

## PROFILE

Name **Dr. D. Prabhu**  
Designation **Assistant Professor**  
Unit **Research and Development Wing**  
Affiliating Institution **Sree Balaji Medical College and Hospital (SBMCH) - BIHER, Chennai-600 044 Tamil Nadu, India.**  
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Details	Google Scholar	Scopus	Web of Science
Total citations	143	116	84
h-index	7	7	6
i10-index	5		

**Total Impact Factor: 68.06**

Education Qualification				
S. No	Institute, Place	Degree	Year	Specialization
1.	Alagappa University, Karaikudi	Ph.D.	2020	Bioinformatics
2.	Alagappa University, Karaikudi	M.Sc.	2011	Bioinformatics
3.	University of Madras, Chennai	B.Sc.	2009	Biotechnology

Academic Experience			
S. No	Institute, Place	Designation	Period
1.	Sree Balaji Medical College and Hospital (BIHER), Chennai, India	Assistant Professor	Nov'2021 - Till date
2.	SASTRA Deemed University, Thanjavur	Research Associate - I	Aug'2020 – Oct'2021
3.	Alagappa University, Karaikudi	Senior Research Fellow	May'2018-May'2020
4.	Alagappa University, Karaikudi	Research Fellow	Nov'2015 - Apr'2018
5.	Alagappa University, Karaikudi	Project Assistant	Oct'2012-Oct'2015

Publications –Articles		IF	Citation
1.	Saritha P, Rajamanikandan S, Rajmichael Raji, Thangaraj S, <b>Prabhu D</b> , Biswal J, Veerapandiyan M, Chitra JP, Jeyakanthan J. Computational screening of potential inhibitors targeting MurF of <i>Brugia malayi</i> Wolbachia through multi-scale molecular docking, molecular dynamics and MM-GBSA analysis. <i>Molecular and Cellular Parasitology</i> .	1.75	-
2.	Karthika A, Ramachandran B, Chitra JP, <b>Prabhu D</b> , Rajamanikandan S, Veerapandiyan M, Jeyakanthan J. Molecular dynamics simulation of Toxin-Antitoxin (TA) system in <i>Acinetobacter baumannii</i> to explore the novel mechanism for inhibition of cell wall biosynthesis: Zeta Toxin as an effective therapeutic target. <i>J Cell Biochem.</i> , Aug 26. 2021	4.429	-
3.	<b>Prabhu D</b> , Rajamanikandan V, Sureshan M, Jeyakanthan J, Saraboji K. Modelling studies reveal the importance of the C-terminal inter motif loop of NSP1 as a promising target site for drug discovery and screening of potential phytochemicals to combat SARS-CoV-2. <i>J Mol Graph Model</i> . Apr 19, 106:107920, 2021	<b>2.518</b>	1
4.	Surekha K, <b>Prabhu D</b> , Nachiappan M, Sanjay KC, Prajisha J, Jayashree B & Jeyakanthan J. Structural insights on binding mechanism of CAD complexes (CPSase, ATCase and DHOase). <i>J Biomol Struct Dyn</i> , 39 (3), 3144-3157, 2021	3.31	-
5.	S Rajamanikandan, S Soundarya, P Anandhi, <b>D Prabhu</b> , J Jeyakanthan, R Vidhyavathi. Computational identification of potential lead molecules targeting Rho receptor of <i>Neisseria gonorrhoeae</i> . <i>J Biomol Struct Dyn</i> . Feb 16;1-11, 2021	3.31	-
6.	J Joseph Sahayarayan, K Soundar Rajan, R Vidhyavathi, M Nachiappan, <b>D Prabhu</b> , S Alfarraj, S Arokiyaraj, AN Daniel. In-silico Protein-Ligand Docking Studies against the Estrogen protein of Breast Cancer using pharmacophore based virtual screening approaches. <i>Saudi J Biol Sci</i> . 28(1):400-407, 2021	4.219	-
7.	M Amala, M Richard, P Saritha, <b>D Prabhu</b> , M Veerapandiyan, K Surekha, J Jeyakanthan. Molecular evolution, binding site interpretation and functional divergence of aspartate semialdehyde dehydrogenase. <i>J Biomol Struct Dyn</i> . Nov 23;1-19, 2020	3.31	-
8.	J Joseph Sahayarayan, K Soundarajan, M Nachiappan, <b>D Prabhu</b> , RGR Rao, J Jeyakanthan, AH Mahmoud, OB Mohammed, AMA Morgan. Identification of potential drug target in malarial disease using molecular docking analysis. <i>Saudi J Biol Sci</i> . 27(12):3327-3333, 2020	4.219	2
9.	<b>Prabhu D</b> , Rajamanikandan S, Baby Anusha S, Sushma Chowdary M, Veerapandiyan M & Jeyakanthan J. <i>In silico</i> functional annotation and characterization of hypothetical proteins from <i>Serratia marcescens</i> FGI94. <i>Biology Bulletin</i> , 2020, Vol. 47, No. 4, pp. 319–331.	0.45	6

