

**Name** : Dr. Viniti Vaidya

**Designation** : Assistant Professor  
Dr. D.Y. Patil Biotechnology &  
Bioinformatics Institute,  
Dr. D.Y. Patil Vidyapeeth, Pune

**Email ID** : [viniti.vaidya@dpu.edu.in](mailto:viniti.vaidya@dpu.edu.in)

**Contact Number** : +912067919444

**Research Interest** : Microbiology and Environmental Biotechnology



## Academic Qualifications

### Ph.D. in Biotechnology (2008-2016)

Shivaji University, Kolhapur, India

**Thesis Title: Cloning and characterization of fructosyltransferases (FTFs) and their transgenic expression**

### Master of Science in Microbiology (2007)

Goa University, Goa

**Grade A, First Class**

### Bachelor of Science in Microbiology (2005)

Applied subject: **Biotechnology**

University of Mumbai, Mumbai

**70.88%, First Class**

## On-going Research Projects

- **Segregation and management of laboratory wastes for resource recovery and value addition**

Funding agency: Department of Science and Technology, (DST), Technology Development and Transfer (TDT) Division

Duration: 3 years

- **Characterization and cost-effective production of fructans: prebiotic health-improving compounds**

Funding agency: Dr. D.Y. Patil Biotechnology & Bioinformatics Institute, Dr. D.Y. Patil Vidyapeeth, Pune

Duration: 2 years

## Professional Experience

- **Assistant Professor**  
October 2016–present  
Department of Biotechnology, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute,  
Dr. D. Y. Patil Vidyapeeth, Pune 411033.
- **Academic Research Editor (Biosciences)**  
January 2015–May 2016  
Crimson Interactive Pvt. Ltd. Veer Savarkar Marg, Goregoan, Mumbai, India.
- **Research Scholar**  
October 2013–November 2014  
Dept. of Innovation in Biological and AgroForestry systems (DIBAF)  
University of Tuscia, 01100 Viterbo-Rome, Italy

## Scholarships and Awards

- **Italian Government Scholarship Award in Biotechnology**, Ministry of Human Resources–Italian Ministry of Foreign Affairs, Italy (2013).
- **Senior Research Fellowship** (Life Science Research Broad, DRDO Project), University of Agricultural Sciences, Bangalore, (2012).
- **Senior Research Fellowship** (ICAR-based), Vasantdada Sugar Institute, Pune, India. (2009-2007).
- Masters in Science (Microbiology): **3<sup>rd</sup> Rank** in Goa University.
- Bachelor in Science (Microbiology, Applied Biotechnology): **2<sup>nd</sup> Rank** in Wilson College, University of Mumbai.

## Research Projects

- Principle Investigator for project funded by Department of Science and Technology, (DST), Technology Development and Transfer (TDT) Division. Research grant Rs. 50,18,800 L, Duration 2020-2023  
Project Title: Segregation and management of laboratory wastes for resource recovery and value addition
- Principle Investigator for project funded by Dr. D.Y. Patil Biotechnology & Bioinformatics Institute, Dr. D.Y. Patil Vidyapeeth, Pune. Research grant Rs. 2,00,000 L, Duration 2018-2020  
Project Title: Characterization and cost-effective production of fructans: prebiotic health-improving compounds
- Project on optimization of extracellular laccase and manganese peroxidase production from *Trametes* sp. in fermentation on olive mill waste water based media at Dept. of Innovation in Biological and AgroForestry systems (DIBAF), University of Tuscia, 01100 Viterbo-Rome, Italy under Italian Govt. Scholarships.
- Project on Antibacterial and antioxidant activity of green synthesized silver nanoparticles using plant extracts: *Cicer arietinum* pods, *Acacia Catechu* at Department of Biotechnology, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth, Pune 411033.

