

Insights from the UK wide survey of the 2022 Research and Innovation Workforce: Technical Annex

Ipsos and Warwick Institute for Employment Research

1. Sampling

Considerations when defining eligibility

For this research, we have used a broad definition to capture the UK R&I workforce. This is broader than the definition of R&D workers provided by the OECD's Frascati manual¹, since the Frascati definition covers only those working on basic research, applied research or experimental development. In addition, this survey also includes workers who are responsible for product or process innovation, or who introduce innovative technologies to their market or organisation. As well as researchers, the survey was open to technicians, engineers, R&I leaders and managers. Using this broader and pragmatic definition helps to align the findings with general stakeholder and policymaker interests beyond the narrower concept of 'R&D' (the definition of which is kept narrow as it relates to tax-related incentives for R&D investment).

Approach to defining eligibility

We chose to take an inclusive approach to eligibility. For example, although we have assigned all respondents to one or more standard occupational classification (SOC) codes, we chose not to use these codes to determine eligibility for the survey. This was to avoid incorrectly screening out respondents who perform R&I in occupations outside of a predetermined list, or those who perform R&I but find it difficult to select an appropriate SOC code and might become discouraged by this at the start of the survey. Equally, not every worker in a given SOC code will perform R&I in their role.

We asked potential respondents at the start of the survey to consider whether their role involved research and innovation. The question asked was as follows:

"This survey is for people who do any of the following in their work:

- generate new knowledge, for example by doing research or scientific studies
- apply scientific or technical knowledge to a particular organisation
- design, test or develop new or significantly improved products or processes
- introduce new technologies to a market
- help firms to adopt or apply new technologies
- lead or manage teams or projects that do any of the above

¹ https://www.oecd.org/sti/inno/frascati-manual.htm

Does your work involve research or innovation as defined above?

If you are not sure, please select "Do not know" and continue. We will collect information about your specific role later on in the survey."

All respondents selecting "yes" or "do not know" were able to continue with the survey (1.3% of overall respondents selected "do not know" at this point).

2. Questionnaire development

The survey questionnaire was developed by the research team (Ipsos and Warwick Institute for Employment Research), with input from BEIS and feedback from a Steering Group comprising representatives from industry, academia, government, and the not-for-profit sector.

The questionnaire underwent cognitive testing in December 2021 with ten participants from different sectors. Cognitive testing is a technique used to test and improve survey questions. During a cognitive interview, survey questions are administered (in this case by being displayed on screen for participants to read, to mimic the online mode of the survey) and participants are asked about the cognitive processes they go through in answering those questions. This helps to uncover problems with the questions and identify improvements.

Following this, the survey was piloted from 21st February 2022 by sending invitations to a small sample of potential respondents. The pilot survey received 56 responses, which allowed the research team to check for any questions with a high proportion of missing data, review the nature of responses to the free-text questions, and gather feedback via an open question at the end.

The research team made final amendments to the questionnaire accordingly. Amendments involved minor wording changes to some questions and the removal of the pilot-stage feedback question at the end of the survey.

A copy of the final survey questionnaire is included at the end of this technical annex.

3. Recruitment

Due to the lack of an existing sample frame covering the R&I workforce, the research took the form of an online survey with an open link that could be shared widely.

The survey was officially launched on 2nd March 2022 and remained open until 13th May 2022. Recruitment during this period took place through a range of channels. An initial mailout was sent out to recipients of UKRI grant funding, applicants for

Innovate UK grant funding, and to contacts appearing in the "Scientific research and development" sector of the Dun & Bradstreet business database.

In order to maximise completes, further email or postal invitations were sent out to relevant recipients. These included: businesses that reported conducting innovation in the UK Innovation Survey; businesses that were in one of the top ten industry sectors for R&D according to BERD figures²; businesses appearing in "most innovative" lists published by the European Commission³, PwC⁴ and Beauhurst⁵; or those that received a Queen's Award for Innovation.⁶

Altogether, the research team sent out 106,272 email invitations (not including reminders) and 19,524 postal invitations during the fieldwork period.

The survey was also promoted via social media and through networking opportunities such as conferences. Membership bodies such as R&D specialist organisations and professional societies and industry organisations for industries investing heavily in R&D, and relevant think tanks, charities, and trade unions also promoted the survey and shared the open link.

4. Fieldwork outcomes

7,519 eligible respondents completed the survey. In order to maximise completion rates we aimed for the survey to take a maximum of 20 minutes to complete. The average time taken to complete it by our respondents was 17 minutes.

5. Weighting

Following the fieldwork period, the research team compared the sample of respondents with existing data sources to understand how representative it was likely to be. However, it is worth noting that by design our survey was intended to capture a wider population than was captured by these other data sources and so comparisons should be treated as indicative.

In terms of occupation, discipline, gender and region, the survey sample appeared similar to other datasets on the R&D population⁷.

²

https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/datasets/ukbusinessenterpriseresearchanddevelopment

³ https://iri.jrc.ec.europa.eu/scoreboard/2021-eu-industrial-rd-investment-scoreboard;;

⁴ <u>https://www.strategyand.pwc.com/gx/en/insights/innovation1000.html</u>

⁵ <u>https://www.beauhurst.com/blog/most-innovative-startups-uk/</u>

⁶ https://www.thegazette.co.uk/all-notices/content/101145

⁷ The survey sample was checked against the following datasets: OECD 2019 data on sector breakdowns, Labour Force Survey 2021 data on occupation and gender breakdowns, HESA data on discipline, and BERD 2020 data on employment in R&D for regional breakdowns.

The tables below outline how representative the R&I workforce survey sample was by occupation, discipline, gender and region. Any deviation by more than 5 percentage points is highlighted in blue.

Occupation comparison

	LFS 2020 (Jan - Sept) ⁸ - proportion of total in these groups	R&I Survey
Programmers and software development pr	15%	8%
Chemical scientists	1%	5%
Biological scientists, biochemists and biomedical scientists	3%	16%
Physical scientists	1%	14%
Social and humanities scientists	1%	16%
Natural and social science professional	3%	3%
Civil engineers	3%	1%
Mechanical engineers	3%	4%
Electrical engineers	2%	1%
Electronics engineers	1%	3%
Production and process engineers	2%	2%
Engineering professionals n.e.c./ combination of "Other type of engineering professional" and "Design and development engineer"	8%	2%
Environment professionals	2%	3%
Higher education teaching professionals	8%	26%
Business and related research profession	2%	3%
Actuaries, economists and statisticians	2%	3%
Laboratory technicians	4%	0%
Research and development (R&D) managers	2%	9%
Management consultants and business ana	7%	4%
Chief executives and senior officials	5%	14%
Information technology directors	5%	2%
Artistic, literary or media professional	17%	2%
Health professional	3%	5%

The table above shows that, compared to the LFS, our survey sample contains more biological scientist / biochemists, physical sciences, social sciences, higher education professionals, R&D managers, chief executives and senior officials. There is a lower proportion of programmers and software developers and artistic, literary or media professionals.