10.	<b>Prabhu D</b> , Amala M, Saritha P, Rajamanikandan S, Veerapandiyan M & Jeyakanthan J. Functional characterization of streptomycin adenylyltransferase from <i>Serratia marcescens</i> : An experimental approach to understand the Antibiotic Resistance mechanism. <i>BMC Infectious Diseases</i> , 20(Suppl 1):324, 20, 2020	2.56	-
11.	Sudharsana S, Madhana Priya N, <b>Prabhu D</b> , Jeyakanthan J & Mohanapriya A. Conformational insights into the inhibitory mechanism of phyto-compounds against SRC kinase family members implicated in psoriasis. <i>J Biomol Struct Dyn</i> , 38(5):1398-1414, 2020	3.31	2
12.	<b>Prabhu D</b> , Rajamanikandan S, Saritha P & Jeyakanthan J. Evolutionary Significance and Functional Characterization of Streptomycin adenylyltransferase from <i>Serratia marcescens</i> . <i>J Biomol Struct Dyn</i> , 38 (15):4418-4431, 2020	3.31	6
13.	Imran H, Manikandan PN, <b>Prabhu D</b> , Dharuman V, Jeyakanthan J & Hahn JH. Ultra selective label free electrochemical detection of cancer prognostic p53-antibody at DNA functionalized grapheme. <i>Sens Bio Res</i> , 23, 100261, 2019	2.75	11
14.	Prajisha J, Biswal J, Kanagarajan S, <b>Prabhu D</b> , Gogoi P, Kanaujia S & J Jeyakanthan. Design of novel PhMTNA inhibitors, targeting neurological disorder through Homology Modeling, Molecular Docking and Dynamics approaches, <i>J Recept Signal Transduct</i> , 39(1):28-38, 2019	1.62	2
15.	Amala M*, Rajamanikandan S*, <b>Prabhu D*</b> , Surekha K & Jeyakanthan J. Identification of Anti-filarial leads against Aspartate semialdehyde Dehydrogenase of Wolbachia endosymbiont of <i>Brugia malayi</i> : Combined Molecular Docking and Molecular Dynamics Approaches. <i>J Biomol Struct Dyn</i> . 37(2):394-410, 2019. (*Authors share equal contribution)	3.31	15
16.	Sindhu T, Venkatesan T, <b>Prabhu D</b> , Jeyakanthan J, Gracy GR, Jalali SK & Rai A. Insecticide-resistance mechanism of <i>Plutella xylostella</i> (L.) associated with amino acid substitutions in acetylcholinesterase-1: a molecular docking and molecular dynamics investigation. <i>Comput Biol Chem.</i> , 77:240-250, 2018.	1.58	7
17.	<b>Prabhu D</b> , Vidhyavathi RM & Jeyakanthan J. Computational identification of potent inhibitors for Streptomycin 3"-adenylyltransferase of <i>Serratia marcescens</i> . <i>Microb Pathog</i> .103, 94-106, 2017. (IF: 2.33)	2.33	10
18.	Surekha K, Nachiappan M, <b>Prabhu D</b> , Choubey SK, Biswal J & Jeyakanthan J. Identification of potential inhibitors for oncogenic target of Dihydroorotate dehydrogenase using <i>in silico</i> approaches. <i>J Mol Struct.</i> , 1127, 675-688, 2017.	3.12	6
19.	Biswal J, Nachiappan M, <b>Prabhu D</b> & Jeyakanthan J. Unraveling the importance of Multidrug Efflux Transporter protein from <i>Thermus thermophilus</i> HB8 - an <i>in silico</i> approach. <i>Research Journal of Medical</i>	-	-

