CRACK IT Challenges Phase 1 Application Form

**Important**

* Applicants should consult the [Guide for Participants](https://www.nc3rs.org.uk/sites/default/files/CRACK%20IT%20Challenges%20Guide%20for%20Participants%20and%20BGS%20September%202020.pdf) when completing the application form which provides further details of the competition, and the [Innovation Platform website](https://nc3rs.org.uk/crackit/) for additional information. For more information on the NC3Rs, please visit [nc3rs.org.uk](https://nc3rs.org.uk/crackit/).
* Any questions should be addressed to crackitenquiries@nc3rs.org.uk.
* Keep the use of acronyms to a minimum. In order for your application to be accepted you must submit **all the required information including all mandatory fields** in the application form.
* **THIS FORM MUST BE SUBMITTED TO** crackitenquiries@nc3rs.org.uk **BEFORE 12 NOON (GMT) ON 28 OCTOBER 2021**.

Before submitting this application, **please read** the [full terms and conditions](#_Annex_3:_Terms) of this competition located at the end of this document ([Annex 3](#_Appendix_3:_Terms)).

The NC3Rs collects data on equality and diversity from applicants for grants and other awards. These data help in assessing how effective our policies and procedures are in eliminating unlawful discrimination and promoting equal opportunities. The Equality, Diversity and Inclusion form can be found in [Annex 4](#_Annex_4:). The information we ask for includes date of birth, ethnic origin, country of nationality, gender and disability. You can choose not to disclose this information, but it will help us monitor equality of opportunity if you do provide it. This information will be treated in strict confidence in line with UKRI’s data protection procedures and will not be used in the assessment of your application. These details only need to be provided by the lead applicant.

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| **Project Number (office use only)** |  |

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| **1. Application**  |
| **Project Title:** Please provide your own title for the project. This should be clearly descriptive and concise. It should contain keywords relevant to the project. |
| **Project Duration (months):** Enter months. | **Total Project Cost (£):** Enter cost. |
| **Challenge Number:** Challenge 41 - SAFE | **Proposed Start Date:** Select a date. |
| **What is the best way to describe your Innovation?** Please select from the list. |
| **2. Details of Lead Applicant Organisation** |
| **Organisation Name:** | Enter the name of your organisation. |
| **Registered Address:** | Enter the registered address for your organisation. |
| **Town/City:** | Enter town/city. |
| **Postcode:** | Enter postcode. |
| **County:** | Enter county. |
| **Country:** | Enter country. |
| **Company registration Number:** | Enter your company registration number. |
| **VAT Registration Number:** | Enter your VAT registration number. |
| **Website:** | Enter your website address. |
| **Size:**  | Select the size of your organisation. |
| **Status:** | Select the status of your organisation. |
| **Main Activity:** | Enter the main activity of your organisation. |
| **Business Sector:** | Select the sector of your organisation. |
| **Type of Organisation:** | Select the type of your organisation.  |
| **3. Contact Details** |
| **Title:** | Enter your title. |
| **Name:** | Enter your full name. |
| **Position:** | Enter your position. |
| **Organisation:** | Enter the name of your organisation. |
| **Main Correspondence Address:** | Enter your main correspondence address. |
| **Town/City:** | Enter town/city. |
| **Postcode:** | Enter postcode. |
| **County:** | Enter county. |
| **Country:** | Enter country. |
| **Phone:** | Enter contact phone number. |
| **Mobile:** | Enter contact mobile number. |
| **Email:** | Enter contact email address. |

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| **4. Abstract for Publication (max. 230 words)** |
| Please provide a brief public-facing description of the project. Should your project be successful, this information may be made public once the award is confirmed. We reserve the right to amend the description before publication if necessary but will consult you about any changes.**Please include your word count here**: 000 |
| Enter abstract for publication. |

