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. Kushi Anand

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

Areas of Specialisation:

Infectious disease and point of care diagnostics;
Host-pathogen interaction, Antimicrobial Resistance,
Redox biology, Nucleic acid secondary structure

Dr. Kushi Anand is an Associate Professor of Life Sciences at Kristu Jayanti University, Bengaluru. He completed his doctoral studies at VIT University, where he was awarded a Merit Fellowship for his research on biomolecules that suppress cancer angiogenesis. This work led to the identification of dietary compounds with significant anti-tumor effects. His postdoctoral research was supported by the prestigious DS Kothari Fellowship (UGC) and the IISc/DBT Partnership Programme. With over fifteen years of research experience in cancer biology, infectious diseases, and nucleic acid secondary structures, Dr. Anand has investigated drug resistance and tolerance mechanisms, Fe-S cluster biogenesis in Mycobacterium tuberculosis, and host–pathogen interactions at IISc and NCBS. He has published 17 high-impact research papers in reputed journals, accumulating over 600 citations with an h-index of 13. He is expertise in grant writing and management has secured competitive funding from the Welcome Trust/DBT India Alliance and UGC, enabling him to establish independent research programs in infectious diseases. His notable achievements include being nominated to attend DELTAS Africa 2019 in Dakar, Senegal, and receiving an EMBO Travel Fellowship to present his work at the Pasteur Institute, France. He is a life member of the Society of Neurochemistry and serves on the advisory board of the Society of Chemical and Synthetic Biology. His academic journey and professional contributions highlight his commitment to advancing scientific research, fostering collaborations, and promoting innovation in the life sciences.

Selected Publications:

1. Tripathi, A., **Anand, K.**, Das, M., O'Niel, R. A., P. S, S., Thakur, C., … Singh, A. (2022). Mycobacterium tuberculosis requires SufT for Fe-S cluster maturation, metabolism, and survival in vivo. PLOS Pathogens, 18(4), e1010475. https://doi.org/10.1371/journal.ppat.1010475

2. **Anand, K.**, Tripathi, A., Shukla, K., Malhotra, N., Jamithireddy, A. K., Jha, R. K., … Singh, A. (2021). Mycobacterium tuberculosis SufR responds to nitric oxide via its 4Fe–4S cluster and regulates Fe–S cluster biogenesis for persistence in mice. Redox Biology, 46, 102062. https://doi.org/10.1016/j.redox.2021.102062

3. Chawla, M*., Mishra, S*., **Anand, K***., Parikh, P., Mehta, M., Vij, M., … Singh, A. (2018). Redox-dependent condensation of the mycobacterial nucleoid by WhiB4. Redox Biology, 19, 116–133. https://doi.org/10.1016/j.redox.2018.08.006 (*equal first author)