KRISTU JAYANTI
(DEEMED TO BE UNIVERSITY)
Under Section 3 of UGC Act 1956
A CMI INSTITUTION | BENGALURU | INDIA

Centre for Research & Development

Research Supervisor (Guide) Profiles
Discipline of Supervision: Biotechnology

Dr. Dileep Francis

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

Areas of Specialisation:

Infectious Disease Biology, Rational Drug Discovery, Vaccine Immunology, Immunoinformatics.

Dr. Dileep Francis is Dean of Research and Development and Associate Professor in the Department of Life Sciences at Kristu Jayanti (Deemed to be University), Bengaluru. Heearned his Ph.D. in Life Sciences from Kannur University, Kerala, where he received CSIR junior and senior research fellowships after ranking 60th in the CSIR-JRF/NET exam. He also completed a computational biology certification from IIT Madras. His doctoral research identified a vaccine candidate against Methicillin-resistant Staphylococcus aureus infections. Dr. Francis focuses on interventions for diagnosing and treating infectious diseases through rational drug discovery, and collaborates on materials science research for biomedical applications. He has published extensively across high-impact journals, edited books, andconference proceedings, accumulating over 450 citations with an h-index of 12. Dr. Francis serves as editor of the Kristu Jayanti Journal of Core and Applied Biology. He holds several professional positions including life membership in the Kerala Academy of Sciences, membership on Kristu Jayanti (Deemed to be University)'s research advisory committee, and board of studies membership in Biotechnology at Jyoti Nivas College, Autonomous, Bengaluru. From 2020-2023, he coordinated the DBT-Star College Scheme at Kristu Jayanti (Deemed to be University).

Selected Publications:

1. Kumar, B. S., Ravi, S. M., Kapoor, J., Joy, A., Daniel, E. C., George, S. K., Parayil, D. J., & **Francis, D**. (2024). Cycloisolongifolene-8,9-dehydro-9-formyl inhibits lipoxygenase and might play a role in the wound-healing property of Clerodendrum infortunatum and Tagetes erecta. Journal of Herbal Medicine, 43, 100843. https://doi.org/10.1016/j.jhep.2023.100843

2. Abhithaj, J., **Francis, D.,** Sharanya, C. S., Arun, K. G., Sadasivan, C., & Variyar, E. J. (2022). Repurposing simeprevir, calpain inhibitor IV and a cathepsin F inhibitor against SARS-CoV-2 and insights into their interactions with Mpro. Journal of Biomolecular Structure and Dynamics, 40(1), 325-336. https://doi.org/10.1080/07391102.2020.1813200

3. Francis, D., & Kuyyalil, S. (2018). Immunogenicity and protective efficacy of recombinant alkaline shock protein 23 from Staphylococcus aureus in a murine model. Central European Journal of Immunology, 43(4), 371-377. https://doi.org/10.5114/ceji.2018.81348