

## **ERIN ELYSE BLANKENSHIP**

University of Nebraska–Lincoln  
Department of Statistics  
erin.blankenship@unl.edu

**EDUCATION:** Truman State University  
Bachelor of Science, May 1994, Summa Cum Laude, General Honors,  
Mathematics and Computer Science Honors  
Major: Mathematics  
Minors: Statistical Methods, English, Philosophy

North Carolina State University  
Master of Statistics, May 1996  
Doctor of Philosophy, August 1999  
Major: Statistics  
Dissertation Title: “Statistical Methods for Constructing Ozone Exposure Metrics”

### **ACADEMIC POSITIONS:**

North Carolina State University, Department of Statistics  
Graduate Assistant (August 1994 - May 1999)

University of Nebraska–Lincoln, Department of Statistics  
Apportionment Prior to Administrative Appointment: 45% Teaching/55% Research  
Assistant Professor of Statistics (July 1999 - June 2005)  
Associate Professor of Statistics (July 2005 - June 2012)  
Professor of Statistics (July 2012 - present)  
Associate Dean, College of Agricultural Sciences and Natural Resources  
(July 2015 - June 2022)

### **NEW COURSES DEVELOPED and TAUGHT:**

Ecological Statistics (with Drew Tyre)	Introduction to Statistics II
Honors section of Introduction to Statistics	Fully online Introduction to Statistics
Introduction to Mathematical Statistics	Teaching Assistant Preparation
(theory for grad students in allied departments)	(with W. Stroup, J. Green, and A. Friedow)
Statistics for Elementary Teachers (with Jenny Green)	Statistics for Middle-Level Teachers
Statistics for High School Teachers	Career Explorations in Statistics*
Principles of Statistical Analysis*	Probability for Statisticians*

### **COURSES TAUGHT:**

Statistical Methods in Research	Experimental Design
Intro to Mathematical Statistics I & II (undergrad)	Mathematical Statistics I & II (grad)
Linear Models	Nonlinear Regression
Practicum in Statistical Consulting	Alpha Seminar (seminar for 1 <sup>st</sup> year grad students)
Principles of Study Design*	Introduction to Survey Sampling*

\* = part of the Statistics and Data Analytics undergraduate degree program

## REFEREED PUBLICATIONS:

- Blankenship, E. E. and Stefanski, L. A. (2001) "Statistical Estimation of Ozone Exposure Metrics," *Atmospheric Environment*, 35: 4499–4510.
- Blankenship, E. E. and Young, L. J. (2001) "Simulating Size and Power Using a 10-Sided Die." *Statistics Teaching and Resource(STAR) Library*.
- Knezevic, S. Z., Evans, S. P., Blankenship, E. E., VanAcker, R. C. and Lindquist, J. (2002) "Critical Period for Weed Control: The Concept and Data Analysis," *Weed Science*, 50: 773–786.
- Blankenship, E. E., Stroup, W. W., Evans, S. P., and Knezevic, S. Z. (2003) "Statistical Inference for Calibration Points in Nonlinear Mixed Effects Models," *Journal of Agricultural, Biological and Environmental Statistics*, 8: 455–468
- Evans, S. P., Knezevic, S. Z., Lindquist, J. L., Shapiro, C. A. and Blankenship, E. E. (2003) "Nitrogen Level Influences the Critical Period of Weed Control in Corn (*Zea Mays* L.)," *Weed Science*, 51: 408–417
- Perkins, M. W., Johnson, R. J., and Blankenship, E. E. (2003) "Response of Riparian Avifauna to Percentage and Pattern of Woody Cover in an Agricultural Landscape," *Wildlife Society Bulletin*, 31: 642–660.
- Eickhoff, T. E., Baxendale, F. P., Heng-Moss, T. M., and Blankenship, E. E. (2004) "Turfgrass, Crop and Weed Hosts of *Blissus occiduus* (Hemiptera: Lygaeidae)," *Journal of Economic Entomology*, 97: 67–73.
- Gilsdorf, J. M., Hygnstrom, S. E., VerCauteren, K. C., Blankenship, E. E., and Engeman, R. M. (2004) "Propane Exploders and Electronic Guards Were Ineffective at Reducing Deer Damage in Cornfields," *Wildlife Society Bulletin*, 32: 524–531.
- Gilsdorf, J. M., Hygnstrom, S. E., VerCauteren, K. C., Clements, G. M., Blankenship, E. E., and Engeman, R. M. (2004) "Evaluation of a Deer-Activated Bioacoustic Frightening Device for Reducing Deer Damage in Cornfields," *Wildlife Society Bulletin*, 32: 515–523.
- Hansen, K. K., Beck, M. M., Scheideler, S. E., and Blankenship, E. E. (2004) "Exogenous Estrogen Boosts Circulating Estradiol Concentrations and Calcium Uptake by Duodenal Tissue in Heat-Stressed Hens," *Poultry Science*, 83: 895–900.
- Sánchez-Plata, M. X., Amézquita, A., Blankenship, E., Burson, D. E., Juneja, V., Thippareddi, H. (2005) "Predictive Model for *Clostridium perfringens* Growth in Roast Beef during Cooling and Inhibition of Spore Germination and Outgrowth by Organic Acid Salts," *Journal of Food Protection*, 68: 2594–2605.
- Kriz, J. C., Danielson, S. D., Brandle, J. R. and Blankenship, E. E. (2006) "Relative abundance of exotic and native Coccinellidae (Coleoptera) in Southeast Nebraska alfalfa," *Journal of Entomological Science*, 41: 84–86.
- Kriz, J. C., Danielson, S. D., Brandle, J. R., Blankenship, E. E. and Henebry, G. M. (2006) "Effects of aphid (Homoptera) abundance and surrounding vegetation on the encounter rate of Coccinellidae (Coleoptera), Chrysopidae (Neuroptera) and Nabidae (Hemiptera) in alfalfa," *Journal of Entomological Science*, 41: 211–220.
- Marcus, J. F., Dinan, J. J., Johnson, R. J., Blankenship, E. E. and Lackey, J. J. (2007) "Directing Nest Site Selection of Least Terns and Piping Plovers," *Waterbirds*, 30: 251–258.
- Petry, D. B., Lunney, J., Boyd, P. Kuhar, D., Blankenship, E. and Johnson, R. K. (2007) "Differential immunity in pigs with high and low responses to porcine reproductive and respiratory syndrome virus infection," *Journal of Animal Science*, 85: 2075–2092.
- Blankenship, E. E. and Young, L. J. (2007) "Simulating Size and Power Using a 10-Sided Die: Teaching with Data Simulations," *CAUSEweb* (peer reviewed online resource repository), [Online: <http://serc.carleton.edu/sp/cause/datasim/examples/15788.html>]
- Searle, C. L., Kocher, M. F., Smith, J. A. and Blankenship, E. E. (2008) "Field slope effects on uniformity of corn seed spacing for three precision planter metering systems," *Applied Engineering in Agriculture*, 24: 581–586.

