



**PAYAL RAJENDRA KHULKHULE**  
**M.Sc. (Biotechnology)**  
**Research Fellow**  
**Biochemistry Research Laboratory,**  
**CIIMS Hospital,**  
**88/2 Bajaj Nagar-440010**  
**Email: payalkhulkhule@gmail.com**

---

*Creation of new products, methodologies and services through dedicated research in biotechnology leading to positive impact on society, to excel in my field through hard work, research, skills and perseverance, to serve my parents and my country with the best of my abilities.*

---

#### **Work profile:**

Currently working on Development of synthetic peptide based enzyme linked Immunosorbent assay for the diagnosis of viral infections of the central nervous system. Previously worked on development of Novel Cocktail Based ELISA Assays for rapid screening of viral CNS infections. Also involved in research work related to Comparison between three different diagnostic methodologies; PCR, Antibody detection and Antigen detection for screening of Viral CNS infections. Worked on Identification of biomarkers for screening of Brucella infections using MRM based Mass spectrometry assay and Proteogenomics analysis of Brucella melitensis using high-resolution mass spectrometry. Worked on Identification of biomarkers for diagnosis of Viral CNS infections using proteomic tools. Involved in Routine diagnosis of Neuroviruses, Scrub Typhus, Cryptococcal antigen using Enzyme Linked Immunosorbent assay. Also involved in screening of TB, Zoonotic, Chikungunya and Zika infections using ELISA Assay. Worked on Biochemical test named Adenosine deaminase assay. A small study has been performed to know Guillain–Barré syndrome (GBS) association with Antigenic Proteins of Dengue, Chikungunya, Zika and Tuberculosis. Expertise in advance Proteomic techniques; One dimensional and Two dimensional Electrophoresis and MRM technique for identification of novel biomarkers. Worked as a Senior Research Fellow under ICMR funded project entitled “Study of incidence, dynamics of transmission and novel biomarkers for Zoonotic diseases from Central India. Involved in diagnostic marketing visits to hospitals near and out of Nagpur. Involved in all Admin related work of Research Lab (Maintenance of all official files related to research or project work). Completed dissertation projects of post graduate students entitled “Screening for VZV antibodies in serum and CSF samples of Suspected Neuroinfection cases” and “Diagnostic value of novel HSV peptide -RYMALVS for screening viral CNS Infection using ELISA” under the guidance of Dr. Rajpal Singh Kashyap. Working as a Jt. Co-coordinator, for Society for Neurochemistry, India (SNCI) Nagpur Chapter and was involved in preparation of SNCI Newsletter -2017 and 2018 (Volume 1 & 2).