

## Curriculum Vitae of HAKAN DEMIRTAS

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### ***EDUCATION***

08/1997-08/2003 **PHD** in Statistics, Pennsylvania State University, University Park, PA

09/1995-06/1997 **MBA** with Area of Concentration Economics, University of South Alabama, Mobile, AL

09/1987-02/1993 **BS** in Electrical and Electronics Engineering, Bogazici University, Istanbul/Turkey

### ***PROFESSIONAL EXPERIENCE***

08/2008-To date. Associate Professor of Biostatistics (with tenure), Division of Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago.

08/2003-08/2008. Assistant Professor of Biostatistics, Division of Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago.

08/2000-08/2003 Graduate Research Assistant, Center for Prevention Methodology, Pennsylvania State University.

08/1997-07/2000 Graduate Teaching Assistant, Department of Statistics, Pennsylvania State University.

06/1996-06/1997 Graduate Research Assistant in the Economics Department, College of Business Administration, University of South Alabama.

## ***TEACHING EXPERIENCE***

### *Pennsylvania State University:*

Spring-1999: Led the recitation section of STAT200 (Introduction to Statistics).  
Summer-2000: Taught STAT200.  
Summer-1999, Fall-2000, Spring-2001, Fall-2001, Spring-2002: Taught STAT401 (Statistics and Probability for Engineers, Senior level).

### *University of Illinois at Chicago:*

Fall-2003: Co-taught BSTT503 (Biostatistics Lab, Master's level).  
Spring-2004: Taught BSTT504 (ANOVA and Design, Master's level).  
Fall-2004: Taught BSTT512 (Survival Analysis, Master's level).  
Spring-2005: Taught BSTT594 (Computational Statistics, Doctoral level).  
Fall-2005: Taught BSTT594 (Bayesian Statistics, Doctoral level), BSTT512 (Survival Analysis, Master's level), and BSTT595 (Biostatistics Research Seminar, Graduate level).  
Fall-2006: Taught BSTT594 (Computational Statistics, Doctoral level), BSTT512 (Survival Analysis, Master's level).  
Spring-2007: Co-taught BSTT522 (Biostatistical Investigations, Master's level).  
Fall 2007: Taught BSTT512 (Survival Analysis, Master's level), BSTT544 (Bayesian Statistics, Doctoral level), and BSTT594 (Advanced Programming in R, Doctoral level).  
Spring 2008: Taught BSTT594 (Theory and Practice of Multiple Imputation, Graduate level).  
Fall 2009: Taught BSTT524 (Biostatistical Tools, Master's level) and BSTT565 (Computational Statistics, Doctoral level).  
Spring 2009: Co-taught BSTT550 (Biostatistical Investigations, Master's level).

### ***SERVICE TO THE UNIVERSITY***

- Master's comprehensive exam committee- AY 2003/2004
- Master's comprehensive exam committee- AY 2004/2005
- Master's comprehensive exam committee- AY 2006/2007
- Doctoral preliminary exam committee- AY 2005/2006
- Doctoral preliminary exam committee- AY 2006/2007
- Doctoral preliminary exam committee- AY 2007/2008
- Doctoral preliminary exam committee- AY 2008/2009 (chair)
- Committee on Committees-July 2007 to July 2009
- Committee on Academic Progress-July 2007 to July 2009
- Committee on Admissions and Recruitment Policies-July 2007 to July 2009

Served in PhD committees of

- Kristin Rankin (Epidemiology, 2008)
- Sasha Guo (Biostatistics, 2008)
- Jungwha Lee (Biostatistics, 2009)
- John Cursio (Biostatistics, in progress)
- Irene Helenowski (Biostatistics, in progress)
- Xue Li (Biostatistics, in progress)

### ***SERVICE TO THE PROFESSION***

--Associate Editor of Journal of Statistical Software (May 2007-to date).

--Served as a referee for the following journals:

*Statistics in Medicine, Journal of Royal Statistical Society Series C-Applied Statistics, Communications in Statistics-Theory and Methods, Journal of Statistical Computation and Simulation, Biometrical Journal, Multivariate Behavioral Research, American Statistician, American Journal of Epidemiology, Biostatistics, Substance Use and Misuse, Biometrics, Computational Statistics and Data Analysis, Journal of Statistical Software, Philosophical Transactions of the Royal Society, Communications in Statistics-Simulation and Computation, BMC Biomedical Research Methodology..*

--Served as a grant reviewer for US-Israeli Binational Science Foundation.

