



Dr. Pradeep Natarajan

drpradeepnatarajan@gmail.com; pradip.bioinfo@gmail.com

+91-9949442837; +91-9493713006

Dr. Pradeep N, C/o Mrs. Vaishali Pradeep, No:38, Madha Kovil Street, Nathamaedu, Palur, Chengalpattu dist., Tamil Nadu-603101.

CAREER OBJECTIVE

A young, energetic male with a practical approach is sought to drive a high level of creativity, innovation, and cutting-edge research in a global business or professional association that is seeking an individual who can analyze, organize, and manage challenging projects that promote growth through individual and product achievement towards the growth of the organization.

EDUCATIONAL VITALITY

Doctorate University	PhD in Bioinformatics Sri Venkateswara Institute of Medical Sciences University, (SVIMS) Tirupati, Andhra Pradesh.	2017
Degree University	M.Sc. Bioinformatics Sri Venkateswara Institute of Medical Sciences University, Tirupati, Andhra Pradesh.	2010
Marks	73 percent	Distinction
Degree University	B.Sc. Biotechnology Sri Venkateswara University, (SVU) Tirupati, Andhra Pradesh. Gayathri Degree and PG College, Tirupati, Andhra Pradesh.	2008
Marks	80 percent	Distinction
Intermediate Board	BiPC Board of Intermediate Education, Andhra Pradesh.	2005
Institution	Royalaseema Jr. College, Tirupati, Andhra Pradesh.	
Marks	82.8 percent	Distinction
Matriculation Board	SSC Board of Secondary Education, Andhra Pradesh.	2003
Institution	Infant Jesus School, Renigunta, Andhra Pradesh.	
Marks	77.3 percent	Distinction

Experiences

Designation Lab	Scientist-I Bioinformatics Centre (BIC), Centre for Biotechnology Anna University, Chennai, Tamil Nadu.	19th Jan 2023 - till date
Designation Lab	ICMR-Research Associate Gene Manipulation Lab, Dept. of Bio-Medical Engineering. National Institute of Technology (NIT), Rourkela, Odisha.	1.4 years
Designation Lab	BIF-Research Associate BIF Centre, Dept. of Biotechnology and Medical Engineering. National Institute of Technology (NIT), Rourkela, Odisha.	2 years
Designation Lab	ICMR-SRF BIF Centre, Dept. of Bioinformatics. SVIMS University, Tirupati, AP	3 years
Designation Company	Research Trainee Xinnovem, Chennai, Tamil Nadu. BCIL Bio-Informatics Industrial Program (BCIL BIITP)	6 months
Designation Lab	JRF Eukaryotic Gene Expression (EGE-II) lab National Institute of Immunology, New Delhi.	8 months

Research Grants

- Unfolding newer therapeutic strategies by identifying significant biomarkers for human mastitis through multi-omics and big data analysis (**2020-8627**): Indian Council of Medical Research (ICMR), Govt. of India. Amount: INR 20,22,720. Duration: 3 years.
- DBT International travel fellowship grant (**DBT/CTEP/02/201500265**). Albany-2015, 19th Conversation. DBT, Ministry of Science & Technology, Govt. of India. Amount: INR 1,13,700.
- Multiple docking strategies and pharmacophore design for amyloid pathway proteins (**2014-20890**): Indian Council of Medical Research (ICMR), Govt. of India. Amount: INR 11,00,000. Duration: 3 years.

Personal information

Mother	N. Annappoorani
Father	P. Natarajan
Nationality	Indian
Religion	Hindu
DOB	12 Nov 1987
Marital Status	Married

Conference Proceedings

International	03
National	08

Short-Term Courses/ Workshops Organized

- Genomic and Proteomic Analysis for Developing Biosimilars (**GPP-2019**) "11-15 Feb 2019" as a **Coordinator**.
- Computer Aided Drug Designing and Molecular Dynamics Simulations (**CAMDS-2022**) "13-19 Jun 2022" as a **Coordinator**.
- International Short-Term Training Program on Computer Aided Drug Designing and Molecular Dynamics Simulations (**MTTF-2023**) "7-13 Jan 2023" as a **Course Instructor**.
- Workshop on Chemo informatics For Drug Discovery (**WCDD-2023**) "15-18 Mar 2023" as a **Coordinator and Instructor**.

