

Publications July 2025

1. Ashraf A*, **Pal RK**, Hassan MI* (2025) Crystal structure of thymidine kinase from the multi-drug resistant col strain of Staphylococcus aureus. **Biochim Biophys Acta Proteins Proteom.** 1873:141071. [*Correspondence author]
2. Bashir S, Kaur N, Vadhel A, Verma AK, Girdhar M, Malik T*, **Kumar A**, Mohan A* (2025) Unravelling herbicide stress and its impact on metabolite profiling in Cannabis sativa: an investigative study. **J Cannabis Res.** doi: 10.1186/s42238-025-00300-z. [*Correspondence author]
3. Bhosale RS, Chakraborty A, Wong TY, Masal DP, Choudhury R, Srivastava S, Reddy DS, Aldrich CC, Kamat SS, **Mohanty D, Gokhale RS*** (2025) Enzymatic Pathway for Kupyaphore Degradation in *Mycobacterium tuberculosis*: Mechanism of Metal Homeostasis and Turnover. **ACS Chem Biol.** 20:1492-1504. [*Correspondence author]
4. Chauhan K, Datta D, Kapoor Y, Passricha N, Dutt R, Arora N, Das M, Rao K, Singh L, Gautam A, Sharma RD, Sarkar B, Yadav M, Malakar B, Kalam H, Saini P, Mehra L, Das P, Ahuja V, Singhal A, **Nandicoori V**, Kumar D. A* (2025) *Mycobacterium tuberculosis* secreted virulence factor Rv1435c/hsr1 disrupts host snRNP biogenesis. **Proc Natl Acad Sci U S A.** 122:e2423349122. [*Correspondence author]
5. Kapoor A, Verma JK, Goyal D, Agarwal S, Gaur A, **Mukhopadhyay A*** (2025) ATP synthase epsilon subunit is an unconventional adaptor in clathrin-mediated endocytosis of hemoglobin in Leishmania. **J Cell Sci.** 138:jcs263555. [*Correspondence author]
6. Kushwaha M, Chaudhary S, Singh AK, Makharia GK, **Kumar A*** (2025) Bacterial profiling of colorectal cancer biopsies: a culture-based study in Indian patients. **Front Cell Infect Microbiol.** 15:1535477. [*Correspondence author]
7. Kushwaha M, Dalal N, Chaudhary S, Ahmed A, Makharia GK, Singh AK, **Kumar A*** (2025) Colorectal cancer biofilm composition reveals distinct bacterial species signature. **Appl Microbiol Biotechnol.** doi: 10.1007/s00253-025-13537-8. PMID: 40603621; PMCID: PMC12222442. [*Correspondence author]
8. Raina R, Kar D, Singla M, Tiwari S, Kumari S, Aneja S, Kumar V, Banerjee S, Goyal S, Pal RK, Vinothkumar KR, **Biswal B*** (2025) Cryo-EM structures of Mycobacterium tuberculosis imidazole glycerol phosphate dehydratase in the apo state and in the presence of small molecules. **Acta Crystallogr F Struct Biol Commun.** 81:297-305. [*Correspondence author]

9. Upadhyay P, Kumar S, Tyagi A, Tyagi AR, Barbhuyan T, **Gupta S*** (2025) Gut Microbiome rewiring via fecal transplants: Uncovering therapeutic avenues in Alzheimer's disease models. **BMC Neurosci.** doi: 10.1186/s12868-025-00953-9. [*Correspondence author]