Call for proposals under Extramural Research Programme: Investigator Initiated Projects-Intermediate Grant

Overview and purpose

Indian Council of Medical Research (ICMR) provides financial assistance for Indian scientists working outside ICMR institutes to conduct research in the fields of medicine, public health, and allied disciplines aimed at improving health of Indians under its Extramural Research Programme.

The Investigator initiated <u>Intermediate Grant</u> projects are expected to result in finding solutions to priority health problems for the country by validation or evaluation of interventions that already have been shown to have proof of concept. Thus, the proposed study should stem from a well-documented proof of concept study and designed to achieve impact. The project should lead to significant contributions in generating effective interventions for prevention, diagnosis, treatment, or rehabilitation of those disease conditions. Potential deliverables from these projects should include patent/commercial products, or impactful publications to influence clinical or public health practice. Multi-site studies are encouraged under this call.

The following types of research proposals will be considered. Some indicative examples of each category are given below.

<u>Discovery research</u> aimed at finding novel interventions (basic research). If there is proof of concept of a biomarker which is to be taken for commercialization, is an example of such a study. Projects can focus on diagnostics, devices, therapeutics or vaccines and may include phytopharmaceuticals and traditional medicines and genomic methods/algorithms/tools for personalized medicine etc.

<u>Development research</u> aimed at developing interventions for screening, diagnosis, prevention, treatment of diseases/conditions or make existing interventions including devices & diagnostics simpler, safer, more efficacious, or more affordable. Examples of such research includes development of Point of care tests, molecular diagnostic tests, animal models for diseases appropriate dosage and formulations, artificial intelligence and machine learning predictive tools/models, phase 3 (or equivalent phase) clinical trials of vaccine and therapeutics etc. where safety of the intervention has already been established.

<u>Delivery research</u> or implementation research aimed at learning how to overcome barriers in delivering effective interventions to the people who need them. This will include health system-based interventions in single or multiple large districts; with an aim to increase access, and to successfully implement national health programme or schemes, reducing inequity and improving quality of health care. Methods or techniques of delivery of drugs, vaccine or therapeutics in human system are not considered under this category.

Note: Duplicate proposals or similar to those already submitted under Call for Investigator Initiated Research Proposals under Small Extramural Grants vide .: BMI/ePMS/12127 Dated, 01/03/2023, will be excluded.



Those projects focused on finding solutions for prevention, screening, diagnosis, treatment or rehabilitation of the following diseases or conditions will receive preference for selection.

Table-1: Priority Diseases and conditions

Communicable Diseases	Non-Communicable Diseases	Reproductive, Maternal and Child Health, Nutrition	
One-health	Cancer – breast, cervix, oral, lung and other common cancers	Preconception care	
Tuberculosis	Diabetes	Hypertensive disorders of pregnancy	
Antimicrobial resistance	Cardio-vascular disease	Gestation diabetes	
Malaria	COPD	Intrapartum and post-partum care	
HIV, Sexually Transmitted Infections	Stroke	Comprehensive abortion care and expanding contraceptive choices	
Influenza and other Respiratory infections	Epilepsy	Obstetric Haemorrhage	
Viral Hepatitis	Dementia / Alzheimer's disease	Stillbirths	
Sepsis	Rheumatic Heart Disease	Preterm birth / low birth weight	
Meningitis/encephalitis	Trauma and Burns	Perinatal asphyxia	
Urinary infections Chronic GE/Liver disease		Neonatal sepsis	
Lymphatic Filariasis	Chronic Kidney Disease	Early child development	
Kala-azar/Leishmaniasis	Depression, anxiety	Breastfeeding and Complementary Feeding	
Dengue	Psychosis	Common Paediatric Surgical Conditions	
Rickettsia infections (including scrub typhus and non-scrub typhus rickettsia)	Substance Use Disorders	Paediatric Renal Disorders	
Leprosy	Oral health	Childhood malnutrition	
	NCD risk factors – diet, activity, alcohol, tobacco	Anaemia in women and children	
	Sickle Cell Disease / Thalassemia	Adolescent nutrition	
	Clotting disorders	Primordial prevention-preschool/school health	
	Ophthalmic diseases	Polycystic Ovary Syndrome	
	Conditions associated with Ageing	Endometriosis	

Duration of project and funding: The budget for these grants should be between 2-8 crores. The duration of the project will be for 4 years.

