

## CURRICULUM VITAE

### **DR. PRATAP KUMAR PARIDA**

Computational Chemist/Biologist

PhD in Computational Drug Design

Post-Doc Computational Drug Design

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### **ABOUT:**

An experienced scientific writer and computational chemist/biologist with the passion to employ bioinformatics and chemoinformatics to solve real world problem. Hold expertise in Structure/ligand based drug design, Homology Modelling, Virtual Screening, Molecular Docking, MD Simulations, QM/MM, R, Python, Linux, AWS and NGS data Analysis. Looking for a platform where I can apply my problem solving abilities for betterment of the organization.

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### **EDUCATION:**

- **Doctor of Philosophy (Ph.D.) in Computational Drug Design** (Awarded on 1<sup>st</sup> Sept. 2017)
  - Dibrugarh University, Assam, India
  - Thesis Title: “Studies of Molecular Modeling and Drug Designing by Comparative Docking of Dengue Virus Protein (NS3) With Human Nuclear Receptor Binding Proteins (NRBP)”
- **Master of Science (M.Sc.) in Bioinformatics (2009)**
  - Berhampur University, Odisha, India
  - 83% (1<sup>st</sup> class with Distinction, Rank-1 in the University)
- **Bachelor of Science (B.Sc.) in Bioinformatics (2007)**
  - North Orissa University, Odisha, India
  - 77% (1<sup>st</sup> class with distinction, Rank 1 in Bioinformatics Hons.)
- **Higher Secondary in Science (2004)**
  - Council of Higher Secondary Education (C.H.S.E.), Odisha, India
  - 63% (1<sup>st</sup> Class)

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**RESEARCH/TEACHING EXPERIENCE:**

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- **Research Scientist I** – Computational Biology and Bioinformatics, Noor Enzymes Pvt. Ltd, Kolkata, India. **1<sup>st</sup> Feb 2020 to 10<sup>th</sup> May 2021.**
- **Post-Doctoral Fellow**, Indian Institute of Technology, Kharagpur, India. **8<sup>th</sup> March 2018 to 31<sup>st</sup> January 2020.**
- **Research Scientist II**, Biomedical Informatics Centre, Regional Medical Research Centre, NE Region (ICMR), Dibrugarh, Assam, India, **2<sup>nd</sup> July 2013 to 30<sup>th</sup> June 2017**
- **Research Associate**, Bioinformatics Infrastructure Facility, Centre for Studies in Biotechnology, Dibrugarh University, Assam, India, **8<sup>th</sup> March 2010-31<sup>st</sup> June 2013.**
- **Part Time Faculty**, Department of Life Sciences, Dibrugarh University, Assam, India, **1<sup>st</sup> August 2012-1<sup>st</sup> December 2012.**
- **Studentship**, Bioinformatics Infrastructure Facility, College of Veterinary Sciences, Assam Agricultural university, Khanapara, Guwahati-22, Assam India, **27<sup>th</sup> February 2009-4<sup>th</sup> March 2010.**

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**PUBLICATIONS:**

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**Total Publications: 52, [Citations: 518; h-index: 10; i10-index: 10 ]**

**Google Scholar:** <https://scholar.google.com/citations?user=hAT-ah4AAAAJ&hl=en>

**Pubmed:** <https://pubmed.ncbi.nlm.nih.gov/?term=pratap+parida>

**Selected Publications**

**1:** Parida PK, Paul D, Chakravorty D. The natural way forward: Molecular dynamics simulation analysis of phytochemicals from Indian medicinal plants as potential inhibitors of SARS-CoV-2 targets. *Phytother Res.* 2020 Dec;34(12):3420-3433. Doi: 10.1002/ptr.6868. Epub 2020 Sep 24. PMID: 32969524; PMCID: PMC7537166.

**2:** Parida P, Bhowmick S, Saha A, Islam MA. Insight into the screening of potential beta-lactamase inhibitors as anti-bacterial chemical agents through pharmacoinformatics study. *J Biomol Struct Dyn.* 2021 Feb;39(3):923-942. Doi: 10.1080/07391102.2020.1720819. Epub 2020 Feb 12. PMID: 31984863.

**3:** Das CK, Parekh A, Parida PK, Bhutia SK, Mandal M. Lactate dehydrogenase A regulates autophagy and tamoxifen resistance in breast cancer. *Biochim Biophys Acta Mol Cell Res.* 2019 Jun;1866(6):1004-1018. Doi: 10.1016/j.bbamcr.2019.03.004. Epub 2019 Mar 13. PMID: 30878502.

