Robert I. Levy, MD (1937-2000)

Robert I. Levy, MD, a graduate of Cornell University and Yale Medical School, completed a residency in internal medicine at Yale-New Haven Hospital. In 1963 he became a clinical associate at the National Heart Institute in the Molecular Disease Branch headed by Donald S. Fredrickson, MD. During his early days in this laboratory, he and Robert S. Lees, MD, worked with Dr. Fredrickson to demonstrate the facility of an electrophoretic technique to characterize the human plasma lipoproteins. This set the stage for a typing system that was used for more than 20 years to organize the study of inherited disorders and to plan clinical trials.

At the NIH, he directed early clinical trials with bile acid sequestrants and fibrates demonstrating their particular effects on specific lipoprotein species. He began studies with immunochemical techniques that demonstrated the existence of multiple apolipoproteins in HDL and VLDL that differed from the major protein of LDL called apo B. Using radio-labeling of lipoproteins, in collaboration with Steven H. Quarfordt, MD, he demonstrated that VLDL is converted into LDL in human plasma and that slow clearance of LDL is the physiologic abnormality in familial hypercholesterolemia. He mentored young scientists and worked with them to isolate apolipoproteins CI, CII, and CIII, which are important determinants of the production and clearance of lipoproteins from blood.

In 1970, along with Dr. Fredrickson, a nationwide program was designed with 12 universities to obtain more specific data on the distribution of the various lipoprotein disorders in large community studies. Under his direction, this multicenter system organized a trial of cholesterol reduction with a bile acid sequestrant (The Lipid Research Clinics Primary Prevention Trial) that demonstrated for the first time that coronary artery disease could be prevented in middle-aged persons with high cholesterol but with no previous evidence of vascular disease.

In 1975, he became Director of the National Heart, Lung and Blood Institute and guided it through six years of highly productive scientific investigation in lipoprotein metabolism and new means of heart disease prevention. In 1981 he was appointed vice president and dean of Tufts University School of Medicine. He later served as vice president for health affairs at Columbia University.

He became president of the Sandoz Research Institute in 1988 and helped develop a new drug for cholesterol reduction, fluvastatin. In 1992 he joined American Home Products as president of its Wyeth-Ayerst research division, and in 1998 he was named senior vice president for science and technology at American Home Products.

He was author or co-author of more than 300 scientific articles and helped scores of young scientists to develop careers in lipoprotein metabolism, clinical research, and preventive cardiology.