Dulal K. Bhaumik
Curriculum Vitae

Department of Psychiatry
Division of Epidemiology and Biostatistics
Department of Bioengineering
University of Illinois at Chicago
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Chicago, IL 60612
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Education

1. B.Sc. (BS) (July, 1981) Calcutta University, India, Statistics

2. M. Stat. (MS) (July, 1983) Indian Statistical Institute, Calcutta, India, Statistics

3. Ph.D. (June, 1988) University of Maryland (UMBC), Statistics

Professional Experience

Professor, Department of Psychiatry, Division of Epidemiology and Biostatistics, Department of Bioengineering, University of Illinois at Chicago, August 2006 - Present.

Associate Professor, Department of Psychiatry, Division of Epidemiology and Biostatistics, University of Illinois at Chicago, August 2002 - August 2006.

Visiting Associate Professor, Department of Psychiatry, Division of Epidemiology and Biostatistics, University of Illinois at Chicago, August 2001 - July 2002.

Professor, Department of Mathematics and Statistics, University of South Alabama, August 2000 - July 2002.

Research Scientist, Center for Health Statistics, University of Illinois at Chicago, September 2000 - Present.

Associate Professor, Department of Mathematics and Statistics, University of South Alabama, September 1995 - July 2000.

Visiting Scientist, Indian Statistical Institute, Calcutta, India, Fall 1997.

Summer Research Faculty, Brooks Air Force Base, San Antonio, Texas, Summer 1997.

Assistant Professor, Department of Mathematics and Statistics, University of South Alabama, September 1990 - August 1995.

Visiting Assistant Professor, Department of Statistics, Temple University, September 1988 - August 1990.

Teaching Assistant, Department of Mathematics and Statistics, University of Maryland, Baltimore County, September 1986 - July 1988.

Honors Received

2008 Fellow, American Statistical Association.

Awarded Articles

2009 Outstanding Statistical Application Award (by ASA) for the paper entitled "Mixed-effects Poisson Regression Analysis of Adverse Event Reports: The Relationship Between Antidepressants and Suicide."

2006 Youden Award in Interlaboratory Testing for the paper entitled "Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors."

2002 Youden Award in Interlaboratory Testing for the paper entitled "Weighted random-Effects Regression Models with Application to Interlaboratory Calibration."

Grants:

Active

1. Title: UIC ACE: Translational Studies of Insistence on Sameness in Autism
   Source of Support: NICH, 1P50HD055751-01
   Period: 06/01/07-05/31/12 Role: Co-PI (Statistical Core)

Description: Statistical methods in Autism research including fMRI and molecular genetics.

2. Title: Tools for Optimizing, Prescribing, Monitoring and Education
   Source of Support: AHRQ/DHHS, 1U18HS016973-01
   Period: 09/01/07-08/31/11 Role: Co-PI (Statistical Core)
   Description: Development of a new pharmacoepidemiology statistical analysis system.

3. Title: Antidepressant Treatment and Suicidality – Biostatistical/Methodological Solutions
   Source of Support: NIMH, R01 MH080122
   Period: 07/01/08-06/30/13 Role: Co-PI
   Description: The purpose of this proposal is to develop, test, and apply new statistical design and analytical methodologies that can be used to identify low base rate drug – adverse event (AE) interactions.

4. Title: Affective Neuroscience of Pediatric Bipolar Disorder
   Source of Support: NIMH
   Period: 12/01/08-11/30/13 Role: Co-PI
   Description: The aim of this study is to enhance understanding of brain system dysfunction in pediatric bipolar disorder using fMRI and nuerocognitive studies.

5. Title: The Organizational Context of Mental Health Services
   Source of Support: NIMH
   Period: 12/01/08-11/30/13 Role: Co-PI
   Description: Community-based mental health agencies to develop strategies for positive system change.

6. Title: Organizational Context and Children's Mental Health in Urban After School Programs
   Source of Support: NIMH
   Period: 12/01/08-11/30/12 Role: Co-PI
   Description: Testing an Organizational Implementation Strategy in Children's Mental Health.

7. Title: PKC and Cellular Signaling in the Suicide Brain
   Source of Support: NIH/NIMH R01MH48153
   Period: 09/01/07-08/31/11 Role: Co- PI
   Description: Understanding the mechanism of PKC and Cellular signaling in suicide brain.

