Christine Heim, MD
(1949–2001)

OBITUARY

Christine Heim MD, a coworker of Prof. Dr. K.-H. Sontag from the Max-Planck-Institute of Experimental Medicine in Göttingen, one of the persons who contributed the most to 30-year co-operation between German and Polish pharmacologists, including researchers from the Institute of Pharmacology of the Polish Academy of Sciences in Kraków, passed away in Freiburg (Breisgau) on March 24th this year.

Christine Heim was born on November 6th, 1949 in Schweinfurt, where she completed primary school (1962) and Economic High School (1967). She worked as a nurse at a hospital in Schweinfurt in the period between 1967 and 1968, and for the next two years, she attended Biological High School in Landau/Pfalz. Over the next two-year period, she worked as medical technical assistant in Würzburg and later on up to 1979 in the Institute of Anatomy of the University of Hamburg before she commenced medical studies. She qualified as a doctor in 1985. Still being a student, she started to work as an assistant at Max-Planck-Institute of Experimental Medicine in Göttingen, and continued this work after graduation in 1985. In the period between 1985 and 1995, she was an assistant in the Clinic of Psychiatry and Neurology of the university in Göttingen. Over the next five years till 2000, she participated as a scientist in research project of German Federal Government, entitled “Neurotoxins and neuroprotection: significance of free radical mechanisms and inhibition of respiratory chain for etiology of Parkinson’s syndrome, neurodegradation and aging-related processes”.

Dr. Heim published 32 original papers (4 more are in press), 4 book chapters and 63 conference communications. She delivered 10 lectures. She was a winner of 2 prizes.

Dr. Heim was just finishing her habilitation at the faculty of medicine in Göttingen qualifying for assistant professor.

Dr. Christine Heim was engaged in different research activities. One of the main topics, she was interested in, was the effect of diminished blood supply to the brain on its function and neurodege-
nerative processes. To solve this problem, she applied various techniques and demonstrated together with colleagues and guests learning and memory deficits after different time points such short-lasting reduction of the carotis blood flow in rats. The blood flow reductions leads to short-lasting drop of cerebral temperature, local increase in lactic acid levels elevations of glutamic and aspartic acid, hydroxyl radicals and long-lasting increase in GABA levels, and lipid peroxidation in different brain structures, and decreased dopamine DA1 receptor density in the striatum 19 month after surgery. NMDA antagonists and lazaroids exhibited protective effects. The obtained results allow to anticipate which changes are evoked by lowered brain perfusion with blood in the patients and propose therapeutic measures at different stages of the disease.

Another significant field of Dr. Heim’s research included the investigation of the action of neurotoxines. She devoted considerable attention to the studies of TaClo (1-trichloromethyl-1,2,3,4-tetrahydro-β-carboline), demonstrating behavioral disturbances, degenerative effect on dopaminergic system, increased extracellular dopamine and serotonin level and stimulation of hydroxyl radical formation, among other things. Dr. Heim examined also neurotoxic action of ferric chloride and 6-hydroxydopamine.

Dr. Christine Heim was engaged in all her tasks with commitment and diligence and conducted her studies with unwavering enthusiasm. She showed equal dedication in clinical work in the field of psychiatry and neurology. These characteristics of her along with scientific activity won her esteem both in Germany and abroad.

Dr. Christine Helm played an important role in the development and strengthening of 30-year cooperation between German and Polish pharmacologists, particularly between two largest partners the Max-Planck-Institute of Experimental Medicine in Göttingen and Institute of Pharmacology of the Polish Academy of Sciences in Kraków. Her Polish colleagues always highly respected Christine as a person, her knowledge and achievements, and also deeply appreciated her great kindness and hospitality. These her exceptional attributes contributed to tightening links of friendship between German and Polish colleagues. It should be mentioned that similar relationships were made between scientists from Göttingen and Lublin.

Dr. Christine Heim was the closest coworker of her husband and her early death is a great bereavement for Prof. Dr. K.-H. Sontag, her colleagues from Göttingen, for science in general, and also for us in Kraków. We mourn her death with great sorrow and pain, but also with deep gratefulness for all she did for us.

*Jerzy Maj*