The collection of information about research output

The seven UK research councils co-ordinate their work closely in a strategic partnership known as Research Councils UK (RCUK). RCUK has established an online process for researchers to report on the progress of their research council funded research. This process, currently supported by Researchfish Ltd.¹, is also used by 55 other funding agencies to collect information about research outputs, outcomes and impacts in a harmonised way. This information is used in many ways by the seven research councils, collectively by RCUK, by other subscribing funding agencies and stakeholders². Uses include:

- Evidence that research is delivering benefits to the Department for Business, Energy and Industrial Strategy (BEIS), underlining the case for continued Government investment in research.
- Communication of research successes, achievements and to explain delivery in response to specific questions from the public or policy makers.
- Exploring the pathways that lead to impact

All researchers holding Research Council funding are required to complete researchfish®, reporting structured details where applicable against 16 common outcome types as well completing grant specific additional questions. For the first time all Research Council funded students were asked to feedback on any outputs from their training, although responses were not mandatory.

The researchfish® system is open all year with a ‘formal submission period’, when researchers are asked to confirm that information entered over the year is accurate and up to date. The 2016 Researchfish Submission Period ran from Monday 1st February until Thursday 17th March 2016. The overall response rate from eligible awards across RCUK for both grant and studentships was 88%, with 51,909 responses submitted out of an expected 58,685. The compliance rate for grants was 95%, and 78% of studentships submitted returns.

The following report summarises the results from research council funded grants. Studentship data is separately summarised. If you have any questions, comments or suggestions on any aspect of these reports please contact researchoutcomes@rcuk.ac.uk

¹ www.researchfish.com
² For a list of publications drawing on researchfish® data see http://www.rcuk.ac.uk/documents/documents/useofresearchfishdatainpublications2009-2016-pdf/
Contents
Section 1: Compliance ..................................................................................................................................................................................................................... 3
Section 2: Publications..................................................................................................................................................................................................................... 5
Section 3: Collaborations & Partnerships ........................................................................................................................................................................................ 8
Section 4: Further Funding............................................................................................................................................................................................................. 10
Section 5: Engagement Activities ................................................................................................................................................................................................. 12
Section 6: Policy Influence ............................................................................................................................................................................................................. 14
Section 9: Artistic and Creative ...................................................................................................................................................................................................... 16

General Notes:

Percentages in this report are rounded up or down one decimal place.

Deduplication: A number of outputs may have arisen from more than one award, for example a particular publication or collaboration. In this report a particular output is always reported against each individual award where the analysis focuses on activity at the award level (for example the number of instances reported by each award). These outputs are de-duplicated, to the extent possible, in analyses on the type of outputs generated at the level of the Research Council at a particular research organisation (e.g. a publication might be counted against more than one Research Council, but only once within each Research Council), at the level of the research organisation (e.g. a publication would only be counted once within a research organisation) or at the level of all Research Council awards across all research organisation (e.g. a publication would only be counted once). Usually de-duplication is done using system generated codes to indicate when a researcher has attributed an output to more than one award. This does under report duplication if researchers enter similar information independently of one another. Supplemental information is used to de-duplicate where available.

Only selected outputs are included in this report. Summary tables include information on all awards at the institution including those who did not submit any information via ResearchFish, for example if an organisation has 100 awards 80 of which responded and 50 of which reported at least one X (output type). The percentage of awards reporting at least one X would be 50%.
Section 1: Compliance

This analysis was conducted on all RCUK awards identified as eligible for inclusion in the 2016 researchfish Submission Period at University of Oxford. To be eligible for inclusion awards had to be active at some point between April 2006 and October 2015. The outputs reported by these awards, whether they are still active or are now closed, form the basis of this report.

All Research Council funded principal investigators and fellows are required to provide information relating to the outputs arising from their work annually during the period of the award and for a number of years after the award has finished to allow for the reporting of some outputs that may take a number of years to become realised. Failure to complete researchfish can result in sanctions for principal investigators until feedback on their outputs is provided.

All principal investigators subject to researchfish were emailed at the start of data gathering in January 2016. Research managers in the relevant institutions were provided with progress reports during the submission period to monitor compliance and Investigators were reminded by email as the submission period deadline approached.

Normally awards are tracked for at least five years after completion. However if researchers indicate that no further outputs are expected to arise from the research then consideration is given to closing the reporting process early. Some awards were granted a one year exemption if the investigator was on long term leave (for example maternity, sickness, compassionate). The most recently submitted data for all of these awards are included in this analysis.

