



RESEARCH GRANT WRITING GUIDELINES

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Khesar Gyalpo University of Medical Sciences of Bhutan - version 1.0

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Foreword

I am delighted to present the Research Grant Application Guidelines for the Khesar Gyalpo University of Medical Sciences of Bhutan. This document will be a useful resource for our faculty and researchers, providing a comprehensive framework to guide through the grant application process.

In a time where research and development are pivotal to advancing medical sciences, securing external funding is crucial. These guidelines are designed to facilitate successful grant applications that are aligned with the requirements of various funding agencies. This will not only enhance our ability to secure funding but also add significant resources to our University's research and development endeavors.

I am confident that this document will be a valuable tool in your pursuit of research excellence. Together, let us strive to advance medical knowledge and improve healthcare outcomes for the people of Bhutan.



(Dr. Kinzang P. Tshering)

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I Introduction & Rationale

In the era of competing priorities, grants for faculty research are essential for sustaining a University. They not only help keep the university competitive and promote institutional growth, but also enrich the educational experience for students. Faculty research has been a key mission for many universities, making the process of writing grant applications crucial for securing funding. It is apparent that for the majority of health professionals and/or faculty, the motivation to write a grant comes from a need to finance a project, a study, or an educational program.

There are many type of grants, and they are broadly classified as follows:

1. **Research grants:** *to support scientific and academic research projects;*
2. **Project grants:** *to fund specific projects or initiatives within an organization and community;*
3. **Program grants:** *to support ongoing programs instead of specific projects;*
4. **Training grants:** *to fund training and educational activities for individuals or institutions.*

Guidance on preparing and designing a grant application suitable for submission to a funding agency, with a focus on research projects, is important. In fact, many healthcare professionals in healthcare institutions find writing a grant application a completely new experience and daunting task.

This guideline in particular, covers the general components of a research grant proposal, selecting the most suitable funding body, understanding the grant application process, and tips for improving the chances of success.

I.1 Initial steps to take before applying a grant application

General steps to follow before applying for grant:

1. Identify service needs or research gaps, or have an idea.
2. Generate several ideas and narrow these down, based on what is appropriate and feasible.
3. Identify the outcomes that the research study might have and work backwards to design a plan for how to achieve these.
4. Look for funding opportunities to identify grants that would be suitable for the project and for which the project would be eligible.
5. Application requirements vary across programs, so look closely at the notice of funding opportunity for each specific grant program to ensure that you are addressing all the requirements and criteria for the grant program in question.
6. Secure partners to establish a working team that will participate in the research.
7. Prepare the grant proposal, and address the items as listed;
8. Pay close attention to the scoring criteria and address each of those criteria to the best of your ability.
9. Pay attention to deadlines – these are usually inflexible and if you submit your application past the deadline date, it will not be considered.
10. When writing your proposal, be clear and concise, establish your major points, and avoid unnecessary complexity. These points are the primary items on which the application will be evaluated.

There are many guides to help new researchers to prepare a grant application depending on the funder. It is important to familiarize with the goals and aims of the funding agency where one intends to submit the proposal.

2 Grant Application Writing Team

Team composition is crucial in grant application writing in order to bring together diverse expertise and skills, which strengthens the proposal. The team may compose of the following:

- Project Coordinator/Director: a senior-level management, who must support and sign grant applications;
- The Primary Investigator (PI): who is the primary source of project-related information and a grant writer;
- Grant partners or collaborators, wherever applicable;
- Domain expert(s), including Bio-statistician;
- Finance Expert: to help develop a good budget; and
- Logistic and administrative support.

3 Important Characters for Research Grant Proposals

A research grant application usually includes a research proposal, which summarizes how the proposed project will be planned, implemented, monitored and reported. The exact content of the proposal will vary depending on the type of grant and the funder's requirements.

Although there is wide variation in proposal format, [Table 1](#) shows the components commonly found in research grant applications for studies, but not limited to the lists described below.

A primary goal of a grant proposal should be to present an engaging idea for a research study, one that has been developed into practical, achievable actions and aims to provide evidence addressing a significant knowledge gap.