	<i>and Allied Sciences</i> . Vol 1; Issue 1, 2017.		
20.	Choubey SK, <b>Prabhu D</b> , Nachiappan M, Biswal J & Jeyakanthan J. Molecular modeling, dynamics studies and density functional theory approaches to identify potential inhibitors of SIRT4 protein from Homo sapiens: a novel target for the treatment of type 2 diabetes. <i>J Biomol Struct Dyn</i> . Nov;35(15):3316-3329, 2017. (IF: 3.12)	3.12	34
21.	Guru Raj Rao R, Biswal J, <b>Prabhu D</b> , Sureka K & Jeyakanthan J. Identification of Potential Inhibitors for AIRS from de novo purine biosynthesis pathway through Molecular modeling Studies - A Computational approach. <i>J Biomol Struct Dyn</i> . 34 (10), 2199-213, 2016. (IF: 3.12)	3.12	8
22.	Surekha K*, <b>Prabhu D*</b> , Richard M, Nachiappan M, Jaishree Biswal & Jeyakanthan J. Investigation of vital pathogenic target orotate phosphoribosyltransferases (OPRTase) from <i>Thermus thermophilus</i> HB8: Phylogenetic and molecular modeling approach. <i>Gene</i> . 583(2). PP:102-111. 2016. (*Authors share equal contribution).	2.41	20
23.	Gowri M, Beaula WS, Biswal J, <b>Prabhu D</b> , Saiharish R, Rohanprasad S, Pitani R, Kandaswamy D, Raghunathan R, Jeyakanthan J, Rayala SK & Ganesh V. $\beta$ -lactam substituted polycyclic fused pyrrolidine/pyrrolizidine derivatives eradicate <i>C. albicans</i> in an <i>ex vivo</i> human dentinal tubule model by inhibiting sterol 14- $\alpha$ demethylase and cAMP pathway. <i>Biochim Biophys Acta</i> . 1860(4). pp:636-647. 2016.	5.08	8
24.	Surekha K, Nachiappan M, <b>Prabhu D</b> , Jeyaram M, Krishna R & Jeyakanthan J. Exploring the structural features of Aspartase Trans Carbamoylase (TIAAtCase) from <i>Thermus thermophilus</i> HB8 through in silico approaches: a potential drug target for inborn error of pyrimidine metabolism. <i>J Biomol Struct Dyn</i> . 2014, 32:591-601.	2.91	5
25.	Tompa DR, <b>Prabhu D</b> , Immanuel A, Srikanth S, Saraboji K. Promising antiviral potentials of herbal medicines: an update on the developments of plant-derived antiviral drugs. <i>Frontiers in Pharmacology</i> , 2021.	5.8	-
26.	Sureshan M, <b>Prabhu D</b> , Aruldoss I, Saraboji K. Potential inhibitors for Peroxiredoxin 6 of <i>W. bancrofti</i> : A combined study of modelling, structure-based drug design and MD simulation. <i>Journal of Molecular Graphics &amp; Modelling</i> , 2021.	2.5	-
27.	Sureshan M, <b>Prabhu D</b> , Saraboji K. Identification of anti-filarial lead compounds targeting metal binding and substrate channel residues of Cu/Zn SOD1 from <i>Wuchereria bancrofti</i> . <i>Molecular &amp; Biochemical Parasitology</i> , 2021	1.8	-

