Grace E. Kissling, Ph.D.

Biostatistics Branch

National Institute of Environmental Health Sciences

P.O. Box 12233, Mail Drop A3-03

Research Triangle Park, NC 27709

(919) 541-1756

(919) 541-4311 (FAX)

kissling@niehs.nih.gov

EDUCATION:

B. S. in Applied Mathematics with High Honor, Georgia Institute of Technology, 1977.

Ph. D., Department of Biostatistics, University of North Carolina at Chapel Hill, 1981.

HONORS:

Graduate fellowship on a National Research Service Award, 1977-80. Membership in the following honor societies:

Phi Eta Sigma, 1974; Phi Kappa Phi, 1976; Pi Mu Epsilon, 1977;

Tau Beta Sigma, 1974; Sigma Xi, 1984.

National Merit Scholarship, 1973-77.

Finalist for a Senior University Teaching Excellence Award, 1999.

PROFESSIONAL

EXPERIENCE:

Staff Scientist, Biostatistics Branch, National Institute of Environmental Health Sciences, June 2003 – present.

Professor, Department of Mathematical Sciences, Division of Statistics, University of North Carolina at Greensboro, August 1999 – May 2003. (Assistant Professor, 1986-1990; Associate Professor, 1990-1999; Statistics Coordinator, 1998-2000, 2002-2003.)

Interim Head, Department of Mathematical Sciences, University of North Carolina at Greensboro, August 2000 - May 2001.

Adjunct Professor, Department of Public Health Education, University of North Carolina at Greensboro, August 2001 – May 2003.

Adjunct Associate Professor, Department of Anthropology, University of New Mexico, August 1996 - 2002.

Adjunct Associate Professor, Department of Biostatistics, University of North Carolina at Chapel Hill, July 1992 - July 2002.

Visiting Associate Professor, Division of Biostatistics and Epidemiology, Howard University Cancer Center, July 1990 - December 1990.

Assistant Professor, Department of Biometry and Genetics, Louisiana State University Medical Center, July 1981 - July 1986.

Health Statistician, National Institute for Occupational Safety and Health, May 1980 - December 1980.

NIEHS ACTIVITIES:

Chief Statistician for the National Toxicology Program, 2004 – present.

Member, NIEHS/NTP Scientific Review Group (formerly Review Group 1) for the *Report on Carcinogens*, 2004 – present.

Member, Quality Council, 2004 – present.

Project Officer, Contract No. N01-ES-15468, Statistical Analysis and Computational Support for NIEHS Experimental Studies, 2004 – present.

Committee on Promotions II, 2007 – 2009.

REFEREED PUBLICATIONS

Tracy RE, Toca VT, Kissling GE, Lopez C. Fibrous intimal thickening and atheronecrosis of the thoracic aorta: Some background for a mathematical theory. *Laboratory Investigation* 1983; 48(3):303-312.

Tracy RE, Toca VT, Lopez CR, Kissling GE, Devaney K. Fibrous intimal thickening and atheronecrosis of the thoracic aorta in coronary heart disease. *Laboratory Investigation* 1983; 48(3):313-322.

Wolf TM and Kissling GE. Type A behavior and achievement of freshman medical students. *Journal of Medical Education* 1983; 58:820-822.

Tracy RE, Kissling GE, Devaney KO, Lopez CR, Toca VT, Gandia M. The spatial dispersion of foam cells in the human thoracic aorta. *Laboratory Investigation* 1983; 49(6):693-701.

Kaufman HE, Varnell ED, Centifanto-Fitzgerald YM, De Clercq E, Kissling GE. Oral antiviral drugs in experimental herpes simplex keratitis. *Antimicrobial Agents and Chemotherapy* 1983; 24(6):888-891.

Yamaguchi T, Asbell PA, Ostrick M, Safir A, Kissling G, Kaufman HE. Endothelial damage in monkeys after anterior radial keratotomy performed with a diamond blade. *Archives of Ophthalmology* 1984; 102:765-769.

Yamaguchi T, Asbell PA, Ostrick M, Kissling GE, Safir A, Kaufman HE. Corticosteroid therapy after anterior radial keratotomy in primates. *American Journal of Ophthalmology* 1984; 97:215-220.

Bonney GE and Kissling GE. On the inverse of a patterned covariance matrix. *Journal of the American Statistical Association* 1984; 79(387):722-723.

Wolf TM and Kissling GE. Changes in lifestyle characteristics, health, and mood of freshman medical students. *Journal of Medical Education* 1984; 59:806-814.

Sanitato JJ, Asbell PA, Varnell ED, Kissling GE, Kaufman HE. Acyclovir in the treatment of herpetic stromal disease. *American Journal of Ophthalmology* 1984; 98:537-547.

Edwards JC, Euans DW, Kissling GE. Measuring attitude toward family medicine. *Family Medicine* 1985; vol. XVII(1):4-7.

Tracy RE, Devaney K, Kissling G. Characteristics of the plaque under a coronary thrombus. *Virchows Archiv, Pathol. Anat.* 1985; 405:411-427.

Tracy RE, Kissling GE, Devaney KO, Lopez CR, Gandia M. Spatial dispersion of spindle cells in the human thoracic aorta. *Laboratory Investigation* 1985; 52(1):85-92.

