

EMBARGOED FOR RELEASE ON MARCH 31, 2005 4 p.m. Pacific Time Nobel Laureate Sydney Brenner Receives 2005 UCSD/Merck Life Science Achievement Award

Kim McDonald

Sydney Brenner, a distinguished professor at the Salk Institute for Biological Studies and a recipient of the 2002 Nobel Prize in medicine, has been selected to receive the 2005 UCSD/Merck Life Sciences Achievement Award.

Brenner, who is also an adjunct professor of biology at the University of California, San Diego, will receive the prestigious \$25,000 award on April 1 at a dinner on the UCSD campus honoring his lifetime achievements as a scientist.

"Sydney has been a true force of nature in developing new fields of science and in contributing unique and visionary ideas to many disciplines," said Eduardo R. Macagno, Dean of the Division of Biological Sciences at UCSD, who will present the award. "He is a unique individual, more creative than anyone I have ever known. Being able to sit down and have a talk with Sydney is one of the great pleasures of being one of his colleagues."

"We are honored to acknowledge Dr. Brenner's extraordinary contributions to science and humanity with the UCSD/Merck Life Sciences Achievement Award," said Donald Nicholson, Ph.D, vice president and site head of Merck Research Laboratories in San Diego, which provided \$50,000 for the award and for a symposium at UCSD that will bring together the world's experts on RNA biology. "The passion and purpose Dr. Brenner has brought to his work for more than a half century serve as inspiration for the next generation of scientists."

The previous and only other recipient of the UCSD/Merck Life Sciences Achievement Award, established two years ago by Macagno, was the late Francis Crick, a Nobel laureate also from the Salk Institute who co-discovered the structure of DNA. Crick received the first UCSD/Merck Life Sciences Achievement Award in 2003, the year before his death last July.

The award to Brenner will culminate the all-day scientific symposium at UCSD, which will bring to the campus hundreds of scientists working on RNA biology, including two other Nobel laureates. Discoveries about ways in which RNA controls cellular processes beyond the transcribing of information from DNA to synthesize proteins have generated increasing interest in recent years from basic scientists and biotechnology companies working on a wide range of problems dealing with cell regulation. The symposium, entitled *RNA: Beyond the Central Dogma*, is in many ways a tribute to the discoveries and visionary ideas in RNA biology and other fields that Brenner has been responsible for during his fruitful scientific career.

Brenner received his Nobel Prize for his contributions involving the discoveries about how genes regulate organ growth and the process of programmed cell death. He also showed that the tiny transparent worm *C. elegans* was useful for studying how cells specialize and organs develop. During his career, Brenner also demonstrated that a chemical could produce specific genetic mutations in the worm, allowing different mutations to be linked to specific effects on organ development.

In the early 1960s, he established the existence of messenger RNA, or mRNA, which can be translated into proteins, and demonstrated that the nucleotide sequence of mRNA determines the order of amino acids

in proteins. For these discoveries in 1971, Brenner received his first Lasker Award, sometimes referred to as "America's Nobel," in Basic Medical Research. He received a second Lasker Award in 2000.

Among his other notable advances, Brenner-along with Francis Crick-proposed that a single amino acid is coded by three nucleotides, a triplet, of RNA. While at Salk, which he joined in 2000, Brenner has been studying vertebrate gene and genome evolution, where he developed new ways of analyzing gene sequences, offering new understanding into the evolution of vertebrates.

Born January 13, 1927 in Germiston, South Africa, Brenner was awarded degrees in medicine and science in 1947 from the University of Witwatersand in Johannesburg. He subsequently moved to England where, in 1954, he received a D.Phil. in chemistry from Oxford University. In 1957, Brenner joined the Medical Research Council in Cambridge, England. There, he became director of the Laboratory of Molecular Biology and the Molecular Genetics Unit.

From 1981 to 1985, Brenner served as a non-resident fellow at the Salk Institute; from 1989 to 1991, he was a scholar-in-residence at the Scripps Research Institute. In 1996, Brenner became president and director of science at the Molecular Sciences Institute in Berkeley, Calif.

Brenner has received numerous awards, including the Gairdner Foundation International Award, the Krebs Medal, the Royal and Copley Medals of the Royal Society, the Harvey Prize, the Waterford Bio-Medical Science Award, the Kyoto Prize, the King Faisal International Prize for Science, and the Bristol-Myers Squibb Award for Distinguished Achievement in the Neuroscience Research. He is a member of the Royal Society of London and a foreign associate of the U.S. National Academy of Sciences.

Media Contacts: Kim McDonald, UCSD, (858) 534-7572 Cathy Yarbrough, Salk, (858) 453-4100 x1290 Janet Skidmore, Merck, (908) 423-3046

