# **ARISE Project Proposal template**

*Applicants should independently prepare and submit their original proposal to develop new or improve existing methods or technologies, which can be applied to different scientific questions of other researchers as a service and integrated into Research Infrastructures. The proposed project should not be of local interest only, but should have sufficient potential for international transfer.*

***Applicants are required to contact the groups of their choice****[[1]](#footnote-1) before submitting the proposal to get an overview of their field of work and current activities of the groups, and to discuss their idea for new method / technology development with the group or team leader(s).*

*Instructions are shown highlighted in grey and italic throughout this document. Before submitting, instructions highlighted in grey should be deleted.*

*Applicants must use the following formatting constraints:
Arial, at least font size 10, margins (2.0cm side, 1.5cm top and bottom), single line spacing.*

*In drafting the proposal, applicants must follow the structure outlined below.*

*Structure of the proposal:*

* *Abstract (max. 2,000 characters including spaces). This will not count towards the page limit.*
* *Keywords for technology and life science fields*

*Start page count*

*Please ensure that sections 1-3 do not exceed the limit of* ***4 pages.*** *It is up to the applicant to decide how many pages to allocate to each section within the 4-page limit.*

*Section 1. Background, proposed project & its implementation*

*Section 2: Expected results & their impact*

*Section 3: Ethics*

*Stop page count*

* *Ethics self-assessment*
* *Gantt chart*
* *References*

#  **Proposal Name / Candidate Name /**

# **GTL(s) contacted / Partner Organisation chosen**

**ABSTRACT:**

*Please provide a short summary (max. 2,000 characters, with spaces) to explain in Lay Language your proposal (main objectives & how they will be achieved).*

*The abstract might be used in communication process with interested parties, please do not include any confidential information*

**KEYWORDS:**

*Please select up to 3 keywords for technology fields and 3 keywords for life science fields*

|  |  |
| --- | --- |
| **Technology fields** | **Life science fields** |
| [ ]  AI and machine learning[ ]  Automation[ ]  Bioinformatics[ ]  (Bio)chemical engineering[ ]  Chemistry and chemical biology [ ]  Computational modelling[ ]  Data management[ ]  Data science and big data[ ]  Detector development[ ]  High-precision mechanics[ ]  Image analysis[ ]  Imaging, microscopy [ ]  Microfluidics[ ]  Omics[ ]  Robotics[ ]  Software development[ ]  X-ray optics | [ ]  Bioinformatics research[ ]  Biophysics[ ]  Biotechnology[ ]  Cell biology[ ]  Computational biology[ ]  Developmental biology[ ]  Disease modelling[ ]  Drug design[ ]  Epigenetics[ ]  Genome biology[ ]  Neurobiology[ ]  Structural biology[ ]  Tissue biology[ ]  Translational research[ ]  Planetary biology |

--- START PAGE COUNT ---

1. **Background, proposed project & its implementation**

*In this section, you must provide a detailed description of the scientific and technical aspects of the proposal, demonstrating the originality and novelty of the proposed method/technology.*

* ***Introduction, state-of-the-art and objectives*** *- Provide an overview of the proposal. Discuss the state of-the-art. Specify the objectives of the proposal, in the context of the state-of-the- art in the field. It should be indicated how and why the proposed work is important for the field. Specify any particularly challenging or unconventional aspects of the proposal, including multi- or inter-disciplinary aspects (if relevant).*
* *Describe the workplan and methodology of the planned work*
* *With which EMBL groups do you envision to develop the proposed technology and how would your project fit into the expertise, technologies and research focus already present in the group(s)*
* *Would some parts of the proposed project benefit from collaboration with some of the ARISE partner organisations[[2]](#footnote-2), and if yes, with which.*
* *Describe the infrastructure and facilities (e.g. any equipment; specialist software) required to carry out the proposed work, taking into consideration what is available in the hosting centres. Describe any other necessary resources required and expected costs.*
* *List major potential risks associated with the research project implementation. Please be aware that during the interview you might be required to provide information on contingency plan/mitigation measures.*
1. **Expected results & their impact**

*The candidate has to show that the proposed technology / method will be useful to external researchers, and that it has potential to be offered as a service already during the fellowship time. To show the impact of the proposed technology, please describe:*

* *When do you expect to be able to start providing (pilot) access to the technology you propose to develop for other researchers (e.g. other EMBL or non-EMBL researchers)*
* *Will the technology that you envision to be developed be useful to other EMBL groups? Which groups do you foresee could be potential first users and why?*
* *Can you foresee which external (non-EMBL) researchers could be first users of the newly developed technology? Please describe why would they find the technology beneficial? Please provide few examples of means of dissemination of results.*

*The candidate has to provide practical information on the service provision:*

* *Please describe shortly how do you envision provision of services (e.g. virtual vs physical service, users handling machines alone vs Research Infrastructure scientist performing experiments for the users, duration of service per sample/user etc). Which obstacles do you expect to encounter related to the service provision?*

