

Nobel Prize Awarded to Dr. Thomas Südhof

October 7, 2013

To the UT Southwestern Community:

Please join me in congratulating Dr. Thomas C. Südhof, adjunct professor of neuroscience and former chairman of the department at UT Southwestern Medical Center, who was named today as one of three scientists awarded the 2013 Nobel Prize in Physiology or Medicine for their discoveries of key information about how cellular transport systems work.

Dr. Südhof, now at Stanford University School of Medicine, was recognized for pioneering work performed at UT Southwestern on synaptic transmission, the process by which brain cells communicate with each other via chemical signals passed through the spaces, or synapses, between them. His studies on nerve-cell interaction and neurotransmitter release, a process that initiates communication between one neuron and another in the brain, have led to a better understanding of brain function under normal and pathologic conditions, such as Alzheimer's disease. Dr. Südhof's work, which built upon independent discoveries by fellow Nobel winners Dr. James E. Rothman and Dr. Randy W. Schekman, with whom he shares today's Prize, solved the mystery of how the cell organizes its transport system, according to the Nobel Assembly at Karolinska Institutet.

Dr. Südhof spent 25 years at UT Southwestern, starting as a postdoctoral fellow in 1983 in the laboratory of Dr. Michael Brown, director of the Erik Jonsson Center for Research in Molecular Genetics and Human Disease, and Dr. Joseph Goldstein, chairman of molecular genetics, who shared the 1985 Nobel Prize in Physiology or Medicine. Dr. Südhof, who was recently honored with the Lasker Basic Medical Research Award, served on the UT Southwestern faculty from 1986 until 2008, when he was appointed professor of molecular and cellular physiology at Stanford University. Among his many accomplishments while at UT Southwestern were being named a Howard Hughes Medical Institute investigator in 1991 and election to the prestigious National Academy of Sciences in 2002 and its Institute of Medicine in 2007. At UT Southwestern, Dr. Südhof directed the C. Vincent Prothro Center for Research in Basic Neuroscience and held the Gill Distinguished Chair in Neuroscience Research and the Loyd B. Sands Distinguished Chair in Neuroscience. From 1997 to 2006, he directed the Center for Basic Neuroscience, and from 2007 to 2008, he served as first chairman of the Department of Neuroscience.

"We are immensely proud of Thomas Südhof. While a postdoctoral fellow in our laboratory, he solved an important problem concerning cholesterol. We were overjoyed that he remained on our faculty for more than two decades, where he performed all of the experiments that led to today's Nobel Prize," Dr. Brown said. "His discoveries explain how a batter can hit a 95 mph fastball that takes only four-tenths of a second to reach home plate. All Texans should share in our pride."

Dr. Goldstein said: "Thomas Südhof is a biomedical exceptionalist – like Babe Ruth was an exceptionalist in baseball, Leonard Bernstein in music, and Steve Jobs in computers. Having done his Nobel work at UT Southwestern in Dallas, Thomas is our sixth faculty member to win a Nobel Prize. This is quite a record for a relatively 'small' medical school – a record that exceeds the total number of Nobelists produced by premier and more established institutions, like the National Institutes of Health, Harvard

Medical School, and even Stanford University School of Medicine, where Thomas has now enhanced Stanford's Nobel bragging rights!"

Dr. Südhof's accomplishments serve as another milestone for UT Southwestern and all the faculty and staff who worked side-by-side with Dr. Südhof during his days of discovery here. UT Southwestern truly has been and continues to be an incubator for Nobel talent. Today's award makes the seventh Nobel [six faculty members and one graduate student] that has sprung from the rich loam of scientific inquiry that has been a hallmark of our medical center. But more importantly, the work that culminated in this Prize has the potential to change the way doctors treat disease and potentially save lives.

Read more about Dr. Südhof's work at www.nobelprize.org or the UT Southwestern news page.

Daniel K. Podolsky, M.D. President, UT Southwestern Medical Center