## ***RESEARCH SUPPORT***

\* Milk Availability and Lactation Status in Mothers of Preterm & Term Infants. Project Number 5 R01 NR04994-03 (PI: Pamela Hill)  
05/01/03 – 04/30/04, Annual direct cost: \$259,923. (Co-PI). Funded by National Institute of Nursing Research.

\* Homeless Mentally Ill Strategies of Maintaining Residential Stability. Project number DedH1339040320 (PI: Christine Helfrich)  
12/01/04 - 11/30/05, Annual direct cost: \$119,029. (Co-PI). Funded by National Institute on Disability and Rehabilitation Research.

\* A Multivariate Probit Model for Health Services Research. Project Number 1 R01 MH67198-01a2 (PI: Hua Yun Chen)  
05/01/05 - 04/30/06, Annual direct cost: \$150,000. (Co-PI). Funded by National Institute of Mental Health.

\* Mental Health Services for Foster Children. Project Number Mh070580-01A2 (PI: Sonya Leathers)  
09/30/05 - 08/31/10, Annual direct cost: \$ 117,099. (Co-PI). Funded by National Institute of Mental Health.

\* Asthma and Demolition in Chicago Public Housing. Project Number 1 K08 ES11302 (PI: Samuel Dorevitch)  
05/02/02 – 03/31/07, Annual direct cost: \$119,133. (Co-PI). Funded by National Institute of Environmental Health Sciences.

\* Genetic Epidemiology of Osteoporosis. Project Number R01 AR045651 (PI: Xiping Xu)  
09/06/00 – 03/31/07, Annual direct cost: \$386,360. (Co-I). Funded by National Institute of Arthritis and Musculoskeletal and Skin Diseases.

\* Epidemiology of Metabolic Syndrom in Children. Project Number R01 HD049059 (PI: Xiaobin Wang)  
01/01/05 – 12/31/09, Annual direct cost: \$80,000. (Co-I). Funded by NICHD / Children's Memorial Hospital, Chicago.

\* Sleep and Adiposity: A Prospective Twin Study. Project Number R01 HL0864619 (PI: Xiaobin Wang)  
09/15/06- 08/31/10, Annual direct cost: \$55,000. (Co-PI). Funded by NICHD / Children's Memorial Hospital, Chicago.

\* ACISR in Late Life Depression. Project Number (unassigned). (PI: Hakan Demirtas)  
07/1/09 - 12/31/11, Annual direct cost: \$86,568. Housed in Weill Cornell Medical College. Funded by NIH.

***PEER-REVIEWED STATISTICAL & METHODOLOGICAL PUBLICATIONS***

- 1. Demirtas, H.** & Schafer, J.L. (2003). On the performance of random-coefficient pattern-mixture models for non-ignorable drop-out. *Statistics in Medicine*, Volume 22, Issue 16, 2553-2575.
- 2. Demirtas, H.** (2004a). Simulation-driven inferences for multiply imputed longitudinal datasets. *Statistica Neerlandica*, Volume 58, Issue 4, 466-482.
- 3. Demirtas, H.** (2004b). Modeling incomplete longitudinal data. *Journal of Modern Applied Statistical Methods*, Volume 3, No 2, 305-321.
- 4. Demirtas, H.** (2004c). Assessment of relative improvement due to weights within generalized estimating equations framework for incomplete clinical trials data. *Journal of Biopharmaceutical Statistics*, Volume 14, Issue 4, 1085-1098.
- 5. Demirtas, H.** (2004d). Pseudo-random number generation in R for commonly used multivariate distributions. *Journal of Modern Applied Statistical Methods*, Volume 3, No 2, 485-497.
- 6. Demirtas, H.** (2005a). Multiple imputation under Bayesianly smoothed pattern-mixture models for non-ignorable drop-out. *Statistics in Medicine*, Volume 24, Issue 15, 2345-2363.
- 7. Demirtas, H.** (2005b). Bayesian analysis of hierarchical pattern-mixture models for clinical trials data with attrition and comparisons to commonly used ad-hoc and model-based approaches. *Journal of Biopharmaceutical Statistics*, Volume 15, Issue 3, 383-402.
- 8. Demirtas, H.** (2005c). Pseudo-random number generation in R for some univariate distributions. *Journal of Modern Applied Statistical Methods*, Volume 4, No 1, 300-311.
- 9. Demirtas, H.** (2006). A method for multivariate ordinal data generation given marginal distributions and correlations. *Journal of Statistical Computation and Simulation*, Volume 76, Number 11, 1017-1025.
- 10. Demirtas, H.** & Hedeker, D. (2006). Comment on “Tukey’s gh distribution for multiple imputation”. *American Statistician*, Volume 60, No 4, 348-349.
- 11. Demirtas, H.** (2007a). Practical advice on how to impute continuous data when the ultimate interest centers on dichotomized outcomes through pre-specified thresholds. *Communications in Statistics-Simulation and Computation*, Volume 36, Issue 4, 871-889.
- 12. Demirtas, H.** (2007b). The design of simulation studies in medical statistics. *Statistics in Medicine*, Volume 26, Issue 24, 3818-3821.