S1#	Item	Content
1.	Cover Letter	One page cover letter shall be written with the applicant's letter-head. The applicant should demonstrate an acquaintance with the mission of the grant making agency and stress on the grant making agency's goals.
2.	Cover Page	Cover page may contain following information: <ul style="list-style-type: none">• Project Title.• Principal Investigator (PI) and Co-Investigators, including their Institutional Affiliation(s) & Contact Information.• Date of Submission.• Disclosure of Conflict of Interest (COI).
3.	Abstract or Outline of Project Goals	Introduce the topic and mention the problem statement such as what should be happening and what is actually happening?, including: <ul style="list-style-type: none">• Describe the current knowledge.• Context and significance of the research problem relevant to the topic.• Literature review to situate the project within existing research. Literature review should describe the key concepts, justify its value and importance.• Identify gaps/deficiencies in existing knowledge and explain the rationale of the proposed research/project.• Explain the benefits of the project to the community or society.
4.	Significance & Impact	Explanation of the research's importance and potential contributions to the field by enhancing or testing or generating a theory, or resolving a day-to-day problem in the health management and service delivery for instance. Impact on the local community or broader societal implications. How the research addresses issues specific to resource-constrained settings.

Table 1: Common components of research grant proposal

S1#	Item	Content
5.	Methodology	<p>Research designs are plans and procedures for the project/research-detailed description of methods of the data collection, analysis and interpretation. Method should include, but not limited to the following:</p> <ul style="list-style-type: none"> • Specific aims or hypotheses to be tested. • Justification for the chosen methods. • Potential challenges and strategies to address them.
6.	Ethical Considerations <i>(if applicable)</i>	Ethical clearances such as site(s) approval and administrative clearance.
7.	Innovation	Description of innovative aspects of the research. How does the project differ from existing studies or approaches?
8.	Preliminary Data <i>(if applicable)</i>	Presentation of any preliminary data that supports the feasibility of the research. Relevant findings from prior studies conducted by the PI or team.
9.	Timeline & Milestones	Detailed project timeline/plan with key milestones and deliverables/managing the workflow of the project. Phases of the project and expected completion dates.
10.	Budget & Justifications	Detailed budget breakdown, including professional fees, equipment, supplies, travel, and other expenses, In addition, justification for each budget item, especially how it supports the project in a resource-constrained environment. Also provide an explanation of any in-kind contributions or cost-sharing arrangements.
11.	Sustainability Plan	Strategies for sustaining the project's impact after the funding period ends, including Potential for future funding or integration into institutional programs; and Contingency plan for bio-repository for the sustainability of the bio-banks that should be mentioned by PI and should be developed by the concerned institution.

Table-1....Cont.

S1#	Item	Content
12.	Collaboration & Partnerships	<p>Description of any partnerships with other institutions, organizations, or community groups. Also including, Roles and contributions of each partner and Letters of support or commitment from collaborators.</p> <ul style="list-style-type: none"> • If there is any plan of transferring the biological specimen/material to the abroad (international) or with the international collaboration must produce Material Transfer Agreement (MTA). • Memorandum of Understanding (MoU) should be in place to protect mutual interest and to ensure compliance for cultural sensitivity if participating in collaborative research with international countries.
13.	Evaluation & Dissemination Plan	<p>Methods for evaluating the project's success and impact, including:</p> <ul style="list-style-type: none"> • Plans for disseminating findings to relevant stakeholders, including the academic community, policymakers, and the public. • Researchers or the stakeholders should achieve accountability in publication and dissemination of the results in the conferences or seminars. • Final report of the study should be submitted to the funding agency or relevant Ethics Committee after completion of the study.
14.	Institutional Support & Resources	<p>Description of the resources and support available at the applicant's institution; and Letters of support from institutional leaders or departments.</p>
15.	References	<p>Comprehensive list of all references cited in the research grant application proposal.</p>
15.	Appendices (if allowed)	<p>Additional supporting materials, such as CVs of key personnel, detailed methodology, or supplementary data.</p>

Table-1....Cont.

4 Key Concept of Implementation Research (IR)

1. Implementation Research (IR) should concentrate on questions related to the application of evidence-based interventions.
2. IR should take place in real-world settings, utilizing the same resources, incentives, and operational support that would typically be available (if additional resources are provided as part of the implementation strategy, the study should clarify how these will be maintained and integrated into the existing system).
3. IR studies should demonstrate the 'how' and 'why' behind the health impacts of evidence-based interventions by employing implementation outcome measures and a practical research approach.
4. IR studies should be purpose-driven, balancing the need to tackle immediate implementation challenges while also promoting broader and long-term learning.
5. Successful IR activities require collaboration and partnerships among multiple stakeholders.
6. It is essential to document the key features of IR activities to enhance learning and inform action.

