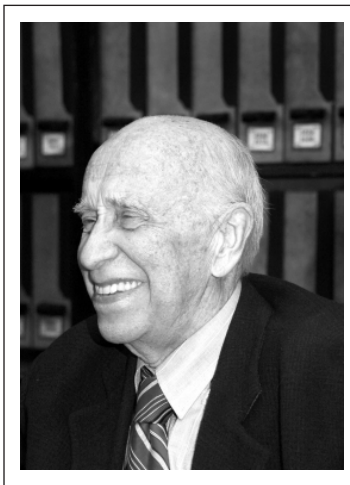


## Professor Olgierd Narkiewicz — the great Polish anatomist and neuroanatomist of the twentieth century (1925–2010)

Professor Olgierd Narkiewicz was born on 21 October 1925 in Vilnius. He came from the Samogitia gentry, whose family hearth was in the ancestral estate of Szolopiany in Taurogi County, known from Sienkiewicz's "Trilogy". It has been the home of the Narkiewicz family since the sixteenth century. His father, Dr. Adolf Narkiewicz, was a local doctor and for some time the Chief Medi-

cal Officer in Vilnius. His mother, Anna, was from the well-known Vilnius family of Umiastowski. Olgierd Narkiewicz began his education in Vilnius where he attended King Sigmundus Augustus Gymnasium — famous before the war. When the Second World War broke out he was to start the third grade. He did the so-called "little baccalaurean" in the times of Soviet occupation of the Vilnius region. He received a Polish school-leaving examination certificate attending a clandestine education. At this time his teachers, among others, were Stanisław Hiller and Stanisław Stomma. He used his knowledge of five languages in the resistance movement, working on reports from the radio watch for the underground press. The patriotic attitude of the family met repression: his father was arrested in 1941 by the Soviets and died in Gorkie prison, and his uncle Franciszek Umiastowski was killed in Katyń.

In 1944, after the Red Army reoccupied Vilnius, Olgierd Narkiewicz concealed himself in a mental hospital. Thanks to skilful simulation and the kindness of the Polish doctors, including Dr Janina Hurynowicz, he managed to save himself from deportation to the Soviet Union. Soon afterwards, thanks to repatriation, he went first to Lodz and then to Lublin. After the end of the war he started study-



ing at the medical faculty at the newly-created Maria Curie-Skłodowska University in Lublin, where he was awarded credits for his first year. In 1946–1950 he continued his studies at the Medical Faculty of the Medical Academy of Gdansk and, still being a student, he started working in the Gross Anatomy Department under the direction of Prof. Michał Reichner. Still as a student he received

junior lectureship and participated in research concerning his master's and teacher's favourite field — primatology. From 1952 he had the post of an assistant. He received his doctor's degree after presenting his work "Structure and variation of splenius muscles". In 1954 he was given a position as a lecturer. In 1960 he conferred his qualification as a university professor with his academic achievements and the habilitation thesis "Arterial segments of the kidney". He became associate professor in 1971 and full professor in 1979. His gradual development in university hierarchy was crowned with the post of the Head of the home department in 1964. Under his direction until 1996 it changed into The Department of Anatomy and Neurobiology. It also evolved gaining a leading position in Poland and significance abroad. His special achievements concerned research on the structure and function of the nervous system. Dealing with basic works on gross anatomy, using modern neurophysiological methodology, he kept in touch with clinical neurology, which resulted in his receiving a specialisation in that field in 1959. He worked out a neuroanatomical textbook, modernising the well-known work of Różycki.

He trained in many well known scientific centres abroad (the USA, Great Britain, Norway, RFN) but his



**Figure 1.** Professor Narkiewicz during his scholarship of the Rockefeller Foundation in 1963 in Wisconsin (USA)

work was mostly influenced by Prof. Jerzy Rose with whom he worked as a scholarship holder of the Rockefeller Foundation in 1962–1963 in Wisconsin at Madison University. He was a visiting professor in many European and American Universities and also several times in the Institute for Basic Research in Developmental Disabilities, where he cooperated with Prof. Henryk Wiśniewski, the holder of an honorary doctorate from the Medical University of Gdańsk (Fig. 1).

As his teachers he had special regard for Prof. Michał Reicher, Prof. Jerzy Rose, one of the most influential American neuroanatomists and neurophysiologists, and Prof. Jerzy Konorski from the Nencki Institute of Experimental Biology in Warsaw, the creator of a well-known neurophysiological school, with whom he also cooperated intensely for a long time.

In the serious academic achievements of Prof. Narkiewicz, containing over 200 publications (app. 100 original), the topic of neuroanatomy prevailed. His leading position in this field is widely recognised and acclaimed in Poland and abroad, particularly in Europe and the USA. He created his own neuroanatomy school, the achievements of which are known and highly valued throughout the world.

Fundamental interests of Prof. Narkiewicz research are:

- structural and functional organisation of cortical connections with the subcortical centres;
- cholinergic centres and connections within the limbic system;
- afferent connections of the frontal cortex and the amygdala;
- claustral connections — claustral-cortical neuronal loop;
- synaptic ultrastructure of subcortical centres (mainly claustrum and the amygdala);
- location and dynamics of pathological changes in the limbic system in the course of physiological aging and Alzheimer's disease.

