Brief Profile

Name	Dr. Ram Das
Current Designation	Scientist E
Research Discipline	Microbiology and Molecular Biology
Department / Division	Protein Biochemistry
Official E-mail ID	ramdas.icmr.nimr@gov.in
Educational Qualification	Ph.D.
Research experience (in	27 Years

Research Interest/Thrust Areas

Molecular diagnosis of *Plasmodium* species, molecular genotyping of *Plasmodium* malaria parasites and molecular mechanisms of relapse malaria

Number of projects handled as:

Principal Investigator - 7

Co-Principal Investigator - 15

Co-investigator- 7

Number of doctorate / post-doc students mentored

As Guide -

As Co-guide - 2

List of significant publications (Please give the details of the publications in APA format)

1. **Das, R**., Vashisht, K., Savargaonkar, D., Mercy Aparna, L. L., Nayak, A., & Pandey, K. C. (2024). Genetic diversity of the *PvMSP*-3α gene in *Plasmodium vivax* isolates circulating in the National Capital Region (NCR) of India. *Parasite Epidemiology and Control*, *26*(e00362), e00362. doi:10.1016/j.parepi.2024.e00362.

2. **Das, R**., Vashisht, K., Kori, L., Singh, K., Kumar, G., Hasan, I., Pandey, K. C. (2024). Detection of the infective *Plasmodium falciparum* gametocytes by RT-qPCR assay from a malaria-endemic region of Northeastern India. *Frontiers in Tropical Diseases*, *5*. doi:10.3389/fitd.2024.1366462

3. Kumar, J., Kumar, A., Gupta, Y., Vashisht, K., Kumar, S., Sharma, A., **Das, R**.,Pandey, K. C. (2024). A cub and sushi domain-containing protein with esterase-like activity confers insecticide resistance in the Indian malaria vector *Anopheles stephensi*. *The Journal of Biological Chemistry*, *300*(10), 107759. doi:10.1016/j.jbc.2024.107759

4. Prashar, C., Devkar, H., Vandana, V. Kona MP, Singh OP, **Das, R.,** Vashisht K, Thakur N, Pandey KC. Potent targeted larvicidal activities of marine-derived *Bacillus* sp. bacterial extracts on mosquito vectors. *Sci Rep* **15**, 8094 (2025). https://doi.org/10.1038/s41598-024-80777-5

5. **Das, R**., Vashisht, K., & Pandey, K. C. (2023). A novel multiplex qPCR assay for clinical diagnosis of non-human malaria parasites-*Plasmodium knowlesi* and *Plasmodium cynomolgi*. *Frontiers in Veterinary Science*, *10*, 1127273. doi:10.3389/fvets.2023.1127273

6. Lata, S., Kumari, S., **Das, R**., Pasi, S., & Dhiman, R. C. (2021). Typical and atypical cutaneous

leishmaniasis in Himachal Pradesh (India). *Heliyon*, *7*(6), e07282. doi:10.1016/j.heliyon.2021.e07282

7. Vashisht, K., Srivastava, S., Vandana, V., **Das, R**., Sharma, S., Bhardwaj, N., Pandey, K. C. (2022). Cyclic constrained immunoreactive peptides from crucial *Plasmodium falciparum* proteins: potential implications in malaria diagnostics. *Translational Research: The Journal of Laboratory and Clinical Medicine*, *249*, 28–36. doi:10.1016/j.trsl.2022.06.008

8. Mittal, M., Biswas, S. K., Singh, V., Arela, N., Katoch, V. M., **Das, R**., Mohanty, K. K. (2018). Association of Toll like receptor 2 and 9 gene variants with pulmonary tuberculosis: exploration in a northern Indian population. *Molecular Biology Reports*, *45*(4), 469–476. doi:10.1007/s11033-018-4182-z

9. Savargaonkar, D., Sinha, S., Srivastava, B., Nagpal, B. N., Sinha, A., Shamim, A., **Das, R.,** Valecha, N. (2018). An epidemiological study of dengue and its coinfections in Delhi. *International Journal of Infectious Diseases: IJID: Official Publication of the International Society for Infectious Diseases*, *74*, 41–46. doi:10.1016/j.ijid.2018.06.020

