

# SARAH M. NUSSER

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## PROFESSIONAL POSITIONS

- 2007-present Director, Center for Survey Statistics and Methodology, Iowa State University
- 2003-present Professor, Department of Statistics, Iowa State University
- 2003-present Faculty Member, Human Computer Interaction Graduate Program, Iowa State University
- 1994-present Faculty Member, Ecology and Evolutionary Biology Graduate Program, Iowa State University
- 1992-2004 Director, Center for Survey Statistics and Methodology, Iowa State University (formerly Professor-in-charge, Statistical Laboratory Survey Section)
- 1997-2003 Associate Professor, Department of Statistics, Iowa State University
- 2000-2001 ASA/NSF/BLS Senior Research Fellow, Bureau of Labor Statistics
- 1992-1997 Assistant Professor, Department of Statistics, Iowa State University
- 1990-1992 Statistician, The Procter & Gamble Company, Cincinnati, OH

## EDUCATION

- 1990 PhD in Statistics, Iowa State University
- 1987 MS in Statistics, Iowa State University
- 1983 MS in Botany, North Carolina State University
- 1980 BS in Botany, University of Wisconsin-Madison

## HONORS

- Distinguished Achievement Award, Section on Statistics and the Environment, American Statistical Association, 2007
- Fellow, American Statistical Association, 2003

**FUNDING**

1. Accommodating individual differences in map-based field survey software on handheld computers, U.S. Census Bureau. PI: S. M. Nusser, Co-PI: L. M. Miller. 9/1/07 – 12/31/08, \$24,991.
2. A non-parametric approach to population size estimation for multiple system capture-recapture surveys, National Science Foundation. PI: S. X. Chen, Co-PIs: J. D. Opsomer, S. M. Nusser. 9/1/05 – 8/31/08, \$299,495.
3. The impact of biorenewable technologies on communities across Iowa, Iowa State University College of Human Sciences. PI: C. Gunderson, Co-PIs: C. Fletcher, M. D. Larsen, S.M. Nusser. 2/01/07 – 1/31/08, \$15,000; 7/01/07-6/30/08, \$22,000.
4. Individual variability and spousal synchronicity in cognition, affect, and health: conducting multiple daily assessments, Iowa State University College of Human Sciences. PI: J. Margrett, Co-PIs: G. Welk, S.M. Nusser. 12/15/06 – 7/15/07, \$9,978.
5. Statistical and survey methods support for the National Resources Inventory, USDA Natural Resources Conservation Service. PI: S. M. Nusser, Co-PIs: T. Maiti, M. D. Larsen, C. L. Yu.
 

1/1/07 – 3/31/08	2,450,000
1/1/06 – 1/31/07	2,236,500
9/1/04 – 12/31/05	2,688,887
9/24/03 – 1/23/05	2,180,000
1/1/03 - 9/23/03	1,700,000
2/15/02 - 12/31/02	1,500,000
10/1/00 - 2/28/02	1,700,000
10/1/99 - 9/30/00	1,100,000
10/1/98 - 9/30/99	1,090,000
10/1/97 - 9/30/98	978,000
10/1/96 - 9/30/97	700,000
10/1/95 - 9/30/96	800,000
10/1/94 - 9/30/95	650,000
10/1/93 - 9/30/94	651,000
10/1/92 - 9/30/93	686,000
6. The development of a cognitive model to simulate lister behavior and decision-making for map-based tasks specific to address canvassing, U.S. Census Bureau. PI: S. M. Nusser, Co-PI: L. M. Miller. 8/1/05 – 12/15/06, \$24,990.
7. Geospatial knowledge in complex mobile field settings, National Science Foundation. PI: S. M. Nusser, Co-PIs: L. M. Miller, J. H. Oliver, M. F. Goodchild, K. Clarke, M. Turk, M. Höllerer. 10/1/03-9/30/06, \$225,000.
8. Strategies for improving abilities to use digital maps, Bureau of Labor Statistics. PI: S. M. Nusser. 9/02-8/04, \$25,000.
9. Enabling the creation and use of GeoGrids for next generation geospatial information, National Science Foundation (subcontract from U. Maine). PI: S. M. Nusser; Co-PIs: H. S. Stern, L. M. Miller. 9/15/01-9/14/05, \$450,000.
10. Collecting and using geospatial data in the field: an extensible framework and testbed, National Science Foundation. PI: S. M. Nusser; Co-PIs: L. M. Miller, M. F. Goodchild, K. Clarke. 7/01/00-12/31/04, \$1,670,900.

11. Mobile computing, BAE Systems. PI: S. M. Nusser; Co-PIs: L. M. Miller, M. F. Goodchild, K. Clarke. 7/01/00-12/31/04, \$65,000.
12. Soils Databases and Statistical Methods for Soil Surveys, USDA Natural Resources Conservation Service. PI: S. M. Nusser, Co-PIs: W. A. Fuller.
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|-------------------|---------|
| 10/1/00 - 9/30/03 | 593,000 |
| 10/1/99 - 9/30/00 | 338,000 |
| 10/1/98 - 9/30/99 | 600,000 |
| 10/1/97 - 9/30/98 | 664,000 |
| 10/1/96 - 9/30/97 | 540,000 |
| 10/1/95 - 9/30/96 | 644,570 |
| 10/1/94 - 9/30/95 | 620,960 |
| 10/1/93 - 9/30/94 | 423,640 |
| 10/1/92 - 9/30/93 | 564,375 |
13. Integrating and characterizing digital location data for computer-assisted survey information collection, Census Bureau. PI: S. M. Nusser. 8/15/00-3/31/02, \$26,350.
14. Using digital geospatial data in computer-assisted survey information collection, National Science Foundation, American Statistical Association, Bureau of Labor Statistics Senior Research Fellowship. PI: S. M. Nusser. 8/15/00-3/31/02, \$43,376.
15. Improving measurement of food security and hunger, USDA Economic Research Service. PI: H. H. Jensen; Co-PI: S. M. Nusser, J. D. Opsomer. 9/1/98-9/30/02, \$200,000.
16. At the interface of times series, measurement errors, and survey sampling: a conference in celebration of Wayne A. Fuller's 70<sup>th</sup> birthday, National Science Foundation. S. M. Nusser, Y. Amemiya, A. L. Carriquiry. 3/01/01-12/31/01, \$19,400.
17. Survey design considerations for evaluating welfare programs, USDA Economic Research Service and Dept. of Health & Human Services. Co-PIs: S. M. Nusser, C. N. Fletcher, H. H. Jensen. 9/99-9/01, \$170,000.
18. Development of sampling methodologies to support the USDA nutrient database for standard reference, USDA Agricultural Research Service. PI: S. M. Nusser; Co-PI: A. L. Carriquiry. 6/15/98-6/14/01, \$31,650.
19. What is happening to food stamp exiters: An examination of their employment and other experiences using administrative and survey data. Co-PIs: H. H. Jensen, S. Garasky, S. M. Nusser. 10/1/98-9/30/00, \$400,000.
20. A framework for the dissemination, use and storage of geospatial images for field data collection, National Science Foundation. PI: S. M. Nusser; Co-PIs: P. M. Siegel, G. F. Covert, M. Egenhofer. 8/1/99-7/31/00, \$40,000.
21. Feasibility study for state-level welfare surveys, Census Bureau. PI: S. M. Nusser; Co-PI: C. N. Fletcher. 5/15/98-5/14/99, \$85,000.
22. Methods development for natural resource surveys, Natural Resources Inventory and Analysis Institute, USDA Natural Resources Conservation Service. PI: S. M. Nusser; Co-PIs: W. A. Fuller, F. J. Breidt, J. D. Opsomer.
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|-------------------|---------|
| 10/1/97 - 9/30/99 | 373,780 |
| 10/1/96 - 9/30/97 | 214,000 |
| 10/1/95 - 9/30/96 | 134,000 |

