%	54	8.6%
PhD research in HEI	14	38.9%	22	61.1%	36	5.7%
Specialist Courses	8	36.4%	14	63.6%	22	3.5%
Unemployment	8	36.4%	14	63.6%	22	3.5%
Career Break	7	38.9%	11	61.1%	18	2.9%
Technicians in HEI	5	29.4%	12	70.6%	17	2.7%
Maternity Leave	2	25.0%	6	75.0%	8	1.3%
Teachers (primary/secondary)	1	50.0%	1	50.0%	2	0.3%
Short term secondment to another institute	0	0.0%	1	100.0%	1	0.2%
<b>Total</b>	<b>279</b>	<b>44.5%</b>	<b>348</b>	<b>55.5%</b>	<b>627</b>	<b>100.0%</b>

Table 3.7: Departing Team Members by Nationality by Destination in 2012

	Irish			EU (Non-Irish)			Non-EU			Total		
	Outside Ireland	Within Ireland	Total	Outside Ireland	Within Ireland	Total	Outside Ireland	Within Ireland	Total	Outside Ireland	Within Ireland	Total
Postdoctoral Researchers	20	70	90	67	35	102	47	20	67	134	125	259
	22.2%	77.8%	100.0%	65.7%	34.3%	100.0%	70.1%	29.9%	100.0%	51.7%	48.3%	100.0%
PhD Students	36	69	105	36	26	62	31	27	58	103	122	225
	34.3%	65.7%	100.0%	58.1%	41.9%	100.0%	53.4%	46.6%	100.0%	45.8%	54.2%	100.0%
Masters Students	4	39	43	8	4	12	6	7	13	18	50	68
	9.3%	90.7%	100.0%	66.7%	33.3%	100.0%	46.2%	53.8%	100.0%	26.5%	73.5%	100.0%
Research Assistants	6	32	38	14	5	19	1	6	7	21	43	64
	15.8%	84.2%	100.0%	73.7%	26.3%	100.0%	14.3%	85.7%	100.0%	32.8%	67.2%	100.0%
Technicians	0	7	7	2	0	2	1	1	2	3	8	11
	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	50.0%	50.0%	100.0%	27.3%	72.7%	100.0%
<b>Total</b>	<b>66</b>	<b>217</b>	<b>283</b>	<b>127</b>	<b>70</b>	<b>197</b>	<b>86</b>	<b>61</b>	<b>147</b>	<b>279</b>	<b>348</b>	<b>627</b>
	23.3%	76.7%	100.0%	64.5%	35.5%	100.0%	58.5%	41.5%	100.0%	44.5%	55.5%	100.0%

Table 3.8: Team Member Qualifications Awarded in 2012

	Irish	EU (Non-Irish)	Non-EU	Total
PhDs awarded	229	111	116	456
Masters Awarded	102	32	32	166
<b>Total</b>	<b>331</b>	<b>143</b>	<b>148</b>	<b>622</b>

## Academic Outputs

Table 4.1a: Publication Output by Publication Type – Active Awards in 2012

	CP	CSET	MI	PI	PIYRA	RFP	RP	SIRG	SRC	US Irl	Total from SFI Funding	Publications funded from Other Funding Sources
Refereed/Original Articles	58	282	55	601	16	261	5	38	333	7	1656	1475
Refereed Reviews	1	62	1	70	4	15	0	10	36	2	201	151
Books (Authored/Edited)	0	6	0	9	0	2	0	1	3	1	22	12
Book Chapters	5	35	0	48	2	8	0	4	23	2	127	97
Refereed Conference/ Meeting Papers	52	334	17	264	0	164	0	27	304	6	1168	659
Edited Conference/ Meeting Papers	19	7	44	68	0	30	0	2	7	0	177	47
<b>Total Research Outputs</b>	<b>135</b>	<b>726</b>	<b>117</b>	<b>1060</b>	<b>22</b>	<b>480</b>	<b>5</b>	<b>82</b>	<b>706</b>	<b>18</b>	<b>3351</b>	<b>2441</b>

Table 4.1b: Publication Output in 2012 for Active Awards

	CP	CSET	MI	PI	PIYRA	RFP	RP	SIRG	SRC	US Irl	Total from SFI Funding	Other Funding Sources	Total
Total Research Outputs	135	726	117	1060	22	480	5	82	706	18	3351	2441	5792
Outputs with non-Irish co-author	37.8%	30.6%	43.6%	44.6%	231.8%	40.6%	80.0%	34.1%	7.2%	33.3%	36.8%	38.0%	37.3%
Outputs available in Open Access Repositories	15.6%	49.4%	26.5%	43.8%	63.6%	50.6%	0.0%	32.9%	23.7%	61.1%	39.9%	26.4%	34.2%
SFI Accredited Outputs	63.0%	79.6%	62.4%	83.7%	90.9%	80.4%	100.0%	76.8%	86.0%	77.8%	81.1%	30.2%	59.7%

Table 4.2: Publication Output by Publication Type – Inactive Awards in 2012

	MI	PI	PICA	PIYRA	RFP	Total from SFI Funding
Refereed Original Articles	42	169	1	56	217	485
Refereed Review Articles	0	30	1	5	18	54
Books (Authored/Edited)	0	1	0	0	0	1
Book Chapters	3	7	0	1	18	29
Edited Conference/ Meeting Papers	0	0	0	0	21	21
Refereed Conference/ Meeting Papers	10	61	0	7	67	145
<b>Total Research Outputs</b>	<b>55</b>	<b>268</b>	<b>2</b>	<b>69</b>	<b>341</b>	<b>735</b>

