



Centre for Research & Development

Research Supervisor (Guide) Profiles

Discipline of Supervision: **Microbiology**



Dr. Gurunathan S

Associate Professor
Department of Life Sciences
School of Biological and Forensic Sciences

Areas of Specialisation:

In silico Drug Discovery, Applied Microbiology,
Microbial Biotechnology, Microbial Genomics, Immunology

Dr. Gurunathan S is an Associate Professor in the Department of Life Sciences at Kristu Jayanti (Deemed-to-be University), Bengaluru, India. He holds a Ph.D. in Applied Microbiology from the University of Madras, Chennai, with a specialization in bacteriocin research. His doctoral work focused on identifying bacteriocinogenic bacterial phytopathogen isolates from diverse plant sources and characterizing bacteriocins using both in vitro and in silico methodologies. His research interests span microbial omics, bioinformatics, next-generation sequencing, immunology, microbial biotechnology, and cancer biology, with a current emphasis on omics-driven approaches for drug target identification and drug discovery. He has published more than 20 peer-reviewed scientific articles in reputed journals, contributing to a growing citation record and significant academic impact. His research has been supported by various agencies, including the University Grants Commission (UGC) for the project Genomic Subtraction-Based Approach for Identification of Potential Antimicrobial Targets in *Ralstonia solanacearum*. He is presently leading a project funded by the Bodhi Niketan Trust. He actively engages in inter-, multi-, and trans-disciplinary research collaborations both within the university and with external institutions. He has also served as a peer reviewer for journals such as *Toxicology & Environmental Chemistry* and the *Journal of Computational Biology*. Beyond research, Dr. Gurunathan is committed to academic mentorship and institutional service, fostering a strong research culture and advancing scientific excellence.

Selected Publications:

1. **Subramanian, G.**, and R, D. (2021). Mining Plausible Antibacterial Targets Against Potato Pathogen *Ralstonia Solanacearum* IPO1609 Through In Silico Subtractive Genomics Approach. *International Journal of Current Research and Review*, 13(11), 65–75. <https://doi.org/10.31782/ijcrr.2021.131104>
2. Ira, R., Adwani, J., Krishnan, A. O., **Subramanian, G.**, Yadav, S., Shukla, S., ... Prakash, T. (2024). Understanding Aging through the Lense of Gut Microbiome. *Exploratory Research and Hypothesis in Medicine*, 000(000), 000–000. <https://doi.org/10.14218/erhm.2024.00008>
3. Selvavinayagam, S. T., Yong, Y. K., Tan, H. Y., Zhang, Y., **Subramanian, G.**, Rajeshkumar, M., ... Raju, S. (2022). Factors Associated With the Decay of Anti-SARS-CoV-2 S1 IgG Antibodies Among Recipients of an Adenoviral Vector-Based AZD1222 and a Whole-Virion Inactivated BBV152 Vaccine. *Frontiers in Medicine*, 9. <https://doi.org/10.3389/fmed.2022.887974>