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**UT Southwestern’s Dr. Roger Unger wins international Luft Award**

**for endocrinology and diabetes research**

DALLAS – March 17, 2014 – Dr. Roger Unger, Professor of Internal Medicine at UT Southwestern Medical Center has been awarded the 2014 Rolf Luft Award for his identification of glucagon as a pancreatic hormone that raises blood sugar levels, having the opposite effect of insulin.

The award from the Karolinska Institutet, the prestigious medical university in Sweden that is also home to the Nobel Assembly, annually honors one scientist worldwide for outstanding contributions to endocrinology and diabetes research. In a tribute to UT Southwestern’s leadership in this area, this is the second time in three years that a UT Southwestern faculty member has received this honor. Dr. David Mangelsdorf, Chair of Pharmacology, received the Luft Award in 2012 for his research on nuclear receptor pathways.

“This award recognizes Dr. Unger’s outstanding contributions to diabetes research over decades,” said Dr. Daniel K. Podolsky, President of UT Southwestern. “He was not only at the forefront of the identification of glucagon as a key hormone that balances insulin regulation of blood sugar, but almost singlehandedly rekindled the current widespread interest in the physiology of glucagon by establishing the hormone as a major drug target.”

A UT Southwestern faculty member since 1956 and Director of the Touchstone Center for Diabetes Research from 1986 to 2007, Dr. Unger will receive the institute’s award on May 13 when he delivers the prize lecture, “A New Biology for Diabetes.” The award consists of a medal and a cash prize.

Dr. Unger’s research “revealed that diabetes is a bihormonal disease in which insufficiency of insulin is always associated with an excess of glucagon, which accounts for the hepatic overproduction of glucose and ketones in diabetes,” according to Karolinska Institutet officials.

While working at the Dallas VA hospital in 1959, Dr. Unger developed a test to measure concentrations of glucagon and established that glucagon was a true pancreatic hormone released in opposing partnership with insulin to maintain normal blood glucose (sugar) levels. His recent studies have demonstrated that blood glucose elevations cannot occur without abnormally high levels of glucagon. This means glucagon suppression restores glucose levels back to normal.

In 1978, Dr. Unger and Dr. Philip Raskin, Professor of Internal Medicine at UT Southwestern, showed that the glucagon-suppressing hormone somatostatin normalized glucose levels of type 1 diabetic patients. Leptin, also a hormone, was another glucagon suppressor that Dr. Unger found eliminated diabetic hyperglycemia, or high blood glucose. Dr. Unger introduced the concept of lipotoxicity resulting from spillover of fatty acids. He demonstrated that adipocyte hormones such as leptin protect against this cause of the metabolic syndrome – lipotoxicity – through increased oxidation of fatty acids that deposit outside of fat cells.

The Luft Award is named after Dr. Rolf Luft, a longtime member of the Nobel Assembly and a Swedish endocrinologist known for his research on mitochondrial diabetes. Dr. Luft died in 2007.

“Rolf Luft was a good friend and, in addition, a hero to me,” said Dr. Unger. “To receive this honor in his memory is a wonderful reward.”

In congratulating Dr. Unger for receiving the award and his overall contribution, Dr. Mangelsdorf noted, “Dr. Unger is a giant in the field of endocrinology and metabolism. He showed that the reciprocal secretion of insulin and glucagon coupled to their reciprocal actions on the liver explained the narrow blood sugar level range of non-diabetics. He found that hyperglucagonemia, or excess glucagon secretion, was present in every form of diabetes, in every species studied.”

Dr. Unger, who holds the Touchstone/West Distinguished Chair in Diabetes Research, was elected to the prestigious National Academy of Sciences in 1986 and to the American Academy of Arts and Sciences in 1994. He has received honorary degrees from the Universities of Liege and Geneva.

His work has been recognized with numerous honors, beginning with the Lilly Award of the American Diabetes Association (ADA) in 1964. Dr. Unger has received the highest awards of the ADA, the European Association for the Study of Diabetes, and The Endocrine Society. He received the Banting Medal in 1975, the Claude Bernard Memorial Medal in 1980, and the Fred Conrad Koch Award in 1983.

After graduating from Yale University, Dr. Unger earned his medical degree at Columbia University. As a member of the UT Southwestern faculty in the Department of Internal Medicine, he was the first Director of the Touchstone Diabetes Center, serving in that role for almost two decades.

**About UT Southwestern Medical Center**

UT Southwestern, one of the premier academic medical centers in the nation, integrates pioneering biomedical research with exceptional clinical care and education. The institution’s faculty includes many distinguished members, including five who have been awarded Nobel Prizes since 1985. Numbering more than 2,700, the faculty is responsible for groundbreaking medical advances and is committed to translating science-driven research quickly to new clinical treatments. UT Southwestern physicians provide medical care in 40 specialties to nearly 91,000 hospitalized patients and oversee more than 2 million outpatient visits a year.

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*For CT:*

*Dr. Mangelsdorf holds the Raymond and Ellen Willie Distinguished Chair in Molecular Neuropharmacology, in Honor of Harold B. Crasilneck, Ph.D., and the Distinguished Chair in Pharmacology.*

*Dr. Podolsky holds the Philip O’Bryan Montgomery, Jr., M.D. Distinguished Presidential Chair in Academic Administration, and the Doris and Bryan Wildenthal Distinguished Chair in Medical Science.*

*Dr. Raskin holds the Clifton and Betsy Robinson Chair in Biomedical Research.*

*Dr. Unger holds the Touchstone/West Distinguished Chair in Diabetes Research.*