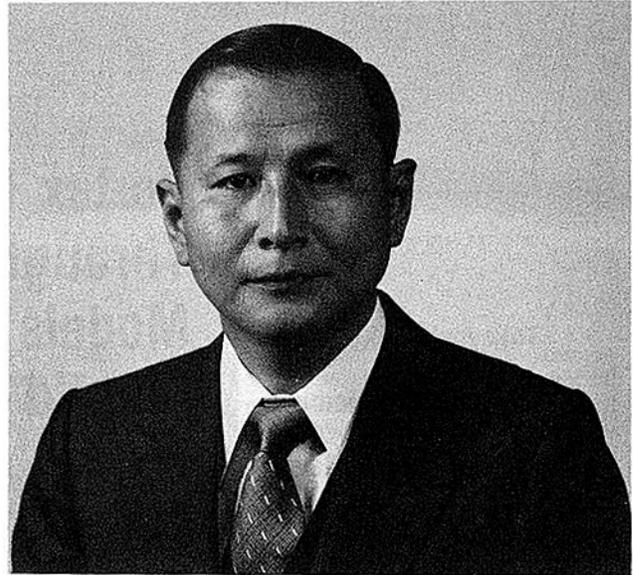


IN MEMORIAM TAKEHIKO AZUMA

On the next page of this issue, an article written by Dr. Azuma and his colleagues is published. Unfortunately Dr. Azuma passed away on December 13, 1987 and this article became his first posthumous publication. With his untimely passing, Bioengineering lost a leader; Microcirculation lost a thinker; Biorheology lost a founder; Japan lost a great scientist and educator; we lost a dear friend. His contributions to physiology, medicine, and to international cooperation, especially between Japan, United States and China, will never be forgotten. His gentle smile and penetrating questions at scientific meetings will be remembered by those who knew him.

Dr. Azuma was born on November 18, 1926 in Tokyo. He completed his undergraduate medical education in University of Tokyo in 1951, finished his graduate courses there in 1957, and received his M.D. degree in 1959. He worked as a research assistant in the faculty of medicine in University of Tokyo from 1957–1966. Then in 1964 he came to the United States as an NIH Fellow and studied under Maurice Visscher at the University of Minnesota. Between 1966 and 1984 he was Professor of Medicine at Shinshu University, being Dean of the Faculty of Medicine in Shinshu from 1980–1984. In 1984 he accepted the Chairmanship of the Board of Directors of Juntendo University and Hospital in Tokyo, and remained in that post until his death. He was the President of Japanese College of Angiology in 1986. In 1987 he received the Japanese National Award, the Order of the Rising Sun, Gold Rays with Neck Ribbon, from the Emperor of Japan.

As a physiologist, Dr. Azuma entered biomechanics through his paper (co-authored with Syoten Oka) on the critical closing of arterioles due to smooth muscle action when the transmural pressure approaches zero. Subsequently he made extensive investigations into the mechanical properties of arteries and veins, hydrodynamical factors in atherosclerosis, vibration-induced hyper-responsiveness of arterial smooth muscle, and Raynaud's disease. He invented a camera-type diameter gauge applicable to small blood vessels and lymphatics. A prolific writer, he translated, edited, or co-edited 21 books, and authored 167 papers in journal publications. He was an indefatigable meeting goer. A short time



T. Azuma

before his death he participated in the Second Japan, U.S., China Conference on Biomechanics in Osaka and enlivened it with many interesting questions and comments. He appeared a little thin at the time, but was full of humor, wit, and enthusiasm. We would like to remember him as he was: always full of humor, wit, enthusiasm, leadership, and a sense of balance.

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