Conference Proceedings

Indian Science Congress Association	Life Member	(L31184)
National Academy of Biological Sciences	Life Member	(LM-014-19)
Antibody Society	Member	

Awards & Honours

Best paper presentation awards: 3

IPTCON-2017

Institute of Pharmaceutical Technology, SPMVV, Tirupati, A.P

NSBI-2014

Dept. of Bioinformatics, SVIMS University, Tirupati, A.P

RACDD-2013

Indian Institute of Science, Bangalore, Karnataka

Skills

MS Office	● ● ● ● ● ●
GROMACS	● ● ● ● ● ●
C, Linux	● ● ● ● ● ●
Python and R	● ● ● ● ● ●
Data Science	● ● ● ● ● ●
Conferences	● ● ● ● ● ●
Presentation	● ● ● ● ● ●
Communication	● ● ● ● ● ●

Research & Area of Interest

Neurological Disorders	Metabolic Disorders	Computer Aided Drug Design	Proteomics & Secretomics
Structural Biology & Biocomputing	Cheminformatics	Data Mining	Cell Signaling
Pharmacogenomics	Immunoinformatics	Comparative genomics & Networking	

Research Guidance

Sidhartha Deo (21MBT023)

Integration of E-pharmacophore modelling and multiple docking strategies targeting ADIPOR1 to identify novel herbal isolates for treating mammary gland inflammation in *Bovine*. (NITRKL/BM/BIF/2023/L/36).

M.Sc. Biotechnology; RAVENSHAW UNIVERSITY, Cuttack, Odisha.

Somo Surjyagni Mallik (21MBT021)

E-pharmacophore based *in silico* approach for discovering a novel galactagogues for treating *Bovine* mastitis. (NITRKL/BM/BIF/2023/L/37).

M.Sc. Biotechnology; RAVENSHAW UNIVERSITY, Cuttack, Odisha.

Devendra Palliwal (118BT0796)

Identification of potential TLR4 inhibitors from medicinal plants targeting bovine mastitis. (NITRKL/BM/BIF/2019/L/66).

M.Tech. Biotechnology; NATIONAL INSTITUTE OF TECHNOLOGY, Rourkela, Odisha.

Paidi Ganga Bhavani (118BT0014)

Network-based bioinformatics analysis was used to identify the secretome in bovine mastitis milk and anti-mastitis compounds from medicinal plants. (NITRKL/BM/BIF/2019/L/65).

M.Tech. Biotechnology; NATIONAL INSTITUTE OF TECHNOLOGY, Rourkela, Odisha.

Soundharya R (1DS16BT040)

Identification of therapeutically significant common differentially expressed genes in type 2 diabetes mellitus and Azoospermia, using micro-array data analysis. (NITRKL/BM/BIF/2019/L/42).

B.Tech. Biotechnology; DAYANANDA SAGAR COLLEGE OF ENGINEERING, Bengaluru, Karnataka.

Shatakshi Agrawal (15/IBT/043)

In silico Identification of Differentially Expressed Genes in Type 2 Diabetes Mellitus (T2DM) (NITRKL/BM/BIF/2019/L/41).

M.Tech. Biotechnology; GAUTAM BUDDHA UNIVERSITY, Greater Noida, Uttar Pradesh.

Saswati Sarita Mohanty (2014MBI002)

Discovery Of Novel Leads By Ensemble miRNA And SNP Through Scaffold Hopping For Snubbed Regulators Involved In Hypertension (NITRKL/BM/BIF/2019/L/40).

M.Sc. Bioinformatics; BUXI JAGABANDHU BIDYADHAR (BJB) (Autonomous) College, Bhubaneswar, Odisha.

