The Kavetsky Institute of Experimental Pathology, Oncology and Radiology was formed in 1960 to strengthen cancer research in the former Soviet Union, to introduce scientific findings into practical medical innovations in the health protection field, and to train oncologists. Broad areas of research include tumor-organism interactions, tumor morphology, stem cells and their role in carcino- and leukemogenesis, hereditary factors and carcinogenesis, development of antitumor vaccines.

The Institute is currently comprised of a staff of 284, including 166 scientists of which one is an Academician, 27 Doctors of Science, 63 Candidates of Science (Ph.D./M.D.), and 18 postgraduate students. The Institute consists of 14 departments and an experimental research unit, and is in possession of a unique collection of cell cultures and tumor strains as property of the Ukrainian government. The Institute is certified to undertake research, to determine and test carcinogenic and mutagenic chemical and biological compounds as well as to identify and characterize products, materials and natural factors as oncological precursors.

Priority fields of research for the Institute include:
- Research of mechanisms of carcino- and leukemogenesis;
- Study of biology of tumor cell;
- Development of new methods for early and differential diagnosis of oncological diseases;

Generation of new technologies of antitumor therapy, including:
- Construction and development of new highly effective means of chemo- and biotherapy;
- Overcoming resistance to antitumor drugs;
Rehabilitation of immune system;
Sorption detoxification of organism of cancer patients
and scientific basement for creation of system of artificial organs.

Applications of research results include:
- The role of hereditary factors in the development of
tumors has been determined, methodologies in support of
genetic consulting have been developed;
- A panel of monoclonal antibodies for early and differen-
tial diagnosis of malignant tumors and leukemia has been generated;
- Native preparations for the comprehensive therapy of cancer patients
(Laferon, Blasten, Mebifon) have been applied;
- An antitumor auto vaccine for the prophylaxis of recurrence and meta-
stases has been developed and certified in Ukraine;
- Methods for determining the individual sensitivity of malignant cells to
antitumor preparations have been developed;
- A methodology for the photodynamic treatment of tumors with topic
localization has been introduced;
- The technology of sorption detoxification of cancer patients has been
developed;
- A Ukrainian laboratory for the diagnosis of hemoblastosis (1,000-1,200
studies per year, including 500-600 children) is in operation.

Priorities for continuing and future research include:
- Determination of molecular-genetic profile of human tumors;
- Development of efficient methods for individual prophylaxis;
- Detection of precancerous diseases and early tumor diagnosis in various
organs and systems;
- Generation of new principles and programs for the treatment of onco-
logical patients.

The Kavetsky Institute of Experimental Pathology, Oncology, and Radiology is a
member of the European Association of Anticancer Institutes, and within the
Institute there is a division of the European Institute of Ecology and Cancer. While
the Institute currently maintains a number of contacts across the globe, it is
nonetheless very interested in improving and expanding its capabilities, and is
equally interested in contributing to solving problems faced by other regions of
the world in the field of cancer research. The Institute enthusiastically welcomes
foreign collaborators and inquiries for initiating cooperative efforts.