**4:** Majumder R, Parida P, Paul S, Basak P. In vitro and in silico study of Aloe vera leaf extract against human breast cancer.. *Nat Prod Res.* 2020 Aug;34(16):2363-2366. doi: 10.1080/14786419.2018.1534848. Epub 2019 Jan 2. PMID: 30600703.

- 5:** Nath R, Sargiary P, Borkakoty B, Parida P. Cutaneotrichosporon (Trichosporon) debeurmannianum: A Rare Yeast Isolated from Blood and Urine Samples. *Mycopathologia*. 2018 Jun;183(3):585-590. doi: 10.1007/s11046-017-0231-8. Epub 2017 Dec 1. PMID: 29196924.
- 6:** Nath R, Bora R, Borkakoty B, Saikia L, Parida P. Clinically relevant yeast species identified by sequencing the internal transcribed spacer region of r-RNA gene and Vitek 2 compact (YST card) commercial identification system: Experience in a Tertiary Care Hospital in Assam, Northeast India. *Indian J Med Microbiol*. 2017 Oct-Dec;35(4):588-592. doi: 10.4103/ijmm.IJMM\_17\_100. PMID: 29405155.
- 7:** Parida P, Yadav RNS, Dehury B, Ghosh D, Mahapatra N, Mitra A, Mohanta TK. Novel Insights into the Molecular Interaction of a Panduratin A Derivative with the Non Structural Protein (NS3) of Dengue Serotypes: A Molecular Dynamics Study. *Curr Pharm Biotechnol*. 2017;18(9):769-782. doi: 10.2174/1389201018666171122122338. PMID: 29173158.
- 8:** Sarma K, Roychoudhury S, Bora SS, Dehury B, Parida P, Das S, Das R, Dohutia C, Nath S, Deb B, Modi MK. Molecular Modeling and Dynamics Simulation Analysis of KATNAL1 for Identification of Novel Inhibitor of Sperm Maturation. *Comb Chem High Throughput Screen*. 2017;20(1):82-92. doi: 10.2174/1386207320666170116120104. PMID: 28093975.
- 9:** Devi U, Borah PK, Malik V, Parida P, Mahanta J. M types & toxin gene profile of group A streptococci isolated from children in Dibrugarh district of Assam, India. *Indian J Med Res*. 2016 May;143(5):659-62. Doi: 10.4103/0971-5916.187116. PMID: 27488011; PMCID: PMC4989841.
- 10:** Mohanta TK, Mohanta N, Parida P, Panda SK, Ponpandian LN, Bae H. Genome-Wide Identification of Mitogen-Activated Protein Kinase Gene Family across Fungal Lineage Shows Presence of Novel and Diverse Activation Loop Motifs. *PLoS One*. 2016 Feb 26;11(2):e0149861. doi: 10.1371/journal.pone.0149861. PMID: 26918378; PMCID: PMC4769017.
- 11:** Ghosh D, Ghosh D, Parida P. Physiological Proteins in Therapeutics: A Current Review on Interferons. *Mini Rev Med Chem*. 2016;16(12):947-52. doi: 10.2174/1389557516999160612164506. PMID: 27499189.
- 12:** Ghosh D, Parida P. Drug Discovery and Development of Type 2 Diabetes Mellitus: Modern-Integrative Medicinal Approach. *Curr Drug Discov Technol*. 2016;13(2):60-7. doi: 10.2174/1570163813666160414105327. PMID: 27074851.
- 13:** Mohanta TK, Mohanta N, Parida P, Bae H. Mitogen Activated Protein Kinase (MPK) Interacts With Auxin Influx Carrier (OsAux/LAX1) Involved in Auxin Signaling in Plant. *Biol Proced Online*. 2015 Oct 30;17:13. doi: 10.1186/s12575-015-0025-7. PMID: 26526688; PMCID: PMC4628314.

