

CURRICULUM VITAE

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DATE OF BIRTH April 21, 1949

EDUCATION

Ph.D., Purdue University, 1974. Major Advisor: S. S. Gupta
B.A., University of Texas at Austin, 1971 (Summa cum laude)

EXPERIENCE

July 1987-on: Distinguished Professor of Statistics, Nutrition and Toxicology (Head of Statistics Department, 1987-90), Texas A&M University.
July 1998-December 2000: Professor Biostatistics and Epidemiology, University of Pennsylvania.
July 1974-August 1987: Assistant, Associate and Full Professor, University of North Carolina.
November 1980-August 1982, July 1990-July 1991, February 1997-August 1997: Visiting Scientist, National Institutes of Health (Guest Researcher, N.C.I., July 1991-present).
May-August 1987, February-May 1991, May-July 2000, May-July 2002, May-July 2005: Visiting Professor, Australian National University.
July 1984-December 1984: Visiting Professor, University of Wisconsin.
May 1980-November 1980: Visiting Professor, Institute for Applied Mathematics, University of Heidelberg, West Germany.

HONORS

MERIT Award, National Cancer Institute, 2005-2015.
Distinguished Achievement Award in Research, Texas A&M University Association of Former Students, 2004.
Teaching Award, College of Science, Texas A&M University, 2003.
Jerome Sacks Award for Cross-Disciplinary Research (from the National Institute of Statistical Sciences), 2003.
Mitchell Prize for Bayesian Statistics, 2003 (from the International Society for Bayesian Analysis).
Fisher Lecture, Committee of Presidents of Statistical Societies (COPSS), 2002. Given annually for "scholarship in statistical science and for highly significant impact of statistical methods on scientific investigations".
Chair, NIH Study section on Biostatistics, 2002-2004.
IMS Special Invited Paper, 2000.

HONORS (continued)

- Snedecor Award from COPSS for best paper in Biometry, 1997.
 JASA Applications Editor's Invited Paper, 1997, 2003.
 Alexander von Humboldt Senior Research Award, 1996.
 Outstanding Achievement Award for Promoting Diversity, Texas A&M University, 1996.
 Outstanding Presentation Award, Society of Toxicology Annual Meeting, Risk Assessment Specialty Section, 1995.
 President's Invited Address, 1995 ENAR Spring Meeting.
 Bernard Greenberg Lecturer, University of North Carolina at Chapel Hill, 1994.
 Distinguished Alumnus, Purdue University, 1994.
 Don Owen Award, 1994 .
 Distinguished Achievement Award in Research, Texas A&M University Association of Former Students, 1994.
 Distinguished Lecturer in Statistics, Australian Graduate School of Management, 1991.
 Ordinary Member, International Statistical Institute, elected 1991.
 COPSS President's Award (IMS, ASA, ENAR, WNAR, CSS), 1988. Given annually by the major North American statistical societies to a statistician under the age of 40 for outstanding achievements in research.
 Wilcoxon Prize, American Society for Quality Control, 1986.
 Fellow, Institute of Mathematical Statistics, elected 1984.
 Fellow, American Statistical Association, elected 1982.
 Sigma Xi, Purdue University Chapter, elected 1975.
 Phi Beta Kappa, University of Texas at Austin, elected 1971.

NAMED LECTURES

- Centers for Disease Control (CDC) Statistical Science Awards Lecture, 2006.
 Sobel Lecturer, University of California at Santa Barbara, 2006.
 Bohrer Lecturer, University of Illinois, 2006.
 Bradley Lecturer, University of Georgia, 2006.
 Buehler-Martin Lecturer, University of Minnesota, 2005.
 Rustagi Lecturer, Ohio State University, 2005.
 Myra Samuels Lecturer, Purdue University, 1999.
 Distinguished Lecturer in Statistics, Australian Graduate School of Management, 1991.

EDITORIAL RESPONSIBILITIES

- Editor, *Biometrics* (1997-2001).
 Editor, *Journal of the American Statistical Association*, Theory and Methods Section (1988-1990).
 Coordinating Editor, *Journal of Statistical Planning & Inference* (1992-98).
 co-editor, Oxford Statistical Science Series, 2000-present.

EDITORIAL RESPONSIBILITIES (Continued)

co-Editor (with J. Copas, D. Hand & R. L. Smith), *Royal Statistical Society Lecture Note Series* (1995-99).

Associate Editor, *Journal of the American Statistical Association*, Theory and Methods Section, (1979-1987), Applications Section (1992-1995), *Annals of Statistics* (1983-1988), *Chemometrics & Intelligent Laboratory Systems* (1986-92), *Journal of Environmental Statistics* (1992-), *Statistica Sinica* (1993-) and *Statistics* (1987-).

