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List of Extramural, Collaborative and Sponsored Research Projects Undertaken

- 1. "A pilot study to estimate malaria incidence using sampling methods" in collaboration with NAMP/ IRMS and State Governments (1980-83) funded by ICMR.
- 2. "A laboratory and field study of malathion resistance in An. culicifacies" in collaboration with NAMP (1980-85) funded by WHO/TDR.
- 3. "To study the impact of residual insecticidal spray operations in areas with varying degrees of resistance and its relationship to the malaria transmission" in collaboration with NAMP and State Governments (1981–83) funded by ICMR.
- 4. "A pilot study to assess the impact of antimalaria operations on the morbidity (duration of febrile illness)" in collaboration with NAMP/State Governments (1982–83) funded by ICMR.
- 5. "Studies on cell biology, ultrastructural and electron cytochemistry of the human malaria parasite Plasmodium vivax and Plasmodium falciparum" in collaboration with Delhi University, Delhi (1982-85) funded by DBT.
- 6. "Seroepidemiology of human malariamulticentric trials" (1983-85) funded by ICMR.
- 7. "Incrimination of An. culicifacies using immunoradiometric assay" (1984-86) funded by International Agency for Funding under Gandhi-Regan Science and Technology Initiative in collaboration with New York University School of Medicine, U.S.A.
- 8. "Impact of Deltamethrin (K-othrine) spraying in areas with DDT and HCH resistant An. culicifacies" in collaboration with NAMP (1985) funded by ICMR/NAMP.
- 9. "Evaluation of Bacillus sphaericus in laboratory and field" (1986-87) funded by WHO/TDR.
- 10. "Field trials of Deltamethrin (K-othrine) in Razapur PHC, District Ghaziabad" (1986-88) funded by NAMP.
- 11. "Science and Technology Project on Integrated Vector Control of Malaria, Filaria and other Vector-borne Diseases" (1986 onwards) funded by ICMR and Deptt. of Health, Ministry of Health and Family Welfare, Govt. of India.
- 12. "Applied field research on malaria" (1987-89) funded by SIDA.
- 13. "Transmission dynamics of Plasmodium falciparum" (1987-90) funded by WHO/TDR.
- 14. "Tribal health" (1988) funded by UNDP/WHO.

- 15. "Establishment of the culture system for exoerythrocytic stage malarial parasites" (1992–94) funded by Indo-French Centre, Delhi.
- 16. "Malaria Parasite Bank" (1992 onwards) funded by DBT (1992-97) and ICMR (1997 onwards).
- 17. "Multicentric field trials with Bacillus sphaericus and Bacillus thuringiensis var. israelensis (1993-94) funded by ICMR/NAMP.
- 18. "Field evaluation of an antigen dipstick test for falciparum malaria" (1994) funded by WHO-SEARO.
- 19. "A comparative field study on malaria transmission by the use of insecticide-impregnated bednets vs DDT residual spraying" (1995) funded by WHO/TDR.
- 20. "Ecological adaptations of malaria vectors in different climatic zones and their epidemiological implications" (1996-97) funded by WHO through NAMP.
- 21. "Community acceptance of insecticide-treated mosquito nets (ITMNs) trial in tribal area of Keonjhar district" (1996-98) funded by British Council Division, U.K.
- 22. "Malaria prevalence among pregnant women and children in malaria endemic tribal area of Orissa" (1997-98) funded by CARE-India.
- 23. "The information modelling of malaria distribution process in India under ILTP of cooperation in Science and Technology between India and Russia" (1998–2000) funded by DST.
- "Molecular analysis of cytoadherence phenotype and invasion pathways of Indian isolates of P. falciparum" in collaboration with ICGEB, New Delhi (1998-2001) funded by ICMR.
- "Molecular markers for the identification of members of Anopheles culicifacies complex", Indo-Sri Lanka under bilateral collaboration in Science and Technology (1998–2001) funded by DBT.
- 26. "Evaluation of ICT Malaria Pf/Pv test kit for diagnosis of malaria" (1999-2000) funded by Becton Dickinson, U.S.A.
- 27. "Phase-II evaluation of Bifenthrin 10% WP and Fipronil 80% WDG indoor residual spraying for malaria vector control in India" (1999-2000) funded by WHOPES, WHO, Geneva.
