

LENISHA CRASTA

Master of Pharmacy – Pharmacology

Mangalore, Karnataka, India - 574231 | crastalenisha@gmail.com | [LinkedIn](#) | +91 8971226825

EDUCATION

Manipal Academy of Higher Education, Manipal Oct 2021 – Nov 2023

Master of Pharmacy – Pharmacology and Toxicology | 8.85 CGPA

Nitte Deemed to be University, Mangaluru Aug 2017 – Sep 2021

Bachelor of Pharmacy – CADD and Pharmacovigilance | 8.4 CGPA

PROFESSIONAL EXPERIENCE

Ministry of Chemicals and Fertilizers, Govt of India | Mangaluru Jan 2025 – Jan 2026

Pharmacist

- Counselling patients on rational medication use, dosage optimization, and safety monitoring in alignment with regulatory and quality standards
- Managed end-to-end inventory lifecycle including procurement planning, stock monitoring, expiry tracking, and reconciliation to ensure uninterrupted drug availability
- Analyzed medication utilization trends and demand patterns to support data-driven supply decisions.

Eli Lilly and Company | Bengaluru Feb 2024 – Aug 2024

Intern – Safety Management

- Processed and validated 100+ Individual Case Safety Reports (ICSRs) in compliance with global regulatory timelines (FDA, EMA, ICH guidelines)
- Performed medical coding using MedDRA and WHO-DD, ensuring accurate classification of adverse events, medical history, concomitant medications, and laboratory data
- Conducted seriousness and expectedness assessments to support aggregate safety evaluation and risk assessment processes
- Authored structured, evidence-based case narratives integrating clinical, laboratory, and pharmacological data
- Reviewed line listings and safety data for discrepancies, ensuring data integrity and consistency across documentation
- Collaborated with global cross-functional teams using Argus Safety and Veeva Vault to maintain standardized documentation workflows

Father Muller Hospitals | Mangaluru Apr 2021 – May 2021

Intern – Hospital Pharmacist

- Supported clinical pharmacists in medication reconciliation, patient counselling, and discharge planning, ensuring error free processes and compliance with set protocols
- Collaborated with multidisciplinary healthcare teams to optimize pharmacotherapy plans, identify drug interactions, and contribute to process improvement and quality driven care initiatives

RESEARCH EXPERIENCE

Manipal Academy of Higher Education | Manipal, India June 2022 – June 2023

Graduate Research Assistant

- **Assessment of role of NF- κ B inhibitor, Indole-3-carbinol, in Alzheimer's disease: in silico and in vivo approach | Prof. Dr. Madhavan Nampoothiri G**

Led a master's dissertation project on evaluating Indole-3-carbinol as an NF- κ B pathway inhibitor in Alzheimer's disease, combining *in silico* docking and molecular dynamics (using IKK as the target) with *in vivo* LPS-induced cognitive dysfunction models in rats to assess neuroprotective and anti-inflammatory effects.

- **Computational analysis of WNT/ β -Catenin pathway activators for Alzheimer's disease | Prof. Dr. K. Sreedhara R Pai**

Assisted in a departmental research project focused on identifying WNT/ β -Catenin pathway activators for Alzheimer's disease by screening FDA-approved drugs for binding to LRP5/6 and DKK1 receptors, evaluating cognitive effects in *in vivo* models, and analysing gene targets affecting pathway modulation.

- **Investigating cromolyn and montelukast effects on cholestasis in rat models | Prof. Dr. K. Sreedhara R Pai**

Contributed to a departmental preclinical research project investigating the effects of cromolyn and montelukast on ANIT-induced cholestasis in rats, including *in silico* screening for FXR agonists, model standardization, and evaluation of biochemical markers relevant to primary sclerosing cholangitis (PSC).

Nitte Deemed to be University | Mangalore, India

August 2019 – August 2021

Undergraduate Research Assistant

- **Synthesis and Optimization of Silver Nanoparticles using Leaf extract of *Tamarindus indica* by Box-Behnken Design for Enhanced Antimicrobial Activity | Prof. Dr. Divya Jyothi**

Awarded Nitte University Short Term Undergraduate Fellowship (NUSR2 Grants); selected as co-student investigator for a project focused on green synthesis of silver nanoparticles using *Tamarindus indica* leaf extract and optimization of synthesis parameters via Box-Behnken Design for improved yield and stability.