Table 4.3: Publication Output by HEI – Active Awards in 2012

	Refereed Original Articles	Refereed Review Articles	Books (Authored/ Edited)	Book Chapters	Edited Conference/ Meeting Papers	Refereed Conference/ Meeting Papers	Total by HEI
Cork Institute of Technology	2	0	0	0	0	2	4
Dublin City University	321	29	3	26	73	186	638
Dublin Institute for Advanced Studies	25	0	1	3	4	7	40
Dublin Institute of Technology	38	3	0	2	1	16	60
Dundalk Institute of Technology	9	0	0	1	0	23	33
Institute of Technology, Tallaght	9	3	0	0	0	6	18
University College Cork	345	105	3	24	24	134	635
University College Dublin	757	46	8	62	45	599	1517
National University of Ireland, Galway	297	53	3	26	18	213	610
National University of Ireland, Maynooth	69	6	3	11	6	55	150
Queen's University Belfast	10	0	0	0	0	14	24
Royal College of Surgeons in Ireland	101	21	3	6	1	76	208
Teagasc	34	12	0	4	1	1	52
The National Institute for Bioprocessing Research and Training	5	0	0	0	0	0	5
Tyndall National Institute	164	5	0	4	16	90	279
Trinity College Dublin	735	66	5	36	27	185	1054
University of Limerick	162	3	4	18	8	174	369
University of Ulster	35	0	0	1	0	13	49
Waterford Institute of Technology	13	0	1	0	0	33	47
<b>Total Publication Output</b>	<b>3131</b>	<b>352</b>	<b>34</b>	<b>224</b>	<b>224</b>	<b>1827</b>	<b>5792</b>

Pre-Commercial Outputs<sup>10</sup>

Table 5.1: Summary of Pre-Commercial Outputs in 2012 (Active Awards)

	Total
Invention Disclosures	147
Patents Filed	80
Patents Awarded	25
Standards Contributed	20
Spin Outs Reported	14
Licensed Technologies	30

Table 5.1a: Summary of Pre-Commercial Outputs in 2012 (Active and Inactive Awards)

	Total
Invention Disclosures	163
Patents Filed	95
Patents Awarded	35
Standards Contributed	20
Spin Outs Reported	17
Licensed Technologies	30

Table 5.2: Summary of Pre-Commercial Outputs by HEI – Active Awards in 2012

Research body	Invention Disclosures	Patents Filed	Patents Awarded	Standards Contributed
Dublin City University	18	5	1	2
Dublin Institute of Technology	4	0	0	1
Dundalk Institute of Technology	0	1	1	2
National University of Ireland, Galway	13	6	1	3
National University of Ireland, Maynooth	1	1	1	0
Royal College of Surgeons in Ireland	3	5	0	0
University of Dublin, Trinity College	28	23	9	2
Tyndall National Institute	13	7	0	0
University College Cork	13	7	2	2
University College Dublin	36	13	3	1
University of Limerick	4	6	5	7
University of Ulster	2	2	0	0
Waterford Institute of Technology	12	4	2	0
<b>Total</b>	<b>147</b>	<b>80</b>	<b>25</b>	<b>20</b>

Table 5.3: Non-Award Specific Pre-Commercial Outputs by HEI - Active Awards in 2012

	Total Licensed Technologies	Total Spin Outs Reported
Dublin City University	7	1
National University of Ireland, Galway	4	3
National University of Ireland, Maynooth	2	0
Royal College of Surgeons in Ireland	3	2
Trinity College Dublin	4	5
Tyndall National Institute	1	0
University College Cork	3	1
University College Dublin	6	2
<b>Total</b>	<b>30</b>	<b>14</b>

<sup>10</sup> Although Invention Disclosures, Patents, Spin Outs and Licenses are reported as here as arising from SFI-funded research, it is important to stress that SFI does not produce these outputs directly. These are the product of the research and commercialisation ecosystem and are dependent upon Enterprise Ireland (EI), the HEI Technology Transfer Offices (TTOs) and other stakeholders.

Table 5.4: Invention Disclosures arising from SFI Funding - by HEI and Award Type - Active Awards in 2012

Research body	CP	CSET	PI	RFP	SIRG	SRC	US Irl	Total by HEI
Dublin City University	0	16	1	0	0	1	0	18
Dublin Institute of Technology	0	0	1	1	0	0	2	4
National University of Ireland, Galway	0	6	2	1	0	4	0	13
National University of Ireland, Maynooth	0	0	1	0	0	0	0	1
Royal College of Surgeons in Ireland	0	0	2	0	0	0	1	3
Trinity College Dublin	0	17	11	0	0	0	0	28
Tyndall National Institute	0	0	6	1	2	4	0	13
University College Cork	1	4	4	1	0	3	0	13
University College Dublin	0	13	5	6	2	10	0	36
University of Limerick	0	1	0	2	0	1	0	4
University of Ulster	2	0	0	0	0	0	0	2
Waterford Institute of Technology	0	0	0	0	0	12	0	12
<b>Total</b>	<b>3</b>	<b>57</b>	<b>33</b>	<b>12</b>	<b>4</b>	<b>35</b>	<b>3</b>	<b>147</b>

