

Brief Profile

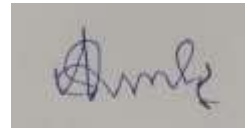
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| Name | Abhinav Sinha |
| Current Designation | Scientist F |
| Research Discipline | Epidemiology and Molecular Parasitology |
| Department / Division | Epidemiology |
| Date of joining the current post | 22/09/2016 |
| Date of joining ICMR | 22/09/2016 |
| Official E-mail ID | abhnavsinha@icmr.gov.in |
| Educational Qualification | PhD (Infection and Immunity), MD (Preventive and Social Medicine), MRes (Molecular Parasitology), MSc (Disaster Mitigation) |
| Research experience (in years): | 23 |
| Research Interest/Thrust Areas | |
| Molecular epidemiology of malaria and drug resistance, inter-pathogenesis of malaria and hypertension, parasite interactions | |
| Number of projects handled as: | |
| Principal Investigator - 7 | |
| Co-Principal Investigator - 0 | |
| Co-investigator - 3 | |
| Number of doctorate / post-doc students mentored | |
| As Guide - 10 | |
| As Co-guide - 2 | |
| List of significant publications (Please give the details of the publications in APA format) | |
| <ol style="list-style-type: none"> 1. Sinha A, Hughes KR, Modrzynska K, Pfander C, Dickens NJ, Religa AR, Bushell E, Graham AL, Kafsack B, Llinas M, Otto TD, Berriman M, Billker O, Waters AP. A cascade of DNA binding proteins essential to commitment and development of sexual stages of malaria parasites. <i>Nature</i> 2014. 507(7491):253-257. doi:10.1038/nature12970 2. Ranford-Cartwright LC, Sinha A, Humphreys GS, Mwangi JM. New synchronisation method for <i>Plasmodium falciparum</i>. <i>Malaria Journal</i> 2010. 9:170. doi:10.1186/1475-2875-9-170 3. Tiwari A, De A, Sinha A#. Increasing blood pressure: could malaria have a role? <i>The Lancet Global Health</i> 2023. 11 (11) E1697. https://doi.org/10.1016/S2214-109X(23)00419-9 1. Deora N, Yadav CP, Pande V, Sinha A#. A systematic review and meta-analysis on sub-microscopic <i>Plasmodium</i> infections in India: Different perspectives and global challenges. <i>The Lancet Regional Health - Southeast Asia</i> 2022. 2:100012. doi:10.1016/j.lansea.2022.05.001 4. Sinha A#, Kar S, Chauhan C, Yadav CP, Kori L. Meta-analysis on <i>Plasmodium falciparum</i> sulfadoxine-pyrimethamine resistance-conferring mutations in India identifies hot spots for genetic surveillance. <i>International Journal of Antimicrobial Agents</i> 2024. 63 (2024) 107071. doi:10.1016/j.ijantimicag.2023.107071 5. Dash M, Sachdeva S, Bansal A, Sinha A#. Gametogenesis in <i>Plasmodium</i>: delving deeper to connect the dots. <i>Frontiers in Cellular and Infection Microbiology</i> 2022. 12:877907. doi:10.3389/fcimb.2022.877907 6. Savargaonkar D, Sinha S, Srivastava B, Nagpal BN, Sinha A, Shamim A, Das R, Pande V, Anvikar AR, Valecha N. An Epidemiological study of dengue and its coinfections in Delhi. <i>International Journal of Infectious Diseases</i> 2018. 74:41-46. doi:10.1016/j.ijid.2018.06.020 7. Chaturvedi R, Deora N, Bhandari D, Parvez S, Sinha A#, Sharma A. Trends of neglected <i>Plasmodium</i> species infection in | |

