



Dr. Laxman Kumar Murmu

Assistant professor (Stage-II)

P. G. Department of Zoology, Berhampur University, Bhanja Bihar,
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Qualification

2009	M.Sc. (Zoology) Utkal University, Bhubaneswar, Odisha
2010	M. Phil (Zoology) Utkal University, Bhubaneswar, Odisha
2022	Ph.D. (Zoology) Berhampur University, Berhampur, Odisha

Area of Specializations

Teaching: Histology, Ecology, Biochemistry, Biology of Invertebrates
Research interest: Parasitology, Ecology, and Systematics

Administrative responsibilities

1. Assistant Superintendent, Indrabati Hostel (25.11.2013 to 31.05.2015)
2. Assistant Superintendent, Bahuda Hostel (01.6.2015 to 01.06.2017)
3. Deputy coordinator, Basic facility for women, XIIth Plan UGC grant (2012-2017)
4. Assistant Superintendent, Indrabati Hostel (01.06.2020 to 31.05.2022)

Professional Experience

1. Junior Lecturer, Govt. Women's College, Keonjhar (24.09.2011 to 31.11.2012)
2. Assistant Professor(I): P.G. Department of Zoology, Berhampur University (1st Dec 2012 to 2nd Feb 2020)
3. Assistant Professor (Stage-II) P.G. Department of Zoology, Berhampur University (3rd Feb 2020 till date)

Conferences/Seminars attended

1. Murmu, L.K. "Gametocytogenesis: The Puberty of Malaria Parasite," presented a poster in the National Seminar on "Current trend on animal science research" organized by P.G. Department of Zoology, North Orissa University, 21-22 March 2014.
2. Murmu, L.K. Impact of Climate on capture fisheries in Odisha, presented a paper in "National Seminar on "Adverse Impact of Global Climate Change and Irregular Monsoon, Agriculture, Aquaculture and Capture fishery in Coastal India and its Management," organized by AABAHANA in collaboration with Department of Zoology, Berhampur University, Odisha, 26-27 March 2016.

3. Murmu, L.K. Conservation efforts for the sustainable utilization of marine fish germplasm resources, presented a paper in the National seminar on “Beach Erosion and Anthropogenic exploitation at coastal line of Odisha and its effect on Olive ridley sea Turtle, Irrawaddy Dolphin, and Fish population and measures for conservation” Organized by AABAHANA Technical collaboration with Dept. of Zoology, Berhampur University, Bhanja Bihar, Ganjam March 29th - 30th,2018
4. Murmu, L.K. Algorithm of genotyping *Plasmodium falciparum* through Loop-mediated isothermal amplification-SNP platform presented a paper in National Seminar on Advances and challenges in the Biological Sciences organized by Department of Zoology, Berhampur University, Odisha, February 12-13,2020
5. Murmu, L.K and Barik, T.K *Plasmodium falciparum*-K13 mutations and ART resistance marker in India, presented a paper in Virtual National Seminars on “Life & Life Processes: Interdisciplinary Approach for Sustainable Development” organized by the Department of Zoology, Goa University, Goa July 19-21, 2021.
6. Murmu, L.K and Barik, T.K. Molecular surveillance of Kelch13 gene in the *Plasmodium falciparum* field isolates from Mayurbhanj district of Odisha, India presented e-poster in the virtual International conference on Genome Biology (ICGB-3) and 53rd Annual Aqua Terr day organized by School of Biological Sciences, Madurai Kamraj University, Madurai, Tamil Nadu. 28TH Feb-2nd March 2022
7. Murmu, L.K and Barik, T.K. Repurposing of ivermectin for treatment of malaria. Presented poster in National Conference on Recent Advances in Chemical Sciences 2023 organized by P.G. Department of Chemistry, Berhampur University, Ganjam, Odisha, (19-20th March 2023)

[Refreshers Courses/ Short-term Courses/Workshop attended:](#)

