

Itzhak Fried, MD, PhD, FACS, FAANS

Professor Itzhak Fried is a neurosurgeon and neuroscientist. He is a Professor of Neurosurgery at the University of California, Los Angeles (UCLA) where he is the director of the epilepsy surgery program and co-director of the seizure disorder center. Prof. Fried joined the Faculty of Medicine at Tel-Aviv University in 2000. He founded the Functional Neurosurgery Unit at Tel-Aviv Medical Center (Ichilov Hospital), served as its director from 1998-2019, brought the field of epilepsy surgery to Israel and performed the first deep brain stimulation (DBS) implants for Parkinson's Disease in Israel. He received his M.D. degree from Stanford University and his Ph.D. from UCLA and obtained his neurosurgical training at Yale.

Prof. Fried is a member of the Israeli Academy of Sciences and an elected fellow of the American Association for the Advancement of Science. His research centers on unique opportunities to apply recording and electrical stimulation in the human brain to study not only mechanisms of disease but also an array of cognitive functions. He developed technology and paradigms that allow recording from large number of neurons in conscious patients. These resulted in breakthrough findings of multiple cellular substrates for cognition related to memory, spatial navigation, emotion, action and will. In recent years he used insights gained from single neuron research to study memory enhancement by electrical stimulation in the awake state and during sleep with the aim of developing memory prosthesis for neurological patients.

Prof. Fried is the recipient of multiple grants from NSF, NIH, DARPA, BSF, ISF. He is the recipient of international awards including the Cajal Award from the International Neuropsychiatric Association and the Tsubokawa Award and Mundinger Award from the World Society for Stereotactic and Functional Neurosurgery.

Prof. Fried primary research involves recording and electrical stimulation in the human brain to probe multiple cognitive functions including perception, memory, decision making, and human will. He is interested in the development of brain-machine interfaces designed to improve and enhance the human mind, especially in neurological disorders such as Alzheimer's Disease, epilepsy, and traumatic brain injury.