Table 5.5: Number of Patents Filed arising from SFI Funding in 2012 - by HEI and Award Type - Active Awards in 2012

Research body	CP	CSET	PI	RFP	SIRG	SRC	US Irl	Total
Dublin City University	0	2	1	0	0	2	0	5
Dundalk Institute of Technology	0	0	0	1	0	0	0	1
National University of Ireland, Galway	0	0	2	0	0	4	0	6
National University of Ireland, Maynooth	0	0	1	0	0	0	0	1
Royal College of Surgeons in Ireland	0	0	2	2	0	0	1	5
Trinity College Dublin	0	13	8	1	0	1	0	23
Tyndall National Institute	0	0	2	1	0	4	0	7
University College Cork	0	1	4	2	0	0	0	7
University College Dublin	0	2	7	1	1	2	0	13
University of Limerick	0	4	0	1	0	1	0	6
University of Ulster	2	0	0	0	0	0	0	2
Waterford Institute of Technology	0	0	0	0	0	4	0	4
<b>Total</b>	<b>2</b>	<b>22</b>	<b>27</b>	<b>9</b>	<b>1</b>	<b>18</b>	<b>1</b>	<b>80</b>

Table 5.6: Number of Awarded Patents arising from SFI Funding in 2012 - by HEI and Award Type - Active in 2012

	CSET	PI	RFP	SRC	Total
Dublin City University	1	0	0	0	1
Dundalk Institute of Technology	0	0	1	0	1
National University of Ireland, Galway	0	0	0	1	1
National University of Ireland, Maynooth	0	1	0	0	1
Trinity College Dublin	4	3	0	2	9
University College Cork	0	2	0	0	2
University College Dublin	2	0	0	1	3
University of Limerick	5	0	0	0	5
Waterford Institute of Technology	0	0	0	2	2
<b>Total</b>	<b>12</b>	<b>6</b>	<b>1</b>	<b>6</b>	<b>25</b>

## Non-Academic Collaborations

Table 6.1: Non-Academic Collaborations by Organisation Type - Active Awards 2012

	Total Collaborations	Organisations
Multinational Corporations	540	275
Small Medium Enterprises	527	428
Government Departments or Semi-State Bodies	70	44
Private Foundations/Charities/Non-Government Organisations (NGO)	26	25
<b>Total</b>	<b>1163</b>	<b>772</b>

Table 6.2: Non-Academic Collaborations by Award Type - Active Awards in 2012

Award type	Multinational Corporations	Small Medium Enterprises	Government Departments or Semi-State Bodies	Private Foundations/Charities/Non-Government Organisations (NGO)	Total
CP	24	31	9	2	66
CSET	190	232	22	12	456
MI	1	4	1	0	6
PI	170	102	16	3	291
PIYRA	5	0	0	0	5
RFP	22	28	3	4	57
RP	0	1	0	0	1
SIRG	14	11	1	0	26
SRC	114	113	17	5	249
US Irl	0	5	1	0	6
<b>Total</b>	<b>540</b>	<b>527</b>	<b>70</b>	<b>26</b>	<b>1163</b>

Table 6.3: Non-Academic Collaborations in 2012 with Legal Agreements

	Legal Agreement in Place	
	Total Collaborations	Organisations
Multinational Corporations	334	183
Small Medium Enterprises	304	256
Government Departments or Semi-State Bodies	35	25
Private Foundations/Charities/Non-Government Organisations (NGO)	10	9
<b>Total</b>	<b>683</b>	<b>473</b>
<b>Percentage of Total</b>	<b>58.7%</b>	<b>61.2%</b>



Table 6.4: Breakdown of Primary Objectives of Industry-Research Collaborations - Active Awards in 2012

	Primary Objective		Secondary Objective		Tertiary Objective	
	Total	% of Total	Total	% of Total	Total	% of Total
Collaborative research	584	50.2%	121	14.0%	46	6.9%
Sharing of knowledge, material, equipment, software or data	155	13.3%	400	46.4%	151	22.9%
Contract/Sponsored Research	141	12.1%	36	4.1%	30	4.5%
Building networks and relationships	225	19.3%	195	22.6%	349	52.9%
Company sponsored postgraduate studentships	41	3.5%	46	5.3%	22	3.3%
Exchanges of personnel	17	1.4%	64	7.4%	61	9.2%
<b>Total</b>	<b>1163</b>	<b>100%</b>	<b>862</b>	<b>100%</b>	<b>659</b>	<b>100%</b>

Table 6.5: 2012-2011 Comparison of Non-Academic Collaborations (Active Awards)

	Collaborations 2012	Collaborations 2011	% Change	Organisations 2012	Organisations 2011	% Change
Multinational Corporations	540	515	+5%	275	246	+12%
Small Medium Enterprises	527	424	+24%	428	337	+27%
Government Departments or Semi-State Bodies	70	73	-4%	44	38	+16%
Private Foundations/Charities/Non-Government Organisations (NGO)	26	23	+13%	25	21	+19%
<b>Total by Award</b>	<b>1163</b>	<b>1035</b>	<b>+12%</b>	<b>772</b>	<b>642</b>	<b>+20%</b>