- Crespo, A., Spencer, T. A., Alves, A. P., Hellmich, R. L., Blankenship, E. E., Magalhães, L. C. and Siegfried, B. D. (2009) "On-plant survival and inheritance of resistance to Cry1Ab toxin from *Bacillus thuringiensis* in a field-derived strain of European corn borer, *Ostrinia nubilalis*," *Pest Management Science*, 65: 1071–1081.
- Mello, A., Streck, N. A., Blankenship, E. E. and Paparozzi, E. T. (2009) "Gibberellic Acid Promotes Seed Germination in *Penstemon digitalis* cv. Husker Red," *HortScience*, 44: 870–873.
- Puckett, H. L., Brandle, J. R., Johnson, R. J. and Blankenship, E. E. (2009) "Avian foraging patterns in crop field edges adjacent to woody habitat," *Agriculture, Ecosystems and Environment*, 131: 9–15.
- Korus, K. A., Conley, M. E., Blankenship, E. E. and Paparozzi, E. T. (2010) "Storage and breakdown of starch aid *P. parviflorus* in leaf re-greening after nitrogen deficiency," *Review of Undergraduate Research in Agriculture and the Life Sciences*, 5: 1–16.
- Coffman, B. A., Kocher, M. F., Adamchuk, V. I., Hoy, R. M. and Blankenship, E. E. (2010) "Testing fuel efficiency of a tractor with a continuously variable transmission," *Applied Engineering in Agriculture*, 26: 31–36.
- Stilwell, A. R., Wright, R. J., Hunt, T. E. and Blankenship, E. E. (2010) "Degree-day requirements for alfalfa weevil (Coleoptera: Curculionidae) development in eastern Nebraska," *Environmental Entomology*, 39: 202–209.
- Schmidt, J. J., Blankenship, E. E. and Lindquist J. L. (2011) "Corn and Velvetleaf (*Abutilon theophrasti*) Transpiration in Response to Drying Soil," *Weed Science*, 59: 50–54.
- Okalebo, J., Yuen, G. Y., Drijber, R. A., Blankenship, E. E., Eken, C. and Lindquist, J. L. (2011) "Biological Suppression of Velvetleaf (*Abutilon theophrasti*) in an Eastern Nebraska Soil," *Weed Science*, 59: 155–161.
- Stamm, M. D., Baxendale, F. P., Heng-Moss, T. M., Siegfried, B. D., Blankenship, E. E. and Gaussoin, R. (2011) "Dose-Response Relationships of Clothianidin, Imidacloprid, and Thiamethoxam to *Blissus occiduus* (Hemiptera: Blissidae)," *Journal of Economic Entomology*, 104: 205–210.
- Tan, S. Y., Cayabyab, B. F., Alcantara, E. P., Ibrahim, Y. B., Huang, F., Blankenship, E. E. and Siegfried, B. D. (2011) "Comparative susceptibility of *Ostrinia furnacalis*, *Ostrinia nubilalis* and *Diatraea saccharalis* (Lepidoptera: Crambidae) to *Bacillus thuringiensis* Cry1 toxins," *Crop Protection*, 30: 1184–1189.
- Abendroth, J. A., Blankenship, E. E., Martin, A. R. and Roeth, F. W. (2011) "Joint Action Analysis Utilizing Concentration Addition and Independent Action Models," *Weed Technology*, 25: 436–446.
- Volesky, J. D., Schacht, W. H., Koehler, A. E., Blankenship, E. and Reece, P. E. (2011) "Defoliation Effects on Forage Production and Root Growth of Wet Meadow Forage Species," *Rangeland Ecology & Management*, 64: 506–513.
- Mamo, M., Ippolito, J., Kettler, T., Reuter, R., McCallister, D., Morner, P., Hussmann, D. and Blankenship, E. (2011) "Learning Gains and Responses to Digital Lessons on Soil Genesis and Development," *Journal of Geoscience Education*, 59: 194–204.
- Meyer, G. E., Paparozzi, E. T., Walter-Shea, E. A., Blankenship, E. E. and Adams, S. A. (2012) "An Investigation of Reflective Mulches for Use Over Capillary Mat Systems for Winter-Time Greenhouse Strawberry Production," *Applied Engineering in Agriculture*, 28: 271–279.
- Hildreth, A. M., Hygnstrom, S. E., Blankenship, E. E. and VerCauteren, K. C. (2012) "Use of Partially Fenced Fields to Reduce Deer Damage to Corn," *Wildlife Society Bulletin*, 36: 199–203.
- Friedow, A. J., Blankenship, E. E., Green, J. L. and Stroup, W. W. (2012) "Am I comfortable there?: Engaging Difference, Learning Interdisciplinary Pedagogies," *Pedagogy*, 12(3):405–424.
- Tiroesele, B., Hunt, T. E., Wright, R., Blankenship, E. E. and Foster, J. E. (2012) "The Soybean Aphid, *Aphis glycines* (Hemiptera: Aphididae): Population Dynamics on Edamame Soybean in Nebraska, USA," *African Journal of Agricultural Research*, 7(44): 5912–5918.

