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Education

- Ph.D. in Biotechnology – Mangalore University, India (2018)
 - K-SET (Karnataka State Eligibility Test) – Government of Karnataka (2018)
 - PG Diploma in Genetics – Kuvempu University, Shivamogga, India (2008)
 - M.Sc. in Biochemistry – Kuvempu University, Davanagere, India (2004)
 - B.Sc. in Biochemistry, Botany, Microbiology – Kuvempu University, India (2002)
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Academic & Teaching Experience

- Associate Professor, St. Aloysius College (Autonomous), Mangaluru (2019 – Present)
 - Lecturer, St. Aloysius College, Mangaluru (2010 – 2019)
 - Guest Lecturer, Gangothri Para Medical College, Shimoga (2007 – 2009)
 - Guest Lecturer, L.B College of Arts and Science, Shimoga (2008 – 2009)
 - Guest Lecturer, DVS College, Shimoga (2004 – 2008)
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Research Experience & Projects

- **Ph.D. Research:** Elucidation of the Molecular Mechanisms of Thyroid Hormone Secretion and Action in Metabolic Syndrome.
 - **Minor Research Project (UGC Sponsored):** Evaluation of the interrelationship between thyroid function and metabolic syndrome in suitable animal models. (2013-2015, Rs. 2,00,000/-)
 - **Ongoing MJES Research Project:** Evaluating the efficacy of Green and Chemically-Synthesized Nanoparticles on Biofilm formation (Funding: Rs. 3,00,000/-).
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Technical Skills

- PCR, qRT-PCR, ELISA, Western Blotting, Immunohistochemistry
 - Gene Expression Studies, Microbial and Plant Tissue Culture Techniques
 - Scanning Electron Microscopy, Bioinformatics Tools, Statistical Analysis
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Publications & Presentations

Research Publications:

- Swarnalatha, B. N., & Abraham, A. (2016). Design of primer for thyrotropin-releasing hormone of *Mus musculus* C57BL/6J for qRT-PCR. *International Journal of Latest Trends in Engineering and Technology*, 7, 31-36.
 - Swarnalatha, B. N., D'Souza, S. S., & Abraham, A. (2016). Insulin resistance precedes glucose intolerance and hyperleptinemia in high-fat simple carbohydrate-fed C57BL/6J mice. *Endokrynologia Polska*, 67(6), 592-598.
 - Swarnalatha, N. B., Roy, N., Gouda, M. M., Moger, R., & Abraham, A. (2017). High-fat, simple-carbohydrate diet intake induces hypothalamic-pituitary-thyroid axis dysregulation in C57BL/6J male mice. *Applied Physiology, Nutrition, and Metabolism*, 43(4), 371-380.
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Conference Presentations:

1. Swarnalatha. (2024, September 25-26). *Biofabrication of silver nanoparticles through green synthesis using Bauhinia fortificata leaf extract*. Oral presentation at the National Conference on India's Journey Towards Trillion Economy: Opportunities and Challenges, AMC College, Bangalore.
2. Swarnalatha. (2024, September 25-26). *Unveiling multifaceted therapeutic properties and pharmacological implications of Calotropis gigantea latex*. Oral presentation at the National Conference on India's Journey Towards Trillion Economy: Opportunities and Challenges, AMC College, Bangalore.
3. Srijith & Swarnalatha. (2024, September 25-26). *Unveiling Nature's Arsenal: The Anti-Cancer Potential of Couroupita guianensis*. Oral presentation at the National Conference on India's Journey Towards Trillion Economy: Opportunities and Challenges, AMC College, Bangalore.
4. Ananth Kumar K. C., Achsah Sujith, & Swarnalatha. (2021, September 15-17). *In vitro antiproliferative effect of DCA and metformin*. Paper presented at the 16th

Kannada Vijnana Sammelana (Science Conference), Mangalore University, Mangalagangothri, Mangalore.

5. Prathap, Ankith, & Swarnalatha. (2025, March 21). *Photocatalytic efficiency of green-synthesized ZnO nanoparticles in malathion degradation: A sustainable solution*. Poster presented at the National Conference on Recent Advances and Innovations in Biological Sciences, Alva's College, Moodubidire.

Students' Projects Guided

- Guided Final Year Postgraduate and Undergraduate Students in Biochemistry Research Projects.
- Supervising student research on nanoparticle synthesis, biofilm formation, and metabolic disorders.

Workshops & Training Programs Attended

- Orientation Program – St. Aloysius College (Autonomous), Mangalore
- National Webinar on Impact of Bioinformatics Tools in Biological Sciences (2023)
- Symposium on Health Informatics – Yenepoya Research Centre (2022)
- Workshop on Intellectual Property Rights – Dept of Biotechnology, AMC College, 2024
- Refresher Course on Environmental Studies – University of Mumbai (2023)
- Seven-Day FDP on Chat GPT & AI Tools for Educators – St. Joseph's College, Kerala (2023)

Membership in Academic & Research Bodies

- Board of Studies (BOS) Member – PG Department of Biochemistry, Mangalore University
- Board of Examiners (BOE) Member – NUCSER, Nitte (Deemed to be University)
- Subject Expert & Examiner – NITTE (Deemed to be University) and Yenepoya University

Awards & Recognitions

- Best Oral Presentation Award (Bharathiar University, Coimbatore, 2016)
 - Best Poster Presentation Award (St. Aloysius College, Mangalore, 2016)
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Books & Publications

- Co-Author: *Practical Manual of Chemistry & Biochemistry for UG & PG Students* – Dr. Bhavya D K, Sujana MS, Dr. Swarnalatha B N (Walnut Publications, ISBN: 9789359110066).
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Community Engagement & Outreach

- Outreach Program: Visited St. Antony's Ashram, Jeppu, Mangaluru (2023).
- Participated in extension programs promoting biochemical research and education.