

Press Release

JMI Professor secures CCRUM-funded research project to study antimicrobial potential of Unani medicinal plants against multidrug-resistant uropathogens

New Delhi, April 2, 2026

Prof Qazi Mohd Rizwanul Haq, Department of Biosciences, Faculty of Life Sciences, Jamia Millia Islamia, New Delhi, has been awarded a research grant of Rs 22.94 lakhs by the Central Council for Research in Unani Medicine (CCRUM), Ministry of Ayush, Government of India, under the Expression of Interest (EoI) Scheme 2025-2026. The research project, entitled “*Screening of Unani medicinal plants/formulations for antimicrobial potential against multidrug resistant uropathogenic bacteria using AI/ML assisted in-silico and experimental approaches,*” represents a significant transformative confluence of ethnopharmacology and AI-driven drug discovery, bridging classical medicinal wisdom with avant-garde molecular science. Prof Haq is the Coordinator & Principal Investigator of the project. The study will be carried out in collaboration with Dr Sayeed Ahmed (Co-Investigator), *Prof & Director*, Centre of Excellence in Unani Medicine (Pharmacognosy and Pharmacology), Jamia Hamdard, New Delhi.

Infectious diseases are the second most important killer in the world and number three in developed nations. The discovery of antibiotics has revolutionized modern medicine and saved millions of lives. However, the future of antibiotic therapy is in jeopardy due to the development of drug resistance among pathogens. Urinary tract infections (UTIs) are one of the most common infectious diseases in humans. Roughly 1 in 6 bacterial infections worldwide involve antibiotic-resistant pathogens, whereas it’s 1 out of 3 in the case of UTI.

The outcomes of this study are expected to contribute to the development of novel, plant-based antimicrobial agents for treating infections caused by drug-resistant uropathogens. The project aligns national priorities to combat antimicrobial resistance and promote the evidence-based integration of traditional medicines under the Ministry of Ayush.

Prof Haq has recently completed an Indo-UK joint collaborative research project entitled “SELECTAR: Selection for antimicrobial resistance by antimicrobial production waste,” funded by the DBT-India and NERC-UK, in collaboration with experts from the University of Birmingham and the University of Leeds, UK, Aligarh Muslim University, Panjab University, CSIR-Central Drug Research Institute, and Indian Institute of Technology Delhi, India. Prof Haq and Prof Meryam Sardar from the Department of Biosciences served as Co-Principal Investigator and Co-Investigator, respectively. The total sanctioned budget of this project was Rs. 296.00 Lakhs (Indian component).

Prof Haq is the Coordinator and PI of another ongoing DBT-funded major research project in collaboration with The Energy and Resources Institute (TERI), New Delhi and the State Forest Research Institute, Madhya Pradesh. Dr Meryam Sardar, Professor & Head, Department of

Biosciences, is Co-PI in the project. The total sanctioned budget of the project is Rs. 70.60 Lakhs.

At a time when last-resort antibiotics are failing, screening traditional Unani formulations is highly desirable and necessary. Prof Haq contributes to advancing research in an insightful understanding the mechanism of antibiotic and heavy metal resistance: emergence, maintenance and spread among bacteria from natural environments as well clinical settings, and screening of natural and synthetic chemical compounds/ formulations for their antimicrobial activities against MDR pathogens, thereby reinforcing Jamia Millia Islamia's commitment to high-impact, translational science that addresses critical public health challenges through innovation and collaborative excellence.

Prof. Saima Saeed
Chief Public Relations Officer



Prof. Qazi Mohd Rizwanul Haq