Pending

1. Title: Zero Inflated Mixed Models for Mental Health Service Use
   Source of Support: NIH/NIMH R01 MH065556
   Period: 09/01/08-08/31/11 Role: PI
   Description: Development of hypothesis testing in small samples and sample size estimation for ZIP mixed-effects regression models.

2. Title: The Organizational Context of Mental Health Services
   Community-based mental health agencies to develop strategies for positive system change
   Source of Support: NIMH
   Period: 12/01/08-11/30/13 Role: Co-PI

3. Title: Receptors & Second Messengers in Pediatric Bipolar Disorder
   Source of Support: NIH
   Period: 4/1/09-3/31/14 Role: Co-PI
   Description: The aim of this study is to enhance understanding of how the receptors modulate signals in pediatric bipolar disorder using fMRI and neuro-cognitive studies.

4. Title: Chromatin Remodeling in Schizophrenia
   Source of Support: NIH
   Period: 4/1/09-3/31/14 Role: Co-PI
   Description: The aim of this study is to enhance understanding of how the receptors modulate signals in pediatric bipolar disorder using fMRI and neuro-cognitive studies.

Completed

1. Title: Statistical Testing and Power for MH Services Research
   Source of Support: NIH/NIMH, R01 MH069353-01
   Period: 06/01/05-05/31/08 Role: PI
   Description: Development of small sample tests for hypothesis testing for fixed and random effects in generalized mixed-effects regression models.

2. Title: Antidepressant Treatment and Suicidality – Biostatistical/Methodological Solutions
   Source of Support: NIH, R56 MH078580-01, (PI: Gibbons)
   Period: 09/30/06-08/31/07 Role: Co-PI

Description: The purpose of this proposal is to develop, test, and apply new statistical design and analytical methodologies that can be used to identify low base rate drug – adverse event (AE) interactions.

3. Title: Statistical Models for Nested Service Utilization Data
   Source of Support: NIH/NIMH, R01 MH56146-04, (PI: Hedeker)
   Period: 07/01/99 – 06/30/04 Role: Co-PI
   Description: The goal of this project is generalize a variety of mixed-effects regression models to the case of three-level data (e.g. clinics, subjects and measurement occasions).

4. Title: Mixed-Effects ZIP Models for Mental Health Services Research
   Source of Support: NIH, R01 MH65556-01, (PI: Gibbons)
   Period: 06/01/02-05/31/05 Role: Co-PI
   Description: Development of mixed-effects zero-inflated Poisson regression models.

5. Title: Mental Health Computerized Adaptive Testing
   Source of Support: NIH, R01 MH66302-01, (PI: Gibbons)
   Period: 06/01/02-05/31/05 Role: Co-PI
   Description: Development of a computerized adaptive testing approach to the administration of a large (626 item) mood disorder scale.

Courses Taught

Various undergraduate and graduate statistics courses: Basic Statistics Courses, Courses for Biomedical and Nursing Students: Statistical Reasoning and Applications, Life Testing and Reliability Theory, Categorical Data Analysis, Design of Experiments I and II, A Special Course on Clinical Trials Regression Analysis, Experimental Designs, Multivariate Statistics, Statistical Inferences, Sampling, Mathematical Statistics, Linear Models, Time Series, Reliability, and Quality Control.

At UIC: Multivariate Statistics, Statistical Inferences, Linear Models, Biostatistics II, Large Sample Theory.

Editorial Experience

2007-present	Associate Editor: Journal of the American Statistical Association
2007-present	Associate Editor: Sankhya

Papers Refereed for the Following Journals

1. Journal of Combinatorics, Information and System Sciences
2. Communications in Statistics
3. Journal of Applied Statistical Sciences
4. Journal of Statistical Planning and Inference
5. Sankhya
6. Technometrics
7. Journal of the American Statistical Association
8. Statistics in Medicine
9. Psychometrika
10. Multivariate Behavioral Research
11. Biometrics

Ph. D Thesis Supervision:

1. Subhash Aryal, August 2008.
   Title of Dissertation: *Small Sample Tests and Sample Size Determination for Linear and Non-Linear Mixed- Effects Models.*
   Dr. Aryal is an Assistant Professor of Biostatistics at University of North Texas Health Science Center, Fort Worth.

In Progress

2. Kush Kapur
3. Anup Amatya
4. David Morton
5. Yoonsang Kim

Doctoral Dissertation Committee Member
1. Jungwha Lee, Biostatistics, 2009.

