

# Scientist Profile



**Name:** Dr. Nagarjuna Dalbanjan

**Designation:** Assistant Professor Grade-III

**Qualification:** M.Sc., Ph.D. (Biochemistry)

**Specialization:** Antimicrobial Resistance & Drug Discovery.

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• **Assistant Professor** (Grade-III), Dr. Prabhakar Kore Center, KLE Academy of Higher Education and Research (Since 01/12/2025-Present).

**Experiences:**

- **Project fellow**, UGC-SAP DRS II. '**Enzyme technology**' at the Department of Biochemistry Gulbarga University, Kalaburagi, from 25/10/2019 to 01/03/2021.

## Research Focus:

My research focuses on antimicrobial resistance and the discovery of novel therapeutics through an integrated in vitro and in silico approach. I aim to elucidate microbial survival mechanisms under stress, particularly targeting key components such as molecular chaperones, proteases, and regulatory networks that contribute to resistance. The work combines microbiological and biochemical assays with computational techniques, including molecular docking, molecular dynamics simulations, and structure-based drug design, to identify, characterize, and optimize bioactive compounds. This interdisciplinary strategy facilitates the development of mechanism-driven antimicrobial candidates and advances efforts toward combating resistant pathogens.

## Achievements / Awards:

1. **3<sup>rd</sup> rank in SPARK 2025-An Innovation Challenge** organized by BSC BioNEST Bio-Incubator, Regional Centre for Biotechnology, Faridabad 16<sup>th</sup> Jan 2026.
2. **AMI-Prof. J. V. Bhat Award** for the Best Paper (Review) published in Indian Journal of Microbiology (**INJM**) (**2025**), Dalbanjan, N. P. & S. K. Praveen Kumar (2024), INJM 64(3), pp. 879-893 from The Association of Microbiologists of India (AMI).
3. **1<sup>st</sup> place in Oral presentation as presenting First author** with title, **Induction of heat shock proteins in *Priestia aryabhatai* and *Acinetobacter variabilis* enhances their stress tolerance**, at the 3<sup>rd</sup> International Conference on Bacteriophage Research and Antimicrobial Resistance (ICBRAR-2022) conducted by Department of Applied Genetics, Karnatak University Dharwad, Karnataka, India, on 26<sup>th</sup> and 27<sup>th</sup> November 2022.
4. **2<sup>nd</sup> place in Poster presentation as co-author** with title **Stress proteins are the reliant factors for *Bacillus licheniformis* and *Bacillus subtilis* to thrive**

**through heat and salt stress**, at the 3<sup>rd</sup> ICBRAR-2022, on 26<sup>th</sup> and 27<sup>th</sup> November 2022.

5. **Karnataka DST-KSTePS-Ph.D. Fellowship** for Science and Engineering, 2022-23.
6. Karnatak University Research Studentship (**KURS**) for Ph.D. 2021-22.
7. **2<sup>nd</sup> rank** in the **M. Sc. Biochemistry-2019**, Gulbarga University Kalaburagi.

**Publications: 55**

**Book Chapters: 3**

**Conferences/Workshops Attended**

- **Conferences/Workshops Attended: 16**
- **Papers Presented: 2**