Hamano H, Kitano J, Mitsunaga S, Kojima S, Kissling GE. Adverse effects of contact lens wear in a large Japanese population. *The CLAO Journal* 1985; 11(2):141-147.

Tracy RE and Kissling GE. Age and fibroplasia as pre-conditions for atheronecrosis in the human thoracic aorta. *Archives of Pathology and Laboratory Medicine* 1985; 109:651-658.

Kandarakis A, Johnson TD, Ziegler LP, Kissling GE, Zimmerman TJ, Alpern L. The effect of nitrates on intraocular pressure in Sturge-Weber Syndrome. *Glaucoma* 1985; 7(3):120-126.

Kaufman HE, Varnell ED, Centifanto YM, Kissling GE. Effect of the herpes simplex virus genome on the response of infection to corticosteroids. *American Journal of Ophthalmology* 1985; 100(1):114-118.

Bonney GE and Kissling GE. Gram-Schmidt orthogonalization of multinormal variates: Applications in genetics. *Biometrical Journal* 1986; 28:417-425.

Wolf TM, Kissling GE and Burgess LA. Change in Type A behavior among medical students: A four-year longitudinal study. *Medical Education* 1986; 20(3):176-180.

Tracy RE, Kissling GE, Lopez CR, Gandia M. Histometric components of aortic atherosclerosis which vary or remain constant among eight populations. *Laboratory Investigation* 1986; 54(3):314-321.

Miller Jr. JM, Kissling GE, Korndorffer III FA, Brown HL, Gabert HA. A cross-sectional study of *in utero* growth of the above-average-sized fetus. *American Journal of Obstetrics and Gynecology* 1986; 155(5):1052-1055.

Wolf TM, Kissling GE, Burgess LA. Lifestyle characteristics during medical school: A four-year cross-sectional study. *Psychological Reports - Perceptual and Motor Skills* 1986; 59:179-189.

Edwards JC, Kissling GE, Plauché WC, Marier RL. Long-term evaluation of resident training in clinical teaching skills. *Journal of Medical Education* 1986; 61:967-970.

Tracy RE, Devaney K, Kissling G. Characteristics of the plaque under a coronary thrombus. *1986 Yearbook of Pathology and Clinical Pathology* 1986; p. 84-86.

Tracy RE, Kissling GE, Malcom GT, Devaney K. Sequestration hypothesis of atherosclerosis. *Virchows Archiv A* 1987; 411:425-434.

Wolf TM, Kissling GE, Burgess LA. Hassles and uplifts during the freshman year of medical school. *Psychological Reports - Perceptual and Motor Skills* 1987; 60:85-86.

Yazdani M, Kissling GE, Tran TH, Gottschalk SK, Laurent Jr. J, Schuth CR. Phenobarbital increases the theophylline requirement of premature infants being treated for apnea. *American Journal of Diseases of Children* 1987; 141:97-99.

Limberg MB, McCaa C, Kissling GE, Kaufman HE. Topical application of hyaluronic acid and chondroitin sulfate in the treatment of dry eyes. *American Journal of Ophthalmology* 1987; 103(2):194-197.

McDonald MB, Safir A, Waring GO, Schlichtemeier WR, Kissling GE, Kaufman HE. A preliminary study of epikeratophakia or penetrating keratoplasty for keratoconus. *American Journal of Ophthalmology* 1987; 103:467.

Miller Jr. JM, Korndorffer III FA, Kissling GE, Brown HL, Gabert HA. Recognition of the overgrown fetus: *In utero* ponderal indices. *American Journal of Perinatology* 1987; 4(2):86-89.

Brown HL, Miller Jr. JM, Gabert HA, Kissling G. Ultrasonic recognition of the small-forgestation-age fetus. *Obstetrics and Gynecology* 1987; 69(4):631-635.

Tracy RE and Kissling GE. Age and fibroplasia as preconditions for atheronecrosis in human coronary arteries. *Archives of Pathology and Laboratory Medicine* 1987; 111:957-963.

Tracy RE, Kissling GE, Curtis MB. Smooth muscle cell-reticulin lamellar units of 13.2 μm thickness composing the aortic intima. *Virchows Archiv A* 1987; 411:415-424.

Carter JM, Gebhardt BM, Kissling GE, Kaufman HE. The suppression of acute corneal inflammation by Bredinin. *Journal of Ocular Pharmacology* 1987; 3(3):191-197.

Colin J, Chastel C, Kaufman HE, Kissling GE. Combination therapy for dendritic keratitis with Acyclovir and Vidarabine. *Journal of Ocular Pharmacology* 1987; 3:39-42.

Edwards JC, Euans DW, Kissling GE. Changes in student attitudes toward Family Medicine: A four-year study. *Family Medicine* 1988; 20(3):211-214.

Edwards JC, Kissling GE, Brannan JR, Plauché WC, Marier RL. Study of teaching residents how to teach. *Journal of Medical Education* 1988; 63:603-610.

Miller Jr. JM, Brown HL, Kissling GE, Gabert HA. The relationship of placental grade to fetal size and growth at term. *American Journal of Perinatology* 1988; 5(1):19-21.

Miller Jr. JM, Kissling GE, Brown HL, Korndorffer III FA, Gabert HA. Estimated fetal weight: Applicability to small- and large-for-gestational-age fetuses. *Journal of Clinical Ultrasound* 1988; 16:95-97.

