

In Memoriam

Robert I. Levy
1937–2000

THE *Journal of Lipid Research* and we in the lipoprotein research field lost a highly esteemed colleague and friend with the passing of Dr. Robert I. Levy on October 28, 2000. Dr. Levy died at the Columbia-Presbyterian Hospital after a short illness. Many tributes were presented about Dr. Levy at a memorial service held at Caspary Hall at Rockefeller University on November 28, 2000, in New York City.

Dr. Levy had been a major figure in the field of lipid metabolism, dyslipoproteinemia, and coronary heart disease for more than three and one-half decades. He was one of the true pioneers of preventive cardiology, having entered this field at a time when there was relatively little public or general interest in cholesterol and cardiovascular prevention.

Robert Levy burst on the scene of lipid metabolism at the tender age of 26. Bob, as he was known to his friends, family, and colleagues, was born in the Bronx, NY, graduated from the Bronx High School of Science, and arrived at Cornell University in Ithaca at the age of 16. After an exemplary history as a student at Cornell University and Yale University Medical School, with house training at Yale New Haven Hospital, Bob joined the lipid metabolism branch of the National Heart, Lung, and Blood and Institute (NHLBI) in 1963. Together with his mentor and boss at the time, Dr. Donald Fredrickson, who was director of clinical research at the Institute, Dr. Levy conducted an extraordinary set of investigations over the ensuing 18 years. The series of articles in *The New England Journal of Medicine* by D. S. Fredrickson, R. I. Levy, and R. S. Lees in 1966 called the attention of the medical and scientific community to lipoprotein families and types and led to the introduction of a typing system for classifying lipoprotein disorders based on measuring cholesterol content of the lipoprotein fractions, heparin manganese precipitation, separation and cholesterol measurement of the fractions in the ultracentrifuge, and use of paper electrophoresis to qualitatively separate the lipoprotein fractions. The typing system built on the earlier work of Drs. Oncley, Gofman, Havel, Bragdon, Eder, Hatch, and Lees. Soon the typing system using the Roman numerals I through V was being promulgated and used all over the world. Fredrickson and Levy formed a strong team at the National Institutes of Health (NIH) that provided a setting for training of many others who have entered the field of lipoprotein metabolism, dyslipidemia, and coronary heart disease prevention. Virgil Brown, John LaRosa, Ernie Schafer, Gerd Assmann, Heiner Greten, Charles Glick, Robert Mahley, Tom Bersot, Jan Breslow, Peter Kwiterovich, Neil Stone, and I are but a sampling of those whose careers were launched and greatly influenced by

the environment of the Fredrickson-Levy laboratory and clinic at NIH.

As Director of the NHLBI, Bob Levy, on behalf of the Institute, received the award for the National High Blood Pressure Education Program. One could cite many of Bob's contributions, including exchange programs in lipid research with the former USSR, Italy, China, and Israel, but the one that really bears Bob Levy's mark more than any other is the Lipid Research Clinic Coronary Primary Prevention Trial. This ambitious project, undertaken along with the establishment of The Specialized Centers of Research in Atherosclerosis at the beginning of the 1970s, provided the framework for much of what subsequently led to the National Cholesterol Education Program and what we practice today. The Clinic set up a network of 12 clinics throughout North America, with additional clinics in the USSR and Israel. Each clinic was to characterize a population of individuals with various lipid profiles in their own community, and then, after an initial governance study and demonstration project, participate in launching the Coronary Primary Prevention Trial. This study was designed to test the lipid hypothesis, namely, that reducing cholesterol or low density lipoprotein in a double-blind placebo-controlled trial would reduce the risk of coronary heart disease. It was very difficult to recruit for this study and for subjects to maintain adherence to treatment. The participants took cholestyramine over a 7-year period, and the results showed that a 1% reduction in cholesterol was associated with a 2% reduction in risk of an initial event. It was on the basis of this test of the lipid hypothesis that the NIH subsequently convened a consensus group panel on cholesterol chaired by Daniel Steinberg and then launched the National Cholesterol Education Program. Bob Levy's hand was evident at the beginning, throughout the middle, and at the end of the Coronary Primary Prevention Project.

In the meantime, Dr. Levy had become Director of the NHLBI at the age of 38, but left the Institute in 1981 to join academia. After periods of administrative leadership at Tufts University School of Medicine and Columbia University College of Physicians and Surgeons, Dr. Levy joined the Sandoz Research Institute as President from 1988 to 1992 and then joined American Home Products as President of its Wyeth-Ayers Research Division in 1992. In 1998 Dr. Levy became the Senior Vice President for Science and Technology at American Home Products. His major contributions to developing the research pipeline at American Home Products were admirably extolled at the memorial service by Mr. John R. Stafford, Chief Executive Officer and Chairman of American Home Products.

Bob Levy touched many lives, and it was apparent by the moving presentations at the memorial service just how deep an impact he had made. From trainees to patients, to staff, to peers, he had the ability to communicate a genuine interest and to show his feelings of warmth and understanding in many different ways. Bob had the ability to form strong and lasting emotional bonds with individuals, which can only be explained on the basis of his truly having a personal interest in the lives of a large number of people. Combine Bob's imaginative research, his clinical insights, and his administrative leadership, and what we have here is a unique individual. But besides his work, his friends, and his family, Bob had roots deeply planted in

the earth and environment we inhabit. He loved the earth—he loved to garden and plant and mow grass. He was ever seeking bigger lawns and gardens to tend. He loved the snow, predicting the weather and the seasons. He said the only way you could tell it was spring in New York was by watching the ants appear between the cracks in the sidewalk. All Bob's friends and colleagues join in sharing our enormous admiration and affection for him. He has left us a great legacy, which I know will last long after he has gone.

Antonio M. Gotto, Jr.
Weill Medical College of Cornell University