Professional Activities

Served as the Treasurer of the American Statistical Association, Alabama Chapter (1994-1995).

Organized several conferences on- Biostatistics, Linear Models, and Environmental Statistics at the University of South Alabama.

Publications

Book

Gibbons R.D., Bhaumik, D. K., and Aryal, S. *Statistical Methods for Ground-Water Monitoring*, 2nd ed. New York, John Wiley & Sons, In press.

Peer Reviewed Papers

1. Mathew, T. and Bhaumik, D.K., "The Model Robustness and Optimality of Randomized Designs." *Journal of Statistical Planning and Inference*, 23, 371-379, 1989.

2. Bhaumik, D.K., and Mathew, T., "On the Minimax Optimality of Non-randomized Block Designs." *Computational Statistics and Data Analysis*, 8, 59- 66, 1989.

3. Bhaumik, D.K., "On Optimal Block Designs Under the Nearest Neighbor Correlation Model." *Utilitas Mathematica*, 38, 15-25, 1990.

4. Bhaumik, D.K., and Whittinghill, D.C., "Optimality and Robustness to the Unavailability of Blocks in Block Designs." *Journal of the Royal Statistical Society B*, 53: 2, 399-407, 1991.

5. Bhaumik, D.K., and Kulkarni, P.R., "One-Sided Tolerance Limits for Unbalanced One-Way ANOVA Random Effects Model." *Communication of Statistics, Theory and Methods*, 20: 5 and 6, 1665-1675, 1991.

6. Heiberger, R.M., Bhaumik, D.K. and Holland, B., "Optimal Data Augmentation Strategies for Additive Models." *Journal of the American Statistical Association*, 88, 926-938, 1993.

7. Bhaumik, D.K., "On Optimal Block Designs in the Presence of a Linear Trend." *Sankhya, Series B*, 55, 91-102, 1993.

8. Bhaumik, D.K. and Saha, G.M., "Construction of a Series of Affine Resolvable BIBDS." *Calcutta Statistical Association Bulletin*, 43, 257-262, 1994.

9. Bhaumik, D.K., "Majorization and D-Optimality Under the Nearest Neighbor Correlation Model." *Journal of the Royal Statistical Society, Series B*, 139-143, 1995.

10. Bhaumik, D.K., "Optimality in the Competing Effects Model." *Sankhya Series B*, 57, 48-56, 1995.

11. Bhaumik, D.K. and Mathew, T., "Minimaxity of Randomized Optimal Designs with Respect to a General Optimality Criterion." *Sankhya Series B*, 57, 122-127, 1995.

12. Dasgupta, R. and Bhaumik, D.K., "Upper and Lower Tolerance Limits of Atmospheric Ozone Level, and Extreme Value Distribution." *Sankhya Series B*, 57, 182-199, 1995.

13. Bagui, S., Bhaumik, D.K. and Parnes, M., "One-Sided Tolerance Limit for Unbalanced m-way Random Effects ANOVA Models." *Journal of Applied Statistical Sciences*, 3, 135-148, 1996.

14. Bhaumik, D.K. and Kulkarni, P.M., "A Simple and Exact Method of Constructing Tolerance Intervals for the One-Way ANOVA with Random Effects." *The American Statistician*, 50, 319-323, 1996.

15. Hossain, A.M, Bhaumik, D.K., Selukar, R.S., Huff, C., Ritz, B., and Thorneycroft, I.H., "Assessment of the Relationship of Sperm Morphology with Seminal and other Clinical Conditions of Semen Donors." *Archives of Andrology*, 39, 111-117, 1997.

16. Bhaumik, D.K. and Shah, A. K., "Exact Tests in Crossover Designs." *Journal of Statistical Planning and Inference*, 72, 79-88, 1998.

17. Bhaumik, D.K. and Zhang, X.M., "A New Criterion to Measure the Efficiency of A Design." *Sankhya Series B*, 60, 315-330, 1998.

18. Johnson, G.D., Formichella, C., Thomas, J.S., Bhaumik, D.K., Degruy, III, F.V., and Riordan, C.A., "Stress and Distress among Gulf of Mexico Shrimp Fishermen." *Human Organization*, 57, 404-413, 1998.

19. Bhaumik, D.K., and Sen, P.K., "Universal Optimality of Bayesian Experimental Designs and Optimal Data Augmentation." *Sankhya Series B*, 469-487, 1999.