Tracy RE and Kissling GE. Comparisons of human populations for histologic features of atherosclerosis: A summary of questions and methods for geographic studies. *Archives of Pathology and Laboratory Medicine* 1988; 112:1056-1065.

Miller Jr. JM, Kissling GE, Brown HL, Nagel PM, Korndorffer III FA, Gabert HA. *In utero* growth of the large-for-menstrual-age fetus. *Journal of Clinical Ultrasound* 1989; 17:15-17.

Wolf TM, Elston RC, Kissling GE. Relationship of hassles, uplifts, and life events to psychological well-being of freshman medical students. *Behavioral Medicine* 1989; 15(1):37-45.

Edwards JC, Kissling GE, Plauché WC, Marier RL. Evaluation of a teaching skills improvement programme for residents. *Medical Education* 1988; 22:514-517.

Tracy RE, Kissling GE, Oalmann MC. Two variants of coronary atherosclerosis in six populations. *American Journal of Public Health* 1989; 79(5):575-581.

Tracy RE, Kissling GE, Gandia M, Reynolds C. Spatial dispersion of stainable lipid in frozen sections of human aorta. *Virchows Archiv A* 1989; 415:39-49.

Hall L, Vacc NA, Kissling G. Likelihood to use employee assistance programs: The effects of socio-demographic, social-psychological, socio-cultural, organizational, and community factors. *Journal of Employment Counseling* 1991; 28(2):63-73.

Sandford MK, Kissling GE, Joubert PE. Neural tube defect etiology: New evidence concerning maternal hyperthermia, health and diet. *Developmental Medicine and Child Neurology* 1992; 34:661-675.

McCarthy P, Kissling G, Dirkers J. How many people need substance abuse treatment in North Carolina and how much does it cost? *North Carolina Medical Journal* 1993; 54(5):209-212.

Williams R, Laing E, Demenais F, Kissling G, Gause B, Chen V, Bonney G, Descriptive analysis of breast cancer in African-American women at Howard University Hospital, 1960-1987. *Journal of the National Medical Association* 1993; 85(11):828-834.

Laing AE, Demenais FM, Williams R, Kissling GE, Chen V, Bonney GE. Breast cancer risk factors in African American women: The Howard University Tumor Registry experience. *Journal of the National Medical Association* 1993; 85(12):931-939.

Sandford MK and Kissling GE. Multivariate analysis of elemental hair concentrations from a medieval Nubian population. *American Journal of Physical Anthropology* 1994; 95:41-52.

Cykert S, Kissling G, Layson R, Hansen C. Health insurance does not guarantee access to primary care: A national study of physicians' acceptance of publicly insured patients. *Journal of General Internal Medicine* 1995; 10:345-348.

Jud GD, Winkler DT, Kissling GE. Price spreads and residential housing market liquidity. *The Journal of Real Estate Finance and Economics* 1995; 11:251-260.

Williamson NC, Lucas SR, Miles BE, Kissling GE. Protectionist American businesspeople and their firms. *Management International Review* 1996; 36(2):167-182.

Brodie BR, Stuckey TD, Kissling G, Hansen CJ, Weintraub RA, Kelly TA. Importance of infarct-related artery patency for recovery of left ventricular function and late survival after primary angioplasty for acute myocardial infarction. *Journal of the American College of Cardiology* 1996; 28(2):319-325.

Rubino CM, Shaffer CL, Gal P, Ransom JL, Kissling GE. Postnatal pharmacologic prevention of intraventricular hemorrhage: Meta-analysis of phenobarbital and indomethacin. *Pediatric Nursing* 1997; 23(2):196-204.

Brodie BR, Stuckey TD, Wall TC, Kissling G, Hansen CJ, Muncy DB, Weintraub RA, Kelly TA, Berry JJ, DeFranco AC. Importance of time to reperfusion for 30 day and late survival and recovery of left ventricular function after primary angioplasty for acute myocardial infarction. *Journal of the American College of Cardiology* 1998; 32(5):1312-1319.

Cykert S, Joines JD, Kissling G, Hansen CJ. Racial differences in patients' perceptions of debilitated health states. *Journal of General Internal Medicine* 1999; 14:217-222.

Williamson NC, Kissling G, Levinson C, Mangaldas S. Linking export competitiveness and import market targeting. *Journal of Global Competitiveness* 1999; 7(1):174-186.

Cykert S, Kissling G, Hansen CJ. Patient preferences regarding possible outcomes of lung resection: What outcomes should preoperative evaluations target? *Chest* 2000; 117:1551-1559.

Brodie BR, Stuckey TD, Hansen C, Kissling G, Muncy D. Influence of vessel size on early and late outcomes after primary angioplasty for acute myocardial infarction. *Journal of Invasive Cardiology* 2000; 12(1):13-19.

Gegick CG, Altheimer MD, Kissling GE. Benefits of outcome analysis in diabetes management. *Endocrine Practice* 2000; 6(3):253-259.

Beeson SA, Kissling GE. Predicting success for baccalaureate graduates on the NCLEX-RN#2. *Journal of Professional Nursing* 2001; 17(3):121-127.

