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Encouragement to apply for 'Centre for Advanced Research (CAR) grants for providing support for clinical studies to medical device & diagnostic technologies being developed under ICMR-DHR-Centre for Excellence (CoEs) program at various IITs under ICMR-Medical Device & Diagnostics Mission Secretariat (MDMS)

Background

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. ICMR has been supporting the development of various medical device & diagnostic of public health importance in synergies with National Health Mission (NHM) & Ayushman Arogya Mandir, through its various programs/schemes under Medical Device & Diagnostics Mission Secretariat (MDMS). Some of the ICMR supported technologies in medical device & diagnostics sector having potential public health importance have reached a stage wherein they need support for pre-compliance gap analysis and validation by conducting clinical studies.

To advance these technologies further, ICMR is inviting proposals from government and non-government organization under Centre for Advanced Research (CAR) scheme, currently advertised on ICMR website, for carrying out clinical evaluation studies of these high priority medical device & diagnostic technologies (Annexure-I) at their well-equipped state-of-art-facilities/ collaborating partners. The studies conducted under 'CAR' scheme will help in validation of these technologies leading to development of safe and effective products for wider societal benefits.

Through such collaborations, it is envisaged to achieve the following objectives:

1. To establish a robust medical device and diagnostics development validation network in India to spur innovation for safer medical devices.

2. To develop safe and effective technologies in conformance with applicable standards as per regulatory requirements of Medical Device Rules, 2017.

Applicants with relevant expertise & necessary infrastructure are encouraged to submit proposals in accordance with the project submission guidelines, available on ICMR website and also given below:

What we are asking now:

A list of technologies recommended by the Committee is available on the ICMR website (Link) and brief information on each of the technologies is placed at Annexure-I. Applicants are requested to combine number of studies in one proposal aligning with their area of expertise

and available infrastructure under open call for proposals under ICMR extramural grant with details mentioned below:

Centre for Advanced Research (CAR):

A research team which has relevant experience of undertaking advance research and can get involved in a cluster (3-5) studies can submit proposal for setting-up the CAR at host institute for clinical studies.

1. Duration of project and funding: Current budgetary ceiling is 15 crores per CAR. Duration of project will be for 5 years.

2. Please read the guidelines for more details:
   https://epms.icmr.org.in/extramuralstaticweb/callforproposal/CAR%202024_2.pdf

3. Last Date for submission of proposal: **21-Nov-2024**

S.No	Name of the Technology	Brief Information	Nation Health Programme
	List of Technologies Recommended for Innovation Mapping for providing support for Clinical Evaluation studies		
1	ArmAble: Game based Upper Limb Rehabilitation Device for Neuroplasticity	An intensive and engaging (game based), rehabilitation therapy for individuals with upper extremity motor deficit at clinic and home, which can minimize the burden on the therapists, without compromising the quality of therapy.	Palliative and Rehabilitative Care, Target Diseases-Stroke patients, rehabilitation and assistive technologies NHM
2	Image guided Boiling Histotripsy Device for Treating Breast Cancer (HIFU)	High-Intensity Focussed Ultrasound (HIFU) system to treat Breast Cancer non-invasively.	National Cancer Control Programme
3	Customized 3D printed PCL-silk scaffolds for implants	The current technology utilizes the PCL and silk in which reinforcement effect of silk microfibers in the PCL matrix not only enhances its mechanical strength but also cellular behavior of the scaffolds making it osteoconductive for for the application of maxillofacial reconstruction surgeries.	Oral, Eye and ENT care, Mental Health
4	AI enabled portable platform for cervical cancer screening	AI enabled platform intended to enable the pathologist with the qualitative review and interpretation of digital images of surgical pathology glass slides prepared from formalin-fixed paraffin-embeded (FFPE) tissue for cervical cancer screening	First level care for emergencies and trauma, including free essential drugs and diagnostic services
5	Electrochemotherapy for soft Tissues	An Electro-chemotherapy device for tumour specific treatment –palliative as well as adjuvant to address cancer related problems in soft tissues	National Programme on Prevention and Control of Diabetes, CVD and Stroke
6	PoC for Dengue, Sickle Cell Anaemia & Malaria	Point-of-care device for testing and monitoring the prevalence and progression of the vector born diseases like Dengue, Sickle Cell Anemia & Malaria. Instant test results and digitization enabling health data linking to Ayushman Bharat Digital Mission (ABDM), which is a digital healthcare initiative of the National Health Authority (NHA).	National Sickle Cell Anaemia Elimination Mission, National Vector Borne Disease Control Programme
7	Paper based point of care device –PrePAP QR	Point-of-care device for cervical health screening with PrePAPQR measuring Vaginal pH health for early detection and intervention of vaginal diseases.	National Cervical Screening Program
8	Paper based point of care devices –Gluco QR	The GlucoQR is a cutting-edge, paper-based technology tailored for the quantitative measurement of plasma glucose levels in fresh capillary whole blood samples, like those obtained from finger pricks. In-vitro diagnostic tool combines a reagent-embedded strip with an AI-ML powered mobile app and dashboard, enabling effective monitoring and report generation.	National Programme on Prevention and Control of Diabetes, CVD and Stroke
9	CuriO an affordable & refreshable Tactile Tablet for people with borne & late visual impairment	CuriO is a non-braille human computer interface (HCI) to enable blind people code mainstream programming languages with professional competency. An affordable tactile tablet with a 2 -way interface that displays visual content such as diagrams, graphs and geometry as an array of tactile embossed pixels for users to touch and feel.	National Programme for Control of Blindness
10	Paper based point of care devices- Uro QR	Point of care testing device for urine parameters (Proteins, ketones & glucose) kit for regular tracking and monitoring via mobile application.	National programme for prevention & control of cancer, diabetes, cardiovascular diseases & stroke (NPCDCS) and Chronic kidney disease management
11	Antenatal ultrasound imaging	AI Model for fetal standard plane identification, helpful in detection of abnormalities	Ayushman Bharat - Maternal & Child Health Care
12	Vionix Spectra	Robust plasma spectroscopic technology for detection of multiple analytes in laboratories & hospitals, critical for toxicological screening	Emergency care
13	NeuraStim - A Neuromuscular Stimulation Enabled Orthosis to Restore Grasping in	A wearable, at-home rehabilitation device designed to improve hand mobility by training multiple grasps at the same time	Non-Communicable Diseases
14	Wireless Arthroscope	This device is designed to enhance flexibility, efficiency, and ergonomics. This eliminates wired connections and integrates a battery-powered LED light source. Effective thermal management for improved perfomance and extended device lifespan.	Non-Communicable Diseases
15	HaemurEx, Clinical Chemistry Analyzer with ability to transmit information	Analyzer for blood & urine testing at low resource set up for evidence based medicine practice through Tele-health Set up in remote & rural Areas	Health Systems Strengthening
16	Mousewear Device	Head-wearable device that enables hands-free operation of Computers & Smartphones with simple head movements.	Health Systems Strengthening, Elderly and Palliative health care services