23. Watershed assessment studies, Watershed Sciences and Soil Quality Institutes, USDA Natural Resources Conservation Service. Co-PIs: S. M. Nusser and J. D. Opsomer. 4/1/97-9/30/98, \$93,000.
24. Estimating usual intake and biochemical measurement distributions for NHANES III, National Center for Health Statistics. PI: A. L. Carriquiry, Co-PI: S. M. Nusser.
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|-------------------|--------|
| 10/1/97 - 9/30/98 | 48,417 |
| 10/1/96 - 9/30/97 | 24,903 |
25. Statistical methods for dietary assessment, USDA Agricultural Research Service. PI: S. R. Johnson, Co-PIs: W. A. Fuller, H. H. Jensen, A. L. Carriquiry, S. M. Nusser.
- |                   |         |
|-------------------|---------|
| 10/1/95 - 9/30/96 | 239,966 |
| 10/1/94 - 9/30/95 | 160,000 |
| 10/1/93 - 9/30/94 | 199,010 |
| 10/1/92 - 9/30/93 | 193,955 |
26. Statistical review of Minnesota's Fish Contaminant Monitoring Program, State of Minnesota. PI: M. S. Kaiser, Co-PIs: S. M. Nusser, F. J. Breidt. 7/1/94-12/31/95, \$79,350.

## REFEREED PUBLICATIONS

- Nusser, S. M., W. R. Clark, D. L. Otis, and L. Huang. 2008. Sampling considerations for surveillance in wildlife populations. *Journal of Wildlife Management* 72(1) (in press).
- Nusser, S. M. 2008. Discussion: using geospatial information resources in sample surveys (discussion of M. Goodchild's Morris Hansen lecture on "Statistical perspectives on spatial social science"). *Journal of Official Statistics* (in press).
- Singer, J. W., S. M. Nusser, and C. J. Alf. 2007. Are cover crops being used in the Central Western US Corn Belt? *Journal of the Soil and Water Conservation Society*. 62(5):353-358.
- Miller, L., H. Ming, H.-J. Tsai, B. Wemhoff, and S. Nusser. 2007. Supporting geographic data in the mobile computing environment. *Proceedings of the 20th ISCA Conference on Parallel and Distributed Computing Systems*. Las Vegas, NV. p. 56-61.
- Nusser, S. M. 2006. Review of *Survey Methodology*, by R. M. Groves, F. J. Fowler, Jr., M. P. Couper, J. M. Lepkowski, E. Singer, and R. Tourangeau, Wiley. *Journal of the American Statistical Association*. 101:1310-1311.
- Beidler, K. M., J. K. Iles, S. M. Nusser, and A. M. VanDerZanden. 2006. Assessing the preparedness of postsecondary graduates entering the landscape contracting industry. *HortTechnology* 16:312-317.
- Tsai, H. J., L. L. Miller, H. Ming, and S. Nusser. 2006. Combining Spatial Data from Multiple Data Sources, *Proceedings of the ISCA 19th International Conference on Computer Applications in Industry and Engineering (CAINE-2006)*, Las Vegas, NV. pp. 89-94.
- Nusser, S. M., S. S. Intille, and R. Maitra. 2006. Emerging technologies and next-generation intensive longitudinal data collection. In T. A. Walls and J. S. Schafer (editors), *Models for Intensive Longitudinal Data*. New York: Oxford University Press. pp. 254-278.
- Nusser, S. M., W. R. Clark, J. Wang, and T. R. Bogenschutz. 2004. Pheasant populations associated with land use in Iowa during the Conservation Reserve Program. *Journal of Agricultural, Biological and Environmental Statistics*. 9(3):1-17.
- Phillips, M. L., W. R. Clark, S. M. Nusser, M. A. Sovada, and R. J. Greenwood. 2004. Analysis of predator movement in prairie landscapes with contrasting grassland composition. *Journal of Mammalogy*. 82(2):187-195.

11. Nusser, S. M. and E. E. Klaas. 2003. Survey methods for assessing land cover map accuracy. *Environmental and Ecological Statistics*. 10(3):309-331.
12. Nusser, S. M., L. L. Miller, K. Clarke, and M. F. Goodchild. 2003. Geospatial IT for mobile field data collection. *Communications of the ACM (Association for Computing Machinery)*. 46:64-65.
13. Carriquiry, A. L. and S. M. Nusser. 2002. Comment on Patterson, B. H., C. M. Dayton, B. I. Graubard, Latent class analysis of complex sample survey data: application to dietary data. *Journal of the American Statistical Association*. 97:729-731.
14. Doebbling, B. N., M. F. Jones, R. F. Woolson, D. B. Hall, W. R. Clarke, T. Snyders-Crumley, D. H. Barrett, K. H. Falter, J. C. Torner, L. F. Burmeister, J. A. Merchant, S. M. Nusser, D. G. Anderson, D. A. Schwartz. 2002. Methodological issues in a population-based health survey of Gulf War veterans. *Journal of Clinical Epidemiology* 55(5): 477-487.
15. Miller, L. L., N. Sathe, M. Hua, D. Sekaran, S. Nusser and P. Zhao. 2001. An infrastructure for delivering geospatial data to field users. *Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Systems*. p. 378-382.
16. Naugle, D. E., K. F. Higgins, M. E. Estey, R. R. Johnson, and S. M. Nusser. 2000. Local and landscape-level factors influencing black tern habitat suitability. *Journal of Wildlife Management* 64:253-260.
17. Stehman, S. V., R. L. Czaplewski, S. M. Nusser, L. Yang, and Z. Zhu. 2000. Combining accuracy assessment of land-cover maps with environmental programs. *Environmental Monitoring and Assessment* 64:115-126.
18. Opsomer, J. D. and S.M. Nusser. 1999. Sample designs for watershed assessment. *Journal of Agricultural, Biological and Environmental Statistics* 4:429-442.
19. Naugle, D. E., K. F. Higgins, S. M. Nusser, and W. C. Johnson. 1999. Scale-dependent habitat use in three species of prairie wetland birds. *Landscape Ecology* 14:267-276.
20. Naugle, D. E., K. F. Higgins, and S. M. Nusser. 1999. Effects of woody hydrophytes on prairie wetland birds. *Canadian Field-Naturalist* 113:487-492.
21. Nusser, S. M., F. J. Breidt, and W. A. Fuller. 1998. Design and estimation for investigating the dynamics of natural resources. *Ecological Applications* 8:234-245.
22. Nusser, S. M. and J. J. Goebel. 1997. The National Resources Inventory: a long-term multi-resource monitoring programme. *Environmental and Ecological Statistics* 4:181-204.
23. Naugle, D. E., J. S. Gleason, J. A. Jenks, K. F. Higgins, P. W. Mammenga, and S. M. Nusser. 1997. Factors influencing wetland use by Canada geese. *Wetlands* 4:552-558.
24. Nusser, S. M., W. A. Fuller, and P. M. Guenther. 1997. Estimating usual dietary intake distributions: adjusting for measurement error and nonnormality in 24-hour food intake data. In L. Lyberg, P. Biemer, M. Collins, E. DeLeeuw, C. Dippo, N. Schwartz, and D. Trewin (editors), *Survey Measurement and Process Quality*, Wiley, New York, p. 689-709.
25. Nusser, S. M., A. L. Carriquiry, K. W. Dodd, and W. A. Fuller. 1996. A semiparametric transformation approach to estimating usual intake distributions. *Journal of the American Statistical Association* 91:1440-1449.
26. Jensen, H. H., S. M. Nusser, H. Riddick, and L. Sands. 1992. A critique of two methods for assessing the nutrient adequacy of diets. *Journal of Nutrition Education*, 24:123-129.
27. Carriquiry, A. L., H. H. Jensen, and S. M. Nusser. 1991. Modeling chronic versus acute human health risk from contaminants in food. In J. A. Caswell (editor), *Economics of Food Safety*. Elsevier Science Publishing Co., New York, p. 69-87.

