

 **Biography****Roger Sperry**

Roger Sperry was born August 20, 1913, in Hartford, Connecticut. He was awarded a Nobel Prize in physiology and medicine in 1981 for his more than 40 years of research on the brain. The prize was given specifically for his work on the "[split-brain](#)," in which he discovered that the two cerebral hemispheres of the brain had distinct functions. The left, usually the dominant side, is involved in reasoning, language, writing, and reading, while the right, or less dominant side, is more involved in nonverbal processes, such as art, music, and creative behavior.

In one of his most important studies, Sperry asked subjects who had undergone split-brain surgery to focus on the center of a divided display screen. The word "key" was flashed on the left side of the screen, while the word "ring" was projected on the right side. When asked what they saw, the split-brain patients answered "ring", but denied that any other word was also projected onto the screen. Only the word "ring" went to the speech center in the left hemisphere. Although the right hemisphere cannot verbalize the information (the word "key") that was projected on the left side of the screen, subjects are able to identify the information nonverbally. Sperry asked subjects to pick up the object just named without looking at it. If subjects were told to use their left hand, they could easily identify a key. However, if asked what they had just touched, they would respond "ring."

Sperry received his Ph.D. from the University of Chicago in 1941. He did his early research at the Yerkes Primate Laboratory and the National Institute of Health before joining the staff of the California Institute of Technology in 1954 as Hixon Professor of Psychobiology. He originally studied cats, and found that the corpus callosum, or nerve bundle connecting the two cerebral hemispheres, was necessary for the transfer of information from one side of the brain to the other.

Sperry next began to study [epileptic patients](#) whose corpus callosum had been severed to prevent seizures. His research on the "syndrome of hemisphere disconnection," has contributed valuable information to the treatment of various brain disorders.

Sperry continued to be an active researcher until his death in 1994.

For information about Roger Sperry and his work,

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[Split brain consciousness](#)



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