Overview and purpose:

Under its Extramural Research Programme, Indian Council of Medical Research (ICMR) funds Centre for Advanced Research (CAR) to promote advanced research by experienced research teams.

What the CAR is expected to do:

Conducting decisive research that helps in solving an important healthcare problem by a research team. It can have single or multiple linked research projects with clear deliverables. It encourages in-depth research, to generate new knowledge and solutions for health problems in multiple aspects of causation, progression, management and prevention.

Priority diseases or conditions:

Research teams planning to undertake studies in finding solutions for prevention, screening, diagnosis, treatment or rehabilitation of the following diseases or conditions will receive preference for selection as CAR.

Table-1: Priority Diseases and conditions

Communicable Diseases	Non-Communicable	Reproductive, Maternal and Child Health,		
	<u>Diseases</u>	<u>Nutrition</u>		
One Health	Cancer	Anaemia& micronutrient deficiencies		
AMR	Cardiovascular diseases	Childhood malnutrition		
Tuberculosis	Diabetes Mellitus	Early childhood development (particularly improving neuro-developmental outcomes of small and sick newborns)		
Vector Borne diseases	Chronic Kidney Disease	Neonatal Mortality, preterm-LBW, asphyxia, neonatal sepsis		
Respiratory infections	Chronic Respiratory diseases	Genetic disorders/congenital anomalies		
Neurological infections	Neurological conditions	PCOS/ endometriosis		
Hepatic infections	Mental Health	Antenatal, intra-natal and postnatal care		
Sepsis	Blood disorders including hemoglobinopathies	Post-conception care		
HIV/AIDS & other STIs	Rare diseases	Obstetric haemorrhage		

Over-arching:

- Ageing and disabilities
- Oral Health
- Mitigating Health impacts of Climate Change

Duration of project and funding:

Current budgetary ceiling is between <u>INR 8 crores to less than INR 15 crores per CAR</u>. <u>Duration of project will be for a maximum period of five years</u>.

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 Non-Governmental Organizations. The research team should have credentials for relevant skills, experience and demonstrated ability to solve health problems under consideration.

Research teams with outstanding achievements, recognition and proven excellence in the area and having the necessary infrastructure to carry out further work are encouraged to apply.

The institute and principal investigator will be supported to establish CAR with an aim that the facility so created would continue to function even after this funding gets over. CAR should develop trained health research personnel. After completion of the project, the host institute would be expected to take over activities of the centre as permanent activity.

ICMR scientists/institutes are not eligible to apply under this call. ICMR scientists may be named as co-investigators in these projects, but no funds will be given for ICMR institutions or scientists in these cases. Format for project proposal is provided at Annexure-I & II.

Tentative Timeline:

• Release of call: 19-Sep-2024; (Thursday)

• Last date of submission: 21-Nov-2024; 1700hrs (Thursday)

Review and short listing: 03-Jan-2025
Detailed proposal submission: 31-Jan-2025
Final selection: 15-Feb-2025
Release of fund: 21-Mar-2025

Format for submission of Concept note for Centre for Advanced Research

- 1. Title of the proposed CAR (up to 30 words): should be specific, concise and yet sufficiently descriptive and informative.
- 2. Summary (up to 1500 words): A structured summary should contain the following subheadings:
 - a. Rationale/gaps in existing knowledge (300 words),
 - b. Novelty (200 words)
 - c. Objectives (100 words)
 - d. Methods (500 words)
 - e. Expected outcome (200 words)
 - f. Evidence for expertise on specific area of research (200 words)

Experts will review and score each project proposal. The scoring criteria are as follows:

1.	Skill and experience of Research team (PI, CoPI):			
2.	Publications* (01-April-2017 to 31-Mar-2024) including IF?			
3.	Impact of publications on (public health or clinical protocol)			
4.	Concept note:			
	 Choice of the problem for research on solutions 	02		
	 Novelty and appropriateness of methods 	02		
	 Likelihood of success 	02		
	 Possible impact expected 	04		
Total		30		

(* Publications as first, last or corresponding authors)

A full proposal needs to be submitted for shortlisted concept notes. Template for the same is available in Annexure-I

Important note for the submission of proposal:

- 1. Submission portal will open from 19-September-2024
- 2. After completing mandatory section of PI profile,

Go to Proposal submission \rightarrow Click on Call for proposal \rightarrow Click on 'Apply Proposal' \rightarrow Select 'Call for Centre for Advanced Research (CAR),under Extramural Research Program, ICMR – 2024' from the dropdown \rightarrow 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 technical concerns related to the application process, please mail to po.epms@icmr.gov.in

ANNEXURE I: Format for submission of full proposal for Centre for Advanced Research

- 1. **Title of the proposed research project (upto25 words):** should be **specific**, **concise** and yet sufficiently descriptive and informative.
- 2. **Summary (upto 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 <u>one</u> from the list below: Ref: Table-1
- 4. **Keywords:** Six key words separated by comma which best describe your project may be provided.
- 5. **Abbreviations:** Only standard abbreviations should be used in the text. List of abbreviations maximum often may be given as a list.
- 6. **Problem Statement (upto 500 words):** State the currently available information to present the problem adequately.
- 7. **Rationale of the study (upto 500 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.
- 8. **Hypothesis**/ **Research question (upto 100 words):** Please provide details in PICO format as applicable.
- 9. **Study Objectives (upto 250 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.
- 10. **Methodology:**Includeobjective-wiseworkplanunderthefollowingsub-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
- 11. **Expected outcome/ Deliverables from the** project i.e.,what will be known at the end,if the project achieves all the stated objectives (upto 100 words)
- 12. Immediate next steps following the end of the project (up to 100 words):
- 13. Whether the study is going to generate new intellectual property Please provide details
- 14. Timelines with achievable targets: GANTT/ PERT chart to be included.

Part-B

- 1. **Preliminary work** done by the PI including the source of funding (upto 250 words): (**Proof of concept**)
- 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 (20-30KB).
- 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 PubMed (Past10years)	
H-index	
Fellow of Academies	

• Maximum of 10 primary research publications related to the proposal.

Publication details in	Impact factor	Author type (first, corresponding,	Name of policy/ programme/ protocol
AMA style	of journal	coauthor)	document or patent/commercialization of
			products where cited.

• Experience as Investigator:

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

• Ongoing (approved or sanctioned) research projects (fundedbyICMR):

Project ID	Title	Grant amount	Start date	End date

Format of Budget for ICMR Extramural Call

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

Staff/N	Manpower				
Sl. No.		Salary (As per ICMR Project guidelines)			
Justific	cation of Staff/ Manpov	ver			
Equip	ment				
Equip	ment				
Sl.	Equipment Name	Estimated cost wi	th appropriate	Justification	Mode of Proposed
No.		Supporting docum	nent		disposal
G 4					
Conti	ngency				
Detail			E	Breakup with Ju	stification
Year1:					
Year2:					
Year3:					
Year4:					
Year5:					
Consu	mables				
Detail			Е	Breakup with Ju	stification
Year1:					
Year2:					
Year3:					
Year4:					
Year5:					
Trave	l Allowance				
Detail		Justific			
Year1:				atio	n
Year2:					
Year3:					
Year4:					
Year5:					
Overh	ead charges (as per ru	ules)			
Grand	l Total				

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