

LADISLAV KRULICH, M.D., Ph.D.

October 22, 1925 – May 22, 2005



Dr. Ladislav Krulich, professor of physiology at the University of Texas, Southwestern Medical Center at Dallas, Texas, USA, passed away at his home in Dallas on May 22. Dr. Krulich, a native Czech had a long and distinguished scientific career in experimental endocrinology.

After receiving his medical degree from First Medical Faculty Charles University in Prague in 1951, Dr. Krulich began his career under the guidance of Professor Charvat, in the Department of physiology at Charles University. As a lecturer in physiology, he continued his scientific studies on the role of glucoreceptors in the regulation of blood glucose level, and the role of the endocrine system in the adaptation of intermediary metabolism during starvation. During his tenure at Charles University, Dr. Krulich co-authored the first modern comprehensive textbook of physiology, published in 1956. In 1962, Dr. Krulich was promoted to associate professor of medicine.

From 1963-1965, Dr. Krulich joined the research team of Dr. S.M. McCann in the Department of physiology at the University of Pennsylvania School of Medicine, Philadelphia, USA. He went on to study the hypothalamic regulation of growth hormone secretion.

This became a dominant theme during his following 30 years of research. While at Philadelphia, Dr. Krulich described the first observation on the inhibitory action of growth hormone on its own secretion.

In 1966, Dr. Krulich, (together with Dr. McCann and their scientific team), continued research in the Department of physiology at the University of Texas Southwestern Medical Center at Dallas, TX, where he discovered the hypothalamic inhibitory activity of growth hormone secretion, later known as somatostatin. After a partial purification of the inhibitory hypothalamic fractions he proved the existence of growth hormone inhibiting factor (GIF) in vitro. GIF clearly antagonized the stimulatory effect of growth hormone releasing factor on the secretion of growth hormone from incubated pituitaries. Dr. Krulich published numerous scientific papers on this topic in years 1968-1972.

In 1973 the group of Dr. Guillemin confirmed the existence of GIF, and with the use of extremely sensitive methods characterized it as tetradecapeptide, and named it somatostatin. Though, Guillemin's group presented the structure and amino acid sequence of somatostatin, there is no doubt that its existence, and physiological effects were first discovered by Dr. Krulich. The discovery of somatostatin has revealed the understanding of mechanisms of dual regulation of growth hormone secretion. Somatostatin, along with its analogs, has also been used in clinical practice.

Dr. Krulich continued his research in experimental neuroendocrinology in Dallas, mainly on the regulation of hypothalamo-adenopituitary secretion by brain monoamines. Among his important findings was the discovery of the participation of alpha-2 adrenergic receptors in the regulation of growth hormone release.

Dr. Krulich was promoted to professor of physiology in 1985. He published 120 scientific papers which were cited 4187 times, in addition to contributing published chapters in *Annual Review of Physiology* and *Handbook of Endocrinology*.

Dr. Krulich served on the Editorial Board of *Endocrinology* from 1980-1983; Associate Editor of *Neuroendocrinology* from 1985-1995; Editorial Board of *Proceedings of Experimental Biology and Medicine* from 1997-2005.

Dr. Krulich visited his home country frequently in the past decade. In 1998, the First Medical Faculty of Charles University, Prague, awarded Dr. Krulich a “Commemorative Medal” on the occasion of the 650th Anniversary of the founding of Charles University.

The scientific community has lost a distinguished, gentleman scientist, who was always willing to help his colleagues. He will be remembered as

an excellent teacher, who always supported his pre- and postdoctoral students in their intellectual efforts.

Dr. Krulich’s remains will be laid to rest in the family plot in Český Brod.

Jana Jurčovičová
Consuelo Chavez