Miller CK, Edwards L, Kissling G, Sanville L. Evaluation of a theory-based nutrition intervention for older adults with diabetes mellitus. *Journal of the American Dietetic Association* 2002; 102(8):1069-1081.

Miller CK, Edwards L, Kissling G, Sanville L. Nutrition education improves metabolic outcomes among older adults with diabetes mellitus: Results from a randomized controlled trial. *Preventive Medicine* 2002; 34(2):252-259.

Miller CK, Russell T, Kissling G. Decision-making patterns for dietary supplement purchases among women ages 25-45 years. *Journal of the American Dietetic Association* 2003; 103(11):1523-1526.

Nelson-Gray RO, Huprich SK, Kissling GE, Ketchum K. A preliminary examination of Beck's cognitive theory of personality disorders in undergraduate analogues. *Personality and Individual Differences* 2004; 36:219-233.

Nwosu VC, Kissling GE, Trempus CS, Honeycutt H, French JE. Exposure of Tg.AC transgenic mice to benzene suppresses hematopoietic progenitor cells and alters gene expression in critical signaling pathways. *Toxicology and Applied Pharmacology* 2004; 196(1):37-46.

Ghanayem BI, Witt KL, El-Hadri L, Hoffler U, Kissling GE, Shelby MD, Bishop JB. Comparison of germ cell mutagenicity in male CYP2E1-null and wild-type mice treated with acrylamide: evidence supporting a glycidamide-mediated effect. *Biology of Reproduction* 2005; 72:157-163.

Bebenik A, Carver GT, Kadyrov FA, Kissling GE, Drake JW. Processivity clamp gp45 and ssDNA-binding-protein gp32 modulate the fidelity of bacteriophage RB69 DNA polymerase in a sequence-specific manner, sometimes enhancing and sometimes compromising accuracy. *Genetics* 2005; 169:1815-1824.

Salo PM, Xia J, Johnson CA, Li Y, Kissling GE, Avol EL, Liu C, London SJ. Respiratory symptoms in relation to residential coal burning and environmental tobacco smoke among early adolescents in Wuhan, China: a cross-sectional study. *Environmental Health* 2004; 3:14.

Nyska A, Yoshizawa K, Jokinen MP, Brix AE, Sells DM, Wyde ME, Orzech DP, Kissling GE, Walker NJ. Olfactory epithelial metaplasia and hyperplasia in female Harlan Sprague-Dawley

rats following chronic treatment with polychlorinated biphenyls. *Toxicologic Pathology* 2005; 33(3):371-377.

Marsh VA, Young W, Dunaway K, Kissling G, Carlos RQ, Jones SM, Shockley DH, Weaver NL, Ransom JL, Gal P. Efficacy of topical anesthetics to reduce pain in premature infants during eye examinations for retinopathy of prematurity. *Annals of Pharmacotherapy* 2005; 39:829-833.

Gal P, Kissling G, Young W, Dunaway K, Marsh VA, Jones SM, Shockley DH, Weaver NL, Carlos R, Ransom JL. Efficacy of sucrose to reduce pain in premature infants during eye examinations for retinopathy of prematurity. *Annals of Pharmacotherapy* 2005; 39:1029-1033.

Emmen JMA, Couse JF, Elmore SA, Yates MM, Kissling GE, Korach KS. *In vitro* growth and ovulation of follicles from ovaries of estrogen receptor (ER) α and ER β null mice indicate a role for ER β in follicular maturation. *Endocrinology*, 2005; 146(6):2817-2826.

Chen Y, Kissling GE, Negishi M, Goldstein J. The nuclear receptors CAR and PXR cross talk with HNF4α to synergistically activate the human CYP2C9 promoter. *Journal of Pharmacology and Experimental Therapeutics* 2005; 314:1125-1133.

Ghanayem BI, Witt KL, Kissling GE, Tice RR, Recio L. Absence of acrylamide-induced genotoxicity in CYP2E1-null mice: Evidence consistent with a glycidamide-mediated effect. *Mutation Research* 2005; 578:284-297.

Yoshizawa K, Kissling GE, Johnson JA, Clayton NP, Flagler ND, Nyska A. Chemical-induced atrial thrombosis in NTP rodent studies: potential mechanisms and literature review. *Toxicologic Pathology* 2005; 33:517-532.

Drake JW, Bebenek A, Kissling GE, Peddada S. Mutational clusters from transient hypermutability. *Proceedings of the National Academy of Sciences* 2005; 102:12849-12854.

Tam NNC, Nyska A, Maronpot RR, Kissling G, Lomnitski L, Suttie A, Bakshi S, Bergman M, Grossman S, Ho SM. Differential attenuation of oxidative/nitrosative injuries in early prostatic neoplastic lesions in TRAMP mice by dietary antioxidants. *The Prostate* 2006; 66:57-69.

Chan SSL, Santos JH, Meyer JN, Mandavilli BS, Cook Jr. DL, McCash CL, Kissling G, van Houten B, Copeland WC, Walker VE, Witt KL, Bishop JB. Mitochondrial toxicity following perinatal exposure of CD-1 mice to AZT, 3TC, or AZT-3TC. *Environmental and Molecular Mutagenesis* 2006; in press.

Peddada SD and Kissling GE. Evaluation of a survival-adjusted quantal-response test for analysis of tumor incidence rates in animal carcinogenicity studies. *Environmental Health Perspectives* 2006; 114:537-541.

