

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

# **COLLOQUIUM**

**Friday, April 27, 2007**  
**2:00 – 3:00 PM**  
**Maria Sanford, Room 101**

## **From Multivariate Biomarkers to The Informative Set of Genes**

**DARIUS M. DZIUDA**

**CENTRAL CONNECTICUT STATE UNIVERSITY**

### **Abstract**

Presented will be a novel method for identification of the informative set of genes, which is defined as a set containing all information significant for differentiation of two or more classes (diseases, prognoses, toxicity, phenotypes, etc.). The informative set of genes is important for elucidation of biological processes underlying class differentiation in order to extract from the data new biological or biomedical knowledge. Commonly used methods are either univariate or univariately-biased and as such they are missing genes whose discriminatory importance can be identified only by multivariate approach. In the presented method, the informative set of genes is an extension of a multivariate biomarker that can be used as a classifier.

***For further information:***

[gotchevi@ccsu.edu](mailto:gotchevi@ccsu.edu) 860-832-2839  
[castanedan@ccsu.edu](mailto:castanedan@ccsu.edu) 860-832-2851