

Academician Ladislav MACHO, MD., Ph.D., D.Sci.

85TH ANNIVERSARY



L. Macho, an internationally recognized researcher at the field of the developmental endocrinology and cosmic physiology, will celebrate his life jubilee in August 2015. He is one of the establishers of the Institute of Experimental Endocrinology, who with his research

trend direction and organizational activities took significant part in the research orientation and international acceptance of the Institute.

L. Macho was born in 1930 in Modra, Slovakia. He attended the Medical Faculty of Comenius University in Bratislava and was graduated as a „sub summis auspiciis“. Immediately after graduating, he started to work as a young researcher at the Institute of Endocrinology, where he spent 60 years as an active researcher and where he is still working as an emeritus investigator. He is author or co-author of more than 310 scientific publications, which were cited more than 1360 times. He supervised seven PhD. students thesis.

The research career of L. Macho was quite impressive. He became one of the leading and outstanding researchers at the field of the endocrine system functioning during ontogenesis. His most important research findings include: 1) proof about the existence of critical periods in the development of the endocrine glands function during ontogenesis in mammals and 2) experimental evidence about the negative consequences of environmental interventions, made during early period of ontogenesis, on the function of endocrine glands and the impact of hormones on the metabolism in the adulthood. In the collaboration with his colleagues, he received original knowledge about the presence of hormones in the maternal milk in mammals and their importance for the proper development of the endocrine system in pups. Original findings also include elucidation of the effect of undernourishment, overnourishment, and stress conditions in the regula-

tion of hormones and their receptors. In the last years, L. Macho was engaged in the project centered on the study of endocrine regulation in rheumatic illnesses and investigation of immunomodulatory hormones transfer between plasma and joint synovial fluid.

One of the most interesting fields of L. Macho engagements was his participation in space flight investigations. From 1975, he was involved in the number of studies regarding the investigation of the impact of space flights, especially the effect of microgravitation, on the endocrine and metabolic functions in humans and animals. He took part in studies dealing with the impact of space flight on the small experimental animals in 7 „Biosputnik“ programs, as a member of a broad international team of investigators from Russia, French, U.S.A., Hungary, Poland, etc. He was also one of the members who have established the International Society of the Gravitational Physiology and the International Journal of Gravitational Physiology. He initiated a number of international collaborations and attended numerous meetings. One of the highest international recognitions achieved at this field is the award of the International Academy of Astronautics (IAA), received in 1993. High international recognition was also his nomination as the academician of the IAA in Paris in 1986. Between years 1989-1997, L. Macho acted as a member in IAA Chairmanship and in 1992, he was elected as a member of the international society "Academia Europea Scientiarum et Artium".

The research progress of L. Macho was followed by obtaining a number of research degrees. He received the Philosophiae doctor degree (PhD.) in 1962 and the academic degree of the Doctor of Sciences (D.Sci.) in 1976. In 1977, he became the Corresponding member of the Slovak Academy of Sciences (SAS) and in 1981, of the Czechoslovak academy of Sciences (CSAS). In 1987, L. Macho was honored as SAS and in 1988 as CSAS academician.

L. Macho also served in many different leading positions: head of the Developmental Endocrinology Department (1965-1971), director of the Institute of Experimental Endocrinology SAS (1971-1990, 1991-

1995), member of the CSAS Presidium (1987-1992), Deputy president of the CSAS Presidium (1990-1992), President of the SAS (1990-1992), member of the SAS Medical Sciences Scientific College (1969-1987), member of Medical Sciences Scientific College of CSAS (1976-1987), member of Czechoslovak Committee for the research collaboration in the cosmic space "Interkozmos" (1983-1990), member of the Government Council of SR for research and investigation (1991-1992), and member of the Scientific Council of Comenius University Bratislava (1990-1992). In years 1983-1985, he was an advisory officer of the World Health Organization (WHO, Switzerland) for International program about chemical safety focused on the health risks. In years 1998-2003, he was a member of VEGA Commission and in 2007 a member of Evaluation Committee in II Section of the SAS. From 1985 up to the present, he is a member of the COSPAR National Committee.

The extraordinary scientific achievements of L. Macho have been recognized by many awards, including, among others, award of the International Astronautic Committee (1993), J. A. Gagarin Medal of the International Astronauts Union (1980), awards of the SAS (1974, 1999), National award (1978), Gold Plaque of the SAS and CSAS (1990), the SAS award for the research support

(2010), Gold Medal of the Slovak Medical Society (1990), Comenius Medal of the government (1992), and national award, the 1st degree of the Ludovit Stur Order (2012).

As an invited speaker, L. Macho presented his research achievements in the number of scientific meetings; from the field of the development of mammals endocrine functions in Pecs (1967), New Delhi (1975), Berlin (1978), Sapporo (1988) and from the field of space physiology in Tashkent (1989), San Antonio (1991), Moscow (1991), Cologne (1991), Barcelona (1992), Glasgow (1993), Tokyo (1993), Budapest (2001), and Prague (2010).

We admire L. Macho whole life scientific achievements, his tireless working energy and research activity, resourcefulness, creativity, and scientific ideas and novelties. As emeritus researcher, he is still scientifically active at the Institute of Experimental Endocrinology.

Dear Academician Ladislav Macho, I wish you, on the behalf of all the employee of the Institute of Experimental Endocrinology, many beautiful and fruitful days and happiness in the circle of your family.

Alexander Kiss
Editor-in-Chief
Endocrine Regulations