

BIOGRAPHICAL SKETCH

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NAME Grier Philip Page	POSITION TITLE Associate Professor of Biostatistics		
eRA COMMONS USER NAME gppage			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Texas –Austin	BS	1993	Zoology
University of Texas –Austin	BS	1993	Molecular Biology
University of Texas –HSC-Houston	MS	1997	Biomedical Sciences
University of Texas –HSC-Houston	PhD	1998	Biomedical Sciences
MD Anderson Cancer Center	Post-doc	1999	Statistical Genetics

A.1 Positions

Associate Professor	University of Alabama-Birmingham	Oct 2005 - Present
Assistant Professor	University of Alabama-Birmingham	Dec 2001-Sept 2005
Assistant Professor	Med. Univ. South Carolina	Mar 1999-Nov 2001

A.2 Honors

NMB (formerly IFCN-1) Study Section (*ad Hoc*) Oct 2002-June 2006
 NIH/CSR BST-51 (Software) Feb 2004
 NSF MRI-B Study Section (2003-2006)
 NSF Biological Database and Informatics Panel (2005)
 Delta Omega annual award for innovative Public Health Curriculum

B. Publications (selected from 54)

- **Page GP**; Amos CI, Boerwinkle E. (1998) 'The Quantitative LOD score: Test statistic and sample size for exclusion and linkage of quantitative traits' American Journal of Human Genetics 62: 962-968.
- **Page GP**, Amos CI. (1999) 'Comparison of Linkage-Disequilibrium Methods for Localization of Genes Influencing `Quantitative Traits in Humans' American Journal of Human Genetics 64(4)1194-1204
- **Page GP**, Green JL, Lackland D (2000) Epidemiology of lung cancer with special reference to genetics, bioassays, women, and developing countries. Semin Respir Crit Care Med. 2000;21(5):365-74.
- **Page GP**, King TM, Barnholtz JS, de Andrade M, Peterson L, Amos CI(1999) Genome scans for genetic predisposition to alcoholism by use ofTDT analysis' Genetic Epidemiology 17(sup 1) S277-S282.
- **Page, GP**, Marsha A Wilcox, Jane Occhiuto, Sudeshna Adak, Donna Neuberg, Ruta Bajorunaite, Varghese George* (2001) Comparison of the QTDT analyses of IGE by different tests and between datasets Genetic Epidemiology 21(sup 1) S312-S316.
- Gelernter J, Bonvicini K, **Page GP**, Woods SW, Goddard AW, Kruger S, Pauls DL, Goodson S. (2001) Linkagegenome scan for loci predisposing to panic disorder or agoraphobia Amer. J. Med. Genet. 105(6) 548-557
- Amos CI, **Page GP** ' (2001)Methods for linkage disequilibrium mapping' In Genetic Dissection of Complex Traits: Challenges for the Next Millennium D.C. Rao MA Province Ed. Wiley and Sons p213-222.
- Zhang Z, **Page GP**, Zhang H. (2002) Applying classification separability analysis to microarray data. Methods of Microarray Data Analysis: Papers from CAMDA '00 Eds. Lin and Johnson p125-136.
- Kaplan DE, Gayán J, Ahn J, . . . , **Page GP**.,Smith S.D., Gruen J.R. (2002) Evidence for linkage and association with reading disability on 6P21.3-22 Am. J. Hum. Genet. 70(5) 1287-1298
- Zhang Z, **Page GP**, Zhang H. (2003) Fishing Expedition - a Supervised Approach to Extract Patterns from a Compendium of Expression Profiles. Methods of Microarray Data Analysis: Papers from CAMDA '01 Eds In and Johnson. P 86-95.
- Gadbury, GL, Allison DB, **Page GP**, Heo M, Mountz J (2003) – Randomization tests for small samples: an

application for genetic expression data. *Journal of Royal Statistical Society* –C 52(3)365-376.