- Senior Research Fellow on a DRDO-funded project on Cloning and Functional Analysis of Fructosyltransferases (FTFs) for the Production of Fructans: Prebiotic Health-Improving Compounds by at Department of Biotechnology, University of Agricultural Sciences, GKVK, Bangalore 560065, Karnataka, India.
- Worked on Immobilization and characterization of thermostable levansucrase using polyacrylamide gel at Department of Biotechnology, University of Agricultural Sciences, GKVK, Bangalore 560065, Karnataka, India.
- Worked on Identification of YNK interacting proteins under oxidative stress using *Saccharomyces cerevisiae* as model system at Department of Biotechnology, University of Agricultural Sciences, GKVK, Bangalore 560065, Karnataka, India.
- Worked on Incidence of *Listeria monocytogenes* in fresh and processed meat samples in Goa and detection of virulence associated genes by PCR at Dept. of Public Veterinary Health, Indian Council of Agricultural Research (ICAR), Goa, India
- Worked on Multi drug resistant bacteria from urinary tract infection (UTI) positive patients in Goa at Dept. of Microbiology, Goa University, India

## Publications

- **Vaidya V**, Carota E, Calonzi D, Petruccioli M, D'Annibale A (2019) Production of lignin-modifying enzymes by *Trametes ochracea* on high-molecular weight fraction of olive mill wastewater, a byproduct of olive oil biorefinery. **New biotechnology**. 25 (50) 44-51.
- Shah S, Gaikwad S, Nagar S, Kulshrestha S, **Vaidya V**, Neelu Nawani and Sarika Pawar (2019) Biofilm inhibition and anti-quorum sensing activity of phytosynthesized silver nanoparticles against nosocomial pathogen *Pseudomonas aeruginosa*. **Biofouling**. 35(1) 34-49.
- **Vaidya, V.**, and Prasad, D. T. (2020) Enhanced levan production by a thermostable levansucrase from *Bacillus subtilis* BB03, *Curr Microbiology* (in preparation).
- **Vaidya, V.**, Prabhu, G. and Prasad, D.T. (2014) Heterologous expression and characterization of thermostable levansucrase (BsSacB) from *Bacillus subtilis* BB03, *Online J Bio Sci*, **15** (1) 10–22.
- **Vaidya, V.** and Prasad, D. T. (2012) Thermostable levansucrase from *Bacillus subtilis* BB04, an isolate of banana peel, *J Biochem Tech*, **3** (4) 322–327.
- Doijad, S., **Vaidya, V.**, Garg, S., Sapte, S. and Barbuddhe, S. (2010) Isolation and characterization of *Listeria* species from raw and processed meats, *J Vet Public Health*, **8** (2) 83–88.

## Gene sequence submissions at NCBI, USA

- **Vaidya, V.**, Yadav, A. and Prasad, D. T. (2011) *Bacillus subtilis* partial 16S rRNA gene, strain BB03 (Accession No. **HE605036**).
- **Vaidya, V.**, Yadav, A. and Prasad, D.T. (2011) *Bacillus subtilis* partial 16S rRNA gene, strain BB03 (Accession No. **HE605037**).
- **Vaidya, V.**, Kawar, P. and Prasad, D.T. (2009) *Bacillus subtilis* levansucrase gene complete cds (Accession No. **FN599519**).
- Yadav, A., **Vaidya, V.** and Prasad, D.T. (2008) *Cladosporium* sp. SPRY16 partial 18S rRNA gene (Accession No. **FM179794**).

## Conference Publications

T Chauhan, R Khartode, J K Pal, N N Nawani, **V Vaidya\***. (2019) Production and functional assessment of biochar using laboratory-media waste. International conference on New Horizons in Biotechnology, Trivandrum, Kerala, India.

S Pandey, P Singhanian, D Rathod, T Chauhan, S Pawar, **V Vaidya**, J.K. Pal, N N Nawani. (2019) Utilization of laboratory biowaste for commercially viable products. International conference on New Horizons in Biotechnology, Trivandrum, Kerala, India.

Sadaf Khan, Simran Singh, Neelu Nawani, Swapnil Gaikwad, **Viniti Vaidya** and Sarika Pawar (2018) Optimization, characterization and antifungal activity of biologically synthesized silver nanoparticles. International conference on Biotechnological Innovation for Sustainable Development (BioSD) 22-25 November 2018, IICT, Hyderabad.

