

Guy Brock

Assistant Professor

Department of Bioinformatics
School of Public Health &
Information Sciences

Research Activities

Dr. Brock's research interests include statistical genetics and the analysis of microarray data. He is also interested in developing methods for handling proteomic data.

Grants Funded

Role: Statistical Core

Title: Molecular Determinants of Developmental Defects

Funding Agency: NIH/NCRR

Direct Costs Funded: \$297,367 (core only)

Role: Statistical Consultant

Title: Center for Environmental Genomics and Integrative Biology
Bioinformatics, Biostatistics and Computational Biology Core

Funding Agency: NIH/NIEHS

Direct Costs Funded: \$600,000 (core only)

Role: Co-Investigator

Title: Transcriptional Coactivators and Pregnancy Outcomes

Funding Agency: NIH

Direct Costs Funded: \$255,546

Role: Co-Investigator

Title: Nutritional Epigenetics and Orofacial
Development

Funding Agency: NIH

Direct Costs Funded: \$250,000

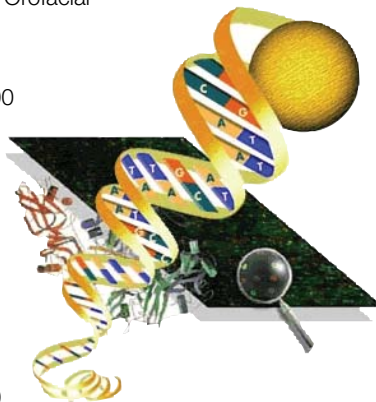
Role: Co-Investigator,

Biostatistician

Title: A Pharmacogenetic
Approach to Prostate Cancer
Susceptibility

Funding Agency: National
Cancer Institute, NIH

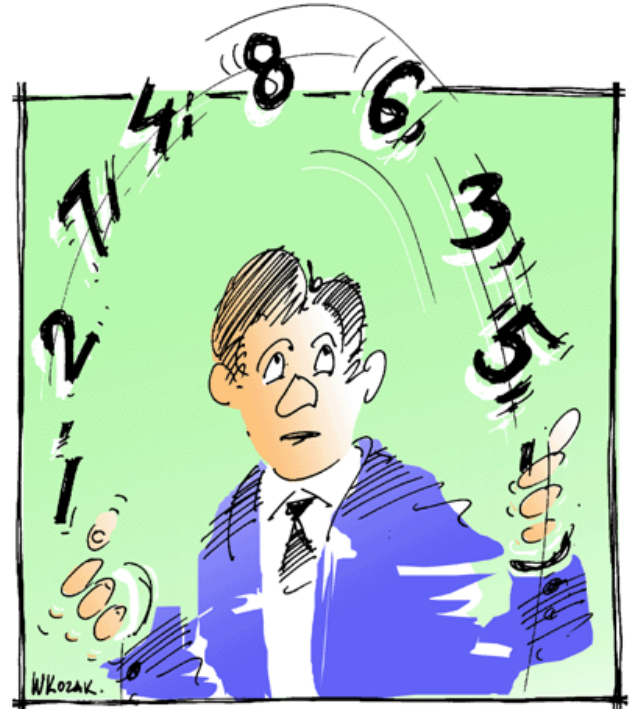
Direct Costs Funded: \$50,000



Peer-reviewed Publications

Brock, G., Weeks, D.E., Sobel, E. and Feingold, E. (2007) "A novel method for estimating significance levels in NPL scores for large pedigrees" *Genet Epidemiol.*, 31(5):417-430.

Brock, G., Shaffer, J.R., Blakesley-Ball, R.E., Lotz, M.J., and Tseng, G.C. (2008) "Which missing value imputation method to use in



expression profiles: a comparative study and two selection schemes" *BMC Bioinformatics* 9(1):12

Bordon, J., Peyrani, P., **Brock, G.**, Blassi, F., Rello, J., File, T., Ramirez, J.A., and the CAPO Study Group. "The care of hospitalized patients with community-acquired pneumonia should not be altered by the presence of pneumococcal bacteremia: Results from the community-acquired pneumonia organization (CAPO) international cohort study." *CHEST*, 2008. 133(3):618-24

Pihur, V., **Brock, G.**, Datta, S. and Datta, S. "Cluster validation for microarray data: An appraisal". In Indian Statistical Institute Platinum Jubilee Series (A. SenGupta, Ed), *World Scientific Press*, to appear (2008).

Bhattacharjee, S., Kuo, C-L., Mukhopadhyay, N., **Brock, G.**, Weeks, D.E., and Feingold, F. (2008) "Robust score statistics for QTL linkage analysis" *The American Journal of Human Genetics* 82(3):567-82.

Brock, G., Pihur, V., Datta, S., and Datta, S. (2008) "cIValid, an R package for cluster validation" *Journal of Statistical Software* Vol. 25, Issue 4, Mar 2008.

Brock, G., Beavis, W., and Salter, L. (2008) "Fuzzy and related methods as screening tools for detecting gene regulatory Networks," *Information Fusion* (in press).