- "Phase-II evaluation of mosquito nets treated with Bifenthrin SC and ME formulations vis-à-

- vis Lambda-cyhalothrin CS formulation for control of *Anopheles culicifacies*, a major vector of malaria in District Sonepat, Haryana state, India" (1999–2000) funded by WHOPES, WHO, Geneva.
- "A randomized, double blind comparative study of Azithromycin vs Chloroquine as treatment of uncomplicated *P. vivax* and *P. falciparum* malaria at Delhi, Jabalpur and Sonapur" (1999–2001) sponsored by Pfizer.
- "Study on the vector bionomics and evaluation of the sensitivity of malaria parasites to antimalarials in Surat City" (1999–2001) funded by DFID, U.K.
- "Phase-II evaluation of Bifenthrin 10% WP and Deltamethrin 80% WDG indoor residual spraying for malaria vector control in India" (1999–2001) funded by WHOPES, WHO, Geneva.
- 32. "Impact of residual spraying of Reldan 40% EC against DDT and HCH resistant malaria vector An. culicifacies in malaria endemic villages of District Ghaziabad (U.P.), India" (1999–2002) sponsored by Denocil.
- 33. "Impact of residual spraying of Bendiocarb 80% WP (Carbamate) against DDT and HCH resistant malaria vector An. culicifacies in malaria endemic villages of District Ghaziabad (U.P.), India" (1999–2002) sponsored by Hoechst Schering Agro Evo Ltd.
- "Laboratory and field evaluation of Hilmilin against mosquitoes" (1999–2002) sponsored by Hindustan Insecticides Ltd.
- "Bioefficacy and operational feasibility of Alphacypermethrin (Fendona) impregnated mosquito nets/curtains to control rural and urban malaria" (1999–2002) sponsored by CYNAMID Agro Ltd.
- 36. "Population genetic analysis of *Anopheles culicifacies* species A" (1999–2003) funded by WHO/TDR (Molecular Entomology), Geneva.
- 37. "Field research on situation analysis in some selected districts and towns in the context of Roll Back Malaria Initiative" (2000–01) funded by WHO-SEARO, New Delhi.
- 38. "Phase-III evaluation of Bifenthrin 10% WP and Deltamethrin 25% WG indoor residual spraying for malaria vector control in India" (2000–02) funded by WHOPES, WHO, Geneva.
- 39. "Molecular characterization of pyrethroid resistance in *An. culicifacies*" (2000–02) funded by Wellcome Trust, U.K.
- 40. "Bioenvironmental control of mosquitoes in Mormugao Port Trust: technology transfer phase" (2000–02) funded by Mormugao Port Trust.
- 41. "Application of remote sensing in identifying and mapping sandfly distribution in endemic and non-endemic Kala-azar foci in Bihar (RMRI, Patna)" (2000–03) funded by ICMR Task Force.
- 42. "Application of RS and GIS for decision support in malaria control" (2000–03) funded by ICMR

- Task Force.
- 43. "Delineation of breeding habitats and landscape features suitable for *An. culicifacies* abundance using satellite remote sensing data" (2000–03) funded by ICMR Task Force.
- 44. "Evaluation of Rapid diagnostic technique, Parasight for diagnosis of malaria" (2000–05) funded by Becton Dickinson.
- 45. "Multicentric field trials with *Bacillus thuringiensis* var *israelensis* serotype H-14 against mosquitoes in Haldwani (Uttaranchal), Shahjahanpur (U.P.) and Vasco-da-Gama (Goa)" (2001) sponsored by Wockhardt.
- 46. "Efficacy of Azithromycin + Chloroquine combination in the treatment of uncomplicated P. falciparum malaria cases at Jabalpur and Sonapur" (2001) sponsored by Pfizer.
- "Primary screening of herbal products for antimalarial activity" (2001) sponsored by DRDO, Tezpur, Assam.
- 48. "Operational evaluation of the stability of lodine in double fortified salt—a multicentric study" (2001–02) funded by ICMR.
- "Operational evaluation of the stability of Iodine in double fortified salt—a multicentric study (ICMR- NIN-MRC-RMRC, Dibrugarh-RMRC, Bhubaneswar-TRC-IRR)" (2001–02) funded by ICMR.
- 50. "Evaluation of the impact of DDT and malathion indoor residual spraying being used in malaria and Kala-azar control programmes on the disease prevalence—a multicentric study" (2001–02) funded by ICMR Task Force.
