(Form E1)

**Advanced Research and Development Programs**

**for Medical Innovation, AMED**

**Research and Development (R&D) Proposal**

|  |  |
| --- | --- |
| Title of proposed R&D project | Study of XXXX |
| R&D area (Type) | By clicking here you will see the dropdown menu. Press ▼ on the right side and select your R&D area. |
| R&D period | Oct. 1st 2022 ~ Mar. 31th 2028 (5.5 years) |
| Name of R&D PI | IRYO M. Hanako <LAST NAME Middle name First name> |
| Affiliated institution, department, position | Department of WWWW, Faculty of XXXX, YYYY University, Professor |
| Academic background (since University) | ----Example----<Undergraduate Institution>yyyy (year of completion): Department of WWWW, Faculty of XXXX, YYYY University<Graduate Institutions>Master’s Course: yyyy (year of completion): Department of WWWW, Faculty of XXXX, YYYY University(Supervisor: Prof. Wwww Y. XXXX) [Necessary Information]Doctoral Course: yyyy (year of completion): Department of WWWW, Faculty of XXXX, YYYY University(Supervisor: Prof. Wwww Y. XXXX) [Necessary Information]Academic Degree: yyyy (year of acquisition): Ph.D. (Field of Specialty) at ZZZZ University(Supervisor\*: Professor Wwww Y. XXXX; Head of Laboratory\*: Professor Aaaa B. CCCC) [*\*Necessary Information*] |
| Professional Appointments (Major careers and Fields of R&D) | ----Example----From yyyy to xxxx: Assistant Professor, Department of Medicine, WWWW University(Researched XXXX at the laboratory of Professor Aaaa B. CCCC\*)From yyyy to xxxx: Associate Professor, Department of Medicine, WWWW University(Researched XXXX at the laboratory of Professor Aaaa B. CCCC\*)From yyyy to xxxx: Associate Professor, Department of Medicine, WWWW University(Researched XXXX at the laboratory of Professor Aaaa B. CCCC\*)From yyyy to xxxx: Professor, Department of Medicine, WWWW University(Researched XXXX at the laboratory of Professor Aaaa B. CCCC\*)[*\*Necessary Information*] |

Note: When submitting please **delete the examples in blue**.

 Please **do not delete the instructions in black**.

All text, figures and tables must be in English.**1. Research Objectives**

1. Use a font size of 10.5 points or larger, and do not exceed 4 pages (no exceptions). If these instructions are not followed, the research proposal may not be accepted.
2. Make effective references to the descriptions of achievements listed in the “3. Research Achievements” to clarify the relationship between the achievements of the applicant and the research being proposed.
3. Please specify clearly the background of the R&D concept (necessity and importance of the research), the achievements of the applicant (and preliminary evidence) and the R&D concepts and plans.
4. Where necessary add any figures or tables to clarify the details of the proposal.
5. **Targets and Objectives**

Specify the research objectives of the proposed R&D project (expected achievements at the end of the research period), and the targets of the proposed R&D (in terms of outcome resulting directly from the above-mentioned achievements).

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1. **Background**

Specify scientific and technological needs, social demands and requests from economic and industrial interests, including trends in related fields, in order to illustrate the importance and necessity of the proposed R&D project.

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1. **R&D Fundamentals and Preparations**

Specify the relevant projects conducted previously and the personal research achievements of the R&D PI (and those of the Co-Investigators, and other collaborating researchers, as required), and other preliminary knowledge, experimental evidence, etc. to support the R&D concept. Specify the contents corresponding to “4.2.2 (D)” in the Application Guidelines.

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1. **Originality and Novelty of the Proposed R&D and Comparison to the Current Status of Similar Studies Worldwide**

Explain the originality and novelty of the proposed R&D project, and the advantages of this R&D project over others in the world, taking into account the research situation and trends worldwide.

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1. **Future R&D Prospects**

Explain the creation of scientific and technological innovation, creation of seeds for medical applications, contributions to society, and acquisition and enforcement of intellectual property that are expected to be realized in future if the “I. Targets and Objectives” stated on this Form E1 are successfully achieved.

