***Name*** *:* Dr. Ipsita Pal Bhowmick ([bhowmick.ip@icmr.gov.in](mailto:bhowmick.ip@icmr.gov.in), [ipsitapb@gmail.com](mailto:ipsitapb@gmail.com) )

***Affiliation*** *:* Scientist C ( ICMR Talent Search Scheme), ICMR NE Region-RMRC Dibrugarh

***Academic Qualifications:***

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| --- | --- | --- | --- | --- |
| Year | Degree | Institution/ University/ Board | Grade/ Percentage | Rank |
| 2007 | PhD | TIFR (Tata Institute of Fundamental Research), Mumbai | A | Obtained  Best Ph.D. thesis award |
| 2001 | M. Sc. | I.I.T. Kanpur  (Indian Institute of Technology) | 9.2/10 | 2nd |
| 1999 | B. Sc. | Jadavpur University | 78.2/100 | 1st |
| 1996 | Higher Secondary  (Grade 12th) | West Bengal Council of Higher Secondary Education | 85.4/100 | 52nd\* |
| 1994 | Secondary (Grade 10th) | West Bengal Board of Secondary Education | 88.4/100 | 42nd \*\* |

***Position:***

|  |  |  |
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| Institution Place | Position | Duration |
| ICMR NE Region-RMRC Dibrugarh | Scientist C ( ICMR Scientist Talent Search Scheme) | Aug 2017-till date |
| Model Rural Health Research Unit (MRHRU), Tripura | Scientist C | Aug 2015- Aug 2017 |
| ICMR NE Region-RMRC Dibrugarh | Scientist C ( MESA-ICEMR Project) | May 2014- Jul 2015 |
| Johns Hopkins University, Baltimore, USA | Post doctoral researcher | Jan, 2013- Jan, 2014 |
| National Institute of Health (NIH), USA | Post doctoral researcher | Aug 2007-Aug 2012 |

***Area of research interest :***

Malaria and other vector borne diseases, entomology, m-health, public health, health system

***Publications :***

*i)* Saurav Jyoti Patgiri, Dibya Ranjan Bhattacharyya, Ipsita Pal Bhowmick, Md. Atique Ahmed. Deciphering asymptomatic malaria – the missing link in India’s fight against the disease? Curr. Sci. 2020 May; 118(9): 1333-34.)

*ii)* Nilanju Pran Sarmah, Ipshita Pal Bhowmik, Devojit Kumar Sarma, Chandra Kanta Sharma, Gajendra Kumar Medhi, Pradyumno Kishore Mohapatra, Jagadish Mahanta, and Dibya Ranjan Bhattacharyya, Role of *Anopheles baimaii*: potential vector of epidemic outbreak in Tripura, North-east India, Journal of Global Heath Reports, 2019, 03-e2019036

iii)Chakraborty R et al,[Decreased *In Vitro* Artemisinin Sensitivity of  *Plasmodium falciparum* across India.](https://www.ncbi.nlm.nih.gov/pubmed/31332065)

Antimicrob Agents Chemother. 2019 Sep 23;63(10). pii: e00101-19. doi: 10.1128/AAC.00101-19. Print 2019 Oct.

### iv) [Challenges for achieving safe and effective radical cure of Plasmodium vivax: a round table discussion of the APMEN Vivax Working Group](https://malariajournal.biomedcentral.com/articles/10.1186/s12936-017-1784-1)