1. Participated in workshop-cum-training programme on “Application of Bioinformatics tools in Biological Science Teaching and Research,” organized by Bioinformatics Infrastructure Facility Centre, Berhampur University, Odisha (22- 24 March 2013)
2. Attended Orientation Course at Academic Staff College, Sambalpur University (10.08.2013- 06.09.2013)
3. Participated in a national “Bioinformatics and Biodiversity Conservation” workshop organized by Ganapati Sabat Foundation at Gopalpur-on-Sea. on 1st February 2014.
4. Participated in the UGC-sponsored Short-Term course on “Use of SPSS on data analysis” at Academic Staff College, Sambalpur University. 19-24 April 2014
5. Participated in National Workshop on “Biotechnology for Economic Enhancement of Rural Community in Southern Region of Odisha” organized by Post Graduate Department of Zoology, Berhampur University, Berhampur, Odisha, Sponsored by DBT and in association with Socio-Cultural Development Centre, 11th September 2015

6. Participated in National Workshop on “Workshop cum Training on Recent Development and future trends of Bioinformatics in Biological science” organized by Post Graduate Department of Zoology, Berhampur University, Berhampur, Odisha Sponsored by DBT, 26th -27th December 2016.
7. Participated in Five days of training on “Molecular Biology, Next Generation Sequencing, and Bioinformatics” at Yaazh Xenomics, 326, 1st Floor, Thadagam Road, Near GCT College, Coimbatore-641013, Tamil Nadu, India, 16th -20th October 2018.
8. Participated One day workshop on “Role of IPRs and Innovation Management in University Ecosystems” at Khalikote University, Berhampur, Organized by National Research Development Corporation and Khalikote University, 30th October 2018.
9. Attended refresher course at UGC-Human Resource Development Centre, University of Hyderabad, Hyderabad, Telangana, (15.02.2019 to 07.03.2019)
10. Participated One day workshop on “Faunal diversity of Chilika Lagoon” Organized by EBRC, Zoological Survey of India, 26th July 2019.
11. Participated Five-days online-Faculty Development Programme on “Mathematics for Biological Sciences” Organized by Faculty Development Centre, UGC-MHRD, Savitribai Phule Pune University, Pune, 15th -20th June 2020
12. Participated Seven-days virtual workshop on “Science Leadership” Organized by Indian Science Academies and Punjab Central University, 22nd -28th June 2020.
13. Participated Seven-days online-Faculty Development Programme on “Earth & Environment Responses During COVID-19,” Organized by Faculty Development Centre, UGC-MHRD, Savitribai Phule Pune University, 11th -17th July 2020.
14. Participated Seven days online-Faculty Development Programme on Research Methodology: Data Analysis, Reporting, and Publication prospective Organized by Bharathiar School of Management and Entrepreneur Development (BSMED), Bharathiar University, Coimbatore, Tamilnadu 20th July to 26th July 2020
15. Attended and completed SWAYAM ONLINE CERTIFICATION COURSE on “Academic Writing” offered by HNB Garhwal University, Garhwal. 15 weeks course Jan-April 2020
16. Attended and completed NPTEL Online Certification (Funded by Ministry of HRD, Govt. of India) 4-weeks course (Sept-Oct 2020) on “Functional genomics” offered by IIT-Kanpur
17. Participated in Twenty-one days online-Faculty Development Programme on Adopting “Online Teaching Learning Technologies” from 16th Nov-7th Dec 2020 Jointly organized by Dr. BR Ambedkar University Delhi and Dr. BR Ambedkar University Srikakulam
18. Participated in the online UGC STRIDE WORKSHOP on “Molecular Phylogeny and Molecular Docking” from 19th Jan to 27th Jan 2021 at Mizoram University, Aizawl
19. Attended online one week FDP on “E-content development” organized by Teaching Learning Centre, Tezpur University, from 04-08 April 2022 in association with the University of Science

and Technology, Meghalaya.