⁸ Labour Force Survey 2021 data was used for comparisons of occupation and gender which informed our approach to weighting (OECD data was also used as a source of data for the gender comparison). On the 26th of September 2022, ONS released an article identifying an error in the coding of LFS occupational data from January 2021 onward. However, data for the Research & Innovation Workforce survey had already been weighted by this time. The ONS article on this coding error can be accessed here: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/theim

nttps://www.ons.gov.uk/employmentandiabourmarket/peopleinwork/employmentandemployeetypes/articles/theim pactofmiscodingofoccupationaldatainofficefornationalstatisticssocialsurveysuk/2022-09-26

Note that for some sectors, such as programmers or artistic, literary and media professionals, we would not expect the entire workforce to be eligible for the survey, as not everyone in these sectors will be a researcher or innovator (i.e., undertake research and innovation activities in their role). We therefore should be less concerned that a lower proportion of our sample works in these sectors compared with the overall proportion of the labour force working in these sectors (and that some other sectors accordingly make up a higher proportion of the sample).

Discipline comparison

Discipline	HESA freq	HESA %	Survey (re-based on those who were asked the question)	Diff %
Administrative & business studies	18245	8%	2%	6%
Agriculture, forestry & veterinary science	3065	1%	5%	-4%
Architecture & planning	4960	2%	2%	0%
Biological, mathematical & physical sciences	33480	15%	25%	-10%
Design, creative & performing arts	18760	8%	3%	5%
Education	13170	6%	9%	-3%
Engineering & technology	28380	13%	16%	-3%
Humanities & language-based studies &	17785	8%	7%	1%
Medicine, dentistry & health	54380	24%	16%	9%
None of the above	3170	1%	3%	-1%
Prefer not to say	0	0%	0%	0%
Social studies	28735	13%	11%	1%
Total	224130	100%	100%	

The table above suggests that in our sample there may be an over-representation of biological, mathematical and physical science compared to HESA data, and an under-representation of medicine, dentistry and health.

Gender comparison

	OECD data (2019, headcount data)	Labour Force survey 2020 ⁹ (research occupations ¹⁰ only)	RIW survey
Men	62%	73%	63%
Women	38%	27%	33%
Other/prefer not to	Not given	Not given	4%
say			

⁹ See footnote above

¹⁰ all the scientists and social scientists, HE teaching/research professionals, lab technicians, R&D managers, business and related research professionals

The gender profile in our survey closely matches the profile of the R & D workforce in both the OECD data and the LFS data.

	BERD 2020 data on employment in R&D	RIW survey	
North East	2.5%	3.7%	
North West	8.1%	6.3%	
Yorkshire and the Humber	5.3%	7.1%	
East Midlands	7.4%	5.1%	
West Midlands	9.9%	4.7%	
East of England	16.3%	7.8%	
London	12.4%	16.1%	
South East	18.7%	12.4%	
South West	8.1%	7.7%	
Scotland	2.5%	10%	
Wales	6.0%	2.9%	
Northern Ireland	2.8%	1%	
Greater South East	47.40%	36.30%	
Outside greater South East	52.60%	48.50%	

Region comparison

Scotland is over-represented in our sample when compared to the BERD data and East of England, the South East (and therefore the 'Greater South East' are under-represented.

Overall, in these categories the R&I workforce survey sample was reasonably statistically similar to other datasets on the R&D population. Therefore, with no 'true' population of R&I workers to weight to, we did not weight our data by any of these characteristics.

Sector comparison

However, comparison with OECD data on the sectoral composition of the R&D workforce¹¹ suggests that our sample under-represented workers in private for-profit organisations, and over-represented workers in other types of organisations. This can be seen in the table below.

	OECD data (2019, headcount data)	RIW survey
Private for-profit organisations	52%	24% (18% exclusively)
Private not-for-profit organisations	1%	5% (2% exclusively)
Academia/higher education	45%	68% (61% exclusively)
Government/public sector	2%	14% (8% exclusively)

¹¹ https://stats.oecd.org/Index.aspx?DataSetCode=PERS_FUNC

Weighting approach

We therefore weighted the data to correct for this bias, giving more weight to responses from workers in the private sector and less weight to responses from workers in other types of organisation.

We applied the following weights:

- Private-sector respondents: 2.56
- Higher education respondents: 0.66
- Public-sector/government respondents: 0.22
- Not-for-profit respondents: 0.41

This gives an overall effective sample size of 4,912 (from a sample of 7,519 respondents).

We considered trimming the weights to be closer to 1, so that this design effect is reduced; but rejected this approach on the grounds that this would be an arbitrary choice (given we do not have a defined sample frame) and the resulting weighted sample would not then represent anything meaningful.

Prioritising sectors for weighting

Ten per cent of our sample (766 respondents) answered that they worked in more than one sector. We allowed respondents to choose multiple sectors because this was a better reflection of the reality of the workforce; requiring respondents to choose only one role might have missed interesting information about people's "secondary" roles and inter-sector mobility.

However, the OECD 2019 data does not contain any figures for people working in more than one sector. We thus decided to force these 766 respondents into a 'main sector' in order to apply the sector weighting. We achieved this through a combination of the following rules:

- Respondents who were solely UKRI funded were considered more likely to be working in the public sector, whereas those who were solely Innovate UK funded were considered more likely to be working in the private sector
- Respondents who chose only one pre-coded sector, but added a further sector under 'Other: specify' were assigned to the sector they selected in the pre-coded list.
- In the open question Q_OCCUPATION, multiple respondents described working for a private business that advises public organisations, or vice versa.

We assigned these respondents to the sector they work in rather than the one they advise or work with.

- Respondents who described themselves as a CEO, company founder, or director at the open question Q_OCCUPATION were coded to 'private sector business'.
- Respondents who said they were a professor/academic but also the CEO/director of a spin-out or in a consultancy were assigned to 'higher education'. This was done under the assumption that the spin-out company was likely a product or result of their academic work.
- Clinical academics/scientists who worked both as NHS doctors and university researchers were assigned to "government" (which covered the public sector).

6. Interpretation of figures

Unless otherwise stated, figures given in this report are for the R&I population as a whole, after the weighting described above. The exception to this is figures that compare sectors with one another (where the bases are individual sectors), where we have used unweighted data.