Threimer K et al, Malar J. 05 Apr 2017

v).Pal-Bhowmick I, Bosch J., Andersen J, Srinivasan P, Miller LH, Binding of aldolase and GAPDH to cytoplasmic tails of Plasmodiium falciparum merozoite DBL and RH family ligands. Mbio. 2012 Sep 18;3(5). :pii: e00292-12,

vi).Singh S, [Alam MM](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Alam%20MM%22%5BAuthor%5D), [Pal-Bhowmick I](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Pal-Bhowmick%20I%22%5BAuthor%5D), [Brzostowski JA](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Brzostowski%20JA%22%5BAuthor%5D), [Chitnis CE](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Chitnis%20CE%22%5BAuthor%5D). Distinct external

signals trigger sequential release of apical organelles during erythrocyte invasion by malaria

parasites. PLoS Pathog. 2010 Feb 5; 6(2):e1000746,

vii).Pal-Bhowmick I, Kumar N, [Coppens I](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Coppens%20I%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Sharma S](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Sharma%20S%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Jarori GK](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Jarori%20GK%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus). Plasmodium falciparum enolase stage-specific expression and sub-cellular localization. Malar J. 2009 Jul 30; 8:179-195.

viii)Vora HK, Shaik FR, Pal-Bhowmick I, Mout R, Jarori GK. Effect of deletion of a plant like pentapeptide insert on kinetic, structural and immunological properties of enolase from *Plasmodium falciparum*. Arch Biophys Biochem, 2009 May 15; 485(2):128-38.

ix).Pal-Bhowmick I, [Mehta M](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Mehta%20M%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Coppens I](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Coppens%20I%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Sharma S](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Sharma%20S%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Jarori GK](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Jarori%20GK%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus). Protective properties and surface localization *of Plasmodium falciparum* enolase. Infec Immun. 2007 Nov; 75(11):5500-8,

x) Pal-Bhowmick I, Jarori GK, Pande RP,  [Jarori](https://pubmed.ncbi.nlm.nih.gov/?term=Jarori+GK&cauthor_id=17963728) GK, [Kar](https://pubmed.ncbi.nlm.nih.gov/?term=Kar+S&cauthor_id=17963728) S, Sahal D, [Structural and functional studies on Ribonuclease S, retro S and retro-inverso S peptides](https://scholar.google.co.in/scholar?cluster=7030265267422191473&hl=en&as_sdt=2005&sciodt=0,5)

Biochem Biophys Res Commun 2007 Dec 21;364(3):608-13.

xi).Pal-Bhowmick I, Vora HK, Jarori GK. Sub-cellular localization and post-translational modifications of the *Plasmodium yoelii* enolase suggest moonlighting functions. Malar J. 2007 Apr 16;6: 45-52,

xii).Pal-Bhowmick I, Krishnan S, Jarori GK. Differential susceptibility of *Plasmodium falciparum* versus yeast and mammalian enolases to dissociation into active monomers. FEBS J. 2007 Apr; 274(8):1932-45.

xiii) Pal-Bhowmick I, Vora HK, Roy J, Sharma S, Jarori GK. Generation and characterisation of monoclonal antibodies specific to *Plasmodium falciparum* enolase. J Vector Borne Dis. 2006 Jun; 43(2):43-5

xiv).Pal-Bhowmick I, Sadagopan K, Vora HK, Sehgal A, Sharma S, Jarori GK. Cloning, over-expression, purification and characterization of *Plasmodium falciparum* enolase. Eur J Biochem/ FEBS J,. 2004 Dec; 271(23-24):4845-54.

**Manuscripts accepted:**

1. FeverTracker : mHealth technology platform for malaria surveillance in India

***Major academic /other achievements:***

***Academic:***

* + Selected for and successfully completed the prestigious ‘The Science of Eradication: Malaria Core Course’ (http://scienceoferadication.org/ ) which is a foundational leadership development course organized by [Barcelona Institute for Global Health](http://www.isglobal.org/), [Harvard University](http://www.harvard.edu/), and [Swiss Tropical and Public Health Institute](http://www.swisstph.ch/) that provides participants with a multidisciplinary perspective on approaches to malaria elimination and eradication and the follow up meeting ‘Rethinking Malaria Leadership’ at [Harvard University](http://www.harvard.edu/).
  + Best Ph.D. Thesis in Biological and Chemical Sciences in TIFR, 2008 and recipient of TAA-Zita Lobo memorial award
  + Ranked second in M.Sc from I.I.T. Kanpur
  + Securing first position in Bachelors’ degree in Chemistry in Jadavpur University and recipient of Gold Medal.
  + Obtained National Merit Scholarship for ranking among top 100 students in West Bengal Secondary ( rank 42nd) and Higher Secondary examination ( rank 54th) respectively.
  + Qualified in all India National Eligibility Test (NET-CSIR) in Chemical Science for JRF and was among the top 10 students all over India in Chemical Sciences selected for Shyamaprasad Mukherjee Fellowship under CSIR.
  + Selected for research fellowship in biological sciences in Tata Institute of Fundamental Research (TIFR), India and National Centre for Biological Sciences (NCBS), India.
  + Ranked 15th in all India GATE (Graduate Aptitude Test) (99.14 percentile) in Chemical Sciences.

