

Dr. N K SUBHEDAR

Visiting Faculty, Biology, IISER, Pune, Maharashtra

E-mail: subhedar@iiserpune.ac.in

Dr. Subhedar studied the endocrines of fish and obtained his PhD from Nagpur University in 1973. He took faculty position at the Department of Pharmaceutical Sciences, Nagpur University and was engaged in teaching animal physiology and neuropharmacology to the B.Pharm and M.Pharm students. At the Department, he set up his lab to pursue his interests in fish endocrines and investigated the role of neuropeptides in the regulation of reproduction. Investigations led to the discovery of stretch sensory pathways from the ovary to the hypothalamic nuclei in fish and frog. Studies also revealed the role of neuropeptide Y in the regulation of gonadotropins and underscored the importance of entopeduncular nucleus as a site for glucose sensing in the brain. Interaction with the colleagues and students in pharmacology prompted the use of rodents to ask specific biological questions of preclinical importance. We employed stereotaxic administration of neuroactive substances or their antagonists, directly into the ventricles or at strategic sites in the brain, and analyzed the behavior. We have attempted to understand the processes underlying hunger, anxiety, depression, learning and memory, reward and drug addiction. Recent studies from our laboratory shed light on the functional attributes of CART peptides in processing of fear and reward in disparate brain circuits.

Dr Subhedar has published several research articles, and served as reviewer for reputed journals. He supervised the research work of 15 students leading to PhD degree. His research efforts have been supported by funding agencies like DST, DBT, ICAR, UGC, IBRO and TWAS. He has actively participated in the organizing the DST sponsored schools in chronobiology and neurobiology and in teaching programmes at JNCASR and the Ashoka University.

After his superannuation in 2008 from the Nagpur University, Dr Subhedar moved to IISER Pune to take up new assignment as a visiting faculty to teach Animal Physiology and Neurobiology and establish new collaborations.