

Dr. Alex Eapen is a Senior Scientist and Officer-in-Charge of ICMR- National Institute of Malaria Research at Chennai. His core research area includes Urban Malaria and its transmission dynamics, Vector biology and control, Vector Ecology, Malaria Epidemiology with special reference to *Plasmodium vivax*, and environmental determinants of Vector-borne diseases. Dr. Alex Eapen's scientific work since 1988 is operational research of public health importance focusing mainly on vector-borne diseases such as Malaria, Dengue, and Chikungunya. The scientific projects that translated to the programme include, bioenvironmental control of malaria vectors that led to '**Seven point action plan for Malaria control in urban areas**', Geographical Information System (GIS) based malaria surveillance system in Dindigul, first of its kind (health sector, 1999) in India; Involved in the discovery of new larvivorous fish, *Puntius sharmai* (1992), new sibling species of *Anopheles culicifacies* complex (Species E), malaria vector (1999) and a new mosquito species *Heizmannia rajagopalani* (2019). Therapeutic efficacy of antimalarials (chloroquine) to *Plasmodium falciparum* observed high level of chloroquine resistance in Tamil Nadu (2006) leading to change in the drug regimen in Tamil Nadu. Rainwater harvesting methods to mitigate vector breeding resulted in an action plan with environment-friendly designs. All the studies highlighted integrated environmental, vector management methods to eliminate malaria. Dr. Eapen in addition to his many publications in peer-reviewed international journals is also a reviewer for Scientific Reports, PLOS One, Parasites & Vectors, Malaria Journal, AJTMH, IJMR, and an external examiner (Ph.D.) for many universities in Tamil Nadu and Kerala. He is a life member of Indian Society for Parasitology (ISP), National Academy of Vector Borne Diseases (NAVBD), National Environmental Science Academy (NESA), member of American Society of Tropical Medicine & Hygiene (ASTMH), American Committee of Medical Entomology (ACME), Chartered Biologist (CBiol, London); felicitated as Fellow of Royal Entomological Society (FRES), UK and Fellow of Royal Society of Biology (FRSB), UK. Dr. Alex Eapen was also a commissioner of the Lancet Commission for Malaria Eradication (LCME).

Important publications (Last 5 years- Since 2015)

1. Conn JE, Norris DE, Donnelly MJ, Beebe NW, Burkot TR, Coulibaly MB, Chery L, **Eapen Alex**, Keven JB, Kilama M, Kumar A, Lindsay SW, Moreno M, Quiñones ML, Reimer LS, Russell TL, Smith DL, Thomas MB, Walker ED, Wilson ML and Yan G (2015). Entomological monitoring and evaluation: Diverse transmission settings of ICEMR will require local and regional Malaria elimination strategies. *American Journal of Tropical Medicine and Hygiene*, 93 (Suppl 3), 28-41.
2. Quiñones ML, Norris De, Mzilahowa T, Conn JE, Moreno M, Burkot TR, Yan G, Rosas A, Palomino M, Donnelly MJ, Mawajje HD, **Eapen Alex**, Coulibaly MB, Beier J, Kumar A (2015). Insecticide resistance in areas under investigation by the International Centers of Excellence for Malaria Research: A challenge for malaria control and elimination (2015). *American Journal of Tropical Medicine and Hygiene*, 93 (Suppl 3), 69-78.
3. Wilson ML, Krogstad DJ, Arinaitwe E, Arevalo-Herrera M, Chery L, Ferreira MU, Daouda N, Mathanga DP and **Eapen Alex** (2015). Urban Malaria: Understanding its epidemiology, ecology and transmission risk across diverse ICEMR sites. *American Journal of Tropical Medicine and Hygiene*, 93 (Suppl 3), 110-123.
4. Eijk AMV, Ramanathapuram L, Sutton PL, Kanagaraj D, Lakshmi Priya GS, Ravishankaran S, Asokan A, Tandel N, Patel A, Desai N, Singh R, Sullivan SA, Carlton JM, Srivastava HC and **Eapen Alex** (2016). What is the value of Reactive Case Detection in Malaria control? A case study in India and a systematic review. *Malaria Journal* 15: 67.
5. Thomas Shalu, Ravishankaran S, Justin JA, A. Aswin, Mathai MT, Valecha N, Thomas MB and **Eapen Alex*** (2016). Overhead tank is the potential breeding habitat of *Anopheles stephensi* in an urban transmission setting of Chennai, India. *Malaria Journal* 15: 274.
6. Hupalo DN, Luo Z, Melnikov A, Sutton PL, Rogov P, Escalante A, Vallejo AF, Herrera S, Herrera MA, Fan Q, Wang Y, Cui L, Lucas CM, Durand S, Sanchez JF, Baldeviano GC, Lescano AG, Laman M, Barnadas C, Barry A, Mueller I, Kazura J, **Eapen Alex**, Kanagaraj D, Valecha N, Ferreira MU, Roobsoong W, Nguitragool W, Sattabongkot J, Gamboa D, Kosek M, Vinetz JM, González-Cerón L, Birren BW, Neafsey DE and Carlton JM. Population genomics reveals signatures of global dispersal and drug resistance in *Plasmodium vivax*. *Nature Genetics* published online 27 June 2016; doi: 10.1038/ng.3588.