***Name of Awards/Fellowship***

* 1. 1st prize for talk, Health Research Conclave, India International Science Festival 2020
  2. 1st prize for talk, TROPACON 2014, RMRC Dibrugarh, ICMR NE, India
  3. Received TAA-Zita Lobo Memorial Award for the Best Ph.D. Thesis in Biological and Chemical Sciences in TIFR, 2008.
  4. Received award for best poster and selected for oral presentation at the ‘’6th International Symposium ‘On Biochemical Roles of Eukaryotic Cell Surface Macromolecules’ titled Malaria – An alternative therapeutic search” in 2003.
  5. Qualified in all India National Eligibility Test (NET) in Chemical Science for JRF and was among the top 10 students all over India in Chemical Sciences selected for Shyamaprasad Mukherjee Fellowship under CSIR.
  6. Selected for research fellowship in biological sciences in Tata Institute of Fundamental Research (TIFR), India and National Centre for Biological Sciences (NCBS), India.
  7. Ranked 15th in all India GATE (Graduate Aptitude Test) in the year 2001 (99.14 percentile).
  8. Selected for summer student fellowship of Indian Academy of Sciences in the year 2000.
  9. 2nd All India rank in entrance test for Environmental Science conducted by Jawharlal Nehru University in the year 1999.
  10. Awarded Gold medal from Jadavpur University and State Government Scholarship in the year 1999 for securing first position in Bachelors’ degree in Chemistry.
  11. Obtained National Merit Scholarship for ranking among top 100 students in the state in Secondary and Higher Secondary examination held in the year 1994 and 1996, respectively.
  12. Qualified among top 20 students all over India in National Talent Search (NTS) examination organized by CSIR in the year 1994.
  13. Awarded rank and medals in Science Talent Search Examinations conducted by All India Science Teachers’ Association from 1989 to 1993.
  14. **S**elected for the prestigious ‘The Science of Eradication: Malaria Core Course’ (http://scienceoferadication.org/ ) which is a foundational leadership development course organized by Barcelona Institute for Global Health, Harvard University, and Swiss Tropical and Public Health Institute that provides participants with a multidisciplinary perspective on approaches to malaria elimination and eradication.
  15. Selected and obtained full fellowship for Gordon Research Conference on ‘Host-Parasite Interactions’ in Salve Regina University, Newport, Rhode Island, USA from June 25th to 30th, 2006.
  16. Selected and obtained fellowship for summer course in ‘Biology of Parasitism: Modern Approaches’ in Marine Biological Laboratory, MA, USA, from June 8th to August 6th, 2005.
* Selected for Wood-Whelan fellowship in the year 2005, from IUBMB Committee carrying out research project in the laboratory of Prof. Nirbhay Kumar, Johns Hopkins University, Baltimore, MD, USA.
* Qualified for CMP (Centre for Membrane Proteomics) fellowship for CMP summer school, Frankfurt, Germany, September, 2004.
* Obtained 5-year fellowship of Tata Institute of Fundamental Research for pursuing research in biological sciences in 2001.
* Qualified for CSIR fellowship in chemical sciences for doing research in India in 2001.
* Obtained fellowship from Indian Academy of Science for summer project in 2000.