**3. Ethics**

*If ethical issues are raised by your project proposal (you answered “Yes” to any of the questions included in the ethics self-assessment – questionnaire below), please describe how they will be addressed.*

*If not applicable, please state “N/A”.*

----STOP PAGE COUNT---

**Ethics self-assessment**

*Please fill out the questionnaire below about ethical issues – Answer only “Yes” or “No”.*

***Please note that providing a duly filled in ethics self-assessment is part of the eligibility criteria.***

*The questionnaire is based on the ethics self-assessment for Horizon 2020 (H2020) projects[[3]](#footnote-3). ARISE is co-funded by H2020 programme and, thus, projects funded by ARISE must comply with H2020 ethical requirements.*

*If you answered "Yes" to any of the questions below, you must provide additional information about how these issues will be addressed in the section 3. "Ethics" (see above)*.

|  |  |  |
| --- | --- | --- |
| **Section 1. Human embryos/foetuses** | **Yes** | **No** |
| Does your research involve Human Embryonic Stem Cells (hESCs)? | [ ]  | [ ]  |
| Does your research involve the use of human embryos?  | [ ]  | [ ]  |
| Does your research involve the use of human foetal tissues / cells?  | [ ]  | [ ]  |
| **Section 2. Humans** | **Yes** | **No** |
| Does your research involve human participants? | [ ]  | [ ]  |
| Does your research involve physical interventions on the study participants? | [ ]  | [ ]  |
| **Section 3. Human cells/tissues** | **Yes** | **No** |
| Does your research involve human cells or tissues (other than from human embryos/foetuses? | [ ]  | [ ]  |
| **Section 4. Protection of Personal Data** | **Yes** | **No** |
| Does your research involve processing of personal data? | [ ]  | [ ]  |
| Does your research involve further processing of previously collected personal data (including use of pre-existing data sets or sources, merging existing data sets)? | [ ]  | [ ]  |
| Does your research involve publicly available data? | [ ]  | [ ]  |
| Is it planned to export personal data from the EU to non-EU countries?  | [ ]  | [ ]  |
| Is it planned to import personal data from non-EU countries into the EU? | [ ]  | [ ]  |
| **Section 5. Animals** | **Yes** | **No** |
| Does your research involve animals? | [ ]  | [ ]  |
| **Section 6. Non-EU countries** | **Yes** | **No** |
| In case non-EU countries are involved, do the research related activities undertaken in these countries raise potential ethics issues? | [ ]  | [ ]  |
| Is it planned to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples, etc.)? | [ ]  | [ ]  |
| Is it planned to import any material from non-EU countries into the EU? | [ ]  | [ ]  |
| Is it planned to export any material from the EU to non-EU countries? | [ ]  | [ ]  |
| In case research involves low and/or lower-middle income countries, are any benefit-sharing actions planned? | [ ]  | [ ]  |
| Could the situation in the country put the individuals taking part in the research at risk? | [ ]  | [ ]  |
| **Section 7. Environment** | **Yes** | **No** |
| Does your research involve the use of elements that may cause harm to the environment, to animals or plants? | [ ]  | [ ]  |
| Does your research deal with endangered fauna and/or flora /protected areas? | [ ]  | [ ]  |
| Does your research involve the use of elements that may cause harm to humans, including research staff? | [ ]  | [ ]  |
| **Section 8. Dual use** | **Yes** | **No** |
| Does this research involve dual-use items in the sense of [Regulation 428/2009](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1399888895034&uri=CELEX:02009R0428-20120615), or other items for which an authorisation is required? Dual use items according to Horizon 2020 programme are items, including software and technology, which can be used for both civil and military purposes, and shall include all goods which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices. | [ ]  | [ ]  |
| **Section 9. Exclusive focus on civil applications** | **Yes** | **No** |
| Could your research raise concerns regarding the exclusive focus on civil applications? (research projects funded under H2020 programme must be exclusively focused on civil applications and cannot be used for military purposes) | [ ]  | [ ]  |
| **Section 10. Misuse** | **Yes** | **No** |
| Does your research have a potential for misuse of research results? | [ ]  | [ ]  |
| **Section 11. Other ethics issues** | **Yes** | **No** |
| Are there any other ethics issues that should be taken into consideration? | [ ]  | [ ]  |

**Gantt chart**

*Here you can show the timeline for the major achievements in the project. The fellowship duration is 36 months. The proposed project must be feasibly undertaken within the fellowship duration).*

**References**

*Please list here the references relevant to your proposal.*

1. The full list of EMBL Group and Team Leaders participating in ARISE call 1 is available here: <https://www.embl.org/training/technology-developers-programme/arise/research-focus/> [↑](#footnote-ref-1)
2. List of ARISE Partner Organisations available here: <https://www.embl.org/training/technology-developers-programme/arise/research-focus/> [↑](#footnote-ref-2)
3. Horizon 2020 guide “How to complete your ethics self-assessment”: <https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf> [↑](#footnote-ref-3)