## Academic-Academic Collaborations

Table 7.1: Academic Collaborations in 2012 by Region (Active Awards)

Irish	570	23.9%
EU (Non Irish)	1196	50.0%
Non EU	625	26.1%
<b>Total</b>	<b>2391</b>	<b>100.0%</b>

Table 7.2: Academic Collaborations in 2012 by Award Type (Active Awards)

PI	843	35.3%
CSET	527	22.0%
RFP	454	19.0%
SRC	296	12.4%
CP	94	3.9%
SIRG	78	3.3%
PIYRA	37	1.5%
US Irl	28	1.2%
MI	25	1.0%
RP	9	0.4%
<b>Total</b>	<b>2391</b>	<b>100.0%</b>

Table 7.3: Academic Collaborations in 2012 by Award Type and Region (Active Awards)

	Irish		EU (Non-Irish)		Non-EU		Total
PI	200	23.7%	385	45.7%	258	30.6%	843
CSET	90	17.1%	322	61.1%	115	21.8%	527
RFP	120	26.4%	231	50.9%	103	22.7%	454
SRC	92	31.1%	123	41.5%	81	27.4%	296
CP	25	26.6%	48	51.1%	21	22.3%	94
SIRG	23	29.5%	42	53.8%	13	16.7%	78
PIYRA	14	37.8%	14	37.8%	9	24.3%	37
US Irl	2	7.1%	12	42.9%	14	50.0%	28
MI	0	0.0%	13	52.0%	12	48.0%	25
RP	4	44.4%	5	55.6%	0	0.0%	9
<b>Total</b>	<b>570</b>	<b>23.8%</b>	<b>1195</b>	<b>50.0%</b>	<b>626</b>	<b>26.2%</b>	<b>2391</b>

Table 7.4: Academic Collaborations in 2012 by Objective (Active Awards)

	Collaborations	% of Collaborations with this Objective
Access to/provision of material, equipment, software, data	1582	59.2%
Joint publication/Research	1146	42.9%
Training and Career & Professional Development (CPD)	942	35.2%
Building networks & relationships	183	6.8%
Licence development	117	4.4%
Other	34	1.3%
Start-up development	14	0.5%

## External Funding

Table 8.1: Amount of non-SFI Funding by SFI Funded Researchers in 2012 (By Source, amounts in €s)

	External Funding Leveraged
EU	68,192,006
Enterprise Ireland	27,374,828
Private Enterprise	13,955,898
HRB	10,204,870
IRCSET	10,056,983
Wellcome Trust	9,209,422
HEA	5,003,623
Department of Agriculture Fisheries and Food	5,332,902
Other Irish Government Source	4,883,721
Other International Government Source	3,521,326
Charity/Non-Profit Organisation (Irish)	2,977,130
Teagasc	2,621,790
EPA	1,118,648
Charity/Non-Profit Organisation (International)	2,488,559
Other International Interest Organisation	1,294,715
NIH	1,371,530
Marine Institute	62,000
Other Source	388,439
DCENR	810,000
NSF	172,500
<b>Total</b>	<b>171,040,890</b>

Table 8.2: Amount of External Funding secured by SFI Funded Researchers in 2012 by Irish Exchequer vs Non-Irish Exchequer and National vs International Funding Sources (Active Awards, amounts in €s)

	Irish Exchequer	Non-Irish Exchequer	National	International
EU		68,192,006		68,192,006
Enterprise Ireland	27,374,828		27,374,828	
Private Enterprise		13,955,898		
HRB	10,204,870		10,204,870	
IRCSET	10,056,983		10,056,983	
Wellcome Trust		9,209,422		9,209,422
HEA	5,332,902		5,332,902	
Department of Agriculture Fisheries and Food	5,003,623		5,003,623	
Other Irish Government Source	4,883,721		4,883,721	
Other International Government Source		3,521,326		3,521,326
Charity/Non-Profit Organisation (Irish)		2,977,130	2,977,130	
Teagasc	2,621,790		2,621,790	
EPA	1,118,648		1,118,648	
Charity/Non-Profit Organisation (International)		2,488,559		2,488,559
Other International Interest Organisation		1,294,715		1,294,715
NIH		1,371,530		1,371,530
Marine Institute	62,000		62,000	
Other Source		388,439		
DCENR	810,000		810,000	
NSF		172,500		172,500
<b>Total by Source</b>	<b>67,469,365</b>	<b>103,571,525</b>	<b>70,446,495</b>	<b>86,250,058</b>
<b>Total Amount</b>	<b>171,040,890</b>		<b>156,696,553<sup>11</sup></b>	

11 It is not possible to classify all funding sources as national or international, for example, private enterprise; therefore, this figure is less than the total external funding secured figure of €171,040,890

## Other

Table 9.1: Involvement in Outreach Programmes in 2012 by HEI (Active and Inactive Awards)