20. Gibbons, R.D., and Bhaumik, D.K., "Weighted Random-effects Regression Models with Application to Inter-laboratory Calibration." *Technometrics*, 43, 192-198, 2001.

21. Bhaumik, D.K., and Mathew, T., "Optimal Data Augmentation for the Estimation of a Linear Parametric Function in Linear Models." *Sankhya, Series B*, 10-26, 2001.

22. Bhaumik. D.K., and Sarkar, S., "On the Power Function of the Likelihood Ratio Test for MANOVA." *Journal of Multivariate Analysis*, 82, 416-421, 2002.

23. Bhaumik, D.K., Khattree, R. and Bagui, S.C., "Statistical Tests for Nested Designs Under Partial Balance." *Communication in Statistics, Theory and Methods*, 31, 1795-1813, 2002.

24. Bhaumik, D.K. and Gibbons, R.D., "An Upper Prediction Limit for the Arithmetic Mean of a Lognormal Random Variable." *Technometrics*, 46, 239-248, 2004.

25. Gibbons, R.D., Lazar, N., Bhaumik, D. K., Sclove, S. N., Chen, H.Y., Thulborn, K.R., Sweeney, J.A., Patterson, D., "Estimation and Classification of fMRI Hemodynamic Response Patterns." *NeuroImage*, 22, 804-814, 2004.

26. Bagui, S. C., Bhaumik, D. K., "Glimpses of inequalities in probability and statistics." *International Journal of Statistical Sciences*, 3, 9-15, 2004.

27. Bagui, S. C, Bhaumik, D.K., "Computing Jacobians Using Exterior Products." *Statistical Methodology*, 1, 71-80, 2004.

28. Gibbons, R.D., Bhaumik, D.K., Cox, D.R., Grayson, D.R., Davis, J.M., and Sharma, R.P., "Statistical Analysis of Microarray Data." *Journal of Statistical Planning and Inference*, 129, 19-37, 2005.

29. Gibbons, R.D., Hur, K., and Bhaumik, D.K., Mann, J.J., "The Relationship Between Antidepressant Medication Use and Rate of Suicide." *Archives of General Psychiatry*, 62, 165-172, 2005.

30. Bhaumik, D.K., and Gibbons, R.D., "Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors." *Technometrics*, 47, 223 –231, 2005.

31. Bhaumik, D. K., and Gibbons, R.D., "One-sided prediction intervals for at least p of m observations from a gamma population at each of r locations." *Technometrics*, 48, 112-129, 2006.

32. Gibbons, R. D., and Bhaumik. D. K., "Simultaneous Gamma Prediction Limits for Ground Water Monitoring Applications." *Ground Water Monitoring and Remediation*, 3, 105-116, 2006.

33. Gibbons, R. D., Bock, D.R., Hedeker, D., Weiss, D., Bhaumik, D., Kupfer, D., Frank, E., Grochocinski, V., "Full-Information Item Bi-Factor Analysis of Graded Response Data." *Applied Psychological Measurement*, 31, 4-19, 2007.

34. Gibbons, R.D., Hur, K., and Bhaumik, D.K., Mann, J.J, "The Relationship Between Antidepressant Prescription Rates and Rate of Early Adolescent Suicide." *The American Journal of Psychiatry*, 163, 1898-1904, 2006.

35. Roy, A., Bhaumik, D. K., Gibbons, R. D., Aryal, S., "Sample Size Determination for Hierarchical Longitudinal Mixed Effects Models with Differential Attrition Rates." *Biometrics*, 63, 699-707, 2007.

36. Gibbons R.D., Brown C.H., Hur K., Marcus S., Bhaumik D.K., Mann J.J., "The relationship between antidepressants and suicide: Results of analysis of the Veterans Health Administration datasets." *American Journal of Psychiatry*, 164, 1044-1049, 2007.

37. Gibbons R.D., Hur K., Bhaumik D., Bell C.C., "Profiling of county-level foster care placements using random-effects Poisson regression models." *Health Services Outcomes Research Methodology*, 97-108, 7, 2007.

38. Gibbons R.D., Brown C.H., Hur K., Marcus S., Bhaumik D.K., Erkens J.A., Herings R.M.C., Mann J.J., "Early evidence on the effects of the FDA black box warning on SSRI prescriptions and suicide in children and adolescents." *American Journal of Psychiatry*, 164:9, 1-8, 2007.

