Use of UKRIO Advisory Service:

Summary data 2007-2016

April 2018





UK Research Integrity Office

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I. Introduction

- 1.1 The UK Research Integrity Office (UKRIO) operates an Advisory Service for people and organisations with questions and concerns about the design, conduct and dissemination of academic, scientific and medical research.
 - a. The Advisory Service covers all academic disciplines and offers support on research wherever it is carried out in the UK, including in universities, the NHS, private sector organisations and charities. It is open to individual researchers, organisations and members of the public, including research participants and patients.
 - b. We offer support on: how to achieve and promote good research practice; how to address problems and mistakes; and how to respond to allegations of misconduct.
 - c. Requests for assistance may involve: individual research projects; particular aspects of research practice; specific challenges or problems; allegations or investigations of research misconduct; or wider issues of research integrity, ethics and governance across a department, faculty or organisation, including the development of policies, systems and practices to sustain and promote research integrity within an institution.
 - d. UKRIO does not have any regulatory powers; it exists to advise and assist those who seek its help. Accordingly, use of the Advisory Service is voluntary, not mandatory.
 - e. Further information on how this service operates can be found at http://ukrio.org/get-advice-from-ukrio/ and http://ukrio.org/wp-content/uploads/UKRIO-Protocol-for-responding-to-requests-for-assistance-2013.pdf.
- 1.2 This paper provides anonymised summary data on formal requests for assistance (see 2.5, below) which UKRIO has received from researchers, research organisations and members of the public in the period January 2007 December 2016.
- 1.3 It does not provide: any un-anonymised data; data on individual formal requests for assistance; or summary data on any informal requests for assistance (see 2.2, below) received by UKRIO during this period.

2. 'Formal' and 'informal' requests for assistance

- 2.1 To aid in internal record-keeping, requests for assistance received by UKRIO are divided into two broad categories: 'informal requests for assistance' and 'formal requests for assistance.'
- 2.2 **'Informal requests'** for UKRIO's assistance are broadly defined as short or brief questions on the design, conduct and reporting of research to which UKRIO can respond comparatively easily and promptly. This is because the issues raised are relatively straightforward and can be answered without needing to consult UKRIO's Register of Advisers, the body of expert volunteers who assist the charity in responding to questions and concerns about the conduct of research. Examples include:
 - a. The question asked or the issue raised refers to matters that are not complex and about which UKRIO has often been consulted (i.e. it is a straightforward query which we have answered many times before, drawing on relevant existing good practice).
 - b. Published guidance on research practice exists that answers the question or addresses the issues which have been raised, including guidance from UKRIO.
 - c. It is appropriate to refer the enquirer to an external organisation whose remit is particularly relevant to the matter in question.
 - d. The enquiry is a request for UKRIO publications, case studies or training materials.
- 2.3 UKRIO does not give rote or 'one size fits all' answers in response to informal requests for advice; the information provided is always tailored to, and appropriate for, the particular nature of the enquiry.
- 2.4 Requests for advice and assistance regarding concerns about, or allegations of, research misconduct are never treated as informal requests for advice, even when they present as apparently straightforward questions or issues. Instead, they are automatically treated as formal requests for assistance.
- 2.5 **'Formal requests'** for UKRIO's assistance are those enquiries which do not involve matters which fit into the broad definition given in (5), above. These include but are not limited to:
 - a. Complex questions about research practice which require the input of UKRIO's Advisers.
 - b. Issues where a field of research is new or particularly specialised or has been the subject of considerable debate in the academic/ scientific/ medical community.
 - c. If the research has been the subject of public debate and concern.
 - d. Allegations of research misconduct or related concerns about the conduct of research.
 - e. If the matter in question concerns a situation that may require immediate action to prevent: further risk or harm to research participants, patients or other persons; improper

- treatment of animal subjects of research; improper use or storage of human tissue, materials or personal data; or negative environmental consequences.
- f. The matter in question may involve criminal activity.
- g. The matter in question (including any persons or organisations involved) presents any potential or actual conflicts of interest, for UKRIO as a whole or for any of its staff or volunteers.

