<u>CALL FOR INVESTIGATOR-INITIATED RESEARCH PROPOSALS FOR FIRST IN</u> <u>WORLD CHALLENGE GRANTS (2025)</u>

Background:

- Over the years Indian Council of Medical Research (ICMR) has encouraged researchers within and outside ICMR by providing funding support through various research schemes.
- Inspired by Chandrayan-3 landing on the south pole of the moon, making India the first country to do so, ICMR had launched initiative "First in the World Challenge" research grant to support innovative, out of the box ideas from researchers across the country.

Purpose:

- The scheme inspires researchers to come up with novel, futuristic ideas, new knowledge generation, discovery/ development of breakthrough health technologies (vaccines, drugs/ therapeutics, diagnostics, interventions etc.) which have never been thought, tested or tried in the world till date.
- The proposal must have forward thinking research ideas with significant wide- ranging impact and if successful should have potential 'first of its kind' biomedical and technological innovations for better health outcomes in the global context. Proposals aiming for mere increment in the knowledge or process innovation will not be considered for this scheme.
- ICMR understands that odds of the success may be variable but still considers it worth taking the risk to achieve something which no one in the world has ever done before. It is a high risk, high reward initiative. Each supported proposal may not be successful, but if a project is successful it can result in a revolutionary change in health area.

Funding norms:

- If the proposal gets selected, funding will be released for the selected proposals upon receiving of the required documents (Institutional undertaking, IEC as applicable, bank details); as per the ICMR norms.
- Following three types of projects will be considered under this scheme:
 - A. Project to develop **'<u>Proof of concept'</u>**: Projects submitted at conceptual stage to design proof of concept. (up to 1 Cr each); maximum duration 2 years
 - B. Project to develop **<u>'Prototypes':</u>** Shortlisted projects to develop prototype of product in the next stage. (up to 4 Cr each); maximum duration 3 years
 - C. Project to develop <u>'Final product/model'</u>: Shortlisted projects to develop final product/ implementation model (up to 8 Cr each); maximum duration 4 years
 - PI can submit proposals of any one of the types mentioned above depending on the current stage of the innovation.
 - > Projects will have flexible duration, funding will be linked to deliverables.
 - > PI can submit the deliverables of a particular stage at any point of time within the project

duration and request for funding for the next stage.

> ICMR will review the deliverables and decide on suitability for funding for the next stage.

<u>Eligibility:</u>

- The proposals can be initiated by an individual or by a team of researchers (either single or multiple institutes)
- Each team application must designate ONE Principal Investigator from the team, who will be responsible for technical, administrative and financial management of project.
- Following are eligible for applying in the call:
 - 1. Scientist/Faculty working at Govt. Medical colleges/INIs/ ICMR institutes/universities/recognized research and development laboratories and NGOs. Those institutes registered under UGC, AICTE, NMC will not require DSIR certificate.
 - 2. Other Private Institutions and NGOs (Registered with the DSIR, Govt. of India) working as research organizations. [Note: NGOs are required to be registered at the NITI Aayog Portal of NGO DARPAN] and Indian startup /MSME/ Industry are also eligible to apply.

Application:

- Proposal must be submitted only through e-PMS portal of ICMR.
- For ICMR Scientists, SAC approval is not mandatory at the time of applying in the call.
- Please make sure all details are filled in proposal. Proposal will not be considered for review purpose if any area is not filled properly/completely. It will be rejected technically.

Selection

- For reviewing proposals, a selection committee will be formed comprised of experts of high-level experts, innovators, policy makers, scientists with outstanding record for conducting and nurturing research and innovation in biomedical domain.
- First Step in selection will be to confirm that the proposal is indeed First in the World.
- Second step would be shortlisting of proposals by individual committee members based on relevance and impact.
- The final step will be discussion and decision on the final awardees.

Timelines		
Date of release of call	25/07/2025	
Last date of submission	30/09/2025, 05:00 PM	
Declaration of Results	End of November 2025	

Important note for the submission of proposal

- 1) Submission portal will open from 25/07/2025.
- After completing mandatory section of PI profile, click on 'Proposal Submission' →Click on 'Apply Proposal' → Select 'First in the World Challenge, ICMR' from the call for proposal / advertisement drop-down → Click on 'Apply New Proposal' and fill the form step by step.
- 3) Kindly ensure that all sections are adequately filled with the necessary details.
- 4) Inclusion of at least one CO-PI from PI's institute is mandatory.
- 5) PIs are advised to submit proposal well ahead of the last date, since servers may be overloaded and slow to respond.
- 6) For any query related to the call, please mail to the address given below; other modes of communication won't be entertained.
- 7) Proposal will not be considered for review if any area is not filled properly/ filled incompletely and will be technically rejected.
- For any Technical concerns related to application process/ other queries, you may write to: E-mail: po.epms@icmr.gov.in

Format for Proposal

Part A

(No personally identifiable information for PI/institute should be included in part-A)

1. Title of the proposal (up to 25 words): should be specific, concise and yet sufficiently descriptive and informative.

2. Summary (up to 350 words): A structured summary should contain the following subheadings:

- (i) Rationale/ gaps (50 words):
- (ii) Novelty (50 words):
- (iii) Objectives (80 words):
- (iv) Methods including regulatory strategy (100 words):
- (v) Expected outcome and its effects/ uses and possible impact on public health/ clinical care: (70 words)

3. Keywords: Six keywords separated by comma which best describe your project may be provided.

4. Abbreviations: Only standard abbreviations should be used and must be spelt out in full before their use.

A list of maximum ten abbreviations may be given.

