

Robert J. Lefkowitz

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Seven Transmembrane Receptors

Life

He studied chemistry and trained to become a doctor at Columbia University. Since 1973 he has worked at Duke University and the Howard Hughes Medical Institute in Durham, North Carolina

Work

Communication between the cells in your body are managed by substances called hormones. Each cell has a small receiver known as a receptor, which is able to receive hormones. In order to track these receptors, in 1968 Robert Lefkowitz attached a radioactive isotope of iodine to the hormone adrenaline. By tracking the radiation emitted by the isotope, he succeeded in finding a receptor for adrenaline and studied how it functions. It was later discovered that there is an entire family of receptors that look and act in similar ways - "G-protein-coupled receptors". Approximately half of all medications used today make use of this kind of receptor.

BASIC SCIENCE IS ALWAYS THE ROOT OF TRANSLATIONAL RESEARCH



Robert Lefkowitz receiving his Nobel Prize from His Majesty King Carl XVI Gustaf of Sweden at the Stockholm Concert Hall, 10 December 2012



Like many Nobel Laureates before him, Robert Lefkowitz autographs a chair at Bistro Nobel at the Nobel Museum in Stockholm, 6 December 2012



Robert Lefkowitz (left) in his laboratory

A new Fellow of the Bologna Academy of Science
May 3rd, 2018