RESEARCH GRANTS AND SPECIAL CONSULTING PROJECTS

- National Cancer Institute (CA-57030), support for basic research, 1992-present (P.I.). Funded through 2015 via a MERIT Award.
- National Cancer Institute (CA-90301), support for training program in Biostatistics, Bioinformatics and the Biology of nutrition and Cancer, 2001-present (P.I.). Funded through 2011.
- National Institute of Environmental Health Sciences, P.I. for Biostatistics and Epidemiology Research Core, Center for Environmental and Rural Health, 1997-present.
- Panel member, NIH State of the Science Conference on Multivitamin/Mineral Supplements and Chronic Disease Prevention, May 2006.
- National Cancer Institute (CA-61067), support for developing computer software in measurement error models, 1993-97 (P.I.).
- Consultant, STATA Corporation SBIR grant for development of measurement error analysis programs.
- Consultant, Eli Lilly Research Laboratories, 1998-2004.
- EPA contract to develop computer programs for toxicological risk assessment, 1993-96.
- National Institute of Statistical Sciences, support for toxicology research, 1992-1998.
- Texas Natural Resources Conservation Commission, 1994-1995.
- National Institute of General Medical Sciences, support for basic research, 1989-1992.
- Air Force Office of Scientific Research, support for basic research, 1976-1991.
- Consultant, Los Alamos National Laboratory, 1993-2000.
- Consultant, Finnegan, Henderson Attorneys, Washington D.C., 1991-92.
- Consultant, Beckton-Dickenson Research Center, 1985-1988.
- Member, National Academy of Science Panel on the Effects of Youth Employment Programs, 1983-1986.
- Consultant, National Bureau of Standards, 1984-1987.
- Consultant, Framingham Heart Study, Diagnostic Assessment by Noninvasive Procedures, 1983.
- Consultant, Covington and Burling Attorneys, Washington, D.C., 1983-1987.
- Consultant, Agent Orange Research and Education Office, Veterans Administration, 1982.
- Consultant, Environmental Protection Agency 1982-1984.
- Advisor, Ad Hoc Committee on Biobehavioral Approaches to Control of Hypertension. National Heart, Lung and Blood Institute, 1982.
- Member, Policy Advisory Board, the PDA Study (Patency of the Ductus Arteriosus), a clinical trial funded by the National Heart, Lung and Blood Institute involving prematurely born infants, 1980-1981.
- Statistical Advisor for the clinical trial IPPB (Intermittent Positive Pressure Breathing) involving lung function and funded by the National Heart, Lung and Blood Institute, 1980-1982.
- North Carolina State Department of Fisheries, contract grants for prediction of shrimp harvest, 1977-78; models for menhaden harvest and migration patterns, 1980-1982.
- Centers for Disease Control (Atlanta), special consultant to the SENIC Project to study the control of nosocomial infection, 1978-1980.

BOOKS

- Carroll, R. J. & Ruppert, D. (1988). *Transformation and Weighting in Regression*. Chapman and Hall, London.
- Carroll, R. J., Ruppert, D. & Stefanski, L. A. (1995). *Measurement Error in Nonlinear Models*. Chapman & Hall, London.
- Ruppert, D., Wand, M. P. & Carroll, R. J. (2003). *Semiparametric Regression*. Cambridge University Press.
- Carroll, R. J., Ruppert, D., Stefanski, L. A. & Crainiceanu, C. M. (2006). *Measurement Error in Nonlinear Models: A Modern Perspective*, Second Edition. Chapman and Hall CRC Press.

PUBLICATIONS

- [1] Johnson, N. L., Wegman, E. J. & Carroll, R. J. (1975). Report on a research study to determine the effects of class openness and the effects of kindergarten experience on selected student measures. Submitted as a public document to the North Carolina State Board of Education.
- [2] Carroll, R. J. (1975). Density estimation at unknown points and tail orderings. *Communications in Statistics*, 4, 565-574.
- [3] Carroll, R. J., Gupta, S. S. & Huang, D. Y. (1975). Selection procedures for the t-best populations. *Communications in Statistics*, 4, 987-1008.
- [4] Carroll, R. J. (1976). On sequential density estimation. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete*, 36, 137-151.
- [5] Wegman, E. J. & Carroll, R. J. (1976). Final Report: General description of the sample for the North Carolina assessment of educational progress of ninth grade students. Submitted as a public document to the North Carolina State Department of Public Instruction.
- [6] Carroll, R. J. & Gupta, S. S. (1977). On the probabilities of rankings of k populations with applications. *Journal of Statistical Computation and Simulation*, 5, 145-157.
- [7] Hawkins, D., Carroll, R. J. & Wegman, E. J. (1977). Final Report: The 1976-77 North Carolina assessment of educational progress of third grade students. Submitted as a public document to the North Carolina State Department of Public Instruction.
- [8] Carroll, R. J. (1977). On the asymptotic normality of stopping times based on robust estimates. *Sankhya, Series A*, 355-377.
- [9] Wegman, E. J. & Carroll, R. J. (1977). A Monte-Carlo study of robust estimators of location. *Communications in Statistics*, 6, 795-812.
- [10] Carroll, R. J. (1977). A comparison of two approaches to fixed-width confidence interval estimators. *Journal of the American Statistical Association*, 72, 901-907.
- [11] Carroll, R. J. (1977). On the uniformity of sequential procedures. *Annals of Statistics*, 5, 1039-1046.
- [12] Carroll, R. J. (1978). On almost sure expansion for M-estimates. *Annals of Statistics*, 6, 314-318.
- [13] Carroll, R. J. (1978). Sequential confidence intervals for the mean of a subpopulation of a finite population. *Journal of the American Statistical Association*, 73, 408-413.
- [14] Carroll, R. J. (1978). On the asymptotic distribution of multivariate M-estimates. *Journal of Multivariate Analysis*, 8, 361-371.
- [15] Carroll, R. J. (1979). On sequential elimination procedures. *Sankhya, Series B*, 41, 226-238.
- [16] Carroll, R. J. (1979). Estimating variances of robust estimators when the errors are asymmetric. *Journal of the American Statistical Association*, 74, 674-679.

