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Fifteenth Neuroontogenetic Day to Commemorate Professor Lubor Jílek

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Program moderator of the Fifteenth Neuroontogenetic Day

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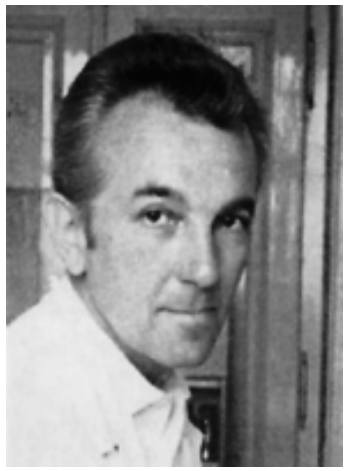

Figure 1 – Professor Lubor Jílek, MD., DSc., was born on January 8, 1926, died on February 6, 1975.

Traditional Discussion day in neuroontogeny was held in the Institute of Physiology of the First Faculty of Medicine, Charles University on December 14, 2005 with active participation of research workers from several Faculties of Medicine and Institutes of the Academy of Sciences of Czech Republic. Papers were traditionally presented namely by graduate students in medicine.

Presented results and the accompanying discussion led to several conclusions for the future neuroontogenic research in participating laboratories. One of the principal questions appears to be the mechanism of selection of neurons in the process of cell death (apoptosis). After the initial overproduction of neurons in CNS, up to one half of them die before they can undergo processes of structural and functional maturation. Important role in that mechanism has the development of CNS and the formation of connection between CNS and periphery, which includes processes of synaptogenesis, and their control by trophic signalling molecules.

Another problem is the development of spontaneous motor activity, which represents the external manifestation of the functional activity of CNS and enables the analysis of the internal mechanisms of those behavioural phenomena. Attractive appear the experiments on the Morris water maze.

The third modern aspect in the neurootogenetic research is the study of mediators and the mechanisms of their action and mutual interaction. This problem includes possibility of humoral modulation of the immature nerve tissue by various factors of environment. The fourth traditional field of the neurootogenetic research is the plasticity of CNS with implication to the processes of learning and memory.

The Fifteenth Neuroontogenetic Day was highly successful and we can be looking forward to the next one.

Program of the meeting proceeded with the commemoration of one of the eminent representatives of Neuroontogenesis in our country – Professor MUDr. Lubor Jílek, DrSc., who would accomplish eighty years on January 8, 2006.

Professor Jílek was born in Prague, graduated from the Faculty of Medicine in 1951 and immediately after he got a position in the Institute of Physiology of the Charles University in Prague at Albertov. Since the beginning he proved a deep and life-lasting interest in the Medical Physiology and revealed endowment for the mission of the university teacher. As his research program he chose the functional features of the developing brain. His scientific work was characteristic

with wide spread and high invention – from biochemical parameters to functional changes. He habilitated as a docent in 1959, in 1965 he defended the doctoral dissertation and in 1966 he became a full professor. Accomplished results of his scientific work he analysed and synthesized in his monographic book (1966) on the effects of stagnant hypoxia and anoxia on the functional, metabolic and structural development of the brain. He succeeded to establish a thematically unified team of co-workers and thus founded the modern school of developmental physiology of the nervous tissue – neuroontogenesis. Professor Jílek was appointed to head the Institute of Physiology since 1970 till his death on February 6, 1975.