**Appendix №1**

**GUIDELINE FOR DEVELOPING AND SUBMITTING A GRANT PROPOSAL**

1. **Standard grant proposal format and application requirements**

[Please note that projects that do not meet the proposal development requirements will be rejected]

**Font:** Times New Roman Font

**Size:** 12

**Frame:** 2.5 cm on all sides

**Line spacing:** 1.0

**Language:** The project will be submitted in Mongolian and English. An English translation of the project will be provided for the project sponsor and the International Evaluation Team.

**Submission:** The research project should be submitted in electronic format in pdf format to research@must.edu.mn by November 12, 2021, along with the research ethics certification **[[1]](#footnote-1)**.

**PART 1: PROJECT SUMMARY** [to be completed by the applicant]

1. **General introduction of the project**
	1. Name of the principle investigator (PI):

Full name:

Position:

School/department:

* 1. Project Name:
	2. Project Status: New □ Reapplying □
	3. Key Branch:

 Sub-branch:

 Does the project include priority areas:

* 1. Five keywords to describe the research project
	2. Project duration: months (Maximum duration up to 18 months).

|  |  |
| --- | --- |
| * 1. Total requested funding:
 | ₮ |

* 1. Write the summary of the research project understandable to non-professionals. (Write in the table below with a maximum of 400 words):

**Summary of the research project**

**PART 2: DETAILED GRANT PROPOSAL**

* 1. **The need, purpose, and importance of the research project**

(*Define the intended problems to solve, the main solutions to the problem, the project result, the practical impact on the industry, and the importance of educational, research, and professional development)*

1. Project Objectives (write the main idea of ​​the project objectives in less than 800 words)
2. Project effectiveness (not exceeding one A4 page)

*(Answer should include identifying research stakeholders, how they will benefit, how to measure the effects other than academic impact, and what can be done to make the results effective during and after the project)*

* 1. **Project introduction, research work plan and methodology**

(maximum 4 pages of A4 and sections (a) and (b))

1. Introduction to the project
2. - Research work plan and methodology

- A Gantt table showing a research work plan on a single page of A4

1. If necessary, diagrams, pictures, and tables of up to two pages.
2. Bibliography (bibliography cited in sections 1-2 in APA format)
3. Results Dissemination Plan

|  |  |  |
| --- | --- | --- |
| Time of distribution (year, quarter) | In what form (scientific journal / conference / other) | Brief information of scientific journal, conference and other forms |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **Costs and justification [Explain the rationale for each expense] (each justification under 500 words)**

**Project financing**

* The MUST will provide grant recipient teams with the necessary infrastructure, laboratories, equipment, telephones, internet, libraries, and access to research database and other necessary resources.
* Project financing will not be approved if the following requirements are not met.
	+ 1. Salary and allowances for the research team

**Types of salary increase**

* Salary and allowances[[2]](#footnote-2) for principle investigators and co-investigators from Mongolian universities
* Salary of co-investigator [[3]](#footnote-3)
* Scholarship stipend for Postdoctoral and advanced students [[4]](#footnote-4)

|  |  |
| --- | --- |
| (i) Salary of research teacher | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| (ii) Reporting and attendance expense | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| (iii) Domestic on-road travel and travel costs for the study area | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| (iv) External travel and travel expenses | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| (v) Costs of publication, distribution and others | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| (vi) Paid external laboratory testing costs | ₮\_\_\_\_\_\_\_ |
| Rationale: |   |
| (vii) Other costs deemed necessary | ₮\_\_\_\_\_\_\_ |
| Rationale: |  |
| **Total cost** | ₮\_\_\_\_\_\_\_ |

* 1. **Laboratories and key equipment available for the research project (maximum 400 words)**
	2. **Guaranteed and expected funding**
1. Funding from another fund for this study:

[the amount of this financing is deducted from the total cost]

 Sponsor Funding amount

(₮)\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Funding that is or is expected to be funded by another sponsor for this research project: [if this funding is guaranteed, the amount of funding from this program will be reduced]

Sponsor Funding amount

 (₮)\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Principle investigator and co-investigator information**
1. Principle investigator information:

|  |  |  |
| --- | --- | --- |
| Name | Position | School and Department |

1. CV of the applicant.

[For principle investigators and co-investigators, please submit your CV to the application form with a maximum of 4 pages, or a maximum of 800 words, in a text box and send it directly to this form]

1. Name:
2. Degree of education:
3. Previous academic experience (date):
4. Current position:
5. Relevant previous research:
6. List of works [APA format]:

Part A - research papers that best represent your relevant research experience in the last 5 years (starting with the most recent one).

