# **Curriculum Vitae**

# Dr. Vishwambhar Vishnu Bhandare

#### **Objective**

To be a helpful human being and honest researcher is my primary goal in life. I would love to contribute my expertise to address challenging problems associated with human health, agriculture and environment. I also like teaching along with keeping myself updated with latest research.

### **Research Experience**

- 1. *Dr. D. S. Kothari Postdoctoral Fellow*, Shivaji University, Kolhapur December 2021 to till date; Fellowship Amount: 54,520/- per month
- 2. *Project Scientist (Scientist B)*, ICMR-NITM, Belagavi, Karnata, India May 2021 to 7 December 2021 (8 months); Last Salary: 52,000/- per month
- 3. *Postdoctoral Fellow*, Indian Institute of Technology Bombay, Mumbai, India February 2018 January 2021 (3 years); Last Salary: *Rs.88,040 per month*
- 4. *Research Associate*, Bose Institute, Kolkata, India May 2017- January 2018 (8 Months, 18 days); Last Salary: *Rs. 47,000 per month*
- 5. *Research Scholar* (extn), Pondicherry University, Puducherry, India July 2015 to October 2016
- 6. **Senior Research Felloship**, Pondicherry University, Puducherry, India July 2012 to June 2015
- 7. *Junior Research Fellowship*, Pondicherry University, Puducherry, India July 2010 to June 2012

#### **Education**

1.	Doctor of Philosophy in Bioinformatics	2017
	Pondicherry University, Puducherry, INDIA	
	Thesis title: "Rational design and structural dynamics of possible siRNAs targeting ALS-	
	associated mutants of tdp43 and their interaction with human argonaute2 protein: a	
	computational approach".	
2.	Master of Engineering in Biochemical Engineering and Biotechnology	2010
	Shivaji University, Kolhapur, INDIA	
3.	Post Graduate Diploma in Bioinformatics	2009
	Shivaji University, Kolhapur, INDIA Coil Bend Turn A-Helix 3-Helix	
4.	Master of Science in Biotechnology	2008
	Shivaji University, Kolhapur, INDIA	
5.	Bachelor of Science in Biotechnology	2006
	Shivaji University, Kolhapur, INDIA	
6.	Higher Secondary School Certificate (Maharashtra State Board)	2003
7.	Secondary School Certificate (Maharashtra State Board)	2001