- Paula-Moraes, S., Hunt, T. E., Wright, R. J., Hein, G. L. and Blankenship, E. E. (2012) "On-plant Movement and Feeding of Western Bean Cutworm (Lepidoptera: Noctuidae) Early Instars on Corn," *Environmental Entomology*, 41: 1494–1500.
- Wortman, S. E., Francis, C. A., Bernards, M. A., Blankenship, E. E. and Lindquist, J. L. (2013) "Mechanical Termination of Diverse Cover Crop Mixtures for Improved Weed Suppression in Organic Cropping Systems," *Weed Science*, 61: 162–170.
- Paula-Moraes, S., Hunt, T. E., Wright, R. J., Hein, G. L. and Blankenship, E. E. (2013) "Western Bean Cutworm Survival and the Development of Economic Injury Levels and Economic Thresholds in Field Corn," *Journal of Economic Entomology*, 106: 1274–1285.
- Hefley, T. J., Tyre, A. J. and Blankenship, E. E. (2013) "Fitting Population Growth Models in the Presence of Measurement and Detection Error," *Ecological Modeling*, 263: 244–250.
- Howard, C. N., Kocher, M. F., Hoy, R. M. and Blankenship, E. E. (2013) "Testing the Fuel Efficiency of Tractors with Continuously Variable and Standard Geared Transmissions," *Transactions of the American Society of Agricultural and Biological Engineers (ASABE)*, 56(3):869–879.
- Hefley, T. J., Tyre, A. J., and Blankenship, E. E. (2013) "Statistical Indicators and State-Space Population Models Predict Extinction in a Population of Bobwhite Quail," *Theoretical Ecology*, 6:319–331.
- Green, J. L., and Blankenship, E. E. (2013) "Primarily Statistics: Developing an Introductory Statistics Course for Pre-Service Elementary Teachers," *Journal of Statistics Education*, 21(3). [Online: <http://www.amstat.org/publications/jse/v21n3/green.pdf>]
- Stamm, M. D., Heng-Moss, T. M., Baxendale, F. P., Reese, J. C., Siegfried, B. D., Hunt, T. E., Gaussion, R. E. and Blankenship, E. E. (2013) "Effects of Thiamethoxam Seed Treatments on Soybean Aphid (Hemiptera: Aphididae) Feeding Behavior," *Journal of Economic Entomology*, 106:2384–2390.
- Hefley, T. J., Tyre, A. J., Baasch, D. M. and Blankenship, E. E. (2013) "Non-detection Sampling Bias in Marked Presence-Only Data," *Ecology and Evolution*, 3(16): 5225–5236.
- Hefley, T. J., Baasch, D. M., Tyre, A. J. and Blankenship, E. E. (2014) "Correction of Location Errors for Presence-Only Species Distribution Models," *Methods in Ecology and Evolution*, 5:207–214.
- Schmid, K. K., Blankenship, E. E., Kerby, A. T., Green, J. L. and Smith, W. M. (2014) "The Development and Evolution of an Introductory Statistics Course for In-Service Middle-Level Mathematics Teachers," *Journal of Statistics Education*, 22(3). [Online: <http://www.amstat.org/publications/jse/v22n3/schmid.pdf>]
- Hefley, T. J., Baasch, D. M., Tyre, A. J., and Blankenship, E. E. (2015) "Use of Opportunistic Sightings and Expert Knowledge to Predict and Compare Whooping Crane Stopover Habitat," *Conservation Biology*, 29: 1337–1346, DOI: 10.1111/cobi.12515.
- Green, J. L., and Blankenship, E. E. (2015) "Fostering Conceptual Understanding in Mathematical Statistics," *The American Statistician*, 69: 315–325 DOI:10.1080/00031305.2015.1069759.
- Loseke, B. A., Read, P. E., and Blankenship, E. E. (2015) "Preventing Spring Freeze Injury on Grapevines Using Multiple Applications of Amigo Oil and Naphthaleneacetic Acid," *Scientia Horticulturae*, 193: 294–300.
- Marx, S. E., Luck, J., Hoy, R. M., Pitla, S., Blankenship, E., and Darr, M. J. (2015) "Validation of Machine CAN Bus J1939 Fuel Rate Accuracy Using Nebraska Tractor Test Laboratory Fuel Rate Data," *Computers and Electronics in Agriculture*, 118: 179–185.
- Koch, K., Palmer, N., Stamm, M., Bradshaw, J., Blankenship, E., Baird, L., Sareth, G., and Heng-Moss, T. (2015) "Characterization of Greenbug Feeding Behavior and Aphid (Hemiptera: Aphididae) Host Preference in Relation to Resistant and Susceptible Tetraploid Switchgrass Populations," *Bioenergy Research*, 8: 165–174.
- Kocher, M. F., Wold, M., Hoy, R. M., Lammers, A., and Blankenship, E. (2016) "Calibration Procedure for Fuel Flowmeters at the Nebraska Tractor Test Lab," *Applied Engineering in Agriculture*, 32(3):319–326.
- Stamm, M. D., Heng-Moss, T., Baxendale, F., Siegfried, B., Blankenship, E. and Nauen, R. (2016) "Uptake and Translocation of Imidacloprid, Clothianidin and Flupyradifurone in Seed-Treated Soybeans," *Pest Management Science*, 72: 1099–1100.

