

NEWS

THE UNIVERSITY OF TEXAS
(SOUTHWESTERN)
MEDICAL SCHOOL AT DALLAS



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DALLAS--Dr. Roger H. Unger of The University of Texas (Southwestern) Medical School at Dallas is among a select group of eminent scientists invited to participate in an international Nobel Symposium on hormone research July 20-21 in Stockholm.

The symposium, sponsored by Sweden's Nobel Foundation, will bring together leading figures in hormone research from around the world. Some 30 experts will report on various aspects of their investigations covering "Frontiers in Gastrointestinal Hormone Research."

Dr. Unger is one of 13 American scientists who will take part in the symposium. A recognized authority on the hormonal malfunction inherent in diabetes, he is professor of internal medicine at the Dallas medical school and director of research and chief of the metabolic section at the Dallas Veterans Administration Hospital.

In Stockholm Dr. Unger will describe laboratory findings which suggest that two hormones of the gastrointestinal tract, secretin and pancreozymin, may act as biological "messengers" whose chemical signals somehow influence production by the pancreas of insulin and glucagon--two hormones involved in the body's processing of sugar and other carbohydrates.

Studies with laboratory animals indicate that by some process the gastrointestinal tract telegraphs the area of the pancreas which produces the two vital food-processing hormones, signaling the magnitude and character of the incoming nutrient load. Two separate groups of pancreas cells then know how much insulin and glucagon to secrete to maintain normal blood-sugar balance.

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Secretin and pancreozymin possess the necessary biological properties to serve as these cellular "messengers," Dr. Unger will report to the symposium, and test injections into animals indicate they appear, in fact, to influence the amount of insulin and glucagon released into the bloodstream.

Dr. Unger's research has shown that the metabolic breakdown causing diabetes is more complicated than medical science previously realized. His studies suggest that the obscure hormone glucagon also plays an important role, along with insulin, in controlling the moment-to-moment blood-sugar level.

Lack of insulin, stemming from failure of insulin-producing cells in the pancreas, was long believed to be the only hormonal derangement involved in diabetes. But Dr. Unger and his associates have shown that an excess of glucagon also is present in diabetes, exaggerating the consequences of the insulin lack and, he says, increasing the amount of insulin required to control the disease.

The Dallas scientist's work has been recognized with numerous major awards, the most recent being the Veterans Administration's Middleton Award, presented last January.

Joining Dr. Unger and 12 other Americans, including one other Texan, at the symposium will be leading scientific investigators from Sweden, England, Canada, Italy, Germany and Australia. The sponsoring foundation is named for Nineteenth Century Swedish chemist Alfred Bernhard Nobel, who endowed the international prizes bearing his name.

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