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**2. R&D Plan and Approaches**

1. Use a font size of 10.5 points or larger, and do not exceed 4 pages (no exceptions). If these instructions are not followed, the research proposal may not be accepted. Also refer to notes in “1. Research Objectives.”
2. Explain the R&D approaches taken to achieve “1. I. Targets and Objectives” and potential problems and solutions, as well as alternative approaches for in the case that the project fails to obtain the expected results during the R&D period with certain milestones. The milestones are including criteria for evaluating achievement levels and time periods for conducting the R&D.
3. Clearly stipulate the goals to be achieved within three years of commencing the R&D (This is a basic item for Mid-term Review).
4. The R&D plan and approaches should be consistent with the schedule described in “(Annex E1) Main Schedule for R&D”, and also should be specified for each R&D item.
5. With regard to intellectual property and other matters anticipated in this R&D concept (such as applications, licensing, and management), specify the relevant intellectual property rights owned by the applicants, and the strategy for acquiring intellectual property rights during the course of the R&D.

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**3. Research Achievements**

1. For each R&D Principal Investigator and Co-Investigator, select major papers that have been published in academic journals, etc. and books (within the past 5 years) and list them in order starting from the most recent year. Put circle (●) at the start of lines for those that are directly related to the proposed project.
2. State the acquisition and application status of patent rights or other intellectual property rights, and any policy recommendations that have been made as a result of the implementation of the R&D project (guiding principles or guidelines to which you have contributed, etc.)

**R&D Principal Investigator: XX XX**

Papers /Books

●M.Marusankaku, J.Aaaa, H.Bbbbb, A.Ccccc, Treatment of Hepatic……, Nature, 2020 , 1,10-20

M.Marusankaku, T.Aaaa, A.Bbbbb, T.Ccccc, Risk factors for Fungal…, Nature, 2019, 2,17-26

Acquisition and application status of patent rights or other intellectual property rights

Policy recommendations

XXXXXX Guideline (issued by XX Academic Association, XXXX [year])

**R&D Co-Investigator (1): XX XX**

Papers /Books

●M.Kakukaku, T.Dddd, A.Eeee, T.Ffff, Study on Hepatitis…………, Nature, 2020,12,32-40

M.Kakukaku, T. Dddd, A. Eeee, T.Ffff, Study on Malaria………, Nature, 2019,10,45-54

**R&D Co-Investigator (2): XX XX**

(Example of pasting researchmap text output)

Non-negligible collisions of alkali atoms with background gas in buffer-gas-free cells coated with paraffin

Applied Physics B-Lasers and Optics 122(4) 81-1-81-6, March 2020

Laser frequency locking with 46 GHz offset using an electro-optic modulator for magneto-optical trapping of francium atoms

Applied Optics 55(5) 1164-1169, February 2020

Atomic spin resonance in a rubidium beam obliquel

(Annex E1)

1. Enter the R&D items that must be dealt with in order to achieve the objectives, as well as the period of execution.
Milestones: Points of arrival or matters to be achieved that constitute turning points in the achievement in the R&D.
2. For each R&D item, enter the schedule and the persons in charge
3. Please detail the approximate allocated amount (direct costs) of the contracted R&D funds for the entire R&D period. Detail the total sum of the planned allotted amount for each R&D item so they equal the direct costs of the sum applied for.
4. Enter information within 2 pages (no exceptions). Add entry fields as needed in accordance with the project term.

**Main Schedule for R&D**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| R&D itemResearch Costs | Person in charge | 1st Year(FY2022) | 2nd Year(FY2023) | 3rd Year(FY2024) | 4th Year(FY2025) | 5th Year(FY2026) | 6th Year(FY2027) |
| H1 | H2 | H1 | H2 | H1 | H2 | H1 | H2 | H1 | H2 | H1 | H2 |
| *(1) Analysis of XX related gene manifestation**- Establishment of assay system**- Analysis of manifestation data***Research Costs:**XX thousand yen | *PI**IRYO M. Hanako* |  | *■* | *■* | *■* | *■**■* | *■**■* | *■* | *■*▲Milestone: ○○○○○○○○○○○○○○○○○○○○○○○ | *■* | *■* | *■* | *■* |
| (2) *AAA AAA* *- a* *- a***Research Costs:**XX thousand yen | *Co-Investigator**IRYO M. Taro* |  |  |  | *■* | *■**■* | *■**■*▲Milestone: ○○○○○○○○○○○○○○○○○○○○○○○ | *■**■* | *■**■* | *■**■* | *■* | *■* | *■* |
| (3) BBB BBB*- b**- b***Research Costs:**XX thousand yen  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (4) CCC CCC*- c**- c***Research Costs:**XX thousand yen |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (5) DDD DDD*- d**- d***Research Costs:**XX thousand yen |  |  |  |  |  |  |  |  |  |  |  |  |  |