#### **Publications**

- 1. Pukar Khanal Shailendra Gurav, Darasaguppe R. Harish, B.M. Patil, Subarna Roy, V. V. B. System biology-based investigation of Silymarin to trace hepatoprotective effect. *Comput. Biol. Med.* 2022, (2022). <a href="https://doi.org/10.1016/j.compbiomed.2022.105223">https://doi.org/10.1016/j.compbiomed.2022.105223</a> (IF: 4.589)
- 2. Joshi, B. P. *et al.* Molecular modelling studies and identification of novel phytochemical inhibitor of DLL3. *J. Biomol. Struct. Dyn.* 1–21 (2022). <a href="https://doi.org/10.1080/07391102.2022.2045224">https://doi.org/10.1080/07391102.2022.2045224</a> (IF: 3.310)
- 3. Krishnappa, B. *et al.* 17β hydroxysteroid dehydrogenase 3 deficiency in 46, XY disorders of sex development: Our experience and a gender role-focused systematic review. *Clin. Endocrinol.* (*Oxf*). (2022). https://doi.org/10.1111/cen.14694 (IF: 3.478)
- 4. Maheshwari, M. *et al.* 17α-hydroxylase/17, 20-lyase deficiency in 46, XY: our experience and review of literature. *J. Endocr. Soc.* **6**, bvac011 (2022). <a href="https://doi.org/10.1210/jendso/bvac011">https://doi.org/10.1210/jendso/bvac011</a> (IF=3.21)
- 5. Karlekar, M. P. *et al.* Expanding genetic spectrum and discriminatory role of steroid profiling by LC-MS/MS in 11β-hydroxylase deficiency. *Clin. Endocrinol.* (*Oxf*). **94**, 533–543 (2021). https://doi.org/10.1111/cen.14376 (IF: 3.478)
- 6. Pandey, B. *et al.* Insights on the disruption of the complex between human positive coactivator 4 and p53 by small molecules. *Biochem. Biophys. Res. Commun.* **578**, 15–20 (2021). https://doi.org/10.1016/j.bbrc.2021.09.020 (IF: 3.575)
- 7. Arya, S. *et al.* Clinical, Hormonal, Genetic, and Molecular Characteristics in Androgen Insensitivity Syndrome in an Asian Indian Cohort from a Single Centre in Western India. *Sex. Dev.* **15**, 253–261 (2021). <a href="https://doi.org/10.1159/000517763">https://doi.org/10.1159/000517763</a> (IF: 1.824)
- 8. Dodamani, M. H. *et al.* Genotype and phenotypic spectrum of vitamin D dependent rickets type 1A: our experience and systematic review. *J. Pediatr. Endocrinol. Metab. JPEM* (2021). https://doi.org/10.1515/jpem-2021-0403 (IF: 1.634)
- 9. Patil, V. A. *et al.* GNRH1 Variants in Congenital Hypogonadotropic Hypogonadism: Single-center experience and Systematic Literature Review. *Neuroendocrinology* (2021). https://doi.org/10.1159/000521558 (IF: 4.914)
- 10. Kumbhar, B. V. & Bhandare, V. V. Exploring the interaction of Peloruside-A with drug resistant αβII and αβIII tubulin isotypes in human ovarian carcinoma using a molecular modeling approach. *J. Biomol. Struct. Dyn.* **39**, 1990–2002 (2021). <a href="https://doi.org/10.1080/07391102.2020.1745689">https://doi.org/10.1080/07391102.2020.1745689</a> (IF: 3.310)
- 11. Arya, S. *et al.* Homozygous p.Val89Leu plays an important pathogenic role in 5α-reductase type 2 deficiency patients with homozygous p.Arg246Gln in SRD5A2. *Eur. J. Endocrinol.* **183**, 275–284 (2020). <a href="https://doi.org/10.1530/EJE-19-1050">https://doi.org/10.1530/EJE-19-1050</a> (IF: 6.664)
- 12. Bhandare, V. V. & Kunwar, A. An Atomic Level Interactions of Phosphorylated Tau Repeat with Microtubule using Molecular Modeling Approach. *Biophys. J.* **118**, 508a (2020). (IF: 4.033) (abstract published)