- 51. "Evaluation of Temeguard 50% EC at Chennai" (2001–02) funded by Gharda Chemicals.
- 52. "Phase III evaluation of Bifenthrin 10% WP and Deltamethrin 25% WG indoor residual spraying for malaria vector control in India" (2001–02) funded by FMC Bengaluru.
- 53. "Comparative evaluation of bioefficacy and persistence of mosquito nets treated with Deltamethrin tablet formulation (K-O Tab® against malaria vectors *Anopheles culicifacies* and *An. stephensi*" (2001–02) funded by Aventis/ Bayer Crop Sciences, Mumbai.
- 54. "Bioenvironmental control of mosquitoes in Mormugao Port Trust, Vasco-da-Gamma, Goa" (2001–02) funded by Mormugao Port Trust, Goa.
- 55. "Testing of Rapid Diagnostic test kits manufactured by M/s. Orchid Biochemicals" (2001–03) funded by M/s. Orchid Biochemicals System, Goa.
- "Ecological adaptation of malaria vectors in three different climatic zones of country" (2001–03) funded by World Bank.
- 57. "Laboratory and field evaluation of Teknar HP-D (*Bacillus thuringiensis* var *israelensis Bti*)" (2001–03) funded by Margo Bio Control Pvt Ltd.
- 58. "Field evaluation of Triflumuron (IGR) against

- larvae of mosquito vectors" (2001–03) sponsored by Bayer.
- "Evaluation of Azithromycin as treatment against P. falciparum and P. vivax using chloroquine as comparison drug" (2001–03) funded by Pfizer Ltd.
- 60. "Delineation of breeding habitats and landscape features suitable for *An. culicifacies* abundance using satellite data" (2001–03) funded by ICMR Task Force.
- "Use of molecular and cytotaxonomic techniques to study *Anopheles culicifacies* complex and its relationship in malaria transmission (Indo-Sri Lanka)" (2001–03) funded by DBT.
- 62. "Population genetic analysis of *Anopheles culicifacies* species A" (2001–03) funded by WHO-TDR.
- 63. "To develop strategy for integrated control of vectors of malaria, JE and dengue in Karnataka" (2001–03) funded by WHO.
- 64. "Primary screening of the medicinal plants for north-east states of India for its antimalarial activity" (2001–04) funded by DRDO.
- 65. "Process of development for production of recombinant malaria vaccine based on *P. vivax* duffy binding protein" in collaboration with ICGEB-NIH (2001–04) funded by DBT.
- 66. "To develop strategy for integrated control of vectors of malaria and dengue" (2001–04) funded by WHO.
- 67. "Prospecting for botanical pesticides All India coordinated research project" (2001–05) funded by DBT.
- 68. "Field evaluation of mosquito larvicide and pupicide Agnique MMF in different urban habitat against malaria vector *An. stephensi*" (2002) funded by WHOPES, WHO, Geneva.
- "Laboratory (Phase-I) evaluation of Phenthoate against urban mosquito vectors Anopheles stephensi and Culex quinquefasciatus" (2002– 03) funded by EID Perry, India Ltd.
- 70. "Operational feasibility of use of larvivorous fish for control of malaria in a high areas of Karnataka state" (2002–03) funded by WHO.
- 71. Therapeutic efficacy of chloroquine in *P. vivax* malaria" (2002–03) funded by WHO-SEARO.
- 72. "Evaluation of Binax: a rapid *Pf* diagnostic kit" (2002–03).
- 73. "Evaluation of Deltamethrin 25% WG indoor residual spraying for malaria control in India" (2002–04) funded by Aventis/Bayer Crop Science.
- 74. "Strategy for integrated control of vectors of malaria and dengue in northern Gujarat" (2002–04) funded by WHO country budget.
- 75. "Impact of climate change on malaria in India" (2002–04) funded by Ministry of Environment and Forest.
- 76. "ICT *Pf* kit programme" (2002–04) funded by DSS Imagetech.

- 77. "Comparative evaluation of bioefficacy and persistence of mosquito nets treated with Deltamethrin tablet formulation against malaria vectors *An. fluviatilis* and *An. culicifacies* and its impact on malaria transmission in malaria endemic tribal area of Sundargarh district (2002–04) funded by Aventis Crop Science Ltd.
