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Kandel Wins Nobel Prize

The Nobel Assembly at the Karolinska Institute announced this morning that the 2000 Nobel Prize in physiology or medicine was awarded to Eric R. Kandel, an HHMI investigator at Columbia University, Arvid Carlsson of the University of Göteborg, and Paul Greengard of The Rockefeller University. The three scientists were honored for their discoveries concerning signal transduction in the nervous system.

According to a news release issued by the Karolinska Institute, Kandel was "rewarded for his discoveries of how the efficiency of synapses can be modified, and which molecular mechanisms take part. With the nervous system of a sea slug as experimental model he has demonstrated how changes of synaptic function are central for learning and memory. Protein phosphorylation in synapses plays an important role for the generation of a form of short-term memory. For the development of a long term memory a change in protein synthesis is also required, which can lead to alterations in shape and function of the synapse."

Born in Vienna, Austria, Kandel graduated from Harvard College, where he majored in history and literature. He received his medical degree from New York University School of Medicine. His postdoctoral training was with Wade Marshall in the Laboratory of Neurophysiology at NIH; his residency training in psychiatry was at the Massachusetts Mental Health Center, Harvard Medical School; and he did a postdoctoral fellowship with Ladislav Tauc at the Institut Morey in Paris.

Kandel held faculty positions at Harvard Medical School and the New York University School of Medicine before coming to Columbia, where he was the founding director of the Center for Neurobiology and Behavior. He is a member of the National Academy of Sciences and counts among his honors the Lasker Award, the Gairdner Award, the Harvey Prize, and the National Medal of Science.