



Amritha Roy

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Profile

Ms. Amritha Roy is a dedicated and emerging academician in the field of Forensic Science, bringing to the classroom and the laboratory a rare combination of a strong foundation in the biological sciences and a growing specialization in forensic application. Her journey so far reflects a deliberate progression from foundational training in botany and biotechnology to focused, credentialed expertise in forensic science, supported by hands-on exposure to real forensic casework. This trajectory positions her as a promising young faculty member capable of introducing students to the scientific rigor that underlies modern forensic practice while nurturing curiosity, critical thinking, and ethical awareness in the next generation of forensic scientists

Her academic foundation was laid at CMS College (Autonomous), Kottayam, Kerala under Mahatma Gandhi University where she earned her Bachelor's degree in Botany and Biotechnology. This dual specialization gave her a well-rounded grounding in plant sciences alongside the core techniques of modern biotechnology, including molecular biology, genetics, microbiology, and laboratory-based experimental methods. She completed her postgraduation in Forensic Science from CHRIST (Deemed-to-be University), Bangalore. She successfully qualified the UGC-NET examination in Forensic Science in 2025, a significant milestone that reflects both her command over the subject and her readiness to pursue a career in academia.

A highlight of academic training is Undergraduate dissertation on the title **"Bioprospecting of soil microbiota for amylase-producing bacteria."** The study involved screening soil microbiota for amylase-producing bacteria using starch agar media. The project provided practical experience in microbiological screening, bacterial characterization, and laboratory-based biological analysis, strengthening her understanding of applied biological research. She received training at the Rubber Board, Kottayam, in Plant Science and Biotechnology, further strengthening her background in biological sciences and laboratory-based research. Her academic and scholarly interests have also extended into forensic psychology and medico-legal investigations. She has contributed to the scientific literature through the publication titled **"Psychological autopsy: Overview of equivocal deaths, suicides and homicide-suicides,"** published in the *Journal of Forensic and Legal Medicine* on

January 27, 2025. The publication reflects her engagement with forensic and medico-legal subjects involving the examination of equivocal deaths and the application of psychological approaches in forensic investigation. Alongside her academic and research activities, Amritha Roy has undertaken training in a range of scientific and analytical techniques. She completed IBM SPSS training in Biostatistics at Christ University. Her instrumental training at Christ (Deemed-to-be University) included Field Emission Spectroscopy, Scanning Electron Microscopy, and X-Ray Diffraction.

A defining feature of Amritha's early professional development has been her internship at the Regional Forensic Science Laboratory, Kochi, Kerala, where she gained valuable and practical exposure to the day-to-day realities of forensic casework. During this internship, she had the opportunity to observe and participate in laboratory procedures that form the backbone of forensic investigations, gaining insight into how biological and physical evidence is collected, preserved, examined, and interpreted within a regulated, chain-of-custody framework. This exposure to an operational forensic laboratory allowed her to translate classroom knowledge into a practical understanding of forensic protocols, instrumentation, and the meticulous documentation standards required for evidence to withstand scrutiny in legal proceedings and it continues to inform her approach to teaching and mentoring students who aspire to enter the field.

She has a strong interest in forensic biology, an area concerned with the identification and analysis of biological evidence such as blood, body fluids, tissues, and other organic materials recovered from crime scenes. Closely related to this is her interest in forensic biotechnology, where she is drawn to the ways in which modern biotechnological tools, including DNA profiling and molecular diagnostic techniques, are being adapted and refined for forensic identification and criminal investigation. She is equally engaged with crime scene investigation, an area that demands methodical observation, careful documentation, and the scientific reconstruction of events based on physical and biological traces left behind. In addition, she maintains a keen interest in forensic laboratory practices, encompassing the standard operating procedures, quality assurance measures, and analytical techniques that ensure the reliability and admissibility of forensic findings.

Beyond her technical and academic interests, she is passionate about fostering scientific inquiry among students and cultivating an environment where theoretical knowledge is consistently linked to practical forensic application. She is committed to designing learning experiences that help students develop this dual fluency. Her own transition from a biological sciences background into forensic specialization, reinforced by direct laboratory internship experience, gives her a grounded, empathetic perspective on the learning journey that forensic science students undertake. As she continues to grow in her academic career, Ms. Amritha Roy aims to contribute to the discipline not only through teaching but also through research that furthers the integration of biological sciences with forensic investigation, positioning herself as a thoughtful and engaged young academic in a field that continues to grow in relevance and importance within the criminal justice system.