



NAME: Dr. Dimple Davray

Designation: Assistant professor

Email ID: dimple.davray@dpu.edu.in

Qualification: Ph.D. (Bioinformatics)

Area of Specialization: Computational Biology (Omics data analysis)

Research Interest: Data scientist, Machine learning

EDUCATIONAL QUALIFICATIONS:

- Ph.D. (Bioinformatics) 2023, Symbiosis School of Biological Sciences, Symbiosis International (Deemed University), Pune, India.
- Advance Diploma (PG) in Bioinformatics 2002-2003, Jawaharlal Nehru University (JNU), New Delhi, India.
- M.sc (Life sciences) 2000-2002, Jawaharlal Nehru University (JNU), New Delhi, India.
- B.Sc. (Botany, Zoology, Chemistry) 1997-2000, Choudhary Charan Singh University, Meerut, Uttar Pradesh, India.
- Certification courses on C (July 2006 to September 2006), Seed Infotech Pvt. Ltd, Pune.
- C++ (December 2006 to February 2007), Java (June 2007 to July 2007), Seed Infotech Pvt. Ltd, Pune.
- Advanced Java (August 2007 to October 2007). Seed Infotech Pvt. Ltd, Pune.

ACADEMIC AND RESEARCH EXPERIENCE:

- Assistant Professor (2023-Present), Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth, Tathawade, Pune
- Bioinformatics Technical staff (2009- 2017), National Center for Cell Science, Pune, India.
- Technical Support Manager (2007- 2008), BioResource Biotech Pvt. Ltd, Pune India

AWARDS AND ACHIEVEMENTS:

- DBT Scholarship during Advance Post Graduate Diploma in Bioinformatics (2002-2003).
- JNU Scholarship during Masters in Life Sciences (2000-2002).

- Awarded National Talent Search Scholarship by the National Council of Educational Research and Training (NCERT), Government of India (1998)

PUBLICATIONS:

- **Davray D**, Kulkarni R (2023). In-silico functional analysis of hypothetical proteins from *Lactiplantibacillus plantarum* plasmids reveals enrichment of cell envelope proteins. *Plasmid*. 2023 May 29.
- **Davray, D.**, Bawane, H., Kulkarni, R., 2023. Non-redundant nature of *Lactiplantibacillus plantarum* plasmidome revealed by comparative genomic analysis of 105 strains. *Food Microbiol.* 109, 104153.
- **Davray, D.**, Deo, D., Kulkarni, R., 2021. Plasmids encode niche-specific traits in *Lactobacillaceae*. *Microb. Genomics* 7.
- Dixit, K., **Davray, D.**, Chaudhari, D., Kadam, P., Kshirsagar, R., Shouche, Y., Dhotre, D., Saroj, S. D. (2021). Benchmarking of 16S rRNA gene databases using known strain sequences. *Bioinformatics*, 17(3), 377.
- Deo, D., **Davray, D.**, Kulkarni, R., 2019. A diverse repertoire of exopolysaccharide biosynthesis gene clusters in *Lactobacillus* revealed by comparative analysis in 106 sequenced genomes. *Microorganisms* 7.
- Ghattargi, VC., Nimonkar, YS., Burse, SA., **Davray, D.**, Kumbhare, SV., Shetty, SA., Gaikwad, MA., Suryavanshi, MV., Doijad, SP., Utage, B., Sharma, OP., 2018. Genomic and physiological analyses of an indigenous strain, *Enterococcus faecium* 17OM39. *Functional & integrative genomics*, 18(4), 385-399.

CERTIFICATIONS:

- Certification courses on C (July 2006 to September 2006),
- C++ (December 2006 to February 2007)
- Java (June 2007 to July 2007), and
- Advanced java (August 2007 to October 2007).

CONFERENCES (Abstracts/Oral/Poster):

- Poster presentation at 13th International Symposium on Lactic Acid Bacteria, August 23-25 2021. Poster title "Comparative genomics of *Lactiplantibacillus plantarum* plasmidome"; Dimple Davray, Ram Kulkarni.
- Poster presentation at "CDAC, Pune" on Accelerating Biology 2019: Towards Thinking Machines (February 05-07, 2019). The poster titled "Plasmids encode niche-specific traits in *Lactobacillaceae*"; Dimple Davray, Ram Kulkarni

WORKSHOPS:

- Attended workshop of Basic R for Life Sciences, at NCL Innovation Park, Pune, Feb 6-8, 2020.
- Attended workshop on Biostatistics: a user's perspective, IISER Pune, December 28 to 31 2018.
- Attended the two-day international symposium on Microbial Ecology and Systematics held from September 16 to 17, 2016 at CSIR-National Chemical Laboratory, Pune, India.

- Participated in the Next-Generation Sequencing and Bioinformatics for Genomics & Health Conference organized by SciGenom Labs Pvt. Ltd., Department of Biotechnology, Indian Institute of Technology Madras (IITM) and Cooperarive Oncology Network (ICON) held during November 1-3, 2012.
- Participated in the Bioinformatics workshop for Genomics & Healthcare organized by SciGenom Labs Pvt. Ltd. and Department of Biotechnology, Indian Institute of Technology Madras (IITM) held during November 1-3, 2012

BIOINFORMATICS AND BIOTECHNOLOGY SKILLS:

- More than ten years of experience in handling Unix/Linux systems, biostatistics, bioinformatics tools & algorithms, and R with respect to genome data analysis.
- Good understanding and basic implementation of Python programming.
- Work in association with research labs, which gives me the ability to understand experimental techniques and communicate with biologists.
- Certification courses on C (July 2006 to September 2006),
- C++ (December 2006 to February 2007), Java (June 2007 to July 2007), and
- Advanced java (August 2007 to October 2007).