Publications Books		Publisher
1.	Nachiappan M, Guru R Rao, Richard M, Prabhu D, <b>Rajamanikandan S</b> , Chitra JP	Elsevier-

	& Jeyakanthan J. 3D Structural Determination of Macromolecules using X-ray Crystallography Methods. Molecular Docking for Computer-Aided Drug Design (ISBN: 978-0-12-822312-3), Pages: 119-140, 2021.	Academic Press
2.	Nachiappan M, Guru R Rao, Richard M, Saritha P, Amala M, Prabhu D, <b>Rajamanikandan S</b> , Chitra JP & Jeyakanthan J. Experimental and Computational Methods to Determine Protein Structure and Stability. Frontiers in Protein Structure, Function, and Dynamics (ISBN 978-981-15-5529-9), Pages: 23 – 55, 2020.	Springer Nature

### Projects

#### Sponsored projects

Nil

#### Consultancy projects

Nil

### Patents

Nil

### Details of Conference/Symposium/Workshop

#### Conference/Symposium

1.	<b>16<sup>th</sup> Conference on “Asian Crystallographic Association – AsCA 2019”</b> , held at National University of Singapore, Singapore.
2.	<b>1<sup>st</sup> International Conference on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-ICSBCADD 2019”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
3.	<b>3<sup>rd</sup> International Science Symposium on “HIV &amp; Infectious Diseases - ISSHID 2019”</b> , held at Sri Ramachandra Institute of Higher Education and Research (SRIHER), Chennai, Tamil Nadu.
4.	<b>11<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2019”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
5.	<b>10<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2018”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
6.	<b>9<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2017”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
7.	<b>International Conference on “Recent Trends in Biosciences-2016”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
8.	<b>8<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2016”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
9.	<b>43<sup>rd</sup> National Seminar on Crystallography-2014</b> , held at CSIR-Central Drug Research Institute, Lucknow.

10	<b>6<sup>th</sup> International Symposium on “Recent Trends in Macromolecular Structure and Function-2014”</b> , held at the University of Madras, Chennai, Tamil Nadu.
11	<b>6<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2014”</b> , held at Alagappa University, Karaikudi, Tamil Nadu.
12	<b>2<sup>nd</sup> IIT Madras-Tokyo Tech Joint Symposium on “Techniques and Applications of Bioinformatics-2013”</b> , held at IIT-Madras, Chennai, Tamil Nadu.
13	International Conference on <b>“Recent Advances in Computational Drug Design-2013”</b> , held at Indian Institute of Science, Bangalore, Karnataka.
14	<b>5<sup>th</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2013”</b> held at Alagappa University, Karaikudi, Tamil Nadu.
15	<b>41 National Seminar on Crystallography-2012</b> , held at the University of Madras, Chennai, Tamil Nadu.
16	<b>3<sup>rd</sup> National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer-Aided Drug Designing-2010”</b> , organized by the Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu.
17	National seminar on <b>“Melange 2008”</b> held at Vel’s Arts and Science College, Chennai, Tamil Nadu.
18	<b>“MCAS BIO2008”</b> , held at Muthayammal College of Arts and Science, Rasipuram, Tamil Nadu.
<b>Workshops</b>	
19	<b>Attended National Workshop</b> on Structural Biology on <b>“Introduction to protein crystallography-2015”</b> , held at National Institute of Mental Health and Neurosciences, Bangalore, Karnataka.
20	<b>Attended National Workshop</b> on <b>“Molecular modeling and drug design-2014”</b> held at the University of Madras, Chennai, Tamil Nadu.
21	<b>Attended Phenix Workshop-2014</b> , held at Madras University, Chennai, Tamilnadu.
22	<b>Attended National Workshop</b> on <b>“System Biology and Computational Biology-2010”</b> held at Vel’s University, Chennai, Tamil Nadu

<b>Award</b>	
1.	Indian Council of Medical Research, New Delhi: Senior Research Fellowship (2018)