

Curriculum Vitae

Dr. Rajendra Ku. Baharia, Scientist B, NIMR Field u NADIAD, Gujarat

Scientific Research Interest: Core area: “Malaria Parasitology and Vector Biology”

Research Experience:

2. Research Scientist:

- Worked on Genomics data analysis of Dengue and H1N1 viruses in Rajasthan.
- Submitted Dengue Genome sequences (28) to National Centre for Biotechnology Information (NCBI), Bethesda, MD USA.

3. Scientist in NIMR:

- Presently, working on Malaria Epidemiology and Vector Biology and control. The research work are undertaken in collaboration with Commissionerate of Health, WHOPEs (WHO) and Industries.
- Organizing Training for State Health Department Personnel's in Malaria Microscopy and Entomology.

Scientific Achievement:

WHOPEs (WHO, Pesticide Evaluation System) Project:

1. Permethrin 3.0 LLINs Phase-III trials
2. Fludora Fusion Insecticide, Phase-III trials

WHO, (Therapeutic Efficacy Trials of Antimalarial Drug):

ACT trials in Plasmodium Falciparum.

Extramural Project:

1. ICMR Extramural :

1. Vector Bionomics Project : Completed.
2. Low density Infection: to be initiated
3. Vector Biology in Endemic Area: to be initiated

Sponsored Project:

1. Larvicide Phase-III Trials. To be initiated.
2. LLINs Phase-III Trials. To be initiated.

Extramural State Govt Funded:

1. User Rate Pattern of LLINs
2. Command and Non command area : Malaria epidemiology and Entomology Study

ICMR INTRAMURAL:

1. Malaria in pregnancy
2. Economic Burden of Dengue and Chikungunya.

Administrative Experience: Officiating as Officer In charge having, charge of Administrative and Research Laboratories (Parasitology and Entomology)

Research Publications:

1. Baharia RK, Tandon R, Sharma T, Suthar MK, Das S, Siddiqi MI, et al. (2015) Recombinant NAD-dependent SIR-2 Protein of *Leishmania donovani* Immunobiochemical Characterization as a Potential Vaccine against Visceral Leishmaniasis. PLoS Negl Trop Dis 9(3): e0003557. doi:10.1371/journal.pntd.0003557.
2. Reema Gupta, Pramod K. Kushawaha, Mukesh Samant, Anil K Jaiswal, Rajendra K Baharia and Anuradha Dube. Treatment of *Leishmania donovani* infected Hamster with Miltefosine: Analysis of mRNA cytokine expression by Real-Time PCR, Lymphoproliferation, Nitrite production and Antibody responses. *J Antimicrob Chemother.* 2011 Nov 25. 2011. PMID: 22121191
3. Rati Tandon, Sharat Chandra, Rajendra Kumar Baharia, Sanchita Das, Pragya Misra, Awanish Kumar, Mohammad Imran Siddiqi, Shyam, Sundar and Anuradha Dube. Studies on characterization of Proliferating

Cell Nuclear Antigen of *Leishmania donovani* clinical isolate and its association with antimony resistance. *Antimicrob Agents Chemother.* 2014 Jun;58(6):2997-3007. doi: 10.1128/AAC.01847-13. Epub 2014 Mar 10.

4. Sumit Joshi¹, Narendra Kumar Yadav¹, Keerti Rawat¹, Chandradev Pati Tripathi¹, Anil Kumar Jaiswal¹, Prashant Khare¹, Rati Tandon¹, Rajendra Kumar Baharia¹, Sanchita Das¹, Reema Gupta¹, Pramod Kumar Kushawaha¹, Shyam Sundar², Amogh Anant Sahasrabudhe³ and Anuradha Dube^{1*} Comparative analysis of cellular immune responses in treated *Leishmania* patients and hamsters against recombinant Th1 stimulatory proteins of *Leishmania donovani*. *Front Microbiol.* 2016 Mar 22;7:312. doi: 10.3389/fmicb.2016.00312. eCollection 2016. PMID:27047452
5. Das S, Shah P, Baharia RK, Tandon R, Khare P, Sundar S, Sahasrabudhe AA, Siddiqi MI, Dube A. Over-expression of 60s ribosomal L23a is associated with cellular proliferation in SAG resistant clinical isolates of *Leishmania donovani*. *PLoS Negl Trop Dis.* 2013 Dec 5;7(12):e2527. doi: 10.1371/journal.pntd.0002527. eCollection 2013. PMID:24340105
6. Rati Tandon, Sharat Chandra, Rajendra Kumar Baharia, Sanchita Das, Pragya Misra, Awanish Kumar, Mohammad Imran Siddiqi, Shyam, Sundar and Anuradha Dube. Molecular, biochemical characterization and assessment of immunogenic potential of Cofactor -independent phosphoglycerate mutase against *Leishmania donovani*. *Parasitology.* 2018 Apr;145(4):508-526. doi: 10.1017/S0031182017001160. Epub 2017 Jul 10.
7. Angel, A., Angel, B., Joshi, V., Joshi, A.P., Baharia, R.K. and Rathore, S. First study of complete genome of Dengue -3 virus from Rajasthan, India: genomic characterization, amino acid variations and phylogenetic analysis. *Virology Report Virology Reports 6 (2016) 32–40.*
8. Joshi, A.P., Angel, A., Angel, B., Joshi, V., Baharia, R.K. and Rathore, S. In-silico Designing and Testing of Primers for Sanger Genome Sequencing of Dengue Virus Types of Asian Origin. *J Genomics.* 2018 Apr 10;6:34-40. doi: 10.7150/jgen.22460.
9. A novel Multiplex RT-PCR for simultaneous detection of Malaria, Chikungunya and Dengue infection (MCD-RT PCR)- Under Review
10. Phase-III) evaluation of the efficacy and residual activity of Fludora Fusion indoor residual spraying in comparison to clothianidin, deltamethrin and bendiocarb for malaria vector control in Gujarat state, India. ((In press)
11. Small scale (Phase II) evaluation of the efficacy and residual activity of Fludora Fusion indoor residual spraying in comparison to clothianidin, deltamethrin and bendiocarb for malaria vector control in Gujarat state, India. ((In press)
12. Bionomics of malaria vector(s), sibling species composition and to establish their role in malaria transmission in Central Gujarat, India- Under Preparation
13. Economic burden estimation associated with dengue and chikungunya in Gujarat, India- Under Preparation.

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