



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

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

INDIAN COUNCIL OF MEDICAL RESEARCH
DIVISION OF EPIDEMIOLOGY AND COMMUNICABLE DISEASES

Call for proposal on Research areas in Leishmaniasis

Visceral leishmaniasis (VL or Kala-azar) is a deadly tropical disease caused by the protozoan parasite genus *Leishmania*. VL is endemic in >80 countries, however, 90% of the global cases are reported in six countries: Brazil, Ethiopia, India, Somalia, South Sudan, and Sudan. In India, VL is widely prevalent in the 54 districts of four endemic states of India namely Bihar, Jharkhand, Uttar Pradesh and West Bengal.

National Health Policy (2002) envisaged KA elimination by 2010 which was revised to 2015. VL elimination strategy in the Indian subcontinent, that has a current goal of reducing the incidence of VL to below 1/10,000 of population by the year 2020.

However, as the incidence of VL declines towards the elimination goal, greater targeting of control methods will be required to ensure appropriate early action to prevent the resurgence of VL. Though many of the efforts were to strengthen the elimination programme, but they did not necessarily arise from research needs of the national programmes. Research gaps still exist and many areas of study remain unexplored.

This call will encourage interdisciplinary, innovative, close to practice research in the field of Leishmaniasis. Invited proposals may address one of the below mentioned research gaps:

A. Epidemiological

1. Comprehensive epidemiological studies (indigenous/imported) in visceral leishmaniasis and cutaneous leishmaniasis

- a) to assess pockets of transmission in understudied endemic and non-endemic states reporting leishmaniasis.
 - b) to characterize parasite variants and establish phylogenetic origin and genetic relatedness of the parasite species/subspecies
1. To test a model for integrated surveillance of vector borne diseases as three parasitic VBDs are in elimination mode and many geographical areas are co-endemic.
 2. To establish the role of Post Kala azar Dermal Leishmaniasis (PKDL), latent human carriers, HIV-VL co-infected, cured VL cases and animals in transmission

A. Diagnostics

1. Tools or biomarkers to detect active disease (Antigen-based/ nucleic acid based diagnostic) that can be used
 - a) at peripheral health facility to discriminate between post-treatment cure versus relapse;
 - b) to predict the progression in an asymptomatic carrier to active VL;
 - c) to measure parasite load as test of cure to monitor the efficacy of new drugs;
 - d) threshold level of parasites associated with progression to disease and transmission to sandflies & others;
 - e) to detect VL in HIV co-infected patients who are immunocompromised.

B. Post Kala azar Dermal Leishmaniasis (PKDL)

1. Burden studies (active case finding) on PKDL load in community and the prevalent forms (macular, maculo-nodular or nodular) in different VL epidemiological settings.
2. Test to distinguish PKDL from other dermatological conditions like leprosy
3. Studies to document failure/resistance and relapse rates after Miltefosine treatment and
4. New drug treatment regimen (oral, mono or combination) to lower the relapse rates.

C. Vector and Vector Control

1. Bionomics of *P. argentipes*. Effect of climatic factors including rainfall and temperature on sandfly density in different settings.
2. Impact of IRS as a vector control measure and on disease; Monitoring of insecticide resistance, mechanisms and rate of resistance in vectors
3. Supplementary/novel vector control strategies targeting exophagic, exophilic *P. argentipes*, accompanied by rigorous vector population monitoring.

4. Studies on correlation of entomological and epidemiological data in a given area during a defined period to develop a model that predicts the reduction in disease and identify hotspots for transmission and control.
5. Xenomonitoring of *P. argentipes* as a routine surveillance tool with an appropriate rapid response for vector control.

D. Community Behaviour and Positive Changes – for Visceral Leishmaniasis (VL), Cutaneous Leishmaniasis (CL), Post Kala azar Dermal Leishmaniasis (PKDL), Co-infections

1. Studies to understand barriers to timely health-seeking and compliance to treatment and preventive measures including vector control in different epidemiological settings.
2. Development of an appropriate tailor-made intervention package and its impact in improving reporting and treatment.

ELIGIBILITY

Individuals holding permanent positions in Medical colleges/Universities, educational and research institutes, NGOs (possessing DSIR certificate).

HOW TO APPLY

Duration of the research proposals should be preferably up to two years. All projects involving research on human beings/animals must be cleared by the Human ethics committee/Animal ethics committee of the respective institute.

Applicants may submit full-length proposal online following ICMR guidelines www.main.icmr.nic.in.

To submit a proposal online, please follow the following steps:

1. Go to ICMR website www.main.icmr.nic.in
2. Go to Grants, click on 'Extramural Adhoc', then
3. Click on new user for registration as project investigator (PI). If already registered need not register again
4. Using the user ID and password begin submission of proposal by clicking on advertisement

5. Enter title of the call: ‘**Call for proposal on Research areas in Leishmaniasis**’

6. Click on broad area as ECD, select ‘**Call for proposal on Research areas in Leishmaniasis**’ as discipline

7. Major discipline: Leishmaniasis

8. Programme officer: Dr. Manju Rahi, Scientist F, Division of Epidemiology and Communicable Diseases

IMPORTANT TIMELINES

1. Call start date: **14th August 2020**

2. Call end date: **30th September 2020 (extended) till 5:00 PM**

EVALUATION

The following criteria will be used to evaluate proposals

1. Novelty, applicability and Justification for research

2. Work carried out by PI/ institution till now/ competence of PI

3. Infrastructure, staff available, grants received till now, publication if any in the area of proposed research

4. Budget requirement