3. Constraints of this data

- 3.1 This data refers to the use of UKRIO's Advisory Service. There is no obligation, whether legal or otherwise, to seek advice from our charity. Accordingly, this data should not be viewed as necessarily being representative of research integrity in the UK or of the UK research community as a whole.
 - a. Use of our Advisory Service has risen year-on-year since 2006. This does not in itself indicate that challenges to research integrity are increasing. While we strongly feel that there is no room for complacency on such issues, the growth in use of UKRIO's services is due to many factors. Since our inception in 2006, awareness of issues of research integrity has grown, both in the UK and internationally, as has awareness of the support which can be accessed, such as the services we provide.
- 3.2 However, as the only dedicated research integrity organisation in the UK, UKRIO has amassed unmatched practical experience in advising on questions of good research practice and assisting with the promotion of research integrity. Similarly, more than a decade of advisory work on issues of research misconduct gives us a unique perspective on addressing fraud in research.
- 3.3 We therefore present this data to provide insight into the challenges and problems faced by UK researchers and research organisations. Our aim is to encourage researchers, their institutions and related bodies to think more deeply, across all disciplines, about wider organisational and ethical issues underpinning the practice of research.
- 3.4 **Please note:** as stated earlier (see I.I(b)), UKRIO gives advice on how to achieve and promote good research practice, how to address problems and mistakes, and how to respond to allegations of misconduct. The summary data in this report covers all of those types of requests for assistance; the data does **not** apply solely to allegations or investigations of research misconduct and should not be read as such.

4. Breakdown of requests for assistance - Origin

- 4.1 The origin of formal requests for assistance from 2007-2016 is shown in Figure 1.
- 4.2 The majority of requests were made by representatives of research institutions, 65.8% in 2016. In contrast, in 2008 this was recorded to be only 24%. Although yearly variability in the number of requests from institutions is observed, there is an apparent upward trend seen from 2007 to 2016 as is shown in Figure 2. This is evidence to suggest that UKRIO has become a trusted brand for institutions to seek guidance on good practice in research integrity and on difficult issues such as research misconduct investigations, and as equally important a source of advice for a wide range of interest groups.
- 4.3 While the number of requests from individual researchers in the UK has increased from the first three years of the reporting period, it does not appear to have changed dramatically in more recent years (Figure 3).

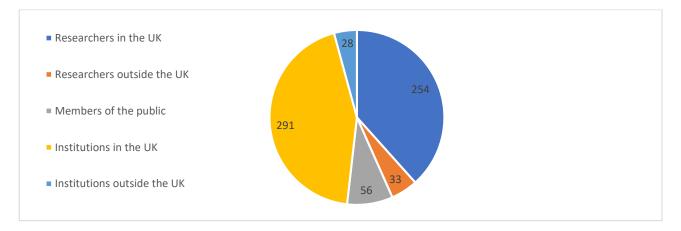


Figure 1. Origin of formal requests for assistance 2007-2016 (n=662)

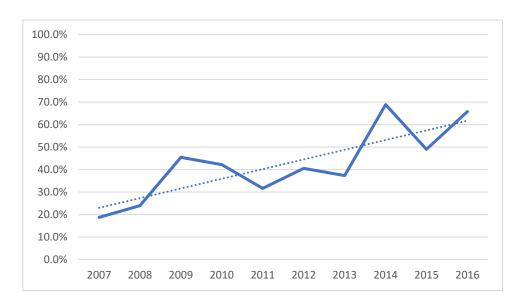


Figure 2: Percentage of formal requests for assistance originating from institutions

