Three share 1981 Nobel Prize in medicine

The 1981 Nobel Prize in Medicine or Physiology is being shared by three Harvard investigators and a researcher from the Karolinska Institute of Technology.

Half of the $1,050,000 prize will be shared by Dr. Hans E. Wiesel, MD, and Torsten N. Wiesel, MD, both of Harvard, for their studies showing that the stimulation of right in infancy is tied to future vision.

The other half of the award goes to Roger W. Sperry, PhD, whose work at Caltech demonstrated that the left and right sides of the brain perform different functions.

The Karolinska Assembly, which selects the Nobel winners, said in announcing the award that the 20 years of work by Dr. Hube and Wiesel "represent a breakthrough in research into the ability of the brain to interpret the code of the visual scene from the eyes. The visual system is developed directly after birth, and that a prerequisite is for the eyes to be exposed to visual stimuli. A practical result of their research is the treatment of children's visual problems with special patterns.

The Karolinska Assembly said, "It is only a slight exaggeration to say that what we see today, in other words, how we perceive the visual world around us, depends on the visual experiences we had during the first stages of our lives. If those are dull and distorted, for example through errors in the lens system of the eye, it may lead to permanent impairment of the brain's ability to analyze visual impressions."

The Harvard physiologists found that a step-by-step process transmits images from the retina to the brain, each step involving a column of nerve cells that receive and analyze information and transmit it to other nerve cells.

Dr. Sperry's brain research, they said, has provided us with insight into the inner workings of the brain, but it is almost completely hidden from us.

Dr. Sperry's work has shown that the left side of the brain performs logical and mechanical functions, while the right side performs intuitive and emotional functions.

Dr. E. Wiesel is the son of a Swedish psychiatrist and received his MD from the Karolinska Institute in Stockholm. He has been in the United States since 1955, and has worked with Dr. Hube since that time.

Dr. Hube, born in Windsor, Ont., received his medical degree from McGill U. in Montreal. He and Dr. Wiesel began working together at the Johns Hopkins Neurological Institute in 1955. They both moved to Harvard Medical School in 1959. Dr. Wiesel is chairman of the neurology department. Dr. Hube is former chairman of the department and now is Harvard's George Parker Berry professor of neurology.

Dr. Sperry, born in Hartford, Conn., received his medical degree in zoology at the U. of Chicago and has done research at Harvard and the Yerkes Laboratory of Primate Biology in Atlanta. He has been at Caltech since 1954.

Celebrations were in order for the three men Nobel Prize in Medicine or Physiology. In the top photo, MDs Torsten Wiesel (left) and David Hube (right) share a toast with a 1980 co-winner of the award, Baruj Benacerraf, MD, who also has a Harvard affiliation of this year's winners. In the photo at right, Roger Sperry, PhD, describes his award-winning work at the California Institute of Technology.

Proceedings of AMA-sponsored Sixth Western Hemisphere Nutrition Congress are now available. Copies of Nutrition in the 1980s: Constraints on Our Knowledge, are $60 each from Alan R. Liss Inc., 150 Fifth Ave., New York, N.Y. 10011.