

MEDICAL PROBIOTICS LABORATORY

Dr. Elavarashi E, MSc., PhD. Assistant Professor

ABOUT US

Probiotics hold significant promise by providing benefits for both intestinal and extraintestinal health and disease. Probiotic strains are known for their robust ability to withstand harsh gastrointestinal conditions, promoting beneficial effects such as immune modulation, pathogen inhibition, and gut microbiota balance. Their probiotic potential extends beyond the gut, impacting lung cancer, neurodegenerative disease and metabolic disorders. By producing bioactive compounds, probiotic strains can modulate the host's overall health, offering a versatile and effective approach to disease prevention and treatment across various bodily systems.



TEAM MEMBERS



Mrs. Deepthi G Nair and
Ms. Vaishnavi Ketna
(PhD Scholars) are
investigating on
regulating cholesterol and
maintenance of gut health



Ms. Vaishnavi Thangaraj
(PhD scholar) is evaluating
bioactive compounds
produced by Bacillus
species to combat oral
pathogens



Mr. Raja Prabu R
(PhD Scholar) is focusing
apoptotic pathway in
neurogenerative disease
like Alzhemiers



Ms. Adeline Celina R
(PhD Scholar) is exploring
the use of probiotics for
lung cancer, aiming to
enhance the apoptosis of
cancer cells

PAST MEMBERS



The postgraduate and undergraduate students investigated Bacillus strains through a range of studies. Their research included assessing the antimicrobial potential of these strains against various gut pathogens, evaluating their probiotic attributes, screening for extracellular enzymes, virulence factors profiling, and identifying bioactive compounds.

PUBLICATIONS

 Adeline Celina Rufus, Kalai K, Elavarashi Elangovan. Isolation and characterization of Bacillus species for the detection of siderophores. Research Journal of Biotechnology. 2024:19(8):92-99. doi:https://doi.org/10.25303/1908ribt092099 LF-0.1 (2024)

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 Kalai K, Rufus AC, Manz AM, Elangovan E. Unveiling the Antimicrobial Potential of 7-Osuccinyl Macrolactin F from Bacillus subtilis Group against HtsA Siderophore Receptor of Staphylococcus aureus: A Computational Exploration. Biomedical and Biotechnology Research Journal (BBRJ). 2024;8(1):92. doi:https://doi.org/10.4103/bbrj.bbrj_288_23

I.F- 1 (2024)
 Suresh K, Trishala Gopikrishna, K Tapasya, Perumal K, Elavarashi Elangovan. A
COMPUTATIONAL GENOME ANALYSIS OF STRAIN BACILLUS SUBTILIS MIZ-8 ISOLATED
FROM BEKANG REVEALS A DISTINCT CHROMOSOME AND PLASMID CONFERRING
SELECTIVE ADVANTAGE. The Journal of Microbiology, Biotechnology and Food Sciences.
Published online June 26, 2023:e9141-e9141. doi:https://doi.org/10.55251/jmbfs.9141

Pramod S, Thommana RT, Kulanthaivelu Kanagam H, et al. Data on the genome of Bacillus subtilis A1- Midalam from beach soil. Data in Brief. 2021;39:107552.
 dai:https://doi.org/10.1016/j.dib.2021.107552. JE 11.(2022)

doi: https://doi.org/10.1016/j.dib.2021.107552 . IF-1.1 (2022).
Gopikrishna T, Suresh Kumar HK, Perumal K, Elangovan E. Impact of Bacillus in fermented soybean foods on human health. Annals of Microbiology. 2021;71(1). doi: https://doi.org/10.1186/s13213-021-01641-9 IF-3.1 (2021).

For a full list of publications <u>click here</u>
For the functional database of Bacillus subtilis <u>click here</u>
For detailed CV <u>click here</u>

Contact us at elavarashi@sriramachandra.edu.in, elavarashi@gmail.com Visit us at Medical Probiotics Laboratory, Department of Biotechnology, Faculty of Biomedical Sciences and Technology, Sri Ramachandra Institute of Higher Education and Research, Chennai - 600116.