

## Posts Held

2008-till date: Assistant Professor, Dept of Biotechnology, NIPER

2006-2008 Project Investigator, DST WOS (A), Institute of Microbial Technology, Chandigarh

2004-2005 Research Associate, Institute of Microbial Technology, Chandigarh

2003-2004 Postdoctoral Fellow, National Cancer Institute, NIH,  
Bethesda, USA

2001-2002 Research Fellow, ICGEB, New Delhi

## Academic Qualifications

2000 PhD Biotechnology, IMTECH Chandigarh

1994 M.Biotechnology from All India Institute of Medical Sciences, New Delhi

## Research Interests

### Host-Pathogen interaction during Infection

The emergence of drug resistant strains of tuberculosis has contributed to the fact that *Mycobacterium tuberculosis* remains one of the most successful pathogens. Research has been initiated in the area of host –pathogen interaction using cell biology and recombinant DNA based approaches. The main focus is on identifying multifunctional housekeeping enzymes of the host and pathogen that could be essential in the process of infection and survival of intracellular *M.tuberculosis*. In addition, a screening assay for anti-mycobacterials is also being developed. Other areas of interest are Iron metabolism and Immune signalling

## Papers

1. **The Macrophage Cell Surface Glyceraldehyde-3-phosphate Dehydrogenase Is a Novel Transferrin Receptor.** Raje CI, S.Kumar, A. Harle, J.S. Nanda, and M. Raje, *J Biol Chem*, Vol. 282, No. 5, 3252–3261, February 2, 2007.
2. **Bfl-1/A1 acts as a negative regulator of autophagy in mycobacteria infected macrophages.** Kathania M, Raje CI, Raje M, Dutta RK, Majumdar S. *Int J Biochem Cell Biol*. 2010 Dec 15. *In Press*
3. **Colocalization of Autophagosome Marker, LC3 with Mycobacterium tuberculosis H37Rv bearing phagosomes in bfl-1/A1 siRNA treated THP-1 cells.** M Kathania, M Raje, C.I Raje, R Dhiman and S Majumdar Abstract/Poster Emerging Trends in Tuberculosis Research: Biomarkers, Drugs & Vaccines ICGEB, December, 2008.