When reporting on sub-groups, we note whether or not results from sub-groups differ from the overall workforce in a statistically significant way, with statistic testing relying on an assumption that the weighted sample achieved was as good as a random probability sample of R&I workers. Statistical significance testing is used to determine whether differences in results are likely to be due to a genuine difference between groups, as opposed to chance variation. The threshold used in this research is the 0.05 level, meaning there is less than a 5% chance that results deemed significantly different differ due to chance. This is a standard level of significance used in social sciences.

7. Data processing and coding

During analysis of the data, we removed a very small number of respondents (n=9) who, based on their answers to the questions about their occupation and the nature of their work, did not appear to work in research or innovation.

During the data processing stage we applied coding to assign answers to 'Other: specify' responses and open-ended questions to discernible codes. Where we have created new codes based on common 'Other: specify' responses, these are indicated.

In particular, we assigned answers to Q_SUPPORTOPEN to broad codes to aid analysis. Q_SUPPORTOPEN was designed to be an open-ended question in which respondents could answer in their own words how they felt the government could support them better in their career, without being prompted by pre-determined codes. 5,947 respondents provided an answer to this question. Their answers were grouped into 259 specific codes under 13 broad headings.

8. Survey questionnaire (post-pilot version)

A. INTRODUCTION

Welcome to the first Research and Innovation (R&I) Workforce Survey in the UK - your chance to help shape UK government R&I policies and government funding decisions. This survey covers the full diversity of occupations in the R&I workforce, including trainee or experienced researchers, technicians, engineers, R&I leaders and managers.

The questions in this survey are crucial for understanding how the R&I workforce is affected by government policy, and will help government and funders make decisions based on evidence.

Please fill in this short survey if you are a researcher or innovator – whether you create new knowledge or adapt or apply others' innovations. We welcome views from all specialisms, whether you work in STEM (Science, Technology, Engineering and Mathematics), the humanities, arts or social sciences; and whether you work in the private, public or non-profit sector.

Ipsos (formerly Ipsos MORI), an independent research organisation, has produced this survey on behalf of BEIS. BEIS has designed this project in collaboration with UKRI, Innovate UK, industry bodies, business organisations, charities and National Academies to make sure the findings will be useful for all sectors and institutions funding and supporting R&I in the UK.

[ONLY SHOW TO THOSE RECEIVING OPEN LINK SURVEY: The more R&I workers that complete the survey, the better the data will be, so we would be very grateful if you could share this survey link with any other R&I workers in the UK: https://ipsos.uk/RIworkforce]

Participation in the survey is voluntary and confidential, and you can change your mind at any time. We will ask for some personal information in the survey, including information that could identify you, for example if you agree to be recontacted for further research. You do not have to answer these questions. To check the survey is legitimate and get more information, visit Ipsos's <u>privacy policy</u>. At Ipsos we adhere strictly to the Market Research Society Code of Conduct. For more information about this survey, please email UK-Innovationworkforce@ipsos.com.

The survey will take up to 20 minutes to complete. [ONLY SHOW TO THOSE RECEIVING OPEN LINK SURVEY: You will not be able to save your answers, so please ensure you have enough time to complete it in one go.]

ASK ALL

Q_SCREENER. This survey is for people who do any of the following in their work:

- generate new knowledge, for example by doing research or scientific studies
- apply scientific or technical knowledge to a particular organisation
- design, test or develop new or significantly improved products or processes
- introduce new technologies to a market
- help firms to adopt or apply new technologies
- lead or manage teams or projects that do any of the above

Does your work involve research or innovation as defined above?

If you are not sure, please select "Do not know" and continue. We will collect information about your specific role later on in the survey. SINGLE CODE

- 1. Yes
- 2. No THANK AND CLOSE
- 3. Do not know -- CONTINUE

ASK ALL SELECTING 1 OR 3 AT Q_SCREENER

Q_UKSCREENER. This survey is about the UK workforce. Do you live in the UK? MULTICODE EXCEPT 3

- 1. Yes I live and work in the UK
- 2. Yes I live in the UK but do international work
- 3. No THANK AND CLOSE

B. EMPLOYER AND SECTOR

ASK ALL

Q_EMPSTAT. Which of the following apply to you? Please select all that apply.

MULTICODE

- 1. I am employed by an organisation or institution ['*i' hover button to display*: Please only select this option if you are directly employed by the organisation/institution rather than contracted by them]
- 2. I am self-employed
- 3. I am a business owner or sole trader
- 4. I currently have multiple jobs
- 5. I am doing research as part of a qualification (such as a doctorate)
- 6. I am on an apprenticeship
- 7. I am unemployed, retired or otherwise not in paid work (SINGLE CODE)
- 8. Other (please specify)
- 9. Do not know (SINGLE CODE)
- 10. Prefer not to say (SINGLE CODE)

ASK THOSE WHO ARE UNEMPLOYED (Q_EMPSTAT = 7)

Q_UNEMPLOY. Why are you currently not in paid work? Please select all that apply.

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MULTICODE

- 1. I have been made redundant
- 2. I am currently looking for work but there are limited relevant opportunities to apply for
- 3. I am currently looking for work but my applications have so far not been successful
- 4. I am currently looking for work but have not yet received a job offer I wanted to take up
- 5. I am a student / in training
- 6. I am looking after family / home / children
- 7. I am caring for a disabled or elderly person
- 8. I am sick or disabled
- 9. I am retired (THANK AND CLOSE)
- 10. I do not need employment (THANK AND CLOSE)
- 11. Other (please specify)
- 12. Do not know (SINGLÉ CODE)

ASK ALL GRID QUESTION – A, B, C ACROSS THE TOP AND MULTICODE LIST OF SECTORS DOWN THE SIDE ${f Q}_{\mbox{sectors.}}$

- A. Which of the following best describes the [IF EMPSTAT = 2, 3, 4, 5: <u>sector/s</u> <u>you work in</u>] [IF EMPSTAT = 1, 6 <u>the organisation/s you are employed by</u>] [IF EMPSTAT = 7: <u>last sector/s you worked in</u>]? Please only include your direct employer/s, not clients or partners.
- B. Which of these types of organisations have you worked in <u>over the course of</u> <u>your career</u> in research and innovation? [IF EMPSTAT IS NOT 7: Please include your current role.]
- C. Which of these types of organisations have you <u>collaborated with</u> in your [If unemployed (CODE 7 AT EMPSTAT) most recent role] [OTHERWISE: current role]?

Please select all that apply.

MULTICODE FOR EACH OF A, B, C

- 1. Private sector businesses
- 2. Higher education institutions
- 3. Further Education colleges
- 4. Public sector research organisation/s e.g. public research institutes, public sector research establishments (PSREs), or Catapults
- 5. National Health Service
- 6. Local or national government
- 7. Other public sector
- 8. Non-profit organisation, charity or community organisation/s
- 9. Other (please specify)
- 10. Do not know (SINGLE CODE)
- 11. Prefer not to say (SINGLE CODE)

C. OCCUPATION, NATURE AND PURPOSE OF THE WORK

ASK ALL

Q_OCCLIST. Which of the following categories best describes your [If unemployed (CODE 7 AT EMPSTAT) most recent] occupation?