- [17] Carroll, R. J. (1979). On sequential estimation of the largest normal mean. *Sankhya, Series A*, 40, 294-302.
- [18] Carroll, R. J. (1980). A robust method for testing transformations to achieve approximate normality. *Journal of the Royal Statistical Society, Series B*, 42, 71-78.
- [19] Ruppert D. & Carroll, R. J. (1980). Trimmed least squares estimation in the linear model. *Journal of the American Statistical Association*, 77, 828-838.
- [20] Holt, R. N. & Carroll, R. J. (1980). Classification of commercial bank loans through policy capturing. *Accounting, Organizations and Society*, 5, 285-296.
- [21] Carroll, R. J. (1980). Robust methods for factorial designs with outliers. *Applied Statistics*, 29, 246-251.
- [22] Carroll, R. J. & Ruppert, D. (1981). On robust tests for heteroscedasticity. *Annals of Statistics*, 9, 206-210.
- [23] Carroll, R. J. & Ruppert, D. (1981). Prediction and the power transformation family. *Biometrika*, 68, 609-616.
- [24] Haley, R. W., Carroll, R. J. et al. (1981). The joint associations of multiple risk factors with the occurrence of nosocomial infections. *American Journal of Medicine*, 70, 960-790.
- [25] Briles, D. G. & Carroll, R. J. (1981). A simple method for estimating the number of different antibodies by examining the repeat frequencies of the sequences of isoelectric focusing patterns. *Molecular Immunology*, 18, 29-38.
- [26] Carroll, R. J. (1982). Two examples of transformations when there are possible outliers. *Applied Statistics*, 31, 149-152.
- [27] Carroll, R. J. & Ruppert, D. (1982). Robust estimation in heteroscedastic linear models. *Annals of Statistics*, 10, 429-441.
- [28] Carroll, R. J. & Ruppert, D. (1982). A comparison between maximum likelihood and generalized least squares in a heteroscedastic linear model. *Journal of the American Statistical Association*, 77, 878-882.
- [29] Carroll, R. J. (1982). Robust estimation in certain heteroscedastic linear models when there are many parameters. *Journal of Statistical Planning and Inference*, 7, 1-12.
- [30] Carroll, R. J. (1982). Adapting for heteroscedasticity in linear models. *Annals of Statistics*, 10, 1224-1233.
- [31] Carroll, R. J. (1982). Power transformations when the choice of power is restricted to a finite set. *Journal of the American Statistical Association*, 77, 908-915.
- [32] Carroll, R. J., Ruppert, D. & Holt, R. N. (1982). Some aspects of estimation in heteroscedastic linear models. *Statistical Decision Theory and Related Topics III*, Volume I. Editors, S. S. Gupta and J. O. Berger. Academic Press, New York.
- [33] Carroll, R. J. & Gallo, P. P. (1982). Some aspects of robustness in functional errors-in-variables regression models. *Communications in Statistics, Series A*, 11, 2573-2585.
- [34] Carroll, R. J. & Ruppert, D. (1982). Weak convergence of bounded influence regression estimates with applications to repeated significance tests in clinical trials. *Journal of Statistical Planning and Inference*, 7, 117-129.
- [35] Carroll, R. J. (1983). Tests for regression parameters in power transformation models. *Scandinavian Journal of Statistics*, 9, 217-222.
- [36] Carroll, R. J. (1983). Discussion of Huber's paper "Minimax aspects of bounded influence regression." *Journal of the American Statistical Association*, 78, 78-79.
- [37] Holt, R. N., Scarpello, V. & Carroll, R. J. (1983). Towards understanding the contents of the "Black Box" for predicting complex decision making outcomes. *Decision Sciences*, 14, 1253-1269.