- 78. "Genetic diversity of human malaria parasites Plasmodium falciparum and P. vivax: development of microsatellite markers" (2002– 05) funded by ICMR.
- "Genetic polymorphism of T-helper cell epitopic regions of *Plasmodium falciparum* isolates from India: relevance for vaccine development" (2002–05) funded by CSIR.
- 80. "Development of field site for malaria vaccine trial" (2002–07) funded by DBT.
- 81. "Studies on estimation of disease burden of identified infectious diseases—collection and review of literature for estimating malaria burden in India using DALYs as a summary measure" (2003–04) funded by WHO.
- 82. "Evaluation of Primiphos-methyl 50% EC against the immatures of *Anopheles stephensi/An. culicifacies* (malaria vectors) *and Culex quinquefasciatus* vector bancroftian filarial" (2003–04) funded by Syngenta Chemicals Ltd.
- "WHO collaborative study for the establishment of diagnostic concentrations for bifenthrin and alpha-cypermethrin for resistance monitoring in malaria and dengue vectors" (2003–04) funded by WHO.
- 84. "Multicentric study on evaluation of VectoBac WDG, a formulation of *Bacillus thuringiensis israelensis* (*Bti*) against larvae of mosquito vectors" (2003–04) funded by Sumitomo Chemicals.
- 85. "Antimalarial drug against uncomplicated falciparum malaria in West Bengal as part of Indo-Nepal cross border activity" (2003–04) funded by USAID.
- 86. "Entomological evaluation of Cyphenothrin 5% EC as space spray against mosquitoes" (2003–05) funded by Sumitomo Chemicals.
- 87. "Cerebral malaria associated neurological disorders in central India" (2003–05) funded by Medical College, Jabalpur, More House School of Medicine and Centre for Disease Control and Prevention, Atlanta, U.S.A.
- 88. "Mosquito control in Bangalore City" (2003–05) funded by Bengaluru Mahanagar Palike.
- 89. "Molecular characterization of *Anopheles fluviatilis* complex: development of species specific diagnostic markers and microsatellite markers" (2003–05) funded by ICMR Genomics.
- "Enhanced Malaria Control Programmesponsored by NAMP" (2003–05) funded by EMCP/NAMP.
- 91. "Accumulation of persistent organochlorine compounds in sub-Himalayan region of north

- India" (2003–06) funded by G.B. Pant Institute of Himalayan Environment.
- 92. "Videography of Olyset Net" (2004) funded by Sumitomo Chemicals.
- 93. "Monitoring of NVBDCP programme implementation in high risk districts" (2004–05) funded by NVBDCP.
- 94. "Operational activity for the assessment of therapeutic efficacy of Chloroquine and Sulpha-Pyrimethamine combination for uncomplicated falciparum malaria in Assam, Orissa and Tripura" (2004–05) funded by WHO.
- 95. "Pictorial identification key for Indian anophelines" (2004–05) funded by DRL, Tezpur.
- "Evaluation of Diflubenzuron GR-2 and TB-2 for control of mosquito larvae" (2004–05) funded by Bayer India Ltd.
- 97. "Entomological evaluation of Etofenprox 20 WP against malaria vectors" (2004–05) funded by Sumitomo Chemicals.
- 98. "Entomological evaluation of Olyset nets impregnated with Permethrin 2% w/w at three sites" (2004–05) funded by Sumitomo Chemicals.
- "Evaluation of Pyriproxifen 0.5 G against larvae of mosquito vectors" (2004–05) funded by Sumitomo Chemicals.
- 100. "Assessment of state implementation capacities for IMCP" (2004–06) funded by NVBDCP.
- 101. "Health impact assessment of Indira Sagar Dam and resettlement and rehabilitation colonies in SSP reservoir impoundment areas in Narmada Valley in Madhya Pradesh" (2004–06) funded by NVDA, Bhopal.
- 102. "Assessment of therapeutic efficacy of antimalarial drugs against uncomplicated *P. falci*parum malaria" (2004–06) funded by USAID/ WHO.
- 103. "Assessment of malaria treatment practices in public and private health sectors" (2004–06) funded by USAID/WHO.
- 104. "Transmission dynamics of malaria in tribal areas" (2004–07) funded by RMRC, Jabalpur under Tribal Sub-plan of ICMR.
- 105. "Phase-II evaluation of VectoBac tablets (*Bti* H-14 formulation) against larvae of mosquito vectors" (2005) funded by Sumitomo Chemicals India Pvt Ltd.