10. Kumar, D., Kumar, G., **Das, R**., & Agrawal, V. (2018). Strong larvicidal potential of silver nanoparticles (AgNPs) synthesized using *Holarrhena antidysenterica* (L.) Wall. bark extract against malarial vector, *Anopheles stephensi* Liston. *Process Safety and Environmental Protection : Transactions of the Institution of Chemical Engineers, Part B*, *116*, 137–148. doi:10.1016/j.psep.2018.02.001

11. Kumar, D., Kumar, G., **Das, R.,** Kumar, R., & Agrawal, V. (2018). In vitro elicitation, isolation, and characterization of conessine biomolecule from Holarrhena antidysenterica (L.) Wall. callus and its larvicidal activity against malaria vector, *Anopheles stephensi* Liston. *Environmental Science and Pollution Research International*, *25*(7), 6783–6796. doi:10.1007/s11356-017-1038-3

12. **Das, R.,** Dhiman, R. C., Savargaonkar, D., Anvikar, A. R., & Valecha, N. (2016). Genotyping of *Plasmodium vivax* by minisatellite marker and its application in differentiating relapse and new infection. *Malaria Journal*, *15*(1), 115. doi:10.1186/s12936-016-1139-3

13. Raizada, N., Sachdeva, K. S., Chauhan, D. S., Malhotra, B., Reddy, K., **Das, R.,** Dave, P. V., Dewan, P. K. (2014). A multi-site validation in India of the line probe assay for the rapid diagnosis of multi-drug resistant tuberculosis directly from sputum specimens. *PloS One*, *9*(2), e88626. doi:10.1371/journal.pone.0088626

14. Bharti, R., **Das, R.,** Sharma, P., Katoch, K., & Bhattacharya, A. (2012). MTCID: a database of genetic polymorphisms in clinical isolates of *Mycobacterium tuberculosis*. *Tuberculosis (Edinburgh, Scotland)*, *92*(2), 166–172. doi:10.1016/j.tube.2011.12.001

15. Singh, V., Gaur, R., Mittal, M., Biswas, S. K., **Das, R.,** Girdhar, B. K., Mohanty, K. K. (2012). Absence of nucleotide-binding oligomerization domain-containing protein 2 variants in patients with leprosy and tuberculosis. *International Journal of Immunogenetics*, *39*(4), 353–356. doi:10.1111/j.1744-313X.2012.01085.x

16. Faujdar, J., Gupta, P., Natrajan, M., **Das, R.,** Chauhan, D. S., Katoch, V. M., & Gupta, U. D. (2011). *Mycobacterium indicus pranii* as stand-alone or adjunctimmunotherapeutic in treatment of experimental animal tuberculosis. *Indian J Med Res*, *134*, 696–703.

17. Lavania, M., Katoch, K., Sharma, R., Sharma, P., **Das, R**., Gupta, A. K., … Katoch, V. M. (2011). Molecular typing of *Mycobacterium leprae* strains from northern India using short tandem repeats. *The Indian Journal of Medical Research*, *133*, 618–626. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21727660

18. Singh, M., Jadaun, G. P. S., **Das, R.,** , Srivastava, K., Chauhan, V., Mishra, R., Katoch, V. M. (2011). Effect of efflux pump inhibitors on drug susceptibility of ofloxacin resistant Mycobacterium tuberculosis isolates. *The Indian Journal of Medical Research*, *133*, 535–540. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21623040

19. Narang, R., Narang, P., Jain, A. P., Mendiratta, D. K., Joshi, R., **Das, R.** Lavania, M., Katoch, V. M. (2010). Disseminated disease caused by *Mycobacterium simiae* in AIDS patients: a report of three cases. *Clinical Microbiology and Infection: The Official Publication of the European Society of Clinical Microbiology and Infectious Diseases*, *16*(7), 912–914. doi:10.1111/j.1469-0691.2009.03021.x

20. **Das, R.,** Gupta, P., Singh, P., Chauhan, D. S., Katoch, K., & Katoch, V. M. (2009). Association of mutations in rpsL gene with high degree of streptomycin resistance in clinical isolates of *Mycobacterium tuberculosis* in India. *The Indian Journal of Medical Research*, *129*(1), 108–110.

