**PROJECT DETAILS AND METHODOLOGY TEMPLATE**

**AMED-MRC RESEARCH COLLABORATION IN** **ENGINEERING BIOLOGY**

Both partners must supply identical joint project information written in English to the MRC and AMED.

For UK applicants, this information will be supplied through the TFS vision, approach, and international partnerships and mobility plan, sections.

You should complete the details within this project details and methodology template and supply it to AMED through the e-RAD system.

As applicants will be submitting a common research plan and vision, it is vital that it provides full details of the work proposed for both the UK and Japanese components.

1. **What are you hoping to achieve with your proposed work? Please ensure you outline the work being undertaken in both the UK and in Japan.**

Word Limit: 1,500 words

Explain how your proposed work:

* is of excellent quality and importance within or beyond the fields or areas.
* has the potential to advance current understanding, or generate new knowledge, thinking or discovery within or beyond the field or area
* is timely given current trends, context, and needs
* Impacts world-leading research, society, the economy, or the environment

You should also:

* identify the potential direct or indirect benefits and who the beneficiaries might be
* identify potential improvements in human or population health, whether through contributing to relieving disease or disability burden, improving quality of life or providing benefit to the health service or health-related industry
* identify the originality and novelty of the proposed work
* identify how the proposed research responds to social needs

You may demonstrate elements of your responses in visual form if relevant. Further details are provided in the UKRI funding service.

1. **How are you going to deliver your proposed work? Please ensure you outline the work being undertaken in both the UK and in Japan.**

Word Limit 2,500 words

How are you going to deliver your proposed work? Please ensure you outline the work being undertaken in both the UK and in Japan.

Explain how you have designed your work so that it:

* is effective and appropriate to achieve your objectives
* is feasible, and comprehensively identifies any risks to delivery, and how they will be managed
* if applicable, uses a clear and transparent methodology
* if applicable, summarises the previous work and describes how this will be built upon and progressed
* will maximise translation of outputs into outcomes and impacts
* describes how your, and your team’s research environment (in terms of the place, relevance to the project and division of roles between the UK and Japan research teams) will contribute to the success of the work

You should also:

* demonstrate access to the appropriate services, facilities, infrastructure, or equipment to deliver the project
* provide a project plan including milestones and timelines, in the form of an embedded Gantt chart or similar
* explain and justify how you will approach diversity and inclusion in the study population and follow the MRC embedding diversity in research design policy (if applicable)
* show how you will use both sexes in research involving animals and tissues and cells (if applicable). If you are not proposing to do this justify why

You have the option to use 500 words to provide additional information about reproducibility and how you will ensure reliability and robustness of your work, such as further details of statistical analyses, methodology and experimental design. If this information is not applicable, then you should not use this space to expand on other areas of your approach and your response to this section should be around 2,000 words.

The reproducibility information should be clearly identified using the heading Reproducibility and statistical design.

 We expect you to seek professional statistical or other relevant advice in preparing your response, which may include:

* Experimental approach to address objectives.
* Sample and effect sizes.
* Planned statistical analyses.
* Models chosen (for example animal model, cell line).

Refer to the [MRC guidance for applicants, section 2.2.3.5 ‘Reproducibility and statistical design’](https://www.ukri.org/councils/mrc/guidance-for-applicants/what-to-include-in-your-application/2-2-attachments/), for further information, examples and online tools.

If your proposed work involves animals (in either the UK or Japan), you should provide information on animal sample sizes and statistical analyses in the Vision and approach document, you should not duplicate it in the Research involving the use of animals section. Use the ‘Research involving the use of animals section to provide information on the rationale for using animals, choice of species, welfare and procedure severity.

#### (3) The International Partnership and Mobility Plan

Word Limit: 1,500 words

Identify the value added of the UK-Japan collaboration to your research, highlighting the uniqueness of the partnership, and expertise of both partners.

You should address:

Research partnerships: including strength and clarity of the collaboration and opportunities provided, the sustainability of the partnership, the added value of the partnership and the appropriateness of the governance arrangements, the key considerations include;

* does your application involve high-level international joint research aimed at enhancing scientific and technological capabilities for both countries?
* is the target top international research community clearly defined and consistent with the project purpose?
* is the plan for building and expanding the international collaboration appropriate?
* is it expected to continue and expand as a global network after the completion of the research program?
* are the research exchanges and collaborations planned on an equal footing and mutually beneficial for both countries? Is the relationship between the two countries such that one side is not subordinate to the other?
* does the division of roles between the UK and Japan research teams ensure a feasible and equitable approach to your research?

Plans for international partnership and mobility activities

* are there appropriate plans for cultivating next-generation researchers based on past successes?
* is the strategy for fostering the next generation of top researchers that will contribute to the promotion of international talent mobility appropriate?
* what strategies are in place to ensure its continuation upon the completion of the research program?
* show how top-level international joint research will continue after the completion of the research and development, thereby maintaining and improving scientific and technological capabilities for both countries

Capability of the applicants and the project team to foster knowledge and methodology exchange:

* Does the Principal Investigator have experience in top research communities with the co-investigators from foreign institution, and as an example, have experience in human resource development of young researchers, etc?

Support for early career researchers and a clear strategy for fostering the next generation of top researchers that will contribute to the promotion of international talent mobility. Key questions to consider include:

* are there appropriate plans for cultivating next-generation researchers based on past successes?
* is the strategy for fostering the next generation of top researchers that will contribute to the promotion of international talent mobility appropriate?
* can we expect human resource development to continue in the top research community after the completion of the research program?