

THE  
*Flexner*  
**DISCOVERY**  
LECTURE SERIES

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**NANCY J. COX, PH.D.**

BUILDING A CATALOG LINKING GENES  
TO THE MEDICAL PHENOME IN BIOVU

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DECEMBER 17, 2015

4:00 P.M.

208 LIGHT HALL

THE  
*Flexner*  
**DISCOVERY**  
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Upcoming Discovery Lecture:

**DORA ANGELAKI, PH.D.**

*Chairman and Professor of Neuroscience  
Baylor College of Medicine, Houston, TX  
Member, National Academy of Sciences*

*Jan. 14, 2015*

*208 Light Hall / 4:00 P.M.*

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VANDERBILT  UNIVERSITY  
MEDICAL CENTER

## BUILDING A CATALOG LINKING GENES TO THE MEDICAL PHENOME IN BIOVU

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Using the novel PrediXcan method, we are embarking on the creation of a catalog characterizing the relationship between the genetically determined expression of each gene and the medical phenome that has been developed here at Vanderbilt through the Synthetic Derivative and BioVU. We will highlight examples of initial discoveries, biological validations of these discoveries, and replications, as well as the plans for future research. We will also summarize the opportunities for Vanderbilt investigators to access all results from these studies as well as to partner for additional BioVU genotyping and for additional BioVU analysis.

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### **NANCY J. COX, PH.D.**

**DIRECTOR, VANDERBILT GENETICS INSTITUTE  
DIRECTOR, DIVISION OF GENETIC MEDICINE  
MARY PHILLIPS EDMONDS GRAY PROFESSOR OF GENETICS  
PROFESSOR, DEPARTMENT OF MEDICINE  
VANDERBILT UNIVERSITY SCHOOL OF MEDICINE**

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Nancy Cox is a quantitative human geneticist conducting research to develop methods for the analysis of genetic and genomic data, most recently focused on data integration approaches, and then applying these methods to identify genetic risk factors for common human diseases. Dr. Cox completed a BS in Biology in 1978 from the University of Notre Dame, a PhD in Human Genetics in 1982 from Yale University and did post-doctoral research at Washington University and the University of Pennsylvania before joining the University of Chicago in 1987, where she spent 28 years. She joined the faculty at Vanderbilt in 2015 as the Mary Phillips Edmonds Gray Professor of Genetics and Director of the Vanderbilt Genetics Institute and the Division of Genetic Medicine.

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