- Possu, W. B., Brandle, J. R., Domke, G. M., Schoeneberg, M. and Blankenship, E. (2016) “Estimating Carbon Storage in Windbreak Trees on U. S. Agricultural Lands,” *Agroforestry Systems*, 90: 889–904.
- Bentivenha, J. P. F., Baldin, E. L. L., Hunt, T. E., Paula-Moraes, S. V. and Blankenship, E. E. (2016) “Intraguild Competition of Three Noctuid Maize Pests,” *Environmental Entomology*, 45(4):999–1008.
- Pretorius, R. J., Hein, G. L., Blankenship, E. E., Purrington, F. F., and Bradshaw, J. D. (2017) “Response of Pemphigus betae (Hemiptera: Aphididae) and Beneficial Epigeal Arthropod Communities to Sugarbeet Plant Density and Seed-Applied Insecticide in Western Nebraska,” *Environmental Entomology*, 46(1): 107-117.
- Koehler-Cole, K., Brandle, J. R., Francis, C. A., Shapiro, C. A., Blankenship, E. E. and Baenziger, P. S. (2017) “Clover Green Manure Productivity and Weed Suppression in an Organic Grain Rotation,” *Renewable Agriculture and Food Systems*, 32(5): 474-483.
- Paparozzi, E. T., Meyer, G. E., Schlegel, V., Blankenship, E. E., Adams, S. A., Conley, M. E., Loseke, B., and Read, P. E. (2018) “Strawberry Cultivars Vary in Productivity, Sugars and Phytonutrient Content When Grown in a Greenhouse During the Winter,” *Scientia Horticulturae*, 227: 1–9. DOI:10.1016/j.scienta.2017.07.048
- Morrison, D. M., Blankenship, E. E., Read, P. E., and Paparozzi, E. T. (2018) “Stolon Development and Cultural Production Practices of Winter-Grown Strawberries,” *International Journal of Fruit Science*, 18(2): 138–152. DOI:10.1080/15538362.2017.1413700
- Green, J. L., Smith, W. M., Kerby, A. T., Blankenship, E. E., Schmid, K. K., and Carlson, M. A. (2018) “Introductory Statistics: Preparing In-Service Middle-Level Mathematics Teachers for Classroom Research,” *Statistics Education Research Journal*, 17(2): 216–238.
- Pretorius, R. J., Hein, G. L., Blankenship, E. E., Purrington, F. F., Wilson, R., and Bradshaw, J. (2018) “Comparing the Effects of Two Tillage Operations on Beneficial Epigeal Arthropod Communities and Their Associated Ecosystem Services in Sugar Beets,” *Journal of Economic Entomology*, 111(6): 2617–2631.
- Burnham, E. and Blankenship, E. (2020) “Lessons Learned: Revising an Online Introductory Course,” *Chance*, 33(4): 50-55. DOI: 10.1080/09332480.2020.1847961
- Paparozzi, E. T., Li, Z., Blankenship, E. E., and Conley, M. E. (2021) “Purple Leaf Basil Plants Express Micronutrient Deficiencies Symptoms Differently Than Green Leaf Basil Plants,” *Journal of Plant Nutrition*, 45(10): 1466-1479. DOI:10.1080/01904167.2021.2014885
- Burnham, E. M., Blankenship, E. E., and Brown, S. E. (2023) “Designing a Large, Online Simulation-Based Introductory Statistics Course,” *Journal of Statistics and Data Science Education*, 31(1): 66–73. DOI: 10.1080/26939169.2022.2087810