How to apply

A proposal can be submitted for financial support through ONLINE MODE ONLY by the Principal Investigator on behalf of the proposed team of Scientists/ professionals who have a regular employment in Medical Institutes/ Research Institutes/ Universities/ Colleges/ recognized Research & Development laboratories/ Government and semi-government organizations and NGOs (documentary evidence of their recognition including DSIR certificate should be enclosed with every proposal). The research team should have credentials for relevant skills, experience and demonstrated ability to solve health problems under consideration.



<u>ICMR scientists/institutes are not eligible to apply in this call.</u> ICMR scientists may be named as co-investigators in these projects, but no funds will be given to ICMR institutions or scientists in these cases.

Proposal Review Process

Two independent experts will screen and score each project proposal. The scoring criteria are as follows:

1.	Rationale of the project – is it likely to solve a priority problem?	20
2.	Possible impact – is it likely result in patent/commercial product,	
	or influence clinical protocol/public health policy?	20
3.	Methodology – are study methods appropriate to achieve the objectives?	20
4.	Implementation strategy – is the study feasible in a timely manner?	20
5.	Review of study team strengths and experience	20

Projects that receive a score of at least 60 will be shortlisted for review by a Project Selection Committee. Proposal Improvement workshops with PIs may be organized by ICMR to address comments and incorporate suggestions of the Project Selection Committee.

Timeline

Activities	Date
Release of Call	01-June-2023
Last date for submission of proposal*	15-July-2023
Review and selection	30-Sep-2023
Proposal improvement & final submission of documents	15-Nov-2023

^{*} ICMR epms portal will accept proposals against Extramural Research Programme: Investigator Initiated Projects-Intermediate Grant between 15th June-2023, 00:00 hrs IST to 15th July-2023 17:00 hrs IST



Important note for the submission of proposal:

- 1. Submission portal will open from 15th June-2023
- 2. Open the ICMR Electronics Project Management System (e-PMS) portal https://epms.icmr.org.in. The user manual of e-PMS (under Guidelines \rightarrow e-PMS manual) is available at the portal.
- 3. Project proposal submission is three steps process in e-PMS:
 - Step 1: PI registration/ Login (https://epms.icmr.org.in/userLogin)
 - Step 2: Verify email ID and complete/update PI profile
 - Step 3: Proposal submission
- 4. After completing mandatory section of PI profile, click on "Proposal submission →Click on Submit new proposal → Select the program from drop-down box as "Investigator-initiated Research Proposals" →Fill the form step by step.
- 5. Please submit the budget in prescribed format
- 6. Inclusion of at least one Co-PI from PI's institute is mandatory.
- 7. PIs are advised to submit proposal well ahead of the last date, since servers may be overloaded and slow to respond.
- 8. For any queries related to the call, please contact

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Scientist C

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ANNEXURE_I: Format for submission of Proposal under Extramural Research Programme: Investigator Initiated Projects-Intermediate Grant

PART-A

- 1. **Title of the proposed research project (up to 25 words):** should be **specific**, **concise** and yet sufficiently descriptive and informative.
- 2. **Summary (up to 250 words):** A structured summary should contain the following subheadings: Rationale/ gaps in existing knowledge, Novelty, Objectives, Methods, and Expected outcome.
- 3. Does it cover a priority area? If yes please select the most appropriate one from the list below:

Communicable Diseases	Non-Communicable Diseases	Reproductive, Maternal and Child Health, Nutrition	
One-health	Cancer – breast, cervix, oral, lung and other common cancers	Preconception care	
Tuberculosis	Diabetes	Hypertensive disorders of pregnancy	
Antimicrobial resistance	Cardio-vascular disease	Gestation diabetes	
Malaria	COPD	Intrapartum and post-partum care	
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	Ophthalmic diseases	Polycystic Ovary Syndrome	
	Conditions associated with Ageing	Endometriosis	

4.	. Area of research (Please mark primary and secondary area of research as appropriate):				
	\Box D	iscovery:	Primary/ Secondary		
	\Box D	evelopment:	Primary/ Secondary		
	\Box D	elivery:	Primary/ Secondary		
5.	Keywords: Six keywo	ords separated by	comma which best describe your project may be provided.		