13. Demirtas, H. & Hedeker, D. (2007). Gaussianization-based quasi-imputation and expansion strategies for incomplete correlated binary responses. *Statistics in Medicine*, Volume 26, Issue 4, 782-799.
14. Demirtas, H., Arguelles, L.M., Chung, H. & Hedeker, D. (2007). On the performance of bias-reduction techniques for variance estimation in approximate Bayesian bootstrap imputation. *Computational Statistics and Data Analysis*, Volume 51, Issue 8, 4064-4068.
15. Demirtas, H. (2008). On imputing continuous data when the eventual interest pertains to ordinalized outcomes via threshold concept. *Computational Statistics and Data Analysis*, Volume 52, Issue 4, 2261-2271.
16. Demirtas, H., Freels, S.A. & Yucel, R.M. (2008). Plausibility of multivariate normality assumption when multiply imputing non-Gaussian continuous outcomes: A simulation assessment. *Journal of Statistical Computation and Simulation*, Volume 78, Issue 1, 69-84.
17. Demirtas, H. & Hedeker, D. (2008). Imputing continuous data under some non-Gaussian distributions. *Statistica Neerlandica*, Volume 62, Issue 2, 193-205.
18. Hedeker, D., Mermelstein, R. & Demirtas, H. (2008). An application of a mixed-effects location scale model for analysis of ecological momentary assessment (EMA) data. *Biometrics*, Volume 6, Issue 2, 627-634.
19. Demirtas, H. & Hedeker, D. (2008). An imputation strategy for incomplete longitudinal ordinal data. *Statistics in Medicine*, Volume 27, Issue 20, 4086-4093.
20. Demirtas, H. & Hedeker, D. (2008). Multiple imputation under power polynomials. *Communications in Statistics-Simulation and Computation*, Volume 37, Issue 8, 1682-1695.
21. Demirtas, H. & Hedeker, D. (2008). Comment on "Using calibration to improve rounding in imputation". *American Statistician*, Volume 62, No 4, 364-365.
22. Demirtas, H. (2008). Is the three-point system necessarily better than the two-point system in soccer? *Interstat*, Issue 10, 1-2.
23. Demirtas, H. (2009). Imputation under the generalized lambda distribution. *Journal of Biopharmaceutical Statistics*, Volume 19, Issue 1, 77-89.
24. Demirtas, H., Hedeker, D. & Kapur, K. (2009). A comparative study on most commonly used correlated binary data generation methods. *Advances and Applications in Statistical Sciences*, Volume 1, Issue 1, 45-55.
25. Demirtas, H. (2009). A distance-based rounding strategy for post-imputation ordinal data. Forthcoming in *Journal of Applied Statistics*.

