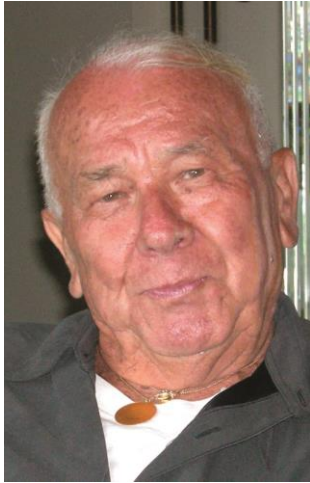


IN MEMORIAM

Turan M. Itil, M.D.

The Ardent Electroencephalographer



In 1929 Hans Berger, a German sanitarium psychiatrist, recorded the brain's electrical rhythms from the intact scalp of his daughter and a laboratory assistant, reporting that the rhythms were altered with arithmetic tests, sleep, and morphine, cocaine, and chloroform. During the same years that he worked, insulin coma, convulsive therapy and leucotomy, new treatments for the psychiatric ill were introduced. Interest in EEG was galvanized among psychiatrists who sought to understand the mechanism of these treatments.

When chlorpromazine and imipramine were introduced to the clinic, Turan Itil was among the first to study their effects on the EEG. At the CINP meeting in Rome in 1958, our independent reports were so similar that each could have used the other's slides and data.

In 1964 came to St. Louis to establish the Neurophysiology Laboratory at the Missouri Institute of Psychiatry using newly developed digital computer methods to measure EEG changes. The reliable quantitative methods were used to predict the clinical applications of putative psychoactive drugs, to separate clinically active from inactive substances, and to suggest dosage ranges.

In 1972 he was asked to profile GB-94 (mianserin), a new agent developed by Organon scientists. He found the EEG patterns in human volunteers and patients identical to those of

imipramine. His report conflicted with predictions made by the Organon pharmacologists in their animal models. Based on Turan's prediction, clinical trials did show clinical antidepressant activity and mianserin was successfully marketed as Tolvon, verifying the usefulness of the pharmaco-EEG prediction model.

Were the EEG effects of psychoactive substances in animals predictive of their effects in man? Pharmacologists opined that the EEG changes induced by drugs in animal trials were *dissociated* from behavior, not predictive of human drug effects, challenging the nascent pharmaco-EEG science. By 1966 presentations at the CINP in Washington showed that EEG and behavior were *associated* in man, and that EEG studies of potential psychoactive medicines could be used to predict human applications. This critical determination established pharmaco-EEG as a human science.

Throughout his life Turan was at the heart of this science. He described the effects of natural and synthetic hormones, psychostimulants, and cognitive enhancers. In his later years he established outpatient clinics assessing dementia by EEG and computerized neuropsychologic tests.

He was a founder of the International Pharmaco-EEG Group (IPEG), an active scientific member of ACNP and CINP and numerous other EEG and psychopharmacology societies. Werner Herrmann in Berlin, Bernd Saletu in Vienna, Masami Saito in Osaka, and Sevket Akpinar in Ankara, each a leader in pharmaco-EEG science, were his students. Turan was consultant and lead scientist on projects of the World Health Organization.

Turan Itil was born in Bursa, Turkey on August 12, 1924. He received the M.D. degree from Istanbul University in 1948 and moved to the University of Tübingen in Germany for training in neurology. In 1953 he joined the faculty at the University of Erlangen with EEG and psychopharmacology the center of his research. After a decade in St. Louis, he moved to New York Medical College and established the HZI Research Center Laboratory in Tarrytown New York.

He was a vibrant, enthusiastic, and warm-hearted man. He played intensely, enjoyed

ping-pong, billiards and roulette. He supported friends and colleagues enthusiastically. He adjusted to the American culture but on retirement he returned to his family in Turkey. He died at his country home on April 29, 2014 at age 89. He and his wife Ellen had two children, Kurt and Yasmin. He leaves an extended family in Turkey and New York, friends and students around the world, and a unique body of psychopharmacology science.

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