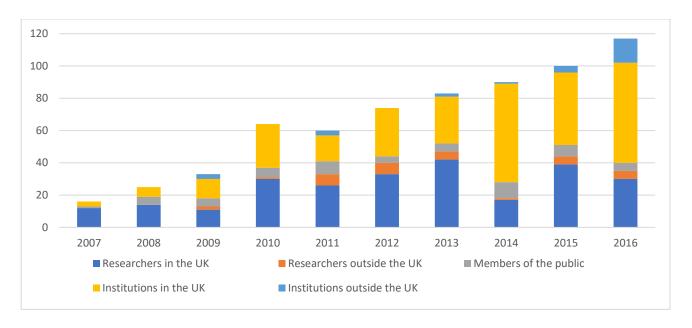


Figure 3: number of requests for assistance by origin 2007 -2016: breakdown by year (n=662)

5. Breakdown of requests for assistance - Sector

5.1 The sectors involved in formal requests for assistance from 2007-2016 are shown in Figure 4. Over this reporting period, the majority of formal requests for assistance were from the higher education sector (77.3%), followed by collaborations between the NHS and other sectors (6.3%) and then the NHS (5.4%).

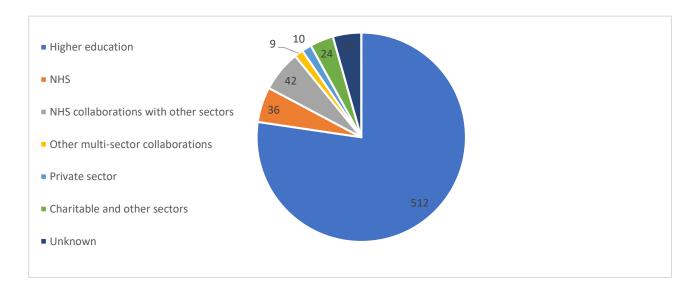


Figure 4: Sector involved in formal requests for assistance 2007-2016 (n=662)

5.2 The majority of requests for assistance received in 2016 originated from the higher education sector (73 %). This continues the trend noted in previous years and has continually risen over the last 5 years of reporting, as shown in Figure 5. The high use of our Advisory Service by the

higher education sector reflects the increased awareness, since our inception, by universities of issues of research integrity and the need to seek proactive support. This has been supported by extensive outreach work by UKRIO to higher education institutions.

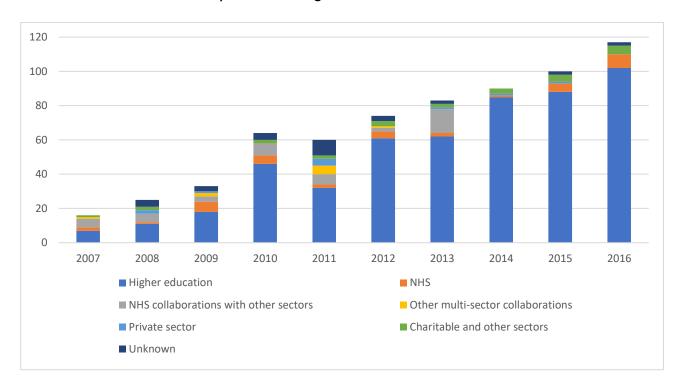


Figure 5: Sector involved in formal requests for assistance 2007-2016: breakdown by year (n=662)

6. Breakdown of requests for assistance - Academic discipline

6.1 The academic disciplines involved in formal requests for assistance from 2007-2016 are shown in Figure 6.

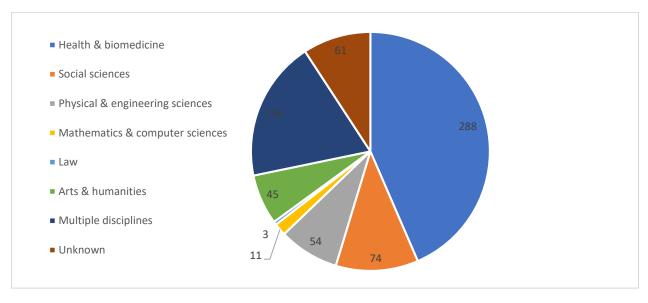


Figure 6: Academic disciplines involved in formal requests for assistance 2007-2016 (n=662)

