List of ten best papers of the candidate, highlighting the important discoveries/contributions described in them briefly

The research innovations into my account included identification and characterization of a panel of novel genomic markers for molecular typing of *Mycobacterium leprae*. This was a long awaited requirement to know the source / reservoir of M.leprae infection and to trace the transmission of leprosy disease by unknown sources. My research identified that the soil of those villages/areas harbor viable M.leprae, which may transmit infection to local people. I involved in developing novel protocols for the isolation of bacterial DNA/RNA from soil samples for their easy detection. Findings on above subjects were also awarded.

My research work, especially on emerging anti-microbial drug resistance in leprosy has been recognized by National Leprosy Eradication Programme of Govt. of India. It was the first Report about the occurrence of both primary and secondary rifampicin drug resistance in leprosy cases. Data generated by my studies played an important role in influencing the Govt policies pertaining to public health interventions in prevention of spread of leprosy in poor society as well as prevention of drug resistance. My work has already created an awareness for surveillance of detecting resistance to anti-leprosy drugs. Government has started surveillance at country level, so that drug resistance in leprosy should not become an issue in the future and the patients can be treated more effectively.

My research work on the development of tools for early diagnosis of leprosy makes an impact on the social life of leprosy patients. Early diagnosis and proper treatment allow patient to lead a life with dignity without any disability in the society and help bringing them back in the mainstream.

I also worked to detect leprosy bacillus in Brain, and that provides a new source for clinicians for diagnosing leprosy in Central Nervous system. After proper diagnosis and proper treatment, cases showed resolution of brainstem and cord lesions.

I contributed science with 61 papers in peer-reviewed journals, several chapters and articles, which have been appreciated by leprosy experts and included in National Leprosy Program. Seeing my prolonged contribution to leprosy and science in general and my passion towards scientific research and inclination to help economically challenged poor patients, it motivates me to apply for this award.

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