- 106. "Bionomics and role of Anopheles stephensi in transmission of malaria in rural areas of Gujarat" (2005) funded by Govt. of Gujarat and IDVC.
- 107. "Phase-III evaluation of Olyset nets for malaria control in India" (2005) funded by Sumitomo Chemicals.
- 108. "Assessment of the state implementation capacities for IMCP" (2005–06) funded by NVBDCP.
- 109. "Monitoring of NVBDCP programme implementation in high risk districts" (2005–06) funded by NVBDCP.

- 110. "Studies on the epidemiology of urban malaria in mega, medium and small cities of India" (2005–06) funded by USAID.
- 111. "Discovery of antimalarials from marine organisms" (2005–06) funded by DBT.
- 112. "Screening of chloroquine sensitivity status of *P. falciparum* parasites from western border areas of India" (2005–06) funded by DRDO.
- 113. "Phase-III evaluation of Olyset nets (LLINs) against *An. minimus* transmitted malaria in Assam" (2005–06) funded by Sumitomo Chemicals.
- 114. "Entomological evaluation of PermaNets against malaria vector" (2005–06) funded by Vestergaard.
- 115. "Situation analysis of malaria in Car Nicobar after Tsunami attack" (2005–06) funded by DBT.
- 116. "Monitoring of Post-Tsunami malariogenic conditions in Car Nicobar Island using Satellite Remote Sensing" (2005–06) funded by ISRO.
- 117. "Environmental assessment of use of insecticides and insecticide treated material under NVBDCP" (2005–06) funded by NVBDCP.
- 118. NIH funded project "Promotion of *Plasmodium* research and training in India" (2005–06) funded by New York University School of Medicine NY.
- 119. "Effect of formulation and encapsulation on the efficacy of microbes against mosquito larvae" (2005–06) funded by CSIR.
- 120. "Bioefficacy of advanced odomos cream against *An. stephensi* a malaria vector and *Aedes aegypti* vector of dengue and dengue haemorrhagic fever" (2005–06) funded by Balsara Home Products, Mumbai.
- 121. "Study to assess the repellency of a natural oil formulation (DRP-1) on disease mosquito vectors" (2005–06) funded by Dabur Research Foundation.
- 122. "Laboratory evaluation of wash resistance of bioefficacy and insecticidal persistence of K-O Tab 12% treated LLN against An. culicifacies and An. stephensi" (2005–06) funded by Bayer Crop Sciences India Ltd, Mumbai.
- 123. "Randomized control trial of an indigenous fish, Aphanius dispar for malaria control in Gujarat" (2005–06) funded by Govt. of Gujarat and IDVC.
- 124. "Phase-III village scale trial of Lamda-cyhalothrin CS for indoor residual spraying against malaria vectors" (2005–06) funded by WHOPES, WHO.
- 125. "Evaluation of Biolarvicide (*Bti* B-17) in different larval habitats" (2005–06) funded by Godrej Hi Care India Ltd.
- 126. "Engineering of Indian malaria vector Anopheles culicifacies mosquito genetically using transposable element (IMVAC Project)" (2005–08) funded by DBT.
- 127. "Estimation of malaria disease burden in Jharkhand" (2005–08) funded by USAID.
- 128. "Evaluation of Primiphos-methyl 50% against the immatures of *Anopheles stephensi, An. culici-*

- facies (MV) and Culex quinquefasciatus, vector of bancroftian filariasis" (Jul-Sep 2006) funded by Syngenta Crop Protection Pvt Ltd.
- 129. "Bioefficacy laboratory studies on Interceptor long-lasting insecticide treated nets (LLINs) impregnated with Alpha-cypermethrin" (July to December 2006) funded by OBASE India Ltd.
- 130. "A phase-III comparative, open level, randomised multicentric, clinical study to assess the safety and efficacy of fixed dose formulation (Paramex *Pv*)" (August to September 2006) funded by Medicine for Malaria Venture, Switzerland.
- 131. "Laboratory evaluation of the wash resistance of bioefficacy and insecticidal persistence of K-O Tab 123 treated long-lasting insecticidal nets against *An. culicifacies* and *An. stephensi* K-O Tab (Hardwar)" (2006) funded by Bayer Crop Sciences India Ltd.
