

ACADEMICIAN VASILY FEDOROVICH CHEKHUN (ON 50th ANNIVERSARY)



Academician of the National Academy of Sciences of Ukraine Vasily Fedorovich Chekhun, director of the R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, National Academy of Ukraine (IEPOR), Head of the Department of Biological Mechanisms of Anticancer Therapy of the above mentioned Institute, Professor of Oncology, Doctor of Medical Sciences, who celebrated his 50th anniversary on November 15, 2006, was born in Trostynka of Kiev region, in 1956.

In 1980 after graduation of the Faculty of Therapy of A.A. Bogomolez Medical Institute of Kiev, MH of Ukraine, he had started his scientific career in the Institute of Oncological Problems (presently R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, NAS of Ukraine), where he had made a career from the young scientist to the director of the Institute, continuing the development of scientific school of Ukrainian experimental oncology created by R.E. Kavetsky.

V.F. Chekhun had occupied the positions of Senior Technician, Young, Scientific and Senior Researcher, Scientific Secretary of the Institute, the Head of the Department and starting from 1996, he has been heading IEPOR as a Director. In 1985 he defended his PhD thesis titled "Influence of thiosorbent K-2-9 on toxic and antitumor effects of cis-dichlorodiaminoplatina *in vivo*", and in 1994 — a Doctoral thesis titled "The role of plasma membranes of normal and tumor cells in the mechanism of realization of cytotoxic effects of coordination platinum compounds". In 1997 he has been granted with Professor degree, in 2000 elected as a Corresponding Member of NAS of Ukraine, and in 2006 elected as an Actual Member of NAS of Ukraine.

V.F. Chekhun participated in sabbatical programs in leading scientific centers of Austria, USA and Israel.

Academician V.F. Chekhun is notable for his wide scientific interests, deep scientific expertise and ability to find original directions for investigation localized on the border of different fields. The major direction of his scientific activity is the study of molecular mechanisms of drug resistance, systematization of prognostic methods of individual malignant progression and optimization of anti-tumor therapy efficiency. For the first time he determined and proved that coordination compounds of platinum, besides genetic, induce number of epigenetic mechanisms, which determine their therapeutic and toxic effect. According to the results of investigations, the role of structural and functional state of normal and transformed (sensitive and resistant) cell membranes in realization of biological effects of cytostatic drugs was clarified. Molecular profile of sensitive and resistant cells was determined and differences in key links of some cascades of signal transduction and induction of apoptosis were defined. Panels of monoclonal antibodies for prognosis of disease progression and evaluation of therapeutic efficiency were introduced. Technology of pharmacokinetic correction and pharmacodynamic of cytostatics by application of specific sorbents and inductors of activity of enzymes of microsomal oxidation accounting of body protection systems was established. The role of immune system and mechanisms of its participation in overcoming drug resistance was assessed.

Academician V.F. Chekhun is an author of more than 350 scientific publications, 17 patents and 7 wide known monographs among which "Interleukine network and cancer", "Cytostatic therapy of malignant neoplasia", "Breast tumors", "Immunology of malignant growth" made a significant contribution in the development of national oncological science.

His methodological and teaching activity on biological faculty of T. Shevchenko Kiev National University definitely deserves attention. Using novel knowledge of theoretical and experimental oncology, Vasily Fedorovich teaches course "Regulation of mechanisms of nonspecific resistance", that promotes the formation of scientific view for students and induces the education of young generation of oncologists-investigators.

5 Doctoral and 8 PhDs of Science were defended and prepared for defense under his supervision, evidencing on formation of scientific school in the field of experimental oncology, namely "Molecular basis and medical and biological problems of pharmacological resistance".

Since 1996 Vasily Fedorovich is an Editor-in-Chief of international scientific journal "Experimental oncology" and from 1999 — an Editor-in-Chief of scientific

and practical journal "Oncology"; he is a member of editorial boards of some international journals, including "Journal of Experimental and Clinical Cancer Research".

He successfully combines scientific and teaching activities with the management of scientific institute. He is a Member of the Bureau of the Branch of Molecular Biology, Biochemistry, Experimental and Clinical Physiology of NAS Ukraine, the Member of the Committee on State Awards of Ukraine in Science and Technology, the Member of Management Council of ESMO, the Head of Scientific Council on the speciality "Oncology", the Head of Scientific Council on the problem "Malignant Neoplasia", NAS of Ukraine, the initiator of numerous national and international scientific and practical conferences, symposiums and congresses.

For significant contribution to the development of modern oncological science V.F. Chekhun was granted with a number of State awards.

Man with bright personality, extremely hard-working, kind and intelligent, with wide scientific experience and potential — V.F. Chekhun with dignity represents Ukraine in world scientific community.

We are congratulating Vasil Fedorovich with anniversary and wishing him happiness, creative inspiration, further achievements and hope that in future Professor V.F. Chekhun will continue to contribute significantly to his field with his original and timely research.

***Editorial Board of the journal
"Experimental oncology"***

***R.E. Kavetsky
Institute of Experimental Pathology,
Oncology and Radiology, NAS of Ukraine***