

Gustav Schonfeld, MD (1934–2011)

Gustav Schonfeld, MD, made major contributions to the field of lipid research. During his long career, he worked in both laboratory and clinical research; took care of patients; taught, mentored, and collaborated with numerous colleagues; and contributed time and effort to multiple organizations.

He is known for his work on apolipoprotein B (apoB) and for extensive work on the structure and function of lipoproteins as well as studies on the effects of hormones on lipoprotein structure and metabolism. He also investigated the effects of lipid-lowering medications on lipoprotein structure and metabolism and was involved in many clinical trials of lipid lowering medications including the landmark Coronary Primary Prevention Trial.

Dr. Schonfeld became interested in hypobetalipoproteinemia in the early 1990s and continued work in this area for more than 20 years. He identified various mutations of apo B, which lead to different lengths of this apolipoprotein and the mechanisms involved in hypobetalipoproteinemia. He went on to look at the relationship of hypobetalipoproteinemia to hepatic steatosis, using magnetic resonance spectroscopy to quantitate liver fat levels. This work on patients with very low levels of LDL-cholesterol (LDL-C) remains significant as new therapeutic agents for LDL lowering have emerged. The very low levels of LDL-C that can be achieved with antibodies to proprotein convertase subtilisin/kexin type 9 (PCSK9) are in some cases similar to those seen in hypobetalipoproteinemia. Dr. Schonfeld was a pioneer in studies of the relationship between the synthesis of truncated forms of apo B and steatosis.

Dr. Schonfeld was born in Hungary and experienced the Holocaust, spending more than a year of his childhood in Nazi concentration camps. He eventually wrote about this experience and his life after coming to the U.S. in his book, *Absence of Closure*, published in 2009.

After the war, his family settled in St. Louis. He earned a bachelor's degree in 1956 and a medical degree in 1960 — both from Washington University. After internship and residency at New York University, Bellevue Medical Center, he was chief resident at the The Jewish Hospital of St. Louis and then did postgraduate training in endocrinology and metabolism at Washington University from 1964 to 1966. He spent two years at the U.S. Air Force School of Aerospace Medicine as a research flight medical officer and then was assistant professor of medicine at Washington University.

After moving to Boston, he had appointments at Harvard Medical School and the Massachusetts Institute of Technology (MIT) Clinical Research Center and was an associate professor of metabolism and nutrition at MIT. In 1972 he returned to Washington University School of Medicine to lead the Lipid Research Clinic program and the Division of Atherosclerosis, Nutrition and Lipid Research from 1972 to 2002. From 1996 to 1999, he served as the chairman of the Department of Medicine and physician-in-chief at Barnes-Jewish Hospital.

Dr. Schonfeld was known nationally and internationally for his work in lipid metabolism. He was a warm, outgoing, and compassionate person, and dedicated to his family. His contributions to lipid research will be long remembered.