To determine a final compliance rate, the number of awards expected to complete and the number actually completing researchfish were used. Research institutions could provide a case for removing awards from their compliance calculations on the grounds that the investigators had left their institutions. Researchers who have moved institution are still expected to complete researchfish and so adjustment is only made for compliance at the research institution level. These numbers and an amended rate are also shown in Table 1.
Table 1: Compliance of Awards with Researchfish

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Awards</td>
<td>2721</td>
<td>53,140</td>
</tr>
<tr>
<td>Number of awards with one year exemption</td>
<td>13</td>
<td>348</td>
</tr>
<tr>
<td>Number of awards with permanent exemption</td>
<td>598</td>
<td>15,869</td>
</tr>
<tr>
<td>Number of awards removed from compliance only</td>
<td>193</td>
<td>3,920</td>
</tr>
<tr>
<td>Number of awards where a submission is optional</td>
<td>393</td>
<td>6,510</td>
</tr>
<tr>
<td>Number of awards expected to complete</td>
<td>1,932</td>
<td>35,060</td>
</tr>
<tr>
<td>Number of awards completing</td>
<td>1,922</td>
<td>33,426</td>
</tr>
<tr>
<td>Final compliance rate</td>
<td>99.5%</td>
<td>95%</td>
</tr>
</tbody>
</table>

The compliance numbers can show some variation across councils. These numbers are broken down by research council below.

Table 2: Compliance by Research Council

<table>
<thead>
<tr>
<th>Overall</th>
<th>AHRC</th>
<th>BBSRC</th>
<th>EPSRC</th>
<th>ESRC</th>
<th>MRC</th>
<th>NERC</th>
<th>STFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Awards</td>
<td>184</td>
<td>336</td>
<td>834</td>
<td>278</td>
<td>564</td>
<td>279</td>
<td>246</td>
</tr>
<tr>
<td>Number of awards with one year exemption</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Number of awards with permanent exemption</td>
<td>41</td>
<td>9</td>
<td>277</td>
<td>113</td>
<td>49</td>
<td>42</td>
<td>67</td>
</tr>
<tr>
<td>Number of awards removed from compliance only</td>
<td>20</td>
<td>19</td>
<td>49</td>
<td>35</td>
<td>44</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Number of awards where a submission is optional</td>
<td>40</td>
<td>136</td>
<td>93</td>
<td>36</td>
<td>0</td>
<td>61</td>
<td>27</td>
</tr>
<tr>
<td>Number of awards expected to complete</td>
<td>114</td>
<td>280</td>
<td>521</td>
<td>120</td>
<td>501</td>
<td>222</td>
<td>174</td>
</tr>
<tr>
<td>Number of awards completing</td>
<td>114</td>
<td>279</td>
<td>520</td>
<td>118</td>
<td>497</td>
<td>220</td>
<td>174</td>
</tr>
<tr>
<td>Final compliance rate</td>
<td>100%</td>
<td>99.6%</td>
<td>99.8%</td>
<td>98.3%</td>
<td>99.2%</td>
<td>99.1%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The final compliance rate takes into account all submitted awards and may differ from the compliance rate provided earlier this year, which only counted response code 1 awards.
Section 2: Publications

Principal investigators reported publications that could be attributed to Research Council funding in 79% of University of Oxford awards. In the case where more than one award claims to have contributed to a publication, each is credited equally in analysis at the award level. In this analysis, several thousand publications are counted multiple times in the All RCUK group.

Table 3: Publications

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td>2721</td>
<td>53,140</td>
</tr>
<tr>
<td>Number reporting at least one publication</td>
<td>2150</td>
<td>39,585</td>
</tr>
<tr>
<td>Percentage of group reporting at least one publication</td>
<td>79%</td>
<td>74.5%</td>
</tr>
<tr>
<td>Total number of publications reported by the group</td>
<td>36438</td>
<td>628,688</td>
</tr>
<tr>
<td>Mean number of publications for awards with at least one publication only</td>
<td>16.95</td>
<td>15.9</td>
</tr>
<tr>
<td>Mean number of publications for the whole group</td>
<td>13.39</td>
<td>11.8</td>
</tr>
</tbody>
</table>
The awards can be broken down into groups based on the Research Council awarding the funding and this is shown below.