	Engaged in Public Outreach Programmes for the Promotion of Science 2012		
	Yes	No	Total
University College Dublin	87	135	222
Trinity College Dublin	96	91	187
University College Cork	53	57	110
National University of Ireland, Galway	52	35	87
Dublin City University	26	40	66
National University of Ireland, Maynooth	27	30	57
University of Limerick	12	29	41
Tyndall National Institute	17	15	32
Royal College of Surgeons in Ireland	17	10	27
Dublin Institute of Technology	7	8	15
Dublin Institute for Advanced Studies	4	8	12
Waterford Institute of Technology	2	3	5
Cork Institute of Technology	2	2	4
Teagasc	4	0	4
Dundalk Institute of Technology	2	1	3
Institute of Technology, Tallaght	2	1	3
Athlone Institute of Technology	1	1	2
Institute of Technology, Carlow	0	1	1
Institute of Technology Sligo	1	0	1
Institute of Technology, Tralee	0	1	1
Queen's University Belfast	1	0	1
University of Ulster	1	0	1
<b>Total</b>	<b>414</b>	<b>468</b>	<b>882</b>

Table 9.2: Attendance at International Events by HEI in 2012 (Active and Inactive Awards)

	Yes	No	Total
Athlone Institute of Technology	0	2	2
Cork Institute of Technology	2	2	4
Dublin City University	31	31	62
Dublin Institute for Advanced Studies	8	4	12
Dublin Institute of Technology	10	5	15
Dundalk Institute of Technology	1	2	3
Institute of Technology, Tallaght	3	0	3
Institute of Technology, Carlow	1	0	1
Institute of Technology, Sligo	1	0	1
Institute of Technology, Tralee	0	1	1
National University of Ireland, Galway	54	31	85
National University of Ireland, Maynooth	28	8	36
Queen's University Belfast	1	0	1
Royal College of Surgeons in Ireland	21	15	36
Teagasc	2	2	4
Trinity College Dublin	108	76	184
Tyndall National Institute	23	7	30
University College Cork	57	52	109
University College Dublin	116	99	215
University of Limerick	23	18	41
University of Ulster	1	0	1
Waterford Institute of Technology	3	1	4
<b>Total</b>	<b>494</b>	<b>356</b>	<b>850</b>

Table 9.3: Breakdown of Location and Member Roles at International Events in 2012 (Active and Inactive Awards)

	Ireland	EU (excl Ireland)	Outside EU	Total
Host	155	61	22	238
Programme Committee Member	378	167	21	566
Invited Speaker	1281	321	170	1772
Oral Presentation of a Paper	1360	426	156	1942
Poster Presented	1440	445	175	2060
Meeting participant	1060	291	55	1406
<b>Total</b>	<b>5674</b>	<b>1711</b>	<b>599</b>	<b>7984</b>

## Appendix A: List of Organisations Collaborating with SFI Researchers

**Note:** These organisations are reported to be collaborating with SFI groups by SFI researchers.

### Companies

40-30	Alimentary Health Ltd	AstraZeneca	Biotica Technology	Clarochem Ireland
ABB	Alkermes Inc	Asylum Research	Blue Bridge Technologies	Clerici-Sacco Group
Abbott Pharmaceuticals	Allan Crean	AT&T	Blue Power Energy	Clontech
ABXL	Allergan Inc	Atesio	BlueAcre Technologies Ltd	Cloudstrong
Accenture	Allied Irish Beef Processors	Aughinish Alumina	Boehringer Ingelheim	CLS MedPharma (Complete Laboratory Solutions)
Acciona Infraestructuras SA	Alltech	Avaya	Bofinn Diagnostics	Coco Cola
Accuris Networks	Almac Group Ltd	Axion Consulting	Boliden Tara Mines Ltd	Codelco
AccuScience	Almir Business	B.Braun Medical Ltd	Bosch	CODEX Discovery
Achira	Alpha Wireless	B9 Energy Group	Boston Scientific	CognoPlus Ltd
ADA Security	Alstom	Bausch & Lomb Inc	Boxever	Collplant Ltd
Adama Innovation	Amdocs ChangingWorlds	Baxter Medical	BPI Visqueen	Compass Infomatics
Adidas	Amebis Ltd	Bayer Pharma	Brandon Products, Tralee	Component Integrity Solutions
Adnagen	AMGEN	BBInternational	Briglec Ltd	Connelly Red Mills
ADVA Optical Networking	AMLT	Becker & Hickl	Brim Brothers	Connexios
Advance Science	Analog Devices Inc	Becton Dickinson	Bristol-Myers Squibb	Consorzio Treesse
Advanced Accelerator Apps	Analysys Mason Ireland Ltd	Bedfont Scientific	British Sky Broadcasting	ConsteleX Technology Enablers
Aerogen Ltd	Ananova Instruments	Beiersdorf	Brockley Group	Coolsky
AeroSurgical Ltd	AP EnvEcon	BenchBio Ltd	Bruker	Copeland Ltd
AF Chem Pharm	APC Limited	Benetel	BT	Copper Industries
Affymetrix	Applied Enzyme Technology Ltd	Benson Engineering	Callmark	Covalex
Agennix	Applied Language Solutions	Beta Electronics	Cara Health	Coviden
Agile Sciences	Applied Materials	BETELGEUX, S.L	Carbery	CR Entertainment
Agilent Technologies	Appsie	BiancaMed	Carbon Decisions	Creganna
Airmid Healthgroup	Apsec	Big River Streaming	CBRN Hazards Ltd	Crescent Diagnostics
Airtricity	Aquamarine Power Ltd	BioBusiness	Celgene Cellular Therapeutics	Critical Path
Airvod	Aquinox Pharmaceuticals	Biocroi	Cellix Ltd	Crospon Ltd
Aixtron	Arch Therapeutics	BiolineRX	Celtic Catalysts Ltd	CSEM S.A.
Ajinomoto	Argutus Medical	Biolitec AG	Celtrak Ltd	CVD Technologies Ltd
Alcatel Lucent	Ark Therapeutics	BioMedical Research Ltd	Ceram Research	Cybercolloid
Alchemy Software Development Ltd	Arquebios	Biomining Inc	Cerbios Pharma	Cylon Controls
Alcon Laboratories Ireland Ltd	Arup	Biomonitor Ltd	Certivox Ltd	Cynar Plc
Alere International	ASM	Bioplastech	Cestel d.o.o.	Dabl Ltd
	ASML	Bioseek Inc	Ceva Animal Health	Dairygold
	Associated Plastics Limited	Biosensia	Charles Rivers Laboratories	
	Astellas	Biosurfit SA	Cisco	

