

In memory of Professor Igor Klatzo (1916-2007)

Zbigniew Marian Rap



Igor Klatzo, former Chief of the Laboratory of Neuropathology and Neuroanatomical Sciences at the National Institute of Neurological Diseases and Stroke (NINDS), National Institutes of Health (NIH), Bethesda, Maryland USA, passed away on 5th May 2007. This exceptional and colourful man was born on 9th October 1916 in St. Petersburg, Russia, but after the Russian revolution lived in Vilnius, known as a multicultural city, Poland (now Lithuania), where he grew up and was educated. He studied medicine at the King Stefan Batory University in Vilnius. As a medical student, Igor Klatzo was greatly influenced by Prof. Maximilian Rose, a prominent psychiatrist and neurologist. During the Second World War he served as a physician (at the Psychiatric Hospital in Vilnius) in the Polish Underground Home Army (Armia Krajowa) under the direct leadership of the Polish Government-in-exile (London, England). After the war in 1945, he served as a medical doctor in the Polish Red Cross Mission in Germany. He was responsible for assessing the health condition of Polish citizens, former German forced labourers, prior to their repatriation home. Unexpectedly, a visit to his friend from Vilnius Dr Jerzy Olszewski, who worked with Prof. Oskar Vogt at the Brain Research Institute in Neustadt (Black Forest, Germany), changed Igor's Klatzo life. He was offered a Research Associate position and agreed to work there under the tutelage of Professor Oskar and Cecile Vogt. Prof. Oskar Vogt was the founder of the Wilhelm Keiser Hirnforschung Institute in Berlin-Buch, and presently is considered as

a father of modern neuroscience. Prof. Oskar Vogt was also doctor *honoris causa* of the Stefan Batory University in Vilnius. Igor Klatzo stayed at the Brain Institute from November 1945 until 1948. During this time he received the degree of Doctor of Medicine from the Albert-Ludwig University of Freiburg, Germany (December 1947). With a recommendation letter from Prof. O. Vogt to Prof. Wilder G. Penfield, Director of the Montreal Neurological Institute (MNI) in Montreal, Canada, Igor Klatzo was able to move together with J. Olszewski to Canada in the spring of 1948. At the MNI Igor Klatzo worked with Prof. Penfield (until 1952) and subsequently with Prof. G. Lyman in Duff's Pathological Institute, McGill University (1952-1954). In 1952 he obtained an MSc degree from the same University. Igor Klatzo also received an Allan Blair Memorial Fellowship (awarded by the Canadian Cancer Society). This award permitted Igor Klatzo to study neuropathology in the United States, Mexico and Europe. In 1956 he was appointed as Head of the Neuropathology Section, Branch of Neurosurgery, National Institute of Neurological Diseases and Blindness, NIH, Bethesda, Maryland, USA. Ten years later (1966) he was nominated as Chief of the Laboratory, Institute of Neuropathology and Neuroanatomical Sciences, NINDS.NIH, where he remained until his retirement in 1994.

The chronologic scientific accomplishments of Igor Klatzo are as follows: (1) Description of Kuru disease pathology and demonstration of its similarity to Creutzfeldt-Jakob disease. This original observation

greatly contributed to the investigations involved in studying new type slow virus disease for which C. Gajdusek received the Nobel Prize. (2) Experimental induction of neurofibrillary degeneration with aluminium adjuvant in rats. This phenomenon inspired Henryk and Krystyna Wisniewski to investigate the pathogenesis of Alzheimer's disease. (3) Igor Klatzo achieved his greatest success studying the pathophysiology of the blood-brain-barrier and brain oedema. His definition and classification of brain oedema as vasogenic and cytotoxic types have been accepted as a novel concept that has been generally hailed by the scientific community. (4) The investigation and observations (with Umeo Ito) related to the dynamics of pathophysiology occurring in brain ischaemia/reperfusion of gerbils established a new phenomenon: the so-called "maturation phenomenon".

In the early sixties Igor Klatzo was instrumental in forging the cooperative agreement (PL-480) between Polish and USA governments in medical sciences including neuropathology. Responsible for realisation of the agreement was Ewa Osetowska, Head of Neuropathology Department, Polish Academy of Sciences, Henryk Wisniewski, as well as Miroslaw J. Mossakowski, later Director of the Medical Research Centre, Polish Academy of Sciences.

Supervisor of this agreement on the USA government side was I. Klatzo. This cooperation of Igor Klatzo and Maria Spatz (Head of Neurocytobiology Section from his Laboratory) gave the opportunity for many Polish neuropathologists to visit and study at NIH in Bethesda. Short- and long-term visits were made possible for Henryk Wisniewski, Miroslaw J. Mossakowski, Zuzanna Krasnicka, Lech Iwanowski, Grazyna Szumanska, Zbigniew Rap, Mieczyslaw Smialek, Krystyna Renkawek, Roman Gadamski, Ryszard Pluta and others.

Igor Klatzo was a recipient of the prestigious Mikolaj Kopernik Medal for contributions to Polish science (1991). Furthermore he was also awarded doctor *honoris causa* at the Medical Academy in Poznan, Poland (1993).

Igor Klatzo was the President of the American Association of Neuropathology (1965) and a member of many international societies and scientific assemblies.

Igor Klatzo was not only an excellent scientist but also a very creative photographer, always carrying a camera. He liked many sporting activities, for example scuba diving, surfing and playing tennis. He was also a connoisseur of good wines, as well as French and Japanese cuisine. He lived a full and successful life...