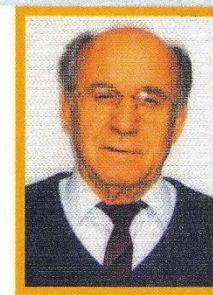


Second KIA Laureate Applied Research



- ◆ **Researcher:** Prof. Gyula Telegdy
- ◆ **Nationality:** Hungarian
- ◆ **Date of birth:** 1935
- ◆ **Position:** Professor Emeritus
- ◆ **Scientific affiliation:** Institute of Pathophysiology, University of Szeged, Hungary

Project title: Role of neuropeptides in the central nervous systems

Abstract: During the last decades more than 300 neuropeptides have been discovered to be present in the brain. The function of most of them is unknown or fairly little is known. During the last 30 years great number of these neuropeptides have been tested in the Department of Pathophysiology on different aspects of brain function. More than 500 papers have been published on results of these topics.. The experiments have been carried out on rats and mice. The following neuropeptides have been tested, apelin-13: vasopressin, oxytocin, and fragments or analogues, ACTH, ANP, BNP, CNP, urocortins, ghrelin, urocortins, endomorphin 1,2, somatostatin, orexins etc and the action on brain functions were measured on cognitive functions; such as learning and memory in passive and active avoidance conditioning, locomotion, affective functions such as anxiety, depression, temperature regulations, dependence and tolerance of opiates and adrenal cortex function etc.. The neuropeptides were administered into the lateral brain ventricle and behavior of the animals were tested in freely moving rats or mice. Interactions with neurotransmitters were investigated following pretreatment with specific receptor antagonist.

Biography: Prof. Telegdy graduated in Pécs. In 1959, he received the degree of Medical Doctor. From 1959 till 1975, he had been working at the Department of Physiology in Pécs. In 1966, he defended his Ph.D and in 1974, his Doctorate of Science degree. In 1995, he became Member of the Hungarian Academy. From 1975 till 2000, he was the Chairman of Department of Pathophysiology in Szeged, from 1985 to 1990, the Dean of the Medical University and from 1991 to 2000, Vice Rector. He was the President of the Medical Section of the Hungarian Academy of Sciences and also the Regional Committee of the Academy. His research interest is the action of hormones including neuropeptides on brain functions. He has made fundamental discoveries how the hormones and different neuropeptides are acting on affective and cognitive functions. He demonstrated that neuropeptides are acting mainly as neuromodulators changing the activity of classical neurotransmitters. Under his guidance more than 20 postgraduate students received his Ph.D. degree, three of them became Member of the Hungarian Academy. He received more than 10 different awards among them the highest Hungarian State Szechenyi Award. He has published more than 500 original papers, his work has been cited more than 4000 times and collected more than 700 impact factors.