

BIO DATA

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Date of Birth: 25th Aug, 1982

Education (Post-Graduation onwards & Professional Career)

Sl No.	Institution Place	Degree	Year	Field of Study
1.	Utkal University, Bhubaneswar, Odisha	M.Sc.	2005	Biotechnology
2.	Goa University, Goa	Ph.D.	2016	Mosquito Proteomics
3.	Public Health Foundation of India (PHFI), Delhi	Post Graduate Diploma in Epidemiology (PGDE)	2018	Epidemiology

Research specialization (Major scientific fields of interest)

Entomology, biological vector control agents, vector proteomics, genomics and vector-parasite interaction

Patent:

Patent filed: Temp/E-1/13888/2018-CHE- Novel peptides for developing anti-malarial vaccines and diagnostic kits.

Awards:

1. **“DGAFMS & Senior Colonel Commandant Award”** for the best published article in the field of Community Medicine for the year 2017 by Armed Forces Medical College (AFMC), Pune, India.
2. Best **“Oral Presentation Award”** during XII Joint Annual Conference of Indian Society for Malaria and Other Communicable Diseases & Indian Association of Epidemiologists” ISMOCD 2017, held from 1st -3rd September, 2017 at Armed Forces Medical College (AFMC), Pune, India.
3. Best **“Poster Presentation Award”** at the National Symposium on “Microbial Diversity and its Applications in Health, Agriculture and Industry” organized by the ICAR Research Complex for Goa, Ela, Old Goa, Goa- from 4-5th March, 2011.

Publications: 25 Research articles, 2 review articles and 3 Book chapters

1. Pereira M, Mohanty AK, Garg S, Tyagi S and Kumar A. Characterization of midgut microbiome of *Anopheles stephensi* Liston. Journal of Vector Borne diseases. (Accepted)
2. Mohanty AK, de Souza C, Harjai D, Ghavanalkar P, Fernandes M, Almeida A, Walke J, Manoharan SK, Pereira L, Dash R, Mascarenhas A, Gomes E, Thita T, Chery L, Anvikar AR, Kumar A, Valecha N, Rathod P, Patrapuvich R. Optimization of

Plasmodium vivax sporozoite production from *Anopheles stephensi* in South West India. Malaria Journal. 2021 Dec; 20(1):1-3.