Dunnick J, Blackshear P, Kissling G, Cunningham M, Parker J, Nyska A. Critical pathways in heart function: Bis(2-chloroethoxy)methane-induced heart gene change in F344 rats.

Toxicologic Pathology 2006; 34:348-356.

Kissling GE, Bernheim NJ, Hawkins WE, Wolfe MJ, Jokinen MP, Smith CA, Herbert RA, Boorman GA. The utility of the guppy (*Poecilia reticulata*) and medaka (*Oryzias latipes*) in evaluation of chemicals for carcinogenicity. *Toxicological Sciences* 2006; 92:143-156.

Elliott L, Longnecker MP, Kissling GE, London SJ. Volatile organic compounds and pulmonary function in the third national National Health and Nutrition Examination Survey, 1988-1994. *Environmental Health Perspectives* 2006; 114:1210-1214.

Fortune JM, Welch CM, Kissling GE, Burgers PMJ, Kunkel TA. RPA and PCNA suppress formation of large deletion errors by yeast DNA polymerase delta. *Nucleic Acids Research* 2006; 34: 4335-4341.

Clayton NP, Yoshizawa K, Kissling G, Burka LT, Chan P-C, Nyska A. Immunohistochemical analysis of expressions of hepatic cytochrome P450 in F344 rats following oral treatment with kava extract. *Experimental and Toxicologic Pathology* 2006; in press.

Zhong X, Garg P, Stith C, Nick-McElhinny S, Kissling G, Burgers P, Kunkel T. The fidelity of DNA synthesis by yeast DNA polymerase zeta alone and with accessory proteins. *Nucleic Acids Research* 2006; 34: 4731-4742.

Elangbam CS, Wehe JG, Barton JC, Krull DL, Nyska A, Crabbs T, Kissling GE. Evaluation of glycosaminoglycans content and 5-hydroxytryptamine 2B receptor in rat heart valves with spontaneous mitral valvulopathy – A possible exacerbation by *dl*-amphetamine sulfate in F344 rats? *Experimental and Toxicologic Pathology* 2006; in press.

Nwosu V, Dallas T, Ladapo J, Kissling G. The food safety initiative and the sanitary quality of market ground beef in Durham, North Carolina. *North Carolina Academy of Sciences* 2006; in press.

Peddada SD, Dinse GE, Kissling GE. Use of historical controls in survival-adjusted quantal response tests for comparing incidence rates of rare tumors. *Journal of the American Statistical Association* 2006; in press.

Kissling GE, Malarkey DE, Vallant MK, Johnson JD, Hejtmancik MR, Herbert RA, Boorman GA. Evaluation of dichloroacetic acid for carcinogenicity in genetically modified Tg.AC and p53 haploinsufficient mice. *Toxicological Sciences* 2006; in press.

Dumsdorf C, Clark AB, Lin Q, Kissling GE, Yuan T, Kunkel TA, McGregor WG, Kucherlapati R. Participation of mouse DNA polymerase t in strand-biased mutagenic bypass of UV photoproducts and suppression of skin cancer. *Proceedings of the National Academy of Sciences* 2006; in press.

Moore AB, Flake GP, Swartz CD, Heartwell G, Cousins D, Haseman JK, Kissling GE, Sidawy MK, Dixon D. Influence of race, age and body mass index on the gross pathology of uterine fibroids. *New England Journal of Medicine* 2006; in press.

Golumb E, Houminer E, Dunnick J, Kissling G, Borman J, Nyska A, Schwalb H. Occult cardiotoxicity: Subtoxic dosage of bis(2-chloroethoxy)methane impairs cardiac response to simulated ischemic injury. *Toxicologic Pathology* 2006; in press.

Witt KL, Cunningham CK, Patterson KB, Kissling GE, Dertinger SD, Livingston E, Bishop JB. Elevated frequencies of micronucleated erythrocytes in infants exposed to zidovudine in utero and postpartum to prevent mother-to-child transmission of HIV. *Environmental and Molecular Mutagenesis* 2006; in press.

Melnick RL, Nyska A, Foster PM, Roycroft JH, Kissling GE. Toxicity and carcinogenicity of the water disinfection byproduct, dibromoacetic acid, in rats and mice. *Toxicology* 2006; in press.

BOOK CHAPTERS

Edwards JC, Kissling GE, Plauché WC, Marier RL. Developing and evaluating a teaching improvement program for residents. In: Edwards JC and Marier RL, eds. *Clinical Teaching for Medical Residents: Roles, Techniques, and Programs*. New York: Springer Publishing Company, 1987.

Sandford MK and Kissling GE. Chemical analyses of human hair: Anthropological applications. In: Sandford MK, ed. *Investigations of Ancient Tissues: Chemical Analyses in Anthropology*, New York: Gordon and Breach Science Publishers. 1993;131-166.

Sandford MK, Bogdan G, Kissling GE. Biological adaptation in the prehistoric Caribbean: Osteology and bioarchaeology of the Tutu site. In: Righter E, ed. *Human Adaptations at the Tutu Archaeological Village Site: A Multidisciplinary Case Study*. New York: Gordon and Breach Science Publishers, 2002; 209-229.