- 13. Shanmuga Priya, V. G. *et al.* Molecular modeling approach to identify inhibitors of Rv2004c (rough morphology and virulent strain gene), a DosR (dormancy survival regulator) regulon protein from Mycobacterium tuberculosis. *J. Biomol. Struct. Dyn.* **40**, 3242–3257 (2020). <a href="https://doi.org/10.1080/07391102.2020.1846620">https://doi.org/10.1080/07391102.2020.1846620</a> (IF: 3.310)
- 14. Kumbhar, B. V., Bhandare, V. V., Panda, D. & Kunwar, A. Delineating the interaction of combretastatin A-4 with αβ tubulin isotypes present in drug resistant human lung carcinoma using a molecular modeling approach. *J. Biomol. Struct. Dyn.* **38**, 426–438 (2020). https://doi.org/10.1080/07391102.2019.1577174 (IF: 3.310)
- 15. Kumar, M., Chutia, S. J., Talukdar, A., Thakuria, J. & Bhandare, V. V. Modulator compound for captive induced breeding in Monopterus cuchia through molecular modeling and Dynamics. *J. Pharmacogn. Phytochem.* 424–426 (2019).
- 16. Bhandare, V. V. K. B. V. K. A. K. Differential binding affinity of tau repeat region R2 with neuronal specific beta tubulin isotypes. *Sci. Rep.* (2019) doi:10.1038/s41598-019-47249-7. https://doi.org/10.1038/s41598-019-47249-7 (IF: 4.379)
- 17. Cavuturu, B. M., Bhandare, V. V., Ramaswamy, A. & Arumugam, N. Molecular dynamics of interaction of Sesamin and related compounds with the cancer marker β-catenin: an in silico study. *J. Biomol. Struct. Dyn.* (2018) doi:10.1080/07391102.2018.1442250. (IF: 3.310)
- 18. Bhandare, V. V. & Ramaswamy, A. The proteinopathy of D169G and K263E mutants at the RNA Recognition Motif (RRM) domain of tar DNA-binding protein (tdp43) causing neurological disorders: A computational study. *J. Biomol. Struct. Dyn.* (2017) doi:10.1080/07391102.2017.1310670 (IF: 3.310)
- 19. Bhandare, V. V. & Ramaswamy, A. Structural dynamics of human argonaute2 and its interaction with siRNAs designed to target mutant tdp43. *Adv. Bioinformatics* **2016**, (2016). <a href="http://dx.doi.org/10.1155/2016/8792814">http://dx.doi.org/10.1155/2016/8792814</a> (IF=2.83)
- 20. Bhandare, V. V. & Ramaswamy, A. Identification of possible siRNA molecules for TDP43 mutants causing amyotrophic lateral sclerosis: In silico design and molecular dynamics study. *Comput. Biol. Chem.* **61**, 97–108 (2016). <a href="https://doi.org/10.1016/j.compbiolchem.2016.01.001">https://doi.org/10.1016/j.compbiolchem.2016.01.001</a> (IF: 2.877)
- 21. Ashokan, K. V, Pillai, M. M. & Vishwambhar, V. B. Phlyogenetic studies on ITS 2, 5.8S and 28S rRNA genes in Dengue virus vector mosquitoes variants. *Int. J. Environ. Sci. Res.* 1, 31–38 (2011).

## **Book Chapter**

1. **Bhandare, VV.** (2021). Homology Modeling of Tubulin Isotypes to Investigate MT-Tau Interactions. In *Homology Molecular Modeling - Perspectives and Applications* (p. Ch. 5). IntechOpen. DOI: 10.5772/intechopen.95792

### Professional recognition / Awards / Prizes / Fellowships

- 1. Best research paper award by BSBE Dept., IIT Bombay, Mumbai, India (2020)
- 2. ASCB EMBO travel award for ASCB EMBO meeting at Washington DC, USA (2019)
- 3. Best Poster award at int. conference Bioinformatica Indica, Kerala University, India (2016)

- 4. Rajiv Gandhi National Fellowship by UGC (JRF and SRF), India (2010-2015)
- 5. Post graduate Scholarship for Professional courses for SC/ST, by UGC, India (2008-2010)
- 6. Qualified GATE (2010), SET(TN-2016), SET (MH-2020) examinations

### Additional duties performed

- 1. Guest faculty for Bioinformatics Training programme at MITCON, Pune (08 to 20 Mar 2021)
- 2. Volunteer at '23<sup>rd</sup> Techfest at IIT Bombay, India (3-5 December 2020)
- 3. Teaching Assistant for 'BB101' Summer course at IIT Bombay, India (May to July 2019)
- 4. Volunteer at '22<sup>nd</sup> Techfest at IIT Bombay, India (14-16 December 2018)
- 5. Teaching Assistant for 'BINF552' and 'BINF452' at Pondicherry University, India (2013-2016)
- 6. Volunteer for QIP / CEP courses "Biology for Engineers" and "Laboratory and Ergonomic Safety for Engineers" conducted by Prof. Ambarish Kunwar, IIT Bombay, Mumbai during (February 2018 to January 2021).
- 7. Active volunteer National cadet corps (NCC/1999-2000), National service scheme (NSS/2003-05) and Mharashtra caded corps (MCC/1999)

### **Additional Trainings**

- 1. First Aid and CPR safety (Trainer: Dr. Manajeet Singh, Fortis hospital)
- 2. Trained to use all types of fire extinguishers (Trainer: Prof. A. Kunwar, IIT Bombay)
- 3. Laboratory and Ergonomic safety (Trainer: Prof. A. Kunwar, IIT Bombay and Dr. K. N. Subramanya, Principal, RV College, Bengalore)