- [38] Carroll, R. J. & Ruppert, D. (1983). Robust estimation in random coefficient regression models. *Contributions to Statistics: Essays in Honour of Norman L. Johnson*, P. K. Sen, ed., North Holland.
- [39] Oberpriller, J. O., Ferans, V. J. & Carroll, R. J. (1983). Changes in DNA content, number of nuclei and cellular dimensions of young rat atrial myocytes in response to left coronary artery ligation. *Journal of Molecular and Cellular Cardiology*, 14, 31-42.
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- [41] Carroll, R. J. & Ruppert, D. (1984). Power transformations when fitting theoretical models to data. *Journal of the American Statistical Association*, 79, 321-328.
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- [43] Abbott, R. D. & Carroll, R. J. (1984). Interpreting multiple logistic regression coefficients in prospective observational studies. *American Journal of Epidemiology*, 119, 830-836.
- [44] Carroll, R. J. & Ruppert, D. (1984). Discussions of Hinkley and Runger's paper "The Analysis of Transformed Data." *Journal of the American Statistical Association*, 79, 312-313.
- [45] Carroll, R. J. & Gallo, P. P. (1984). Comparisons between maximum likelihood and method of moments in a linear errors-in-variables regression model. *Design of Experiments: Ranking and Selection*, T. J. Santner & A. C. Tamhane, eds., Marcel Dekker, New York.
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- [50] Carroll, R. J. & Lombard, F. (1985). A note on N-estimators for the binomial distribution. *Journal of the American Statistical Association*, 80, 423-426.
- [51] Carroll, R. J. & Schneider, H. (1985). A note on Levene's test for heteroscedasticity. *Statistics and Probability Letters*, 3, 191-194.
- [52] Ruppert, D., Reish, R. L., Deriso, R. B. & Carroll, R. J. (1985). A stochastic model for managing the Atlantic menhaden fishery and assessing managerial risks. *Canadian Journal of Fisheries and Aquatic Sciences*, 42, 1371-1379.
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- [54] Hollister, R. M., Carroll, R. J. and the Panel on Youth Employment (1985). *Youth Employment and Training Programs: The YEPDA Years*. National Academy of Sciences Press, Washington, D.C.
- [55] Ruppert, D. & Carroll, R. J. (1985). Data transformations in regression analysis with applications to stock recruitment relationships. In *Resource Management: Lecture Notes in Biomathematics* 61, M. Mangel editor, Springer Verlag, New York.
- [56] Abbott, R. D. & Carroll, R. J. (1986). Conditional regression models for transient state survival analysis. *American Journal of Epidemiology*, 121, 278-735.
- [57] Stefanski, L. A., Carroll, R. J. & Ruppert, D. (1986). Optimally bounded score functions for generalized