- 132. "Laboratory evaluation of the wash resistance of bioefficacy and insecticidal persistence of K-O Tab 123 treated long-lasting insecticidal nets against *An. culicifacies* and *An. stephensi* K-O Tab (Nadiad)" (2006) funded by Bayer Crop Sciences India Ltd.
- 133. "Phase-II and Phase-III field evaluation of a neem based larvicide 0.15% Azaec by BMR and Compune" (2006) funded by BMR Agency.
- 134. "A phase-III comparative, open level, randomised multicentric, clinical study to assess the safety and efficacy of fixed dose formulation (Paramex *Pt*)" (July to August 2006) funded by Medicine for Malaria Venture, Switzerland.
- 135. "Meeting expenditure for village wise digital map of nine districts for GIS mapping of kala-azar in India and mosahar population in villages of Bihar under the direction of NVBDCP" (2006–07) funded by NVBDCP.
- 136. "Micro-level mapping of high malaria risk district in India for decision support of malaria control" (2006–07) funded by NVBDCP.
- 137. "Use of Artemisinin and Curcumin combination in treatment of uncomplicated *P. falciparum* malaria" (September 2006 to March 2007) funded by DST.
- 138. "Phase-III randomized, non-inferiority trial to assess the efficacy and safety of Dihydro-artemisinin and Piperaquine (DHA+PPO, Artekin) in comparison with Artesunate + Mefloquine (AS+MQ) in patients affected by acute uncomplicated *Plasmodium falciparum* malaria—Goa, Bangalore and Sonapur" (October 2006 to January 2007) funded by MDS-Life Sciences, Singapore.
- 139. "Follow-up studies on the efficacy of Olyset net in malaria vector and incidence of malaria in a village of District Gautam Budh Nagar, U.P" (2006–07) funded by Sumitomo Chemicals Pvt Ltd.
- 140. "Malaria in pregnancy in M.P. Agreement for

- performance of work (APW) under allotment and SE-IND MAL 002 x W06 re. Rapid assessment of burden malaria in pregnancy in Satna, Katni and Jabalpur" (2006–07) funded by WHO.
- 141. "WHOPES field testing and evaluation of bioflash GR (*Bti*, Nature Bio Tek, Iran) for mosquito larviciding" (2006–07) funded by WHO.
- 142. "Phase-I laboratory studies to assess the larvicidal efficacy of (SSCL-30 mixture of essential) on mosquito vector species" funded by AccuDx Consultants, New Delhi.
- 143. "Laboratory studies to assess the bioefficacy of herbal based repellent spin cream (AD 101mixture of essential oils) against the different mosquito vector species on human volunteers" (2-months) funded by AccDIGM Bio Med Trading Pvt Ltd, Delhi.
- 144. "Community randomized evaluation of the effectiveness of insecticide treated nets for malaria control in construction work in the urban slums in Goa" (2006–08) funded by NVBDCP.
- 145. "Identification of malaria risk factor in different ecosystem of Assam using remote sensing" (2006–09) funded by DRL.
- 146. "Antimalarial properties of some plants from Garhwal region of northwest Himalaya" (2006– 09) funded by DST.
- 147. "Characterization of monoclonal antibodies raised against erythrocytic stages of India Plasmodium vivax isolates (2006–09) funded by CSIR.
- 148. "Identification of malaria risk factors in different ecosystems of Assam using remote sensing" (2006–09)) funded by DRDO.
- 149. "Field evaluation of Bacticide DT (Dispensable tablets) a formulation of *Bacillus thuringiensis* var *israelensis* H-14, strain 164 against larvae of mosquito vector" (July to December 2007) funded by Bio Tek International Ltd Delhi.
- 150. "In vitro sensitivity of Indian Plasmodium falciparum strains to antimalarial agents" (2007) funded by DNDI.
- 151. "Field evaluation (Phase-III) Bacticide WP, a formulation of *Bacillus thuringiensis* var israelensis H-14, strain 164 against larvae of mosquito vector" (July to December 2007) funded by Bio Tek International Ltd.
- 152. "Studies to assess the comparative bioefficacy of two different samples of Olyset nets (LLINs) 2% Permethrin incorporated (HD PE) bednets" (2007) funded by Sumitomo Chemicals India Pvt Ltd, Mumbai.
- 153. "Molecular characterization of different glchromosomal forms of *Anopheles fluviatilis*" (2007).