## BOOK CHAPTERS:

- Blankenship, E., Stenberg, S. J., and Wilson, D. E. (2013) “Developing a Process for Assessing General Education Learning Outcomes Across a Multi-College University,” in R. Thompson (Ed.), *Changing the Conversation about Higher Education* (Chapter 6). Lanham, MD: Rowman and Littlefield Publishers, Inc.

## REFEREED PROCEEDINGS PUBLICATIONS:

- Blankenship, E. E., Evans, S., Stroup, W. W., and Knezevic, S. Z. (2001) "Using PROC NLMIXED to Analyze a Time of Weed Removal Study," in *Proceedings of the 2001 Kansas State Conference on Applied Statistics in Agriculture*, Manhattan, KS, pp. 207–221.
- Blankenship, E. E., Perkins, M. W., and Johnson, R. J. (2002) "The Information Theoretic Approach to Model Selection: Description and Case Study," in *Proceedings of the 2002 Kansas State Conference on Applied Statistics in Agriculture*, Manhattan, KS, pp. 62–76.
- Green, J. L. and Blankenship, E. E. (2014) "Beyond Calculations: Fostering Conceptual Understanding in Statistics Graduate Teaching Assistants," in K. Makar (Ed.), *Sustainability in Statistics Education. Proceedings of the Ninth International Conference on Teaching Statistics, Flagstaff, Arizona*. Voorburg, The Netherlands: International Statistics Institute.  
[Online: [http://icots.info/9/proceedings/pdfs/ICOTS9\\_3A3-GREEN.pdf](http://icots.info/9/proceedings/pdfs/ICOTS9_3A3-GREEN.pdf)]

## FUNDED GRANT PROPOSALS:

- Sandhills Pasture Management and Bird Communities (2001)  
Principal Investigators: Ron Johnson, Mace Hack, Erin Blankenship and Tom Bragg  
Submitted to the Sandhills Task Force (funded for \$15,000) and to the Sampson Range and Pasture Management Endowment (funded for \$10,000)
- Synchronizing Habitat Enhancement Practices with Predator Mobility for Control of Alfalfa Insect Pests (2003-2006)  
Principal Investigators: Stephen Danielson, Thomas Hunt, James Brandle and Erin Blankenship  
Submitted to the ARD Advisory Council (funded for \$39,145)
- Interactions Among Life-Forms in Secondary Succession on Restored Wetlands (2004-2006)  
Principal Investigators: Pat Reece, Ron Johnson, Drew Tyre, Erin Blankenship and Ann Koehler  
Submitted to the ARD Advisory Council (funded for \$20,000)
- Modernization of Introductory Statistics through the Human/Technology Interface (2005-2006)  
Principal Investigators: Walter Stroup, Erin Blankenship, Christopher Bilder, Stephen Kachman and Shunpu Zhang  
Submitted to the Enhancing Teaching and Learning at UNL Seed Grant Program (funded for \$9,000)
- Potential for Grassland Birds to Suppress Insect Pests in Cropfields (2005-2007)  
Principal Investigators: James Brandle and Erin Blankenship  
Submitted to the Sampson Range and Pasture Management Endowment (funded for \$5,000)
- Developing Required Statistical Theory and Methodology to Answer Several Questions Related to R & D Statistical Support (2005)  
Principal Investigators: Erin Blankenship and Walter Stroup.  
Submitted to Boehringer Ingelheim Pharmaceuticals, Inc. (funded for \$30,228).
- Development of Statistical Methodology to Support the Setting of Specification Limits (2006-2007)  
Principal Investigators: Erin Blankenship and Walter Stroup.  
Submitted to Boehringer Ingelheim Pharmaceuticals, Inc. (funded for \$82,731)
- Investigating Opportunities for Rural Development through Bird-Friendly Farms and Agricultural/Nature Tourism (2006-2007)  
Principal Investigators: Ron Johnson, James Brandle and Erin Blankenship  
Submitted to the University of Nebraska Rural Initiative (funded for \$15,300)
- Enhancing Tribal Economic, Cultural, and Environmental Benefits with Conservation Plantings (2007-2011)  
Principal Investigators: David Shelton, Ellen Paparozzi and Erin Blankenship  
Submitted to the USDA-CSREES Tribal Colleges Research Grants Program (funded for \$52,535)
- Fostering Faculty and TA Development as Writing Instructors (2008-2009)  
Principal Investigators: Erin Blankenship, Walter Stroup and Shari Stenberg  
Submitted to the UNL Initiative for Teaching and Learning Excellence (funded for \$36,000)