- **Page GP**, George V, Go RC, Page PZ, Allison DB (2003)“Are we there yet”: Deciding when one has demonstrated specific genetic causation in complex diseases and quantitative traits. *American Journal of Human Genetics*. 73(4) 711-719.
- Beasley, TM, **Page GP**, Brand JP, Gadbury GL, Allison DB (2003) Chebyshev’s Inequality for Non-parametric Testing with Small N and α in Microarray Research - *Journal of Royal Statistical Society* –C 53(1) 98-105.
- **Page GP**, Edwards, JW, Barnes S, Weindurch R, Allison DB (2003) A Design and Statistical Perspective on Microarray Gene Expression Studies in Nutrition: The Need for Playful Creativity ... *Nutrition* 19:997-1000.
- Sadlonova A, Novak Z, Johnson MR, Bowe DB, Gault SR, **Page GP**, Thottassery JV, Welch DR, Frost AR. (2004) Breast fibroblasts modulate epithelial cell proliferation in three-dimensional in vitro co-culture. *Breast Cancer Res*. 2005;7(1):R46-59.
- Kim H, **Page GP**, Barnes S (2004) Proteomics and mass spectrometry in nutrition research. *Nutrition* 21(1)155-165.
- Allison DB, **Page GP** Beasley TM, Edward JE (2005) DNA Microarrays and Related Genomics Techniques. CRC Press.
- Gadbury GL, Xiang Q, Edwards J, **Page GP**, Allison DB (2005) The role of sample size on measures of uncertainty and power. In *DNA Microarrays and Related Genomics Techniques*.
- Ginos, MA, **Page, GP**, Michalowicz, BS, Volker, SE, Patel, K, Ondrey, FG, Gapany, M, Maisel M, Adam G, Pembuccian M, Gaffney, PM (2004) Gene Expression Profiling Identifies a Signature Associated with Recurrent Disease in Squamous Cell Carcinoma of the Head and Neck. *Cancer Research*. 64(1) 55-63.
- Gadbury GL, **Page GP**, Edwards JW, Kayo T, Prolla TA, Weindruch R, Permana PA, Mountz J, Allison DB (2004) Power analysis and sample size estimation in the age of high dimensional biology: a parametric bootstrap approach illustrated via microarray Research. *Stat. Methods in Medical Research*. 13: 325-338.
- St-Onge, M., **Page, G. P.**, DeLuca, M., Zhang, K., Kim, K., Heymsfield, S. B., & Allison, D. B. (2006). Design & Analysis of Microarray Studies for Obesity Research. In N. Moussa (Ed.). *Genomics of Obesity*.
- Gelernter J, Liu X, Hesselbrock V, **Page GP**, Goddard A, Zhang H. (2004) Results of a genome wide scan: . . for cigarette smoking. *American Journal of Medical Genetics*.128B(1) 94-101.
- Churchill GA . . . **Page GP** . Zhou F (2004). The collaborative cross, a community resource for the genetic analysis of complex traits. *Nature Genetics* 11:133-1137
- Trivedi P, **Page GP** Edwards . . . Allison DB (2005) HDBStat! : A platform-independent software suite for statistical analysis of high dimensional biology data. *BMC Bioinformatics* 2005 Apr 6;6(1):86.
- Lee YH, Nair S, Rousseau E, Allison DB, **Page GP**, Tataranni PA, Bogardus C, Permana PA. (2005) Microarray profiling of isolated abdominal subcutaneous adipocytes. *Diabetologia*. 2005 Sep;48(9):1776-83
- Zakharkin SO, Kim K, Mehta T, Chen L, Barnes S, Scheirer KE, Parrish RS, Allison DB, **Page GP**. (2005) Sources of variation in Affymetrix microarray experiments. *BMC Bioinformatics*. 2005 Aug 29;6:214.
- Garge NR, **Page GP**, Sprague AP, Gorman BS, Allison DB. (2005) Reproducible clusters from microarray research: whither? *BMC Bioinformatics*. 2005 Jul 15;6 Suppl 2:S10.
- Persson S, Hairong W, Jennifer Milne, **Page GP**, Somerville S (2005) Large-scale co-expression analysis reveals novel genes involved in cellulose biosynthesis. *Proc. Natl. Acad. Sci. USA*. 102(24):8633-8.
- **Page GP** Ruden DM Combining high dimensional biological data to study complex diseases and quantitative traits. (2005) In *DNA Microarrays and Related Genomics Techniques*. Eds Allison, Beasley, Edwards, and **Page**.
- **Page GP**, Edward JE, Wang J, Yelisetti P, Trivedi P Allison DB (2006) The PowerAtlas: a power and sample size atlas for microarray experimental design and research.*BMC Bioinformatics*. 2006 Feb 22;7:84.
- Cui X, **Page GP**, Kendzioriski K, Allison DB (2006)Microarray Data Analysis: From *Dis*-array to Consolidation & Consensus. *Nature Reviews Genetics* 7(1)55-65
- Wiener, HW, Go, RCP, Tiwari H, George V, **Page GP** (2006) COGA phenotypes and linkages on chromosome 2. *BMC Genetics* 2005, 6(Suppl 1):S125.
- Mukherjee S, Frolova N, Sadlonova A, Novak Z, Steg A, **Page GP**, Welch DR, Lobo-Ruppert SM, Ruppert JM, Johnson MR, Frost AR. (2006) Hedgehog signaling and response to cyclopamine differ in epithelial and stromal cells in benign breast and breast cancer. *Cancer Biol Ther*.Jun;5(6):674-83.