- humans over the past century in India. *One Health* 2020. 11:100190. doi:10.1016/j.onehlt.2020.100190
8. Sinha A#, Savargaonkar D, De A, Tiwari A, Yadav CP, Anvikar A. Joint involvement can predict chikungunya in a dengue syndemic setting in India. *Journal of Epidemiology and Global Health* 2023;13(4):895-901. doi:10.1007/s44197-023-00163-8
 9. Chauhan C and Sinha A#. Plasmodium and malaria: adding to the don'ts. *Trends in Parasitology* 2021. 37(11):935-936. doi:10.1016/j.pt.2021.07.017
 10. Panwar V, Bansal V, Chauhan C, Sinha A#. Cost analyses for malaria molecular diagnosis for research planners in India and beyond. *Expert Rev Mol Diagn*. doi:10.1080/14737159.2024.2356172.
 11. Deora N, Sinha A#. Evidence on sulfadoxine-pyrimethamine resistance molecular markers from India: interpret with caution. *Malar J*. 2024 Jul 24;23(1):219. doi: 10.1186/s12936-024-05027-5.
 12. Deora N and Sinha A#. Truenat® for Plasmodium sub-microscopic infections: Miles to go...2022. *The Lancet Regional Health - Southeast Asia* 2022. 5: 100056 <https://doi.org/10.1016/j.lansea.2022.100056>
 13. Deora N, Sinha A. Pitfalls in generating robust malaria molecular evidence for SP-resistance. *Clin Microbiol Infect*. 2024 Oct 5:S1198-743X(24)00473-7. doi: 10.1016/j.cmi.2024.09.026. Epub ahead of print. PMID: 39374652.
 14. Savargaonkar D, Shrivastava B, Yadav CP, Singh MP, Sharma A, Anvikar A, Singh H#, Sinha A#. Contribution of travelers to Plasmodium vivax malaria in South West Delhi, India. 2024. *JMIR Public Health and Surveillance* (accepted).
 15. De A, Tiwari A, Pande V, Sinha A#. Evolutionary trilogy of malaria, angiotensin II and hypertension: deeper insights and the way forward. *Journal of Human Hypertension* 2021. 36(4):344-351. doi:10.1038/s41371-021-00599-0
 16. Kar S and Sinha A#. Plasmodium vivax Duffy Binding Protein-Based Vaccine: a Distant Dream. *Frontiers in Cellular and Infection Microbiology* 2022. 12:916702. doi: 10.3389/fcimb.2022.916702
 17. Deora N, Pande V, Sinha A#. Misidentification of Plasmodium mixed-infections leads to an overestimation of falciparum malaria. *medRxiv* 2023. <https://doi.org/10.1101/2023.10.02.23296210>
 18. Mittal P, Mishra S, Kar S, Pande V, Sinha A, Sharma A. Global distribution of single amino acid polymorphisms in Plasmodium vivax Duffy-binding-like domain and implications for vaccine development efforts. *Open Biology* 2020. 10(9):200180. doi:10.1098/rsob.200180
 19. Dash M, Pande V, Das A, Sinha A#. Evolution of tandem repeats in putative CSP to enhance its function: A recent and exclusive event in Plasmodium vivax in India. *bioRxiv*. 2023. doi: <https://doi.org/10.1101/2023.11.28.568961>
 20. Deora N, Kar S, Pande V, Sinha A#. 75 years' journey of malaria publications in English: what and where? *Malar J*. 2024;23(1):172. doi:10.1186/s12936-024-04992-1
 21. Tiwari A, De A, Sinha A. Malaria and Hypertension: What Is the Direction of Association? *Function (Oxf)*. 2024 Aug 30:zqae037. doi: 10.1093/function/zqae037. Epub ahead of print. PMID: 39215464.
 22. Wadi I, Singh P, Nath M, Anvikar AR, Sinha A#. Malaria transmission-blocking drugs: implications and future perspectives. *Future Medicinal Chemistry* 2020. 12(11):1071-1101. doi:10.4155/fmc-2020-0026
 23. Dash M, Pande V, Sinha A#. Putative circumsporozoite protein (CSP) of Plasmodium vivax is considerably distinct from the well-known CSP and plays a role in protein ubiquitination pathway. *Gene* 2019. 721S:100024. doi:10.1016/j.gene.2019.100024
 24. Wadi I, Nath M, Anvikar A, Singh, Sinha A#. Recent advances in transmission-blocking drugs for malaria elimination. *Future Medicinal Chemistry* 2019. 11(23):3047-3088. doi:10.4155/fmc-2019-0225
 25. Wadi I, Anvikar AR, Nath M, Pillai CR, Sinha A, Valecha N. Critical examination of approaches exploited to assess the effectiveness of transmission-blocking drugs for malaria. *Future Medicinal Chemistry* 2018. 10(22):2619-2639. doi:10.4155/fmc-2018-0169
 26. De A, Tiwari A, Dash M, Sinha A#. ACE2 mutation might explain lower COVID-19 burden in malaria endemic areas. *Human Cell* 2021. 34(2):702-705. doi:10.1007/s13577-021-00489-0
 27. Tiwari A, De A, Pande V, Sinha A#. Human Angiotensin-Converting Enzyme may be under malaria selection pressure: need to explore. *Human Cell* 2021. 34(1):289-290. doi:10.1007/s13577-020-00459-y
 28. Singh PK, Anvikar A, Sinha A#. COVID-19 related knowledge, attitudes, and practices in Indian Population: An online national cross-sectional survey. *PLoS One* 2022;17(3):e0264752. doi:10.1371/journal.pone.0264752
 29. De A, Dash M, Tiwari A, Sinha A#. Malaria, COVID-19 and angiotensin-converting enzyme 2: what does the available population data say?." *Open Biology* 2021;11(10):210213. doi:10.1098/rsob.210213
 30. Tiwari A, De A, Pande V, Sinha A#. Interlinking antecedent malaria and hypertension through angiotensin II in India. *Frontiers in Cardiovascular Medicine* 2021. 8:729525. doi:10.3389/fcvm.2021.729525
 31. Kumari S, Sinha A#. Culture and transfection: Two major bottlenecks in understanding Plasmodium vivax biology. *Frontiers in Microbiology* 2023. 14:1144453. doi: 10.3389/fmicb.2023.1144453

