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\*\*\*\*Gifford Foundation gives \$730,000  
for diabetes research

DALLAS -- A gift of \$730,000 from the Gifford Foundation has recently been awarded The University of Texas Health Science Center at Dallas for the building and furnishing of the Gifford Laboratories for Diabetes Research.

The Gifford Foundation has liquidated its assets and given all to the health science center in support of diabetes research, according to Pete Gifford, former chief executive officer of Gifford-Hill & Company, Inc.

The foundation, formed in 1959 by Pete Gifford's mother Eveline V. Gifford, has as its trustees Pete Gifford, Marjorie Gifford Touchstone of Dallas, Edna May Gifford Parrish of Albuquerque, N.M., and Gifford Touchstone of Dallas. The family became interested in diabetes research after Gifford Touchstone's son developed the disease.

The Gifford Laboratories, being housed in the Cecil H. and Ida Green Biomedical Research Building, will provide the primary research site for the UTHSCD Center for Diabetes Research, under the direction of diabetes expert Dr. Roger Unger. Unger is professor of internal medicine at the health science center and is senior medical investigator at the Dallas Veterans Administration Medical Center.

The laboratories will house researchers who will work on projects related to the prevention and cure of diabetes. It is planned that new faculty will be recruited to join the distinguished diabetes researchers already on campus. In addition, young postdoctoral fellows are being trained in modern scientific techniques, such as molecular biology and immunology, in the laboratories of Dr. Joseph Sambrook and Dr. Donald Capra, professor and chairman of the Department of Biochemistry and professor of microbiology, respectively.

Besides addressing basic science problems in diabetes research, Dr. James Marks of the Department of Pediatrics and nurse coordinator Marilyn Alford are forming a diabetes registry of patients with Type I diabetes in the North Texas area in order to conduct long-term studies. In preparation for starting the Dallas project, Marks, who is director of the diabetes clinic at Children's Medical Center in Dallas, spent a sabbatical year working with a similar project in Pittsburgh, Pa.

"The diabetes registry will provide a list of families containing persons with diabetes so that we can look for patterns in the way the disease develops in brothers and sisters who are currently free of diabetes," says Dr. Daniel Foster, professor in the Department of Internal Medicine and associate director of the diabetes research center.

"By identifying those at highest risk for developing diabetes, we hope to intervene and arrest the disease with one or more substances that are now under investigation," says Foster. "If any or all of these substances should prove effective, those individuals in the registry who are at maximum risk for developing diabetes could be candidates for intervention."

(More)



Both Unger and Foster have received the Banting Medal, the world's highest award for their research in diabetes. Unger has received wide acclaim for his discovery of the crucial role that glucagon plays in diabetes. Foster and his colleague Dr. J. Denis McGarry discovered the biochemical mechanisms by which diabetic ketoacidosis develops.

Families in the registry undergo genetic testing to determine members at increased risk for developing diabetes. All registry participants, including the unaffected brothers and sisters of Type I diabetes patients have HLA-tissue typing and tests for the newly discovered T-cell receptor genetic marker. This aspect of the research is under the direction of Capra.

Diabetes affects one to two out of every 100 Americans, with the more serious Type I diabetes accounting for about one-fourth of cases. This type begins early in life and can cause diabetic coma and death. Fortunately, the discovery of insulin in the 1920s has made death from diabetic coma a rare event. However, diabetes is associated with a devastating array of long-term complications involving the eyes and kidneys as well as nerves and blood vessels supplying the heart and brain. Insulin therapy, which in most cases prevents the diabetic patient from going into coma, does not prevent these complications. Consequently, diabetes is a leading cause in this country of adult blindness, kidney failure and amputations to limbs because of gangrene. Type I diabetes is also a major cause of heart attacks and strokes.

"The urgency of finding ways to prevent or cure the disease follows from the fact that these complications represent enormous losses in personal suffering and in economic costs to the country," says Foster.

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