5. Problem Statement (up to 500 words): State the currently available information to adequately present the problem.

6. Rationale of the study (up to 250 words): Mention how the developed innovation helps to break critical barrier(s) in current scientific knowledge, technical capability, and/or programmatic/clinical/lab. practice and its relevance to local, national and international context with relevant bibliography.

7. Gaps to be covered through proposed work with special reference to the project: (50 words)

8. Study Objectives (up to 20 words/ objective): Do not include more than 4 objectives.

9. Significance of the project (750 words)

- i. Clinical Need: (100 words)
- **ii.** Technical Solution: (100 words)
- iii. Major applications of the proposed technology: (100 words)
- **iv.** What is the status of your technology (including the regulatory status)? Provide your own experimental results, if any. (150 words)
- **v.** Current best practice and competition? (150 words)
- vi. How will proposed innovation technology be superior to existing ones and practices? (150 words)

10. Methodology: (1000 words)

- Please describe how the work (various steps/activities involved) will be carried out: (300 words)
 (you may provide information in flowchart/ diagram/ blue-prints etc. in Additional documents and upload it at point no 16, if desired. Please refer correct number of fig/ diagram in text).
- ii. Sample size calculation: if needed (50 words)
- iii. Statistical analysis: if applicable (50 words)
- iv. <u>Validation of developed technology: (if applicable)</u>
 - Internal validation (in Lab.): (100 words)
 - External validation (in field/ relevant environment): (100 words)
 - Prototype demonstration in operational environment: (100 words)
 - Technology readiness for deployment: (100 words)
 - Escalation to commercialization: (100 words)
 - Ethical issues (if any) and their resolution: (100 words)

11. Implementation strategy: Provide a GANTT/ PERT chart to be uploaded.

12. Expected outcome/ Deliverables: Expected outcome and its effects/ uses and possible impact on public health/ clinical care (up to 200 words)

13. Future plans for technology development/ technology transfer: based on expected outcomes (up to 100 words):

14. Conflict of Interest Declaration (if any): PI should include a statement for conflict of declaration (if any). (30 words)

15. Intellectual Property Status: (30 words)

16. Additional supplementary information including figures, tables, flow diagrams, etc can be shared as PDF (5 MB).

17. Institutional Support/ Facilities and Manpower:

Mention the efforts made to achieve inter-departmental or inter institutional collaboration needed for implementation, details of coordination between clinical, laboratory and data management procedures, etc.

Part-B

- 1. **Preliminary work** done by the PI including the source of funding (up to 250 words): (**Proof** of concept if applicable)
- 2. Skill and experience of the research team: Highlight only salient points (along with 5 relevant publications/ achievements) that provides confidence to reviewers that PI and team can implement the project with quality.
- **3. Institutional Support/ Facilities:** Share a brief note on inter-departmental or interinstitutional collaboration needed for study implementation. Do mention the role and responsibility of the PI and Co- PIs.
- **4.** Laboratory facilities (in-vitro/ in-silico): Mention the institutional resources (such as animal house, instruments/ equipment etc.) available for use in the proposed project for participating institutes.
- **5. Budget:** provide a detailed budget break up. Justifications for all sub- headings under budget (as per ICMR format) are to be provided in detail. Without appropriate justification, the project will not be considered for review.

Short Resume format (PI/Co-PI):

Name of PI/Co-PI	
Date of Birth	
Domain Expertise	
Number of articles in PubMed (Past 10 years)	
H-index	
Fellow of Academies	

(Maximum of 10 primary publications and/ or Granted/ filed Patents/ technology developed by PI/ team)

Publication	Impact	Author type	Name of
details in AMA style	factor of journal	(first/corres ponding/ co-author)	policy/program/ protocol document or patent/commercializ ation of products where cited.

Experience as Investigator:

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Short title of project	Role	Funding agency	Amount of	Reference of main
(Max. 10 words)	PI/Co-PI		funding	publications

Ongoing (approved or sanctioned) research projects (funded by ICMR):

Project ID	Title	Grant amount	Start date	End date

Format of Budget

(Staff, Equipment, Contingency/Consumables and Travel Allowance)

Staff/Manpo	wer				
Sl. No.		Salary (As	per ICMR	Project	
		guidelines)			
Justification	of Staff/Manpe	ower			
Equipment					
S1.	Equipment	Estimated cost with	ith appropriate	Justification	Mode of Proposed
No.	Name	supporting docun			disposal
Contingen	cy				
Detail			Breakup with Justification		
Year 1:					
Year 2:					
Year 3:					
Year 4:					
Consumab	les				
			-		
		Breakup with Justification			
Year 1:					
Year 2:					
Year 3:					
Year 4:					

Travel Allowance	
Detail	Breakup with Justification
Year 1:	
Year 2:	
Year 3:	
Year 4:	
Overhead charges (as per rules)	
Grand Total	

Justification must be given in adequate detail; else the proposed budget item will be removed from the approved grant.