Achievements/Awards/Additional Information

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| 2023 | CSIR Travel Grant (Infectious Diseases meeting, London, UK) ICMR Travel Grant (Malaria Gordon Research Conference, Barcelona, Spain) STUDY UK Alumni Award for Science and Sustainability (British Council India) |
| 2022 | Scientific Meeting Grant (\$ 2544; The Company of Biologists Ltd, Cambridge, UK) CTEP Grant (\$ 6035; Department of Biotechnology, Government of India) Organizer Grant (\$ 36,432; EMBO; Germany) Organizer Grant (\$ 6638; DBT/Wellcome Trust India Alliance) |
| 2019 | Institut Pasteur Travel Fellowship (International Conference on P. vivax Research, Paris, France) |
| 2014 | MESA conference grant (Keystone Symposia on Malaria Eradication, Mexico) |

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| 2013 | Keystone Symposia Future of Science Fund Scholarship Best poster awards, University of Glasgow, UK |
| 2012, 2010 | Scottish Overseas Research Students Awards (Scottish Funding Council, UK) |
| 2009 | Wellcome Trust International PhD Studentship |
| 2008 | Chevening Scholarship (British Council & Foreign & Commonwealth Office, UK) Glasgow Postgraduate Excellence Scholarship, University of Glasgow, UK |
| 2007 | Royal Society of Hygiene and Tropical Medicine conference grant (RSTMH, London, UK) Gordon Research Conference Chair's Fund (GRC on Malaria, Oxford, UK) |
| 2006 | University of Geneva conference grant (Geneva Forum, Geneva, Switzerland) |
| 1996 | Gold medal, (Physiology and Biochemistry, NSCB Medical College, India) |



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