Physiol. Res. 64 (Suppl. 2): iii-vi, 2015

Luboslav Stárka –

Doyen of the Czech Endocrinology

(85th Anniversary)

Dear Readers,

You are holding a special issue of *Physiological Research* which is devoted to prominent Czech endocrinologist, professor Luboslav Stárka, on his jubilee. His pioneering work, visions and dozens of publications, focused especially on steroid hormones, are known throughout the world, and many of them opened new frontiers in endocrinology and biochemistry.

The professional life of professor Stárka is more than 58 years connected with the Institute of Endocrinology in Prague, where he built a steroid laboratory in 1957. He has always been one of the leading personalities, and in the years 1983-1987 and 1990-2001 he was a director of the institute.

Over the years, endocrinology undergone rapid development, and now it represents much broader discipline overlapping the other medical specializations. Endocrine system together with the nervous and the immune system is involved in maintaining the integrity and homeostasis of the organism. Flawless interplay of these three systems enables the body to realize its genetic "programming" and to cope with the constantly changing external conditions. Cooperation of these systems is so narrow that their mediators – molecules carrying a signal, often fulfill bivalent function – as some hormones also act as neurotransmitters, or as cytokines, and vice versa. An illustrative example of such an integrative function is the interaction of hormones in adipose tissue, gastrointestinal hormones and neurotransmitters of the central nervous system regulating the energy balance of the organism.

Thus, the modern endocrinology focuses not only on endocrine glands and their pathologies but it includes also several other organs and tissues which produce hormones, such as brain, heart, stomach, adipose tissue, skelet, and muscle.

The current research of the Institute of Endocrinology covers a broad spectrum of topics in endocrinology including thyroid and steroid hormone research, molecular endocrinology, neuroendocrinology, immunoendocrinology, endocrinology of aging as well as diabetes, obesity, neurodegenerative diseases, and the study of endocrine disruptors. Investigations currently performed in the institute include not only clinical research, but also basic science and epidemiological studies.

We present a set of publications that document the current research trends in our institute. We hope that our contributions will enable you to get a picture of the wide range of modern endocrinology and of its impact on the development of medical knowledge.

Běla Bendlová
Director of the Institute of Endocrinology