Table 4: University of Oxford Publications by Research Council

<table>
<thead>
<tr>
<th></th>
<th>AHRC</th>
<th>BBSRC</th>
<th>ESRC</th>
<th>EPSRC</th>
<th>MRC</th>
<th>NERC</th>
<th>STFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td>184</td>
<td>336</td>
<td>278</td>
<td>834</td>
<td>564</td>
<td>279</td>
<td>246</td>
</tr>
<tr>
<td>Number reporting at least one publication</td>
<td>150</td>
<td>244</td>
<td>201</td>
<td>715</td>
<td>487</td>
<td>217</td>
<td>136</td>
</tr>
<tr>
<td>Percentage of group reporting at least one publication</td>
<td>81.5%</td>
<td>72.6%</td>
<td>72.3%</td>
<td>85.7%</td>
<td>86.3%</td>
<td>77.8%</td>
<td>55.3%</td>
</tr>
<tr>
<td>Total number of publications reported by the group</td>
<td>993</td>
<td>2958</td>
<td>4222</td>
<td>8569</td>
<td>7819</td>
<td>1654</td>
<td>10223</td>
</tr>
<tr>
<td>Mean number of publications for awards with at least one publication only</td>
<td>6.62</td>
<td>12.12</td>
<td>21</td>
<td>11.98</td>
<td>16.06</td>
<td>7.62</td>
<td>75.17</td>
</tr>
<tr>
<td>Mean number of publications for the whole group</td>
<td>5.4</td>
<td>8.8</td>
<td>15.19</td>
<td>10.27</td>
<td>13.86</td>
<td>5.93</td>
<td>41.56</td>
</tr>
</tbody>
</table>

Many types of publications can be reported in Researchfish. The table below shows the numbers of unique publications grouped by type and research council. This same information is grouped by University of Oxford and compared to the average across all RCUK awards in Figure 1.

Table 5: University of Oxford Publications by Type and Research Council

<table>
<thead>
<tr>
<th>Type</th>
<th>AHRC</th>
<th>BBSRC</th>
<th>ESRC</th>
<th>EPSRC</th>
<th>MRC</th>
<th>NERC</th>
<th>STFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Article</td>
<td>339</td>
<td>1331</td>
<td>1546</td>
<td>5362</td>
<td>6541</td>
<td>1210</td>
<td>4124</td>
</tr>
<tr>
<td>Conference Proceeding/Abstract</td>
<td>36</td>
<td>40</td>
<td>1055</td>
<td>982</td>
<td>46</td>
<td>80</td>
<td>76</td>
</tr>
<tr>
<td>Book/Edited Book/Book Chapter</td>
<td>521</td>
<td>50</td>
<td>637</td>
<td>180</td>
<td>56</td>
<td>83</td>
<td>10</td>
</tr>
<tr>
<td>Working Paper</td>
<td>11</td>
<td>0</td>
<td>667</td>
<td>34</td>
<td>0</td>
<td>3</td>
<td>150</td>
</tr>
<tr>
<td>Other</td>
<td>56</td>
<td>484</td>
<td>291</td>
<td>1158</td>
<td>226</td>
<td>117</td>
<td>2597</td>
</tr>
<tr>
<td>Total</td>
<td>963</td>
<td>1905</td>
<td>4196</td>
<td>7716</td>
<td>6869</td>
<td>1493</td>
<td>6957</td>
</tr>
</tbody>
</table>
Figure 1: Publications by Type
Section 3: Collaborations and Partnerships

Collaborations and partnerships play an increasingly important part in research enabling the leveraging of insights and expertise from around the globe. Principal investigators reported collaborations and partnerships in 31.9% of University of Oxford awards. Table 6 shows the basic summary of collaborations and partnerships for University of Oxford and also all RCUK awards.

Table 6: Collaborations and Partnerships

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td>2721</td>
<td>53,140</td>
</tr>
<tr>
<td>Number reporting at least one collaboration and partnership</td>
<td>869</td>
<td>14,848</td>
</tr>
<tr>
<td>Percentage of group reporting at least one collaboration and partnership</td>
<td>31.9%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Total number of collaborations and partnerships reported by the group</td>
<td>3941</td>
<td>74,857</td>
</tr>
<tr>
<td>Mean number of collaborations and partnerships for awards with at least one instance only</td>
<td>4.54</td>
<td>5</td>
</tr>
<tr>
<td>Mean number of collaborations and partnerships for the whole group</td>
<td>1.45</td>
<td>1.4</td>
</tr>
</tbody>
</table>

The percentage of awards reporting at least one collaboration by research council are shown below and compared with the percentages reported across all awards.
Figure 2: Percentage of Awards Reporting at least One Collaboration

- AHRC
- BBSRC
- ESRC
- EPSRC
- MRC
- NERC
- STFC

University of Oxford vs. RCUK
Section 4: Further Funding

Principal investigators reported receiving further funding in 27.5% of University of Oxford awards. These additional funds may be to explore new, but related, research gained as a result of the Research Council funded award.