3. Dey G, **Mohanty AK**, Sreenivasamurthy SK, Kumar M, Kumar A, Prasad TK. Proteomics dataset of adult *Anopheles stephensi* female brain. Data in brief. 2020 Oct 1; 32:106243.
4. Almeida J, **Mohanty A K**, Dharini N, Hoti SL, Kerkar S, Kumar A. A report on novel mosquito pathogenic Bacillus spp. isolated from a beach in Goa, India. International Journal of Mosquito Research 2020; 7(2): 21-29.
5. Kumar A, Chaturvedi HK, **Mohanty AK**, Sharma SK, Malhotra MS, Pandey A. Surveillance based estimation of burden of malaria in India, 2015–2016. Malaria journal. 2020 Dec; 19 (1):1-2.
6. Almeida J, **Mohanty AK**, Kerkar S, Hoti SL, Kumar A. Current status and future prospects of bacilli-based vector control. Asian Pacific Journal of Tropical Medicine 2020; 13(12): 525-534.
7. **Mohanty AK**, Dey G, Kumar M, Sreenivasamurthy SK, Garg S, Prasad TK, Kumar A. Proteome data of female *Anopheles stephensi* antennae. Data in brief. 2019 Jun 1; 24:103911.
8. Kumar M, **Mohanty AK**, Dey G, Sreenivasamurthy SK, Kumar A, Prasad K. Dataset on fat body proteome of *Anopheles stephensi* Liston. Data in brief. 2019 Feb 1; 22:1068-73.
9. Dey G, **Mohanty AK**, Sreenivasamurthy SK, Kumar M, Prasad TK, Kumar A. Proteome data of *Anopheles stephensi* salivary glands using high-resolution mass spectrometry analysis. Data in brief. 2018 Dec 1; 21:2554-61.
10. Sreenivasamurthy SK, Dey G, Kumar M, **Mohanty AK**, Kumar A, Prasad TK. Quantitative proteome of midgut, malpighian tubules, ovaries and fat body from sugar-fed adult *An. stephensi* mosquitoes. Data in brief. 2018 Oct 1; 20:1861-6.
11. Dey G, **Mohanty AK**, Kumar M, Sreenivasamurthy SK, Patil AH, Prasad TK, Kumar A. Proteome data of *Anopheles stephensi* ovary using high-resolution mass spectrometry. Data in brief. 2018 Oct 1;20:723-31.
12. **Mohanty AK**, Nina PB, Ballav S, Vernekar S, Parkar S, D'souza M, Zuo W, Gomes E, Chery L, Tuljapurkar S, Valecha N. Susceptibility of wild and colonized *Anopheles stephensi* to *Plasmodium vivax* infection. Malaria journal. 2018 Dec;17(1):1-0.
13. Dey G, **Mohanty AK**, Sreenivasamurthy SK, Kumar M, Prasad TK, Kumar A. Proteome data of *Anopheles stephensi* salivary glands using high-resolution mass spectrometry analysis. Data in brief. 2018 Dec 1; 21:2554-61.
14. **Mohanty AK**, Dey G, Kumar M, Sreenivasamurthy SK, Garg S, Prasad TK, Kumar A. Mapping *Anopheles stephensi* midgut proteome using high-resolution mass spectrometry. Data in brief. 2018 Apr 1; 17:1295-303.
15. Dhawan R, Pillai CR, **Mohanty AK**, Kumar A. Achieving in vitro gametocytogenesis of *Plasmodium falciparum* in optimal conditions: A review.
16. Kumar M, **Mohanty AK**, Sreenivasamurthy SK, Dey G, Advani J, Pinto SM, Kumar A, Prasad TS. Response to blood meal in the fat body of *Anopheles stephensi* using quantitative proteomics: toward new vector control strategies against malaria. Omics: a journal of integrative biology. 2017 Sep 1; 21(9):520-30.
17. Nina PB, **Mohanty AK**, Ballav S, Vernekar S, Bhinge S, D'souza M, Walke J, Manoharan SK, Mascarenhas A, Gomes E, Chery L. Dynamics of *Plasmodium vivax* sporogony in wild *Anopheles stephensi* in a malaria-endemic region of Western India. Malaria Journal. 2017 Dec; 16(1):1-2.
18. Sreenivasamurthy SK, Madugundu AK, Patil AH, Dey G, **Mohanty AK**, Kumar M, Patel K, Wang C, Kumar A, Pandey A, Prasad TS. Mosquito-borne diseases and Omics: tissue-restricted expression and alternative splicing revealed by transcriptome profiling of *Anopheles stephensi*. Omics: a journal of integrative biology. 2017 Aug 1; 21(8):488-97.
19. Dhawan R, **Mohanty AK**, Kumar M, Dey G, Advani J, Prasad TK, Kumar A. Data from salivary gland proteome analysis of female *Aedes aegypti* Linn. Data in brief. 2017 Aug 1; 13:274-7.
20. Prasad TK, **Mohanty AK**, Kumar M, Sreenivasamurthy SK, Dey G, Nirujogi RS, Pinto SM, Madugundu AK, Patil AH, Advani J, Manda SS. Integrating transcriptomic and

proteomic data for accurate assembly and annotation of genomes. *Genome research*. 2017 Jan 1; 27(1):133-44. **(Shared first author)**