OTHER SUPPORT**Active**

NSF 0217651 (Allison)	8/1/2002-8/31/2006	NSF
Design and Analysis of Microarray Gene Expression studies in Plants		
Goals: Develop and disseminate methods of the analysis of microarray data to the plant community.		
Role: Co-PI		
U54 AT100949-01 (Barnes/Page)	8/14/03-5/31/08	NIH/NCI
Center for nutrient gene interactions		
Goals: Study the effects of phytoestrogens upon the development of cancer.		
Role: PI of Core D (Biostatistics)		
U54 AT100949-01 (Barnes/Page)	8/14/03-5/31/08	NIH/NCI
Center for nutrient gene interactions		
Goals: Study the effects of phytoestrogens upon the development of cancer.		
Role: Co-I on project 3		
1R03 CA 105950-01 (Frost)	9/30/03 - 9/29/05	NIH/NCI
Prevention of Breast Cancer by Targeting Myofibroblasts		
Goals: The goal of this proposal is to establish the potential of alpha smooth muscle actin as a key molecular target through which the fibroblast-epithelial cell interactions important in breast carcinogenesis can be modulated to prevent invasive breast cancer.		
Role: Co-investigator		
5R01 NS043530-02 (Gruen)	9/15/03-9/14/08	NIH/NICHHS
Discovery of the 6p.21.3 Reading Disability Gene		
Goal: Localization of a gene for reading disability in 6p21.3		
Role: Sub-contract PI for linkage analysis		
NSF 0306596 (Page)	9/1/03 – 8/31/05	NSF
SEGR: The power Atlas		
Goal: This grant is to develop a web based tool for helping investigators plan and design microarray experiments and to calculate sample sizes.		
Role: PI		
NSF 0501890(Luthe/Page)	9/1/05-8/31/08	NSF
Functional genomics of flowering in the woody perennial <i>Populus</i> .		
Goal: To determine similarities and differences in flowering between annual and perennial plants.		
Role: Sub-contract PI for microarray analysis.		
1R01 ES 012933-01 (Ruden)	09/01/2004 to 08/31/2009	NIH/NIEHS
The major goals of this project are to use QTL mapping techniques and microarray techniques to identify genes that affect the sensitivity of <i>Drosophila</i> to the heavy metal toxin lead. This is the grant that you are reviewing.		
Role: Co-investigator for the analysis of microarray data.		
1 R01 AA15172-01 (Bailey)	12/1/05-11/30/09	NIH/NIAAA
Redox Modification of Thiols in Alcohol Hepatotoxicity		
Role: Co-investigator for proteomic analysis		
DOD (Ratner/Page)	1/1/05-12/21/07	DOD/CDMRP

Principal Investigator/Program Director (Last, First, Middle): Page, Grier

Therapeutic Targets for Neurofibromas: Identification by Cross-Species Gene Expression Analysis
Goals: The proposed studies will assess the effect of fibroblast-epithelial cell interactions on the growth of epithelial cells of varying degrees of transformation and tumorigenicity and the role of Hedgehog signaling in these interactions.

Role: Sub-contract PI

NIH/NCI (Page) 10/1/2005-9/30/2006 NIH/NCI

Are there common mechanisms of action of phytoestrogens?

Goals: To develop a database of phytoestrogen related microarray experiments and compare and contrast the response of different estrogenic and phytoestrogenic compounds./

ole: Pilot PI