

May 13, 2003

Tuesday 9:00 am - 5:00 pm

Ford Auditorium  
University of Michigan Hospital

MICHIGAN LIFE SCIENCES INSTITUTE  
ANNUAL SYMPOSIUM

GENETIC INSIGHTS INTO  
BIOLOGY AND DISEASE



life sciences institute

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# GENETIC INSIGHTS INTO BIOLOGY AND DISEASE

## David Ginsburg

Ginsburg is the Warner-Lambert/Parke-Davis Professor of Medicine in the Departments of Internal Medicine and Human Genetics and a Howard Hughes Investigator at the University of Michigan. He is also a Senior Research Scientist in the Life Sciences Institute. He received his B.A. in 1974 from Yale University and an M.D. from Duke University in 1977.

His research program centers on the molecular genetics of inherited bleeding and clotting disorders. The molecular basis of von Willebrand disease is a particular focus, with current work aimed at characterizing major modifier genes in a mouse genetic model.



## MORNING SESSION

Huda Akil, moderator

9:05 - 9:10 am

**Welcome**

**Alan Saltiel**

University of Michigan

9:10 - 10:10 am

**Leptin SCD1 and the  
Biological Basis of Obesity**

**Jeffrey Friedman**

Howard Hughes Medical Institute  
Rockefeller University

10:30 -

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10:10-10:30 am Break

11:30.





### **Jeffrey Friedman**

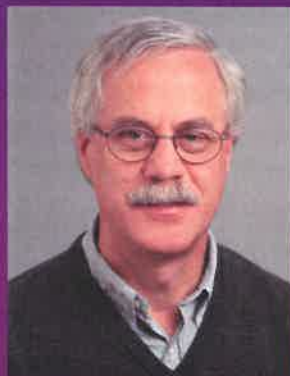
Friedman is the Marilyn M. Simpson Professor at the Rockefeller University and a Howard Hughes Investigator. He is also the Director of The Starr Foundation Center for Human Genetics. He received his M.D. from Albany Medical College in 1977, and his Ph.D. from The Rockefeller University in 1986. After completing a residency in Internal Medicine at Albany Medical Center Hospital, Dr. Friedman came to Rockefeller as a Post-graduate Fellow and Associate Physician in 1980.

His research studies the molecular mechanisms that regulate body weight and metabolism. Current research is aimed at understanding the genetic basis of obesity in humans and the neural mechanisms by which leptin regulates feeding behavior.

### **Joseph Nadeau**

Nadeau is a Professor of Genetics at Case Western Reserve University School of Medicine. He was a founding member of the International Mammalian Genome Society and a founding editor of Mammalian Genome. He was founder and director of the Mouse Genome Informatics Project (1989-1994) and founder of the Mouse Gene Expression Database Project (1992-1994). He received his Ph.D. in Population Biology from Boston University in 1978.

His research focuses on the genetic and phenotypic dissection of selected mouse models of human multifactorial disease traits. His laboratory is developing new kinds of mouse genetic resources for complex trait analysis. He has pioneered the mathematical analysis of comparative genetic maps as a means for studying genome organization and evolution. His current work focuses on the evolution of gene families and physiological pathways.



## **AFTERNOON SESSION**

**John Lowe**, moderator

11:30 am

**Genetic Defenses Against  
Cholesterol Accumulation**  
**John Hobbs**

Hughes Medical Institute  
University of Texas Southwestern Medical School

12:00 pm Lunch Break

1:45 - 2:30 pm

**Inherited Disorders of  
Bleeding and Clotting**  
**David Ginsburg**

Howard Hughes Medical Institute  
University of Michigan

2:45 - 3:30 pm

**Building hearts:  
Genetic perturbations, fuel  
networks, and systems**

**Joseph Nadeau**  
Center for Computational Genomics  
Case Western Reserve University

3:45 - 4:00 pm Coffee Break



### **Helen Hobbs**

Hobbs is the Director of the McDermott Center for Human Growth and Development, a Howard Hughes Institute Investigator, and a Professor of Internal Medicine and Molecular Genetics, as well as Chief of the Division of Medical Genetics in Internal Medicine at The University of Texas Southwestern Medical School. She received her B.A. at Stanford University in 1974, and an M.D. from Case Western Reserve University School of Medicine in 1979.

Her research focuses on genetic determinants of plasma lipid levels, LDL metabolism and the role of ABC transporters in lipid transport. Her laboratory is investigating the ways in which dysregulation in the uptake and trafficking of dietary lipids contributes to human diseases, in particular coronary atherosclerosis, gallstones, and metabolic syndromes.

### **Min Han**

Han is a Professor of Molecular, Cellular and Developmental Biology and a Cancer Center Member at the Health Science Center at the University of Colorado at Boulder. He is also an Associate Investigator at the Howard Hughes Medical Institute and the Guest Professor at Fudan University in Shanghai. He earned his B.S. in Biochemistry at Peking University in Beijing in 1982 and a Ph.D. in Molecular Biology at the University of California at Los Angeles in 1988.

Han's laboratory has focused on postembryonic development of the model organism *Caenorhabditis elegans* aiming at understanding the mechanisms of signal transduction, cell differentiation and tissue morphogenesis. His laboratory is also studying several human disease genes including those involved in macular degeneration.



genetic  
functional  
systems biology

4:00 – 4:45 pm

***C. elegans* genetics:  
nuclear positioning and beyond**  
**Min Han**

Howard Hughes Medical Institute  
University of Colorado

5:00 pm Adjourn



The Life Sciences Institute at the University of Michigan is at the nexus of a campus-wide effort to expand learning and teaching in the life sciences. Its multidisciplinary team of researchers is focused on Genetics, Genomics and Proteomics; Molecular and Cellular Biology; and Structural, Chemical and Computational Biology. This fall, the Institute's charter faculty will begin moving into a new 230,000 square foot wet lab facility located in the heart of the Ann Arbor campus.

The annual LSI symposium is designed to highlight recent scientific developments and to encourage the exchange of ideas. It also provides an opportunity for the state of Michigan's students and scientists to interact with and learn from prominent scientific leaders.

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