28. Whigham, D. F. and S. M. Nusser. 1990. The response of *Distichlis spicata* (L.) Greene and *Spartina patens* (Ait.) Muhl. to nitrogen fertilization in hydrologically altered wetlands. In D. F. Whigham, R. E. Good, and J. Kvet (editors), *Wetland Ecology and Management: Case Studies*. Kluwer Academic Publishers, The Netherlands, p. 31-38.
29. Nusser, S. M., A. L. Carriquiry, H. H. Jensen, and W. A. Fuller. 1990. A transformation approach to estimating usual intake distributions. In G. A. Milliken and J. R. Schwenke (editors), *Applied Statistics in Agriculture: Proceedings of the 1990 Kansas State University Conference on Applied Statistics in Agriculture*. Manhattan, KS, p. 120-132.
30. Cure, W. C., S. M. Nusser, and A. S. Heagle. 1988. Canopy reflectance of soybeans as affected by chronic doses of ozone in open-top-fluid chambers. *Photogrammetric Engineering and Remote Sensing* 54:499-504.
31. Byrne, S. V., T. R. Wentworth, and S. M. Nusser. 1987. A moisture strain index for loblolly pine. *Canadian Journal of Forest Research* 17:23-26.

### NON-REFEREED PUBLICATIONS

1. Beyler, N. K., S. M. Nusser, W. A. Fuller, A. L. Carriquiry and G. J. Welk. 2007. Survey design for studies of measurement error in physical activity assessments. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]
2. Carriquiry, A. L. and S. M. Nusser. 2007. Biometric developments in health surveys: discussion. *Proceedings of the 56<sup>th</sup> Session of the International Statistical Institute*. [CD-ROM]
3. Legg, J., W. A. Fuller and S. M. Nusser. 2006. Estimation for two-phase panel surveys. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]
4. Nusser, S. M. 2005. Digital capture of geographic feature data for surveys. *Proceedings of the 2005 Federal Committee on Statistical Methodology Research Conference*. [http://www.fcsm.gov/05papers/Nusser\\_IXA.pdf](http://www.fcsm.gov/05papers/Nusser_IXA.pdf)
5. Legg, J., W. A. Fuller and S. M. Nusser. 2005. Estimation for longitudinal surveys with repeated panels of observations. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]
6. Nusser, S. M. 2005. Sample designs for monitoring survey data collection. *Proceedings of the 55<sup>th</sup> Session of the International Statistical Institute*. [CD-ROM]
7. Nusser, S. M. 2004. Computer-assisted data collection for geographic features. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]
8. Ferraz, C., S. M. Nusser and J. D. Opsomer. 2004. Sample designs for monitoring the data collection process of longitudinal surveys. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]
9. Miller, L., B. Zou, M. Hua, and S. Nusser. 2004. Supporting a virtual office environment for federal agency field operations. *The Third International Conference on Politics and Information Systems: Technologies and Applications (PISTA '04)*. Orlando, FL. pp. 84-88.
10. Kies-Bokenkroger, C. and S. M. Nusser. 2003. Generating accuracy measures for computer-based queries of geospatial data. *Proceedings of the Section on Statistics and the Environment*, American Statistical Association. [CD-ROM]
11. Mukhopadhyay, P. and S. M. Nusser. 2003. Computer-assisted probability sampling in the field. *Proceedings of the Section on Survey Research Methods*, American Statistical Association. [CD-ROM]

12. Murphy, E. D. and S. M. Nusser. 2003. Evaluating user interfaces for accommodation of individual differences in spatial abilities and way-finding strategies. In *Proceedings of the UAHCI 2003: 2nd International Conference on Universal Access In Human-Computer Interaction*, 4:1005-1009.
13. Miller, L. L. and S. Nusser. 2002. Supporting geospatial data in the field. *Proceedings of the 11<sup>th</sup> GITA Conference on Geographic Information Systems for Oil and Gas*, Houston, TX, pp. 139-151.
14. Nusser, S. M., L. L. Miller, M. F. Goodchild, K. Clarke. 2002. A user-centered framework for next-generation field data collection. *Proceedings of dg.o 2002 National Conference on Digital Government Research*, Los Angeles, CA. p. 8.
15. Miller, L., S. Qu, H. Ming, S. M. Nusser, H.C. Butler, P. Zhao. 2002. Infrastructure designs for using geospatial data in mobile computing environments. *Proceedings of dg.o 2002 National Conference on Digital Government Research*, Los Angeles, CA. pp. 411-413.
16. Nusser, S. M., E. E. Klaas, C. H. Botts, and R. McNeeley. 2001. A methodological study for accuracy assessment of GAP land cover maps. *GAP Bulletin*, 10: 13-19.
17. Nusser, S. M. 2001. Challenges in Geospatial Information Technologies for Field Survey Data Collection. White paper for Workshop on the Intersection of Geospatial Information and Information Technology, National Academies Computer Science and Telecommunications Board, Washington, D.C. [http://www7.nationalacademies.org/cstb/wp\\_geo\\_nusser.pdf](http://www7.nationalacademies.org/cstb/wp_geo_nusser.pdf)
18. Nusser, S. M. and J. Fox. 2001. Using geospatial information to locate sample units in the field. Proceedings of the Federal Committee on Statistical Methods 2001 Research Conference, Washington, D.C. [http://www.fcs.gov/01\\_papers/Nusser.pdf](http://www.fcs.gov/01_papers/Nusser.pdf).
19. Nusser, S., L. Miller, K. Clarke, M. Goodchild. 2001. Future views of field data collection in statistical surveys. *Proceedings of dg.o 2001 National Conference on Digital Government Research*, Los Angeles, CA. <http://www.isi.edu/dgrc/dgo2001/papers/session-3/nusser1.pdf>.
20. Anderson, L. L., J. M. Larson, D. G. Anderson and S. M. Nusser. 2001. Overview of Blaise at the Iowa State University Statistical Laboratory. Proceedings of the 7<sup>th</sup> International Blaise User's Conference, Washington, D.C. [http://www.blaiseusers.org/ibucpdfs/2001/L\\_Anderson--IBUC\\_paper.pdf](http://www.blaiseusers.org/ibucpdfs/2001/L_Anderson--IBUC_paper.pdf).
21. Drignei, D. and S. M. Nusser. 2000. On reducing the number of items in the Food Security Supplement for measuring food insecurity. *Proceedings of the Section on Government Statistics and Section on Social Statistics*, American Statistical Association. p. 225-230.
22. Nusser, S. M. 1999. Mobile CASIC and the survey process. *Proceedings of the Third International Association for Survey Computing Conference*, Edinburgh, Scotland. p. 209-218.
23. Fletcher, C.N. and S. M. Nusser. 1999. Conducting a feasibility study for a nationally-consistent, state-level survey of child and family well-being under new welfare policies. In Irene Leach (ed.), *Consumer Interests Annual*, Volume 45, American Council on Consumer Interests. Chicago, IL. p. 130. (abstract)
24. Nusser, S. M. and D. M. Thompson. 1998. Web-based survey tools. *1998 Proceedings of the Section on Survey Research Methods*, American Statistical Association, p. 951-956.
25. Bakker, K. K., K. F. Higgins, D. E. Naugle, and S. M. Nusser. 1998. Effects of tract size and surrounding land use on avian species in a South Dakota agricultural landscape. 60<sup>th</sup> Midwest Fish and Wildlife Conference, Cincinnati, p. 207 (abstract).
26. Nusser, S. M., A. L. Carriquiry, and H. H. Jensen. 1997. Usual intake distributions in risk assessment for food residues. *1997 Proceedings of the Section on Statistics and the Environment*, American Statistical Association, p. 13-18.
27. Nusser, S. M. 1997. The USDA's Continuing Survey of Food Intakes by Individuals: issues and applications (discussion). *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, p. 817-819.

