

Dr. HITENDER GAUTAM, M.D., FIMSA

Professor

Bacteriology, Serology, HIV-Immunology & Hospital Infection Control

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Areas of Research:

1. Antimicrobial resistance (AMR) & Antimicrobial stewardship
2. Hospital Infection Control (HIC) and Hospital acquired infections (HAI)
3. Meningitis.
4. Diarrhoea.
5. Biomarkers

Dr. Hitender Gautam has completed his M.B.B.S. from University College of Medical Sciences (U.C.M.S.) & G.T.B. Hospital in 2003. He has completed his M.D. in 2008 and Senior Residency in 2011 from Maulana Azad Medical College (M.A.M.C.). He joined the institute as Assistant Professor in June 2014.

- HIC Core Committee Member, AIIMS, New Delhi
- Hospital Infection Control: Dr. B.R.A IRCH & Surgical Block
- NABL Core Committee Member & Deputy Quality Manager for Dept. of Microbiology
- Nodal Faculty for AIIMS New Delhi Infectious Disease Research & Diagnostic Laboratory (IRDL) under DHR-ICMR
- Academic Editor in PLOS ONE Journal Editorial Board
- Fellow of International Medical Sciences Academy (FIMSA)
- Chief Guide: 4 PhD, 3 DM & 4 MD Theses. Co-guided multiple PhD, DM & MD theses

Publications- 107

Papers in Conference either as Presenting or Co-author – 131

Book Chapters- 7

Invited Lectures: 52

Gene Bank Submission: 24

Awards:

- Our Research work has been awarded with **Dr. S.S. Kelkar Award** with Gold Medal at IAMM, MICROCON-2015 & IAMM, MICROCON-2016; **Sanjay Sardana Memorial Award** on Immunodiagnostic Techniques at Micro-D-Con 2015 & MICRO-D-CON-2021 for cytokine profile in meningitis; **Dr. Srinivas award** for best poster on antibiotic susceptibility testing category at IAMM- Delhi Chapter September 2020 & IAMM Delhi Chapter, 22nd July 2023; **MD Best Poster award** on AMR at IAMM Delhi Chapter, 6th August 2022; **First Prize Judged under Senior Resident category** for our thesis work on AMR at 2nd AIIMS Research Day 18th Oct. 2022; **Certificate of Commendation** for our Research Work on antibiotic sensitivity testing (AST): On 3rd Annual Research Day, AIIMS, New Delhi; **Best E-Video** in Antimicrobial resistance category (2020) at E-Microcon 2020; **Certificate of Appreciation** under the category of Anti-Microbial Resistance in AIIMS-ASM 2020 International Webinar; **Second prize for the best oral presentation** at ASICON 2009 for HIV work; Best paper award by Indian Association of Medical Microbiologist, Delhi-Chapter (August 30, 2008) “Clinical and Immunological Response in HIV Infected Children, Receiving Antiretroviral Therapy”; Selected from India to Participate in the “East Asia Young Researchers Network For Clinical Trial of AIDS Vaccine 2010” held in **Graduate School of Medicine, Hokkaido University, Sapporo, Japan**, from 1-30 June 2010 and to **present the country report of India on HIV/AIDS situation.**

Major Extramural Research Projects as Principal Investigator:

1. “Biomarkers for bacteremia, antimicrobial resistance and hospital acquired infections by NMR and Mass Spectrometry among febrile neutropenic patients” : BIRAC, DBT.

2. “Genomic profiling of invasive and hospital acquired *Escherichia coli* pathotypes from different clinical samples to identify the virulence and antimicrobial resistance markers” SERB DST.
3. Site-specific biomarkers to differentiate infection from either colonization or aseptic inflammation in ICU. ICMR.
4. Detection and Molecular Characterization of *Diarrheagenic Escherichia coli* as a cause of morbidity and mortality in children under 5 years of age presenting with acute diarrhea. DHR.
5. “Platform for enhanced pathogen detection for meningitis and sepsis: Rapid, portable, and field-deployable diagnostics”. ICMR.
6. Detection of viable but non-culturable (VBNC) Gram-negative bacteria in sepsis and meningitis: Clinical significance in AMR stewardship. AIIMS-THSTI Collaborative Proposal.
7. Investigating the Role of Non-Coding RNAs (miRNAs and lncRNAs) in Modulating Antimicrobial Resistance Mechanisms in Aerobic Bacteria Isolated from Blood and CSF Infection. ICMR.
8. Identification of Novel nucleic acid signatures of AMR in ESKAPE pathogens: Role in AMR detection and antimicrobial stewardship: AIIMS-IGIB Collaborative Proposal.
9. Validation of CSIR-NIIST Biomedical Waste Conversion Rig.

Major Extramural Research Projects as Co-Investigator:

1. National Capacity Building for healthcare workers in Infection, Prevention and Control including biomedical waste management for pandemic preparedness. Funded by USAID-RISE & JHPIEGO.
2. Infectious Disease Research & Diagnostic Laboratory (IRDL) Project. ICMR-DHR: Nodal Faculty
3. Pan-India Surveillance of Acute Diarrhoeal Disease through DHR-ICMR.
4. APP-DIP: Development of AI based prognostic platform for an early detection of infections in immunocompromised patients. Jointly sanctioned under Indo-Sweden Collaboration in Biotechnology (IITD) & AIIMS, New Delhi. Indo (DBT)-Sweden Collaboration.
5. AMR-Educate: A multinational and interdisciplinary research-integrated education partnership for a sustainable future against infection and antimicrobial resistance threats. Collaborative Project between Inland Norway University (INN) and AIIMS, New Delhi.
6. OH-AMR-Diag: Novel technological solutions for rapid detection and screening of AMR from a One- Health perspective. Collaborative Project between INN and AIIMS, New Delhi.

Major Publications: Google Scholar citations: <https://scholar.google.com/citations?user=fnBriZoAAAAJ>

1. Clonal relationship among *Acinetobacter baumannii* isolates from different clinical specimens by ERIC-PCR. *Infection, Disease & Health* 31 (2026) 100422.
2. Comparative in vitro analysis of sulbactam-durlobactam against extensively drug resistant (XDR) and non-XDR carbapenem-resistant *Acinetobacter baumannii* (CRAB) clinical isolates collected from a tertiary care facility in North India. *Eur J Clin Microbiol Infect Dis* 2025;Vol 45:459-467.
3. Molecular detection and serotyping of acute bacterial meningitis pathogens in Indian children. *Eur J Clin Microbiol Infect Dis* (2025). <https://doi.org/10.1007/s10096-025-05198-2>
4. Epidemiology of Opportunistic Infections and its Correlation with CD4+ T-Lymphocyte Counts and Plasma Viral Load among AIDS Patients at tertiary care hospital in India. *Journal of the International Association of Physicians in AIDS Care* 2009; 8(6): 333-337.
5. Paving the way for syphilis reverse algorithm diagnostic strategy in the Indian scenario through treponemal POCT. *Int J STD AIDS*. 2025 Nov;36(13):923-929. Epub 2025 Jul 11.
6. The importance of stool antigen test in the diagnosis and management of *Helicobacter pylori* infections. *Ind J Med Microbiol* Volume 56, July–August 2025, 100888.
7. Non-O157 diarrheagenic *Escherichia coli* causing hemolytic uremic syndrome in a child: An emerging paradigm. *Indian J Med Microbiol*. 2026 May 7:62:101133. doi: 10.1016/j.ijmmb.2026.101133.