26. Yucel, R.M. & Demirtas, H. (2009). Impact of non-normal random effects on inference by multiple imputation: A simulation assessment. Forthcoming in *Computational Statistics and Data Analysis*.
27. Demirtas, H. (2009). Multiple imputation for longitudinal data under a Bayesian multilevel model. Forthcoming in *Communications in Statistics-Theory and Methods*.
28. Demirtas, H. (2009). Rounding strategies for multiply imputed binary data. Forthcoming in *Biometrical Journal*.
29. Demirtas, H., Amatya, A., Pugach, O., Cursio, J., Shi, F., Morton, D. & Doganay, B. (2009). Accuracy versus convenience: a simulation-based comparison of two continuous imputation models for incomplete ordinal longitudinal clinical trials data. Revision invited by *Statistics and Its Interface*.
30. Hedeker, D., Demirtas, H. & Mermelstein, R.J. (2009). A mixed ordinal location scale model for analysis of ecological momentary assessment (EMA) data. Revision invited by *Statistics and Its Interface*.
31. Demirtas, H. (2010). An application of multiple imputation under the two generalized parametric families. Forthcoming in *Journal of Data Science*.
32. Demirtas, H. & Hedeker, D. (2009). Generating multivariate continuous data via the notion of nearest neighbors. Forthcoming in *Journal of Applied Statistics*.
33. Helenowski, I.B., Vonesh, E.F., Demirtas, H., Jovanovic, B.D., Rademaker, A.W., Ananthanarayanan, V., Gann, P.H. (2009). Defining reproducibility statistics as a function of the spatial covariance structures in biomarker studies. Under review.

#### ***PEER-REVIEWED COLLABORATIVE & INTERDISCIPLINARY PUBLICATIONS***

1. Batcioglu, K., Ozturk, I.C., Atalay, S., Dogan, D., Bayri, N. & Demirtas, H. (2002). Investigation of time dependent magnetic field effect on superoxide dismutase and catalase activity: An in-vitro study. *Journal of Biological Physics and Chemistry*, 2, 108-112.
2. Gulek, J.C. & Demirtas, H. (2005). Learning with technology: The impact of laptop use on student achievement. *Journal of Learning, Technology and Assessment*, Volume 3, Number 2, 1-39.
3. Hill, P.D., Aldag, J.C., Demirtas, H., Zinaman, M. & Chatterton, R.T. (2006). Mood states and milk output in lactating mothers of preterm and term infants. *Journal of Human Lactation*, 22(3), 305-314.

4. Dorevitch, S., **Demirtas, H.**, Persky, V.W, Erdal, S., Conroy, L., Schoonover, T. & Scheff, P.A. (2006). Demolition of high-rise public housing increases particulate matter air pollution in communities of high-risk asthmatics. *Journal of the Air and Waste Management Association*, Volume 56, 1022-1032.
5. Wang, X., **Demirtas, H.** & Xu, X. (2006). Homocysteine, B vitamins, and cardiovascular disease. *New England Journal of Medicine*, Volume 355, Issue 2, 207-209.
6. Dorevitch, S., Tharenos, L., **Demirtas, H.**, Persky, V.W., Artwohl, J. & Fortman, J.D. (2007). Inverse association between rural environment in infancy and sensitization to rodents in adulthood. *Annals of Allergy, Asthma and Immunology*, Volume 98, No 5, 440-446.
7. Wang, X., Qin X., **Demirtas, H.**, Li, J., Mao, G., Huo, Y., Sun, N., Liu, L. & Xu, X. (2007). Efficacy of folic acid supplementation in stroke prevention: a meta-analysis. *Lancet*, Volume 369, 1876-1882.
8. Wang, X., Qin X., **Demirtas, H.** & Xu, X. (2007). Efficacy of folic acid supplementation-Reply. *Lancet*, Volume 370, 651.
9. Hedeker, D., Mermelstein, R. & **Demirtas, H.** (2007). Analysis of binary outcomes with missing data: missing=smoking, last observation carried forward, and a little multiple imputation. *Addiction*, Volume 102, 1564-1573.
10. Dorevitch, S., **Demirtas, H.**, Scheff, P.A. & Persky, V.W. (2007). Bias and confounding in longitudinal measures of exhaled monoxides. *Journal of Exposure Science and Environmental Epidemiology*, Volume 17, 583-590.
11. Leon, A.C., **Demirtas, H.** & Hedeker, D. (2007). Bias reduction with an adjustment for participants' intent to dropout of a randomized controlled clinical trial. *Clinical Trials*, Volume 4, No 5, 540-547.
12. Arguelles, L.M., Wang, X., **Demirtas, H.**, Yang, J., Li, Z., Wang, L., Liu, X., Tang, G., Xing, H. & Xu, X. (2007). Body mass index, percent body fat, and bone mass in a cohort of Chinese twins aged 6 to 18 years. *Archives of Osteoporosis*, Volume 2, No 1-2, 7-20.
13. Doganay, S., Hepsen, I.F., Yologlu, S. & **Demirtas, H.** (2007). Effect of the preservation-to-surgery interval on corneal allograft survival in low-risk patients. *Ophthalmic Surgery, Lasers and Imaging*, Volume 38, No 6, 457-461.
14. Atkins, M.S., Frazier, S.L., Leathers, S.J., Graczyk, P.A., Talbott, E., Jakobsons, L., Adil, J., Marinez-Lora, A., **Demirtas, H.**, Gibbons, R.D. & Bell, C.C. (2008). Teacher key opinion leaders and the diffusion of innovation in urban low-income schools. *Journal of Consulting and Clinical Psychology*, Volume 76, Issue 5, 905-908.

