Brain research pioneer Sperry dead at 80

Nobel winner taught at Caltech

By Roberto Conciere

PASADENA — Retired Caltech professor Roger Wolcott Sperry, a 1981 Nobel Prize winner for discoveries showing that the two hemispheres of the brain function independently, has died of a heart attack.

Sperry, a Pasadena resident, was 80 when he died Sunday at Huntington Memorial Hospital in Pasadena. Memorial services were pending.

Sperry's work ethic drove him to research and write until his hospitalization April 11, friends and relatives said yesterday. For the last 25 years, he suffered from a degenerative nerve disease.

"He was so single-minded that if he was working, that was all he thought about," said his assistant, Mary Jeffries. "I would say, 'See you tomorrow,' and he would very meticulously put his middle finger over his index finger. I guess he was saying, 'With any luck.'"

Sperry won the Nobel Prize in medicine-physiology for his pioneering research involving "split-brain" patients whose left and right brain hemispheres were surgically cut. He showed how the two brain hemispheres function independently and together.

His discovery revolutionized the way doctors, psychologists and scientists understood the brain. Before Sperry's work, the right hemisphere had been considered nearly useless.

Sperry's results substantiated that analytic process and higher verbal skills tend to be located in the left hemisphere, while the right side is more holistic and copes better with spatial relationships.

Sperry also received the National Medal of Science in 1969 from then-President George Bush.

In the 1940s, Sperry researched the functions of brain cells and vision. In the 1960s he introduced groundwork for a theory explaining how neurons grow, assemble and organize themselves in the brain by means of chemical codes controlled by heredity.

Before his death, Sperry had been studying the role of consciousness and its importance in preserving values, said Norma Deupree Sperry, his wife of 45 years.

He was concerned about the earth's condition and population growth. His wife said he believed people should set values that preserve the quality of life.

Sperry continued working at Caltech as a professor emeritus of psychobiology after his official retirement in 1984.

About six months ago, he began using a walker, Jeffries said Sperry held a pencil with great difficulty but pressed on with his work.

The illness forced Sperry to give up the Baja California fishing vacations that he had purchased a camper to enjoy. He was in Baja when the 1981 Nobel Prize was
awarded and learned about it over the radio.

"From the time we got the camper, in about 1973, we were down there several times a year until two years ago," Norma Deupree Sperry said. "We were unable to go after that. It was too difficult for him to get around."

Sperry's list of accomplishments extended beyond science. Friends knew him for his square dancing, sculpture and fossil collection.

His wife said he once held the Connecticut state high-school record in the javelin throw. He was captain of the basketball team during his days at Oberlin College in Ohio.

He earned his doctorate degree in zoology in 1941 from the University of Chicago.

In addition to his widow, Sperry is survived by his son, Glenn Tad Sperry of Philadelphia; daughter, Janeth Hope Sperry of Cleveland; brother, Russell L. Sperry, of Bend, Ore.; and two grandchildren.

ROGER W. SPERRY

- **Birthplace:** Hartford, Conn., Aug. 20, 1913
- **Education:** Bachelor's degree in English literature, Oberlin College, 1935; master's degree in psychology, Oberlin College, 1937; doctorate in zoology, University of Chicago, 1941
- **Major awards:** Nobel Prize in medicine-physiology, 1981; National Medal of Science, 1989; Wolf Prize in Medicine, Albert Lasker Medical Research Award, both in 1979; California Scientist of the Year Award, 1972
- **Occupation:** Among other positions, joined Caltech in 1954 as Sloan Professor of Psychobiology; retired in 1984
- **Family:** Married Norma Deupree on Dec. 28, 1949; brother Russell Sperry of Bend, Ore.; son Glenn Tad Sperry of Philadelphia; daughter Janeth Hope Sperry of Cleveland; two grandchildren