



DR. SHRUTI GUPTA

Associate Consultant - Lab Medicine (Biochemistry)

Qualification

MBBS | MD (Biochemistry) | MBA (Hospital Administration & Healthcare Management)

Overview

Dr. Shruti Gupta is a highly distinguished clinical biochemist and laboratory medicine specialist at Old Airport Road. She is currently practising as an Associate Consultant – Lab Medicine (Biochemistry) at Manipal Hospital Old Airport Road, Bangalore. With an elite academic pedigree and extensive specialisation in quality assurance, analytical diagnostics, and healthcare management, Dr. Shruti has built a stellar reputation in supervising high-volume diagnostic laboratories, implementing strict international laboratory accreditation guidelines, and delivering critical evidence-based clinical decision support. Dr. Shruti completed her foundational medical education with an MBBS from the prestigious Osmania Medical College, Hyderabad. She then pursued her MD in Biochemistry from the All India Institute of Medical Sciences (AIIMS), Jodhpur, where she graduated at the top of her class, winning the highly revered Prof. Praveen Sharma Gold Medal and a Certificate of Excellence for securing the highest aggregate marks. To seamlessly bridge advanced diagnostics with operational systems, she also earned an MBA in Healthcare and Hospital Administration from Dr. D. Y. Patil University, Pune, and completed formal clinical audit training

in Laboratory Management Systems. At Manipal Hospital Old Airport Road, Dr. Shruti's clinical practice focus centres on driving maximum diagnostic efficiency across high-acuity emergency, inpatient, and outpatient pathology services. She possesses profound field expertise in quality assurance systems, including the meticulous monitoring of Internal Quality Control (IQC) and External Quality Assurance Schemes (EQAS). Her daily operational oversight includes high-throughput clinical chemistry analysers, advanced immunochemistry platforms, hormonal assays, metabolic panels, toxicological profiling, and the introduction and method validation of novel biomarker assays. Her expertise in best clinical biochemist in Bangalore services is supported by extensive experience in clinical chemistry, immunochemistry, hormonal assays, metabolic panels, and diagnostic quality management. Dr. Shruti's structural and administrative expertise extends to managing complex Hospital Information Systems (HIS) and Laboratory Information Systems (LIS) integration, process optimisation, and healthcare supply chain management. Beyond routine biochemistry, she is deeply involved in cutting-edge, translational research exploring artificial intelligence in lab medicine, blockchain operational value, extracellular vesicles, and metabolic indicators for conditions like gestational diabetes. Dr. Shruti is a globally recognised investigator, holding lifetime memberships in the Association of Clinical Biochemists of India (ACBI) and the Association of Medical Biochemists of India (AMBI), alongside international memberships in the American Society for Clinical Pathology (ASCP) and the African Society for Laboratory Medicine (ASLM). She is a widely published author with over 15 papers in indexed international journals and has received several travel scholarships, culminating in an invited presentation at the IFCC Worldlab Congress in Rome.

Fellowship & Membership

- Member, Asia-Pacific Federation for Clinical Biochemistry and

- Laboratory Medicine Committee of Laboratory Management,
Point of care testing (APFCB C-LM POCT) Working Group
- Corresponding member, International Federation of Clinical Chemistry and Laboratory Medicine Task Force Young Scientists (IFCC TF-YS)
 - Corresponding member, International Federation of Clinical Chemistry and Laboratory Medicine Committee for Clinical Laboratory Management (IFCC C-CLM)
 - Association of Clinical Biochemists of India (ACBI)
 - Association of Medical Biochemists of India (AMBI)
 - Association of Clinical Chemistry & Lab Medicine Practitioners (ACCLMP)
 - Indian Academy of Biomedical Sciences (IABS)
 - Society Of Biological Chemists, India (SCBI)
 - African society for Laboratory Medicine (ASLM)
 - American Society for Clinical Pathology (ASCP)
 - Australasian Association for Clinical Biochemistry and Laboratory Medicine (AACB)
 - Biochemical Society