### Papers / Posters presentation in Conferences (last 5 years)

- 1. <u>Bhandare VV</u>, Anurag Lila and Ambarish Kunwar, "Study of Competitive Inhibition of 5α-Reductase Type I And Type Ii Isoforms By Finasteride And Dutasteride Used In Treatment Of Benign Prostatic Hyperplasia" in SMST-2020 at Bogmello Beach Resort, Goa on February 22-25, 2020.
- 2. <u>Bhandare VV</u>, Kumbhar BV, and Ambarish Kunwar, "Differential binding affinity of tau repeat region R2 with neuronal-specific β-tubulin isotypes s" in ASCB-EMBO meeting 2019 at Washington DC, USA on December 7-11, 2019.
- 3. <u>Bhandare VV</u> and Ambarish Kunwar, "Computational study on interactions of eribulin with the drug resistant tubulin isotypes" in ICFNM, 2019 at IIT-BHU, Varanasi on February 22-25, 2019.
- 4. <u>Bhandare VV</u> and Amutha Ramaswamy, "The proteinopathy of D169G and K263E mutants of tdp43 in ALS" in Natural and Artificial Molecular Machines at Indian Institute of technology, Bombay, Powai Mumbai, INDIA on December 18-20, 2017.
- 5. <u>Bhandare VV</u> and Amutha Ramaswamy, "Rational design of small interfering RNAs against tdp43 mutants causing Amyotrophic Lateral Sclerosis: *In silico* design and molecular dynamics study" in Current Trends in Protein Structure and Genome Analysis at Pondicherry University, Pondicherry, INDIA on February 24, 2017.
- Pondicherry, INDIA on February 24, 2017.

  6. Bhandare VV and Amutha Ramaswamy, "Stability of tdp43 mutants D169G and K263E causing ALS at higher Temperatures" in INCOB2016 at Singapore on September 21-23, 2016.
- 7. <u>Bhandare VV</u> and Amutha Ramaswamy, "Structural dynamics of human Argonaute2 and its interaction with few siRNAs designed to target mutant tdp43" in Bioinformatica Indica 2016 at Kerala University, Trivandrum, INDIA on 8-9 January 2016.

- 8. <u>Bhandare VV</u>, "An Education system at Post Graduate level studies in Maharashtra colleges and University A detailed Study" in National seminar on Right to Education: Quality concerns, Issues and Challenges at AJCE, Gargoti on March 15, 2015.
- 9. <u>Bhandare VV</u> and Suresh Pannerselvem, "Current state of Indian Lifestyles and food Habits are unhealthy", in Science and Technology for Human Development at Pondicherry University, Pondicherry, INDIA on March 17-18, 2015.

## **Membership**

- 1. American Society for Cell Biology (ASCB), USA
- 2. International Society for Computational Biology (ISCB), USA
- 3. Biophysical Society (BPS), USA
- 4. Indian Science Congress Association (ISCA), Kolkata, India
- 5. French Society for Cell Biology (SBCF), France
- 6. Microbiology Society, USA
- 7. International Parkinson and Movement Disorder Society, USA

### Referees

- 1. Prof. Gautam Basu, Bose Institute, Kolkata Email: gautam@jcbose.ac.in
- 2. Prof. Ambarish Kunwar, IIT Bombay, Mumbai Email: akunwar@iitb.ac.in
- 3. Dr. V. Umashankar, Scientist E, ICMR-NITM, Belagavi *Email*: umashankar.v@icmr.gov.in
- 4. Prof. Amutha Ramaswamy, Pondicherry University, Puducherry Email: ramutha@bicpu.edu.in

### **Personal Details**

Passport Number: P3674067 Birth date: 25 January 1986 Nationality: Indian Permanent address: Vishwayogi, Dr. D. Y. Patil Colony, Gargoti, Dist. Kolhapur 416209, INDIA

#### **Declaration**

I hereby declare that all the above given information is true, and nothing has been distoted or concealed.