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| **5a. Description of Proposed Idea/Technology (max. 700 words)** |
| Please provide a description of your proposed idea/technology and how this addresses the Challenge as a whole. You may wish to add pictures or diagrams to support your response to this question – *maximum two sides A4, to be submitted as a PDF attachment, please name attachment as Section 5a – Additional information/diagrams.***Please include your word count here**: 000 |
| Enter your description. |

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| **5b. Description of Proposed Idea/Technology (max. 700 words)** |
| Please provide a description of your proposed idea/technology and how this addresses the Challenge Phase 1 deliverables. You may wish to add pictures or diagrams to support your response to this question – *maximum two sides A4, to be submitted as a PDF attachment, please name attachment as Section 5b – Additional information/diagrams.***Please include your word count here**: 000 |
| Enter your description. |

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| **6. Scientific/Technical Project Summary (max. 700 words)** |
| Please give a scientific/technical summary of your project\*. Explain the challenges that will need to be overcome and describe how this will be achieved, including any alternative strategies. List the key scientific/technical deliverables.**Please include your word count here**: 000\*If your proposal includes any animal work, please complete the questions in the [Justification of animal use/experimental design form (Annex 1)](#_Annex_1:_Justification). If your proposal includes the use of animals outside of the UK, please complete the [Additional questions on the use of rodents overseas form (Annex 2)](#_Annex_2:_Additional). Find these at the end of this application form and see section 1.4.1 and 1.4.2 of the [Guide for Participants](https://www.nc3rs.org.uk/sites/default/files/CRACK%20IT%20Challenges%20Guide%20for%20Participants%20and%20BGS%20September%202020.pdf) for further information. |
| Enter project summary. |

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| **7. Current State of the Art and Intellectual Property (max. 700 words)** |
| Describe the current state of the art and any competing or alternative strategies. Explain the benefits of your proposed approach to the Challenge. Include details of any other existing IP and its significance to your freedom to operate, details of your own background IP and any restrictions this may impose on the dissemination and exploitation of the project findings. Please also detail your proposed arrangements for IP which might arise during the project i.e. ownership, exploitation and dissemination.Proposed arrangements for IP: Please detail your proposed arrangements for how any IP, which might arise during the project, would be handled i.e. ownership, exploitation and dissemination. **Please include your word count here**: 000 |
| Enter current state of the art/IP. |

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| **8. Project Plan and Methodology** |
| Please describe PHASE 1 project milestones at appropriate intervals (see [Guide for Participants](https://www.nc3rs.org.uk/sites/default/files/CRACK%20IT%20Challenges%20Guide%20for%20Participants%20and%20BGS%20September%202020.pdf)) and the scientific lead for each milestone. Highlight what resources will be required to address the technical challenges and what the key success criteria would be. Further information on the milestones and a Gantt chart must be provided as a *PDF attachment – maximum two sides A4, please name attachment as Section 8 – Additional milestones/ Gantt chart.*Further rows up to a maximum of ten may be added to the table. |

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| **Milestones** | **Deadlines**  | **Resources** | **Success Criteria** | **Scientific Lead**  |
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| **8. (Continued) Project Management (max. 200 words)** |
| Identify the project management processes that will ensure milestones are achieved including risk mitigation and proposed Partner and Sponsor interaction.**Please include your word count here**: 000. |
| Enter project management text. |

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| **9. Scientific/Technical Team and Expertise (max. 700 words)** |
| Provide a detailed description of your scientific/technical team, including those from sub-contractors, the expertise of each member relevant to this application and the proportion of their time that will be spent on the project. Relevant commercial and management expertise should also be included. CVs of no more than five principal team members must be provided as a combined PDF attachment – these should be no longer than one side of A4 per member. *Please name attachment as Section 9 – CVs.***Please include your word count here**:000 |
| Enter team/expertise description. |

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| **10. Application Finances** |
| A summary of the overall costings for the contractor (including any sub-contractors) should be provided in the table below. If the proposal involves sub-contractors, a breakdown of costs for each contributing organisation (contractor and sub-contractor(s)) should be provided in the same format as the table below as separate PDF attachments. *Please name attachments as Section 10 – Subcontractor costings.* |