28. Wang, J., S. M. Nusser, and W. R. Clark. 1997. Analyzing ecological trends with multiple natural resource databases. *1997 Proceedings of the Biometrics Section*, American Statistical Association, p. 216-221.
29. Abbitt, P. J., F. J. Breidt, and S. M. Nusser. 1997. A nonlinear two-phase predictor for soil survey updates. *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, p. 657-660.
30. Nusser, S. M. 1997. A CASIC system using hand-held computers and centralized data servers. *Proceedings of the International Statistical Institute* (contributed papers).
31. Nusser, S. M. and D.M. Thompson. 1997. Networked hand-held CASIC. *Proceedings of Symposium 97: New Directions in Surveys and Censuses*, Statistics Canada, p. 361-364.
32. Naugle, D. E., K. F. Higgins, S. M. Nusser. 1997. Effects of woody hydrophytes on prairie wetland birds. *59<sup>th</sup> Midwest Fish and Wildlife Conference*, Milwaukee, p. 277 (abstract).
33. Nusser, S. M., D. M. Thompson, and G. S. DeLozier. 1996. Using personal digital assistants to collect survey data. *1996 Proceedings of the Section on Survey Research Methods*, American Statistical Association, p. 780-785.
34. Nusser, S. M. 1995. Sampling issues in regional monitoring programs. *1995 Proceedings of the Biometrics Section*, American Statistical Association, p. 68-70.
35. Abbitt, P. J., and S. M. Nusser. 1995. Sampling approaches for soil survey updates. *1995 Proceedings of the Section on Statistics and the Environment*, American Statistical Association, p. 87-92.
36. Carr, D. B., and S. M. Nusser. 1995. Converting tables to plots: a challenge from Iowa State. *Statistical Computing and Graphics Newsletter*, p. 11-18.
37. Nusser, S. M. 1994. Estimating usual food intake distributions from 24-hour dietary intake data. *1994 Proceedings of the Section on Epidemiology*, American Statistical Association, p. 49-58.
38. Leonard, K. A., A. B. An, S. M. Nusser, and F. Jay Breidt. 1994. Approximating the variance of the survey regression estimator using poststratification. *1994 Proceedings of the Section on Survey Research Methods*, American Statistical Association, p. 222-227.
39. Nusser, S. M. and T. R. Wentworth. 1987. Relationships among first-year loblolly pine seedling performance, vegetative regrowth, environmental conditions and plantation management practices. In D. R. Phillips (editor), *Proceedings of the Fourth Biennial Southern Silvicultural Research Conference*, November 4-6, 1986, Atlanta, GA. General Technical Report SE-42, USDA Forest Service, Southeastern Forest Experiment Station, Asheville, NC, p. 565-575.

## TECHNICAL REPORTS

1. Larson, J., S. M. Nusser, and C. J. Alf. 2007. A survey of farming practices and cover crop use: methodology and analysis report. Report prepared for J. Singer, USDA Soil Tilth Laboratory. 14 pp.
2. Gibson, C. and S. M. Nusser. 2006. Assessing the role of spatial abilities in address canvassing activities. Final Report for 2006 Census Test Evaluation #3. U.S. Census Bureau. 32 pp.
3. Fuller, W. A., S. M. Nusser, and J. Legg. 2004. 2005 NRI calibration experiment. Report prepared for the USDA Natural Resources Conservation Service. 8 pp.
4. Nusser, S. M. 2003. Methodological research on mobile computing tools for field data collection. Report prepared for the American Statistical Association Census Bureau Advisory Committee. 6 pp.

5. Nusser, S. M. 2003. User responses to digital map tools on handheld computers: Statistical design and analysis report for the 2002 Delaware Route Planning and Navigation Study. Report prepared for the Census Bureau. 19 pp.
6. Drignei, D. and S. M. Nusser. 2003. Alternative measures of food security using a reduced question set: analysis of 1999 Food Security Supplement data. For USDA Economic Research Service. 84 pp.
7. Jensen, H. H., S. Garasky, C. Wessman, and S. M. Nusser. 2002. Iowa Food Stamp Leavers Survey: Final Report. For USDA Economic Research Service, ERS E-FAN No. 02014-1, <http://www.ers.usda.gov/publications/efan02014-1/>. 50 pp.
8. Nusser, S. M. and E. E. Klaas. 2001. GAP accuracy assessment pilot study. For Environmental Protection Agency. 61 pp.
9. Anderson, L. L., S. M. Nusser, and D. G. Anderson. 2001. Survey methodology report for the Iowa Transportation and Employment Survey. 42 pp.
10. Nusser, S. M., C. N. Fletcher, and H. H. Jensen. 2001. Considerations for designing state surveys to support integration with national survey data: final report. For Department of Health and Human Services and the USDA Economic Research Service. 138 pp.
11. Nusser, S. M., C. N. Fletcher, and D. G. Anderson. 2000. The Iowa Survey of Program Dynamics feasibility study. For the Census Bureau. 32 pp.
12. Nusser, S. M., L. L. Anderson, and D. G. Anderson. 2000. Iowa Food Stamp Leavers Survey methodology report. For the USDA Economic Research Service (Published in 2002 as ERS E-FAN No. 02014-2, <http://www.ers.usda.gov/publications/efan02014-2/>). 60 pp.
13. Nusser, S. M. and M. Bachan. 1999. Sample design recommendations for the Iowa Gender Wage Equity Survey. For Iowa Workforce Development. 3 pp.
14. Opsomer, J. D., H. H. Jensen, S. M. Nusser, D. Drignei, and Y. Amemiya. 1999. Statistical Considerations for the USDA Food Insecurity Index. For USDA Economic Research Service.
15. Nusser, S. M., J. M. Kienzler, W. A. Fuller. 1999. Geostatistical estimation data for the 1997 Natural Resources Inventory. For Natural Resources Conservation Service. 5 pp.
16. Nusser, S. M. 1999. Geostatistical control data for the 1997 National Resources Inventory. For Natural Resources Conservation Service. 39 pp.
17. Nusser, S. M. and J. Schumi. 1999. Sample selection procedures for the nursing home care review committee volunteer survey. For Pat Keith, Iowa State University Department of Sociology. 2 pp.
18. Opsomer, J., D. Anderson, S. Nusser, S. Fernandez. 1999. Voice disorder survey final methodology report. For Elaine Smith and Jon Lemke, University of Iowa. 17 pp.
19. Nusser, S. M., W. A. Fuller, and L. L. Anderson. 1999. Sampling and weighting procedures for the Iowa Survey of Program Dynamics feasibility study. For the Census Bureau. 24 pp.
20. Nusser, S. M., and A. L. Carriquiry. 1998. Sampling approaches for nutrient data bases. For Nutrient Data Laboratory, USDA Agricultural Research Service. 23 pp.
21. Opsomer, J. D., and S. M. Nusser. 1998. Sampling design for NRCS watershed health assessment study. For Natural Resources Conservation Service Watershed Sciences Institute. 17 pp.
22. Opsomer, J. D., S. Sinharay, and S. M. Nusser. 1998. Report on the first phase of the survey of the Rocky River and Saluda River watersheds. For Natural Resources Conservation Service Watershed Sciences Institute. 24 pp.
23. Opsomer, J. D., S. Fernandez, and S. M. Nusser. 1998. Student satisfaction survey: sampling and analysis. For the Iowa State University Office of Institutional Research. 12 pp.