- 1. Programmer or software development professional
- 2. Chemical scientist
- 3. Biological scientist or biochemist
- 4. Physical scientist
- 5. Social and humanities scientist
- 6. Other natural and social science professional
- 7. Civil engineer
- 8. Mechanical engineer
- 9. Electrical engineer
- 10. Electronics engineer
- 11. Design and development engineer
- 12. Production and process engineer
- 13. Other type of engineering professional
- 14. Environment professional
- 15. Higher education teaching or research professional
- 16. Statistician
- 17. Laboratory technician
- 18. Research and development manager
- 19. Management consultant or business analyst
- 20. CEO or senior manager
- 21. Business and related research professional
- 22. Information Technology (IT) director
- 23. Artistic, literary or media professional
- 24. Health professional
- 25. Other researcher
- 26. Other
- 27. Do not know (EXCLUSIVE)
- 28. Prefer not to say (EXCLUSIVE)

ASK ALL

Q_OCCUPATION. Please describe your [If unemployed (CODE 7 AT EMPSTAT) most recent] occupation or role in 30 words or fewer.

Please write in your answer here

1. Prefer not to say

ASK ALL

Q_WORKTYPE. Which of the following research or innovation activities have you done in your [If unemployed (CODE 7 AT EMPSTAT]: most recent] [otherwise: current] job role?

Please select all that apply

MULTICODE

- 1. Basic research: work to acquire new knowledge without a specific application
- Applied research: work to acquire new knowledge, towards a specific aim or objective ['*i*' hover button to display: "This includes applications from any discipline; for example policy research is included"]
- Experimental development: novel and experimental work that uses existing knowledge to substantially improve or create new products, services or processes [*i*' hover button to display: This includes new materials and new systems]
- 4. Market research of potential users, marketing or competitors
- 5. Acquisition and adaptation of technology that is not new to the market but is new to your organisation (for example, digital technologies)

- 6. R&D or innovation management establishing strategies, processes, structures and responsibilities to increase research or innovation and its usage
- 7. Other research or innovation activities (please specify)
- 8. Do not know (EXCLUSIVE)
- 9. Prefer not to say (EXCLUSIVE)

ASK ALL SELECTING ANY OF CODES 1 TO 7 AT WORKTYPE AND NOT UNEMPLOYED (NOT CODE 7 AT EMPSTAT)

Q_MOSTTIME. And during the last 6 months, which one of these activity types has taken up the largest share of your working time?

SINGLE CODE. ONLY DISPLAY CODES SELECTED AT WORKTYPE. ALWAYS DISPLAY CODE 8 ("I CANNOT SAY").

- 1. Basic research: work to acquire new knowledge without a specific application
- Applied research: work to acquire new knowledge, towards a specific aim or objective ['i' hover button to display: "This includes applications from any discipline, for example policy research is included"]
- 3. Experimental development: novel and experimental work that uses existing knowledge to substantially improve or create new products, services or processes[*i*' hover button to display: This includes new materials and new systems]
- 4. Market research of potential users, marketing or competitors
- 5. Acquisition and adaptation of technology that is not new to the market but is new to your organisation (for example, digital technologies)
- 6. R&D or innovation management establishing strategies, processes, structures and responsibilities to increase research or innovation and its usage
- 7. SUBSTITUTE CODE FROM OTHER SPECIFY AT WORKTYPE
- 8. I cannot say (SINGLE CODE)

ASK ALL ACADEMICS, PUBLIC AND NON-PROFIT RESEARCHERS EXCEPT IF UNEMPLOYED (CODE 2, 3, 4 AND/OR 8 AT SECTOR A AND NOT CODE 7 AT EMPSTAT) Q_DISCIPLINE. Do you work in any of the following research disciplines? Please select all that apply.

MULTICODE

- 1. Medicine, dentistry & health
- 2. Agriculture, forestry & veterinary science
- 3. Biological, mathematical & physical sciences
- 4. Engineering & technology
- 5. Architecture & planning
- 6. Administrative & business studies
- 7. Social studies
- 8. Humanities & language-based studies & archaeology
- 9. Design, creative & performing arts
- 10. Education
- 11. None of the above
- 12. Prefer not to say (SINGLE CODE)

ASK ALL EXCEPT UNEMPLOYED (ALL EXCEPT CODE 7 AT EMPSTAT)

Q_OUTPUTS. Thinking about the last 12 months, which of the following outputs has your work fed into? ['*i*' hover button to display: Please include all outputs even they were realised outside the UK]

Please select all that apply

MULTICODE. IF CODE 2, 3 OR 4 AT SECTOR A (ACADEMICS AND PUBLIC SECTOR RESEARCHERS), ORDER LIST AS BELOW

IF NOT CODE 2, 3, 4 or 5 (PRIVATE, NOT FOR PROFIT AND OTHER PUBLIC SECTOR CODES) PLEASE ORDER LIST AS FOLLOWS (1, 8-17, 2-7, 18-20) IF CODE 5 (NHS) PLEASE ORDER LIST AS FOLLOWS (1, 11, 2-10, 12-20)

- 1. New knowledge from research or experimentation, discussed with colleagues
- 2. Publications in academic journals
- 3. Other types of publications (trade journals, opinion magazines, research reports and newspapers)
- 4. Data collection, datasets, databases or data models
- 5. Making information more readily available through reviewing, documenting, or archiving
- 6. Sharing new or existing knowledge through education, training, mentoring or knowledge exchange
- 7. Influencing government policy
- 8. Intellectual property and licensing
- 9. A new business, including start-ups and spin-outs
- 10. Commercialising research or new technology without seeking intellectual property
- 11. Medical products or interventions
- 12. Artistic and creative products or services
- 13. Software and technical products
- 14. Other new or significantly improved products
- 15. New or significantly improved services
- 16. New or significantly improved **processes** for producing or supplying goods or services
- 17. Prototypes of new products or processes
- 18. Other outputs (please specify)
- 19. Do not know (EXCLUSIVE)
- 20. Prefer not to say (EXCLUSIVE)

ASK ALL EXCEPT UNEMPLOYED (CODE 7 AT EMPSTAT)

Q_SKILLSNEED. The following is a list of skills or knowledge that may be needed for your current job. On a scale from 1 to 5, where 1 means not at all important, 3 means moderately important and 5 means essential, how important are the following for doing your job?

