

Maryam Sani Lawal is a biosecurity scientist and infectious disease genomics researcher, currently completing a PhD in Infectious Diseases at Hokkaido University through the Partnership for Building Resilience against Public Health Emergencies through Advanced Research and Education (PREPARE) program. She also serves as a Senior Scientific Officer at the Nigeria Centre for Disease Control and Prevention, where she has contributed to the country's genomic surveillance strategy and led efforts to integrate pathogen genomics into outbreak response.

She played a key role in the optimization and implementation of mEGA, an enhanced metagenomic sequencing platform that has uncovered hidden viral threats in undiagnosed outbreaks, enabling faster, more cost-effective detection in resource-limited settings. She co-authored Nigeria's first biosafety and biosecurity handbook for students and the Youth Declaration for Biosecurity, presented at the Biological Weapons Convention. A frequent collaborator with JICA, WHO, and UNODA, she facilitates trainings and dialogues on global health security and disarmament.

Her work embodies the power of innovation, policy engagement, and international collaboration to strengthen pandemic preparedness across borders.