#### A. Background:

The Indian Council of Medical Research (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world. Over the years ICMR has encouraged researchers within and outside ICMR by providing funding support through various research schemes.

To move ahead of the curve, ICMR is looking for innovative, out of the box ideas from researchers across the country. Inspired by Chandrayan 3 landing on the south pole of the moon, making India the first country to do so, Indian Council of Medical Research (ICMR) is launching a new initiative <u>"First in the World Challenge"</u> research grant.

#### **B.** Purpose

This will inspire our scientists to come up with innovative ideas for finding solutions to difficult health problems. The scheme aims to foster novel, out of the box, futuristic ideas, new knowledge generation, discovery / development of breakthrough health technologies (vaccines, drugs/ therapeutics, diagnostics, interventions etc.) which has never been thought, tested or tried in the world till date. The proposal must have bold 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 'incremental' knowledge' or 'process innovation 'will not be funded through this scheme.

It is a high risk, high reward initiative, odds of success may be variable; But ICMR considers it worth taking the risk to achieve something which no one in the world has ever done before. This program believes in taking big chances for big rewards. Every attempt may not work out, but the successes will bring about huge revolution in biomedical science.

<u>Funding norms:</u> The investigator will decide on the budgetary heads. Funding will be released upon receiving of the required CODAL documents (Institutional undertaking, IEC as applicable, bank details)

- A. Project to develop Proof of concept: Projects submitted at conceptual stage to design proof of concept. (up to 1 Cr each); maximum duration 2 years
- B. Project to develop Prototypes: Shortlisted projects to develop prototype of product in the next stage. (up to 4 Cr each); maximum duration 4 years
- C. Project to develop Final product/model: Shortlisted projects to develop final product/implementation model (up to 8 Cr each); maximum duration 4 years
- ✓ PI can submit proposals suitable for any one of the three stages.
- ✓ Projects will have flexible duration of funding with a cap at each stage.
- ✓ PI can submit the final result of an approved project at any point of time within the project duration and request for funding for next stage.
- ✓ ICMR will review the result and decide on suitability for funding for next stage.

#### **Eligibility:**

- Individual: 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.
- 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.
- NRI/OCI/PIO holders. As per DHR-ICMR norms.
- The proposals can be submitted by an individual or by a team of researchers (either single or multiple institutes).
- Every team application must designate ONE Principal Investigator from the team, who will be responsible for technical, administrative and financial deliverables.

#### **A.** Application:

Only through ePMS portal of ICMR.

For ICMR Scientists, SAC approval is **NOT** mandatory for applying in this call.

#### **B.** Selection:

Selection committee will be formed by experts of high repute, innovators, policy makers, scientists with outstanding record for conducting and nurturing research and innovation in biomedical domain.

#### C. <u>Timelines</u>:

Date of release of call: 30-October-2024, Wednesday
Start date of submission: 05-Nov-2024, 1100 hrs, Tuesday
Last date of submission: 12-Dec-2024, 1700 hrs, Thursday

#### Important note for the submission of proposal:

- 1. Submission portal will open from 05-Nov-2024
- 2. After completing the mandatory section of PI profile, click on 'Proposal submission'→ Then go to Apply proposal → Select 'First in the World Challenge, ICMR' from the dropdown →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 maybe overloaded and slow to respond.
- 6. For any query related to the call, please mail to the addresses given below; other modes of communication won't be entertained.

Technical concerns related to application process	Any other concerns related to call
Email: po.epms@icmr.gov.in	Email: <u>pramit.ghosh@icmr.gov.in</u>

Annexure-I: Format for Project Proposal

#### **PART-A**

(No personally identifiable information for PI/institute should be included in part-A, Sl 1-14)

- 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. Keywords: Six keywords separated by comma which best describe your project may be provided.
- **4. Abbreviations:** Only standard abbreviations should be used in the text. List of abbreviations maximum of ten may be given as a list.
- 5. Problem Statement (up to 500 words): State the currently available information to present the problem adequately.
- **6. Rationale of the study (up to 500 words):** Justify why it should be considered as First in the World grant. 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.
- 7. Hypothesis/Research question (up to 100 words): Please provide details in PI CO format as applicable.
- **8. 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. Provide specific, measurable and time bound outcomes for each objective.
- 9. Methodology: Include objective-wise work plan under the following sub-headings:
  - a. Study design
  - b. Study area (multiple choice): Community/Hospital/Laboratory
  - c. Sample size estimation and sampling strategy
  - d. Project implementation plan
  - e. Design of statistical analysis
- **10. Expected outcome/Deliverables from the** project i.e., what will be known at the end, if the project achieves all the stated objectives (up to 100 words)
- 11. Immediate next steps following the end of the project (up to 100 words):
- 12. Whether the study is going to generate new intellectual property: Please provide details.
- 13. Timelines with achievable targets: GANTT/PERT chart to be included.

#### Part-B

- 1. **Preliminary work** done by the PI including the source of funding(up to 250 words): (**Proof of concept as applicable**)
- 2. **Skill and experience of the research team:** Highlight only salient points (along with 5 relevant publications) that provide confidence to reviewers that team can implement the project with quality.
- 3. **Institutional Support**/ **Facilities:** Share a brief note on inter-departmental or inter institutional 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. Additional supplementary information including figures, tables, flow diagrams, data collection tool etc. can be shared as PDF (20-30 KB).
- 6. **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. 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 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	Author type (first,corresponding, coauthor)	Name of policy/programme/ protocol document or patent/commercialization of products where cited.

## • Experience as Investigator:

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/N	<b>Ianpower</b>					
Sl. No.		Salary (As per ICMR Project guidelines)				
Justific	ation of Staff/Manpow	/er				
Equipn	ment					
S1.	Equipment Name	Estimated cost wa	ith appropriate	Justification	Mode of Proposed	
No.		supporting docum	nent		disposal	
Contin	gency					
Detail			Breakup with Justification			
	Year 1:					
Year 2:						
	Year 3:					
Consui	mables					
Detail			Е	Breakup with Ju	stification	
	Year 1:					
	Year 2:					
	Year 3:					
Travel	Allowance					
Detail		Breakup with Justification				
	Year 1:					
	Year 2:					
	Year 3:					
Overh	ead charges (as per r	ules)				
Grand	Total					

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