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Editors B.N. Dhawan P.K. Seth

Indian Academy of Neurosciences (IAN) and Council of Scientific and Industrial Research (CSIR)

BIOGRAPHY

Prof. B.N. Dhawan is a former Director of Central Drug Research Insititute, Lucknow. His research work and efforts to develop national research capabilities have been recognized internationally. His major contributions have been in basic Neuronatural products and development of new drugs.



pharmacology, evolving bio-evaluation strategies for

His neuropharmacological studies have been focused on neurotransmitters modulating CNS activity and characterization of their receptors. He has selected quantifiable CNS effects like thermoregulation, stereotypy, blood-brain barrier, central cardiovascular control etc. and used sophisticated techniques like microiontophoresis, radio-ligand binding, steretaxic stimulation or ablation etc. The neurotransmitters investigated include catecholamines, 5-HT, histamine, acetylcholine, enkephalins and nitric oxide. He was a founder member of IUPHAR Receptor Nomenclature Committee. He is a Fellow of several international and national academies including the Academy of Science for developing contories (TWAS), Collegium Internationale Neuro-Psychopharmacologicum (CINP); Indian National Science Academy (INSA); The National Academy of Sciences India (NASI); National Academy of Medical Sciences (NAMS) and Indian Academy of Neurosciences (IAN). etc.

He has developed four fold approach of broad based biological screening, specialized battery of tests for plants used in traditional medicine, development of semi-synthetic products by lead optimization and initial clinical trial of selected poly-pharmaceuticals with preferred use of standardized extract rather than single constituents from natural products. This approach has been accepted now by WHO.

Prof. Dhawan had been intimately involved in Preclinical and Clinical studies with 8 drugs of the Central Drug Research Institute, Lucknow approved and licensed for marketing. These include Memory Plus (nootropic), Centbucridine (local anesthetic), Centbutindole (neuroleptic), Centpropazine (anti-depressant) and Chandonium Iodide (skeletal muscle relaxant developed jointly with Punjab University).

Prof. Dhawan holds nearly 60 national and international patents. He has published over 400 papers in refereed national and international journals and written or edited 20 books.

BIOGRAPHY

Dr. P.K. Seth has made significant contributions to molecular biology and biotechnology related to health sciences particularly understanding the effect of chemicals and drugs on the nervous system. He introduced concepts of mechanistic



toxicology for assessing risk to toxic substances and the need to identify the target molecules to serve as markers of exposure and prediction of adverse effects of chemicals. His studies led to understanding of the mechanisms of toxicity of several chemicals. (monomers like acrylamide, metals like manganese and mercury and pesticides like endosulfan and lindane). His recent studies demonstrating expression of cytochrome P450 isoenzymes in mammalian lymphocytes opened up new avenues for identifying individuals susceptible to chemicals due to cytochrome P450 polymorphism. He has developed a receptor-binding screen to identify the converted into a High Throughput Screen. He planned and built up a state of the art GLP Compliant animal house at ITRC for rodents. He has been a prime mover for the development of Biotechnology Park in Lucknow.

Dr Seth is a fellow of The National Academy of Sciences, India and National Academy of Medical Sciences, India. He is a Founder Fellow and Past President of Indian Academy of Neurosciences (IAN) and is a Fellow of Collegium Internationale Neuro-Psychopharmacologicum (CINP) and member of International Brain Research Organization (IBRO). He is a recipient of Prof. B. K. Bachhawat Life Time Achievement Award of Indian Academy of Sciences (2006); Oration Award of Association of Clinical Biochemists of India (2006); Vigvan Gaurav Samman (2004) of Government of Uttar Pradesh; Raj Kristo Dutt Memorial Lecture Award of Indian Science Congress (2002), Norman Dill Award of Society of Biosciences. He is also recipient of the prestigious P.C. Ray Memorial Award of Indian Science Congress (2007). He has published over 240 research papers, contributed over 50 review articles / book chapters & reports and holds 10 patents. Dr. Seth is Chief Executive Officer of Biotechnology Park, Lucknow and Adjunct Professor, Department of Elementology & Toxicology, Jamia Hamdard University, New Delhi and former Director of Indian Institute of Toxicology Research (erstwhile ITRC), Lucknow.