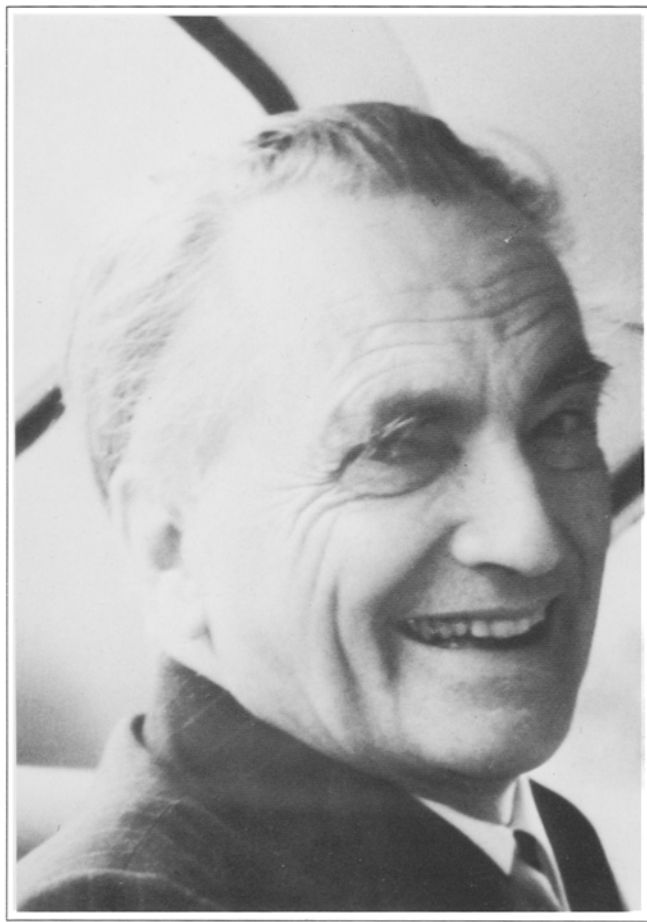


*In Memory of*  
*Walther Wilbrandt*



## Walther Wilbrandt

1907 – 1979

With Walther Wilbrandt's death on July 25, 1979, the field of membrane biology has lost one of its great pioneers. For almost 50 years he had inspired this field with ideas, quantitative concepts, and skilful experimental research. His major scientific contributions, his crystal-clear lectures, his enthusiasm, and wonderful sense of humor will be remembered by the scientific community. His friends all over the world will sorely miss this deeply humane and humble man.

Walther Wilbrandt was born in Berlin, Germany, in 1907. He spent his childhood in Tübingen and studied medicine in Tübingen, Freiburg, Berlin, Vienna, and Kiel. He finished his studies with a doctoral thesis in Physiology under the guidance of Professor Rudolf Höber in Kiel. Wilbrandt left Germany after the Nazi regime had come to power. In 1934–35 he worked as Rockefeller Fellow in the United States with L. Michaelis at the Rockefeller Institute in New York and with A.N. Richards and R. Höber at the University of Pennsylvania. During that year he performed the first measurements of transtubular potentials in the *Necturus* kidney in A.N. Richard's laboratory and began his pioneering work on the relation between cell metabolism and membrane permeability in erythrocytes.

Physico-chemical approaches to the relatively new field of membrane permeability and transport fascinated Wilbrandt from the very beginning of his career. Very early he recognized the need for quantitative theories combined with crucial experimental tests. Twenty years later he and his brother-in-law, Thomas Rosenberg, developed a mathematical theory of carrier transport that greatly influenced thinking and experimental approaches in this field. The most important part of his experimental work was devoted to

the mechanism of sugar transport through erythrocyte membranes. In this system he successfully tested predictions of the mobile carrier theory, like counter transport, competitive acceleration, and inhibition. On the other hand, he was well aware of certain shortcomings of the original Wilbrandt-Rosenberg theory and worked on its extension. A major part of his thinking centered around problems in the field of membrane transport, and he was scientifically active until his last day in life.

From 1936 onwards Walther Wilbrandt had his academic home at the University of Bern, Switzerland. He first worked in the Department of Physiology. In 1945 he became professor and chairman of the Department of Pharmacology, a position he held until 1972. He was Dean of the Medical Faculty in Bern and served as President of the Swiss Academy of Medical Sciences. He was a member of the German Academy of Natural Sciences "Leopoldina" and was awarded the "Schmiedeberg-Plakette", the highest honor of the German Pharmacological Society.

Walther Wilbrandt was a deeply modest person. He considered his role as scientist as a privilege and as a great responsibility towards society. His human warmth, his moral integrity, his sparkling wit and humor created for him many friends. He had a wide span of interests in literature, music, and theatre. He was a charming host in the generous atmosphere of his home.

Walther Wilbrandt was among the first members of the Board of Editors of the Journal of Membrane Biology. This issue of the Journal is dedicated to the memory of Walther Wilbrandt as one of the pioneers in the field of membrane biology.

Harald Reuter