- 14:** Mohanta TK, Mohanta N, Mohanta YK, Parida P, Bae H. Genome-wide identification of Calcineurin B-Like (CBL) gene family of plants reveals novel conserved motifs and evolutionary aspects in calcium signaling events. *BMC Plant Biol.* 2015 Aug 6;15:189. doi: 10.1186/s12870-015-0543-0. PMID: 26245459; PMCID: PMC4527274.
- 15:** Mohanta TK, Arora PK, Mohanta N, Parida P, Bae H. Identification of new members of the MAPK gene family in plants shows diverse conserved domains and novel activation loop variants. *BMC Genomics.* 2015 Feb 6;16(1):58. doi: 10.1186/s12864-015-1244-7. PMID: 25888265; PMCID: PMC4363184.
- 16:** Borkakoty B, Sarma K, Parida P, Prakash A, Mohapatra PK, Mahanta J. In silico screening of antifolate based novel inhibitors from *Brucea mollis* Wall. ex kurz against quadruple mutant drug resistant PfDHFR. *Comb Chem High Throughput Screen.* 2014;17(8):681-93. doi: 10.2174/1386207317666140521153305. PMID: 25053170.
- 17:** Parida P, Yadav RN, Sarma K. Insight into structural organization and protein-protein interaction of non structural 3 (NS3) proteins from dengue serotypes. *Curr Pharm Biotechnol.* 2014;15(2):156-72. doi: 10.2174/1389201015666140608142728. PMID: 24910013.
- 18:** Parida P, Yadav RN, Sarma K, Nainwal LM. Design, virtual screening and docking study of novel NS3 inhibitors by targeting protein-protein interacting sites of dengue virus - a novel approach. *Curr Pharm Biotechnol.* 2013;14(11):995-1008. doi: 10.2174/1389201014666131226160025. PMID: 24372240.
- 19:** Gahtori P, Ghosh SK, Parida P, Prakash A, Gogoi K, Bhat HR, Singh UP. Antimalarial evaluation and docking studies of hybrid phenylthiazolyl-1,3,5-triazine derivatives: a novel and potential antifolate lead for Pf-DHFR-TS inhibition. *Exp Parasitol.* 2012 Mar;130(3):292-9. Doi: 10.1016/j.exppara.2011.12.014. Epub 2012 Jan 3. PMID: 22233734.
- 20:** Hazarika R, Parida P, Neog B, Yadav RN. Binding Energy calculation of GSK-3 protein of Human against some anti-diabetic compounds of *Momordica charantia* linn (Bitter melon). *Bioinformation.* 2012;8(6):251-4. doi: 10.6026/97320630008251. Epub 2012 Mar 31. PMID: 22493531; PMCID: PMC3321233.

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#### **BOOK CHAPTERS:**

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**(Total=02 International-01, National-01)**

- 1. Parida P,** Sarma K, Borkakoty B, Mohapatra PK: Structure and Functional Differentiation of PfCRT Mutation in Chloroquine Resistance (CQR) in *Plasmodium falciparum* Malaria. *Current Topics in Malaria* edited by Alfonso J. Rodriguez-Morales, ISBN 978-953-51-2790-1, Print ISBN 978-953-51-2789-5, InTech, November 11, 2016
- 2. Parida P:** Fundamentals of Sequence alignment and phylogenetics analysis. *Biotechnology and Bioinformatics, Tools techniques and Applications* edited by Dr.

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**REVIEWER IN NATIONAL AND INTERNATIONAL JOURNALS:**

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Central Nervous System Agents in Medicinal Chemistry (Bentham), Journal of Data Mining in Genomics & Proteomics (Omics), International Journal of Spectroscopy, International Journal of Chemical and Biomedical Science, American Journal of Biomedical Science and Engineering, AASCIT Biology, Current Science, RSC Advances, Current Cancer Therapy Reviews (Bentham), Pharmaceutical Biology (Informa), Transaction in Biology and Medicine, Journal of Computational Biology, Journal of Biomolecular Structure and Dynamics

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**EDITORIAL BOARD MEMBERS:**

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International Journal of Chemical and Biomedical Science, American Journal of Biomedical Science and Engineering, International Journal of Biological Sciences and Applications, Journal of New Science Biotechnology

**Personal Details:**

Date of Birth : 12<sup>th</sup> June 1987  
Gender and Marital Status : Male, Married  
Nationality : Indian  
Corresponding Address : 45/A, Roy Bahadur Road, Behala, Kolkata-700034  
Languages Known : English, Hindi, Odia, Bengali and Assamese

I hereby declare that the information provided above is true to the best of my knowledge and I understand that I am liable for disqualification at any stage if any of the above data is found to be incorrect.

Place : Kolkata  
Date : 07.06.2021



(PRATAP KUMAR PARIDA)