Weaver DS, Sandford MK, Bogdan G, Kissling GE, Powell ML. Prehistoric treponematosis on the North Carolina coast. In: Powell ML and Cook DC, eds. *The Myth of Syphilis: The Natural History of Treponematosis in North America*. Gainesville, Florida: University Press of Florida, 2005; 77-91.

Sandford MK, Bogdan G, Weaver DS, Kissling GE, Powell ML. Prehistoric treponematosis at the Tutu Site: the U.S. Virgin Islands. In: Powell ML and Cook DC, eds. *The Myth of Syphilis: The Natural History of Treponematosis in North America*. Gainesville, Florida: University Press of Florida, 2005; 402-417.

TECHNICAL REPORTS

Kissling GE. A generalized model for the analysis of nonindependent events, *Institute of Statistics Mimeo Series* No. 1357, Chapel Hill, North Carolina, 1981.

Sandford MK, Bogdan G, Kissling GE. A view to the past: An investigation of the bioarchaeology and paleopathology at the Tutu Site, St. Thomas, United States Virgin Islands. Site report submitted to the Senior Archaeologist, Government of the Virgin Islands, St. Thomas, 1997.

National Toxicology Program (2005). Toxicology and carcinogenesis studies of 2,2-bis(bromomethyl)-1,3-propanediol, nitromethane, and 1,2,3-trichloropropane in guppies (*Poecilia reticulate*) and medaka (*Oryzias latipes*). Technical Report Series No. 528. NIH Publication No. 04-4464. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005). Toxicology and carcinogenesis studies of sodium chlorate in F344/N rats and B6C3F₁ mice (drinking water studies). Technical Report Series No. 517. NIH Publication No. 05-4457. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of transplacental AZT in Swiss (CD-1) mice (*in utero* studies). Technical Report Series No. 522. NIH Publication No. 05-4458. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of 2,2',4,4',5,5'-hexachlorobiphenyl (PCB 153) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No. 529. NIH Publication No. 05-4465. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2004, in press). Toxicology and carcinogenesis studies of a binary mixture of 3,3',4,4',5-pentachlorobiphenyl (PCB 126) and 2,2',4,4',5,5'-hexachlorobiphenyl (PCB 153) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No. 530. NIH Publication No. 05-4466. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2004, in press). Toxicology and carcinogenesis studies of a binary mixture of 3,3',4,4',5-pentachlorobiphenyl (PCB 126) and 2,3',4,4',5-pentachlorobiphenyl (PCB 118) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No. 531. NIH Publication No. 05-4467. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of bromodichloromethane in male F344/N rats and female B6C3F₁ mice (drinking water studies).

Technical Report Series No. 532. NIH Publication No. 05-4468. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of benzophenone in F344/N rats and B6C3F₁ mice (feed studies). Technical Report Series No. 533. NIH Publication No. 05-4469. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology and carcinogenesis studies of diisopropylcarbodiimide in F344/N rats and B6C3F1 mice (dermal studies). Technical Report Series No. 523. NIH Publication No. 05-4473. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology and carcinogenesis studies of divinylbenzene-HP in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 534. NIH Publication No. 05-4470. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology and carcinogenesis studies of 4-methylimidazole in F344/N rats and B6C3F1 mice (feed studies). Technical Report Series No. 535. NIH Publication No. 05-4471. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology and carcinogenesis studies of dibromoacetic acid in F344/N rats and B6C3F1 mice (drinking water studies). Technical Report Series No. 537. NIH Publication No. 05-4475. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology and carcinogenesis studies of methyl isobutyl ketone in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 538. NIH Publication No. 05-4476. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology studies of bromodichloromethane in genetically modified (FVB Tg.AC hemizygous) mice (dermal, drinking water, and gavage studies) and carcinogenicity studies of bromodichloromethane in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water and gavage studies). GMM Series No. 5. NIH Publication No. 05-4422. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology studies of sodium bromate in genetically modified (FVB Tg.AC hemizygous) mice (dermal and drinking water studies) and carcinogenicity studies of sodium bromate in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water studies). GMM Series No. 6. NIH Publication No. 05-

4423. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology studies of diisopropylcarbodiimide in genetically modified (FVB Tg.AC hemizygous) mice and carcinogenicity studies of diisopropylcarbodiimide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (dermal studies). GMM Series No. 10. NIH Publication No. 05-4427. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005, in press). Toxicology studies of dichloroacetic acid in genetically modified (FVB Tg.AC hemizygous) mice (dermal and drinking water studies) and carcinogenicity studies of dichloroacetic acid in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water studies). GMM Series No. 11. NIH Publication No. 05-4428. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology and carcinogenesis studies of methylene blue trihydrate in F344/N rats and B6C3F1 mice (gavage studies). Technical Report Series No. 540. NIH Publication No. 06-4429. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology and carcinogenesis studies of α -methylstyrene in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 543. NIH Publication No. 06-4474. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology studies of allyl bromide in genetically modified (FVB Tg.AC hemizygous) mice and carcinogenicity studies of allyl bromide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (gavage studies). GMM Series No. 7. NIH Publication No. 06-4424. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology and carcinogenesis study of benzene in genetically modified haploinsufficient p16^{lnk4a}/p19^{Arf} mice (gavage studies). GMM Series No. 8. NIH Publication No. 06-4425. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology studies of dicyclohexylcarbodiimide in F344/N rats, B6C3F1 mice, and genetically modified (FVB Tg.AC hemizygous) mice and carcinogenicity study of dicyclohexylcarbodiimide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (dermal studies). GMM Series No. 9. NIH Publication No. 06-4426. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology and carcinogenesis study of phenolphthalein in genetically modified haploinsufficient p16^{INK4a}/p19^{Arf} mice (feed study). GMM Series No. 12. NIH Publication No. 06-5961. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006, in press). Toxicology and carcinogenesis study of glycidol in genetically modified haploinsufficient p16^{INK4a}/p19^{Arf} mice (gavage study). GMM Series No. 13. NIH Publication No. 06-5962. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