References

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| 1 Dr. B. S. Lakshmi , Professor
Director & Head,
Department of Biotechnology,
Anna University, Chennai, Tamil Nadu -600025.
Email: lakshmi@annauniv.edu | 2 Dr. Mukesh K Gupta , Professor,
Gene Manipulation Lab,
Dept. of Biotechnology and Medical Engineering,
National Institute of Technology (NIT), Rourkela,
Odisha-769008.
Email: guptam@nitkl.ac.in |
| 3 Dr. A. Umamaheswari , Professor,
Head, Department of Bioinformatics,
Coordinator of BIF, SVIMS University,
Tirupati, Andhra Pradesh -517 507
Email: svims.btisnet@nic.in . | 4 Dr. B. Vengamma , Sr. Professor,
Head, Department of Neurology
Former Director-cum-Vice Chancellor,
SVIMS University, Tirupati, Andhra Pradesh -517 507
Email: bvengamma@yahoo.com . |

Published Research Articles:

Google Scholar ID: [yiEarE8AAAAJ](https://scholar.google.com/citations?user=yiEarE8AAAAJ)

- Natarajan P**, Manne M, Koduru SK, Bokkasam TS (2023) 3-Deazaadenosine: A Promising Novel p38 γ Antagonist with Potential as a Breast Cancer Therapeutic Agent. *Cancer Treatment and Research Communications*; 36:100744, [https://doi.org/10.1016/j.ctarc.2023.100744] [July 2023] [International] (**Scopus & Pubmed/Medline**).
- Pradeep N**, S Oggu, BD Mallavarapu, S Malempati, R Gundla (2022) Synthesis, Cytotoxicity and Molecular Docking Studies of Chalcone Incorporated 1, 2, 3-Triazol-1, 3, 5-Triazin-Quinazoline as Anti-Cancer Agents. *Journal of Molecular Structure*; 1266, 133412 [https://doi.org/10.1016/j.molstruc.2022.133412] [June 2022] [International-SCI] (**Impact factor: 3.841**).