**For UK-based lead applicants**

CRACK IT is contract research (**not a grant**) for research and development services to solve the Challenge. CRACK IT awards are subject to VAT at UK standard rates (20%) where applicable. **It is the responsibility of the lead applicant to determine whether VAT should be paid; if VAT should be paid, the total amount including VAT should not exceed that offered for the Challenge.**

[ ]  **Please tick this box if the total costs include VAT**

**For EU-based lead applicants**

For applications from organisations based outside of the United Kingdom, please note that a **European Union (EU) reverse charge of VAT** will be applied to your award. This will be charged at 20% and will need to be taken into consideration when costing your application, as the maximum amount that will be paid out, inclusive of the EU Reverse Charge of VAT, will not exceed the total amount offered for the Challenge.

[ ]  **Please tick this box to confirm you understand that an EU Reverse Charge (RC) of 20% will be charged to the award**

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| --- | --- | --- |
|  | **Net costs (£)** Excluding VAT | **Total costs (£)**Including VAT/EU Reverse Charge (if applicable) |
|
| Labour cost |  |  |
| Materials costs |  |  |
| Capital equipment costs |  |  |
| Animal costs |  |  |
| Travel & Subsistence costs |  |  |
| Indirect costs (specify) |  |  |
| Other costs (specify) |  |  |
| **TOTAL COSTS** |  |  |
| **Challenge budget**  | Challenge 41- £100,000 |

Funding from other public and private bodies that may contribute to the delivery of this project:

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| --- | --- | --- |
| **Source** | **Amount funded** | **Provisional/Confirmed** |
|  |  | Please select. |
|  |  | Please select. |
|  |  | Please select. |
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|  |  | Please select. |
|  |  | Please select. |
|  |  | Please select. |
|  |  | Please select. |

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| **10. (Continued) – Cost Justification (max. 700 words)** |
| Please provide justification of costs. Applicants should refer to the application form instructions in Section 1.4 of the[Guide for Participants](https://www.nc3rs.org.uk/sites/default/files/CRACK%20IT%20Challenges%20Guide%20for%20Participants%20and%20BGS%20September%202020.pdf)(Application Finances) for further guidance.**Please include your word count here**: 000 |
| Enter justification of costs. |

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| **11. Plans for Dissemination and Commercialisation of Challenge Product (max. 700 words)** |
| The Challenge brief outlines that the CRACK IT Challenges competition is designed to support the development of new 3Rs technologies and approaches, which will improve business processes and/or lead to new marketable products. Please include a plan for commercialisation and dissemination of Challenge product throughout Phase 2.**Please include your word count here**:000 |
| Enter plans for dissemination and commercialisation. |

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| **12. 3Rs Impact Assessment (max. 700 words)** |
| The Challenge brief outlines the potential 3Rs benefits arising from the successful completion of the project. Please provide your own assessment of the 3Rs impact of the work, including quantitative and qualitative estimates whenever possible. Further guidance on how to effectively assess 3Rs impact, which you may find useful, can be found [here](https://www.nc3rs.org.uk/write-effectively-about-3rs).**Please include your word count here**: 000 |
| Enter 3Rs assessment. |

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| **13. Declaration** |
| The lead applicant is expected to have discussed the application within their own company/ organisation and any other body whose co-operation will be required to deliver the project. The lead applicant will need to obtain consent from an authorised officer or appropriate signatory who will sign the contract if successful; we will provide a contract for review.The contract is a legally binding document and subject to the outcome of this competition.By submitting the application, you are confirming that the information given, in this application, is complete and that you are actively engaged in this project and responsible for its overall management and agree to administer the award if made. You are also confirming that you have read and understood the relevant explanatory materials. [ ]  **I hereby confirm that I fully comply with the declaration as stated above and I have read the terms and conditions of the competition (**[**Annex 3**](#_Appendix_3:_Terms)**). Please tick the box to confirm.****This application cannot be processed without the Declaration section being completed.****This form and all ATTACHMENTS must be submitted BY EMAIL to** crackitenquiries@nc3rs.org.uk **bEFORE 12 noon (GMT) on 28 October 2021.****Optional: Please complete the Equality, Diversity and Inclusion Form found in** [**Annex 4**](#_Annex_4:_Equality,)**. These details only need to be provided by the lead applicant.**  |