LETTER TO THE EDITOR

Brodie BR, Kissling G. Relationship between delay in performing direct coronary angioplasty and early clinical outcome in patients with acute myocardial infarction. [Letter to the Editor]. *Circulation* 2000; 102(4):E29-30.

NONREFEREED PAPERS

Edwards JC, Marier RL, Kissling GE. Improving clinical teaching for residents: Workshops and seminars. *Professions Education Researcher Notes* 1985; 7(2):3-4.

Love WP, Kissling GE, Kilgariff L. Teaching limits of functions in college calculus classes. *Abstractions* 1988; p.5.

COURSES TAUGHT

Undergraduate/	
Graduate	Course
LSUMC:	
U	Biometry 3115 - Basic Statistics
G	Biometry 250 - Multivariate Methods
G	Biometry 282 - Advanced Topics in Biometry (Multivariate Methods)
G	Biometry 283 - Advanced Topics in Probability and Estimation Theory
G	Biometry 284 - Advanced Topics in Significance and Hypothesis Testing
G	Biometry 296 - Statistical Consulting in the Health Sciences
G	Biometry 298 - Seminar in Biometry (Coordinator)
G	Biometry 300 - Thesis Research
<u>UNCG:</u>	
U	Statistics 108 - Elementary Introduction to Probability and Statistics
U	Statistics 271W - Fundamental Concepts of Statistics (Writing Intensive)
U	Statistics 351 (343) - Probability

- U Statistics 352 Statistical Inference
- U&G Statistics 573 Theory of Linear Regression (Writing Intensive)
- U&G Statistics 574 Theory of the Analysis of Variance (Writing Intensive)
- U&G Statistics 575 Nonparametric Statistics
- U&G Statistics 580 Biostatistical Methods
- U&G Statistics 593, 594 Directed Study in Statistics
- G Statistics 651 Mathematical Statistics I
- G Statistics 652 Mathematical Statistics II
- G Statistics 661 Advanced Statistics in the Behavioral and Biological Sciences I
- G Statistics 661L Advanced Statistics Laboratory I
- G Statistics 662 Advanced Statistics in the Behavioral and Biological Sciences II
- G Statistics 662L Advanced Statistics Laboratory II
- G Statistics 667 Special Problems in Applied Statistics/Statistical Consulting
- G Statistics 673 Statistical Linear Models I
- G Statistics 674 Statistical Linear Models II
- G Statistics 675 Experimental Design
- G Statistics 676 Sample Survey Methods
- G Statistics 677 Advanced Topics in Data Analysis and Quantitative Methods
- G Mathematics 699 Thesis Research
- U Anthropology 501 Selected Topics in Anthropology (team taught)
- U Anthropology 502 Selected Topics in Anthropology (team taught)
- G Genetic Counseling 671 Quantitative Risks in Practice
- G Public Health Education 604 Public Health Statistics

SERVICE

University:

Faculty Consultant, UNCG Statistical Consulting Center, 1986 - 2003.

Member, Mathematics Instructional Area Committee, UNCG, 1989-91, 1997-1999, 1999-2002 (Chair 2000-2002).

Member, Natural Science and Mathematics General Education Core Committee, UNCG, 2000-2001.

Member, Task Force on Restructuring Faculty Senate Committees, UNCG, 2000-2001.

Member, Admissions Policies Committee, UNCG, 1989-92.

Member, University Curriculum Committee, UNCG, 1989-91.

Member, Academic Research Data Archive Advisory Committee, UNCG, 1991 - 1996.

Chair, University Faculty Development Committee, UNCG, 1992-93, Member 1993-1995.

Member, Substance Abuse Committee, Student Affairs, UNCG, 1993-1996.

Member, Graduate Studies Committee, UNCG, 1995-96 (and Student Affairs Subcommittee).

Member, Graduate Studies Committee, UNCG, 1998-1999 (and Curriculum Subcommittee).

Member, Committee on Appointed and Elected Committees, UNCG, 1999-2000.

College/School:

Member, Grievance Committee, School of Nursing, LSUMC, 1982 and 1985.

Member, Undergraduate Studies Committee, College of Arts and Sciences, UNCG, 1989-91.

Member, Promotion and Tenure Committee, College of Arts and Sciences, UNCG, 1993-94.

Chair, Promotion and Tenure Committee, College of Arts and Sciences, UNCG, 1994-95.

Member, Mathematical Sciences Departmental Review Committee, College of Arts and Sciences, UNCG, 1995-96.

