Richard Havel, MD (1925–2016)

Richard Havel, MD, was a world-renowned researcher in the field of lipoproteins and a founding member and the former director of the UC San Francisco (UCSF) Cardiovascular Research Institute (CVRI). Dr. Havel worked at the National Heart Institute from 1953 to 1956, where he initiated his research on lipoproteins and lipid transport. While at the National Heart Institute, Havel developed a preparative ultracentrifugal technique for the isolation of plasma lipoprotein species that was the foundation for a generation of discovery of the biology of lipid transport and of its relationship to atherosclerotic vascular disease. The publication describing this technique is among the most often cited in all of medical bibliography. It led to the definition of many lipid phenotypes still identified today. Dr. Havel served as the CVRI’s director from 1973 until his retirement in 1992. He continued to make major contributions to understanding plasma lipoprotein metabolism and its regulation and importance in human disease throughout his long career.

He was the first to establish the mechanism of a heritable lipoprotein disorder — lipoprotein lipase deficiency — and subsequently demonstrated that the metabolism of chylomicrons proceeds in two discrete steps. Later, he showed that very low-density lipoprotein metabolism involves similar steps, elucidated its regulation by free fatty acid flux, and provided an explanation for low-density lipoprotein formation.

Havel also served as the director of the Specialized Center for Research in Atherosclerosis (SCOR center) that produced a large body of integrated research on the biology and clinical significance of lipoprotein disorders. This included one of the first demonstrations that reducing the levels of atherogenic lipoproteins would decrease the plaques in diseased arteries.