15. Bean, J., Ng, D., **Demirtas, H.** & Guinan, P. (2008). Medical students' attitudes toward torture. *Torture Journal*, Volume 18, No 2, 99-103.

16. Tsai, H.J., Kumar, R., Pongracic, J., Liu, X., Story, R., Yu, Y., Caruso, D., Costello, J., Schroeder, A., Fang, Y., **Demirtas, H.**, Meyer, K.E., O'Gorman, M.R.G. & Wang, X. (2009). Familial Aggregation of Food Allergy and Sensitization to Food Allergens: A Family-Based Study. *Journal of Clinical and Experimental Allergy*, Volume 39, Issue 1, 101-109.

17. Hill, P.D., Aldag, J.C., **Demirtas, H.**, Naeem, V., Parker, N.P., Zinaman, M.J. & Chatterton, R.T. (2009). Association of serum prolactin and oxytocin with milk production in mothers of preterm and term infants. *Biological Research for Nursing*, Volume 10, Number 4, 340-349.

#### ***BOOK REVIEWS, CONFERENCE PROCEEDINGS AND OTHER PUBLICATIONS***

1. **Demirtas, H.** & Schafer, J.L. (2002). Performance of random-coefficient pattern-mixture models for nonrandom attrition. *Biopharmaceutical Section of Joint Statistical Meeting Proceedings 2002*, 730-735.

2. **Demirtas, H.** (2003). Multiple Imputation for Nonignorable Dropout using Bayesian Pattern-Mixture Models. *Technical Report: 03-58, Prevention Methodology Center*, University Park, PA, The Pennsylvania State University.

3. **Demirtas, H.** & Schafer, J.L. (2003). On the performance of random-coefficient pattern-mixture models for nonignorable dropout. *Technical Report: 02-51, Prevention Methodology Center*, University Park, PA, The Pennsylvania State University.

4. **Demirtas, H.** (2004). Review of the book "Medical Statistics from Scratch" by Bowers, D. *Statistical Methods in Medical Research*, Volume 13, Number 3, 242-243.

5. **Demirtas, H.** (2005). Review of the book "All of Statistics" by Wasserman, L. *Statistical Methods in Medical Research*, Volume 14, Number 2, 193-193.

6. **Demirtas, H.** (2005). Review of the book "Applied Longitudinal Analysis" by Fitzmaurice, G. M., Laird, N. M. & Ware, J.H. *Statistical Methods in Medical Research*, Volume 14, Number 3, 321-322.

7. **Demirtas, H.** (2005). An imputation strategy for correlated binary responses. *Statistical Computing Section of Joint Statistical Meeting Proceedings 2005*, 2079-2080.

8. Gulek, J.C. & **Demirtas, H.** (2005). Learning with technology: The impact of laptop use on student achievement. *Journal of Research and Information*, Volume 23, Number 4, 4-20. (Re-print of Journal of Learning, Technology and Assessment article)