- linear models, with applications to logistic regression. *Biometrika*, 73, 413-425.
- [58] Giltinan, D. M., Carroll, R. J. & Ruppert, D. (1986). Some new methods for weighted regression when there are possible outliers. *Technometrics* 28, 219-230.
- [59] Carroll, R. J. & Spiegelman, C. H. (1986). The effect of small measurement error on precision instrument calibration. *Journal of Quality Technology*, 18, 170-173.
- [60] Carroll, R. J. & Ruppert, D. (1986). Discussion of Wu's paper "Jackknife, bootstrap and other resampling plans". *Annals of Statistics* 14, 1298-1301.
- [61] Gleser, L. J., Carroll, R. J. & Gallo, P. P. (1987). The limiting distribution of least squares in an errors-in-variables linear regression model. *Annals of Statistics*, 15, 220-233.
- [62] Simpson, G. D., Carroll, R. J. & Ruppert, D. (1987). M-estimation for discrete data: Asymptotic distribution theory and implications. *Annals of Statistics*, 15, 657-669.
- [63] Carroll, R. J. & Ruppert, D. (1987). Diagnostics and robustness for the transform-both-sides approach to nonlinear regression. *Technometrics*, 29, 287-299.
- [64] Watters, R. L., Carroll, R. J. & Spiegelman, C. H. (1987). Error modeling and confidence interval estimation for inductively coupled plasma calibration curves. *Analytical Chemistry* 59, 1639-1643.
- [65] Davidian, M. & Carroll, R. J. (1987). Variance function estimation. *Journal of the American Statistical Association*, 82, 1079-1092.
- [66] Stefanski, L. A. & Carroll, R. J. (1987). Conditional scores and optimal scores in generalized linear measurement error models. *Biometrika*, 74, 703-716.
- [67] Carroll, R. J. (1988). The effects of variance function estimation on prediction and calibration: an example. *Statistical Decision Theory and Related Topics IV, Volume 2*, ed. S. S. Gupta and J. O. Berger. Springer-Verlag, New York.
- [68] Carroll, R. J. & Cline, D. B. H. (1988). An asymptotic theory for weighted least squares with weights estimated by replication. *Biometrika*, 75, 35-43.
- [69] Wu, M. C. & Carroll, R. J. (1988). Estimation and comparison of changes in the presence of informative right censoring by modeling the censoring process. *Biometrics*, 44, 175-188.
- [70] Davidian, M. & Carroll, R. J. (1988). A note on extended quasilielihood estimation. *Journal of the Royal Statistical Society, Series B*, 50, 74-82.
- [71] Carroll, R. J., Sacks, J. & Spiegelman, C. H. (1988). A new, easy to use multiple calibration curve procedure. *Technometrics*, 30, 137-142.
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- [73] Davidian, M., Carroll, R. J. & Smith, W. (1988). Variance functions and the minimum detectable concentration in assays. *Biometrika*, 75, 549-556.
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- [77] Carroll, R. J. & Hall, P. (1988). Optimal rates of convergence for deconvolving a density. *Journal of the American Statistical Association*, 83, 1184-1186.
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- [79] Carroll, R. J. & Härdle, W. (1989). Second order effects in semiparametric weighted least squares regression. *Statistics*, 20, 179-186.
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- [81] Carroll, R. J. (1989). Covariance analysis in generalized linear measurement error models. *Statistics in Medicine*, 8, 1075-1093.
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- [87] Carroll, R. J. & Welsh, A. H. (1989). A note on asymmetry and robustness in linear regression. *The American Statistician*, 42, 285-287.
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- [91] Härdle, W. & Carroll, R. J. (1990). Biased crossvalidation for a kernel regression estimator and its derivatives. *Österreichische Zeitschrift für Statistik und Informatik*, 20, 53-64.
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- [93] Stefanski, L. A. & Carroll, R. J. (1990). Structural logistic regression measurement error models. *Proceedings of the Conference on Measurement Error Models*, P. J. Brown & W. A. Fuller, editors.
- [94] Carroll, R. J. & Stefanski, L. A. (1990). Approximate quaslikelihood estimation in models with surrogate predictors. *Journal of the American Statistical Association*, 85, 652-663.
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- [105] Carroll, R. J. & Li, K. C. (1992). Errors in variables for nonlinear regression: dimension reduction and data visualization. *Journal of the American Statistical Association*, 87, 1040-1050.
- [106] Carroll, R. J. & Spiegelman, C. H. (1992). Diagnostics for nonlinearity and heteroscedasticity in errors in variables regression. *Technometrics*, 34, 186-196.
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- [115] Carroll, R. J. (1993). Comment on double-blind reviews. *Statistical Science*, 5, 323.
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- Statistical Society, Series B*, 68, 179-199.
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SELECTED PENDING MANUSCRIPTS

- [1] Xie, M., Simpson, D. G. & Carroll, R. J. (2003). Adapting for heterogeneity in generalized linear models.
- [2] Apanasovich, T. V., Ruppert, D. & Carroll, R. J. (2004). Semiparametric longitudinal-spatial binary regression, with application to colon carcinogenesis.
- [3] Freedman, L. S., Midthune, D., Subar, A., Carroll, R. J., Schatzkin, A., Potischman, N. and Kipnis, V. (2005). A new method using biomarkers for the validation of dietary questionnaires.
- [4] Li, Y., Wang, N., Hong, M., Turner, N. D., Lupton, J. R. & Carroll, R. J. (2007). Nonparametric estimation of correlation functions in longitudinal and spatial data, with application to colon carcinogenesis experiments.
- [5] Thompson, F. E., Kipnis, V., Midthune, D., Carroll, R. J., Freedman, L. S., Subar, A. F., Mouw, T., Leitzmann, M. & Schatzkin, A. (2007). Performance of a food frequency questionnaire in the National Institutes of Health-AARP Diet and Health Study.
- [6] Freedman, L. S., Kipnis, V., Midthune, D., Dodd, K. W., Carroll, R. J. & Subar, A. F. (2007). Estimating usual intake of episodically consumed foods from nutritional survey data and its use in evaluating diet-disease relationships.
- [7] Yanetz, R., Kipnis, V., Carroll, R. J., Dodd, K. W., Subar, A., Schatzkin, A. & Freedman, L. S. (2007). Using biomarker data to improve estimates of the distribution of usual intake in the U.S. population.
- [8] Midthune, D., Kipnis, V., Freedman, L. S. & Carroll, R. J. (2007). Binary regression in truncated samples, with application to comparing dietary instruments in a large prospective study.
- [9] Carroll, R. J., Delaigle, A. & Hall, P. (2007). Nonparametric regression estimation from data contaminated by a mixture of Berkson and classical errors.
- [10] Chen, Y.-H., Carroll, R. J. & Chatterjee, N. (2007). A model for relaxing gene-environment independence assumption in retrospective analysis of haplotype-based case-control studies.
- [11] Lobach, I., Carroll, R. J., Spinka, C., Gail, M. H. & Chatterjee, N. (2007). Haplotype-based regression analysis of case-control studies with unphased genotypes and measurement errors in environmental exposures.
- [12] Crainiceanu, C., Carroll, R. J. & Ruppert, D. (2007). Spatially adaptive Bayesian P-splines with heteroscedastic errors.
- [13] Henderson, D. J., Carroll, R. J. & Li, Q. (2007). Nonparametric estimation and testing of fixed effects panel data models.
- [14] Li, Y., Guolo, A., Hoffman, F. O. & Carroll, R. J. (2007). Shared uncertainty in measurement error problems, with application to Nevada Test Site Fallout data.
- [15] Baladandayuthapani, V., Hong, M. Y., Mallick, B. K., Lupton, J. R., Turner, N. D. & Carroll, R. J. (2007). Bayesian hierarchical spatially correlated functional data analysis with application to colon carcinogenesis.
- [16] Maity, A., Apanasovich, T. V. & Carroll, R. J. (2007). Estimation of population-level summaries in general semiparametric repeated measures regression models.
- [17] Pfeiffer, R. M., Carroll, R. J., Wheeler, B., Whitby, D. & Mbulaiteye, S. (2006). Combining assays for estimating prevalence of human herpesvirus 8 infection using multivariate mixture models. *Biometrics*, to appear.
- [18] Tadesse, M., He, Q., Johnson, C. D., Carroll, R. J. & Ramos, K. S. (2007). Comparison of high-density short-oligonucleotide microarray platforms.
- [19] Maity, A., Apanasovich, T. V. & Carroll, R. J. (2007). Estimation of population-level summaries in general semiparametric repeated measures regression models