Publications:

1. **Murmu, L.K.**, Panda, M., Meher, B.R., Purohit, P., Behera, JP., Barik, TK. Molecular surveillance of Kelch-13 gene in *Plasmodium falciparum* field isolates from Mayurbhanj District, Odisha, India, and *in silico* artemisinin-Kelch-13 protein interaction study. *Parasitol Res* 122:717-717 (2023). <https://doi.org/10.1007/s00436-023-07784-9>
2. Nayak, B., Khuntia, B., **Murmu, L.K.** Sahu, B., Pandit, R S., Barik, T.K. Artificial intelligence (A.I.): a new window to revamp the vector-borne disease control. *Parasitol Res* (2023). 122, 369–379. <https://doi.org/10.1007/s00436-022-07752-9>
3. Sahoo, S., Mishra, G., Seth, J.K., **Murmu, L.K.**, Goud, S. New Record of the Mediterranean Recluse Spider *Loxosceles rufescens* (Dufour) from Eastern India. *Indian J. Entomol* (2023).85(1),222-224. <https://doi.org/10.55446/IJE.2022.803>
4. Sahoo, S., Mishra, G., Seth, J.K., **Murmu, L.K.**, Goud, S. Functional capabilities of spiders in support of sustainable agriculture. *Indian J. Entomol.*85(1)122-124(2023). <https://doi.org/10.55446/IJE.2022.689>
5. Tudu, P.C., Sajan, S., **Murmu, L.K.**, Balakrishnan, S., Mohapatra, A. Additional Record of *Oxyperas lentiginosum* (Gould 1852) (Bivalvia, Mactridae) from East Coast of India and Notes on its Morpho-taxonomy. *Thalassas* 38,1269-1273(2022). <https://doi.org/10.1007/s41208-022-00462-0>
6. **Murmu, L.K.**, Barik, T.K. An analysis of *Plasmodium falciparum*-K13 mutations in India. *J Parasit Dis.*46(1)296-303 (2022). <https://doi.org/10.1007/s12639-021-01425-7>
7. Seth, J.K, Mohanty, S.R, Behera, A.K, **Murmu, L.K.** and Mohapatra A. “First record of *Lobothorax typus* from Odisha coast, India, with molecular characterization and observation of its biphasic moulting.” *J Parasit Dis.*45,1077-1083 (2021): 1-7. <https://doi.org/10.1007/s12639-021-01405-x>
8. **Murmu, L.K.**, Sahu, A.A. & Barik, T.K. Diagnosing the drug resistance signature in *Plasmodium falciparum*: a review from contemporary methods to novel approaches. *J Parasit Dis.*45, 869-876 (2021). <https://doi.org/10.1007/s12639-020-01333-2>
9. Mohanty, S.R, **Murmu, L. K.**, Roy, S and Mohapatra, A. First documentation of a Ophichthid eel, *Ophichthus cephalozona* Bleeker 1864 (Anguilliformes; Ophichthidae) from Odisha Coast. *Rec. Zool. Surv. India.* (2021) 121(2):303-305. <https://doi.org/10.26515/rzsi/v121/i2/2021/154861>
10. Mohanty, S.R., Mohapatra, A and **Murmu, L.K.** Occurrence of rare small snake eel, *Allips concolor* McCosker,1972 (Anguilliformes: Ophichthidae) along Paradeep coast, Odisha, India. *Rec. Zool. Surv. India.* (2020) 120(3) 277–280. <https://doi.org/10.26515/rzsi/v120/i3/2020/149931>

Ongoing Project

Studies on dynamics and diversity of bacterial endosymbionts of field collected *Aedes aegypti* and *Culex quinquefasciatus* and their possible relationship with insecticide resistance. Funding agency ICMR, Amount in Rs 52,69877/-, Sanctioned 27/12/2022, Role as **Co-PI**

Membership in professional bodies

1. Indian Society for Parasitology, 2023, Life member
2. Entomological Society of India, 2022, Member

Gene sequences Submitted to NCBI databank: (03) Three

1. NCBI Accession number: **OL999567, OK424757 and OL897320**