- 6. **Abbreviations:** Only standard abbreviations should be used in the text. List of abbreviations maximum of ten may be given as a list.
- 7. **Problem Statement (up to 500 words):** State the currently available information to present the problem adequately, focusing on the reported proof of concept.
- **8.** Rationale of the study (up to 250 words): Mention how the research question addresses the critical barrier(s) in scientific knowledge, technical capability, and/or programmatic/clinical/lab practice and its relevance to local, national, and international context with relevant bibliography.
- 9. Hypothesis/ Research question (up to 100 words): Please provide details.
- 10. **Study Objectives (up to 25 words/ objective):** Define the objectives clearly and in measurable terms; mention as primary and secondary objectives, if necessary. Do not include more than 3-4 objectives.
- 11. **Methodology:** Include objective-wise work plan under the following sub-headings:
 - a. Study design
 - b. Study site: Please do not use proper nouns for site names.
 - c. Methods (e.g. PICO)
 - d. Sample size
 - e. Implementation strategy
 - f. Statistical analysis
 - g. Ethical issues
- 12. Expected outcome/ Deliverables aligned with research question (up to 100 words):
- 13. Future plan based on expected outcomes (up to 100 words):
- 14. Whether the study is going to generate new intellectual property Please provide details
- 15. Timelines with achievable targets: GANTT/ PERT chart to be included.



PART-B

- **16.** Preliminary work done by the PI including the source of funding (up to 250 words): Proof of concept:
- **17. Skill and experience of the research team**: Highlight only salient points that provides confidence to reviewers that team can implement the project with quality. Include brief CV of PI and Co-PI
- **18. Institutional Support/ Facilities:** Mention the efforts made to achieve inter-departmental or interinstitutional collaboration needed for study implementation, details of coordination between clinical, laboratory and data management procedures,:
- 19. **Laboratory facilities** (*in-vitro*/ *in-silico*): institutional resources such as animal houses, instruments/ equipment and other physical resources available for use in the proposed project.
- 20. **Budget:** Budget should be as per ICMR guidelines available on the website. Justifications for all sub-headings under budget (as per ICMR format) are to be provided in detail.
- 21. Conflict of Interest Declaration (if any): PI will be asked to submit declaration, if shortlisted.
- 22. Additional supplementary information including figures, tables, flow diagrams, etc. can be shared as PDF (20-30 KB).



Short Resume format (PI/Co-PI) (Maximum two pages)

Name:	
Qualifications:	
Designation:	
Institute:	
	_
Date of Birth	
Domain Expertise	
Articles in Pub Med (Past 10 years)	
H-index	
Fellow of Academies	

• Maximum of 10 primary research publications related to the proposal

Publication details in AMA style	Impact factor of journal	Name of policy/programme/ protocol document or patent/commercialization of
	or journar	products where cited.

(Publications as first, last or corresponding authors)

• Experience as Investigator:

Short title of project (Max. 10 words)	Role PI/Co-PI	Funding agency	Amount of funding	Reference of main publications
eg Immediae KMC and Survival of LBW infants	PI	WHO	200,00,000	NEJM 2021; 384: 2028-38



Format of Budget for ICMR Extramural Call (Staff, Equipment, Contingency/Consumables and Travel Allowance)

Staff/M	anpower				
Sl. No.		Salary (As per ICMR Project guidelines)			
Justifica	ntion of Staff/Manpowe	er			
Equipn	nent				
Sl. No.	1 1			Justification	Mode of Proposed disposal
Conting	gency				
Detail			Breakup with Justification		
Year 1: Total Amount (e.g. 50,000) (amount is just for reference)		1) Item 1: 20,000/- 2) Item 2: 30,000/-			
Year 2:					
Year 3:					
Consun	nables				
Detail				Breakup with Jus	tification
Year 1:	Total Amount (e.g. 5.0)	0 000) (amount is		1) Item 1: 2	00 000/-
Year 1: Total Amount (e.g. 5,00,000) (amount is just for reference)				,00,000/-	
Year 2:					
Year 3:					



Format of Budget for ICMR Extramural Call (Staff, Equipment, Contingency/Consumables and Travel Allowance)

Travel Allowance		
Detail		Justification
Year 1:		
Year 2:		
Year 3:		
	1	
Overhead charges(as per rules)		
Grand Total		
Signature of the Principal Investigator with Stamp	Accounts Officer with Stamp	Signature of Head of the Institute with Stamp
Date:		