- **In-silico Studies, Synthesis, and Antibacterial Evaluation of Thiophene Linked Isoxazole Derivatives | Prof. Dr. Pankaj Kumar**

Worked on a group research project during the final year of my bachelor's degree involving *in silico* studies, synthesis, and antibacterial evaluation of thiophene-linked isoxazole derivatives targeting *Staphylococcus aureus* gyrase B (PDB ID: 4URM) through molecular docking and tube dilution assay.

- **In Silico ADMET and Molecular Interaction Profiles of Phytochemicals from Medicinal Plants in Dakshina Kannada | Prof. Dr. Jainey P James**

Worked on a group research project during final semester of my bachelor's degree, conducting *in silico* ADMET profiling and molecular docking of phytochemicals from medicinal plants of Dakshina Kannada, using tools like Qikprop, Molinspiration, ADMETlab 2.0, ProTox-II, and GLIDE to evaluate drug-likeness, toxicity, and interactions with antimicrobial targets (*Staphylococcus aureus* 1JII and *Candida albicans* 4HOE).

SKILLS

In Vivo:

- Animal handling (rats & mice), drug administration (oral, intraperitoneal, subcutaneous, intratracheal, intracerebroventricular) and blood withdrawal techniques (retroorbital, cardiac puncture, rat tail vein)
- ADME-Tox evaluation of novel compounds
- Rt-PCR/qPCR, RNA isolation, cDNA synthesis, gene expression analysis
- Basic training in mammalian cell culture, experimental work with neuronal cell lines
- Cell viability and cytotoxicity assays (MTT, SRB)
- Drug screening using *in vitro* models
- Biochemical assays and ELISA
- Stereotaxic surgery in rats
- Experimental design, data interpretation, scientific writing, literature analysis

In Silico:

- Molecular docking, molecular dynamics simulation, ligand preparation, protein preparation, MMGBSA, induced fit docking, ADMET prediction, target screening and validation

Tools: Oracle Argus Safety, Veeva Vault (CDMS, RIM), Microsoft Office Suite, RStudio, GraphPad Prism, Schrödinger Suite

PUBLICATIONS

- Crasta, L., Suhana, K. H. K., Afrana, K., Kshema., & Kumar, P. (2021). In-silico Studies, Synthesis, and Antibacterial Evaluation of Thiophene Linked Isoxazole Derivatives. *Journal of Pharmaceutical Research International*, 256–264. <https://doi.org/10.9734/jpri/2021/v33i43A32485>
- Deepak Ail, P., Jyothi, D., Sultana, R., & Crasta, L. (2023). Synthesis and Optimization of Silver Nanoparticles using Leaf extract of *Tamarindus indica* by Box-Behnken Design for Enhanced Antimicrobial Activity. *Research Journal of Pharmacy and Technology*, 4583–4590. <https://doi.org/10.52711/0974-360X.2023.00746>
- James, J. P., Ail, P. D., Crasta, L., Kamath, R. S., Shura, M. H., & T.J, S. (2024). In silico ADMET and Molecular Interaction Profiles of Phytochemicals from Medicinal Plants in Dakshina Kannada. *Journal of Health and Allied Sciences NU*, 14(02), 190–201. <https://doi.org/10.1055/s-0043-1770057>

CERTIFICATION

- The Data Scientists Toolbox – Johns Hopkins University - Coursera (Dec 2024)
- Google SEO fundamentals – University of California, Davis – Coursera (Aug 2025)

CONFERENCES / WORKSHOP

- International Conference on Advances in Pharmaceutical and Health Sciences - 2020, Nitte College of Pharmaceutical Sciences
- National e-Conference on Drug Discovery for CNS Disorder - 2021, Manipal College of Pharmaceutical Sciences
- International Conference on Clinical Pharmacy – CPCON - 2023, Manipal College of Pharmaceutical Sciences
- Workshop on Ischemic Stroke of Middle Cerebral Artery: Microsurgery and Validation on Rodents - 2022, Yenepoya College of Pharmaceutical Sciences

REFERENCES

1. Dr. K. Sreedhara. R. Pai

Professor
Department of Pharmacology
Manipal College of Pharmaceutical Sciences, Manipal
ksr.pai@manipal.edu

2. Dr. Madhavan Nampoothiri G

Associate Professor
Department of Pharmacology
Manipal College of Pharmaceutical Sciences, Manipal
madhavan.ng@manipal.edu

3. Dr. Pankaj Kumar

Associate Professor
Department of Pharmaceutical Chemistry
Nitte Institute of Pharmaceutical Sciences,
Mangalore
pankajpgr@nitte.edu.in