Danone	Elsevier	Firecomms	Henkel	Intermune
Danubia Nanotech sro	Embankment Plastics Ltd	Fish Antics	Hewlett Packard	Intune Networks
Data Display	EMC	Fitzgerald Nurseries Ltd	Heystaks	InvestorFirst
Datafusion	Emerson Process Management	FMMW	Histogen Inc	IPC Ltd
DataHug	EnBio Ltd	Food NDP Teo	HistoIndex	Ipsen
Decawave	enet	Forschungszentrum Julich GmbH	Hoffmann-la-Roche Ltd	IPT Ltd
Dell (Ireland)	Epic Digital Media	France Telecom	Holfeld Plastic Ltd	Irish Driver Harris
Deloitte & Touche (Ireland)	Episensor	FrieslandCampina	Hollister ULC	Irish Precision Optics
Depuy	Epona Biotech	Fugro-BKS	Honeywell Transportation Ireland Ltd	IROC
Derbyville	EPPRA SAS	Fujitsu	Houghton Mifflin Harcourt	ISAAT Technologies
Devro Ltd	Equateq	Full Flight Technology	HSG Zander GMBH	iTraffic
Diaceutics Ltd	Equinome Ltd	G.E.M Team Solutions Gdbr	Huawei Technologies	Izon
Digital Optics Corporation	Ericsson	Gaelectric Developments Ltd	Human Genome Science Inc	Jam Media Ltd
DigitalWeed	Erigal	Gasera Ltd	Husqvarna AB	Janssen Pharmaceutical Ltd
Disney	Escher (Ireland)	GEM Biosoft	IBM	Janysis
DMC Medical	Esju Oy	Gemalto	IBVisual	JAVA
DMF Systems	eSpatial	Gencell Bio	ICON Central Laboratories	Java Clinical Research
DNP	ESRI Ireland	Genentech	Idiro	JBA
Dong Energy	EstudNET	General Electric	iduron	JL gore materials
DP Energy	Europlex	General Mills International	IHeed	Johnson & Johnson
DreamTec	EverSeen Ltd	Genewave SAS	Imagine Communications Group	JPT
Dresser Rand	EXA High Performance Computing	Genzyme Corporation	IMEC	K Systems
Drop Technology	Excico	GeoServ Solutions	Imex Instruments	Kanichi
Dualsystems	EXFO	Glantreo Ltd	iMobile	Kedco Ltd
DuPont	Ezose	Glas-Seal (NI) Limited	Impedans Ltd	Kelvatek Ltd
E&G Manly	EZWind	GlaxoSmithKline	Inabensa Abengoa	Kepak
E.ON	Fairspectrum	Glebe Scientific	Infineon AG	Kerry Group
EADS	FairView Analytics Ltd	Glen Dimplex Ltd	InfiniLED Ltd	Kildare Chilling
Eblana Photonics	Falk	Glycom	Information Mosaic	Kingspan
Eboroil Udmartia Inc	FEI	Gooch & Housego (Torquay) Ltd	Innocoll	KODE Biotech Ltd
eDaq Pty Ltd	Ferfics	Google	Innolume	K-Systems
EDF Energy	Fey Con	Goshido	Innopharma Labs	Kudyou
Eircom	FFiG	Groupe Archimen Active 3D	INNOVA S.p.A.	Kugler Maag
Eirgen Pharma	Fiat Research ScPA	GT Energy	Innovalia	Kymaner Ltd
EKF Diagnostics	Fibralign	Guralp Systems Ltd	Intel	Lakeland Dairies
Elan Pharmaceuticals (Ireland)	Fidelity Investments (FISC) Ireland Ltd	Halcyon Solutions	Intelligence & Science Applications	Lam Research
Elastagen	Fineos	Hansaplast	Intelligent Data Systems	Language and Computing
Elastin Specialties, Inc.	Finisar	Helsinn Therapeutics Inc.	Intercept Pharma	LaserAge Ltd/Mincon Ltd
Eli Lilly		Hemcon Medical Technologies Inc		Lexas Research Ltd