ENTER NUMBER BETWEEN 1-5 FOR EACH PLUS DK ROTATE CODES

- 1. Specialist knowledge including technical knowledge
- 2. Learning to use new technology, including software
- 3. Analysis (such as creating new models and hypotheses, using analysis techniques, synthesis, problem solving, or recognising patterns with other work)
- 4. Advanced digital skills (such as programming, using or developing software, or using data science techniques)
- 5. Commercial skills such as selling ideas to customers or clients, attracting investment, or bringing an idea to market
- 6. Communication and working with people
- 7. Leadership, including leading a team
- 8. Project management (such as identifying and bidding for funding, planning and monitoring resources and outputs)

ASK ALL

QSKILLADVANCE. And which of these skills do you think you will need further training or development on to progress your career in R & I? Please select all that apply. MULTICODE ROTATE CODES TO MATCH ROTATION AT SKILLSNEED

- 1. Specialist knowledge including technical knowledge
- 2. Learning to use new technology, including software
- 3. Analysis (such as creating new models and hypotheses, using analysis techniques, synthesis, problem solving, or recognising patterns with other work)
- 4. Advanced digital skills (such as programming, using or developing software, or using data science techniques)
- 5. Commercial skills such as selling ideas to customers or clients, attracting investment, or bringing an idea to market
- 6. Communication and working with people
- 7. Leadership, including leading a team
- 8. Project management (such as identifying and bidding for funding, planning and monitoring resources and outputs)
- 9. None of the above SINGLE CODE
- 10. Not interested in further pursuing a career in R & I SINGLE CODE
- 11. Not applicable SINGLE CODE
- 12. Do not know SINGLE CODE
- 13. Prefer not to say SINGLE CODE

H. GOVERNMENT SUPPORT

ASK ALL

Q_GRANTS. Have you, or a team you were working in, received any of the following UK grant funding for research and innovation in your career?

Please select all that apply

MULTICODE. DO NOT SHOW CODE 1 IF FROM UKRI LIST

- 1. UKRI or Innovate UK grant funding for a specific R&I project, including funding from a Research Council
- 2. UK government grant funding for a specific R&I project
- 3. UK National Academy grants or prizes
- 4. Charity funding for a specific R&I project
- 5. European Union grant funding (e.g. Horizon 2020)
- 6. UK National Academy talent scheme or fellowship
- 7. UKRI funded talent scheme/fellowship,including funding from a Research Council or Innovate UK
- 8. PhD funding by UKRI (including each Research Council and Innovate UK)
- 9. A private sector/business funded talent scheme/fellowship
- 10. Other (specify)
- 11. None of the above (SINGLE CODE)
- 12. Do not know

ASK ALL EXCEPT THOSE SELECTING ALL OF 1, 2 AND 7 AT GRANTS, AND DO NOT SHOW CODES SELECTED AT GRANTS

Q_GRANTAPPS. Have you ever applied for the following grant funding for research and innovation in your career?

Please select all that apply

MULTICODE

- 1. UKRI or Innovate UK grant funding for a specific R&I project, including funding from a Research Council
- 2. UKRI funded talent scheme/fellowship, including funding from a Research Council or Innovate UK
- 3. UK government grant funding for a specific R&I project
- 4. None of the above (SINGLE CODE)

ASK ALL

Q SUPPORTOPEN. How do you feel the Government could support you better in your research and innovation career?

We are interested in a broad range of suggestions, including (but not limited to) financial support, investment, infrastructure, regulation, and policies and strategies relating to skills, intellectual property, trade, immigration and fiscal policy.

Please write in your answer here

- 1. Do not know
- 2. Prefer not to say

G. REASONS FOR CAREER DECISIONS

ASK ALL EXCEPT UNEMPLOYED (ALL EXCEPT CODE 7 AT EMPSTAT)

Q JOBREASON. How important were the following factors in your decision to take up your current job? Please use a scale of 1 to 5 where 1 means it was not at all important, 3 means moderately important and 5 means crucial.

GRID QUESTION (SCALE 1-5 PLUS DK) ROTATE CODES

- 1. The job suited my qualifications, skills and experience
- 2. The job provided security
- 3. The job offered good career progression/career development
- 4. The company/organisation was well known/respected in its field
- 5. The pay and package of benefits (such as health insurance, bonuses, company car) was good
- 6. The job was close to home
- 7. I wanted to move to the location of the job
- 8. I was interested in the nature of the work itself
- 9. The work-life balance of the job
- 10. I valued the job's purpose or the impact it would have

ASK UNEMPLOYED (CODE 7 AT EMPSTAT)

Q JOBSEARCH. How important are the following factors to you when looking for a job? Please use a scale of 1 to 5 where 1 means it is not at all important, 3 means moderately important and 5 means essential.

ROTATE CODES

GRID QUESTION (SCALE 1-5 PLUS DK)

- 1. The job suits my qualifications, skills and experience
- 2. The job provides security
- 3. The job offers good career progression/career development
- 4. The company/organisation is well known/respected in its field
- 5. The pay and package of benefits (such as health insurance, bonuses, company car) is good
- 6. The job is close to home
- The location of the job is somewhere I want to move to
 My interest in the nature of the work itself
- 9. The job has a good work-life balance
- 10. The job's purpose or impact it would have

ASK ALL

Q_OUTUK. Just thinking about your career in <u>research and innovation</u>, have you ever worked outside the UK, or considered working outside the UK? By working outside of the UK we mean both working *and* living in a country other than the UK. SINGLE CODE

1. I have worked outside the UK

- 2. I have not worked outside the UK, but I have considered it
- 3. I have not worked outside the UK and have not considered it
- 4. Do not know
- 5. Prefer not to say

ASK ALL

Q_OUTUK5. Specifically thinking about the next five years, to what extent would you consider working outside the UK? Again, we mean working *and* living in a country other than the UK.

SINGLE CODE

- 1. Already have definite plans to work outside the UK in the next five years
- 2. Would strongly consider working outside the UK in the next five years
- 3. Might consider working outside the UK in the next five years
- 4. Unlikely to consider working outside the UK in the next five years
- 5. Would definitely not consider working outside the UK in the next five years
- 6. Do not know
- 7. Prefer not to say

ASK ALL SELECTING 1, 2 OR 3 AT OUTUK

Q_UKWORK. Which of these have influenced your decision to stay in the UK so far? Please select all that apply

MULTICODE

PLEASE ROTATE EXCEPT OTHER, DK AND PNTS WHICH SHOULD BE FIXED AT END

- 1. Specific organisation based in the UK
- 2. UK's strength in a particular industry
- 3. UK's strength in a particular discipline
- 4. Opportunity to work on a particular topic of interest
- 5. Opportunities for career progression/development
- 6. Research facilities/infrastructure
- 7. Educational and training opportunities
- 8. To work with expert colleagues
- 9. Pay/standard of living
- 10. Access to research funding
- 11. Job security
- 12. Social security and other benefits
- 13. Working conditions or work-life balance
- 14. UK culture/lifestyle
- 15. Geographic location/ability to travel
- 16. Ability of family members to work in the UK
- 17. Other personal/family reasons
- 18. I am from the UK and there has not been a good enough reason to move
- 19. Other (specify)
- 20. Do not know
- 21. Prefer not to say

ASK ALL

Q_BRITCIT. Are you a British citizen? SINGLE CODE

- 1. Yes a British citizen
- 2. Yes I have dual citizenship

Insights from the UK-wide survey of the 2022 Research and Innovation Workforce

- 3. No
- 4. Prefer not to say

ASK ALL NON-SOLE BRITISH CITIZENS (2 OR 3 OR 4 AT BRITCIT)

Q_UKBARRIERS. Have any of the following made it more difficult for you to work in the UK? Please select no more than the five most challenging issues for you.

