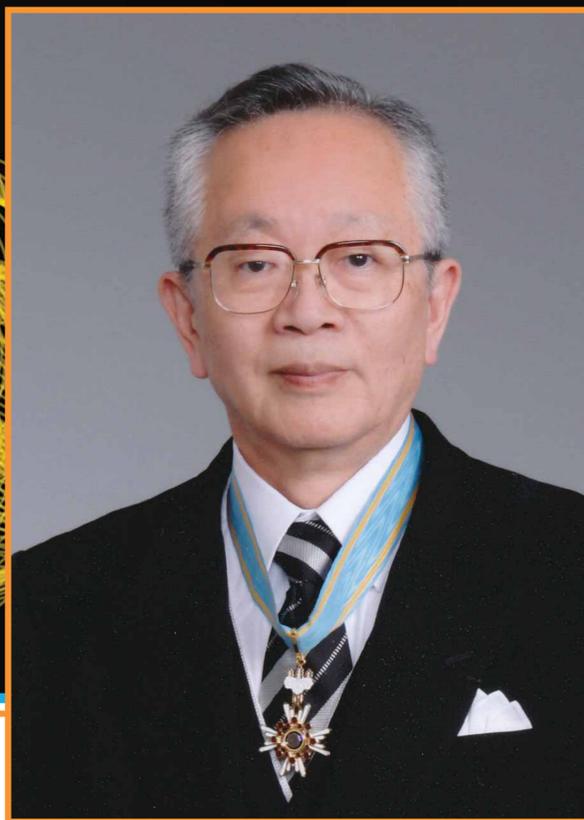


Outstanding Contributions Over the Last 50 Years



Kiyomitsu Kawachi

Kiyomitsu Kawachi graduated from the Applied Physics Department of Tokai University in 1963, when he joined National Institute of Radiological Sciences (NIRS), and was affiliated with Division of Physics. Although he did the most of research works at NIRS, between 1969 and 1974, he spent at the National Cancer Center of Japan, and the University of Chicago. In the meantime, he developed the well known the electron beam calculation model for treatment planning. He got a doctorate degree in medical sciences from Tohoku University in 1977. At NIRS, he contributed to the developing of various particle therapy systems, such as fast neutrons, protons and heavy ions. He developed three dimensional scanning techniques for proton therapy at NIRS cyclotron in his early days. He also compared potential of charged particles including protons, carbon ions and the other heavy ions for cancer therapy, and concluded that carbon beam was the most suitable for deep seated tumor therapy.



With regards to heavy ion therapy in Japan, Kawachi led the project from the beginning. In 1984 NIRS started a well known HIMAC (Heavy Ion Medical Accelerator in Chiba) project and Division of Heavy Ion Research was established in 1987. He managed the progress of the project as a Section Head and later the Division Director in 1993. HIMAC was completed in 1993 and carbon ion therapy, which was selected at NIRS according to his analysis, started in 1994. Kawachi was appointed Deputy Director General of NIRS in 1999.

HIMAC has been very reliable and efficient during 20 years operation, and so far more than 7,000 patients were treated with carbon ion beam. Now, carbon beam facilities are being constructed or planned not only in Japan, but also all over the world. Therefore, the contributions of Kawachi to carbon ion beam therapy are significant and may be lasting to the future. Kawachi was recommended an Honorary Member of PTCOG (Particle Therapy Cooperative Group) in 2001.

He served as the president of Japanese Association of Radiological Physicist (JARP) between 1998 and 2000, and the president of Japan Society of Medical Physics (JSMP) during 2001. It was during his presidency that JARP developed to JSMP, an academic organization truly independent and to open to all experts in the fields related to medical physics. After JSMP establishment, the number of ordinary members of JSMP increased rapidly and has become three times compared to that of JARP.

Although Kawachi initiated the HIMAC project and played a definitive role, its success was the result of cooperation of many people including administration staffs. Especially Drs. Yasuo Hirao, Satoru Yamada, Tatsuaki Kanai and Masahiro Endo at NIRS were acknowledged for their essential contributions.