Light Stream Animation	Microsoft	Novartis	Pfizer	Randex Laboratories
Limagrain	Microtrin	Novate Medical	Pharmatrin Ltd	Raytheon BBN Technologies
Limerick Wave	Midatech Ltd	Novo Nordisk	Philips	R-Biomedical
Lipid Systems sp. z.o.o.	Millipore	Nowcasting International	Phoenix Ltd	RealTime Technologies
LogScreen	MiPlaza, Philips Innovation Services	NTE SENER	Phoenix Photonics	Recycled Paving Ltd
Lucigen	Mitre	NT-MDT	Photek Ltd	Red Box Direct Ltd
Lumension	MK Fluidics	NTR	PicoMetrics Inc	Regulus Therapeutics (USA)
Luxcel Biosciences Ltd	MLL Telecom Ltd	NTT Data	Pilot Photonics	Reprodoc
M/A-COM Technology Solutions	MobiDiag	Nucleus Venture Partners	Pioneer Investments	ReResearch Ltd
Maddison	Mocon Inc	NXP Semiconductors	Pixelert	RES Ltd
MagSense Life Sciences	Molecular Devices	Nypro	Plasmedica Ltd	Resource Kraft Ltd
Mainstream Renewable Power Ltd	Mostostal Warszawa	Ocean Energy Ltd	Plentex Ltd (Blue Sundial Algae Project)	Rinicom
Mainstream Renewable Power Ltd	Movidius	Ocean Modus	Plexera	Roche
Mandat International	Moving Media	Ocean Renewables Ireland	PMD solutions	Rofin Siinar Laser GmbH
ManOPT	Munich RE	Oceanlinx	Pointec Medical Ltd	Rohde-Schwarz
MAPREG	Mutebutton Ltd	Oclaro Switzerland A.G.	Polatis Ltd	Rolls-Royce Group PLC
Marigot Ltd	Mylan Institutional Inc	OFS	Polyplus Transfection	Royal DSM NV
Marine Power Technologies	Mytec GmbH	OncoMark Ltd	Portugal Telecom Inovacao	RSE
Marvao Medical	Nanoate	Openet	Premier Green Energy	RxGen
Marvell	NanoScan AG	Openlink Software (USA) Ltd	Prestwick Chemical	S2Group
Mason Technologies	Nanosight	Opsona Therapeutics	Probability Dynamics	S3 Group
Maxwell Technologies	Nanotex	Optobiotix	Prodevelop	SAB Miller
MBE-Komponenten	National Instruments	OptoSystems Ltd	Profactor	SAES Getter group
mBio Diagnostics	NaviExpert	Optronics Technologies	Progenika	SAFC Hitech
Media4Buyers	NAVTEQ EUROPE BV	Organic Power	Prognosys Biosciences Inc	Sanofi-Aventis
MedImmune	Neodoo Microsystems	Organis Spintronics srl	Protagen	SAP
Medtronic	NeoSurgical	Oriflame	Proteneomix	SAS Ireland
Megazyme	Nestle	Ortho Clinical Diagnostics	ProVita Eurotech	Saudi Aramco
Meiji	Net IQ	Ovagen	Proxy Biomedical Ltd	Scale Up systems Ltd
Memjet	Netwatch	Oxford Gene Technology	Puma Biotechnology	Scandinavian Homes Ltd
MEMSCAP	Neul	Oxford Metrics Group	QAD	Schneider Electric
Mentor Graphics	Neuren pharmaceuticals	Ozo	QinetiQ	SciPharm SaRL
Mercer	New Lambda Technologies	Paddy Power	QLT Inc	Scorpion Networks
Merck	Nike	Pantrx	Qualcomm	Scottish & Southern Energy
Merrion	Nikon Europe	Paraytech	Quaternion Risk Management	ScreenCell
MetaOme	Nines Photovoltaic	Pavement Management Services Ltd	Quintiles	SDL Enterprise Technology (Ireland)
mFuture	Nitto	PepsiCo Ireland	Qumas Ltd	Seagate Technologies (Ireland)
MicroDiscovery GmbH	Nokia Siemens	Pevion Biotech, Swiss	Radisens	Second Genome
Micronit	Northern Ireland Electricity			Selective Antibodies Ltd

Sembarc Ltd	Spintec	Theta Chemicals	VMAC
Seniormind	SpongeIT	Thomas Swan	Volkswagen AG
Sensinode	Sports Index	Tieto	Voya
Sensl	SQS Group Ltd	Time-Bandwidth Products A.G	Waters Corporation
Sequoia Smart Solutions	SSE Renewables	Tokn Grain Products	Wattics
Seroba-Kernel Life Sciences	St Microelectronics	Touchapps	Wavebob Ltd
Servier	Stat Sports	Towercom	Waybiz
Shell UK Ltd	Storm Technology Ltd	Transformation	Weedle
Shimmer Research	Storyful Ltd	Transver GmbH	Welocalize
Siemens	Strep Ltd	Trend Technologies	Western Digital
Sigint Solutions	Summit PLC	TriMod Therapeutics	Willis Plumbing and Heating
Sigma Aldrich Corporation	Suntory	Trinity Biotech	Wirelite Sensors Ltd
Sigmoid Pharmaceuticals	Superlum Ireland	Trino Therapeutics	WIS
Sigrun AB	Sutro Biopharma	Triveritas Ltd	W-onesies
Skyware Global	Swedish Pharma	Trulife	Xantheila Marine Resource Centre
Slattery Communications	Sygnature Chemical Services Ltd	Trutz Haase	Xcelerator Ltd
SLR Consulting	Sylansis	TXT e-Solutions	Xcelerit
Smart Cell Biologics	Symantec Corporation	UCB Pharma	XDC Consulting
Smart Cells	Synopsys International Ltd	Underarmour	XEPTAGEN SpA
SmartBay	T2M	Unilever	Xilinx Research Labs
SmartBin	Taiwan Semiconductor	United Technologies	Xylephone
Smartex	Manufacturing Corp (TSMC)	Unternehmensberatung Biogas	Zamano
Smith & Nephew	Taiyen Biotech Ltd	UNUM	Zeus Inc
Socowave	Taoglas	Vaisala	Ziel
Softhouse	Technicolor	Valio	Signals
Software CPR	Technology From Ideas Ltd	Velox GmbH	Zimory
Software Radio Systems (SRS)	Teck Ireland	Veolia	Zinopy
Solae	Tecnalia Energia	Vert Labs	
Solaplug	Telcordia Technologies	Veryan Ltd	
Solaronix SA	Telecom Italia	VI Systems	
Solarprint Ltd	Telefonica	Viadynamics	
Solexperts AG	Tellabs	VICHEM CHEMIE	
Solvay	Tenesol SA	Virbac, France	
Solvotrin Therapeutics	TerOpta	Viridian Power & Energy	
SONI Ltd	Teva Pharmaceutical Industries Ltd	VistaTEC	
SourceDogg	Thales Group	Vitalograph	
Spectra7	The Irish Times	Vitesse	
Spectrum Bridge	The Journal	Vivasure Medical Ltd	
SpeechStorm	ThermoFisher Scientific	Vivid Components Ltd	