MULTICODE – 5 MAXIMUM

PLEASE ROTATE EXCEPT OTHER, DK AND PNTS WHICH SHOULD BE FIXED AT END

- 1. Immigration and visa requirements
- 2. Qualification requirements
- 3. Language requirements
- 4. Level of pay and benefits/ maintaining your standard of living
- 5. Transfer of pension/ other benefits
- 6. Other financial considerations, including cost of relocating
- 7. Availability of suitable opportunities to advance your career
- 8. Lack of research facilities/ infrastructure
- 9. Working hours
- 10. Workplace discrimination and harassment
- 11. Ability of family members to live or work in the UK
- 12. Maintaining contact with your professional network
- 13. Finding suitable care or education for dependents
- 14. Finding adequate accommodation
- 15. UK culture
- 16. Other
- 17. Nothing has made it difficult for me to work in the UK (SINGLE CODE)
- 18. Do not know
- 19. Prefer not to say

ASK ALL THOSE THAT WOULD CONSIDER WORKING OUTSIDE UK (OUTUK5 = 1-3)

Q_NONUKDRIVERS. What are the main reasons [IF OUTUK5= 1: for planning to work] [IF OUTUK5= 2 OR 3: you would consider working] outside the UK in the next 5 years? Please select all that apply

MULTICODE

PLEASE ROTATE EXCEPT OTHER, DK AND PNTS WHICH SHOULD BE FIXED AT END

- 1. Better availability of suitable job opportunities
- 2. Better opportunities in a particular industry or discipline
- 3. Opportunities to work on a particular topic of interest
- 4. Better research facilities/infrastructure
- 5. Better pay and benefits
- 6. Better work life balance
- 7. Lower cost of living
- 8. For my family members' career or education
- 9. Better workplace culture
- 10. Better job security
- 11. To be near family/friends
- 12. Other lifestyle factors
- 13. Other (specify)
- 14. Do not know (EXCLUSIVE)
- 15. Prefer not to say (EXCLUSIVE)

E. WORKING CULTURE

ASK ALL EXCEPT THOSE SELF-EMPLOYED OR UNEMPLOYED (ASK ALL EXCEPT THOSE SELECTING CODE 2 OR 7 AT EMPSTAT AND NO OTHER CODE AT EMPSTAT)

Q_CULTURE. How strongly do you agree or disagree with each of the following statements in relation to the culture of your organisation?

GRID QUESTION – PLEASE ROTATE 1-3

- 1. My organisation's culture supports diversity and inclusion
- 2. My organisation's culture encourages me to do my best work
- 3. I feel confident challenging the way things are done at my organisation
- 4. Administrative tasks and processes take up too much time at my organisation

SCALE - SINGLE CODE. REVERSE SCALE FOR ITEMS 1 TO 5

- 1. Strongly agree
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Strongly disagree
- 6. Do not know
- 7. Prefer not to say

F. CAREER PATH AND EDUCATION

ASK PRIVATE OR OTHER SECTOR OR DK (Q_SECTOR A = 1 OR 9 OR 10)

Q_INDUSTRY. Which of the following industry groups best describe the R&D activities you are involved in? Please select all that apply

MULTICODE

- 1. Pharmaceuticals
- 2. Healthcare
- 3. Chemicals and chemical products
- 4. Food products and beverages; tobacco products
- 5. Construction
- 6. Motor vehicles and parts
- 7. Aerospace
- 8. Shipbuilding
- 9. Machinery and equipment
- 10. Precision instruments and optical products; photographic equipment
- 11. Consumer electronics and communication equipment
- 12. Electrical equipment
- 13. Telecommunications
- 14. Software development
- 15. Computer programming and information service activities
- 16. Research and development services
- 17. Miscellaneous business activities; technical testing and analysis
- 18. Other (Specify)
- 19. Do not know (EXCLUSIVE)
- 20. Prefer not to say (EXCLUSIVE)

ASK PRIVATE OR OTHER SECTOR OR DK (Q_SECTOR A = 1 OR 9 OR 10)

Q_INDOPEN. Please describe the main activity of your employer or organisation in 10 words or fewer.

Please write in your answers here

- 1. Do not know
- 2. Prefer not to say

ASK ALL EMPLOYEES WHO WORK IN PRIVATE OR THIRD SECTOR (EMPSTAT = 1 AND SECTOR A = 1 OR 8) **Q ORGSIZE** Including yourself, roughly how many people work at your whole

Q_ORGSIZE. Including yourself, roughly how many people work at your whole organisation?

SINGLE CODE

- 3. 1 to 9
- 4. 10 to 49
- 5. 50 to 249
- 6. 250 to 499
- 7. 500 or more
- 8. Do not know
- 9. Prefer not to say

ASK ALL

Q_TECHSECTOR. The government's innovation strategy recently set out seven families of technologies in which the UK is globally competitive. These are listed below. [If unemployed (CODE 7 AT EMPSTAT) Did] [OTHERWISE: Does] your work relate to any of these technologies? Please select all that apply MULTICODE

- 1. Advanced Materials and Manufacturing
- 2. AI, Digital and Advanced Computing
- 3. Bioinformatics and Genomics
- 4. Engineering Biology
- 5. Electronics, Photonics and Quantum
- 6. Energy and Environment Technologies
- 7. Robotics and Smart Machines
- 8. None of the above
- 9. Do not know (single code)
- 10. Prefer not to say (single code)

ASK ALL

Q_QUALS. Do you have any of the following qualifications? Please select all that apply

MULTICODE

- 1. A degree apprenticeship, graduate apprenticeship or higher level apprenticeship
- 2. A foundation degree
- 3. An undergraduate degree
- 4. A higher degree (postgraduate qualifications, including PGCE or PGDE)
- 5. Graduate membership of a professional institution [*"i" hover information button to display:* A professional institution is an organisation that holds individual members associated with a specific profession, interest or occupation, for example the Institution of Civil Engineers]
- 6. Other professional research and innovation qualification
- 7. None of the above
- 8. Do not know

