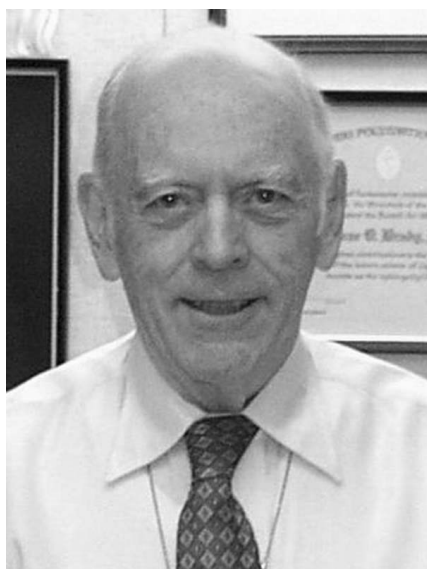




Biography of Dr. Roscoe O. Brady



Dr. Roscoe O. Brady was born in Philadelphia, Pennsylvania in 1923 and at present is Chief of the Developmental and Metabolic Neurology Branch in the National Institute of Neurological Disorders and Stroke (NINDS). After receiving his MD degree from Harvard University in 1947, he interned at the hospital of the University of Pennsylvania and became a postdoctoral fellow in clinical medicine in the Department of Medicine at University of Pennsylvania, remaining there until 1950. Following two years on active duty in the US Navy, he joined the National Institute of Health in 1952 and remained there until now. During his postdoctoral years while working in the laboratory of Dr. Gurin, he initially discovered the essential

requirement of bicarbonate buffer during biosynthesis *in vitro* of fatty acids. Later on this observation led others to establish the crucial CO₂-fixation step for the formation of Malonyl-CoA in the biosynthetic pathway of fatty acids.

Dr. Brady has dedicated most of his research career to unveiling the mysteries surrounding human hereditary metabolic disorders and has set the stage for enzyme replacement therapies of a number of genetic diseases (Sphingolipid disorders). Dr. Brady and his colleagues identified the enzymatic defects in Gaucher disease, Nieman-Pick disease, Fabry disease, and the specific metabolic abnormality in Tay-Sachs disease. He and his associates developed diagnostic, carrier detection, and prenatal tests for the first three of these conditions. He and his coworkers developed effective enzyme replacement therapy for patients with Gaucher disease and Fabry disease. He is currently exploring gene therapy in the murine model of Fabry disease and carrying out basic research and clinical investigations on the hereditary neurogenetic disorder known as Mucopolidosis Type IV.

Dr. Brady received the Gairdner Foundation International Award in 1973; the American Academy of Neurology Cotzias Award in 1980; the Passano Foundation Award and the Laskar Foundation Clinical Medical Research Award in 1980; the Sachs Award from the Child Neurology Society in 1990; the Kovalenko Medal from the National Academy of Sciences USA in 1991; and the Alpert Foundation Prize from the Harvard Medical School in 1992. He is a member of the National Academy of Sciences, USA and a member of the Institute of Medicine of the National Academy of Sciences.

Dr. Brady and his associates have published over 430 papers and articles in internationally recognized journals and books.