Arthur Karmen, M.D.
(1930 - 2018)

A pioneer in medicine, Arthur Karmen, M.D., was born in New York City in 1930 and grew up in the Bronx, New York. He graduated from the Bronx High School of Science at age 16, and earned his A.B. degree in 1950 and his M.D. in 1954 from New York University.

At age 22, while a medical student, Dr. Karmen sought out a research project to complete during a summer elective. Though few opportunities existed, he was challenged to explore the possibility that enzymes might be released into blood following a myocardial infarction. Dr. Karmen was provided with an empty laboratory and a $200 stipend, but obstacles and lack of funding did not stop him from ultimately making his seminal contribution to the field of medicine.

Dr. Karmen demonstrated the presence of glutamic-oxaloacetic and glutamic-pyruvic transaminases (aspartate and alanine aminotransferases) in blood. In 1954, he devised the method for measuring these enzymes. He then studied the serum of patients with acute myocardial infarction, showing that glutamic-oxaloacetic transaminase increased after cardiac injury. The enzymes were measured in "Karmen Units." Further studies proved the usefulness of Dr. Karmen's assay in cardiac and liver disease. Dr. Karmen's method, with minor modifications, is still used today in laboratory testing around the world.

After completing two years of residency in internal medicine at Bellevue Hospital, Dr. Karmen went on to work at the National Heart Institute of the National Institutes of Health, where he studied gas chromatography, developing ionization detectors and methods for measuring radioisotopes in chromatographic effluents in lipid metabolism. He continued his work in nuclear medicine at Johns Hopkins University from 1963 to 1968, developing flame ionization detectors. He then returned to New York, serving as the director of clinical laboratories at New York University. In 1971, he joined the faculty of Albert Einstein College of Medicine where he became the first chairman of the Department of Laboratory Medicine. He worked tirelessly to improve clinical laboratory testing through automated methods to expedite testing and reduce cost. He retired as professor emeritus in 2012 at the age of 82.

Throughout his career, Dr. Karmen served as a mentor to countless students, residents, para-medical professionals and colleagues pursuing scientific and medical careers. Dr. Karmen holds several patents and published approximately 200 papers that have been cited more than 6,000 times.

The Arthur Karmen, M.D., Award for Outstanding Scientific Research has been created by Carol L. Karmen, M.D., associate professor of medicine at New York Medical College (NYMC) to honor her father's legacy. Throughout his life, Arthur Karmen fondly remembered NYMC. Although he did not attend the College, it was the first medical school from which he received a letter of acceptance— a telegram from New York Medical College, Flower and Fifth Avenue, on Thanksgiving Day.