ASK ALL SELECTING 4 AT QUALS

Q_HIGHERQUAL. Was your higher degree... Please select all that apply Insights from the UK-wide survey of the 2022 Research and Innovation Workforce

MULTICODE

- 1. A Doctorate
- 2. A Masters
- 3. A Postgraduate Certificate/Postgraduate Diploma in Education (PGCE or PGDE)
- 4. Another postgraduate degree or professional qualification (Please specify)
- 5. Do not know

ASK ALL SELECTING ANY CODES AT QUALS AND HIGHERQUAL

Q_UKQUALS. Which, if any, of your qualifications were achieved in the UK? GRID QUESTION – DISPLAY ALL CODES SELECTED AT QUALS EXCEPT 4, 7 AND 8 AND ALL CODES SELECTED AT HIGHERQUAL EXCEPT 5 AS ROWS AND 1-3 BELOW AS COLUMNS

- 1. Achieved in the UK (MULTICODE)
- 2. Achieved elsewhere (MULTICODE)
- 3. Prefer not to say

ASK ALL SELECTING ANY OF 1 TO 4 AT QUALS Q_QUALSUBJECT. In which subject(s) do you have qualifications at degree level or above? MULTICODE

- 1. Arts
- 2. Biological and agricultural sciences
- 3. Engineering and computer science
- 4. Maths, physics or chemistry
- 5. Humanities (including languages)
- 6. Medical sciences and healthcare
- 7. Social sciences
- 8. Combined subjects
- 9. Other (specify)
- 10. Do not know (EXCLUSIVE)
- 11. Prefer not to say (EXCLUSIVE)

ASK ALL EMPLOYEES (CODE 1 AT EMPSTAT)

Q_SENIORITY. What is your highest responsibility within your organisation? SINGLE CODE

- 1. Lead the entire organisation
- 2. Lead a department or division in your organisation
- 3. Lead a team or projects involving other people
- 4. Supervise colleagues or contractors
- 5. None of the above
- 6. Do not know
- 7. Prefer not to say

ASK ALL

Q_CAREERLENGTH. How many years have you worked in research and innovation? Please round up to the closest full year.

[SHOW IF Q_HIGHERQUAL = 1: Please include time spent working on your doctorate] Please write in number of years. (ALLOW ONLY INTEGERS BETWEEN 1-80)

- 1. Do not know
- 2. Prefer not to say

ASK IF DON'T KNOW OR PREFER NOT TO SAY NUMBER OF YEARS (Q_CAREERLENGTH = 1 OR 2)

Q_CAREERLENGTHBAND. Thinking about how many years have you worked in research and innovation, are you able to put yourself into one of the following bands? [SHOW IF Q_HIGHERQUAL = 1: Please include time spent working on your doctorate] SINGLE CODE

- 1. Less than 2 years
- 2. 2 to 5 years
- 3. 6 to 10 years
- 4. 11 to 15 years
- 5. More than 15 years
- 6. Prefer not to say

ASK ALL EXCEPT UNEMPLOYED (ALL NOT CODE 7 AT EMPSTAT)

Q_HOURS. How many hours per week are you paid to work (please exclude meal breaks)?

WRITE IN NUMBER BETWEEN 1 AND 150. SOFT CHECK IF <10 OR >70.

I. ABOUT THE RESPONDENT

NEW SCREEN

You are nearly at the end of the survey. Many thanks for your responses so far.

Ensuring the UK has diversity of people and ideas is fundamental to being home to a thriving R&I sector, with a research culture that truly supports discovery, diversity and innovation.

Therefore, this next set of questions is about your personal characteristics. The purpose of these questions is to understand the profile of the UK research and innovation workforce and the information will be used for research purposes only. You can view lpsos's privacy policy here. You are under no obligation to answer these questions and may select "prefer not to say" at any point.

NEW SCREEN. ASK ALL

Q_SEX. What best describes your gender? SINGLE CODE

- 1. Male
- 2. Female
- 3. Prefer to self-describe (SPECIFY)
- 4. Prefer not to say

ASK ALL

Q_ETHNICITY. Which one of the following best describes your ethnic group or background?

DISPLAY OVERALL CATEGORIES THEN RELEVANT SUBCATEGORIES. DISPLAY "PREFER NOT TO SAY" AT BOTH SCREENS. SINGLE CODE FOR OVERALL CATEGORIES THEN MULTICODE FOR SUBCATEGORIES.

- 1. White
 - a. English / Welsh / Scottish / Northern Irish / British
 - b. Irish
 - c. Gypsy or Irish Traveller
 - d. Any other White background
- 2. Mixed

- a. White and Black Caribbean
- b. White and Black African
- c. White and Asian
- d. Any other Mixed / Multiple ethnic background
- 3. Asian / Asian British
 - a. Indian
 - b. Pakistani
 - c. Bangladeshi
 - d. Chinese
 - e. Any other Asian background
- 4. Black / African / Caribbean / Black British
 - a. African
 - b. Caribbean
 - c. Any other Black / African / Caribbean background
- 5. Other ethnic group
 - a. Arab
 - b. Any other ethnic group (please specify)
- 6. Prefer not to say

ASK ALL

Q_NATIONALITY. How would you describe your national identity? MULTICODE

- 1. English
- 2. Welsh
- 3. Scottish
- 4. Northern Irish
- 5. Irish
- 6. British
- 7. Other (SPECIFY)
- 8. Prefer not to say (SINGLE CODE)

PLEASE SELECT ONE

DROP DOWN LIST

1. Prefer not to say

ASK ALL

Q_HEALTH. Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more? SINGLE CODE

- 1. Yes
- 2. No
- 3. Do not know
- 4. Prefer not to say

ASK ALL SAYING YES (CODE 1) AT HEALTH

Q_DISABILITY. Does your condition or illness/do any of your conditions or illnesses reduce your ability to carry out day-to-day activities? SINGLE CODE

- 1. Yes, a lot
- 2. Yes, a little
- 3. Not at all
- 4. Prefer not to say

Insights from the UK-wide survey of the 2022 Research and Innovation Workforce

ASK ALL Q_AGE. How old are you? SINGLE CODE

- 1. 16 24
- 2. 25 34
- 3. 35 44
- 4. 45 54 5. 55 – 64
- 5. 55 646. 65 - 74
- 6. 65 747. 75 - 79
- /. /5-9 90+
- 8. 80+
- 9. Prefer not to say

ASK ALL

Q_HOMELOC. In order to inform analysis on regional policy we would like to know the first half of your home postcode – this will be used for research purposes only. If you are happy to do so, please write in the first half of your home postcode below, for example OX14 or NE3.