39. Aryal, S., Bhaumik, D.K., Matthew, T. and Gibbons, R.D., "Approximate Tolerance Limits and Prediction Limits for the Gamma Distribution." *Journal of Applied Statistical Sciences*, 16:2, 253-262, 2008.

40. Gibbons, R.D., Segawa, E., Karabatsos, G., Amatya, A., Bhaumik, D.K., Brown, C.H., Kapur, K., Marcus, S., Hur, K., Mann, J.J., "Mixed-effects Poisson Regression Analysis of Adverse Event Reports: The Relationship Between Antidepressants and Suicide." *Statistics in Medicine*, 27, 1814-1833, 2008.

41. Bhaumik, D. K., Roy, A., Aryal, S., Hur, K., Duan, N., Normand, S-L, Brown, H., and Gibbons, R. D., "Sample Size Determination for Studies with Repeated Continuous Outcomes." *Psychiatric Annals,* 38:12, 765-771, 2008.

42. Gibbons R.D., Weiss D.J., Kupfer D.J., Frank E., Fagiolini A., Grochocinski V.J., Bhaumik D.K., Stover A. Bock R.D., Immekus J.C., "Using computerized adaptive testing to reduce the burden of mental health assessment." *Psychiatric Services*, 59, 361 – 368, 2008.

43. Bhaumik, D. K., Roy, A., Lazar, N., Kapur, K., Aryal, S., Sweeney, J.A., Patterson, D., and Gibbons, R. D., "Hypothesis Testing, Power and Sample Size Determination for Between Group Comparisons in fMRI Experiments." *Statistical Methodology*, 6, 133-149, 2009.

44. Aryal, S, Bhaumik, D.K., Santra, S. and Gibbons, R.D, "Confidence Interval for Random-Effects Calibration Curves with Left-Censored Data." *Environmetrics*, 20, 181-189, 2009.

45. Bhaumik, D.K., Kapur, K. and Gibbons, R. D., "Testing Parameters a Gamma Distribution for Small Samples." *Technometrics*, In press.

46. Bhaumik, D.K., Santra, S., Aryal, S. and Gibbons, R.D., "One-Sided Simultaneous Prediction Limits for Left-censored Normal Random Variables." *Sankhya Series B*, In press.

47. Kapur, K., Roy, A., Bhaumik, D., Gibbons, R., Lazar, N., Sweeney, J., Aryal, A., and Patterson, D., "Estimation and classification of BOLD responses over multiple trials." *Communication in Statistics*, In press.

Manuscripts Submitted for Publication

48. Chen, H. Y., Gibbons, R. D., Hur, K., Marcus, S. and Bhaumik, D. K., "A Growth Mixture Model for Estimating Patterns of Change in Attention Deficit Hyperactivity Disorder." Under revision.

49. Chen, H. Y., Gibbons, R. D., Hur, K., Bhaumik, D. K., "Mixed-effects Probit Model for Longitudinal Data with Multiple Discrete Outcomes." Under revision.

50. Bhaumik, D.K., Gibbons, R.D., and Mathew, T., "An Optimal Test for Variance Components of Multivariate Mixed-Effects Linear Models." Submitted for publication.

51. Ramati, A., Kapur, K., Keedy, S., Khine, T., Bhaumik, D. K., Gibbons, R. D. and Sweeney, J., "Reliability of a Hierarchical Bayesian Modeling Approach for Event-Related functional MRI Data." Submitted for Publication.

52. Gibbons, R. D., Amatya, A., Brown, C. H., Hur, K., Marcus, S., Bhaumik, D. K., and Mann, J. J., "Post-Approval Drug Safety Surveillance." Submitted for Publication.

Paper Presentations

1. Optimality and Robustness to the Unavailability of Blocks in Block Designs. - Indian Statistical Institute, Calcutta, India, August, 1991.

2. One-sided Tolerance Limits for Unbalanced One-way ANOVA Random Effects Model - ASA and IMS Spring Conference, Houston, March, 1991.

3. Bayes Optimal Incomplete Block Designs for Comparing Treatments with a Control - University of Maryland (UMBC), March, 1991.

4. Bayes Optimal Incomplete Block Designs for Comparing Treatments with a Control - Alabama ASA Chapter Meeting, March, 1991.

5. Minimaxity of Randomized Optimal Designs with Respect to a General Optimality Criterion - presented to the First International Triennial Calcutta Symposium, December, 1991.

