



**Dr. AB Pant**

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**Dr Pant** is a seasoned toxicologist, started his research career over twenty-seven years back at Central Drug Research Institute, Lucknow, India. He is an alumnus of the Department of Biotechnology, IIT Roorkee, Uttarakhand, India. Since 1997, he is serving at Indian Institute of Toxicology Research, Lucknow, India. In the scientific fraternity, Dr Pant is regarded for establishing the cell based models as alternatives to laboratory animals for neurotoxicity/ developmental neurotoxicity, cytotoxicity, pyrogenicity, phototoxicity, hepatotoxicity, genotoxicity, oral-toxicity. He has been instrumental in establishing the laboratory for stem cell research in Lucknow and became renowned for his elegant research on application of human cord blood stem cells (hCBSCs) in developmental neurotoxicity (DNT). His research group has demonstrated the mapping of cellular and sub-cellular events of differentiation of hCBSCs into morphological and functional neuronal cells. His DNT research provides deep insights into the complex processes involved in neuronal development, injury and repair mimicking to the human brain during the gestation and early stage of life. More precisely, his work discovered that how the master regulator signalling molecules/ cascades are critical to convert hCBSCs into functional neurons and what exactly happens when things go wrong during the intricate process of neuronal development. In his much-acclaimed research, he has uncovered novel links between the xenobiotic metabolizing capabilities and their regulators in hCBSCs derived neuronal cells all through the differentiation. His work on the developing neurons not only offers a much sought after framework for understanding the neurodegenerative disorders and potential therapeutic interventions, but also is a strong base for future studies aimed at interpreting the human brain specific DNT.

Besides the laboratory work, he fostered the science among students through public outreach talks and mentoring pre-and post-doctorates. Since 2010 he has also been associated with National GLP Compliance Monitoring Authority of India as GLP Inspector. The accreditation agencies of the country-BIS, DCGI, NABL, Pharmacovigilance, etc. are also utilizing his expertise. Taking his inputs Society of Toxicology, USA has developed a consensus document “**Hooka: How dangerous is it?**” for wide publicity. He has developed an online human health risk assessment system for Indian population-<http://healthriskindia.in>. He was a member in the draft committee of “National SOP for Patients’ Consent in India” developed by the Institute of Medicine & Law, Mumbai. As an International Advisor, he has been instrumental in establishing the WHO funded “Centre of Excellence for Nanotechnology” at Makerere University, Uganda. Recently, he is culminating a task to address the challenges of a neglected neurodegenerative disorder-Amyotrophic Lateral Sclerosis by utilizing an investigator driven federal funding under Indo-Brazilian project. In the acknowledgement of his achievements in the professional career, he has been elected Fellow Several Scientific and Academies bodies, to name a few are: Academy of Toxicological Sciences, USA, Society of Toxicology, India, Indian Academy of Neurosciences, Academy of Sciences for Animal Welfare, India, Academy of Environmental Biology India, etc. Dr Pant is a recipient several prestigious awards such as Shakuntala Amir Chand Prize-2007 (ICMR), Vigyan Ratna Award-2010 (UP-Council of Science & Technology-Uttar Pradesh), National Bioscience Award-2012 (DBT).

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**Editorial Member:** Scientific Reports- (Nature Publishing Group) **Academic Editor:** PLoS ONE (Largest Online Journal)

**Editorial Advisor:** Toxicology Research (Royal Society of Chemistry)

**Executive Editor:** Journal of Clinical Toxicology

**Lead GLP Inspector:** NGCMA, DST, Govt. of India

**Secretary General:** Society of Toxicology, India (2010-2014)