

## **Lab services by Research group of Dr Suman Jain**

**Brain stimulation and Neuromodulation lab** in the dept has advanced therapeutic and research set up of Transcranial Magnetic Stimulation (TMS). It provides patient care services to various departments within AIIMS. Single, paired and repetitive paradigms of TMS are being used as tools for diagnosis, prognosis and as therapy in various neurological, neurotraumatic and neurodevelopmental disorders. The lab caters to clinical research work carried out by PhD students, research fellows and resident doctors of multiple departments of institute. Patients are referred by the treating physician from OPD or wards of the respective departments.

**Neurophysiology and Nanomedicine lab** is fully equipped with latest equipments and facility for creating animal models of various neurological diseases. Numerous electrophysiological, behavioral, morphological, biochemical and molecular techniques have been standardized in the lab for rodent models. The lab also has advanced TMS machine dedicated to stimulate various brain areas of the rodents. Nanoparticles and nanoscaffolds are also being fabricated to test their efficacy in various neurological disorders. Postgraduate and PhD students from various departments use the lab facility for conducting their research work on rodents.