6. Optimal Data Augmentation Strategies for Additive Models, Mississippi State University, February, 1992.

7. On Extreme Value Distributions, University of West Florida, Pensacola, March, 1992.

8. Optimal Data Augmentation Strategies for Additive Models. IMS and ASA Summer Conference, San Francisco, August, 1993.

9. The Ozone Layer - International Conference On Environmental Problems: Issues, Statistical Models and Methods, December, 1993.

10. Universal Optimality of Bayesian Experimental Designs and Optimal Data Augmentation, GLM Meeting, Gainesville, Florida, September, 1994.

11. Exact Tests in Crossover Designs, Joint Statistical Meetings, ASA, IMS - Orlando, FL, August, 1995.

12. Universal Optimality of Bayesian Experimental Designs and Optimal Data Augmentation, University of Southwestern Louisiana, Fall 1995.

13. Universal Optimality of Bayesian Experimental Designs and Optimal Data Augmentation, University of South Alabama, Spring 1996.

14. One-Sided Tolerance Limits for Unbalanced m-Way Random-Effects ANOVA Models, Joint Statistical Meetings, ASA, IMS, - Chicago, August, 1996.

15. A New Criterion to Measure the Efficiency of A Design, University of Maryland Baltimore County, Spring 1997.

16. Tolerance Regions for Random-Effects Calibration Curves with Heteroscedastic Errors, - Maine Conference, - Summer 1997.

17. Universal Optimality of Bayesian Experimental Designs and Optimal Data Augmentation, BHU Conference, India- Winter 1997.

18. Tolerance Regions for Random-Effects Calibration Curves with Heteroscedastic Errors- Indian Statistical Institute, India - Fall 1997.

19. Optimal Data Augmentation for the Estimation of a Linear Parametric Function in Linear Models, - National Seminar on Statistics and Decisions, Calcutta, India, - Summer 1999.

20. On the Power Function of the Likelihood Ratio Test for MANOVA, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, October, 2000.

21. An Upper Prediction Limit for the Arithmetic Mean of a Lognormal Random Variable, Joint IMS, ASA Statistical Meetings, August, 2001.

22. An Upper Prediction Limit for the Arithmetic Mean of a Lognormal Random Variable, - International Conference of Computational mathematics and Modeling, Bangkok, Thailand, December, 2002.

23. Statistical Analysis of Microarray Data, International Conference on Applied Statistics, DeKalb, Illinois, May, 2002.

24. Statistical Analysis of Microarray Data, Department of Mathematics, University of Louisiana, Spring 2003.

25. Single and Multiple Use Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors. Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, Fall 2003.

26. Estimation and Classification of fMRI Hemodynamic Response Patterns, Fifth International Triennial Calcutta Symposium on Probability and Statistics, December, 2003.

27. Single and Multiple Use Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors. Department of Mathematics and Statistics, Mahidol University, Thailand, November, 2004.

28. Single and Multiple Use Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors. Department of Mathematics and Statistics, University of Waterloo, Canada, November, 2004.

29. Single and Multiple Use Confidence Regions for Random-Effects Calibration Curves with Heteroscedastic Errors. ASA Northern Illinois Chapter, March, 2005.

30. One-sided prediction intervals for at least p of m observations from a gamma population at each of r locations. Department of Mathematical Sciences, Northern Illinois University, DeKalb, April, 2005.

31. (Invited Talk) Sample Size Determination for Hierarchical Longitudinal Mixed Effects Models with Differential Attrition Rates. JSM Utah, August, 2007.

32. Sample Size Determination for Hierarchical Longitudinal Mixed Effects Models with Differential Attrition Rates. Department of Biostatistics, University of Pittsburgh, November, 2007.

Consulting

Was the Stat-Consultant in the Department of Mathematics and Statistics at the University of South Alabama for the academic years 1992-1993 and 1998-1999. A list of some important consulting projects.

1. “Chlorine Solubility in Aqueous Solutions,” M.S. Thesis in Chemical Engineering. Bruce Zimmerman.

2. “Parental Presence During Procedures: A Pediatrician's Perspective,” research work, Kenneth R. Retting, M.D., Associate Professor of Pediatrics, Division of Endocrine and Metabolic Disease.

3. “Cardiac Catherization/PTCA Balloon Inflation Times,” Rita McConnell (student), Department of Allied Health.