24. Nusser, S. M., and D. G. Anderson. 1997. Membership and consultant evaluator surveys:, summary of methods and response rates. For the North Central Association of Colleges and Schools. 2 pp.
25. Nusser, S. M., A. N. Williams, and D. G. Anderson. 1997. Sample design, weighting procedures, and summary tables for the study of ISU employee professional development experiences. For the Iowa State University Professional Development Committee. 148 pp.
26. Williams, A. N., C. C. Morpew, S. M. Nusser. 1997. Some considerations for conducting an electronic mail study with university students. For the American Association of Public Opinion Research annual meetings, Richmond, VA. 7 pp.
27. Nusser, S. M., A. N. Williams, and D. G. Anderson. 1997. 1997 Survey of Iowa State University graduating seniors: study methods. For the Iowa State University Office of Institutional Research. 6 pp.
28. Williams, A. N., D. G. Anderson, and S. M. Nusser. 1997. A study of physical activity and nutritional experiences of Ames area residents. For Warren Franke, Health & Human Performance. 2 pp.
29. Nusser, S. M. and S. Fernandez. 1997. Comparison of mean scores for the 1997 graduating seniors survey. For the Iowa State University Office of Institutional Research. 2 pp.
30. Carriquiry, A. L., K. W. Dodd, and S. M. Nusser. 1997. Estimating adjusted intake and biochemical distributions for NHANES III. For National Center for Health Statistics. 302 pp.
31. Dorsch, R. K., A. M. McVey, S. M. Nusser, and W. A. Fuller. 1996. Sample design and wage rate estimation for the 1995 Iowa Wage Survey. For the Iowa Department of Employment Services. 12 pp.
32. Nusser, S. M. and S. Fernandez. 1996. Weight calculation for RDI II business study. For Terry Besser, Department of Sociology, Iowa State University. 4 pp.
33. Nusser, S. M. 1996. Weight calculation for the RDI household study. For Terry Besser, Department of Sociology, Iowa State University. 9 pp.
34. Shierholz, H. S., S. M. Nusser, and F. J. Breidt. 1996. Sampling approaches for Minnesota fish contamination studies. For Minnesota Department of Natural Resources. 42 pp.
35. Nusser, S. M. and F. J. Breidt. 1996. Sample design recommendations for Minnesota fish contamination studies. For Minnesota Department of Natural Resources. 27 pp.
36. Nusser, S. M., A. M. McVey, and A. N. Williams. 1996. Sample design and weighting procedures for a study of campus climate at Iowa State University. For the Iowa State University Committee on Diversity. 2 pp.
37. Nusser, S. M. 1995. International Alumni Study sampling plan. For Martha Vanderkamp, Iowa State University Foundation. 3 pp.
38. Nusser, S. M., K. Wright, and T. A. Genalo. 1995. The use of instructional television in primary and secondary Iowa schools. For Iowa Public Television. 44 pp.
39. Nusser, S. M., T. A. Genalo, H. Shierholz, M. Haubrich, D. L. Hopper, D. O. Lewis, and S. R. Weiss. 1995. Faculty use of instructional computing resources at Iowa State University. For Iowa State University Computation Advisory Committee. 110 pp.
40. Nusser, S. M., T. A. Genalo, J. Kim, M. Haubrich, D. L. Hopper, D. O. Lewis, and S. R. Weiss. 1995. Student use of instructional computing resources at Iowa State University. For Iowa State University Computation Advisory Committee. 75 pp.
41. Nusser, S. M. 1995. Options for future studies of campus diversity issues. For the Iowa State University Committee on Diversity. 6 pp.
42. Opsomer, J. and S. M. Nusser. 1995. Faculty Activity Survey, 1994-1995. For Robert Bergmann, Institutional Research, Iowa State University. 1 p.

43. Nusser, S. M. 1995. Options for sample design for the National Panel Study of Business Start-ups. For the Entrepreneurial Research Consortium, a group of 60 university researchers throughout the U.S. 4 pp.
44. Nusser, S. M., W. A. Fuller, and H. D. Baker. 1995. Southeastern Minnesota Women's Health Project: Summary report for 1993 and 1995 surveys. For Thomas Kottke, Mayo Clinic. 8 pp.
45. Nusser, S. M., A. L. Carriquiry, K. W. Dodd, and W. A. Fuller. 1995. A semiparametric transformation approach to estimating usual daily intake distributions. CARD Staff Report 95-SR 74, Dietary Assessment Research Series Report 2, Center for Agricultural and Rural Development, Iowa State University. 25 pp.
46. McVey, A. M., S. M. Nusser, and W. A. Fuller. 1994. Sample design and wage rate estimation for the 1993 Iowa Wage Survey. For the Iowa Department of Employment Services. 9 pp.
47. Baker, H. D., M. A. Genalo, and S. M. Nusser. 1994. Summary of results from the 1994 survey of former Statistics graduate students. For the Iowa State University Department of Statistics. 32 pp.
48. Nusser, S. M., A. M. McVey, and W. A. Fuller. 1993. Sample design and wage rate estimation for the 1992 Iowa Wage Survey. For the Iowa Department of Employment Services. 11 pp.
49. Graham, M. A., S. M. Nusser, K. A. Leonard, and F. O. Lorenz. 1993. A statistical analysis of sex equity survey results. For the Iowa State University Committee on Women. 8 pp.
50. Nusser, S. M. and K. A. Leonard. 1993. Analyses for the College of Agriculture and for the Humanities segment of Liberal Arts and Sciences. For the Iowa State University Committee on Women. 8 pp.
51. Nusser, S. M., A. L. Carriquiry, and W. A. Fuller. 1992. A semiparametric transformation approach to estimating usual daily intake distributions. CARD Working Paper 92-WP 99.
52. Nusser, S. M., G. E. Battese, and W. A. Fuller. 1990. Method of moments estimation of usual nutrient intake distributions. CARD Working Paper 90-WP 52. 25 pp.
53. Nusser, S. M., A. L. Carriquiry, H. H. Jensen, and W. A. Fuller. 1990. A transformation approach to estimating usual intake distributions. CARD Working Paper 90-WP 59. 22 pp.
54. Carriquiry, A. L., H. H. Jensen, and S. M. Nusser. 1990. Modeling chronic versus acute human risk from contaminants in food. CARD Working Paper 90-WP 69. 29 pp.