21. Dave, S., Faujdar, J., Kumar, P., Gupta, P., **Das, R**., Parasher, D., Katoch, V. M. (2009). Comparative growth pattern of multi drug resistance versus susceptible isolates of *Mycobacterium tuberculosis* in mice lungs. *The Indian Journal of Medical Research*, *130*(1), 58–62.

22. Singh, M., Chauhan, D. S., Gupta, P., **Das, R.,** Srivastava, R. K., Upadhyay, P., … Katoch, V. M. (2009). In vitro effect of fluoroquinolones against *Mycobacterium tuberculosis* isolates from Agra & Kanpur region of north India. *The Indian Journal of Medical Research*, *129*(5), 542–547.

23. Parashar, Deepti, **Das, R.,** Chauhan, D. S., Sharma, V. D., Lavania, M., Yadav, V. S., … Katoch, V. M. (2009). Identification of environmental mycobacteria isolated from Agra, north India by conventional & molecular approaches. *The Indian Journal of Medical Research*, *129*(4), 424–431.

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25. Jadaun, G. P. S., **Das, R.,** Upadhyay, P., Chauhan, D. S., Sharma, V. D., & Katoch, V. M. (2009). Role of embCAB gene mutations in ethambutol resistance in *Mycobacterium tuberculosis* isolates from India. *International Journal of Antimicrobial Agents*, *33*(5), 483–486. doi:10.1016/j.ijantimicag.2008.10.017

26. Lavania, M., Katoch, K., Singh, H., **Das, R**., Gupta, A. K., Sharma, R., … Katoch, V. M. (2007). Predominance of three copies of tandem repeats in rpoT gene of *Mycobacterium leprae* from Northern India. *Infection, Genetics and Evolution: Journal of Molecular Epidemiology and Evolutionary Genetics in Infectious Diseases*, *7*(5), 627–631. doi:10.1016/j.meegid.2007.05.011

27. Chauhan, D. S., Sharma, V. D., Parashar, D., Chauhan, A., **Das, R.,**Singh, D., Singh, H. B. Katoch, V. M. (2007). Molecular typing of *Mycobacterium tuberculosis* isolates from different parts of India based on IS6110 element polymorphism using RFLP analysis. *The Indian Journal of Medical Research*, *125*(4), 577–581.

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30. Singh, P., Wesley, C., Jadaun, G. P. S., Malonia, S. K., **Das, R.,** Upadhyay, P.,Katoch, V. M. (2007). Comparative evaluation of Löwenstein-Jensen proportion method, BacT/ALERT 3D system, and enzymatic pyrazinamidase assay for pyrazinamide susceptibility testing of *Mycobacterium tuberculosis*. *Journal of Clinical Microbiology*, *45*(1), 76–80. doi:10.1128/JCM.00951-06

31. **Das, R**., Katoch, K., Singh, G., Gupta, P., Malhotra, B., Garg, A., … Vm, K. (2006). Association of mutations in embB locus with high degree of ethambutol-resistance in clinical isolates of *Mycobacterium tuberculosis* in Indian. *Curr Sci*, *91*, 923–925.

32. Gupta, Pushpa, Jadaun, G. P. S., **Das, R**., Gupta, U. D., Srivastava, K., Chauhan, A., Katoch, V. M. (2006). Simultaneous ethambutol & isoniazid resistance in clinical isolates of *Mycobacterium tuberculosis*. *The Indian Journal of Medical Research*, *123*(2), 125–130.

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Mycobacterium tuberculosis isolate with a distinct genomic identity overexpresses a tap-like efflux pump. *Infection*, *32*(2), 109–111. doi:10.1007/s15010-004-3097-x

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