In all those fields Prof. Narkiewicz made some important discoveries, which seriously enriched neuroanatomical knowledge. It particularly refers to his research on claustrum, the role of which in brain organisation had not been studied in such depth before. Until the 1960s this structure was seen as a "marginal" subcortical area, its significance was neither known nor of interest to scientists. Among various research projects that brought Prof. Narkiewicz international recognition the most vital are his pioneering studies on claustral-cortical connections mainly through his discovery of the claustral-cortical neuronal loop. These studies became a global scale achievement. In his further research he proved the existence of topographically related claustral-cortical connections, and demonstrated that given cortical areas (e.g. motory, somatosensory, auditory, and visual) have their projective zones in specific claustral areas. It might easily be said that the research in his academic achievements opened a new perspective for the understanding of the functional and structural organisation of the brain. His research did not cease when he retired, and the school he created continues the direction of his research. And not only in his home University; under Prof. Narkiewicz's supervision seven junior academics gained habilitation and later became professors in different universities.

Professor Narkiewicz's teaching activity should be discussed separately. He was a brilliant lecturer. Many times students awarded him the title of "teacher of the year". He changed classic anatomy teaching into a complex presentation, taking clinical and functional aspects into consideration. He was the first to introduce teaching clinical anatomy and neuroanatomy with elements of neurobiology in Poland. It is — as neuroscience — the fundament of neurological disciplines as in the USA and most Western European countries. In doing so he

changed anatomy teaching from purely descriptive-morphological into functional anatomy adapted to clinical problems. To bring anatomical knowledge closer to the students Prof. Narkiewicz eagerly contributed to academic books, and this contribution was always very successful. "Human Anatomy" by Bochenek and Reicher, "Human Anatomy" — by Sokołowska-Pituchowa, "Clinical and functional neuroanatomy" — by Narkiewicz and Moryś, and, the new updated version of "Human Anatomy" by Narkiewicz and Moryś, finally published in 2010, are the most popular books among medical and dental students in Poland.

In 1967–1970 he was Deputy Dean of the Medical Faculty, and then in 1970–1972 the Dean. He had a very good rapport with students while performing his duties as the Dean and while teaching. His activity during the students' strikes in 1980 serve as an example of this. He was a member of the University Senate for several terms. In 1991 he was chosen as the correspondent member of the VI Department of the Polish Academy of Science (PAS) and soon became a full member. In 1992–1998 he was the vice president of the Gdansk Branch of this institution and later a member of the executive committee of the Gdansk Branch and a member of the Disciplinary Committee of first instance in central authority. He entered a part of several committees of PAS, as the Committee for Physiological Sciences (1988–1997), Committee of Neurological Sciences, and Committee of Neurobiology (1999–2010).

He was a member of the boards of numerous scientific institutions, such as the Scientific Council of the Ministry of Health (1974–1976), Scientific Council of the Nencki Institute of Experimental Biology in Warsaw (1966–2010), Scientific Council of the Centre for Experimental Medicine and Clinical Sciences (1991–2010), and finally — the Scientific Council of the Institute of Biogenic Amines (1999–2010). Professor Narkiewicz belonged to numerous scientific societies in Poland and abroad. He served as President of the Board of the Polish Anatomical Society and received honorary membership of this organisation, as he did the Bulgarian Association of Anatomists, Embryologists and Histologists, and the Polish Neuroscience Society. His work also includes ac-

tive participation in three editorial boards of scientific periodicals: *Folia Morphologica*, *Acta Neurobiologiae Experimentalis*, and *Advances in Cell Biology*. He was awarded many scientific prizes, including: Secretary of Polish Academy of Sciences — Team Award (1974, 1977, 1981, 1987) and the John Hevelius Scientific Prize of the President of the City of Gdansk in 1995. Prof. Narkiewicz has received numerous awards, including the Officer's Cross, the Order of Restitution of Poland, and the Medal of the National Education Commission.

Finally in 2000 Prof. Narkiewicz's achievements were honoured with an honorary doctorate in his Alma Mater — the Medical University of Gdansk.

Along with his outstanding achievements, which made him a truly genuine scientist, he was a real man with passion not only for science but also for life. Professor was a cheerful and friendly gentleman with a great sense of humour, and as such he was a likeable and valued participant of social life. His natural curiosity about the world expressed itself in his love of travelling and tourism. He was an excellent skier, keen canoeist, and a pleasant bridge partner. When he was younger he took part in climbing, and when he was elderly he enjoyed spending time in his cottage in the Kashubia region, especially canoeing on Wdzydze Lake.

In 1952 Olgierd Narkiewicz married his younger colleague from the Gross Anatomy Department. This successful relationship helped Prof. Narkiewicz in gaining his academic position and scientific output. Mirosława Narkiewicz was a very good and patient wife, who gave her husband a lot of support and understanding. She has achieved a lot herself in her clinical and scientific career and their relationship was an inspiring example of a partnership that encouraged them mutually for scientific work. Their son Krzysztof is also a professor of the Medical University of Gdansk.

Professor Olgierd Narkiewicz died in Gdansk on nineth October 2010.

We shall remember Professor Olgierd Narkiewicz as a leader, as a colleague and renowned expert, as an extraordinarily creative and hard working scientist, but above all, as a great humanist. His wife Mirosława, son Krzysztof, and two grandchildren survive him.

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