Please write in your answer here. SINGLE CODE

1. Prefer not to say

ASK IF REF AT HOMELOC (HOMELOC = 1) Q_HOMEREGION. In which region of the UK do you live? SINGLE CODE

- 1. North East (England)
- 2. North West (England)
- 3. Yorkshire and The Humber
- 4. East Midlands (England)
- 5. West Midlands (England)
- 6. East of England
- 7. London
- 8. South East (England)
- 9. South West (England)
- 10. Scotland
- 11. Wales
- 12. Northern Ireland
- 13. Prefer not to say

ASK ALL EXCEPT UNEMPLOYED (CODE 7 AT EMPSTAT)

Q_WORKLOCA. Do you currently work...? SINGLE CODE

- 1. Predominantly at a fixed place of work, other than your home
- 2. A combination of at home and at a fixed place of work other than your home
- 3. At home only
- 4. Prefer not to say

ASK IF HAVE A WORKPLACE (WORKLOCA = 1 OR 2)

Q_WORKLOCB. In order to understand people's travel to work and inform analysis on regional policy we would like to know the postcode of your workplace [IF WORKLOCA

= 2: when you are not working at home]. Again, this will be used for research purposes only.

If you are happy to do so, please write in the first half of the postcode in which you work below, for example OX14 or NE3.

Please write in your answer here. SINGLE CODE

- 1. Prefer not to say
- 2. Do not know

ASK IF REF OR DO NOT KNOW AT WORKLOC (WORKLOCB = 1 OR 2) Q_WORKREGION. In which region of the UK is your workplace? SINGLE CODE

- 1. North East (England)
- 2. North West (England)
- 3. Yorkshire and The Humber
- 4. East Midlands (England)
- 5. West Midlands (England)
- 6. East of England
- 7. London
- 8. South East (England)
- 9. South West (England)
- 10. Scotland
- 11. Wales
- 12. Northern Ireland
- 13. Prefer not to say

ASK IF 2 OR 4 OR 7 OR 8 AT SECTOR A. DO NOT ASK IF UNEMPLOYED (EMPSTAT= 7) Q_EMPLOYERA. And finally, what is the name of [IF SECTOR A = 2: the Higher education institution] [IF SECTOR A = 4: the public sector research organisation] [IF SECTOR A = 7: the public sector organisation] [IF SECTOR A = 8: the non-profit organisation] you work for?

DP: if multicode at SECTORA =2,4,70R8 then please prioritise by the order they appear in the list, so 2 is priority where it appears alongside others etc.

If you'd rather not tell us then please select 'prefer not to say'.

DROP DOWN LIST OF UNIVERSITIES AND PUBLIC FUNDED ORGANISATIONS TO BE PROVIDED BY BEIS (from UKRI and landscape review analysis)

- 1. Prefer not to say
- 2. Organisation is not shown in list

J. PERMISSION FOR RECONTACT AND DATA LINKING

ASK ALL

Q_RECON1. Would you be willing for Ipsos or BEIS to contact you in the next 12 months about participating in a more in-depth interview about your career in research and innovation? This would last around 1 hour.

If you agree now, you are still free to change your mind and decline at a later date.

SINGLE CODE

- 1. Yes would be willing for Ipsos or BEIS to contact me (CONFIRM NAME, JOB TITLE, EMAIL AND PHONE)
- 2. No would not be willing (SINGLE CODE)

ASK ALL

Q_RECON2. Would you be willing to be contacted about taking part in a future wave of this survey within the next one to two years? If you agree now, you are still free to change your mind and decline at a later date.

SINGLE CODE

- 1. Yes would be willing (CONFIRM NAME, JOB TITLE, EMAIL AND PHONE IF NOT ALREADY GOT)
- 2. No would not be willing

ASK ALL

Q_DATALINK. The Department for Business, Energy and Industrial Strategy (BEIS) would like to link one or more of these datasets to your answers: Higher Education Statistical Authority data, Longitudinal Education Outcomes data, UK Innovation Survey or ONS R&D Expenditure data. This will give BEIS a better overall picture of the R&I workforce, their education and career paths. All information will be used for research and statistical purposes only. Any outputs from data linking (e.g., reports, statistical tables) will not contain any individual-level personal data and respondents will be kept anonymous. You can view BEIS' Privacy Notice here.

Are you willing for us to let beis attempt to match your answers to these datasets?

- 1. Yes would be willing (CONFIRM NAME IF NOT ALREADY GOT)
- 2. No would not be willing

ASK ALL PARTICIPANTS WITH "IUK PREVIOUS APPLICANTS" OR "UKRI GRANT HOLDER" INDICATED IN SOURCE COLUMN IN SAMPLE

Q_DATALINKUKRI. UKRI would like to link your grant data to your survey answers to help evaluate their funding schemes and to help improve the support UKRI offer the research and innovation community. ['i' hover button to display: UK Research and Innovation (UKRI) is a public body of the UK Government that directs research and innovation funding.]

Any outputs from data linking (e.g., reports, statistical tables) will be anonymised. The data will not be used to profile individuals, or to influence individual funding decisions. UKRI will store your data securely and handle it in line with UK data protection legislation. Further information on how UKRI process personal data can be found in UKRI's <u>privacy notice</u>.

Would you be willing for us to share your survey responses with UKRI so that they can match your answers to their datasets?

- 1. Yes would be willing (CONFIRM NAME IF NOT ALREADY GOT)
- 2. No would not be willing

ASK ALL WHO ARE WLLING TO HAVE DATA LINKED BY BEIS (Q_DATALINK = 1)

Q_DOB. What is your date of birth? This will be used to help us link your data to the Higher Education Statistical Authority database and Longitudinal Education Outcomes data. You can select 'prefer not to say' if you would rather not provide it. Please use the format dd/mm/yyyy

1. Prefer not to say

NEW SCREEN

Thank you for taking the time to participate.

The more R&I workers that complete the survey, the better the data will be, so we'd be very grateful if you could share this survey link with other R&I workers in the UK: https://ipsos.uk/RIworkforce

We aim to publish the headline findings from this survey in summer 2022. Visit the <u>BEIS website</u> for the latest news on government's plans for Research and Innovation, or follow BEIS on <u>Twitter</u>.

Read more about the government's ambitions for:

- an innovation-led economy in the <u>UK Innovation Strategy</u>: leading the future by creating it
- building the research and innovation workforce the UK needs, working in a positive and inclusive culture in the <u>R&D People and Culture Strategy</u>

The privacy notice for this survey explains the purposes for processing your personal data, as well as your rights under data protection regulations to:

- access your personal data
- withdraw consent
- object to processing of your personal data
- and other required information.