

## Dedication to Professor Jan Bubeník, M.D., D.Sc.



It is my great personal pleasure to dedicate this issue of *Folia Biologica* to Jan Bubeník. In spite of his 60th birthday I still keep in fresh memory his coming to our laboratory in the sixties. Very soon it became obvious that he was a highly talented, well-read and original-minded young scientist. He actively joined most of the projects that were

going on in the laboratory in those days and that were touching the problem of tumour-specific antigens, both in *v-src* virus-induced tumours and in carcinogene-induced tumours. While participating in these projects he clearly demonstrated that Rous sarcoma virus-induced tumours contain a new specific transplantation antigen, which was later confirmed by showing that this common antigenicity evokes immunity directed against the oncogene *v-src* product. This is in fact one of the pivotal findings that became part of the history of oncogene-induced tumours. In case of carcinogene-induced tumours, Jan Bubeník confirmed that these tumours usually also acquire a tumour-specific antigen, but this antigen is characteristic for individual tumours. This is in agreement with the character of genetic changes produced by carcinogenes, which differs among different tumours. Again, this observation has been many times repeated and became a textbook fact.

At the end of the sixties, when working in Sweden, Jan Bubeník established the line of human urinary bladder carcinoma called T24 and used it as a tool for proving specific cytotoxic immunoreaction against urinary bladder tumour cells. This cell line T24 profoundly imprinted tumour molecular biology, because it had been employed by several groups for definition of the first oncogene isolated from human tumour lines, the *ras* oncogene. Later, Jan Bubeník turned his interest into the field of cytokines which, as he previewed, should potentiate antitumour immunity. Using the interleukin-2 (IL-2), he was the first to show that peritumoral administration of this cytokine significantly decreased growth of experimental tumours. In further work he has been systematically following this newly open path to the control of tumour proliferation. He devised new strategies to improve the interleukin activity, especially using intratumoral inoculation. Furthermore, he devised a suitable vehicle for tumour treatment represented by lethally irradiated cells, which have the tendency to reemigrate to the tumour tissue. He infected such cells with a retroviral

vector carrying the IL-2 gene, which made it possible to deliver it via lethally irradiated cells into the treated tumour. In such a way Jan Bubeník made one of the first efficient steps toward gene therapy of cancer cells. Using retroviral vectors he actually reutilized his first encounter with retroviruses years ago. The input in cancer research made by Jan Bubeník has been recognized both nationally and internationally. He received several scientific prizes and awards: the State Prize for Medicine and Biology, Czechoslovakia (1985), the Prize of the Ministry of Health of the Czech Republic (1994) and of the Ministry of Education of the Czech Republic (1995), the UICC ICRET Award, Switzerland (1983), the Yamagawa-Yoshida UICC International Award (1990), the International Prize for Cancer Research "Ernesta Nuti", Italy (1992). His scientific articles belong among the most quoted papers. His international recognition is documented by requested lectures at the European and US scientific institutions and by invitations for research stays. In 1969-1971 he joined the laboratory of Peter Perlmann at the Department of Immunology, Wenner-Gren Institute, University of Stockholm, and later he acted as a visiting scientist and visiting professor at several renowned institutions: Max-Planck Institute for Virus Research, Tübingen; Fibiger Institute, Copenhagen; M.D. Anderson Cancer Center, Houston; Cancer Institute, Cairo, and Department of Immunology, University of Toronto, Toronto. He is also highly involved in the international editorial activity as Executive Editor of *Folia Biologica* (Praha) and a member of the Editorial Boards of *International Journal of Oncology*, *Journal of Cancer Research and Clinical Oncology*, *Journal of Experimental and Clinical Cancer Research*, *Gene Therapy*, *Neoplasma*, *Microbiologica*.

For decades I have been staying in close scientific and personal touch with Jan Bubeník and we have been permanently consulting each other, which has been helpful for both sides. I should underline that during my eight-year term as Director of the Institute, Jan Bubeník was aiding as Deputy Director, and I can only highly acknowledge his thoughtful and balanced approach to a number of problems and issues which appeared during this demanding period. Jan Bubeník has also been acting as a very successful educator, both at the Faculty of Science and at the Medical Faculty of Charles University, and attracted a number of students to his laboratory. Eight of them received full Ph.D. training. He has been and still is a respectful scientist, who has been and is not only a help to students and colleagues, but also to our national and international community of cancer researchers.

I take this opportunity to wish to Jan Bubeník further great success in his research, in his educational and organizational activity, in keeping his sharp intellect and good relations with his colleagues.

Jan Svoboda