- [20] Chen, Y-H., Chatterjee, N. & Carroll, R. J. (2007). Retrospective analysis of haplotype-based case-control studies under a flexible model for gene-environment association.

Ph.D. STUDENTS AND CURRENT EMPLOYMENT

- [1] Gordon Johnston (1979). Smooth nonparametric regression analysis. Senior statistician, SAS Institute.
- [2] Paul Gallo (1981). Convergence results for errors in variables models. Senior Statistician, Novartis.
- [3] David Giltinan (1983). Bounded influence estimation in heteroscedastic linear models. Senior Statistician, Genentech.
- [4] Leonard A. Stefanski (1983). Estimation for binary regression models. Professor, North Carolina State University.
- [5] Douglas Simpson (1985). Robust estimation for discrete data. Professor, University of Illinois.
- [6] Marie Davidian (December, 1986). Variance function estimation in regression. Professor, North Carolina State University (also past editor, *Biometrics*).
- [7] Ernestine Kettl (May, 1987). Applications of the transform-both-sides regression model. Shell Research Corporation.
- [8] Yin Yin (March, 1988). Edgeworth expansions and hypothesis tests in heteroscedastic regression models. Glaxo Pharmaceuticals.
- [9] Lie-Ju Hwang (May, 1990). Empirical Bayes methods in assays, with applications to variance function estimation. Statistician, Pfizer, Inc.
- [10] J. H. Sepanski (July, 1991). Semiparametric estimation in measurement error models. Assistant Professor, Department of Mathematics, Central Michigan University.
- [11] R. Landin (July, 1992). Topics in measurement error models with applications to repeated measures and nutrition data. Senior Statistician, Neurocrine Pharmaceuticals.
- [12] C. Y. Wang (August, 1993). Analysis of case-control studies. Full Member, Fred Hutchinson Cancer Research Center.
- [13] R. Knickerbocker (December, 1993). Dimension reduction and measurement error models. Senior Director, Genzyme Inc.
- [14] R. Gutierrez (July, 1995). Semiparametrics, dimension reduction and missing data. Director of Statistics, STATA Corporation.
- [15] S. Eckert (July, 1995). Deconvolution aspects of measurement error models. Senior Director, Genzyme Corporation.
- [16] J. Maca (July, 1997). Nonparametric regression and measurement error. Senior Statistician, Novartis.
- [17] C. Galindo (July, 1998). Nonparametric regression. Director of Business Intelligence, Shopping.com.
- [18] S. Iturria (July, 1998). Bayesian model averaging with application to cladistics analysis in genetics. Senior Statistician, Eli Lilly and Company.
- [19] J. Morris (July, 2000). Statistical models for colon cancer cell mechanisms. Associate Professor, M. D. Anderson Cancer Research Center.
- [20] Hua Liang (March, 2001). Semiparametric statistical methods. Associate Professor, University of Rochester.