- 6.2 In the reporting period, the largest proportion of enquiries for assistance have been from the health and biomedical sciences (43.5 %) (Figure 6). The proportion of enquiries from any particular discipline cannot be ascribed to a single cause and does not necessarily indicate a higher frequency of challenges to research integrity within that discipline. It could equally indicate a greater awareness of the need to seek proactive support on issues of research integrity. In the case of health and biomedical sciences, greater awareness of UKRIO will also be a factor given our initial remit regarding that discipline (see 4.3).
- 6.3 UKRIO's initial remit was to support the UK health and biomedical sciences research community. However, demand from the research community led us to expand to formally support all disciplines from 2007. Figure 7 shows a downward trend in the percentage of formal requests for assistance concerning health and biomedical research 2007 2016. This reflects a continuing increase in enquiries involving other disciplines.

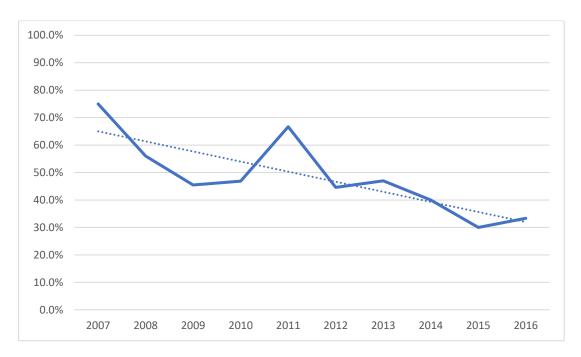


Figure 7: Percentage of formal requests for assistance concerning health and biomedical research

6.4 Figure 8 shows the distribution of academic disciplines involved in formal requests for assistance to UKRIO during the reporting period from 2007-2016. Over time, there is an increase in the number of multi-disciplinary requests as well as from the arts and humanities and the social sciences.

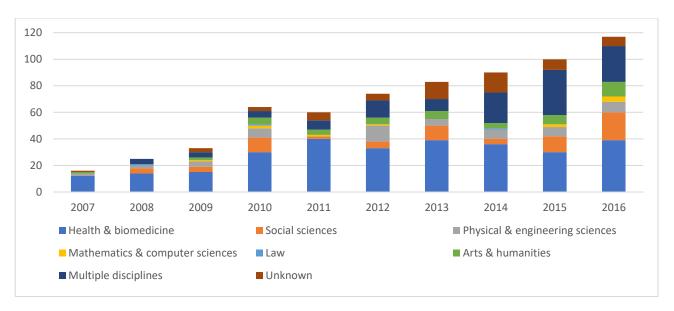


Figure 8: Academic disciplines involved in formal requests for assistance 2007-2016: breakdown by year (n=662)

7. Breakdown of requests for assistance - Main area of interest

- 7.1 Figure 9 shows the main areas of interest in formal requests for assistance for the reporting period from 2007 to 2016. These are listed by keyword categories outlining the main topic or issue.
 - a. As noted in the introduction, UKRIO responds to requests for advice on how to achieve and promote good research practice, how to address problems and mistakes, and how to respond to concerns or allegations of misconduct. Accordingly, the data in this section covers all of those types of requests for assistance. It does **not** apply solely to allegations or investigations of research misconduct and should not be read as such.
- 7.2 Overall, the majority of formal requests for assistance have been related to good practice in research integrity and governance (28.4 %). Research ethics made up the second largest area of interest (17.8 %), followed by an almost equal share between enquiries involving multiple issues of equal importance (13.3%) and publication and authorship concerns (12.4 %) (Figure 9).
- 7.3 Fabrication, falsification and plagiarism, though sometimes described as the most common challenges to research integrity, formed a smaller proportion of requests for assistance in the reporting period (9.1% for fabrication and falsification; 6.2% for plagiarism) (Figure 9).

