CANCER RESEARCH INSTITUTE

Sasaki Institute, Tokyo

The history of the “Sasaki Foundation” goes all the way back to the Kyoundo Hospital, which was established in Kanda-Surugadai, Tokyo, in 1881, by Tooyo Sasaki (First Director of the Kyoundo Hospital). The origin of the present Sasaki Institute is a private small laboratory established by Masakichi Sasaki (2nd Director of Kyoundo Hospital) in a site of his house in 1894. Thereafter, the laboratory was taken over and expanded by Takaoki Sasaki (3rd Director of Kyoundo Hospital). On the first of September 1923, a historically severe earthquake attacked the Tokyo area and destroyed the greater part of the city. Both the laboratory and the hospital were also destroyed and burned. Next year, a temporary Institute building was erected, and in 1938 a concrete and permanent building of the Sasaki Institute was completed by Takaoki Sasaki, this building then being used until 1990. The next year, he donated the building, together with some of his private property, and applied to the Japanese Government to establish a foundation. This was approved by the Ministry of Education in January 1939 as a non profit research foundation, and then the “Sasaki Foundation” was established (Takaoki Sasaki: First Founder of the Foundation and 1st Director of the Sasaki Institute). Two years later, the Kyoundo Hospital was also donated to the “Sasaki Foundation”, and thereafter the “Sasaki Foundation” has comprised two organizations: the research institute (Sasaki Institute) and the hospital (Kyoundo Hospital). In 1990, the Sasaki Institute was reconstructed and a new building was completed in the same site.

Present Director of the Institute, Dr Akihiko Maekawa

From its very beginnings the Sasaki Institute has been responsible for many pioneering basic studies in the medical field. Major contributions have been made to: 1) studies on the decomposition of amino acids by bacteria and synthetic mechanisms; 2) establishment of models for the induction of liver cancer in rats by feeding a dye-based chemical carcinogen, o-aminazotoluene; 3) studies on ascites tumors and cancer chemotherapy screening, employing ascites tumor system, and 4) establishment of analbuminemic rats and defining their characteristics.
Among these research areas, the most remarkable and epoch-making work was “induction of hepatic cancer in rats by o-aminoadzotoluene, one of the azo dyes”. This research was published in 1932 by Takaoki Sasaki and Tomizo Yoshida, the study being the first report in the world literature of a successful method for induction of cancer in an organ of animals by feeding a chemical and therefore one of the most valuable contributions to the field of cancer research. Drs Sasaki and Yoshida were twice awarded the Imperial Prize from the Japan Academy for their many major research advances and they also received Orders for Cultural Merit in 1940 and 1959.

Since its establishment the Sasaki Institute has comprised two Departments, Pathology and Chemistry. Since the reconstruction, there have been three: Pathology, Biochemistry and Cell Genetics.

The prime research interest of the Department of Biochemistry is sugar chains of glycoconjugates and their roles in disease processes, while the Department of Cell Genetics is concentrating attention on the molecular background to leukemogenesis and roles of transcription factors in growth and differentiation. The Department of Pathology, formerly lead by Dr Akihiko Maekawa and now by Dr Dae Nakai, both Editorial Board members of the APJCP, has research focuses of direct relevance to cancer prevention. These are: 1) involvement of free radicals in the molecular mechanisms of endogenous and exogenous carcinogenesis; 2) experimental induction and prevention of female genital tumors in rodents, in which the laboratory is playing a world-leading role; 3) evaluation of the toxicity/carcinogenicity of medical drugs and environmental chemicals. The pathology group of the Sasaki is also fortunate in having the support of the present president of the Sasaki Foundation, Dr Yuki Kurukawa, with his many years experience in the toxicological pathology field.

Located in central Tokyo, near Ocha-no-Mizu station, the Sasaki Institute has a long and proud history of cancer research. With its present staff it can look forward to continuing to contribute major advances to the Asian Pacific effort to control neoplasia.