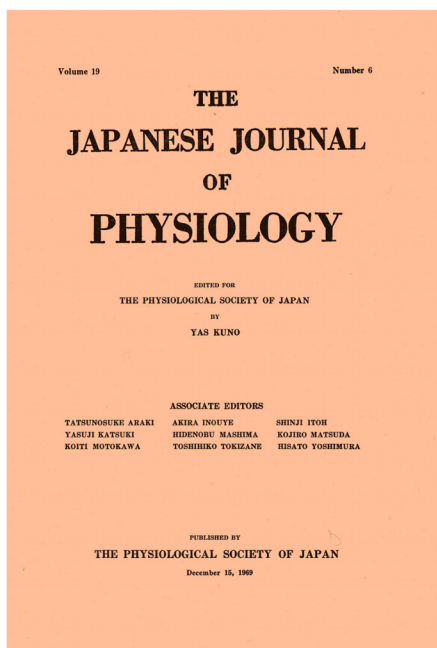


Past Covers of JJP



表紙

- 1) 肌色B5、1-20巻まで
- 2) 緑色B5、21-44巻
- 3) 赤白A4、45巻以降



The Memory of Prof. Y. Kuno

久野寧先生追悼文

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Yas Kuno
(1882-1977)

Professor Emeritus of Nagoya University
Member of the Japan Academy

Dr. Yas Kuno, professor emeritus of Nagoya University, died on December 30, 1977, at the age of 95, after being confined to bed for several months. He was born on March 30, 1882 in Aichi prefecture. After graduating from Aichi Medical School, which was the forerunner of Nagoya University School of Medicine, he studied physiology at the University of Tokyo and then at Kyoto University until 1911, when he was appointed professor of physiology at Nanman (South Manchuria) Medical School. In February 1913, he went to Europe to study physiology at the University of Leipzig and to study physiology of circulation in the Department of Physiology, University College London, with Prof. Ernest Starling.

After returning to Japan, he received the degree of Doctor of Medical Science from the Ministry of Education in 1916. In 1921, he started to study physiology of sweating which became his life's work. He devised a new method of measuring the rate of sweating continuously from the human skin, and found that sweating can be classified into two types, *i. e.*, thermal and mental sweatings. The former is brought about by sensory stimulation resulting from heat accumulation in the body, while the latter is excited by mental stress. Together with Dr. Korehiro Ogata, now a professor emeritus of Kumamoto University, he found the presence of entirely inactive sweat glands in human skin. He also studied the development of the secretory activity of sweat gland, together with their nervous innervation and humoral control.

After leaving Manchuria in 1935, he returned to Kyoto University and was then appointed professor of physiology at his Alma Mater, now Nagoya University School of Medicine, and studied the chemistry of sweat with Dr. Shinji Itoh, now a professor emeritus of Hokkaido University, and found that heat training of sweat glands results in a decrease of salt concentration of sweat. Starting with these findings he studied the homeostatic mechanism of water and salts in body fluid in heat training and the mechanism of heat acclimatization, especially in tropical countries.

His works covered all areas of the physiology of sweating and related problems, and his pioneering works were compiled systematically in his well-known books: *The Physiology of Human Perspiration* (J. & A. Churchill, Ltd., London, 1934) and *Human Perspiration* (C. C. Thomas, Publisher, Springfield, 1956). The physiology of human sweating was completely described, clearly and systematically for the first time.

After retiring from Nagoya University in 1955, he continued his studies on human sweating with me at Kyoto Prefectural University of Medicine, and with

Dr. Shunichi Usami of Mie University. The final presentation of his life-long work was made in a special lecture entitled "The Mechanism of Human Sweat Secretion" at the XXIII International Congress of Physiology in Tokyo in 1965. In this lecture he presented a hypothesis on the evolutionary development of sweat apparatus by demonstrating how the nervous control of human sweat apparatus has developed into the cholinergic innervation from the adrenergic innervation of the primitive sweat glands of animals.

In addition to these research activities, he proposed, as a member of the Science Council of Japan, that the Japanese Government should promote cooperation among research workers in various fields, and thus the Government organized a system of integrated scientific research groups in the Ministry of Education. As a council member of IUPS, he organized the Japanese Union of Physiological Sciences. The Japanese Journal of Physiology was founded by him in 1951, and was edited and published by him until 1970, when its publication was handed over to the Physiological Society of Japan and the University of Tokyo Press. In 1949, he organized the Vitamin Society of Japan where the Journal of Vitaminology originated.

The brilliant work of Dr. Kuno was recognized by the Japanese Government in 1941 when he was awarded the Imperial Prize by the Japan Academy, and then the highest decoration in the field of cultural achievements, the Order of Cultural Merits, by the Government in 1963. He was appointed a member of Japan Academy in 1949 and also received honorary membership in the Physiological Society of Great Britain, the American Physiological Society and the Physiological Society of the Federal Republic of Germany.

It was Dr. Kuno's hobby to provide hospitality to his friends and pupils, with the help of his wife, Fumi, who spoke English fluently. He was a broad-minded, warm-hearted man who had many intimate friends throughout the world. Though he lost his wife in 1951, he spent happy days in his last years, served by his family, especially his good children, three sons, all university professors, and three daughters.

The physiology of human perspiration whose scientific basis was established by Dr. Kuno stimulated the development of climatic physiology and physiology of thermal regulation in Japan in which his pupils, Dr. Kokichi Ohara, professor of physiology, Nagoya City University, and Dr. Teruo Nakayama, professor of physiology, Osaka University play leading roles. With the death of Dr. Kuno, we have lost a good teacher and an outstanding physiologist in the world; all his pupils and friends mourn his death deeply.

Hisato YOSHIMURA