Dr. P K Tiwari

Dr. P. K. Tiwari (born on October 15, 1956) did B. Sc. (1977) from Gorakhpur University and M. Sc. (1979) and Ph. D. (1985) from Banaras Hindu University. He served as Assistant Professor (Life Sciences) at Manipur University, Imphal in 1986. He was a research associate at the Centre for Biotechnology, Jawaharlal Nehru University, New Delhi during 1988. In December 1988, he joined Jiwaji University as Lecturer in Zoology. He also served Dr. H. S. Gour University, Sagar during 1997-98 as Reader in Zoology. Presently he is professor in Zoology and coordinator of the M. Sc. Program in Molecular & Human Genetics at the Centre for Genomics, Jiwaji University. The Department of Biotechnology, Govt. of India, awarded him Overseas Associateship for the year 1995-1996 to work in the Department of Biochemistry, Molecular Biology and Cell Biology, North Western University, Evanston, Ill., USA. His areas of research interest include, molecular characterization and functional analysis of heat shock protein genes in sheep blowfly *Lucilia cuprina*, understanding genomic diversity of the primitive tribes (e.g., Saharia and Bhil) of North Madhya Pradesh, the genetics of susceptibility to tuberculosis in these tribes, genetic typing and strain identification of *Mycobacterium tuberculosis* infecting the tribal population of M. P. and population genetics and conservation of freshwater turtles. The other area of his current research interests is the molecular pathogenesis of gallbladder cancer and gallstone diseases, the epigenetic regulation and identification of biomarkers by proteomic strategies. In the past, he organized four DBT-sponsored hands-on training courses in molecular biology and successfully completed five research projects (DAE, MPCST, DST & DBT). He has research collaborations with various eminent scientists from different national institutions (CCMB, Hyderabad; NCAHG, JNU, New Delhi; AIIMS, New Delhi; NJILOMD, Agra and IOB, Bangalore). At present, he is working on four major research projects sanctioned by ICMR, DST and DAE, Govt. of India. He has designed M. Sc. Program in Molecular and Human Genetics in Jiwaji University and is a member of the national DBT syllabus committee for the same. He has supervised eight Ph. D. and six M. Phil. students. Presently, seven students are working with him for their Ph. D. degree.

Selected publications:

1. Sharma PR, Singh Sweta, Mamta Jena, Gunja Mishra, Ravi Prakash, Das PK, Bamezai RNK, **Tiwari PK**. Coding and non-coding polymorphisms in VDR gene and susceptibility to pulmonary tuberculosis in Tribes, Castes and Muslims of Central India. **Infect. Genet. Evol. Doi: 10.1016/j.meegid.2011.05.019 (2011)**
2. Vinod V, **Tiwari PK**, Meshram GP. Evaluation of mutagenic and anti-mutagenic activities of neem (*Azadirachta indica*) seed oil in the *in vitro* Ames Salmonella/ microsome assay and *in vivo* mouse bone marrow micro nuclease test. **J. Ethnopharmacol**. **Doi: 10.1016/j.jep.2011.02.003 (2011)**
3. Rohilla MS, Reddy PVJ, Sharma S, **Tiwari PK**. *In vitro* induction of the ubiquitous 60 and 70kd heat shock proteins, by pesticides monocrotophos and endosulphan in *Musca domestica*: a potential biomarker of toxicity. **Cell. Mol. Biol**. **57 (1): 94; Doi: 10.1170/T908 (2011)**
4. Reddy PVJ, **Tiwari PK**. Genomic structure and sequence analysis of *Lucilia cuprina* hsp90 gene. **Cell. Mol. Biol. 57 (1): 106; Doi: 10.1170/T909 (2011)**
5. Singh TD, Barbhuiya MA, Jalaj V, Agrawal N, Gupta S, Shrivastav BR, **Tiwari PK.** Quantitative Assessment of Expression of Lactate Dehydrogenase and its isoforms 3 and 4 may serve as useful indicators of progression of Gallbladder Cancer: A Pilot study. **Ind. J. Clin. Biochem**. **26, 146 (2011)**
6. Sharma PR, Jain S, Bamezai RNK, **Tiwari PK.** Utility of serum LDH and its isoforms in the assessment of *Mycobacterium tuberculosis* induced pathology in TB patients of Sahariya tribe. **Ind. J. Clin. Biochem. 25, 57 (2010)**.
7. Sharma PR, **Tiwari PK.** Genetic diversity in Indian populations: implications for genetic susceptibility and mapping of complex genetic diseases. **Recent Trends in Biotechnology, Nova Science Publishers (USA), Volume 2, Chapter 10 (2010)**.
8. Sharma S, Rai E, Sharma PR, Jena M, Singh S, Darvishi K, Bhatt AK, Bhanwer AJS, **Tiwari PK**, Bamezai RNK. The Indian origin of paternal haplogroup R1a1* substantiate the autochtonous origin of Brahmins and the caste system. **Journal of Human Genetics 54, 47 (2009)** (**npg**)
9. Rohilla MS, **PK Tiwari.** Restriction fragment length polymorphism of mitochondrial DNA and Phylogenetic relationships among five species of Indian freshwater turtles. **J. Applied Genetics. 49, 167 (2008).**
10. Sharma S, Rohilla MS, Reddy PVJ, **Tiwari PK.** *In Vitro* Induction of 60kD and 70kD Heat Shock Proteins by Endosulphan and Monocrotophos in Sheep Blowfly *Lucilia cuprina*. **Archives of Environmental Contamination and Toxicology 55, 57-69 (2008) Epub 2007**

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