Dr. Sakshi Talwar

Assistant Professor
Department of Microbiology

Email	sakshi@ss.du.ac.in sakshi2424@gmail.com
Mobile :8860618095	

Academic Qualifications: Research Officer (Post doc) 2019-2020 (THSTI)
Ph.D. 2013-2019 (Translational Health Science and Technology Institute)
M.Sc. Applied Microbiology 2010-2012 (Banaras Hindu University)
B.Sc. (Hons) Microbiology 2007-2010 (University of Delhi)

Teaching Experience (Year)		**Research Experience (Year)**	10+ years

Area of Research	I have a Ph.D. specializing in mycobacterial pathogenesis, my professional journey has been a fascinating exploration into the intricate world of microbial interactions and the host immune response, microbial infections particularly the one caused by *Mycobacterium tuberculosis*. Building upon my background in mycobacterial pathogenesis, molecular biology, and genetic engineering, I transitioned to a challenging role in a French multinational corporation (MNC) specializing in the development of diagnostic kits for various infectious diseases. This phase of my career allowed me to apply my research expertise to the practical realm of diagnostics, contributing to the development of cutting-edge tools for disease detection.
Publications	1. Pal R, Talwar S… Pandey AK et al. Rv0495c regulates redox homeostasis in Mycobacterium tuberculosis. (Tuberculosis) (2024) (IF 2.9) 2. Pandey M, Talwar S… Pandey AK et al. Transcription factor mce3R modulates antibiotics and disease persistence in Mycobacterium tuberculosis. (Research in Microbiology) (2023) (IF -3.9) 3. Talwar S, Pandey M… Pandey AK et al. Host cholesterol modulates the generation and enrichment of persisters during Mycobacterium tuberculosis infection. (mSystems) (2021) (IF- 6.496) 4. Chetan Prakash, Manitosh Pandey, Sakshi Talwar……Niti Kumar et al Extra-ribosomal functions of Mtb RpsB in imparting stress resilience and drug tolerance to mycobacteria. (Biochimie) (2020) (IF-4.079) 5. Pandey M, Talwar S, Bose S…Pandey AK. Iron homeostasis in Mycobacterium tuberculosis is essential for persistence. (Scientific Reports) (2018). (IF-4.379)

	6.Pandey M, Singh AK, Thakare R, Talwar S…Pandey AK. Diphenyleneiodonium chloride (DPIC) displays broad-spectrum bactericidal activity. (Scientific Reports) (2017) (IF-4.379) 7. Dharra R, Talwar S, Singh Y…Pandey AK et al. Rational design of drug-like compounds targeting Mycobacterium marinum MelF protein. (Plos One) (2017) (IF-3
Short Courses/ FDP	Completed a 4-Week Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" from 23 April – 22 May, 2023 and obtained Grade A+.
Awards/Scholarships	1. 2019- Filed an Indian patent entitled "A recombinant mycobacterium strain with constitutively activated toxin VapC12 and uses therof. 2. 2018-Received the Bill and Melinda Gates Foundation Global Health Travel Award for the X7 Tuberculosis: Translating Scientific Findings for Clinical and Public Health Impact conference. 3. 2017- Visited and worked in SigN A*Star, Singapore for a period of one month under the IndoSingapore project entitled "Host-pathogen interaction to identify new drug targets against persistent Mycobacterium" 4. 2016- Best Poster award for the poster entitled "vapC12 toxin promotes cholesterol specific generation of persisters in Mycobacterium tuberculosis", at the annual foundation of THSTI, 2016. 5. 2012-Qualified All India Examination conducted by Indian Council of Medical Research for Junior Research Fellowship (ICMR-JRF-2012). 6. 2012-Qualified All India Examination conducted by Council for Scientific and Industrial ResearchUniversity Grant Commission, National eligibility test for Lectureship with All India rank of 30. 7. 2012-Qualified Graduate Aptitude Test in Engineering (GATE-2012). 8. 2011-selected as summer research fellow by Indian Science Academy (INSA).