Part B - 5 works that best represent your research in the last 5 years (starting with the most recent).

1. Allocation of responsibilities for the research project:

[Indicate whether specific roles have been assigned between the principle investigator and the co-investigator.]

* The investigators presented in the research grant proposal confirm that they have agreed to work on the project team. Attached is a signed official letter stating the role of the investigators.
1. The principle investigator shall indicate hours per week spent on the project in the grant proposal.

* 1. **Investigators' scholarship information and activities related to this project**
1. Principle investigator - information on previous research and grant proposals

 Experience as a principle investigator and co-investigator:

1. the names of all programs funded in the last 5 years and the research work performed;
2. the names of all funded programs and ongoing research;
3. Grant proposals awaiting funding;

|  |  |
| --- | --- |
|  | Details |
| (1) Project / Proposal Registration Number (if any) |
| (2) Project name |  |
| (3) Project Objectives |  |
| (4) Status | Completed / Continuing / Pending |
| (5) Role | Principle investigator / Co-investigator |
| (6) Names of the funded programs and the amount of the fund (₮) |  |
|  (7) Start date and planned end date (if available) |  |
| (8) Time spent by the Principle investigator per week on an ongoing project |  |
| (9) Related to this projectIf relevant, please explain here.  | Related / Unrelated |

1. The following research is ongoing in connection with this grant proposal. These include data collection, preliminary research, working group reports, research papers (articles, conference reports, books, etc.), presentations, media interviews, and proposals for other research projects. Please provide details of the relevant research work (eg. title of the project, research paper, brief introduction of the preliminary research work, etc.) to determine whether the project was part of a funded project and how the completed or ongoing project differs from the proposed project. Please. **Any researcher who conceals previous research work related to the proposed grant proposal will be subject to disciplinary action.**

|  |
| --- |
| Details |
| Please clarify whether another research project related to this research project was part of a funded project, and how it differs from the proposed project. (maximum 400 words) |

1. Co-investigators – Co-investigator information
	1. Current research projects and its funding sources for each co-investigator
	2. Expected research proposal (as a principle investigator)

|  |
| --- |
| Details |
| (1) Project / Project registration number (if any) |
| (2) Project name |

|  |  |
| --- | --- |
| (3) Name and role of co-investigator | Principle investigator |
| (4) Status | Completed / Continuing / Pending |
| (5) Source and amount of funding ($) |  |
| (6) Start date and end date  |  |
| (7) Related to this research projectIf applicable, please provide details | Related / Unrelated |

* 1. The following research is ongoing in connection with this grant proposal. These include data collection, preliminary research, working group reports, research papers (articles, conference reports, books, etc.), presentations, media interviews, and proposals for other research projects. Please provide details of the relevant research work (e.g., title of the project, research paper, brief introduction of the preliminary research work, etc.) to determine whether the project was part of a funded project and how the completed or ongoing project differs from the proposed project. **Any researcher who conceals previous research work related to the proposed grant proposal will be subject to disciplinary action.**

|  |
| --- |
| Details |
| Please clarify whether the research project related to this project was part of a funded project, and how it differs from the proposed project. (maximum 400 words) |

* 1. **Obtaining research ethics / security assurance and government / official / personal data**
1. The proposal of the research project will make  / will not make  a person the object of research.
2. Fill in the '' box if the principle investigator needs the required ethical and safety guarantees. Or make sure these requirements are approved by the university. Prior to the deadline for applications, the confirmation must be obtained from the relevant principle investigator.

|  |  |  |  |
| --- | --- | --- | --- |
|  | No guarantee requested | Guarantee requested | Guaranteed |
| (1) Animal Research Ethics |  |  |  |
| (2) Biosafety |  |  |  |
| (3) Safety of ionizing radioactive substances |  |  |  |
| (4) Safety of non-ionizing radioactive substances |  |  |  |
| (5) Chemical safety |  |  |  |
| (6) The ethics of involving a person as a research object (non-clinical) |  |  |  |

* 1. **Whether MRG-funded final reports, data, research articles, and publications are allowed to be made available to the public**
1. Will the proposed project produce research data to be archived?

Yes  No 

If so, what is the data, how much, and how can this data be used in the future?

1. Is it possible to make the data available to the public after the completion of the project and 12 months after the publication of the project results?