Ph.D. STUDENTS AND CURRENT EMPLOYMENT (Continued)

- [21] Inyoung Kim (May, 2002). Effect modification in matched case-control studies. Assistant Professor, Yonsei University Medical School.
- [22] Chan Hee Jo (December, 2002). Bayesian semiparametric logistic regression. Assistant Professor, University of Arkansas Medical School.
- [23] Tanya Apanasovich (June, 2004). Longitudinal and spatial methods in the analysis of Aberrant Crypt Foci in colon carcinogenesis. Assistant Professor, Cornell University.
- [24] Gosia Leyk-Williams (June, 2004). Bayesian methods in the analysis of DNA damage using the FLARE assay for colon carcinogenesis. Senior Statistician, Eli Lilly & Company.
- [25] Christine Spinka (June, 2004). Gene-environment interactions in genetic epidemiology. Assistant Professor, University of Missouri.
- [26] Veerabhadran Baladandayuthapani (June, 2005). Bayesian methods in Bioinformatics. Assistant Professor, University of Texas M. D. Anderson Cancer Center.
- [27] Iryna Lobach (June, 2006). Seemingly unrelated measurement error models with application to nutritional epidemiology and colon carcinogenesis. Postdoctoral Associate, Yale University.
- [28] Yehua Li (June, 2006). Functional Data Analysis in Biology. Assistant Professor, University of Georgia.
- [29] Bo Li (August, 2006). Spatial statistics. Postdoctoral Associate, National Center for Atmospheric Research.

POSTDOCTORAL RESEARCHERS AND CURRENT EMPLOYMENT

- [1] Helmut Küchenhoff, University of Munich
- [2] Andreas Ruckstuhl, Zürich Technical University, Zürich
- [3] Laura Martino, National Center for Agricultural Research, Rome
- [4] Danh V. Nguyen, University of California at Davis
- [5] Qi Zheng, Texas A&M University, School of Rural Public Health
- [6] Mahlet Tadesse, University of Pennsylvania Medical School
- [7] Wenjiang Fu, Michigan State University
- [8] Kimberley Drews, George Washington University

INVITED PRESENTATIONS

I have presented 295 invited lectures, which include the following:

University of New Mexico	1990
Los Alamos National Laboratory	1990
University of Waterloo	1990
Yale University	1990
University of Wisconsin	1990
Cornell Workshop on Function Estimation	1990
Purdue University	1990
Montana State University	1990
Penn State University	1990
Alaska ASA Chapter	1990
Conference on Discrete Choice Models, Louvaine le Neuve	1990
Australian National University	1991
LaTrobe University	1991
University of Tasmania	1991
Regression Conference, Australian Statistical Association	1991
Distinguished Lecturer, Australian Graduate School of Management	1991
Statistics Week, University of Miami (Ohio)	1991
University of Alaska, Fairbanks	1991
Penn State University	1991
ENAR National Meeting, Atlanta	1991
North Carolina Chapter, American Statistical Association	1991
Bureau of Labor Statistics	1992
University of Texas at Austin	1992
National Institute of Occupational Safety and Health	1992
ENAR Spring Meeting, Cincinnati	1992
Swiss Statistics Society Spring Meeting	1992
Eli Lilly Conference on Population Pharmacokinetics	1992
Purdue Decision Theory Conference	1992
GLIM 92, München, Germany	1992
University of Michigan	1992
Cornell University	1992
IMS Special Topics Meeting on Likelihood	1992
Texas A&M Nutrition Faculty	1992
Harvard School of Public Health	1993
Emory University	1993
Rice University	1993
Rand Afrikaans University	1993
Joint Statistical Meetings, NISS session	1993

INVITED PRESENTATIONS (Continued)

Columbia University	1993
NISS Workshop on Combining Environmental Data	1993
University of Maryland	1993
University of Pittsburgh	1993
National Heart, Lung & Blood Institute	1993
IMS Spring Regional meeting (Cleveland)	1994
ASA Annual Meeting (Toronto)	1994
Greenberg Lectures in Biostatistics, University of North Carolina	1994
University of Texas at Austin	1994
National Cancer Institute, Division of Cancer Etiology	1994
Second International Conference on Dietary Assessment	1995
University of Kentucky	1995
Incomplete Data Conference, Freiburg (Germany)	1995
Oberwolfach Conference on Incomplete Data	1995
Georgia Tech University	1995
Atlanta ASA Chapter	1995
Third Great Lakes Statistics Symposium	1995
Rutgers University	1995
Johns Hopkins University	1995
Nuffield College, Oxford	1995
University of Oxford	1995
ENAR President's Address	1995
Multiple Decision Theory Conference, Purdue University	1995
University of Pennsylvania Medical School	1995
LaTrobe University	1995
Oberwolfach Conference on Mathematical Statistics	1996
ENAR Spring Meeting	1996
ASA Annual Meeting	1996
Brown University	1996
University of California at Davis	1996
University of Georgia Conference on Estimating Functions	1996
Harvard School of Public Health	1996
ASA Annual Meeting, Chicago	1996
Statistics in Science, Halifax	1996
Conference on Longitudinally and Spatially Correlated Data, Nantucket	1996
Brown University	1996
Memorial Sloan-Kettering Cancer Institute	1996
EPA Conference on Validating Lead Exposure Models	1996
Humboldt Universität zu Berlin	1997
University of Munich	1997
University of Pennsylvania	1996
University of Michigan	1997
Temple University	1997
ENAR Spring Meeting	1997
IMS Annual Meeting	1997
University of Illinois	1997
IMS New Researcher's Conference	1997
Mathematical Models in Experimental Nutrition VI	1997
49th Clemson-Georgia Joint Colloquium	1997
IMA Conference on Environmental Statistics	1997
NCI Conference on Radon and Exposure Assessment	1997

