

A TRIBUTE TO PROFESSOR MUDr. VLADIMÍR VONKA, DrSc.

Professor MUDr. Vladimír Vonka, DrSc. died on June 20, 2025, at the age of 94.

He was a physician and virologist of international repute in the field of virology and the immunology of infectious and oncological diseases. He possessed a charismatic gentility combined with a steadfast approach to life and a kindly authority.

Vladimír Vonka was made for virology; he attended the eminent microbiology school of Professor Patočka in Prague, and after a brief period of clinical practice at the Department of Infectious Diseases in Ústí nad Labem Hospital, he returned to Prague to join a highly successful team of virologists and epidemiologists with Dimitrij Slonim, Karel Žáček, Ervin Adam and Vilém Škovránek. This team in the former Czechoslovakia was developing inactivated Salk and later live Sabin vaccines against poliomyelitis in children.

Vladimír Vonka won his virological spurs at Karel Žáček's laboratory at the Bulovka Hospital. It was there that virology became a lifelong passion. His research dreams and aspirations came to fruit at the Immunological Research Institute, which later merged with the Institute of Sera and Vaccines, a notable institution for its time, which regrettably did not survive the transformation of Czech industry in the early 1990s.

Professor Vonka then moved his whole department of experimental virology to the Institute of Haematology and Blood Transfusion to continue in a successful programme of oncologically-orientated virological research. With his enthusiasm, hard work and talent he created an internationally acclaimed scientific programme; all this during the previous political regime without resorting to a traditional academic setting, and, more importantly, without any regime affiliations. To work "at Vonka's" was especially prized by the virological community of the day. He was always careful to publish in leading journals which was not commonplace in the context of Czechoslovak science. With this approach, he created and maintained his distinction and the renown of his pupils of the "Vonka's school" of experimental virology.

Vladimír Vonka's lifelong orientation in oncology and the issue of possible viral aetiology of certain oncological diseases began at the very end of the successful POLIO programme that eradicated child poliomyelitis in the early 1960s in Czechoslovakia.

Although a considerable part of the work at his laboratory comprised development and innovation of influenza vaccines, the main thrust of his research was, for a long time to come, directed at herpes viruses with oncogenic potential. This line of research started during his collaboration with virologist and epidemiologist Professor J. Melnick from Baylor College in the USA, studying cytomegaloviruses and Epstein-Barr virus.

Unfortunately, the period of political "normalisation" in the 1970s precluded any cooperation whatsoever with leading American laboratories. As a result, Vladimír Vonka and his team turned to confirming the role of HSV2 genital herpes as the causative

agent of cervical cancer. This project involved an extensive epidemiological study conducted with the gynaecology department of Professor Jiří Kaňka. To the disappointment of the authors, and against all expectations, the results convincingly refuted the hypothesis of a causative link between HSV2 and cancer. Nonetheless, the study did lead to confirmation of papillomavirus as the pathogen responsible for the disease, and subsequent rapid development of a reliable vaccine by German virologist Professor Harald zur Hausen. Following the initial disappointment, however, came one of the most significant achievements in Vladimír Vonka's career up to that point.

The move, dictated by circumstance, to the Institute of Haematology and Blood Transfusion, had some positive impacts on the continuation of the oncological research conducted by Vonka's virological department. In this second phase of his work, he and his team could fully focus on the oncogenic potential of papillomaviruses, the molecular and cellular mechanisms of their carcinogenesis, as well as theoretical questions regarding gene therapy for cancers and researching novel DNA anti-tumour vaccines, their design and application. Vladimír Vonka and his team employed their experience in this field to perfect procedures for immunotherapy of chronic myeloid leukaemia, a disease of non-viral aetiology. Vladimír Vonka had the good fortune to be involved in these extremely exciting branches of research practically for the rest of his life.

Following the fall of communism in 1989, it came as no surprise that Professor Vladimír Vonka, as a respected scientific authority, became one of the founders of the Learned Society of the Czech Republic, and later the founding member of the Czech Medical Academy.

Vladimír Vonka was very much the prototypical scholar, a contemplative human being who sought to explain relationships between nature, the humanities and social sciences. Indeed, it was causality, not merely limited to medicine, that became his philosophical credo. He was a true Renaissance man, with a pedagogical talent to clearly explain complex phenomena. Many students were inspired to follow scientific careers by the exceptionally successful book that he co-authored with his friend Jan Závada *The Mystery of Cancer* (Mladá Fronta, 1984). Professor Vladimír Vonka was a kind, yet exacting authority, the type of man that it was fortunate to meet, especially for a young person. His charisma made him an example and moral role model for many young adepts.

In Professor Vonka we have lost a remarkable man and scientist, who will remain not only in our memories, but also in his legacy to modern virology and oncological medicine.

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