## PRESENTATIONS

### Conferences and Workshops: Invited

1. "Biometric developments in health surveys: discussion," 56<sup>th</sup> Session of the International Statistical Institute, Lisbon, August 2007
2. "Geographic feature data collection for longitudinal surveys," FedCASIC, Washington, DC, March 2007
3. Discussion of "Statistical perspectives on spatial social science" (presented by M. F. Goodchild), Morris Hansen Memorial Lecture, Washington Statistical Society, Washington, DC, November 2006
4. "Sampling considerations for monitoring CWD [chronic wasting disease] in deer populations," The Wildlife Society Annual Conference, Madison, WI, September 2005
5. "Computer-assisted methods for collecting geographic data using photographic backdrops," Joint Statistical Meetings, Minneapolis, August 2005
6. "Using data from the National Resources Inventory," REAP Alliance Meeting, Ankeny, IA, October 2004
7. "CASIC developments at Iowa State University," FedCASIC, Washington, DC, March 2004

8. "Topics in geographic metadata," GovStat Metadata Symposium, Chapel Hill, NC, September 2003
9. "Computer-assisted survey data collection using geospatial data," Interdisciplinary Research Institute for Survey Science Workshop, Ames, IA, May 2003
10. "Combining data from state and national monitoring surveys to assess large-scale impacts of agricultural policy," International Biometric Society ENAR Meeting, Tampa, FL, March 2003
11. "Mobile computing for sample surveys," 35<sup>th</sup> Symposium on the Interface, Salt Lake City, UT, March 2003
12. "Metadata and computer-assisted data collection," Open Forum 2003 on Metadata Repositories, Sante Fe, NM, January 2003
13. "Using GIS data in analysis weights for environmental surveys," Spatial Statistics: Integrating Statistics, GIS, and Statistical Graphics, Seattle, WA, October 2002
14. "Using geospatial information in planning and navigation," Joint Statistical Meetings, New York, August 2002
15. "Latent class analysis of dietary intake data (discussion)" Joint Statistical Meetings, New York, August 2002
16. "A user-centered framework for next-generation field data collection," 2002 National Conference on Digital Government Research, Los Angeles, CA, May 2002
17. "Digital geospatial data and survey data collection," Workshop on Survey Automation, National Academies Committee on National Statistics, April 2002
18. "Metadata and the data collection cycle," FedCASIC, Washington, DC, February 2002
19. "Using geospatial information to locate sample units in the field," Federal Committee on Statistical Methods Research Conference, Washington, D.C., November 2001
20. "Using geospatial data in mobile field environments," Federal Committee on Statistical Methods Research Conference, Washington, D.C., November 2001 (demonstration)
21. "Using and Collecting Geospatial Data in Mobile Field Environments," Third International Conference on Geospatial Information in Agriculture and Forestry, Denver, Colorado, November 2001 (demonstration, given by Dean Thompson)
22. "Future views of field data collection in statistical surveys," dg.o 2001 National Conference on Digital Government Research, Los Angeles, CA, May 2001
23. "A framework and testbed for survey data collection in a mobile field environment," dg.o 2001 Workshop, Los Angeles, CA, May 2001 (poster)
24. "Collecting and using geospatial data in the field," NSF Workshop on Challenges in Statistical Digital Government, Washington, DC, April 2001 (demonstration)
25. "Using geospatial data in mobile survey environments," FedCASIC, Washington, DC, February 2001
26. "Geospatial data in a mobile field data collection setting: the role of metadata," United Nations / European Economic Community Statistical Metadata Workshop, Washington, DC, November 2000
27. "Food stamps leavers studies: a methodological perspective," Association for Public Policy Analysis and Management Fall Research Conference, Seattle, WA, November 2000
28. "Collecting and using geospatial data in the field," dg.o 2000 Workshop, Burbank, CA, May 2000 (demonstration)
29. "Collecting location data for surveys," FedCASIC, Washington, DC, February 2000.

30. "Incorporating geospatial information: lessons from natural resource surveys," Social Science Data and Data Infrastructure Conference, New York, NY, November 1999
31. "Impact of missing values from converted refusals on nonsampling error: discussion," International Conference on Survey Nonresponse, Portland, OR, October 1999
32. "Mobile computing for statistical survey data collection," Handheld and Ubiquitous Computing 1999, Karlsruhe, Germany, September 1999
33. "Advances in CASIC for spatial data collection," Joint Statistical Meetings, Baltimore, MD, August 1999 (poster)
34. "Recent developments in the NRI survey program," Frontiers of Environmental and Ecological Statistics for the 21<sup>st</sup> Century, Bowling Green, OH, April 1999
35. "Digital images in field data collection," Federal Web Consortium, Rockville, MD, April 1999
36. "Design and estimation for the National Resources Inventory," Environmental Monitoring Surveys Over Time, Seattle, WA, April 1998
37. "The history of survey sampling at Iowa State University: 1947-1997," Statistics for Correlated Data: a Conference marking the 50<sup>th</sup> anniversary of the Department of Statistics at Iowa State University, Ames, IA, October 1997
38. "Usual intake distributions in risk assessment for food residues," Joint Statistical Meetings, Anaheim, August 1997
39. "Combining information for environmental impact assessment (discussion)," Joint Statistical Meetings, Anaheim, August 1997
40. "The USDA's CSFII: issues and applications (discussion)," Joint Statistical Meetings, Anaheim, August 1997
41. "Design and estimation for investigating natural resource dynamics," Ecological Resource Monitoring: Change and Trend Detection Workshop, Patuxent Wildlife Refuge, MD, May 1996
42. "Measures of central tendency for food composition databases," Workshop on the Statistical Representation of Food Composition Data, Agricultural Research Service, USDA, April 1996
43. "Sampling issues in regional monitoring programs," Joint Statistical Meetings, Orlando, FL, August 1995 (discussion)
44. "Estimating usual dietary intake distributions: adjusting for measurement error and normality in 24-hour food intake data," International Conference on Survey Measurement and Process Quality, Bristol, England, April 1995
45. "Estimating usual food intake distributions from 24-hr dietary intake data," Joint Statistical Meetings, Toronto, August 1994
46. "Estimating usual intake distributions from food record and recall data," American Public Health Association Meetings, San Francisco, CA, October 1993
47. "Failure time analyses for repeated measure event time data," Procter & Gamble Math/Stat Symposium, Cincinnati, OH, May 1991

#### Conferences: Contributed

1. "Geographic data collection for longitudinal surveys," Joint Statistical Meetings, Salt Lake City, August 2007.
2. "Sample designs for monitoring survey data collection," 55<sup>th</sup> Session of the International Statistical Institute, Sydney, Australia, April 2005.

3. "Computer-assisted data collection for geographic features," Joint Statistical Meetings, Toronto, August 2004.
4. "User responses to digital map tools on handheld computers," Joint Statistical Meetings, San Francisco, August 2003.
5. "Mobile CASIC and the survey process," Third International Association for Survey Computing Conference, Edinburgh, Scotland, September 1999
6. "New technologies for mobile survey data collection," Joint Statistical Meetings, Dallas, TX, August 1998.
7. "Web-based survey tools," American Association of Public Opinion Research, St. Louis, MO, May 1998
8. "Networked hand-held CASIC," Statistics Canada Symposium '97: New Directions in Surveys and Censuses, Ottawa, Canada, November 1997
9. "A CASIC system using hand-held computers and centralized data servers," International Statistical Institute, Istanbul, Turkey, August 1997
10. "Conducting surveys with personal digital assistants," International Conference on Computer-Assisted Survey Information Collection, San Antonio, TX, December 1996
11. "Using personal digital assistants to collect survey data," Joint Statistical Meetings, Chicago, IL, August 1996
12. "Analyzing ecological trends with multiple natural resource data bases," ENAR Biometrics Meetings, Richmond, VA, March 1996
13. "Protection status of critical habitat for nesting black terns," 57th Midwest Fish and Wildlife Conference, presented by M. E. Estey with co-authors Naugle, R. R. Johnson, K. F. Higgins, S. M. Nusser, December 1995 (poster)
14. "Estimating usual food intake distributions," International Dietary Assessment Methodology Conference, Boston, MA, January 1995
15. "Estimating usual intake distributions for foods," Joint Statistical Meetings, San Francisco, CA, August 1993
16. "Estimating usual intake distributions for foods," ENAR Biometrics Meetings, Philadelphia, PA, March 1993
17. "A semiparametric transformation to normality: application to dietary data," Joint Statistical Meetings, Atlanta, GA, August 1991
18. "Failure time analyses for correlated data," NATO Advanced Studies Workshop on Survival Analysis and Related Topics, Columbus, OH, June 1991 (poster)
19. "Failure time analyses for repeated measure event time data," ENAR Biometrics Meetings, Houston, TX, March 1991
20. "Failure time analyses for correlated data," Joint Statistical Meetings, Anaheim, CA, August 1990
21. "Estimating the distribution of usual nutrient intakes: a model-based approach," American Institute of Nutrition, Charleston, SC, December 1989 (poster)
22. "Estimating the distribution of usual nutrient intakes: a model-based approach," ENAR Biometrics Meetings, Lexington, KY, March 1989