Faculty Leadership for Writing Initiative (2008-2010)

Principal Investigators: Shari Stenberg, Ted Hamann, David Gosselin and Erin Blankenship

Submitted to the Kelly Fund (funded for \$22,000)

Single Discipline GAANN Fellowship Program for the Department of Statistics, UNL (2010-2013)

Principal Investigators: Kent Eskridge, Erin Blankenship, Anne Parkhurst, Walter Stroup and Shunpu Zhang

Submitted to the U. S. Department of Education (funded for \$393,795)

Winter Production of Nebraska Strawberries: An Idea Whose Time Has Come (2013-2014)

Principal Investigators: Ellen Paparozzi, Ryan Pekarek, David Lambe, Stacy Adams, George Meyer, Erin Blankenship and Paul Read

Submitted to the National Strawberry Sustainability Initiative Grants Program (funded for \$110,160)

Improving Student Access to STAT 218, Introductory Statistics, by Creating a

Fully Online Version of the Course (2017-2021)

Principal Investigators: Erin Blankenship and Sydney Brown

Submitted to the NU Kelly Fund (funded for \$66,840)

Nebraska Department of Education Internship (2021-2022)

Principal Investigator: Erin Blankenship

Submitted to the Nebraska Department of Education (funded for \$13,129)

Cultivate Data Science (2023-2027)

Principal Investigators: Jenny Keshwani, Erin Ingram, Leah Sandall, Deepak Keshwani, Erin Blankenship, Troy Gilmore, Heather Akin and Mary Emery

Submitted to the USDA-NIFA (funded for \$749,825)

## **INVITED PRESENTATIONS:**

Blankenship, E. E. and Stefanski, L. A. "Statistical Methods for Constructing Ozone Exposure Metrics." Presented at the Second Annual Regional Workshop on Mathematics and Statistics in Lincoln, NE; November 1999.

Blankenship, E. E. and Stefanski, L. A. "Statistical Methods for Constructing Ozone Exposure Metrics."

Presented at a Truman State University Mathematics Colloquium in Kirksville, MO; April 2000.

Blankenship, E. E. "Randomized Response Designs." Presented at a Central Missouri State Kappa Mu Epsilon meeting in Warrensburg, MO; November 2000.

Blankenship, E. E. "Goldfish, Chocolate and Lies: Adventures in Statistics." Presented at the Central Missouri State University Sonia Kovalevsky High School Mathematics Day in Warrensburg, MO; September 2001.

Blankenship, E. E. "Randomized Response Designs." Presented at the Fourth Annual Regional Workshop in the Mathematical Sciences in Lincoln, NE; November 2001.

Blankenship, E. E. "Randomized Response Designs." Presented at the Upward Bound Math/Science Symposium in Lincoln, NE; June 2002.

Blankenship, E. E., Stroup, W. W. and Evans, S. "Statistical Inference for Calibration Points in Nonlinear Mixed Effects Models." Presented to the Animal Health Group Biometricians at Pfizer in Groton, CT; August 2002.

Blankenship, E. E. and Stroup, W. W. "Inference from Complex Experimental Designs Using Nonlinear Models: A Simulation Study." Presented at the 2003 Spring Meeting of the International Biometric Society Eastern North American Region in Tampa, FL; April 2003.

Blankenship, E. E., Stroup, W. W. and Evans, S. "Statistical Inference for Calibration Points in Nonlinear Mixed Effects Models." Presented as a Mathematics Department seminar at Central Missouri State University in Warrensburg, MO; November 2004.

