

## CANCER RESEARCH INSTITUTE

### The Cancer Institute of the Japanese Foundation for Cancer Research

The Japanese Foundation for Cancer Research is a non-governmental, non-profit organization founded in 1908. The first president was Dr. Tanemichi Aoyama and a principal role was played by Dr. Katsusaburo Yamagiwa, world-famous for his achievement in the first experimental production of tar cancer in rabbit ears. It was an age when the disastrous aspect of cancer was not well-recognized socially, the main thrust of attention being concentrated on combatting the overwhelming problems of infectious diseases. However, after a quarter century of tough fund-raising struggles, the first Cancer Research Institute and Hospital in Japan were set up in 1934 at the present location. Since this was the only professional and comprehensive center of cancer research and treatment in Japan for many years, it was therefore simply called the Cancer Institute (Gann-ken) and the Cancer Institute Hospital without any geographical or other designation, and this name has been maintained to the present day.

The present Research Institute Director and one of the APJCP advisors, Dr Tomoyuki Kitagawa, is the latest in a long line of leading scientists in Japan, carrying on from the first, Dr. Mataro Nagayo (until 1941), Professor of Pathology and later President of the University of Tokyo, followed by Dr. Takaoki Sasaki (until 1945), a chemical biologist. In April 1945 at the end of World War II, all the facilities were unfortunately completely destroyed by bombing and fire.

After the war, however, the activities of the institute were resumed in 1948 under the directorship of Dr. Waro Nakahara, a biologist and chemist known for his discovery of the carcinogenicity of 4-nitroquinoline-1-oxide. In 1963, Dr. Tomizo Yoshida, world-famous for his contributions to experimental hepatocarcinogenesis, became the 4th Director. In his days, in collaboration with the Director of the Hospital and the Chairman of the Board of Directors, and also with the good fortune of coinciding with an unprecedented period of economic prosperity of Japan, the Cancer Institute and the adjoining Hospital



**The Cancer Institute Research Building**



**Dr Tomoyuki Kitagawa**

were completely renewed and enlarged to essentially its present form. In 1973, Dr. Yoshida passed away just before the opening of the new Cancer Chemotherapy Center, for which establishment he had been a major motivating force.

It was a time when molecular approaches were gradually gaining popularity in the field of cancer research. Rapidly introducing this new trend under the directorship of Dr. Sugano, presently heading the Chemotherapy Centre and very active in Japanese UICC efforts, the Cancer Institute produced a succession of epoch-making advances in subsequent years, including the cloning, sequencing and clarification of regulatory mechanisms of cytokines, such as interferon and interleukin-2 (Dr. T. Taniguchi), human T cell leukemia virus (Dr. M. Yoshida), cytochrome p-450 (Dr. Y Fujii), drug resistant p-glycoprotein (Dr. T. Tsuruo) and the APC gene (Dr. Y. Nakamura). At present the Cancer Institute



### **The Cancer Institute Symbol**

is again full of young energy and talent as already evidenced by the recent discovery and characterization of the TSC-2 gene responsible for hereditary renal cell carcinoma of the Eker rat (Dr. Hino), Smad6 a inhibitor of signaling by the TGF- $\beta$  superfamily (Dr. K. Miyazono) and success in induction of mouse colon cancers by conditional knockout of APC gene (Dr. T. Noda). Being small in scale, the Cancer Institute has always featured excellent interdepartmental collaboration between research scientists. The Institute and Hospital have also enjoyed a close relationship from the initial days onwards. Thus a large body of research data on cancer diagnosis, characterization and treatment has been accumulated providing a very important source of information through the collaborative efforts of clinical doctors and institute pathologists. The concept of "early cancer" of the stomach and the uterine cervix stemmed from such cooperation. The present building housing the Cancer Institute has 7 floors and encompasses the Department of Biochemistry (5F), Department of Genetic Diagnosis Research (5F), Viral Oncology (4F), Experimental Pathology (4F), Physics (4F), Pathology (3F), Cell Biology (1F) and Gene Research (1F), together with an Animal Room (6F), Library (2F), an Auditorium (2F), Recombinant DNA Laboratory (1F) and the office of the Japanese Cancer Association (2F). The separately located Cancer Chemotherapy Center also has 7 floors with an Animal Room (6F), the Division of Experimental Chemotherapy (5 and 4F) and the Division of Clinical Oncology (2F), the Cancer Mass Survey Clinic (1F) and the Anticancer Drug Information Office (ADIO) (3F). The cancer Chemotherapy Center has a recently opened annex in which the Genome Analysis Center is located (3F). The Hospital comprises the north, the south and central connecting buildings with a total of 514 beds.

Although principally non-governmental, the Institute has long received financial support from the Ministry of Education, Science, Sports and Culture of Japan which roughly comprises one fourth of the Institute budget. The remnant of the budgets of the Institute and Chemotherapy Center are drawn from donations and a special fund.

The symbol of the Cancer Institute and Cancer Institute Hospital is a representation of the Hakusen Shiomaneki crab (*Uca lactea*) commonly seen in Japan. The design was taken from the gird of a famous Japanese sword made in the 16th century and was originally used as the official symbol of the 9th International Cancer Congress (UICC) held in 1966 in Tokyo. It's proud history continues to be a strong stimulus to efforts at the very forefront of cancer research!



### **The Cancer Institute Hospital**