3. Manne M, Goudar G, Varikasuvu SR, Khetagoudar MC, Kanipakam H, **Natarajan P**, Patil V (2021) Cordifolioside: potent inhibitor against Mpro of SARS-CoV-2 and immunomodulatory through human TGF- β and TNF- α . *3 Biotech*; 11(3), 1–25. [https://doi.org/10.1007/s13205-021-02685-z] [March][International-SCI] (**Impact factor: 2.406**).
 4. **Pradeep N**, Praveen KG, Kirti A, Mukesh KG (2020) Pharmacophore modeling coupled with Scaffold hopping to identify novel and potent Ribosomal S6 Kinase (RSK2) protein antagonists as anti-cancer agents. *Journal of Biomolecular Structure and Dynamics*; 38:16, 4947-4955. [https://doi.org/10.1080/07391102.2019.1689172] [November][International-SCI] (**Impact factor: 5.235**).
 5. **Natarajan P**, Praveen MA, Parvathy KRK, Patra S, Khan I, Balasubramanian P (2020) Cytotoxic and pharmacokinetic studies of Indian seaweed polysaccharides for formulating raindrop symbiotic candy. *International Journal of Biological Macromolecules*, 154, 557–566. [https://doi.org/10.1016/j.ijbiomac.2020.03.086] [July][International-SCI] (**Impact factor: 6.953**).
 6. **Pradeep N**, Sudheer Kumar K, Umamaheswari A, Munikumar M, Sandeep S, Hema K, Guttula PK and Gupta MK (2019) Scaffold hopping strategy on the route discerning novel Glutathione peroxidase agonists. *Journal of Biomolecular Structure and Dynamics*; 37 (1), 42-43. [10.1080/07391102.2019.1604468] [May][International-SCI] (**Impact factor: 5.235**).
 7. Hema k, Sandeep S, **Pradeep N**, Umamaheswari A (2019) In silico identification of leads targeting interleukin-6 against pathogenesis of atherosclerosis. *Journal of Biomolecular Structure and Dynamics*; 37 (1): 32-33. [International-SCI] (**Impact factor: 3.107**).
 8. **Pradeep N**, Munikumar M, Umamaheswari A and Radha Krishna KV (2019) Discovery of potential lumazine synthase antagonists for pathogens involved in bacterial meningitis: In silico study. *Informatics in Medicine Unlocked*; 15, 100187, 1-13. [https://doi.org/10.1016/j.imu.2019.100187] [May][International-Scopus] (**H-index: 9**).
 9. Ravina Madhulitha N, **Pradeep N**, Sandeep S, Hema K, Chiranjeevi P, Sudheer Kumar K and Umamaheswari A (2017) E-Pharmacophore Model Assisted Discovery of Novel Antagonists of nNOS. *Biochemistry and Analytical Biochemistry*; 6(1): 1-9. [https://doi.org/10.4172/2161-1009.1000307] [January][International] (**Cosmos Impact Factor: 0.97**).
 10. **Pradeep N**, Sudheer Kumar K, Sandeep S, Hema K, Chiranjeevi P and Umamaheswari A (2016) Inhibitor design against JNK1 through e-pharmacophore modelling docking and molecular dynamics simulations. *Journal of Receptors and Signal Transduction*; 36(6): 558-571. [https://doi.org/10.3109/10799893.2016.1141955] [February] [International-SCI] (**Impact factor: 2.579**).
 11. **Pradeep N**, Priyadarshini IV, Pradhan D, Munikumar M, Sandeep S, Hema K, Vengamma B and Umamaheswari A (2016) E-pharmacophore-based virtual screening to identify GSK-3 β inhibitors. *Journal of Receptors and Signal Transduction*; 36(5): 445-458. [https://doi.org/10.3109/10799893.2015.1122043] [September] [International-SCI] (**Impact factor: 2.579**).
 12. **Pradeep N**, K Hema, S Sandeep, A Umamaheswari (2016) Identification of effectual inhibitors against human insulin like growth factor binding protein-2. *Journal of Informatics and Data Mining*; 2 (1), 1-10. [DOI: 10.21767/2472-1956.100017] [December] [International].
 13. **Pradeep N**, Hema K, Sandeep S and Umamaheswari A (2016) In silico agonist for human extracellular superoxide dismutase SOD3. *Online Journal of Bioinformatics*; 17(1): 29-40 [International].
 14. Chiranjeevi P, Sandeep S, **Pradeep N**, Hema K, Sudheer Kumar K, Ravina Madhulitha N and Umamaheswari A (2016) Inhibitor Design for VacA Toxin of Helicobacter pylori. *Journal of Proteomics & Bioinformatics*; 9(9): 220-225 [DOI: 10.4172/jpb.1000409] [September] [International-Scopus] (**Journal impact factor: 10.40**).
 15. Sandeep S, Pradhan D, **Pradeep N**, Hema K, Siva Krishna V and Umamaheswari A (2015) Structure guided novel lead molecules against ERK proteins: application of multiple docking and molecular dynamics studies. *Journal of Biomolecular Structure and Dynamics*; 33 (1): 134-135 [https://doi.org/10.1080/07391102.2015.1032838] [June] [International-SCI] (**Impact factor: 5.235**).
 16. **Pradeep N**, Munikumar M, Sandeep S, Hema K, Sudheer Kumar K and Umamaheswari A (2015) Combination of e-pharmacophore modelling, multiple docking strategies and molecular dynamic simulations to discover of novel antagonists of BACE1. *Journal of Biomolecular Structure and Dynamics*; 33 (1): 129-130. [https://doi.org/10.1080/07391102.2015.1032834] [June] [International-SCI] (**Impact factor: 5.235**).
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17. Hema K, Vani Priyadarshini I, Sandeep S, **Pradeep N**, Chiranjeevi P and Umamaheswari A (2015) Subunit vaccine design against pathogens causing atherosclerosis. *Journal of Biomolecular Structure and Dynamics*; 33 (1): 135-136. [https://doi.org/10.1080/07391102.2015.1032834] [June] [International-SCI] (**Impact factor: 5.235**).
18. Pradhan D, Priyadarshini V, Shweta A, **Pradeep N**, Arnab N, Arun kumar J and Umamaheswari A (2015) Discovery of potential inhibitors of BMX non-receptor tyrosine kinase through e-pharmacophore based virtual screening. *Journal of Biomolecular Structure and Dynamics*; 33 (1): 118-120 [https://doi.org/10.1080/07391102.2015.1032834] [June] [International-SCI] (**Impact factor: 5.235**).
19. Hema K, Priyadarshini V, Pradhan D, Munikumar M, Sandeep S, **Pradeep N**, Suchitra MM and Umamaheswari A (2015) Identification of Putative Drug Targets and Vaccine Candidates for Pathogens Causing Atherosclerosis. *Biochemistry & Analytical Biochemistry*; 4(2): 1-9. [DOI: 10.4172/2161-1009.1000175] [April] [International](Cosmos Impact Factor: 0.97).
20. Parveen S, **Pradeep N**, Hema K and Umamaheswari A (2015) Prediction of Novel Inhibitors against Exo-deoxyribonuclease I of H. influenzae through in-silico Approach. *International Journal of Scientific and Engineering Research*; 6(2): 217-221. [February] [International] (**Impact factor: 4.20**).
21. **Pradeep N**, Sandeep S, Hema K, Vengamma B and Umamaheswari A (2015) E-Pharmacophore Based Virtual Screening to Identify Agonist for PKA-Ca. *Biochemistry & Analytical Biochemistry*; 4(4): 1-10. [http://dx.doi.org/10.4172/2161-1009.1000222] [November] [International] (Cosmos Impact Factor: 0.97).
22. **Pradeep N** and Priya S (2012) Development of sub-unit vaccine against Brucella melitensis biotype 2: A computational assay. *BIOMIRROR*; 3(8):25-29. [DOI: BIOMIRROR: 1-5/bm- 1825260612] [August] [National] (Scientific Journal Impact Factor: 3.535).