Blankenship, E. E. "Statistical Decision Making: Sports, Politics, and the Environment." Presented at the Central Missouri State University Sonia Kovalevsky High School Mathematics Day in Warrensburg, MO; November 2004.

Blankenship, E. E. "Taking Off with Statistics." Presented at the Central Missouri State University Sonia Kovalevsky High School Mathematics Day in Warrensburg, MO; February 2006.

- Blankenship, E. E., Wroughton, J. R., Stroup, W. W. and Schwenke, J. R. "Interval Estimates for Assay Response Curves Using Nonlinear Mixed Effects Models." Presented at the 29th Annual Midwest Biopharmaceutical Statistics Workshop in Muncie, IN; May 2006.
- Blankenship, E. E., Perkins, M. W. and Johnson, R. J. "The Information-Theoretic Approach to Model Selection: Description and Case Study." Presented at the Eighth Annual Regional Workshop in the Mathematical Sciences in Lincoln, NE; October 2006.
- Blankenship, E. E. "Data Simulation Activities." Invited poster presented at the 2007 United States Conference on Teaching Statistics in Columbus, OH; May 2007.
- Blankenship, E., Stroup, W., Green, J. and Friedow, A. "Teaching TAs to Teach Writing." Presented at the Writing in the Sciences Day sponsored by the UNL Faculty Leadership for Writing Initiative; November 2008.
- Blankenship, E., Friedow, A., Green, J., Stenberg, S. and Stroup W. "Fostering Statistics TA Development as Writing Instructors." Presented at the 2009 Joint Statistics Meetings in Washington, D.C.; August 2009.
- Blankenship, E., Stenberg, S. and Martens-Baker, S. "Achievement Centered Education (ACE): Assessment Outcomes." Presented as a workshop at UNL; September 2009.
- Blankenship, E. E., Wilson, D. E., Stenberg, S. J., and Martens-Baker, S. "Engaging Faculty in General Education Assessment." Presented at the AAC&U General Education and Assessment: Maintaining Momentum, Achieving New Priorities conference in Seattle, WA; February 2010.
- Blankenship, E. E., Perkins, M. W. and Johnson, R. J. "The Information-Theoretic Approach to Model Selection: Description and Case Study." Presented as the keynote address at the Kappa Mu Epsilon North Central Regional Convention in Warrensburg, MO; April, 2010.
- Blankenship, E. E. "Lines of Best Fit: Barbie Bungee Drop." Presented at the University of Central Missouri Sonia Kovalevsky High School Mathematics Day in Warrensburg, MO; November 2010.
- Blankenship, E. E. "Mathematical Statistics: Enhancing Learning Through Writing." Invited poster presented at The Road Ahead: Intentional and Integrative Learning at UNL symposium in Lincoln, NE; February 2011.
- Blankenship, E. E., Stenberg, S. J., Martens-Baker, S. and Wilson, D. E. "Engaging Faculty in General Education Assessment." Presented at the annual Spencer and Teagle Foundations Project meeting at Duke University in Durham, NC; June 2011.
- Green, J. L. and Blankenship, E. E. "Primarily Statistics: Developing an Introductory Statistics Course for Pre-Service Elementary Teachers." Presentation at the Discipline-Based Education Research Seminar, University of Nebraska–Lincoln; October, 2012.
- Green, J. L. and Blankenship, E. E. "Primarily Statistics: Developing an Introductory Statistics Course for Pre-Service Elementary Teachers." Webinar presented as part of the *Journal of Statistics Education* Webinar Series; January 2014.
- Schwab, A. and Blankenship, E. E. "Developing New Statistics Instructors and Student Leaders Through Peer Mentoring." Webinar presented as part of the CAUSEweb.org Teaching and Learning Webinar Series; March 2014.
- Green, J. L. and Blankenship, E. E. "Beyond Calculations: Fostering Conceptual Understanding in Statistics Graduate Teaching Assistants." Presented at the Ninth International Conference on Teaching Statistics in Flagstaff, AZ; July 2014.
- Blankenship, E. E. "Making the Most of Your Statistical Analysis." Webinar presented as part of the Entomological Society of America Webinar Series; October 2014.
- Blankenship, E. E. "Coincidence and Luck: My Journey to Statistics Education." Presented at the North Carolina State University Department of Statistics 75 Year Anniversary Conference in Raleigh, NC; October 2016.
- Green, J. L. and Blankenship, E. E. "Introductory Statistics: Preparing Inservice Middle-level Mathematics Teachers for Classroom Teaching and Research." Presented at the 21st Annual Conference of the Association of Mathematics Teacher Educators in Orlando, FL; February 2017.
- Blankenship, E. E. "Rubric Construction: Encouraging Students to Prioritize Concepts." Presented at the UNL Fall Teaching and Learning Symposium in Lincoln, NE; October 2017.