## Government Departments or Semi-State Bodies

ALSTOM POWER	Health Service Executive (HSE)
BBC	HEAnet
BBCC	Idaho National Laboratory
Bord Gais	Inria
Bord Na Mona	Irish Naval Service
BreastCheck	Met Éireann
Central Statistical Office	National Institute for Bioprocess Research & Training
Centre Scientifique et Technique du Bâtiment	National Institute of Standards & Technology (NIST)
Coillte Teo	National Museum of Ireland
Commission for Energy Regulation (CER)	National Oceanic and Atmospheric Administration (NOAA)
Competence Centre For Biorefining and Bioenergy	National Roads Authority
Deutsche Welle	Nerviano Medical Sciences
Dublin City Council	Netherlands Institute for Sound and Vision (NISV)
Dublinked	Northern Ireland Electricity
EirGrid	Ordnance Survey Ireland (OSI)
Electricity Supply Board (ESB)	RTE NL
Environmental Protection Agency (EPA)	Scottish Association for Marine Science
European Space Agency (Netherlands)	SmartBay
FADA-CATEC	Teagasc
Fraunhofer Institute	UKsport
Fundacion Labein	University of Cambridge
Geological Survey of Ireland	US Government, Medical Institute for Infectious Diseases

## Private Foundations/Charities/Non-Government Organisations (NGO)

Cambridge Wireless	Irish Medical Devices Association
Carers Ireland	KWPN (Royal Warmblood Studbook of the Netherlands)
DEBRA Ireland	Luke International
Electric Power Research Institute (EPRI)	National Cattle Breeding Centre (NCBC)
European Ocean Energy Association	National Digital Research Centre (NDRC)
Fondazione Bruno Kessler (FBK)	Neurosky
GEIE ERCIM	Pat Falvey Foundation
Incubaid	Tennis Ireland
Information Retrieval Facility	Utility Wind Integration Group (UWIG)
Institute of Bankers	VTT Finland
Irish Amateur Boxing Association	WiSen - Wireless Sensors Enterprise Led Network
Irish Cattle Breeding Federation	Youris.com
Irish Hockey Association	

## Appendix B: Glossary

<b>CP</b>	SFI Charles Parsons Energy Research Award
<b>CSET</b>	SFI Centres for Science, Engineering and Technology
<b>DCENR</b>	Department of Communications, Energy and Natural Resources
<b>DJEI</b>	Department of Jobs, Enterprise and Innovation
<b>EI</b>	Enterprise Ireland
<b>EPA</b>	Environmental Protection Agency
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>HEA</b>	Higher Education Authority
<b>HEI</b>	Higher Education Institutions
<b>HRB</b>	Health Research Board
<b>HSE</b>	Health Service Executive
<b>IDA</b>	Industrial Development Authority, Ireland
<b>IRCSET</b>	Irish Research Council for Science, Engineering and Technology
<b>MI</b>	SFI Mathematics Initiative
<b>MNC</b>	Multi-National Corporation
<b>NIBRT</b>	The National Institute for Bioprocessing Research and Training
<b>NIH</b>	National Institute of Health, USA
<b>PI</b>	SFI Principal Investigator Programme
<b>PICA</b>	SFI Principal Investigator Career Advancement Award
<b>PIYRA</b>	SFI President of Ireland Young Researcher Award
<b>RD&amp;I</b>	Research, Development and Innovation
<b>RFP</b>	SFI Research Frontiers Programme
<b>RP</b>	SFI Research Professor Recruitment Award
<b>SIRG</b>	SFI Starting Investigator Research Grant
<b>SME</b>	Small-Medium Enterprise
<b>SRC</b>	SFI Strategic Research Cluster
<b>SSTI</b>	Strategy for Science, Technology & Innovation 2006 - 2013
<b>US Irl</b>	US Ireland R&D Partnership Programme