**Vaidya, V.**, Prabhu, G. and Prasad D.T. (2012) Characterization of immobilized thermostable levansucrase from *Bacillus subtilis* BB04, International Symposium on Proteomics beyond IDs and 4<sup>th</sup> Annual meeting of Proteomics society, National chemical laboratory, Pune, India.

Shah, N., **Vaidya, V.** and Prasad D.T. (2012) Identification of YNK interacting proteins under oxidative stress using *Saccharomyces cerevisiae* as model system, International Symposium on Proteomics beyond IDs and 4<sup>th</sup> Annual meeting of Proteomics society, National chemical laboratory, Pune, India.

**Vaidya, V.** and Prasad, D. T. (2010) Molecular evaluation of bacterial fructosyltransferase for production of fructan: a low calorie sweetener, Functional foods for chronic diseases: Diabetes and Related Diseases. 6<sup>th</sup> International conference proceedings, USA, 33: 118-120.

**Vaidya, V.** and Prasad, D.T (2008) Cloning of bacterial fructosyltransferase and cluster analysis of enzyme from various organisms, National conference on Genomics, proteiomics and systems biology, IISc Campus, Bangalore.

**Vaidya, V.**, Barbuddhe, S. B., Bhosle, S. N. and Garg, S. (2007) Prevalence of *Listeria monocytogenes* in beef, pork and non-boiled sausages in Western Coast of India, 16<sup>th</sup> International Symposium on Problems of *Listeria*, Savannah, GA, USA.

Desai, V., **Vaidya, V.**, Prabhu N., Santimano, M. C., Chari, L. J., Krishnamurthy, N. and Garg, S. (2006) Multi drug resistant bacteria from UTI positive patients in Goa, 47<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI), Bhopal.

**Vaidya, V.**, Barbuddhe, S. B., Bhosle, S. N. and Garg, S. (2006) Incidence of *Listeria monocytogenes* in fresh and processed meats in Goa, 47<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI), Bhopal.

## **Industrial Trainings/Workshops/Seminars**

- Workshop on Student-Centric Teaching-Learning Methods (March 2020) by Dr. D. Y. Patil College of Physiotherapy, Pimpri.
- Workshop on SmartBoard-enabled Teaching (January 2019) conducted by University Center for Professional Education & Faculty Development (UCPEFD) and Software Development Cell. Dr. D. Y. Patil Vidyapeeth, Pune.
- Workshop on Introduction to Swayam, Moocs & Moodle (January 2018) conducted by University Center for Professional Education & Faculty Development (UCPEFD) and Software Development Cell. Dr. D. Y. Patil Vidyapeeth, Pune.
- STEM Teach Training Workshop on Research-based Pedagogical Tools-Level 1 (March 2017) at Indian Institute of Science Education and Research (IISER) Pune.
- Isotope Ratio Mass Spectrometry Workshop (October 2005) at National Institute of Oceanography, Goa
- Practical Industrial Training in various production departments including Bacterial Vaccine Department (May 2004) Haffkine Bio-Pharmaceutical Corporation Ltd., Mumbai.

## **Events organized/coordinated**

- **Co-ordinator**, Webinar on “Guidelines for Competitive Exams” on 29 May 2020 organized via zoom by Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Pune.
- **Member of Organizing committee**, National Symposium on “Recent Advances in Modern Biology and Biotechnology” during 14-16 March 2019 organized by Dr. D. Y. Patil Biotechnology and Bioinformatics Institute.
- **Member of Organizing committee**, “Industry-Academia Conclave” during 23-24 Feb 2018 organized by Dr. D. Y. Patil Biotechnology and Bioinformatics Institute.
- **Member of Organizing committee**, National Symposium on “Recent Advances in Modern Biology and Biotechnology” during 16-17 March 2017 organized by Dr. D. Y. Patil Biotechnology and Bioinformatics Institute.