INVITED PRESENTATIONS (Continued)

ASA Annual Meeting	1998
University of Heidelberg	1998
NCI Division of Cancer Epidemiology and Genetics	1998
University of Massachusetts	1998
University of New Mexico	1998
Los Alamos National Laboratory	1998
Conference of Texas Statisticians	1998
Taipei International Statistical Symposium	1998
CLAPEM IV, Cordoba, Argentina	1998
ENAR Spring Meeting	1999
ASA-IMS Annual Meeting	1999
Munich Workshop on Semiparametric Modeling	1999
Humboldt University in Berlin	1999
Purdue University	1999
University of Missouri	2000
ENAR Spring Meeting	2000
ASA Radiation Conference	2000
ASA-IMS Annual Meeting (IMS Special Invited Paper)	2000
Workshop on Mathematical Modeling in Nutrition	2000
Munich Workshop on Measurement Error Models	2000
Australian National University	2000
Oberwolfach Conference on Complex Data Structures	2000
University of Freiburg	2000
Yale University	2000
Eli Lilly & Company	2000
Latrobe University (Melbourne)	2000
ENAR, Charlotte (2 talks)	2001
JSM, Atlanta (2 talks)	2001
University of Dortmund	2001
University of Heidelberg	2001
Wayne Fuller Conference, Iowa State University	2001
St. Judes Children's Hospital	2001
University of Wisconsin	2002
ENAR Spring Meeting	2002
Australian National University	2002
Australian Statistical Society Annual Conference	2002
Joint Statistical Meetings	2002
Fisher Lecture, Joint Statistical Meetings	2002
AMS Conference on Longitudinal Data	2002
University of Auckland Biostatistics Workshop	2002
University of Auckland Statistics Department	2002
Florida State University	2003
University of Munich	2003
Columbia University	2003
University of Bielefeld	2003
Joint Statistical Meetings	2003
Statistical Society of Canada	2003
Catholic University of Louvain, Belgium	2003
Cornell University	2003
Temple-Merck Conference	2003
Indian Statistical Institute	2003

INVITED PRESENTATIONS (Continued)

North Carolina State University	2004
ENAR	2004
Ohio State University	2004
IMS Calcutta Conference	2004
Lehmann Conference, Rice University	2004
International Biometric Congress	2004
University of Minnesota	2004
Distinguished Lecture Series, Texas A&M University	2004
University of Pennsylvania	2004
Johns Hopkins University	2004
Australian National University	2004
Eli Lilly and Company	2004
Ohio State University, MBI	2004
ENAR	2005
University of Minnesota (Buehler-Martin Distinguished Lecture Series)	2005
University of Florida Longitudinal Data Workshop	2005
University of Munich	2005
ASA/IMS Annual Meeting	2005
M. D. Anderson	2005
Houston ASA Chapter	2005
Purdue University	2005
Alastair Scott Conference, University of Auckland	2005
Annual General Meeting, Statistical Society of Australia	2005
National University of Singapore	2005
Ohio State University (Rustagi Lecture)	2005
Columbia University	2005
Houston ASA Chapter	2005
M.D. Anderson Cancer Center	2005
University of Munich	2005
Medical University of South Carolina	2005
University of Ulm	2005
University of Mannheim	2005
University of Georgia (Bradley Lecture)	2006
ENAR	2006
Penn State University	2006
University of Illinois (Bohrer Lecture)	2006
University of Washington (Biostatistics)	2006
Midwest Biopharmaceutical Statistics Workshop	2006
WNAR	2006
University of Washington (Breslow Conference)	2006
Joint Statistical Meetings	2006
St. John's University, Newfoundland	2006
University of Louisville	2006
University of Alabama at Birmingham Medical School	2006
University of California at Santa Barbara (Sobel Lecture)	2006
University of California at San Diego	2006
University of Mannheim	2006
University College Cork	2006
University of Juan Carlos III	2006
Centers for Disease Control	2006