

EECS Distinguished Seminar Series



Dr. Gary Stormo

Joseph Erlanger Professor of Genetics & Biomedical Engineering, Washington University

“Computational and Experimental Studies of Regulatory Networks”

Friday, April 3, 2009 • 11:00 a.m. • Harris Center (HEC) 101

One of the challenges of genomics research is to understand the regulation of gene expression. Much of the regulation is controlled through DNA-protein interactions and we have been developing tools, both computational and experimental, to study those interactions for many years. This talk will outline some of the approaches we have been using and how they inform us about the regulatory network that governs the cell's behavior. Post-transcriptional regulation also plays a role in controlling gene expression, and some of our work on that topic will also be described.

DR. GARY STORMO

Dr. Stormo received his B.S. degree in biology from the California Institute of Technology in Pasadena, and his Ph.D. in molecular biology from the University of Colorado at Boulder in 1981. He remained at the University of Colorado as a faculty member and was chosen for the Outstanding Teacher Award by the CU Mortarboard Society. He attained the rank of full professor in the Department of Molecular, Cellular and Developmental Biology at Boulder before joining the faculty at WUSM in 1999.

Dr. Stormo is a pioneer in bioinformatics and genomics. His work has contributed to the understanding of regulation of gene expression and protein-DNA interactions. He is also a leading figure in the development of algorithms for data mining of DNA sequence data. His work has impacted both the fields of experimental and computational molecular biology but is also highly interdisciplinary beyond the fields of biology. He has been an invited speaker at conferences in the fields of Math, Statistics, Computer Science, Chemistry and Physics. His research is supported by both the NIH and the DOE. He has published more than 150 scientific papers.

Dr. Stormo has served as a U.S. member of the International Advisory Committee on Nucleic Acid Sequence Databases and on several NIH committees. He was Executive Editor of Bioinformatics and is currently Editor for Current Protocols in Bioinformatics, Deputy Executive Editor of Public Library of Science: Computational Biology and on the editorial board of several other journals. He served on the Board of Directors for the International Society for Computational Biology and was a fellow of the American College of Medical Informatics. He is an internationally popular lecturer and mentors several graduate students and postdoctoral fellows at WUSM.