Field of Expertise

- Clinical chemistry
- Immunochemistry
- Hormonal assays
- Metabolic panels
- Toxicological assays
- Tumor markers
- Quality assurance
- Laboratory management
- Clinical decision support
- Laboratory accreditation

- Artificial intelligence in Lab medicine

Languages Spoken

- Hindi
- English

Awards & Achievements

- ACBI Travel Award for presentation in 15th APFCB Congress in Jaipur, November 2019
- Prof. Praveen Sharma Gold Medal and a Certificate of excellence for securing overall highest aggregate marks in regular M.D. (Biochemistry) Examinations for the academic year 2018-19 by AIIMS Jodhpur
- APFCB Young Scientist Travel Award for presenting in 24th IFCC Worldlab – 16th APFCB Congress in Seoul, June 2022
- ACBI Travel Award for presentation in 48th ACBICON in Delhi, November 2022
- IFCC Travel Scholarship for presentation at XXV IFCC Worldlab-Euromedlab Rome, May 2023
- Pitabus-Jamuna Burma Memorial Award for presentation of award paper in 49th ACBICON in Kerala, September 2023

Talks & Publications

- Invited talks in 49th Annual National Conference of Association of Clinical Biochemists of India (ACBICON 2023) and East Zone conference of Association of Clinical Biochemists of India (EZ-ACBICON)
- Paper selected for an invited presentation at IFCC Forum for

Young Scientists, during XXV IFCC Worldlab-Euromedlab Roma 2023 Congress.

- 15+ publications and 2 book chapters in various national and international indexed journals.
- Mitra P, Gupta S, Sharma P. Blockchain in Clinical Chemistry: from Hype to Clinical and Operational Value. Ind J Clin Biochem (2026). [Click Here](#)
- Mitra P, Gupta S, Sharma P. AI, Automation and the Future Role of the Clinical Biochemist: from Analyzer Custodian to Clinical Knowledge Partner. Ind J Clin Biochem 41, 1-4 (2026). [Click Here](#)
- Mitra P, Gupta S, Sharma P. Laboratory Medicine and Sustainability: A Call To Action. Ind J Clin Biochem (2025). [Click Here](#)
- Gupta S, Mitra P, Sharma P. Unmasking Lead Exposure and Neurotoxicity: Epigenetics, Extracellular Vesicles, and the Gut-Brain Connection. Indian J Clin Biochem. 2025 Jan;40(1):1-3. Epub 2025 Jan 7. PMID: 39835227; PMCID: PMC11741976. Available from: [Click Here](#)
- Mitra P, Gupta S, Sharma P. Role of Supply Chain Management in Clinical Laboratory. Indian J Clin Biochem. 2024;39:1-2. Available from: [Click Here](#)
- Mitra P, Gupta S, Sharma P. Extracellular Vesicles (EVs) as "A Window to the Brain": Potential, Challenges and Future Perspectives. Indian J Clin Biochem. 2023 Jan;38(1):1-3. Epub 2023 Jan 9. PMID: 36684493; PMCID: PMC9852378. Available from: [Click Here](#)
- Gupta S, Banerjee M, Gauba K, Mitra P, Shekhawat J, Chauhan N, et al. Role of interleukin-22 in tuberculosis patients. J Basic Clin Physiol Pharmacol. 2022 Oct 14. Available from: [Click Here](#)
- Gauba K, Gupta S, Shekhawat J, Dutt N, Yadav D, Banerjee M, et al. Gene expression, levels and polymorphism (Ala16Val) of Mitochondrial Superoxide Dismutase in Tuberculosis patients of

Rajasthan. *Microbes Infect.* 2022 Nov 7;105075. Available from: [Click Here](#)

- Mitra P, Gupta S, Samal P. Methods in Extracellular Vesicle Isolation, Characterization, and Production. In: Ghosh AR, editor. *Extracellular Vesicles in Human Health and Diseases* [Internet]. Singapore: Springer Nature Singapore; 2024 [cited 2024 Aug 19]. p. 23-43. Available from: [Click Here](#)