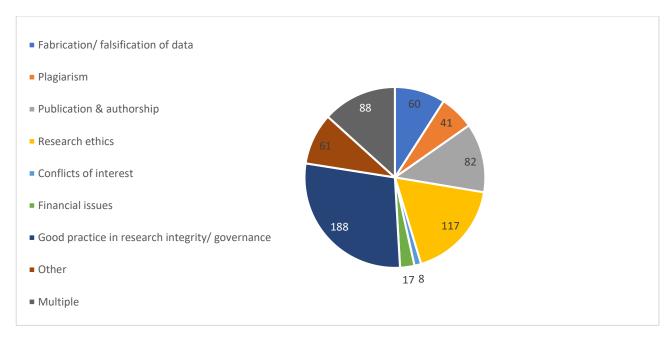


Figure 9: Main area of interest in formal requests for assistance 2007-2016 (n=662)

- 7.4 Figure 10, below, shows the percentage of formal requests relating to good practice in research integrity and governance over time, from 2007 to 2016. The data demonstrates a fivefold rise in this area. UKRIO believes this indicates an increased awareness in research integrity and governance within institutions and the need to seek proactive support. There may potentially be a link between this rise and the release of *The Concordat to Support Research Integrity* in 2012.
- 7.5 Examples of requests which fall under this category include:
 - Researchers seeking assistance on how to ensure that a particular research project runs smoothly;
 - b. Researchers proactively looking for help in addressing problems that they anticipate may occur.
 - Senior researchers requesting advice on how best to conduct certain types of research project in the future.
 - d. Institutions seeing help with creating or revising systems for research integrity, ethics and governance.
 - e. Institutions seeing help with creating or revising systems for the investigation of allegations of misconduct in research; and
 - f. Procedural advice on investigations of specific research misconduct allegations.

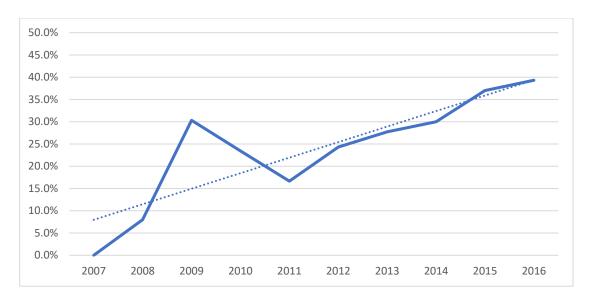


Figure 10. Percentage of formal requests relating to good practice in research integrity/governance

7.6 The main area of interest in formal requests for assistance is show in Figure 11 for each year from 2007 to 2016. There is a continued rise in formal requests relating to good practice in research integrity/governance.

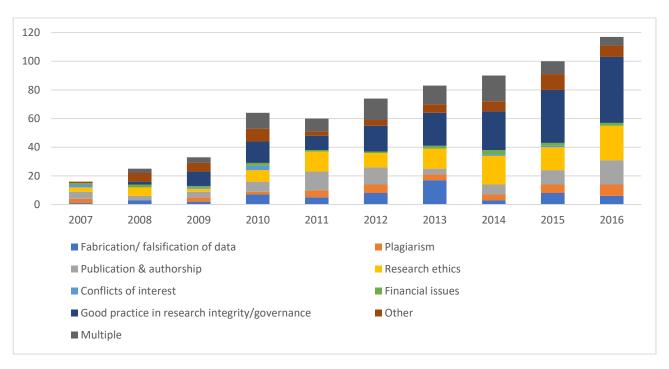


Figure 11. Main area of interest in formal requests for assistance: breakdown by year 2007-2016 (n=662)

Use of UKRIO Advisory Service: summary data 2007-2016

8. Breakdown of formal requests for assistance 2007-2016: Yearly figures

Tables I-4 show the yearly breakdown in numbers of formal requests for assistance used to generate the figures in sections 3-7.