- 9. Demirtas, H.,** Freels, S.A. & Yucel, R.M. (2006). Plausibility of multivariate normality assumption when multiply imputing non-Gaussian continuous outcomes: A simulation assessment. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-001.
- 10. Demirtas, H.** (2006). Practical advice on how to impute continuous data when the ultimate interest centers on dichotomized outcomes through pre-specified thresholds. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-002.
- 11. Demirtas, H.** (2006). A simple suggestion on imputing continuous data when the eventual interest pertains to ordinalized outcomes via threshold concept. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-003.
- 12. Demirtas, H.,** Arguelles, L.M., Chung, H. & Hedeker, D. (2006). On the performance of bias-reduction techniques for variance estimation in approximate Bayesian bootstrap imputation. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-007.
- 13. Demirtas, H.** & Hedeker, D. (2006). On Tukey's gh distribution for multiple imputation. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-008.
- 14. Demirtas, H.** & Hedeker, D. (2006). Imputing continuous data under some non-Gaussian distributions. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-009.
- 15. Demirtas, H.** (2006). On the design of simulation studies in medical statistics. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2006-010.
- 16. Demirtas, H.** & Hedeker, D. (2007). Multiple imputation under power polynomials. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-001.
- 17. Demirtas, H.** (2008). Review of the book "Longitudinal Data Analysis for Biomedical and Behavioral Sciences" by Hedeker, D. & Gibbons, R.D. *Statistical Methods in Medical Research, Volume 17, Number 2, 342-343.*
- 18. Hedeker, D.,** Mermelstein, R. & **Demirtas, H.** (2007). An application of mixed-effects location scale model for analysis of ecological momentary assessment (EMA) data. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-002.

**19. Demirtas, H.** (2007). Imputation under the generalized lambda distribution. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-003.

**20. Demirtas, H.** (2007). A distance-based rounding strategy for post-imputation ordinal data. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-004.

**21. Demirtas, H.** (2007). Rounding strategies for multiply imputed binary data. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-005.

**22. Demirtas, H. & Hedeker, D.** (2007). An imputation strategy for incomplete longitudinal ordinal data. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-006.

**23. Demirtas, H., Hedeker, D. & Kapur, K.** (2007). A comparative study on most commonly used correlated binary data generation methods. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-007.

**24. Demirtas, H. & Hedeker, D.** (2007). Generating multivariate continuous data via the notion of nearest neighbors. University of Illinois at Chicago, School of Public Health, Division of Epidemiology and Biostatistics. Technical report: #2007-008.

**25. Rauscher, G.H. & Demirtas, H.** (2007). Validation of the risk model for estimating absolute effects in public health research. *American Journal of Epidemiology*, Volume 165, Issue 11, S61 (Supplement).

**26. Rauscher, G.H., Demirtas, H., Cho, C.C. & Earp, J.** (2007). Adjusting for dropout in an intervention to reduce the Black-White gap in mammography use. *American Journal of Epidemiology*, Volume 165, Issue 11, S61 (Supplement).

### ***RESEARCH INTERESTS AND TECHNICAL SKILLS***

General skills in biostatistical computing; specific expertise and interest in:

*Statistics:* Markov Chain Monte Carlo techniques, missing data, models for longitudinal and clustered data, multiple imputation, weighted estimating equations, hierarchical linear models, software development and random number generation.

*Computing platforms:* UNIX, Windows 2000/NT/XP, some Macintosh.

*Programming languages and statistical software:* Fortran 90-95, SAS, Splus, R, Minitab, SPSS. *Text formatting and office computing:* LaTeX, Word, Excel, Lotus, Powerpoint.

### ***PRESENTATIONS AT NATIONAL CONFERENCES***

1. Multiple imputation under a multivariate Bayesian pattern-mixture model. Joint Statistical Meetings, Atlanta, GA, August 2001.
2. Random coefficient pattern-mixture models for nonrandom attrition. Joint Statistical Meetings, New York City, NY, August 2002.
3. On the performance of random-coefficient pattern-mixture models for non-MAR dropout. Annual Meeting of the Society for Prevention Research, Seattle, WA, June 2002.
4. Gaussianization-based quasi-imputation and expansion strategies for correlated binary data. Joint Statistical Meetings, Minneapolis, MN, August 2005.
5. Imputation by Gaussianization for correlated binary data. International Biometric Society-Eastern North American Region Annual Conference, Tampa, FL, March 2006.
6. An imputation strategy for incomplete longitudinal ordinal data. CDC&ATSDR Symposium on Statistical Methods, Atlanta, GA, April 2007.
7. Multiple imputation under multivariate Fleishman polynomials. CDC&ATSDR Symposium on Statistical Methods, Atlanta, GA, April 2007.