Book Chapter: (01)

1. **Natarajan P**, Pradeepkiran JA, Munikumar M, Hema K, Sainath SB (2021) Molecular docking and dynamics simulations of novel drug targets. *Brucella Melitensis*, 79–131. [https://doi.org/10.1016/B978-0-323-85681-2.00005-7] [March] [International] (**ISBN: 978-0-323-85681-2**).

Research Articles In-Communication: (05)

1. **Pradeep N**, Praveen G, Ganga B and Mukesh KG (2023) Network-based bioinformatics analysis was used to identify the secretome in bovine mastitis milk and anti-mastitis compounds from medicinal plants. *Journal of Biological Chemistry (in communication: 5.157)*.
2. **Pradeep N**, Devendra P and Mukesh KG (2023) Identification of potential TLR4 inhibitors from medicinal plants targeting bovine mastitis. *Journal of Molecular Graphics and Modelling (in communication: 2.518)*
3. **Pradeep N**, Vengamma B and Umamaheswari A (2023) Virtual screening of CDK5 inhibitors based on e-pharmacophores. *Journal of Pharmaceutical Sciences (in communication: 3.534)*
4. **Pradeep N**, Saswati SM and Gupta MK (2023) Pharmacological targeting snubbed regulators of Hypertension. *Journal of Molecular Structure (in communication: 3.196)*
5. **Pradeep N**, Vengamma B and Umamaheswari A (2023) Designing novel tau kinase antagonist through e-pharmacophore based Virtual Screening. *Bioorganic Chemistry (in communication: 5.275)*

DECELERATION

The information given above is true to the best of my knowledge and belief. I agree to abide by the rules and regulations of the university. I also understand that if any information given by me in the form is found incorrect in the future, my candidature or appointment will be cancelled with immediate effect.

Place:

Date:

(Dr. N. PRADEEP)