### Government Agencies and Industry

1. "Using digital tools for collecting data in the June Area Survey," National Agricultural Statistics Service, Fairfax, VA, June 2004
2. "Methodological research on mobile computing tools for field data collection," American Statistical Association Census Bureau Advisory Committee Meeting, Crystal City, VA, October 2003
3. "Computer-assisted survey data collection using geospatial data," National Agricultural Statistics Service, Fairfax, VA, May 2003
4. "Using digital geospatial information to locate sample units in the field," Bureau of Labor Statistics, Washington, DC, February 2002
5. "Using and collecting geospatial data in mobile field environments," Digital Government Consortium, Washington, DC, November 2001
6. "Project Battuta: using geospatial data in mobile field environments," Digital Government Consortium, Washington, DC, November 2000
7. "Geostatistical Control Data for the 1997 NRI," USDA NRCS, Beltsville, December 1998
8. "Computer-assisted survey information collection," USDA NRCS National Cartography and Geospatial Data Center, April 1998
9. "Statistical aspects of the National Resources Inventory," USDA NRCS National Cartography and Geospatial Data Center, May 1997
10. "Statistical aspects of conducting surveys," Workshop on watershed assessment, NRCS Watershed Sciences Institute, Charlotte, NC, April 1997
11. "Statistical approaches to soil survey updates," USDA National Soil Survey Center, Lincoln, NE, February 1996
12. "Estimating usual dietary intake distributions: adjusting for measurement error and normality in 24-hour food intake data," Proctor and Gamble, Cincinnati, OH, June 1995
13. "Estimating usual dietary intake distributions: adjusting for measurement error and normality in 24-hour food intake data," Agricultural Research Service, USDA, June 1995
14. "Estimating usual dietary intake distributions: adjusting for measurement error and normality in 24-hour food intake data," National Cancer Institute, May 1995
15. "Estimating usual intake distributions from food record and recall data," Human Nutrition Information Service, USDA, November 1993
16. "Estimating the distribution of usual nutrient intakes: a model-based approach," Human Nutrition Information Service, USDA, January 1990
17. "Estimating the distribution of usual nutrient intakes: a model-based approach," National Cancer Institute, January 1990
18. "Estimating the distribution of usual nutrient intakes," Human Nutrition Information Service, USDA, April 1988

### Educational Institutions

1. "Evaluating sample designs for monitoring chronic wasting disease," Department of Natural Resource Ecology and Management, Iowa State University, April 2005
2. "Mobile computing and field data collection for statistical surveys," Department of Geography, University of Iowa, April 2003

3. "Survey methods for assessing land cover map accuracy," Institute for Social Research, University of Michigan, December 2002
4. "Geospatial data and survey data collection," Department of Statistics, Iowa State University, March 2002
5. "Using and collecting geospatial data in mobile field environments," Department of Geography, University of Iowa, April 2001
6. "Statistical Laboratory Survey Section: history and current activities," Department of Statistics (Iowa-Staters), Iowa State University, October 1998
7. "Statistical methods for soil survey updates," Department of Statistics, Texas A & M University, September 1997
8. "Statistical methods for soil survey updates," Department of Statistics, North Carolina State University, April 1997
9. "Estimating usual intake distributions for nutrients and foods," Department of Statistics, Harvard University, January 1995 (with A. L. Carriquiry)
10. "Conducting high quality survey research," Mayo Clinic, Rochester, MN, October 1994
11. "Estimating usual intake distributions from food record and recall data," Division of Biostatistics, University of Iowa, January 1994
12. "Estimating usual intake distributions from food record and recall data," Department of Food Science and Human Nutrition, Iowa State University, October 1993
13. "The Statistical Laboratory's Survey Section: perspectives on the past, present and future," Department of Statistics, Iowa State University, October 1993
14. "Failure time analyses for repeated measure event time data," Department of Statistics, Pennsylvania State University, November 1992
15. "A semiparametric transformation to normality: application to dietary data," Department of Statistics, Iowa State University, October 1991
16. "Failure time analyses for correlated data," Department of Statistics, Iowa State University, May 1990
17. "Estimating the distribution of usual nutrient intakes: a model-based approach," Center for Agricultural and Rural Development, Iowa State University, February 1989
18. "Estimating the distribution of usual nutrient intakes: a model-based approach," Department of Statistics, Iowa State University, October 1988

#### **AFFILIATION WITH THE CENTER FOR SURVEY STATISTICS AND METHODOLOGY**

Oversee all operational sampling, estimation, and survey projects. Major projects have included USDA NRCS National Resources Inventory survey program, USDA NRCS national soils database development, University of Iowa College of Medicine studies, Iowa State University and State of Iowa research and administrative surveys. Develop budgets for selected projects, and monitored expenses for each of 15-30 projects with funds totaling approximately \$3 million per year. Supervise approximately 25 permanent professional and clerical employees, 12-15 graduate and undergraduate research assistants, and 10-15 clerks, interviewers and technicians.

Direct the ISU-USDA NRCS National Resources Inventory cooperative agreement activities, totaling approximately \$2.2 million per year. All 5 survey faculty are involved, along with 6 graduate students supervised by faculty and 15 methodology and survey systems staff.

Consult with on- and off-campus researchers on sample design, questionnaire development, coding, weighting, and statistical analysis. Clients include ISU faculty and graduate students, ISU administration officials and program directors, and researchers in state, federal and nonprofit agencies.

## TEACHING

### Courses Taught

Fall 2007	Statistics 401A	Statistical Methods for Research Workers in the Biological Sciences
Fall 2006	Statistics 401A	Statistical Methods for Research Workers in the Biological Sciences
Spring 2005	Statistics 421	Survey Sampling Techniques
Spring 2004	Statistics 421	Survey Sampling Techniques
Spring 2003	Statistics 421	Survey Sampling Techniques
Spring 2002	Statistics 421	Survey Sampling Techniques
Spring 2000	Statistics 421	Survey Sampling Techniques
Spring 1998	Statistics 421	Survey Sampling Techniques
Fall 1998	Ecology & Evolutionary Biology 698	Statistical Applications in Ecology and Evolutionary Biology (4 weeks on survey sample design and estimation)
Fall 1996	Statistics 401C	Statistical Methods for Research Workers in the Physical, Mathematical and Engineering Sciences
Spring 1995	Statistics 421	Survey Sampling Techniques
Spring 1994	Statistics 421	Survey Sampling Techniques