7. Eijk AMV, Ramanathapuram L, Sutton PL, Peddy N, Choubey S, Mohanty S, Asokan A, Ravishankaran S, Lakshmi Priya GS, Justin JA, Velayutham S, Kanagaraj D, Patel A, Desai N, Tandel N, Sullivan SA, Wassmer SC, Singh R, Pradhan K, Carlton JM, Srivastava HC, **Eapen Alex** and Sharma SK (2016). The use of mosquito repellents at three sites in India with declining malaria transmission: surveys in the community and clinic. *Parasites & Vectors* 9: 418.
8. Thomas Shalu, Ravishankaran S, Justin JA, Aswin A, Kalsingh TMJ, Mathai MT, Valecha N and **Eapen Alex*** (2016). Does fluoride influence oviposition of *Anopheles stephensi* in stored water habitats in an urban setting. *Malaria Journal* 15: 549.
9. Uplekar S, Rao PN, Ramanathapuram L, Awasthi V, Verma K, Sutton P, Ali SZ, Patel A, Priya GSL, Ravishankaran S, Desai N, Tandel N, Choubey S, Barla P, Kanagaraj D, **Eapen Alex**, Pradhan K, Singh R, Jain A, Felgner PL, Davies DH, Carlton JM, and Das J (2017). Characterizing Antibody Responses to *Plasmodium vivax* and *Plasmodium falciparum* Antigens in India Using Genome-Scale Protein Microarrays. *Plos Neglected Tropical Diseases*, DOI: 10.1371/journal.pntd.0005323 January 24, 2017.
10. Thomas Shalu, Ravishankaran S, Justin JA, Aswin A, Mathai MT, Valecha N, Montgomery J, Thomas MB and **Eapen Alex*** (2017). Resting and feeding preferences of *Anopheles stephensi* in an urban setting, perennial for malaria. *Malaria Journal* 16: 111.
11. Thomas Shalu, Ravishankaran S, Aswin A, Justin JA, Kalsingh TMJ, Mathai MT, Valecha N and **Eapen Alex*** (2018). Socio-demographic and household attributes may not necessarily influence malaria: Evidence from a cross sectional study of households in an urban slum setting of Chennai, India. *Malaria Journal* 17: 4.
12. Thomas Shalu, Ravishankaran S, Justin JA, Aswin A, Kalsingh TMJ, Mathai MT, Valecha N, Montgomery J, Thomas MB and **Eapen Alex*** (2018). Microclimate variables of the ambient environment deliver the actual estimates of the extrinsic incubation period of *Plasmodium vivax* and *Plasmodium falciparum*: a study from a malaria-endemic urban setting, Chennai in India. *Malaria Journal* 17: 201.
13. Feachem R, Chen I, Akbari O, Bertozzi-Villa A, Bhatt S, Binka F, Boni M, Buckee C, Dieleman J, Dondorp A, **Eapen Alex**, Feachem NS, Filler S, Gething P, Gosling R, Haakenstad A, Harvard K, Hatefi A, Hwang J, Jamison D, Jones K, Karema C, Kamwi RN, Lal A, Larson E, Lee C, Lees M, Lobo N, Micah A, Moonen B, Newby G, Ning X, Pate M, Quiñones M, Roh M, Rolfe B, Shanks D, Singh B, Staley K, Tulloch J, Wegbreit J, Woo HJ and Mpanju-Shumbusho W (2019). LANCET COMMISSION ON MALARIA ERADICATION Malaria Eradication Within a Generation: Ambitious, Achievable and Necessary. *The Lancet* Published Online September 8, 2019 [http://dx.doi.org/10.1016/S0140-6736\(19\)31139-0](http://dx.doi.org/10.1016/S0140-6736(19)31139-0).
14. Eijk AMV, Sutton PL, Ramanathapuram L, Sullivan SA, Kanagaraj D, Lakshmi Priya GS, Ravishankaran S, Asokan A, Velayutham S, Rao PN, Wassmer SC, Tandel N, Patel A, Desai N, Choubey S, Ali SZ, Barla P, Oraon RR, Mohanty S, Mishra S, Kale S, Bandyopadhyay N, Mallick PK, Huck J, Valecha N, Singh OP, Pradhan K, Singh R, Srivastava HC, Carlton JM and **Eapen Alex** (2019). The burden of submicroscopic and asymptomatic malaria in India revealed from epidemiology studies at three varied transmission sites in India. *Scientific Reports (Nature)* 9: 17095.
15. Bajwala VR, John D, Rajasekar TD, **Eapen Alex** and Murhekar MV. Burden of dengue with related entomological and climatic characteristics in Surat city, Gujarat, India, 2011- 2016: An analysis of surveillance data (2020). *American Journal of Tropical Medicine and Hygiene* (<https://doi.org/10.4269/ajtmh.19-0967>).

* Corresponding author

(Total Publications- 60; https://www.researchgate.net/profile/Alex_Eapen)