Table I. Origin of formal requests for assistance 2007-2016 (n=662)

	Researchers in the UK	Researchers outside the UK	Members of the public	Institutions in the UK	Institutions outside the UK	YEARLY TOTAL
2007	12		I	3		16
2008	14		5	6		25
2009	П	2	5	12	3	33
2010	30	I	6	27		64
2011	26	7	8	16	3	60
2012	33	7	4	30		74
2013	42	5	5	29	2	83
2014	17	I	10	61	ı	90
2015	39	5	7	45	4	100
2016	30	5	5	62	15	117
	<u>254</u>	33	<u>56</u>	<u>291</u>	<u>28</u>	<u>662</u>

Table 2. Sector involved in formal requests for assistance 2007-2016 (n=662)

	Higher education	NHS	NHS collaborations with other sectors	Other multi- sector collaborations	Private sector	Charitable and other sectors	Unknown	YEARLY TOTAL
2007	7	2	5	I		I		16
2008	11	I	5		2	2	4	25
2009	18	6	3	2	ı		3	33
2010	46	5	7			2	4	64
2011	32	2	6	5	4	2	9	60
2012	61	4	2	I		3	3	74
2013	62	2	14		I	2	2	83
2014	85	I			I	3		90
2015	88	5			ı	4	2	100
2016	102	8				5	2	117
	<u>512</u>	<u>36</u>	<u>42</u>	<u>9</u>	<u>10</u>	<u>24</u>	<u>29</u>	<u>662</u>

Table 3. Academic disciplines involved in formal requests for assistance 2007-2016 (n=662)

	Health & biomedicine	Social sciences	Physical & engineering sciences	Mathematics & computer sciences	Law	Arts & humanities	Multiple disciplines	Unknown	YEARLY TOTAL
2007	12		2			I		I	16
2008	14	4	2		I		4		25
2009	15	4	4	I		2	4	3	33
2010	30	11	7	2	I	5	5	3	64
2011	40	2		I		4	7	6	60
2012	33	5	12	I		5	13	5	74
2013	39	11	5			6	9	13	83
2014	36	4	7	0	I	4	23	15	90
2015	30	12	7	2	0	7	34	8	100
2016	39	21	8	4	0	П	27	7	117
	<u>288</u>	<u>74</u>	<u>54</u>	<u>11</u>	<u>3</u>	<u>45</u>	<u>126</u>	<u>61</u>	<u>662</u>

Table 4. Main area of interest in formal requests for assistance 2007-2016 (n=662)

	Fabrication/ falsification of data	Plagiarism	Publication & authorship	Research ethics	Conflicts of interest	Financial issues	Good practice in research integrity/ governance	Other	Multiple	YEARLY TOTAL
2007	I	3	5	3	2	I		I I		16
2008	3		3	6		2	2	6	3	25
2009	2	3	4	2	I	I	10	6	4	33
2010	7	2	7	8	3	2	15	9	11	64
2011	5	5	13	14		I	10	3	9	60
2012	8	6	12	10		I	18	4	15	74
2013	17	4	4	14	0	2	23	6	13	83
2014	3	4	7	20	I	3	27	7	18	90
2015	8	6	10	16	I	2	37	П	9	100
2016	6	8	17	24	0	2	46	8	6	117
	<u>60</u>	41	<u>82</u>	<u>117</u>	<u>8</u>	<u>17</u>	188	<u>61</u>	88	<u>662</u>



The UK Research Integrity Office (UKRIO) is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical research. We welcome enquiries on any issues relating to the conduct of research, whether promoting good research practice, seeking help with a particular research project or investigating cases of alleged fraud and misconduct.

Since 2006, UKRIO has provided independent, expert and confidential support across all disciplines of research, from the arts and humanities to the life sciences. We cover all research sectors: higher education, the NHS, private sector organisations and charities. No other organisation in the UK has comparable expertise in providing such support in the field of research integrity.

UKRIO welcomes enquiries on any issues relating to the conduct of research, whether promoting good research practice, seeking help with a particular research project or investigating cases of alleged fraud and misconduct.

UK Research Integrity Office

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