In addition to the above information, grant applicants for implementation research projects are recommended to present a theory of change that demonstrates the result linkage in their proposals. Theory of Change is narrative describing the underlying logic of result of chain, i.e why and how achievement of one level of results contributes to the achievement of next level of results, as depicted in the [Table 2](#), as an example (template).

Inputs →	Processes →	Outputs →	Outcomes →	Impact →
Write all the resources needed to complete the task (people, places, funding, etc).	What are the key activities that will be conducted to reach the goal?	How will we measure the initial success of the project/initiative?	How will we see signs that the project has been effective?	What is the ultimate, strategic impact of the work I want to achieve? This can be bold and visionary
Write all the resources needed to complete the task (people, places, funding, etc).	What are the key activities that will be conducted to reach the goal?	How will we measure the initial success of the project/initiative?	How will we see signs that the project has been effective?	What is the ultimate, strategic impact of the work I want to achieve? This can be bold and visionary

Table 2: Theory of Change Model Template

5 Developing a Grant Budget

When planning a research study and preparing a grant application, it is crucial to identify necessary assistance and team members early. This affects the project budget, and consulting an advisor or program officer can help determine reasonable expenses. Funding agencies typically do not cover costs for new computers for all team members or meetings in expensive locations. It is essential to request the correct amount of funding to complete the research effectively.

An effective proposal budget accurately assesses all expenses, justifies each item, and explains cost calculations. Consider the project timeline, the necessary items for funding, and the host organization's approval time for the proposed budget. Be prepared to respond to any challenges regarding the costs.

A study's budget includes direct and indirect costs:

- Direct costs cover project personnel salaries, employee benefits, equipment, supplies, services, and travel.
- Indirect costs, often called overheads, are not specifically identifiable to the project and include administrative services, procurement, accounting, finance, security, and library services provided by the host organization.
- Cost sharing may be applicable based on the nature of the project and its requirements.

6 Grant Lifecycle and Review Process

The research grant lifecycle involves several stages, starting from identifying funding opportunities to the completion of the research project. Initially, researchers search for suitable funding opportunities that align with their research area.

Once a potential grant is identified, the next step is to develop a research idea and write a detailed proposal that includes a clear research question, methodology, and budget. This proposal undergoes internal review within the researcher's institution, followed by submission to the funding agency.

The submitted proposal then enters the peer review process, where experts evaluate its scientific merit, feasibility, and potential impact. Funders may offer the full grant, decline the application, or offer a smaller amount. If funding is reduced, negotiation and adjustments to project goals, objectives, and timelines may be necessary. The entire process from submission to decision typically takes three to six months but can extend beyond a year.

If the proposal is successful, the researcher receives a grant award notice, and the project is implemented according to the agreed plan and budget. Progress is reported regularly to the funding agency, and a final report is submitted upon project completion.

The lifecycle concludes (refer Figure 1) with a post-award review or audit by the funding agency to ensure compliance with grant terms and proper use of funds.



Figure 1: Grant lifecycle & review process [Source: <https://rmphc.org/pages/gm101/>]

7 Managing a Grant

Efficient coordination and management are necessary for successful implementation of grant projects. Collaboration may also be needed with relevant departments within the organization and outside stakeholders for timely completion of agreed deliverables and outputs.

8 Adherence to the Instructions

Grant agencies evaluate the proposals and the guidelines of the grant proposal which are mentioned in their websites. Please salient features of grant proposals It is important to adhere and go through these guidelines carefully, and exactly. Proposals are sometimes rejected without reviewing if not followed according to the instructions such as font size or page limitations. For instance, the requirement of the font style and size is Times New Roman and 12-point and depends on the grant agency.

9 In Conclusion.....

Above all, never submit an application that's anything less than complete. Pour your heart and soul into every detail, because the road to securing a grant is paved with passion and precision.

Remember, success isn't guaranteed, but your dedication can make all the difference!!!

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