### ***INVITED TALKS***

1. Model-based approaches for longitudinal data. Bilkent University, Department of Industrial Engineering, Ankara, Turkey, December 1999.
2. Data augmentation strategies for arbitrarily missing repeated-measures data. Middle East Technical University, Department of Statistics, Ankara, Turkey, December 1999.
3. Pattern-mixture models under multivariate normal distribution assumption with unstructured covariances. Pennsylvania State University Methodology Center, University Park, PA, March 2001.
4. Incorporating the model uncertainty via multiple imputation. Pennsylvania State University Methodology Center, University Park, PA, April 2002.
5. Semiparametric and parametric approaches for missing data. Bristol Meyers, Hartford, CT, October 2002.
6. A new class of Bayesian mixture models. University of South Florida, Department of Epidemiology and Biostatistics, Tampa, FL, January 2003.

7. A new class of Bayesian mixture models. Pennsylvania State University Medical School, Hershey, PA, March 2003.
8. A new class of Bayesian mixture models. University of Illinois at Chicago, Division of Epidemiology and Biostatistics, Chicago, IL, May 2003.
9. In imputers we trust, all others bring complete data. University of Illinois at Chicago, Division of Epidemiology and Biostatistics, Chicago, IL, November 2003.
10. Another look at pattern-mixture models. University of Kentucky, Department of Statistics, Lexington, KY, December 2004.
11. Bayesianly smoothed pattern-mixture models for non-ignorable drop-out. University of Illinois at Chicago, Department of Mathematics, Statistics and Computer Science, Chicago, IL, February 2005.
12. Overview of medical statistics. Inonu University, College of Medicine, Malatya, Turkey, June 2005.
13. Gaussianization-based quasi-imputation and expansion strategies for correlated binary data. University of Illinois at Chicago, Division of Epidemiology and Biostatistics, Chicago, IL, September 2005.
14. Bayesianly smoothed pattern-mixture models for non-ignorable drop-out. Northwestern University, Department of Preventive Medicine, Chicago, IL, February 2006.
15. Multiple imputation under Bayesianly smoothed random-coefficient hierarchical pattern-mixture models for nonignorable missing longitudinal data. Northwestern University, Department of Statistics, Chicago, IL, May 2006.
16. Fundamentals of Bayesian data analysis and inference. University of Illinois at Chicago, Quantitative Biomedical Sciences Program, Chicago, IL, October 2006.
17. Real life and notorious statistical execution and interpretation mistakes. University of Illinois at Chicago, Division of Epidemiology and Biostatistics, Chicago, IL, October 2006.
18. Fundamental concepts in biostatistics and common statistical mistakes made by medical researchers. 33<sup>rd</sup> National Hematology Congress, Ankara, Turkey, October 2007.

## ***REFERENCES***

Joseph L. Schafer, Ph.D., Associate Professor of Statistics, Associate Director of Center for Prevention Methodology, 412 Thomas Building, University Park, PA, 16802, [jls@stat.psu.edu](mailto:jls@stat.psu.edu), (814) 863-9795.

Don Hedeker, Ph.D., Professor of Biostatistics, 1603 West Taylor Street, MC923, Chicago, IL, 60612, [hedeker@uic.edu](mailto:hedeker@uic.edu), (312) 996-4896.

Robert Gibbons, Ph.D., Professor of Biostatistics, Director of Center for Health Statistics, MC912, 1601 West Taylor Street, Chicago, IL, 60614, [rdgib@uic.edu](mailto:rdgib@uic.edu), (312) 413-7755.

Leslie Stayner, Ph.D., Professor of Epidemiology, Director of Division of Epidemiology and Biostatistics, 1603 West Taylor Street, MC923, Chicago, IL, 60612, [lstayner@uic.edu](mailto:lstayner@uic.edu), (312) 355-3692.

Xiaobin Wang, MD, MPH, ScD, Professor and Director, Mary Ann and J. Milburn Smith Child Health Research Program, Children's Memorial Hospital and Children's Memorial Research Center, Northwestern University Feinberg School of Medicine, 2300 Children's Plaza, Box 157, Chicago, IL 60614-3394, [xbwang@childrensmemorial.org](mailto:xbwang@childrensmemorial.org), (312) 573-7738.