Yes  No 

I / we all understand that the final report of the MRG project will be made public and a request for data storage will be considered upon completion of the funded project. MRG has the authority to store and archive data requests. The use of data stored on the MRG requires that the data generator and the MRG be mentioned as sources. The data generator provides a copy of all works that use that data.

We understand that providing the URL link to the final report of the project to the websites of the MUST and Oyu Tolgoi and Rio Tinto Mongol LLC will allow the public to view the results and research papers of the research project. Information on where to obtain survey data will also be included in the report.

Once permission is obtained to publish a research paper,

1. I request that the publishing house allow the published version of my research article to be made available to the public on the website of the MUST research article database, or that the final revised version kept by me may be made available to the public on the university website;
2. If the publisher does not consent, the publisher shall request permission to have limited access to the university's library resources immediately after publication or after a period of 12 months only available to paid users.
3. Depending on the permission of the publishing house, I will post my research materials as soon as possible after 6 months from the date of publication in the scientific publication database of MUST and OT or after the expiration of the limited time of the publishing house.
	1. **Education and training plans, technology transfer plans, cooperation letters and other supporting documents are included here.**

Education and training plan

The principle investigator will include any educational or training activities related to the research project.

Technology transfer plan

If there is a technology transfer plan, it should be attached to the application.

(a) Dissemination of research results:

 Introducing to the industry;

 Introducing to to trade and business activities

(b) potential industry partners for technology transfer / industry. If possible, please provide information on the position of this product / technology in the market.

(c) If there is an additional technology development project to join this research project, please provide brief information.

Cooperation number

If you are working with other schools, please provide proof of cooperation.

Supporting documents

Ethical / security documents are included in this section.

**PART 3: UNIVERSITY GUARANTEES IN RESEARCH ETHICS AND SAFETY**

(This section will be filled in by the Academic Secretary General (ASG) of the component school of MUST. Prior to submitting the research project to the MRG, the submission should be supported by the ASG of the component school of MUST based on their review.)

**GUARANTEE BY THE MUST**

* 1. Confirming whether the investigator participating in the MRG meets the requirements

Confirming below:

1. This application has been evaluated and approved by the University for submission to MRG;
2. The principle investigator with a position rank of \_\_\_\_\_\_\_\_\_\_\_ is eligible to submit a research proposal because he or she meets the requirements for investigator;
* Principle investigator spends more than 80% of their working time in university teaching, research, and high-level work.
1.
* The principle investigator has a full-time employment contract.
* The principle investigator’s employment contract is after the end of the project.
* The principle investigator is a visiting professor
* The principle investigator is not a visiting professor

[If the guest is a professor, he / she is a full-time lecturer at the MUST, and the contract period must be after the end of the project.]

1. The teaching time of the investigator applicant has been adequately calculated, the investigators have been given sufficient time to conduct their research, and the time spent for the research has been included in the workload.
2. The research applicant shall, on a weekly basis, spend the time reported in Section II 6 (d) required to manage the research project, without overlapping with his or her other current research projects, teaching or administrative duties;
3. The MUST will promptly notify the MRG and withdraw the application if the principle investigator is unable or unwilling to apply, receive, or disburse funding to the MRG; or if a project is funded and a project is started, a new qualified principle investigator will be nominated;
4. MUST understands the withdrawal of funding in case the research project is not started within one month of receiving the MRG funding. If the Principle investigator intends to take unpaid leave or leave of absence for more than 60 days during the project period, he / she must immediately notify MRG.

Signed by: .................................... / full name / ASG of the school of ..............................

Signature

**ROLE OF THE MUST**

(This section will be filled in by the Academic Secretary General (ASG) of the component school of MUST. Prior to submitting the research project to the MRG, the submission should be supported by the ASG of the component school of MUST based on their review.)

1. **Principle investigator and student support**

**Confirming below:**

1. The MUST will be responsible for providing management support, supervisor support, research equipment, resources, and appropriate training.
* Yes
* No.
1. The MRG is consistent with the mission and objectives of the university.
* Yes
* No.
1. No additional equipment is required
2. The information provided in this application about the principle investigator is accurate.
3. The proposed project application does not include the costs of infrastructure, equipment, communications, stationery, standard software, and the use of university libraries and databases that are part of the university's fixed supply.
4. Intellectual theft detection search in the proposal of this research project
* done.
* not done. (explain the reason)
1. **Guarantees of research ethics and security, and the right to receive official information**

The research grant proposal is reviewed and approved as follows:

|  |
| --- |
| (i)  the research project targets the person (non-clinical) |
|  |  | No guarantee required |
|  |  |  | Applying for a guarantee. |
|  |  |  | Guaranteed |

(ii) Whether permission is required from the relevant authorities:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Permission required | Permission requested | Permission granted |
| (1) | Animal search ethics |  |  |  |
| (2) | Biosafety |  |  |  |
| (3) | Safety of ionizing radiation |  |  |  |
| (4) | Safety of non-ionizing radiation |  |  |  |
| (5) | Chemical safety |  |  |  |

Signed by: ................................ / full name / ASG of the school of ..........................