4. “Most Efficient Method to Compare and Contrast Matched-Pair Data,” Master's Thesis, Scotty D. Stokley, SY/AN.

5. “Appropriate Statistical Tests,” Ph.D. Thesis, Nancy Bledsoe, Accounting, CBM.

6. “The Effect of Treadmill Walking at Faster than Comfortable Speed on the Temporal/Distance Gail Parameters and Lower Extremity Muscle Strength in Hemipartic Subjects,” J. Waagfjord, Instructor, Department of Physical Therapy.

7. “An Experiment to Discover the Effects of Artificial Coloring on Women's Facial Attractiveness,” Master's Project, Kate Adler, Department of Psychology.

8. “How Effective is My New Teaching Technique?” Dyes Roy, Graduate Student, Department of Education.

9. “Statistical Techniques and Tests,” Research Project, R.F. Sweet, Department of Accounting.

10. “Biomonitoring in Urban Environment: Utilization of Small Reptiles as Urban Biocentanal Species,” EPA project, Dr. L.G. Tate, Department of Biology.

11. “Characteristics of Students that Successfully Complete Two-Year Degree Programs at an Urban, Historically Black Comprehensive Community College,” Lisa Hammons, Ed D. Student,
Bishop State College.

12. “A Logistic Model for Altitude Decompression Sickness,” Michael Funches, Allied Health Student.

13. “To Test Routine Swimming Speeds of Two Groups of Fish,” Jonathan O'Neal, Graduate Student, Marine Sc.

14. “Ownership Structure and the Value of the Firm,” Professor H. S. Friday, Dept. of Finance.

15. “Interactions Between Size and Molt Stage of Callinectes Sapidus and Parasitism by Loxothylacus Texanus,” Melissa Lawrence, MS Student in Biology.

16. “Freshwater Turtles' Biodiversity in Bay Reserve,” Krista K Van Amerongen, MS Student in Biology.

17. “The Effect of Physical Activity on Inspiratory Muscles,” Tanya Little and Christy Ramey, BS Students, Cardiorespiratory Care.

18. “Evaluation of the Accuracy of the i-Stat Analyzer,” Glenda Parker, BS Student, Cardiorespiratory Care.

19. “The Use of Mechanical Ventilation,” Angela McDonald and Andre Fincey, BS Students, Cardiorespiratory Care.

20. “rTMS vs Acute ECT and Maintenance Drug Treatment,” Prof. Philip Janicak, Department of Psychiatry, University of Illinois at Chicago.

21. “Health-Care Encounters between Elderly Patients, Physicians, and Other Care Providers,” Professor Kalman J. Kaplan, Department of Psychiatry, University of Illinois at Chicago.

22. “Altered Gene Expression of Brain-Derived Neurotrophic Factor and Receptor Tyrosine Kinase B in Postmortem Brain of Suicide subjects,” Dr. Yogesh Dwivedi, Department of Psychiatry, University of Illinois at Chicago.

23. “Protein Kinase A Postmortem Brain of Depressed Suicide Victims: Altered Expression of Specific Regulatory and Catalic Subunits,” Dr. Yogesh Dwivedi, Department of Psychiatry, University of Illinois at Chicago.

24. “Does Fluoxetine Enhance Physical or Cognitive Therapy in Multiple Sclerosis?” Dr. Daniel B. Hier, Department of Neurology and Rehabilitation, University of Illinois at Chicago.

25. “Alcoholism, Depression and Relapse: A Comparative Study of African-American and Non-Hispanic Caucasian Adult Males,” (A Clinical Research Project: submitted to the faculty of The Illinois School of Professional Psychology of Argosy University/Chicago in Partial fulfillment of the requirements for the degree of Doctor of Psychology in Clinical Psychology.) Dennis R. Karamitis.

26. “Hyponatremia: An alternative phenotype of schizophrenia,” Dr. Morris B Goldman, Department of Psychiatry, University of Illinois at Chicago.

27. “Epigenetic Studies in Primary Cortical Neurons,” Dr. Rajiv Sharma, Department of Psychiatry, University of Illinois at Chicago.

Service on Departmental-Level Committees

Colloquium Committee, Tenure and Promotion Committee, Library Committee, Student Affairs Committee, Statistics Curriculum Committee in the Department of Mathematics and Statistics at the University of South Alabama.

At UIC: Divisional Director Search Committee, Ph.D. Committee in the Division of Epidemiology and Biostatistics, University of Illinois at Chicago.