CURRICULUM VITAE

Name: Dr. NALINI MISHRA Designation: Scientist-C Department: Entomology Date of Birth: 20/10/1988

Qualifications:

- ❖ **Ph.D.,** Evolution of life history traits in *Drosophila melanogaster* populations selected for divergent traits: The Role of Parental Age and Stress, Department of Zoology; University of Delhi, 2017.
- ❖ M.Phil., Effects of parental age on progeny fitness traits in *Drosophila melanogaster*, Department of Zoology; University of Delhi, 2012.
- ❖ M.Sc., Zoology (with specialization in Entomology), Miranda House, University of Delhi, 2010.
- ❖ B.Sc., Zoology, Botany, Chemistry, St. Joseph's College for Women, Deen Dayal Upadhyaya Gorakhpur University, 2008.
- ❖ Selected as Technical Officer −B (pay band level-10) at ICMR-VCRC, Puducherry, letter no. ICMR-VCRC/Estt./DR-Tech/2003-2024/1236 dated 06.03.2024

Research Area:

Vector borne diseases (esp arbo-viral/arbo-bacterial diseases), medical entomology, vector/pest biology vector/pest control and its management, evolutionary biology and environment, social insects and animal behaviour, entomological taxonomy

Positions (Experience)

| S. No. | Designation | University/ Institution | Duration |
|--------|---|--|--|
| | | | |
| 1. | JRF | Indian Agriculture Research Institute (I.A.R.I), Pusa, Delhi | From 6 th March, 2012–7 th July, 2012 |
| 2. | Visiting Faculty (Environmental Studies) | Asian Business School of Management (ranked top 15 B–schools in India) | From 13 th September, 2016 – 13 th January, 2017 |
| 3. | Consultant (in Publication Division in Journal of Vector Borne Diseases) | ICMR-National Institute of Malaria Research (NIMR), Dwarka, Delhi | From 03 rd February, 2017- 05 th February, 2019 |
| 4. | Scientist-C (Non-Medical) in Model Rural Health Research Unit (MRHRU), Badoni, Datia (M.P.), ICMR- NIRTH, Jabalpur | Department of Health Research, Ministry of Health and Family Welfare, Government of India under mentorship of ICMR-National Institute for Research in Tribal Health (NIRTH), Jabalpur, (M.P.), | From 06 th February, 2019 - 29 th April, 2022 |

| 5. | Scientist-C (Non- | Department of Health | From 02 nd May, |
|----|---------------------|------------------------|--------------------------------|
| | Medical) in Viral | Research, Ministry of | $2022 - 20^{\text{th}}$ |
| | Research and | Health and Family | October, 2023 |
| | Diagnostics | Welfare, Government of | |
| | Laboratories, ICMR- | India under ICMR- | |
| | RMRC, Gorakhpur | Regional Medical | |
| | _ | Research Centre | |
| | | Gorakhpur, (U.P.) | |
| 6. | Scientist-C | Department of Health | From 20 th October, |
| | (Entomology) | Research, Ministry of | 2023 till present |
| | ICMR-RMRC, | Health and Family | |
| | Gorakhpur | Welfare, Government of | |
| | | India under ICMR- | |
| | | Regional Medical | |
| | | Research Centre | |
| | | Gorakhpur, (U.P.) | |