Member, Search Committee, Department of Public Health Education, School of Health and Human Performance, UNCG, 1997-98, 1998-99.

Chair-elect, College Assembly, College of Arts and Sciences, UNCG, 1998-99.

Member, Executive Committee, College of Arts and Sciences, UNCG, 1998-2001.

Ex officio member of the Curriculum and Teaching Committee, College of Arts and Sciences, UNCG, 1998-99.

Member of an *ad hoc* committee reviewing the Instrument of Governance, College of Arts and Sciences, UNCG, 1998-99.

Chair, College Assembly, College of Arts and Sciences, UNCG, 1999-2000.

Ex officio member of the Budget and Planning Committee, College of Arts and Sciences, UNCG, 1999-2000.

Member, Search Committee, Department of Geography, College of Arts and Sciences, UNCG, 2000-2001.

Past Chair, College Assembly, College of Arts and Sciences, UNCG, 2000-2001.

Member, Ph.D. Planning Committee, Department of Biology, College of Arts and Sciences, UNCG, 2001-2002.

Member, Search Committee, Department of Curriculum and Instruction, School of Education, UNCG, 2002-2003.

Chair, Outstanding Thesis/Master Production Award Committee, Graduate School, UNCG, 2002-2003.

Department:

Member, Curriculum Committee, Department of Biometry and Genetics, LSUMC, 1981-1986.

Member, Examinations Committee, Department of Biometry and Genetics, LSUMC, 1981-1986.

Member, Ad hoc committee reviewing upper division and graduate level offerings, Department of Mathematics, UNCG, 1986.

Member, Ad hoc committee reviewing requirements for Masters of Arts degree, Department of Mathematics, UNCG, 1987.

Member, Personnel Committee, Department of Mathematics, UNCG, 1988 - 90, 1992 - 94, 1998-2000, 2002-2003, Chair: 1989 -90 and 1993 - 94.

Member, Scholarship Committee, Department of Mathematics, UNCG, 1991 - 1995.

Member, Undergraduate Programs Committee, Department of Mathematics, UNCG, 1991 - 1995.

Member, Graduate Review/Science Planning/Unit Planning Committee, Department of Mathematics, UNCG, 1993 - 1994.

Member, Workload Committee, Department of Mathematical Sciences, UNCG, 1995 - 1996.

Member, Graduate Programs Committee, Department of Mathematical Sciences, UNCG, 1995 - 2003.

Chair, STA 108 Textbook Selection Committee, Department of Mathematical Sciences, UNCG, 1996.

Member, Statistics Search Committee, Department of Mathematical Sciences, UNCG, 1988-1989, 1996-1997, 1997-1998, 2000-2001 (Affirmative Action Representative each time).

Member, Steering Committee for the Departmental Review, Department of Mathematical Sciences, UNCG, 1997-1998.

Coordinator, Division of Statistics, Department of Mathematical Sciences, UNCG, 1998 - 2000, 2002-2003.

Member, MAT 191, 292, 293, 394 Study Group, Department of Mathematical Sciences, UNCG, 1999.

Member, Senior Advisory Committee to the Head, UNCG, 2001-2003.

Member, Head Search Committee, UNCG, 2002-2003.

Professional:

Editorial Board member of the Journal of the National Medical Association.

Referee for: Journal of the American Statistical Association, The American Statistician, Archives of Pathology and Laboratory Medicine, Journal of the American Medical Association, Journal of Counseling and Development, Journal of Statistical Education, Environmental Health Perspectives, Regulatory Toxicology and Pharmacology.

Grant proposal reviewer for: Cooperative Grants Program of the U.S. Civilian Research and Development Foundation; Future SEEDS program of NC A&T.

Member, Membership Committee and Puzzle Contest Committee, Greensboro Chapter of Sigma Xi, 1992 - 1995.

Chair, Nominating Committee, Greensboro Chapter of Sigma Xi, 1993 - 1995.

Secretary, Greensboro Chapter of Sigma Xi, 1995 - 1996.

President, Greensboro Chapter of Sigma Xi, 1998 - 1999; President-elect, 1997 - 1998.

UNCG's representative to the Southern Regional Council on Statistics (SRCOS), 1998 - 2003.

OTHER PROFESSIONAL ACTIVITIES

Statistical Consultant, Moses Cone Hospital, Greensboro, NC, 1987 - 2003.

Statistical Consultant, University Research Associates (formerly Creative Computing Consultants), Jamestown, NC, 1988 - 2003.

Guest Speaker, Collaborative Writing, graduate biostatistics consulting class, Department of Biostatistics, UNC-CH, 1991 - 1999 (each semester).

Expert witness in a Rowan County, NC murder trial, January, 1994.

Expert reviewer of drug testing legal briefs for a Florida court martial, March 1995.

Expert statistician in medical malpractice suit in Greensboro, NC, Fall, 1995 - Winter, 1996.

Expert witness in a federal credit card theft case, Greensboro, NC and Los Angeles, CA, Spring 1995 - Summer, 1996.

Instructor, Meta-analysis, Logistic regression, Survival analysis and outcomes research analysis, Topics in statistics for pharmacy research, summer short courses for pharmacists and neonatologists at Women's Hospital and Moses Cone Hospital, Greensboro, NC, Summers 1995 -2002.