The Irwin Eskind Lecture in Biomedical Science

Dr. Irwin Eskind was a native of Nashville, Tennessee, and a supporter of Vanderbilt University, the School of Medicine, and the Medical Center, for more than four decades. A clinical professor of medicine, emeritus, he was a 1945 graduate of Vanderbilt and a 1948 graduate of the Vanderbilt School of Medicine. He received his residency training in Internal Medicine at Boston City Hospital from 1948-51 and completed his training at Vanderbilt in 1951. He served in the U.S. Army Medical Corps from 1951-53, and was a fellow in Gastroenterology at the Lahey Clinic in Boston from 1953-54. Dr. Eskind was a long-standing member of the University community and established his clinical practice in internal medicine in Nashville in 1954.

Working on the medical staffs of Vanderbilt Hospital and Saint Thomas Hospital, he not only supported the clinical teaching programs directed at our medical students and residents, but devoted enormous personal effort to enhancing the resources of the University and the Medical Center. He served as president of the Canby Robinson Society and on the Executive Committee of the Campaign for Vanderbilt. The Eskind Biomedical Library and the Vanderbilt Eskind Diabetes Clinic stand as magnificent examples of the commitment to Vanderbilt of Dr. Eskind and his family.

Dr. Eskind also served as president of both the Middle Tennessee Diabetes Association and The Temple Congregation OHABAI Shalom, and was on the boards of the WPLN Foundation, the Nashville Jewish Federation, and the Jewish Philanthropic Fund. Dr. Eskind was the recipient of the Humanitarian Award of the Middle Tennessee Community Foundation and was honored as Person of the Year by the Nashville Council on Community Justice. Dr. Eskind was a major supporter of the School of Medicine, the School of Nursing, the Blair School of Music, the Vanderbilt Institute for Public Policy Studies, and the University as a whole. His understanding of the needs of the University was reflected in and driven by his service on the Vanderbilt Board of Trust, and as a member of the Executive Budget and Hospital Committees. Dr. Eskind was a Life Member of the Canby Robinson Society and a member of the Friends of Blair, the Friends of the Library, and the Julia Hereford Society.

Dr. Eskind and his wife of more than 50 years, Annette, raised two sons, Jeffrey and Steven, who are both physicians in Nashville. Dr. Steven Eskind is a member of the Vanderbilt faculty in the Section of Surgical Sciences.

Upcoming Discovery Lecture:
RUTH LEHMANN, PH.D.

Professor and Chair, Department of Cell Biology
Director, Skirball Institute for Biomolecular Medicine, NYU Langone Medical Center
Investigator, Howard Hughes Medical Institute

March 21, 2019
208 Light Hall / 4:00 P.M.

THE Flexner DISCOVERY LECTURE SERIES

RONALD M. EVANS, PH.D.

IRWIN ESKIND LECTURE IN BIOMEDICAL SCIENCE
RESETTING METABOLISM AND TREATING DIABETES BY TARGETING FACTORS FROM FAT AND THE GUT

MARCH 7, 2019
4:00 P.M.
208 LIGHT HALL

SPONSORED BY:
THE VANDERBILT DIABETES CENTER

VANDERBILT UNIVERSITY MEDICAL CENTER

RESETTING METABOLISM AND TREATING DIABETES BY TARGETING FACTORS FROM FAT AND THE GUT

Following a meal, FGF1 is the single most highly induced gene in adipose tissue. But what does it do? PPARd is the master transcription factor in fat and it is a direct regulator of FGF1. In fact, while FGF knockout mice seem normal, on High Fat Diet (HFD) they develop an aggressive diabetic phenotype, with adipose progressively becoming fibrotic, sclerotic and necrotic.

Surprisingly, in diabetic mice a single injection of FGF1 rapidly normalized glucose levels and multiple injections progressively restored insulin sensitivity. Thus, 'endocrinized' FGF-1 is a potent metabolic regulator, achieving insulin sensitization even without weight loss. The mechanism, receptor specificity and therapeutic potential of FGF-1 will be discussed.

A second approach to attack diabetes focuses on the gut and involves the intestinal bile acid receptor FXR. Unexpectedly, gut-specific fexaramine protects mice against diet-induced weight gain, lowers body-wide inflammation, enhances thermogenesis, promotes browning of white adipose tissue, represses hepatic glucose production and preserves β-cells – these results establish an important and unexpected role for FXR in nutrient metabolism and the potential use of gut restricted drugs as new tools to control systemic disease.

RONALD M. EVANS, PH.D.

PROFESSOR AND DIRECTOR,
GENE EXPRESSION LABORATORY,
SALK INSTITUTE FOR BIOLOGICAL STUDIES

HOWARD HUGHES MEDICAL INSTITUTE INVESTIGATOR

Ronald M. Evans, Ph.D. is a Professor at the Salk Institute for Biological Studies, a Howard Hughes Medical Institute Investigator, and holds the March of Dimes Chair in Developmental and Molecular Biology at the Salk Institute. He is an Investigator of the Howard Hughes Medical Institute and a Lustgarten Distinguished Scholar, Director of the Salk's Gene Expression Laboratory and Metabolic Engineering Program and Co-Director of the Helmsley Center for Genomic Medicine. He is known for pioneering studies on hormones' normal activities and their roles in disease. A major discovery was nuclear hormone receptors, which respond to steroid hormones, vitamin A, vitamin D, thyroid hormones and bile acids. By targeting genes these receptors help control sugar, salt, calcium, cholesterol and fat metabolism. They are primary targets in breast, prostate, and pancreatic cancers, and leukemia treatment, and have therapeutic roles in chronic inflammation, osteoporosis and Type 2 diabetes and asthma. His muscle metabolism studies led to the discovery of exercise mimetics, which promote the benefits of fitness without training. Exercise mimetics will help battle the obesity epidemic, diabetes, heart disease and frailty. Evans is a co-leader of 4 Stand Up to Cancer Dream Teams. He was awarded the Albert Lasker Basic Medical Research Award in 2004 and the Wolf Prize in Medicine in 2012. He is a member of the NAS, NAM and NAI.