OList of Research Projects undertaken

| Title of Project | Source of Funds | PI/Co- PI | Duration |
|---|---|--------------|---------------|
| Feasibility of Predicting Vector-borne diseases through Environmental and Entomological Parameters' | 50,000USD((43,78,364.22) under BFI-BIOME Medical INI Grant Program | PI | 3 years |
| Creation of a national network of existing and upcoming high risk pathogens laboratories (BSL-3/4) labs across departments and keeping their 'interlinkages' functional for use during outbreak response across sectors | INR 7372680 | Co-PI | Extension |
| Monitoring resistance to Doxycycline & Azithromycin in AFI/AES cases with scrub typhus in eastern Uttar Pradesh | INR 21938000/- as (intramural) | Co-PI | 3 years |
| Seroprevalence, risk factors and molecular epidemiology of viral hepatitis: A population- based survey in Tharu tribes of eastern Uttar Pradesh | INR 19096800 (intramural) | Co-PI | 3 years |
| Determination of resistance frequency and intensity among field populations of malaria vectors to public health insecticides in use in endemic States of India- | INR 11,37,500/ extramural (Multicentric Task Force study) | Co-PI | One year |
| Studying the prevalence of Asymptomatic malaria and vector bionomics in eastern Uttar Pradesh | INR 20,00,000 (intramural) | Co-PI | 2 years |
| Pan India surveillance for respiratory viruses through DHR-ICMR VRDL Network | INR 7,61,62,320/- (multi- centric) | Co-PI | extension |
| Monitoring of insecticide susceptibility test and cone bioassay on IRS surfaces of Sandflies | INR 20,00,000 (multi- centric) | Co-PI | One year |
| Profile of diseases prevalent in Datia District of Madhya Pradesh, NIRTH/IEC/01/31/2021, institutional ICMR | INR 1000000/-, (Institutional) | Co-PI | Six months |

Publications:

Bibliographical details of last 10 publications

- 1. *Dwivedi, Gaurav Raj; Mishra, Ayush; Singh, Ayush; Singh, Himmat; Kant, Rajni; Mishra, Nalini.* Gorakhpur experience of Japanese Encephalitis Management: A Successful One Health Approach. Journal of Vector Borne Diseases ():10.4103/JVBD.JVBD_171_24, February 15, 2025. | DOI: 10.4103/JVBD.JVBD_171_24
- 2. SthitaPragnya Behera ¹, Nalini Mishra ¹, Aishwarya Shukla, Moni Kumari, Sonal Rajput, Imbisat Fatma, Ashutosh Tiwari, Rajeev Sin gh, Rajni Kant, Gaurav Raj Dwivedi. Genomic investigation of an outbreak of febrile illness with rashes in the eastern Uttar Pradesh, India during March-May 2023. The Microbe https://doi.org/10.1016/j.microb.2025.100243
- 3. Sthita Pragnya Behera, Nalini Mishra, Ramyash Yadav, Aishwarya Shukla, Moni Kumari, Sonal Rajput, Imbisat Fatma, Ashutosh Tiwari, Prashansha Srivastava, Shashikant Tiwari, Rajeev Singh, Satish S Ranawade, Manoj Murhekar, Guarav Raj Dwivedi. An outbreak of acute hemorrhagic conjunctivitis caused by coxsackievirus A24 in Eastern Uttar Pradesh, India 2023. Intervirology 2024; 67:106–113, https://doi.org/10.1159/000540952, IF=3.2, ISSN 1423-0100.
- Hasmatullah Khan1, Vindu Prakash Singh2, Gaurav Raj Dwivedi1, Ayush Mishra1 & Nalini Mishri1 Rare and first case report of a diffused cutaneous leishmaniasis from Uttar Pradesh state, India, Journal of Vector Borne Diseases 62(1), 2025, pp. 125–12, IF= 0.8, ISSN 0972-9062
- Prashansha Srivastava, Aishwarya Shukla, Rajeev Singh, Rajni Kant, Nalini Mishra, Sthita P. Behera, Gaurav R. Dwivedi, Dharmendra K. Yadav. Orientia tsutsugamushi: An Unusual Intracellular Bacteria—Adaptation Strategies, Available Antibiotics, and Alternatives for Treatment. Current Microbiology (2024) 81:236, pg. 1-15, https://doi.org/10.1007/s00284-024-03754-1, springer, IF-2.3 ISSN: 0343-8651, 1432-0991
- Sharma, Suresh; Sarma, Paresh Kumar; Talukdar, Uddip; Talukdar, Ramen; Mishra, Nalini; Baruah, Dipankar; Sultana, Rizwana; Bharali, Abhijit. Serum level of interleukin-6, interleukin-17A, and interferon-α in hospitalized COVID-19 patients and their clinical correlation: A hospital-based case—control study from North-East India. Indian Journal of Allergy, Asthma and Immunology 37(1): p 21-29, Jan–Jun 2023. | DOI: 10.4103/ijaai.ijaai 19_23, Lippincott, ISSN: 2320-4745
- 7. *Mishra N, Barde PV, Awasthi S, Kumawat A, Gaur R, Singh P, Srivastava S and Das A* (2022) Profile of diseases prevalent in Datia District of Madhya Pradesh, India. Front. Public, Health 10:926000. doi: 10.3389/fpubh.2022.926000, fronteirs, Issn: 2296-2565
- 8. *Nalini Mishra*, *Nidhi Krishna Shrivastava*, *Deepak Shivhare and Himmat Singh*, *Wolbachia*: An evolutionary way to combat mosquito borne disease and the challenges in success of the strategy, Int. J. Mosq. Res.2022; 9:2, 65-68, ISSN: 2348-5906 (Online) ISSN Number: 2348-7941 (Print) DOI: 10.22271/23487941.2022.v9.i2a.603
- 9. *Khushboo Sharma, Nalini Mishra and Mallikarjun N. Shakarad*, Evolution of reduced minimum critical size as a response to selection for rapid pre-adult development in *Drosophila melanogaster*. R. Soc. Open Sci 2020; 7:6, 1-9, ISSN: 2054-5703. (*JCR impact factor: 2.51 Thomson Reuters metric*) https://doi.org/10.1098/rsos.191910
- 10. Nalini Mishra, Nidhi Krishna Shrivastava, Ajay Nayak, and Himmat Singh, Wolbachia: A prospective solution to mosquito borne diseases. Int. J. Mosq. Res 2018; 5(2): 01-08, ISSN: 2348-5906. (RJIF: 5.29, Naas Rated: 4.81) [Indexed in Zoological Records (Web of Science) NAASGoogle ScholarCrossRefDOAJScinapse]
- 11. *Chhabra, Hansika, Nalini Mishra, and Mallikarjun Shakarad,* White eye mutation in *Drosophila melanogaster* does not affect fitness a support for a neutral theory of molecular evolution. Dros. Inf. Serv., 2017; 100: 105-111, ISSN: 0070-7333. {Indexed}
- 12. *Nalini Mishra*, *Namita Chauhan*, *Geetanjali Sageena*, *Hansika Chhabra and Mallikarjun N Shakarad*, Relation between parental age and ROS levels in the parents themselves as well as the ensuing progeny in *Drosophila melanogaster*, Journal of Entomology and Zoology Studies, 2017; 5(4): 1877-1881, E-ISSN: 2320-7078, P-ISSN: 2349-6800. (Impact Factor: RJIF 5.48, ICV: 80.67, Naas Rated:5.53) {Indexed}
- 13. *Nalini Mishra*, The need of more sustainable development for greater economic sustainability, ABS Management Research Articles and Application, 2017, 5(1): 57-63, ISBN: 978-81-927282-0-9. (chapter in edited book)
- Nalini Mishra and Mallikarjun N Shakarad, Effects of Parental Age and Substrate Quality on Pre-Adult Fitness of Progeny, IIJR, 2016, 1146-1161, ISSN: 2454-1362. (Citation Impact Factor: 3.75)
- 15. Geetanjali Sageena, Shreya Choudhary, Nalini Mishra, Rakesh Roshan and Mallikarjun Shakarad, Role of Juvenile Environment in pre-adult development and Adult metabolites in *Drosophila melanogaster*, IJERD, 2014, 4:361-370, ISSN: 2249-3131.