

OBITUARY

JÁNOS SALÁNKI (1929–2003)

János Salánki, former president of the International Society for Invertebrate Neurobiology, and former director of the Balaton Limnological Research Institute of the Hungarian Academy of Sciences, died on January 29, 2003. With his death we have lost a prominent and decisive personality of the Hungarian and international scientific community as well as a leading scientist with enormous impact on invertebrate neurobiology.

János Salánki was born May 11, 1929, in Debrecen, East Hungary, and was only one-year old when he lost his father, leaving the family alone and in great poverty. The mother married again, but his step-father never returned from the Russian front of the Second World War. This start of life made a life-long impact onto his credo, and for him the after-war political changes in Hungary did indeed bring the only chance of higher education and emerging from the lower level of the society. He has begun his university studies also in Debrecen at the Medical School in 1948, and soon thereafter that in 1954 he has received his medical diploma, *doctor univ. med.*, he met possibly one of the most important turning point of his life, which has, as a consequence, determined his upcoming career. It happened in 1955 that he was given a chance to go to Moscow to become a PhD student of the at that time widely renown comparative physiologist, Professor H. S. Koshtoyants at the Department of Comparative Animal Physiology of the Moscow State University. Here, upon the initiatives of Professor Koshtoyants, he started to work on the neurophysiological basis of the regulation of the rhythmic activity of bivalves' shell movements, a theme to which he has practically remained faithful until the end of his life. Obtaining the PhD degree in 1959, he has returned to Debrecen and continued his research and teaching activity at the Institute of Physiology of the Medical School. However, in 1962, he met the next decisive turning point of his life: he was invited by the leadership of the Hungarian Academy of Sciences to apply for the vacant chair of directorship of the Biological Research Institute in Tihany. He became the director of the Institute in the same year, and during the next almost 30 years he made those three major achievements, which cemented the research activities and international connections in invertebrate neurobiology, of Tihany. These achievements are the establishment of the

profile of invertebrate neurobiology, the foundation of the series of international symposia on invertebrate neurobiology, and the foundation of the International Society for Invertebrate Neurobiology (ISIN).

After taking over his chair in Tihany, he immediately started to build out the structure of a complex, multidisciplinary research in invertebrate neurobiology at the highest international level, working in physiology, biochemistry and morphology. For the start, he brought young colleagues from Debrecen with, including Imre Zs.-Nagy, Elemér Lábos, László Hiripi and István Varanka, but first of all his wife, Katalin S.-Rózsa who remained his most important colleague and support throughout his life. Soon the group acquired international reputation, publishing important papers, such as describing the aminergic innervation of the adductor muscle activity of the freshwater mussel, *Anodonta cygnea*, or the pharmacological mapping of neurons in the central nervous system of the pulmonate snail, *Helix pomatia*. For the success, a significant momentum was added, when in 1965 János Salánki visited and spent a longer period in Professor Gerald Kerut's laboratory in Southampton, learning the technique of microelectrophysiology, at that time a revolutionary new tool to ask nerve cells about intercellular communication, pharmacological sensitivity and network formation underlying behavior. Characteristic for him, János Salánki not only introduced the technique in the own laboratories, but within a few years he also initiated a series of summer schools for Hungarian neuroscientists to learn how to use this method in their specific research field.

Following the early years in Tihany, he turned towards the further strengthening of the Department of Experimental Zoology, inviting young people to work on the nervous system of invertebrates. From this time, during the next decades, he altogether brought up three generations of scientists with international reputation, contributing significantly to the successful research activity in Tihany. By the late sixties, István Kiss, Tibor Kiss and Károly Elekes joined the staff, followed by László Hernádi, Ágnes Vehovszky and György Kemenes in the seventies, then by János Győri, Attila Szűcs in the late eighties and early nineties, up to the recent years with Gábor Molnár. The balanced combination of the elder and younger generations ensured a continuous and energetic research and publication activity, including membrane and channel electrophysiology, synaptology of identified neurons as well as receptor characterization of different signaling systems in first of all two model gastropods, *Helix* and *Lymnaea*. Meanwhile keeping different basic scientific projects of invertebrate neurobiology running, he masterfully understood the message of our times emphasizing environmental protection. As a consequence, he initiated a new trend of research in the institute, coupled with invertebrate neurobiology, the impact of environmental pollutants, such as heavy metals and some organic compounds, onto the regulation of physiological processes of aquatic invertebrates, *Anodonta* and *Lymnaea*. All these above, and his never ceasing activity and productivity, reflected at the end of his life by over 300 scientific publications, brought him the highest acknowledgements honoring ever a Hungarian scientist: in 1976, he became the corresponding member of the Hungarian Academy of Sciences, followed in 1987 by the ordinary membership.

In 1967, he has initiated and organized the first international symposium on invertebrate neurobiology, inviting a number of eminent scientists from both the Western and Eastern hemispheres, making in this way possible for first of all the Soviet neurobiologists to meet colleagues working over the iron curtain. The meeting was a great success, underlined with the additional publication of the proceedings in a special volume. Since then it became a tradition that by about every fourth year invertebrate neuroscientists gather in Tihany for a short week or so, and not only to present their recent findings but equally important is to change ideas and elaborate new co-operations. All these may happen under the fantastic privacy and atmosphere of the site, *genius loci*: a unique combination of science (institute) and nature (park, beach, population of old trees like in an arboretum), and above all the abbey located on the top of the hill. What else would be needed to feel well at a conference? Since then, nine further symposia were organized, the last, the 10th in the row, right in this year, 2003, but unfortunately for this time already without the founder of these events. The series of the symposia does not stop; the next meeting has already been scheduled for 2007.

In 1987, János Salánki came to the idea, not at last upon the influence of the series of symposia held in Tihany, to organize a society collecting the scientists working in the field of invertebrate neurobiology. His intention with it was that by having a society for invertebrate neuroscientists a better and more powerful connectivity can be achieved among the members, resulting in also a more effective representation in other internationally decisive bodies of organizations, like IBRO, and gaining more support for the activity of the research field. The idea was followed by the foundation of the International Society for Invertebrate Neurobiology (ISIN) in 1989, in which János Salánki served thereafter as president for two periods.

The above writing was an attempt to reflect some but significant aspects of an extremely successful life of a man, János Salánki, spending and devoting his time first of all to the benefit of invertebrate neurobiology. He will be missed by both his closer colleagues, and the broader community of invertebrate neurobiologists, as well as by all those who knew, met and worked with him, home or abroad, in different societies, committees, scientific meetings.

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