21. Dhawan R, Kumar M, **Mohanty AK**, Dey G, Advani J, Prasad TK, Kumar A. Mosquito-borne diseases and omics: salivary gland proteome of the female *Aedes aegypti* mosquito. *Omics: a journal of integrative biology*. 2017 Jan 1; 21(1):45-54.
22. **Mohanty AK**, Garg S, Dhindsa K, Kumar A. Variable region of 16s rRNA is essential for the identification of Group 1 mosquito-pathogenic strains of *Lysinibacillus*. *Adv Biotech & Micro*. 2(2): 555583.
23. Kumar A, Hosmani R, Jadhav S, de Sousa T, **Mohanty AK**, Naik M, Shettigar A, Kale S, Valecha N, Chery L, Rathod PK. *Anopheles subpictus* carry human malaria parasites in an urban area of Western India and may facilitate perennial malaria transmission. *Malaria journal*. 2016 Dec; 15(1):1-8.
24. Chaerkady R, Kelkar DS, Muthusamy B, Kandasamy K, Dwivedi SB, Sahasrabudhe NA, Kim MS, Renuse S, Pinto SM, Sharma R, Pawar H, Sekhar N R, **Mohanty A K**, Getnet D, Yang Y, Zhong J, Dash A P, MacCallum R M, Delanghe B, Mlambo G, Kumar A, Prasad T S K, Okulate M, Kumar N and Pandey A. A proteogenomic analysis of *Anopheles gambiae* using high-resolution Fourier transform mass spectrometry. *Genome research*. 2011 Nov 1; 21(11):1872-81.
25. Nagpal BN, Saxena R, Srivastava A, Singh N, Ghosh SK, Sharma SK, Kumar A, Kumar H, Sharma AS, Chand SK, Ojha VP. **Mohanty S, Mohanty AK**, Dasgupta RK, Singh GP and Dash AP. Retrospective study of chikungunya outbreak in urban areas of India. *The Indian journal of medical research*. 2012 Mar; 135(3):351.
26. Nayak PK, **Mohanty AK**, Gaonkar T, Kumar A, Bhosle SN, Garg S. Rapid identification of polyhydroxy alkanoate accumulating members of Bacillales using internal primers for phaC gene of *Bacillus megaterium*. *International Scholarly Research Notices*. 2013;2013.
27. Sreenivasamurthy SK, Dey G, Ramu M, Kumar M, Gupta MK, **Mohanty AK**, Harsha HC, Sharma P, Kumar N, Pandey A, Kumar A. A compendium of molecules involved in vector-pathogen interactions pertaining to malaria. *Malaria journal*. 2013 Dec; 12(1):1-7.

Book chapters: 3 No.s

S. No	Title of Chapter	Details
1	Mohanaty AK , Garg S, Dhindsa K, Kumar H and Kumar A (2012) Phenotypic Characterization of Mosquito Larvicidal Ed. Barbuddhe S.B., Ramesh R., Lysinibacillus Strains Isolated from Paddy Field and Mangrove Vegetation In : microbial diversity and its application, pp. 49-58.	Ed. Barbuddhe S.B., Ramesh R., Singh N.P. New India Publishing Agency, New Delhi
2	Nayak P, Gaonkar T , Mohanty A , Kumar A, Bhosle S, Garg S (2012) Isolation and Characterization of Polyhydroxyalkanoates Producing Bacteria from Coastal Sand-Dune Ecosystem In : microbial diversity and its application pp. 75-82	Ed. Barbuddhe S.B., Ramesh R., Singh N.P. New India Publishing Agency, New Delhi
3	Ajeet Kumar Mohanty , Keshava Prasad, Sandeep Garg and Ashwani Kumar. Proteogenomics of vector mosquitoes: Progress and Prospects: Major tropical Diseases; Public Health Perspective pp.38-50	Ed. Ashwani Kumar, SavioRodriques and Amit Dias. Broadway Publishing House, Panaji, Goa.

Popular article

1. Ashwani Kumar, **Ajeet Kumar Mohanty**, T. S. Keshava Prasad. (2017) Mosquito-borne diseases – how can omics help characterize vectors? <https://www.id-hub.com/2017/07/11/mosquito-borne-diseases-can-omics-help-characterize-vectors/>Infectious Diseases Hub.

(Dr. Ajeet Kumar Mohanty)