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## Southwestern Scientists Reap More Awards

Four new awards are being added to the already lengthy list of accolades heaped on Southwestern Medical School researchers Drs. Joseph Goldstein and Michael Brown.

The two researchers were scheduled to receive the 1984 Louisa Gross Horwitz Prize of Columbia University on Oct. 29. The scientists will share a cash prize of \$22,000 and were to receive gold medals.

Columbia University officials point out that 50 per cent of those who have won the Horwitz award have gone on to win the Nobel Prize. The prize was established in 1967 under the will of the late S. Gross Horwitz in memory of his mother to honor scientific investigators whose contributions to knowledge in biology and biochemistry have been outstanding.

It was in the early 1970s that Drs. Brown and Goldstein discovered the mechanism by which defective genes caused a condition of high blood cholesterol. This insight led to a number of other discoveries about how cells are regulated by action of membrane receptors.

Since that early discovery, the two UTHSCD investigators have refined their work, locating the site on genes which produce normal or abnormal receptors and actually cloning the LDL receptors.

On Oct. 30, Goldstein and Brown were scheduled to receive the 1984 Award for Distinguished Research in the Biomedical Sciences from the Association of American Medical Colleges. The awards were to be presented at the plenary session of the AAMCs 95th annual meeting in Chicago.

The AAMC cited their work as "informing and guiding the research of many other scientists who have explored other receptor-mediated endocytosis systems."

The American Heart Association announced Nov. 1 that it would present its 1984 Research Achievement Award to Drs. Brown and Goldstein at the opening of the AHA's 57th Scientific Sessions in Miami Beach.

The AHA's highest research award recognizes the two investigators for "their discovery of the mechanism by which the body's cells process cholesterol." The Research Achievement Award has been presented annually since 1953. It consists of a citation and a cash prize.

On Sept. 24, the two scientists had received the V.D. Mattia Award which is given annually by the Roche Institute of Molecular Biology. The award was created in 1972 by the Roche Institute in memory of Dr. Mattia, who, as president and chief executive officer of Hoffman-La Roche Inc., played a key role in the development of the institute.

The award citation said, in part, "Drs. Michael S. Brown and Joseph L. Goldstein have, within the span of a dozen years, revolutionized our understanding of how surface receptors mediate the entry into the cell of specific ligands from the external environment . . . Their findings have



resulted in fundamental conceptual advances in our understanding of cell biology and the nature of inherited diseases."

Previous recipients have included such notables as Nobel Laureates Paul Berg and Walter Gilbert.

Dr. Goldstein and Dr. Brown have collaborated for more than a dozen years at Southwestern and both hold Paul J. Thomas Chairs of Genetics. Dr. Goldstein is chairman of the Department of Genetics and Dr. Brown is director of the Center for Genetic Disease.

It was their work which paved the way for understanding the condition known as familial hypercholesterolemia. In its milder form caused by a defective gene from one parent, it results in a lack of low density lipoprotein receptors on cell surfaces and a higher-than-normal blood cholesterol condition resulting in heart attacks by middle age.

In its more severe form, caused by defective genes from both parents, it causes excess blood cholesterol and heart attacks in children as young as six years old.

The investigative duo previously has compiled an impressive list of awards, principally including the Heinrich Weiland Prize, the Pfizer Award, Bernstein Award, Passano Award, Lounsbery Award, Gairdner Foundation International Award, New York Academy of Sciences Award, and the Hazen award.

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