Signature

**Appendix 5**

**COST BREAKDOWN FORM**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Breakdown of research costs** | **2021** | **2022**  | **Total amount** |
| Cost  | Cost |
| 1 | Remuneration and social security for project team and contractors |  |  |  |
| 2 | Master's and doctoral student scholarships and salaries |  |  |  |
| 3 | Payment for work and services performed by an external organization |  |  |  |
| 4 | Information acquisition costs |  |  |  |
| 5 | Expenses for organizing scientific conferences, seminars and exhibitions |  |  |  |
| 6 | Expenses for the stay of foreign researchers in Mongolia |  |  |  |
| 7 | Preparation of manuscript for books and publications |  |  |  |
| 8 | Expenses related to writing a research report (stationery, printing, etc.) |  |  |  |
| 9 | Sociological, sampling and field research costs |  |  |  |
| 10 | Sample delivery and analysis costs |  |  |  |
| 11 | Cost of purchasing reagents |  |  |  |
| 12 | Cost of purchasing, exterminating and decontaminating experimental animals |  |  |  |
| 13 | Patent fee / related to the research work / |  |  |  |
| 14 | Costs of spare parts, laboratory equipment, installation and maintenance |  |  |  |
| 15 | Publishing the research results in a highly certified professional journal |  |  |  |
| 16 | Cost of purchasing microorganisms and magnification |  |  |  |
| 17 | Foreign and domestic travel expenses |  |  |  |
| 18 | Costs of developing, purchasing, and maintaining computer software |  |  |  |
| 19 | Fees for international conferences / related to the research work / |  |  |  |
| 20 | Labor protection costs |  |  |  |
| 21 | Membership fee |  |  |  |
| 22 | Cost of purchasing testing area and equipments |  |  |  |
| 23 | Fees for the use of university laboratories, research and experimental bases, instruments, equipment, stationery and administrative services |  |  |  |
| **Total** |  |  |  |

Director: ………………………………. /.............................../

Accountant: ………………………………. /.............................../

Principle Investigator: ………………………………. /.............................../

1. In order to protect the interests of researchers, the MUST, and Oyu Tolgoi and Rio Tinto Mongol LLC, the MUST has a special responsibility to prevent, detect, and investigate research ethical violations. Ethical violations include misappropriation of funds, misrepresentation of data, intellectual theft, and overlapping funds from multiple sponsors in the same project, among others. The research project will be submitted by the Academic Secretary of the School of MUST with a signed form confirming the originality of the research project application after it has been verified by the Scientific Secretary of the MUST using software and other methods to detect intellectual theft. Please note that non-certified project proposals will not be accepted. [↑](#footnote-ref-1)
2. **Salary policy for principle investigator and co-investigator**

The principle investigator and co-investigator of the project will be paid for the research project if they are professors in Mongolian universities. However, the salary policy does not apply to consulting engineers, engineers working in mining companies, and professors at foreign universities. In order to ensure that the time spent on research by the researchers involved in this project is realistic, MUST and other universities will be responsible for ensuring the feasibility of the investigators’ time spent on research, training and administrative work. This should be clearly stated in the justification. [↑](#footnote-ref-2)
3. **Assistant investigator salary policy**

A co-investigator may be hired to carry out the technical work of the research, in which case the co-investigator shall be paid if he / she participates in writing the research grant proposal and completes at least 40% of the total research time. The co-investigator will be contracted by the principle investigator. The contract shall specify the percentage of the total project work and the number of months. Senior lecturers and professors of the MUST will not be employed as Co-investigators. The salary of the co-investigator shall be determined based on the average market price research and shall be clearly stated in the justification. [↑](#footnote-ref-3)
4. **Policy to employ young researchers**

The grant supports the participation of postdoctoral and advanced students in research. When hiring a young researcher, the tasks and the working hours should be specified and a certain amount of research stipend is allowed. The amount of the stipend and the number of young researchers to be employed should be clearly stated in the justification. [↑](#footnote-ref-4)