



Kazimierz Zieliński (1929-2004)

With deepest sorrow we mourn the death of Professor Kazimierz Jan Zieliński, an outstanding scientist, one of the most prominent architects of the Polish School of Behavioral Neuroscience, and a person of merit in the organization of science at the Nencki Institute of Experimental Biology. He was a great man whose distinguished work and unique personality will always be remembered. He was an ardent, devoted friend to his co-workers. His sudden death is a great loss for science and for all his friends and pupils. His research works are highly acknowledged both in Poland and abroad.

Professor Kazimierz J. Zieliński was born in Łódź on May 13, 1929, and his adolescence was marked by the difficult experience of World War II. He studied at the Faculty of Biology and Soil Sciences of Leningrad State University where, in 1954, he was granted a M.Sc. degree. His Ph.D. studies were performed at the Pavlov Institute of Physiology USSR Academy of Sciences in Leningrad, and his doctorate was awarded in 1958 (Ph.D. in neurophysiology). Immediately thereafter he moved to the Nencki Institute of Experimental Biology of the Polish Academy of Sciences in Warsaw, where he was employed till the end of his life. Professor Zieliński spent one year on sabbatical leaves at the McMaster University in Canada (1964-1965) and several months at Syracuse University in the USA (1973). At the Nencki Institute he received his habilitation (1966, D.Sc. in neurophysiology). Then he was appointed an associate (1973) and full professor of neurophysiology (1981). In 1968 and during the period 1970-1973 Professor Zieliński was a Vice-Director of the Nencki Institute, and after Jerzy Konorski's death he became the Director of the Institute (1973-1991). In 1977 he became a corresponding member, and from 1991 a full member of the Polish Academy of Sciences.

Professor Zieliński was an active member of several international scientific societies, including the European Neuroscience Association, the European Brain and Behaviour Society, the Pavlovian Society, the Polish Neuroscience Society, and the Polish Physiological Society. He participated in the Governing Council and Executive Committee of the International Brain Research Organization (IBRO), being a Vice-President of this Organization during 1980-1985. He was also a member of the European Science Foundation, and International Scientific Committee for European Training Program in Brain and Behavioural Research (1980-1990).

An important part of his activity was related to the proceedings of numerous Committees of the Polish Academy of Sciences, including the Committee of Physiological Sciences, of which he was the Chairperson (1981-1990). He also participated in the Scientific Councils of many institutes of the Polish Academy of Sciences, including the Nencki Institute from 1967. Moreover, he was included in the editorial boards of several scientific journals. For instance: *Acta Neurobiologiae Experimentalis* (from 1969), *Behavioural Brain Research* (1980-1984), *Acta Physiological Polonica* (1985-1990), *Polish Journal of Pharmacology and Pharmacy* (1987-1990), and *Polish Journal of Pharmacology* (from 1991). For his scientific and organizational achievements Professor Zieliński received many distinctions and awards, including, in 2002, the Commander's Cross with the Star of the Order of Renaissance of Poland.

Throughout his career at the Nencki Institute Professor Zieliński was associated with the Department of Neurophysiology of the Nencki Institute, where he was one of the leading scientific contributors for over 40 years. In this Department he organized the Laboratory of Defensive Conditioned Reflexes (1971), and he served as Head of this Laboratory for 30 years. He inspired his students with his enthusiasm for scientific work, and their achievements delighted him. By combining friendliness, intellectual honesty, and immediate willingness to help others, he created a unique atmosphere enabling the productive scientific activity of his many students. Out of his scientific collaborators and assistants, five have successfully defended their doctoral dissertations for the Ph.D degree, and two received D.Sc. degree in neurophysiology. Professor Zieliński was also the reviewer of many Ph.D. and D.Sc. theses, and applications for nomination for the professor's title.

Professor's Zieliński main research was behavioral neuroscience in the broadest sense. There were two important aspects that always characterized his approach to experimental work. The first was extremely careful parametric investigation of various determinants of animal learning, which required the use of various techniques of automatic programming of the experiments as well as recording of data (especially response latencies), and broad employment of mathematical and statistical analyses. The second aspect was the development of a theoretical framework which would account for behavior. His research was conducted on various animals, including chicks, in the earliest studies, then dogs, cats and rats. Moreover, in his Laboratory some research was performed on monkeys, miniature opossums and mice. Much of Professor Zieliński's scientific work dealt with the systematic study of defensive Pavlovian and instrumental conditioning. Among the topics to which Professor Zieliński made especially significant contributions, were his investigations of stimulus intensity dynamism and mechanisms of conditioned inhibition and inhibition of delay. In addition, the neuronal processes mediating the state of safety, and the role of prefrontal cortex and the amygdala in aversive learning attracted his special attention. Professor Zieliński was the author of more than 200 research and review papers, which were published in the most prestigious and most frequently cited international journals in his field, including *Behavioural Brain Research*, *Neuroscience*, and *Learning and Memory*. He also wrote several chapters in scientific books, and articles that popularized knowledge about contemporary learning theories. It should be stressed, however, that his interests were broad, and he did not restrict himself just to the research activity alone. Without exaggeration it can be said that he was the outstanding expert in the history of the Nencki Institute. He liked poetry (in particular Anna Akhmatova's lyrics), painting (especially the unique styles of Hieronymus Bosh), but also long walks through the forest and picking wild mushrooms.

On January 10, 2004, Professor Kazimierz Jan Zieliński died suddenly in Warsaw at his home. We will miss him deeply.

Tomasz Werka and Maciej Stasiak