<table>
<thead>
<tr>
<th>Table 7: Further Funding Summary by Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>University of Oxford</strong></td>
</tr>
<tr>
<td><strong>All RCUK</strong></td>
</tr>
<tr>
<td><strong>Number of awards in group</strong></td>
</tr>
<tr>
<td><strong>Number reporting at least one Further Funding</strong></td>
</tr>
<tr>
<td><strong>Percentage of group reporting at least one Further Funding</strong></td>
</tr>
<tr>
<td><strong>Total number of Further Funding reported by the group</strong></td>
</tr>
<tr>
<td><strong>Mean number of Further Funding for awards with at least one instance only</strong></td>
</tr>
<tr>
<td><strong>Mean number of Further Funding for the whole group</strong></td>
</tr>
</tbody>
</table>

The percentage of awards reporting at least one instance of further funding by research council are shown below and compared with the percentages reported across all awards. It is important to note that this summary does not include details of the amount of further funding awarded, only the fact that the award has reported at least some further funding. The researchfish® dataset includes further details of the tenure and scale of this funding.
Figure 3: Percentage of Awards Reporting at Least One Instance of Further Funding

% at Least One Instance of Further Funding

AHRC | BBSRC | ESRC | EPSRC | MRC | NERC | STFC

University of Oxford | RCUK

11
Section 5: Engagement Activities

Principal investigators reported engagement activities in 30.5% of University of Oxford awards. Caution should be exercised in interpreting these tables as the qualitative importance of each of those activities is not equivalent. The data is presented as an indication of the volume of further details available in the researchfish® dataset.

Table 8: Engagement Activities

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td></td>
<td>2721</td>
</tr>
<tr>
<td>Number reporting at least one Engagement</td>
<td>829</td>
<td>16,198</td>
</tr>
<tr>
<td>Percentage of group reporting at least one Engagement</td>
<td>30.5%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Total number of Engagements reported by the group</td>
<td>5344</td>
<td>136,487</td>
</tr>
<tr>
<td>Mean number of Engagements for awards with at least one instance only</td>
<td>6.45</td>
<td>8.43</td>
</tr>
<tr>
<td>Mean number of Engagements for the whole group</td>
<td>1.96</td>
<td>2.57</td>
</tr>
</tbody>
</table>
Many types of engagement activities can be reported in Researchfish. Figure 4 below shows the percentage of engagement activities reported grouped by type for University of Oxford and compared to the average across all RCUK awards.

Figure 4: Engagement Activities by Type
Section 6: Policy Influence

Principal investigators reported that their research had an impact on policy in 8.4% of University of Oxford awards.

Caution should be exercised in interpreting these tables as the qualitative importance of each of those activities is neither equivalent nor easily susceptible to quantitative analysis. The data is presented as an indication of the volume of further details available in the researchfish® dataset.

Table 9: Policy Influence

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td>2721</td>
<td>53,140</td>
</tr>
<tr>
<td>Number reporting at least one policy influence</td>
<td>228</td>
<td>3,866</td>
</tr>
<tr>
<td>Percentage of group reporting at least one policy influence</td>
<td>8.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Total number of policy influences reported by the group</td>
<td>646</td>
<td>13,502</td>
</tr>
<tr>
<td>Mean number of policy influences for awards with at least one instance only</td>
<td>2.83</td>
<td>3.49</td>
</tr>
<tr>
<td>Mean number of policy influences for the whole group</td>
<td>0.24</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Many types of policy influence can be reported in Researchfish. Figure 5 shows the percentage of policy influences reported grouped by type for University of Oxford and compared to the average across all RCUK.
Figure 5: Policy Influence by Type

- Not Specified
- Participation in a national consultation
- Participation in an advisory committee
- Membership of a guidance committee
- Influenced training of practitioners or researchers
- Implementation circular rapid advice letter
- Gave evidence to a government review
- Citation in systematic reviews
- Citation in other policy documents
- Citation in clinical reviews
- Citation in clinical guidelines

[Bar chart showing the percentage of policy influence by type for RCUK and University of Oxford]
Section 9: Artistic and Creative

Principal investigators reported that their research had artistic and creative outputs in 2.6% of University of Oxford awards.

Table 10: Artistic and Creative Outputs

<table>
<thead>
<tr>
<th></th>
<th>University of Oxford</th>
<th>All RCUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of awards in group</td>
<td>2721</td>
<td>53,140</td>
</tr>
<tr>
<td>Number reporting at least one artistic and creative output</td>
<td>70</td>
<td>1.830</td>
</tr>
<tr>
<td>Percentage of group reporting at least one artistic and creative output</td>
<td>2.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Total number of artistic and creative outputs reported by the group</td>
<td>141</td>
<td>6,089</td>
</tr>
<tr>
<td>Mean number of artistic and creative outputs for award with at least one instance only</td>
<td>2.01</td>
<td>3.33</td>
</tr>
<tr>
<td>Mean number of artistic and creative outputs for the whole group</td>
<td>0.05</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Many types of artistic and creative outputs can be reported in Researchfish. Figure 6 below shows the percentage of artistic and creative outputs reported grouped by type for University of Oxford and compared to the average across all RCUK awards.
Figure 6: Artistic and Creative Outputs by Type

- Performance
- Image
- Film Video Animation
- Creative Writing
- Composition Score
- Artwork
- Artistic Creative Exhibition
- Artefact

RCUK vs. University of Oxford