भारतीय आयुर्विज्ञान अनुसंधान परिषद
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य और परिवार
कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research
Department of Health Research, Ministry of Health
and Family Welfare, Government of India

Date: 18/05/2022

CALL FOR PROPOSALS

For developing novel tools and technologies for improving the diagnosis and treatment of venomous snake bite under the "ICMR-National Task Force for Research on Snake Bite in India"

The Indian Council of Medical Research (ICMR) function under the Department of Health Research (DHR), Ministry of Health & Family Welfare, Government of India, is the apex biomedical research body in the country for formulation, co-ordination, and promotion of medical research. The ICMR has always attempted to address itself to the growing demands of scientific advances in biomedical research on the one hand, and to the need of finding practical solutions to the health problems of the country, on the other. The overall goal of ICMR-DHR is to generate evidence to inform policy, program and practices pertaining to health care in India.

ICMR has set up a Task Force (TF), the "ICMR-National Task Force for Research on Snake Bite in India" for expanding and strengthening research on Snake Bite and published a ***"White Paper on Venomous Snakebite in India"*** elaborating the current situation and challenges on venomous snakebites in the country and outlines a road map towards mitigation of these challenges and what are the next step(s) being planned to make further progress.

BACKGROUND:

Snakebite is a neglected tropical disease (NTD) and contributes about 95% of the total snakebites of the world in developing and tropical countries. The estimated number of snakebites worldwide is about 5.4 million, resulting in 2.5 million envenomation and 81,000 to 138,000 deaths, annually.

Venomous snakebite is a significant cause of morbidity and mortality in India, especially in the rural hinterlands affecting mostly males between 20 and 55 years of age, the productive age-group. The socio-economic fallout of this is immense, in the case of death of the only earning male member of the house as is not uncommon.

It is estimated that there are over 1,000,000 snakebites in India alone causing 58,000 deaths annually and significant disability in almost four times the number. Although, India is the home to more than 300 species of snakes of which about 60 species are venomous or mildly venomous. Among the venomous species, majority of snakebites in India, however, result from the 4 major venomous species ('Big four') namely *Russell's viper (Daboia russelii), common Indian Cobra (Najanaja), common krait (Bungarus caeruleus) and saw-scaled viper (Echiscarinatus)* are distributed throughout the country even though not uniformly through the length and breadth as distribution is dependent on multiple factors.

PURPOSE OF THE CALL:

Most of the fatalities occur due to the delay in reaching hospital in time, which are preventable. Given the fact that India lacks a commercially available snake venom detection kit (SVDK), clinicians depend on the 'syndromic approach' for the diagnosis of envenomation. The syndromic approach involves observing for

signs and symptoms along with blood tests, of which the whole blood clotting test is most commonly employed to diagnose viperidae bites, to decide as to whether there has been envenomation. It is only after envenomation is ascertained that **Anti-snake venom** (ASV) is infused, the only scientifically proven treatment for venomous snakebite.

Considering the issues related to snake bite problem in India, ICMR invites proposals for developing novel diagnostic tools and therapeutics agents to address the problem of snake bite on either of the following:

1. Development of novel diagnostic assays/kits for the detection of snake venom/ identification of the snake bites at species level.
2. Development of novel therapeutic agents to treat snake envenomation.
3. Development of improved anti-snake venom to neutralize snake envenomation of the Big 4 and anti-snake venom to neutralize snake envenomation of medically important snakes other that the Big 4.

WHO CAN APPLY:

Any researcher/scientist who are a regular faculty in Govt. Medical Colleges/Research Institutes/Universities/Research and Development organization/recognized private Medical Colleges/Institutes/NGOs having well-established proof as principle/leading investigator in the development of novel diagnostic tools or therapeutic agents in the relevant areas at least, in 3 such project in the past.

PROPOSALS WHICH WILL NOT FALL WITHIN THE SCOPE THIS CALL:

1. Any R and D projects involving basic exploratory research having no immediate translational outcome will not be considered.
2. Foreign collaboration is not allowed under the call.
3. Any proposal with incomplete document will not be considered.

DURATION OF PROJECT: 36 months.

FUNDING SUPPORT (GRANT): Rs. 1.5 Cr. for each project.

DATE FOR SUBMISSION OF PROPOSAL:

Start Date : 19/05/2022 Time 9:00 a.m.

End Date : 17/06/2022 Time 5:00 p.m.

HOW TO APPLY: The full proposal should be submitted through ONLINE MODE ONLY. The steps to be followed for online submission are:

1. Open the ICMR Electronics Project Management System (ePMS) portal: https://epms.icmr.org.in
2. The project proposal submission is three steps process in ePMS
    - Step 1: PI Registration/Login
    - Step 2: Verify e-mail Id and complete/update PI Profile
    - Step 3: Apply for full proposal and then click submit new proposal.

INSTRUCTION FOR SUBMISSION ONLINE:

1. Click on **"LOGIN** and select *"Register'* for new registration OR else if already registered provide details to login and enter into e-PMS portal.
2. After registration in the portal, login in the portal. Verify your registered email and complete the PI profile. PI profile includes Personal detail such as Salute, Name, DOB as per 10th certificate, Details of 10th (Board name, roll number, Year of passing), Attachment (10thcertificate/mark sheet), Gender (Male/Female), Category (GEN, OBC, SC, ST), State, District, Institute Name (if name doesn't exist in the drop down list then there is an option to add the new institute also), Designation, Nature of Employment, Department, Broad Area of Research, Subject Area.
3. After completing mandatory section of PI Profile, click on "Submit New Proposal" under "Proposal Submission" menu.
4. The user manual of e-PMS (under Guidelines-> e-PMS menu) is available at https://epms.icmr.org.in Before proceeding to submit the proposal, it is suggested to read user manual and guidelines; and make ready all relevant information, documents and research plan.
5. Contact to po.epms@icmr.gov.in for any technical issue or query. Response/redressal may take up to 2 working days depending on the workload.

DOCUMENT TO BE ATTACHED: The following documents should be submitted along with each proposal:

1. Certification from the head of the institute that the institute is having adequate infrastructures for conducting the proposed research study.
2. List of research publications for the last 5 years in the relevant area.
3. List of ongoing projects as PI.

FOR ANY QUERY, PLEASE CONTACT:

Proposal submission related query	Program related query
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