**Please refer to Section 6 of the application form**

# Annex 1: Justification of animal use/experimental design

*To begin typing, please click on the left-hand side of the cell you wish to add text to or on ‘Choose an item’ to view options*.

|  |  |
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| 1. Does your application include procedures to be carried out on animals in the UK under the Animals (Scientific Procedures) Act?
 | Please select. |
| 1. If yes, have the following necessary approvals been given by:
 |
| 1. The Home Office (in relation to personal, project and establishment licenses)?
 | Please select. |
| 1. The Animal Welfare and Ethical Review Body?
 | Please select. |
| 1. Do your proposals involve the use of animals or animal tissue outside the UK?
 | Please select. |
| 1. If YES,are the appropriate national and institutional approvals in place? Please provide details. *(no more than 2000 characters)*
 |
| Enter details of national/international approvals. |
| 1. If your project involves the use of animals, what would be the severity of the procedures?
 |
| Mild [ ]  | Moderate [ ]  | Severe [ ]  | Non-Recovery [ ]  |
| 1. Please provide details of any moderate or severe procedures *(no more than 2000 characters)*
 |
| Enter details of moderate or severe procedures. |
| 1. Does the proposed research involve the use of the following species? *If yes, please fill in the additional questions relevant to the species in the ‘*[*Standard questions on the use of non-human primates, dogs, cats, equines and pigs*](https://www.nc3rs.org.uk/sites/default/files/documents/Funding/Studentship%20Annex1%282010%29.docx)*’ form.*
 |
| Non-human primates [ ]   | Cats[ ]  | Equines [ ]  | Dogs [ ]  | Pigs [ ]  |
| 1. Please select any of the species of animals that are to be used in the proposed research.
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| Mouse [ ]  | Fish [ ]  | Cow [ ]  | Rabbit [ ]  |
| Rat [ ]  | Amphibian [ ]  | Guinea Pig [ ]  | Bird [ ]  |
| Other Rodent [ ]  | Reptile [ ]  | Sheep [ ]  | Poultry [ ]  |
| 1. Why is animal use necessary; are there any other possible approaches that could provide equally valuable results? *(no more than 2000 characters)*
 |
| Enter details of animal use necessity. |
| 1. Why is the species/ model to be used the most appropriate? (*no more than 2000 characters)*
 |
| Enter reasoning of species/model use. |
| 1. Please describe the experimental design, including any plans to reduce bias such as blinding or randomisation if appropriate. A justification of the proposed sample size must be given along with details of the planned statistical analyses. Power calculations must be included in this section if appropriate. *(no more than 4000 characters)*
 |
| Enter description of experimental design. |

**Please refer to section 6 of the application form**

# Annex 2: Additional questions on the use of rodents overseas

The expectations of the major UK public funding bodies for the use animals in bioscience research are set out in the document ‘[Responsibility in the Use of Animals in Bioscience Research’](https://www.nc3rs.org.uk/responsibility-use-animals-bioscience-research). Compliance with the principles in this document is a condition of receiving funds for animal research. Welfare standards consistent with the principles of UK legislation must be applied and maintained,whereverthe work is conducted.

