

2015 *Women & Science* Fall Breakfast Program***Genetic Disorders of Dietary Excess: Getting to the Heart of the Matter***
Featuring Helen Hobbs, M.D.**Date:** Wednesday, November 18, 2015**Time:** 7:30 a.m. to 9:00 a.m.**Place:** Abby Aldrich Rockefeller HallYork Avenue at East 66th Street

The Rockefeller University



A diet rich in cholesterol and saturated fats may increase an individual's risk of heart disease, but a person's genetic makeup also plays a powerful role. And while the interplay between diet and genes is still poorly understood, many scientists agree that modern humans, who evolved under the pressure of frequent food deprivation, are ill-prepared genetically for the calorie-dense processed foods that are so plentiful in industrialized societies. This hypothesis has helped to guide **Helen Hobbs, M.D.**, a biomedical scientist at the University of Texas Southwestern in Dallas, in her search for genes that confer susceptibility to heart disease and other disorders of metabolism, including fatty liver disease.

Dr. Hobbs directs the Dallas Heart Study, a long-term, multi-ethnic investigation that focuses on defining the genetic determinants of plasma lipoprotein levels and cardiovascular risk. In the course of the study, she has paid special attention to low-density lipoprotein (LDL), nicknamed "bad cholesterol" for its role in creating fatty plaques that accumulate in arteries, especially the arteries feeding the heart. Her laboratory showed, about ten years ago, that people who carry certain variants of a gene called PCSK9 have low plasma LDL and a lower risk of coronary heart disease. Further research revealed that individuals with no functioning PCSK9 do not suffer adverse health effects as a consequence of their rare genetic profile. Pharmaceutical developers took notice, and in 2015, a new cholesterol-lowering medication based on the findings of Dr. Hobbs and her colleagues was approved in the U. S.

Dr. Hobbs is the Director of the McDermott Center for Human Growth and Development/Center for Human Genetics at UT Southwestern, where she is also a Professor of Internal Medicine and Molecular Genetics and an Investigator of the Howard Hughes Medical Institute. A graduate of Stanford University and Case Western Reserve University School of Medicine, she began her research career training in the laboratory of Michael Brown and Joseph Goldstein at UT Southwestern. Dr. Hobbs is a member of the U.S. National Academies of Sciences and Medicine and is the recipient of many honors, including the American Heart Association's Distinguished Scientist Award.

This program will be hosted by **Holly S. Andersen, M.D.**, a Rockefeller University Trustee and director of education and outreach for The Ronald O. Perelman Heart Institute. An authority on preventive cardiology, Dr. Andersen has spoken extensively on the roles that diet, exercise, hormones, stress, and sleep play in heart disease risk.

Register online at: womenandscience.rockefeller.edu
For more information, please contact Rebecca Wahrman
at 212-327-7285 or rwahrman@rockefeller.edu