

Obituary

Prof. T.P. Feng, Honorary Director of the Shanghai Institute of Physiology, Chinese Academy of Sciences, died on April 10, 1995 at age 88.

Feng's long scientific career had several outstanding landmarks. The first landmark was when he studied in the laboratory of Professor A.V. Hill in University College London working on the heat production of muscle and nerve. Among his achievements during that period was his discovery of the increase of the resting heat production of muscle on passive stretch, which later became known as "Feng effect".

The second landmark was the period 1934-1941, just after his return from abroad, when he was teaching in the Department of Physiology, Peking Union Medical College. During this period he opened a new research direction in the physiology of neuromuscular junction. He made a number of seminal discoveries; in the period 1936-41 he and his students published a long series of 26 papers on neuromuscular junction in the Chinese Journal of Physiology (English), which attracted worldwide attention among neurophysiologists. He soon became an internationally acknowledged pioneer in modern research on neuromuscular junction.

The third landmark in his research career was in the field of nerve-muscle trophic relations which he entered in 1961 with a spectacular discovery at the very beginning, namely, the discovery of the extraordinary phenomenon of post-denervation hypertrophy in the slow muscle fibers of the chick. He resumed his research in this field in the seventies and together with his collaborators made important contributions to the problem of the neural determination of the phenotypic characteristics of skeletal muscle fibers.

When he reached the age eighty, Feng took up the study of synaptic plasticity in central synapses, in particular long-term potentiation (LTP) and had already made significant contribution to the cellular mechanisms underlying LTP.

Feng was born in 1907 in Zhejiang, China and obtained a bachelor's degree in biology from the Fudan University in 1926 and a Master's degree in Physiology from the University of Chicago in 1930. He earned a doctorate in physiology from the University College of London in 1933. After returning in China in 1934 he served as professor of physiology at the Peking Union Medical College until 1941. In 1943 he became an Acting Director of the Medical Research Institute (preparatory), Academia Sinica. At the time of death, Feng was a Professor Emeritus and Honorary Director of the Shanghai Institute of Physiology. During Feng's lifetime, he published over 100 scientific papers.

Feng was elected to the Chinese Academy of Sciences in 1995. He was a foreign associate of the National Academy of Sciences (USA), a member of the Third World Academy (1986) and a foreign member of the Indian Academy of Sciences (1988). Feng won honorary members from various societies.

Feng was a devoted scientist and will be greatly missed.

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