Please confirm the following: (Y/N)

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| 1. The enclosure sizes and space allocations meet or exceed those in Annex VII to [Directive 2010/63/EU](https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:276:0033:0079:en:PDF) (Tables 1.1 to 1.5)
 | Please select. |
| 1. Rodents are provided with: a) substrate/bedding on a solid floor; b) a shelter and/or nesting material for refuge and to help regulate body temperature and light exposure; c) chew blocks or other gnawing material.
 | Please select. |
| 1. Rodents are housed socially. Exceptions to this must be justified below.
 | Please select. |
| 1. Appropriate, contemporary anaesthesia and/or analgesia is provided to minimise pain and distress. Any withholding of pain relief during painful procedures must be justified below.
 | Please select. |
| 1. Surgery is performed using aseptic technique, the least invasive surgical approaches, and appropriate perioperative care (pre-operative medications, hypothermic prevention, ophthalmic protection, nursing care where required).
 | Please select. |
| 1. Toe clipping and/or tail biopsy are not used for identification or genotyping purposes*.*
 | Please select. |
| 1. Where genotypes are known to be harmful, animals of that type are not produced unless required scientifically (e.g. if homozygous null is harmful and heterozygotes are desired, then heterozygous is crossed with wild type, not another heterozygous animal).
 | Please select. |
| 1. Where new GA strains are being generated, best knowledge will be applied to predict potential harmful outcomes and the animals will be monitored closely for emerging phenotypes.
 | Please select. |
| 1. Animals are monitored with a frequency appropriate to keep pain and distress to a minimum, using appropriate, tailored welfare indicators and score sheets.
 | Please select. |
| 1. Humane endpoints have been established for each experiment with the potential to cause moderate or severe harm, after consultation with the veterinarian and animal care staff, and implementation of these is recorded during the experiment. (Note the humane endpoint criteria may be requested by the funding body).
 | Please select. |
| 1. The methods of humane killing are those recommended by the [AVMA (2013)](https://www.avma.org/KB/Policies/Documents/euthanasia.pdf) or permitted under Directive 2010/63/EU.
 | Please select. |

Where there are deviations from the above, please explain below:

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| Enter additional text. |

# Annex 3: Terms and Conditions

The NC3Rs is an independent scientific organisation which for logistical reasons operates under the umbrella of the Medical Research Council (MRC) which in turn is part of UK Research and Innovation (UKRI). The NC3Rs captures and processes personal information in line with current UK data protection legislation. [The UK Research and Innovation Privacy Notice](http://www.ukri.org/privacy-notice/) provides more information around the processing of personal information, provides contact details for our Data Protection Officer and explains how to exercise your rights as a data subject.

The information you provide will be processed by the NC3Rs solely for purposes associated with the application and award processes for the CRACK IT Challenges funding competition. Your personal data may be used in relation to:

* the registration of your proposal;
* resolve any queries which you may raise with the CRACK IT team;
* the operation of application processing and management information systems;
* the acquisition of UK and/or international peer reviewer comments on proposals;
* the preparation of material for use by the peer review panels to assess your proposal;
* payments made to your organisation;
* statistical analysis in relation to the evaluation of research funded by the NC3Rs;
* invite you to participate in surveys and events related to the CRACK IT Challenges competition or other relevant events hosted by the NC3Rs;
* NC3Rs policy and strategy studies.

By agreeing to these terms and conditions, and submitting your proposal, you have explicitly consented to your personal data being processed by us in this way and stored on the system and on our associated internal systems hosted by MRC and UKRI on the basis of public task under UK data protection legislation. To maintain public accountability, the NC3Rs may publish or disclose into the public domain details of awards made in the CRACK IT Challenges funding competition. Disclosable information includes:

* the title of your award;
* your name (title, forenames, initials, surname);
* the organisation at which you are working;
* name(s) of project partner organisations;
* the dates associated with your award;
* the type of award;
* the duration of the award;
* the value of funding provided to the organisation;
* a description of your research.

For us to meet the requirements of Freedom of Information and Data Protection legislation we may share these details and other data to provide information on NC3Rs activities when responding to requests made under the FOIA (see below) and/or GDPR Right of Access. Please see information on [UK Research and Innovation Privacy Notice](http://www.ukri.org/privacy-notice/) for more details on how we process your information, the reasons why we may share your information and how we response to data subject requests and FOIs.

