

## **Bruce Blumberg. University of California, Irvine (USA)**

Bruce Blumberg received his Bachelor's degree from Rutgers University in 1976. After moving to California in 1978, he did his Ph.D. studies at UCLA from 1982-1987 where he studied the molecular biology and biochemistry of basement membranes in the laboratory of Prof. John Fessler. Dr. Blumberg spent a year as a postdoctoral fellow at the University of Medicine and Dentistry of New Jersey with Prof. Markku Kurkinen to complete earlier collaborative studies. Dr. Blumberg then did his major postdoctoral training in the molecular embryology of vertebrate development with Prof. Eddy De Robertis at UCLA from 1988-1992. Dr. Blumberg trained in molecular endocrinology at the Salk Institute for Biological Studies, joining the laboratory of Prof. Ronald M. Evans as a Staff Scientist in 1992. There he led the effort to identify new hormones that act through so-called "orphan" nuclear receptors. Dr. Blumberg joined the faculty at the University of California, Irvine in 1998 where he is currently Professor of Developmental and Cell Biology, Pharmaceutical Sciences and Biomedical Engineering

The Blumberg laboratory studies the biology of nuclear hormone receptors in development, physiology and disease. Particular interests concern the early patterning of the vertebrate embryo, and the links between exposure to environmental endocrine disrupting chemicals and the development of cancer and obesity. He proposed the obesogen hypothesis which holds that exposure to chemical "obesogens" important factor predisposing individuals to weight gain and obesity. His laboratory showed that exposure to obesogenic chemicals leads to increased adiposity in vivo and that many candidate obesogens can induce stem cells and preadipocytes to differentiate into adipocytes in vitro. His laboratory recently demonstrated that maternal obesogen exposure leads to epigenomic changes that can be transgenerationally inherited through at least the F4 generation, predisposing exposed animals to obesity and modifying individual response to diet.