### Guest Lecturer (on survey sampling topics)

Spring 1997	Statistics 621	Advanced Theory of Survey Sampling, F. J. Breidt
Spring 1997	Statistics 421	Survey Sampling Techniques, J. D. Opsomer
Fall 1995	Statistics 333	Probability and Statistics for Electrical and Computer Engineers, W. H. Kliemann
Spring 1995	Sociology 302	Research Methods in Sociology, C. W. Roberts
Spring 1994	Sociology 302	Research Methods in Sociology, C. W. Roberts

## GRADUATE EDUCATION

### Major Professor: MS

1. Cherié Alf (expected 2008)
2. Nick Beyler (Summer 2007)
3. Joey Pan (Summer 2005)
4. Ling Huang (Summer 2005)
5. Courtney Kies (Spring 2003)
6. Lixin Qu (Spring 2003)

7. Jason Legg (Fall 2002)
8. Cristiano Ferraz (Fall 2001)
9. Carston Botts (Summer 2001)
10. Dorin Drignei (Spring 2000)
11. Kara Perritt (Fall 1997)
12. Heidi Shierholz (Spring 1996)
13. Pamela Abbitt (Fall 1995)
14. Zugeng Zheng (Summer 1995)
15. Kelli Leonard (Spring 1994)
16. Stephanie Schaller (Fall 1993)

Major Professor: PhD

1. Michelle Rusch (Human Computer Interaction, expected 2008, co-directed with L. L. Miller)
2. Courtney Kies-Bokenkroger (expected 2008, co-directed with W. A. Fuller)
3. Jason Legg (2006, co-directed with W. A. Fuller)
4. Cristiano Ferraz (2004, co-directed with J. D. Opsomer)
5. Pamela Abbitt (1999, co-directed with F. J. Breidt)

**PROFESSIONAL SERVICE: External**

Committees, Programs, and Editorial Assignments

- 2007-2008 Treasurer, Section on Statistics and the Environment, American Statistical Association
- 2006-2008 Member, Census Bureau Advisory Committee of Professional Associations (American Statistical Association representative)
- 2005-2009 Member, Council of the International Association of Survey Statisticians
- 2007 Member, NIH Biostatistical Methods and Research Design (BRMD) Study Section Review Panel
- 2005-2007 Member, National Academies Committee on Social Security Representative Payees
- 2005-2007 Chair, 2007 Cochran-Hansen Prize Committee (for young statisticians in developing and transitioning countries), International Association of Survey Statisticians
- 1999-2002, 2004-2005, 2007 Organizer, *Workshop on technologies for survey data collection* (mobile computing, GIS, sensors) for annual FedCASIC Conference
- 2004-2006 Chair-elect, Chair, Past-chair, Survey Research Methods Section, American Statistical Association
- 2006 Member, NIH Improving Diet and Physical Activity Assessment (HOP D-50) Review Panel
- 2005 Member, External review committee for University of Nebraska – Lincoln Statistics Department
- 2002-2005 ASA representative (2002-2004) and IBS representative (2005) for Management Committee for the *Journal of Agricultural, Biological and Environmental Statistics*
- 2001-2005 Advisory Group for the Behavioral Risk Factor Surveillance System, Survey Research Methods Section, American Statistical Association
- 2004 Committee of Visitors (COV) to review NSF Division of Social and Economic

Sciences programs in Methodology, Measurement, and Statistics; Science and Technology Studies; and Societal Dimensions of Engineering, Science, and Technology

- 2001-2002 Treasurer, Survey Research Methods Section, American Statistical Association
- 2001 Participant, *Workshop on the Intersection of Geospatial Information and Information Technology*, National Academies Computer Science and Telecommunications Board
- 2001 Guest Panelist, *Future Census Methods Research Panel*, National Academies Committee on National Statistics
- 2001 Scientific Committee, *Specialist Meeting on Location-based Services*, National Center for Geographic Information and Analysis
- 2000-2001 Panelist for NSF Survey Methodology proposal review (2 years)
- 2000-2001 Scientific Committee, 7<sup>th</sup> International Blaise Users Conference
- 1997-present National Selection Board for Undergraduate Internships in Federal Statistical Agencies
- 1996-2001 Survey Review Committee, American Statistical Association
- 1997-1999 Associate Editor for *Biometrics*
- 1997-1998 Organizing Committee, Conference on *Environmental Monitoring Surveys Over Time*, co-sponsored by Environmental Protection Agency, National Research Center for Statistics and the Environment, US Forest Service, Natural Resources Conservation Service.
- 1997-1998 Ad-hoc Committee on New Member Initiatives (Chair), Survey Research Methods Section, American Statistical Association
- 1995-1996 Publications Officer, Biometrics Section, American Statistical Association
- 1993-1994 Participant, Quantitative Literacy Program for Secondary Educators in Iowa, American Statistical Association

#### B. Articles Refereed

American Statistician  
 American Journal of Public Health  
 Biometrics  
 Ecological and Environmental Statistics  
 Environmental Monitoring and Assessment  
 Journal of the American Statistical Association  
 Journal of Official Statistics  
 Journal of the Soil Science Society of America  
 Journal of Wildlife Management  
 Pharmaceutical Research  
 Photogrammetric Engineering and Remote Sensing  
 Stats

#### C. Research Proposals and Reports Reviewed

Iowa Agriculture and Home Economics Experiment Station  
 National Academy of Sciences, Institute of Medicine

National Institutes of Health  
 National Science Foundation  
 USDA Agricultural Research Service

#### D. Texts Reviewed

Wiley  
 Duxbury Press

#### E. Memberships

American Statistical Association  
 Caucus for Women in Statistics  
 International Association of Survey Statisticians  
 International Biometric Society

## **XII. PROFESSIONAL SERVICE: Iowa State University**

### A. University Programs and Committees

1999-present GIS Facility Steering Committee  
 2005 Speaker, Frontiers of the Discipline (Physical and Mathematical Sciences), for incoming College of Liberal Arts and Sciences undergraduates  
 2004 Carver Trust Grants Review Committee  
 2003-2004 President's Task Force on Centers and Institutes  
 1999 Presenter, Road Less Traveled Conference for High School Girls, Program for Women in Science and Engineering  
 1997-1998 Search Committee for Director of Academic Information Technology  
 1994 University Strategic Planning Committee for Information Technology  
 1992, 1993 Mentor, Program for Women in Science and Engineering Undergraduate Summer Internships

### B. Departmental Committees

2007-2008 Advisory Committee to the Chair  
 2003-2008 Promotion and Tenure Committee  
 2005-2007 Statistical Laboratory 75<sup>th</sup> Anniversary Committee  
 2005-2007 Honors and Awards Committee  
 2005 External Review Team Selection Committee  
 2002-2003 Survey Faculty Search Committee (Chair)  
 2002-2003 Graduate Admissions Committee  
 2001-2002 DEO Search Committee  
 2001-2002 Seminar Committee (Fall Chair)  
 2000-2001 Organizing Committee for Wayne Fuller 70<sup>th</sup> Birthday Conference (Chair)

- 2000-2001 Statistical Laboratory Strategic Planning Committee
- 1994-2001 Survey Faculty Search Committee (Chair: 1994-1995, 1996-1997, 1998-1999, 2000-2001)
- 1997-2000 Assistantship Evaluation Committee (Chair, 1998-2000)
- 1997-1998 Survey Section Self-Study Committee (Chair)
- 1996-1997 Statistical Laboratory, Statistical Computing Section Committee
- 1995-1996 Safety Committee
  - 1994 DEO Evaluation Committee
  - 1994 Statistical Laboratory Survey Section Strategic Planning Subcommittee (Chair)
- 1993-1994 Seminar Committee (Spring Chair)
- 1992-1993 Assistantship Evaluation Committee