**Freedom of Information Act (FOIA)**

The FOIA gives anyone the right to request access to information held by the NC3Rs, including the information relating to applications and the peer review process. The NC3Rs is an independent, scientific organisation and has responsibility for setting its scientific strategy and making funding decisions. However, it is not an independent public authority. The NC3Rs utilises some UKRI systems and processes and for the purposes of the Freedom of Information Act (FOIA) is considered as part of the MRC, which in turn is part of UK Research and Innovation (UKRI). Any request for information will be considered on a case-by-case basis and the NC3Rs will work with UKRI to ensure that the information is handled appropriately and that any sensitive material is correctly identified and has the relevant exemptions of the Act applied. The NC3Rs and UKRI will seek the views of the applicant and the research organisation wherever possible and will consider these opinions in their deliberations. Further information on the approach taken can be found in the [UKRI Peer Review Framework](https://www.ukri.org/funding/peer-review/).

**Confidentiality of your application**

We each acknowledge the importance of keeping all details in your submission confidential. This is necessary to encourage the submission of innovative proposals from the scientific community and to encourage frank reviewer comment. Accordingly, you and the NC3Rs undertake to each other to keep confidential all information in relation to the submission, including:

* the fact that an application has been made;
* name of the host research organisation;
* details of applicants (title, forenames, initials, surname, ORCID identifier, research organisation and department);
* name(s) of project partner organisations;
* project title;
* technical and non-technical abstracts of the proposal, including all details of the science project and training programmes;
* peer review information.

Confidential information is not released other than as required for operational purposes and within the peer review process, unless there is an overriding public interest. This obligation of confidentiality will not apply in the following circumstances:

* where your application is approved and funded. In such situations, ‘disclosable information’ as above will apply so that the NC3Rs can disclose those details;
* when the NC3Rs are required to disclose details by law (including under the Freedom of Information Act 2000) or by any regulatory body to whose rule the UK Research and Innovation is subject;
* where the information is already in the public domain or gets into the public domain through no fault of ours. In this respect, when details of the science contained in your proposal become generally available, the NC3Rs obligation of confidentiality ends;
* where the information was provided to us by any third party who had a lawful right to disclose it to us and who did not require us to hold it in confidence;
* where the information was already rightfully in our possession and not confidential at the time of its receipt or is referred to above as to be made publicly available.

The NC3Rs may disclose all and any information under ‘disclosable information’ as above to employees of UKRI as appropriate, or to referees and panel members involved in assessing proposals. UKRI undertake to make such employees, referees and panel members aware of the confidentiality of the information described in ‘disclosable information’ above.

# Annex 4: Equality, Diversity and Inclusion

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| **Equality, diversity and inclusion**  |
| The NC3Rs is an independent scientific organisation which for logistical reasons operates under the umbrella of the Medical Research Council (MRC) which in turn is part of UK Research and Innovation (UKRI).UKRI, and as such the NC3Rs, collects data on equality and diversity from applicants for grants and other awards. These data help in assessing how effective our policies and procedures are in eliminating unlawful discrimination and promoting equal opportunities. This information may be used anonymously for statistical purposes. It will be treated in confidence and in line with UKRI’s data protection procedures. It will not be used in the assessment of your application.Under each heading, you can choose not to disclose the information but it will help us to monitor equality of opportunity if you do provide it.The information we ask for is as follows:* Date of birth
* Ethnic origin
* Country of nationality
* Gender
* Disability

To learn more about the Equality Act 2010 visit the Gov.uk site at <https://www.gov.uk/definition-of-disability-under-equality-act-2010> All personal data provided to the NC3Rs will be processed in accordance with current UK data protection legislation. Information on how we use personal data can be found in the [UK Research and Innovation Privacy Notice](http://www.ukri.org/privacy-notice/).   |
| **Date of birth:** | Please enter date of birth. |
| **Please indicate your gender:** | Please select from the list. |
| **Please indicate your ethnicity:** | Please select from the list. |
| **Please indicate your country of nationality:** | Please enter your country of nationality. |
| **Do you consider yourself disabled?** | Please select from the list. |
| **Further information about disability (optional)** | Please enter further information. |