

Call for Expression of Interest (EoI) under ICMR Intramural — Centre for Collaborative Research (CCR) Scheme — NITM, Belagavi: 2026

Annexure-I: Potential research area for collaboration

Name of the ICMR institute for collaborative research	ICMR - National Institute of Traditional Medicine (NITM), Belagavi
Disease/health conditions of interest	Immunological and Chronic Disease Conditions
Strengths of the Institute team	<p>ICMR–NITM, Belagavi, is a premier institute dedicated to research in Traditional Medicine (TM) and Integrative Health. The institute functions across two major verticals: (a) Traditional Medicine & Integrative Health, and (b) diseases of regional and national priority. In the TM domain, NITM’s mandate extends beyond codified AYUSH systems to include non-codified traditional practices and folklore-based healing systems prevalent across India. Adopting a reverse pharmacology approach, traditional interventions with preliminary evidence of effectiveness are subjected to systematic scientific evaluation. The institute is equipped with in silico, in-vitro, in-vivo, cell-based, and molecular biology platforms to assess pharmacological efficacy, safety, and underlying mechanisms. NITM has strong expertise in working with medicinal plants, crude extracts, fractions, and isolated phytochemicals, supported by robust phenotypic and biochemical screening capabilities for the rapid identification of leads.</p> <p>The institute houses comprehensive preclinical research facilities, including small animal models (rodents, zebrafish, and C. elegans), cell culture laboratories, and molecular assay platforms. TM interventions are rigorously evaluated across disciplines for identification, characterization, mechanistic validation, safety, and preclinical efficacy. Promising interventions, after refinement and standardization, are advanced to clinical evaluation. NITM has successfully initiated multicentric randomized controlled trials and community-based studies to assess classical Ayush formulations, proprietary products, and TM-based solutions for priority health conditions. NITM is uniquely positioned to design and oversee the end-to-end scientific validation of TMs in India.</p>
What strengths is the Institute looking for in the Collaborative Centre for joint Research	<ul style="list-style-type: none"> • The proposed CCR should have proven expertise in immunological/ molecular/ mechanistic studies of the natural products, including but not limited to pharmacology, biomedical research on infectious and non-communicable diseases. • The CCR should employ advanced mechanistic bioassays, omics technologies, advanced molecular biology tools, methods in immunology, in silico tools, advanced imaging techniques, and appropriate biological models to elucidate the mode of action and the underlying biochemical and molecular pathways. • Essential capabilities should include immunology, biochemistry, molecular biology, and imaging within in vitro and in vivo systems as applicable. • Strong publication records and demonstrated translational research experience are essential, along with prior experience in managing such projects.
How the CCR is going to complement the objectives of the Institute	<p>The proposed CCR will augment ICMR-NITM’s capabilities by providing molecular and/or immunological insights, advanced mechanistic methodologies, novel bioassay platforms, and crucial interdisciplinary expertise.</p> <p>The CCR with experience in immunology, molecular biology, and systems pharmacology will refine mechanistic hypotheses to strengthen the pre-clinical/ clinical findings of ICMR-NITM. This integration will accelerate data generation and improve the scientific rigour of phytopharmacological investigations and understanding pathway-specific mechanisms. Collaborative efforts will foster knowledge sharing, capacity building, joint research publications, expedited product development, and clinical translation. The CCR’s multidisciplinary strengths will help to bridge current research gaps in botanical therapeutics, offering a contemporary biomedical framework harmonised with traditional medicine research.</p>

<p>Translational value of the collaboration</p>	<ul style="list-style-type: none"> • Clinical Translation: Understanding the mechanistic pathways of TM formulations/ products will address unmet needs in areas like chemotherapy-induced cardiotoxicity, viral infections, antifungal-resistant dermatophytosis, dengue thrombocytopenia, anaemia, osteoarthritis, diabetic foot ulcers, and obesity. • Regulatory & Commercial Value: Outcomes will enable the essential data, ready to be submitted for regulatory approvals, patent filings, licensing, and export opportunities. • Public Health Impact: The mechanistic data will promote the clinical use of these herbal formulations/ products. The data will also help in the evidence-based integration of these herbal formulations/ products with the conventional healthcare system, leading to improved patient care and confidence. • Economic Value: The outcomes of the collaboration in the form of validated, scientifically proven herbal formulation will lead to IPR and commercialization, which result in financial benefits. This will also enhance the technology transfer and commercialization potential of the validated TMs. • Scientific Value: High-impact publications advancing the knowledge base on the biological actions of TMs, which will increase their global acceptability.
<p>Expected deliverables in 5 years</p>	<ul style="list-style-type: none"> • Validated TMs: A minimum of eight standardised formulations/ products, including a few from the indicative list above, will be validated in terms of molecular mechanism-of-action. • Regulatory Dossiers: The dossiers will be prepared for each of these formulations, ready for regulatory submission. • Intellectual Property: Patents filed on novel extracts/formulations may be licensed for commercialisation. • Publications and guidelines: High-impact publications on the clinical practice and integrated use of the selected TM formulations. • Public Health Tools: Standardised SOPs for further validation of similar products or similar health conditions; tools to understand the interplay of the formulations with their respective conventional medical care.