- 154. "External audit of DDT use in NVBDCP regarding" (2007) funded by NVBDCP.
- 155. "Field evaluation of BIODART-M, a formulation of *Bacillus thuringiensis* var *israelensis* (5% WP) against larvae of mosquito vector" (November

- 2007 to October 2008) funded by Ajai Bio Teck India Ltd.
- 156. "Multicentric, open-label, randomised clinical trial of efficacy and tolerability of the fixed-dose Artesunate/Amodiaquine (AS/AQ) combination therapy and Amodiaquine (AQ) monotherapy for treatment of uncomplicated falciparum malaria in India" (2007–08) funded by DNDI, Geneva.
- 157. "Evaluation of malaria (AG)/(AB-rapid test diagnostic kit)" funded by AccuDx Technologies.
- 158. "Monitoring on malaria programme implementation activities under World Bank" funded by NVBDCP.
- 159. "Monitoring on malaria programme implementation of programme activities in high risk district" funded by NVBDCP.
- 160. "Assessment of the state implementation capacity for global fund supported IMCP" funded by NVBDCP.
- 161. "RBX-combo study" funded by Ranbaxy.
- 162. "Multicentric study on efficacy trial with enhance dose of Fenthion 82.5% EC against mosquitoes in polluted water" (2007–08) funded by Bayer Crop Sciences.
- 163. "Assessment of efficacy safety and population pharmacokinetics of the fixed dose combination of Artesunate + Mefloquine in the treatment of acute uncomplicated *P. falciparum* malaria in India" (2007–09) funded by DNDI, Geneva, Switzerland.
- 164. "Phase-III evaluation of high density polythene (HDPE) nets" (3-months) funded by NVBDCP.
- 165. "Follow-up study of Olyset net in Sonapur and Rourkela" (2007–09) funded by Sumitomo Chemicals India Pvt Ltd.
- 166. "Developing a frame work for predicting malaria outbreak in rural and urban Gujarat, India" (2007–09) funded by NVBDCP/University of Michigan.
- 167. "A health monitoring study among inmates of households using bednet impregnated with Interceptor" (2007–09) funded by BASF India Ltd
- 168. "Efficacy of a chloroquine and sulphadoxinepyrimethamine (SP) for treatment of uncomplicated *P. falciparum* malaria with special reference to bio availability of chloroquine and

- sulphadoxine in Chhattisgarh (2008) funded by NVBDCP.
- 169. "Significance of asymptomatic carriers in malaria transmission vis-à-vis development of surveillance strategy in Orissa" (2008) funded by NVBDCP.
- 170. "Assessing the burden of malaria in pregnancy in east India, Jharkhand" (2 years) funded by WHO.
- 171. "Evaluation of Icon life nets having 0.2% Deltamethrin incorporated into the fibre with polyethylene material" (2008) funded by Syngenta Crop Protection Pvt Ltd.
- 172. "Environmental assessment under the proposed World Bank assisted Vector Borne Disease Control Project" (2008) funded by NVBDCP.
- 173. "Operational research on surveillance and intervention strategies in Chad Chiroli district of Maharashtra" (2008) funded by NVBDCP.
- 174. "Multicentric Phase-III evaluation of effectiveness of Diflubenzuron 25% WP (DI-LAEB) an insect growth regulator for mosquito vector control in urban settings" (2008) funded by Chemtura Chemicals India Pvt Ltd.
- 175. "Assessment of the impact of climate change on malaria and dengue at national scales and adaption strategies for short medium to long term scale (Nat.Com)" (2008–09) funded by Unirock International India.
- 176. "HRP-II/P-LDH based diagnostic kit for differential detection malaria parasite Phase-I" (2008–10) funded by Deptt. of Biotechnology, Govt. of India.
- 177. "Studies on the transmission dynamics of acute encephalitis syndrome in relation to vector and virus in the District Saharanpur of Uttar Pradesh in action plan for the prevention and control" (2008–10) funded by NVBDCP.
- 178. "Therapeutic efficacy of antimalarials" funded by World Bank (2008–09).
- 179. "Pharmacovigilance of antimalarials in India" funded by World Bank (2008–09).
- 180. "Quality assurance of laboratory diagnosis of malaria" funded by World Bank (2008–09).
- 181. "Monitoring of insecticide resistance of mosquito vectors in India" funded by World Bank (2008–09).