- Blankenship, E. E. and Green, J. L. "Cutting Through the Theory: Emphasizing Statistical Thinking in Mathematical Statistics." Presented at the 10th International Conference of the ERCIM WG on Computational and Methodological Statistics in London, UK; December, 2017.
- Blankenship, E. E. "Cutting Through the Theory: Emphasizing Statistical Thinking in Mathematical Statistics." Presented at Kansas State University, as part of the Department of Statistics Seminar Series in Manhattan, KS; April, 2019.
- Blankenship, E. and Burnham, E. "Redesigning Courses and Determining Effectiveness Through Research." Invited panel presentation at the NU Innovation in Pedagogy and Teaching Symposium sponsored by NU Online in Lincoln, NE; May, 2019.
- Blankenship, E. and Burnham, E. "Lessons Learned: Revising an Online Introductory Course." Presented as an invited webinar sponsored by the American Statistical Association Section on Teaching Statistics in the Health Sciences; November, 2019.
- Green, J. L. and Blankenship, E. E. "Learning Through Assessment: Challenging Mathematical Statistics Students in Novel Ways." Presented at the 2020 Joint Statistics Meetings (virtual); August 2020.
- Blankenship, E. E. and Green, J. L. "Active Learning: Not Just for Intro Stats." Presented at the 2020 Joint Statistics Meetings (virtual); August, 2020.
- Blankenship, E., Doerge, R., Dudoit, S., Fuentes, M., and Smith, H. "Elevating Applied Statistics in Academic Departments." Invited panel presentation at the 2021 Joint Statistics Meetings (virtual); August, 2021.
- Freeman, P., Green, J., and Blankenship, E. "Performing Meaningful Assessment in a Modernized Mathematical Statistics Course Sequence." Refereed breakout session at the 2022 Electronic Conference on Teaching Statistics (eCOTS); May, 2022.
- Blankenship, E. E. and Green, J. L. "Cutting Through the Theory: Emphasizing Statistical Thinking in Mathematical Statistics." Invited presentation at the 2022 Joint Statistics Meetings in Washington, DC; August, 2022.
- Burnham, E., Blankenship, E. and Brown, S. "Designing a Large, Online Simulation-Based Introductory Statistics Course." Invited webinar sponsored by the Consortium for the Advancement of Undergraduate Statistics Education and the Journal of Statistics and Data Science Education; April, 2023.
- Blankenship, E. E. "Lessons from the Dark Side." Invited opening session presentation at the 2023 United States Conference on Teaching Statistics in State College, PA; May, 2023.
- Herman, J. R., Burnham, E. M. and Blankenship, E. E. "How to Communicate in an Online Statistics Course." Refereed breakout session at the 2023 United States Conference on Teaching Statistics in State College, PA; May, 2023.

## **SELECTED CONTRIBUTED PRESENTATIONS:**

- Blankenship, E. E. and Stefanski, L. A. "Statistical Methods for Ozone Dose-Metric Construction." Presented at the 1998 Joint Statistical Meetings in Dallas, TX; August 1998.
- Blankenship, E. E. and Stefanski, L. A. "Estimating Ozone Exposure Metric Parameters Using Profile Sum of Squares." Presented at the 1999 Joint Statistics Meetings in Baltimore, MD; August 1999.
- Blankenship, E. E. and Stefanski, L. A. "Estimating Ozone Exposure Metric Parameters Using Profile Sum of Squares." Presented as a Biometry Department Seminar at the University of Nebraska in Lincoln, NE; October 1999.
- Blankenship, E. E., Evans, S., Stroup, W. W., and Knezevic, S. Z. "Using PROC NLMIXED to Analyze a Time of Weed Removal Study." Presented at the 2001 Kansas State Conference on Applied Statistics in Agriculture in Manhattan, KS; April 2001.
- Blankenship, E. E., Perkins, M. W., and Johnson, R. J. "The Information-Theoretic Approach to Model Selection: Description and Case Study." Presented at the 2002 Kansas State Conference on Applied Statistics in Agriculture in Manahattan, KS; April 2002.
- Blankenship, E. E. and Stroup, W. W. "Inference from Complex Experimental Designs Using Nonlinear Models: A Simulation Study." Presented as a Statistics Department Seminar at the University of Nebraska in Lincoln, NE; October 2003.

- Blankenship, E. E. and Stroup, W. W. "Statistical Components of Math in the Middle." Presented as a Statistics Department Seminar at the University of Nebraska in Lincoln, NE; February, 2006.
- Wroughton, J. R., Blankenship, E. E., Schwenke, J. R. and Stroup, W. W. "Extending Tolerance Intervals for Prediction Interval Coverage." Presented at the 2006 Spring Meeting of the International Biometric Society Eastern North American Region in Tampa, FL; March 2006.
- Quinlan, M., Blankenship, E., Stroup, W. and Schwenke, J. "Developing Statistical Methods for Setting Specification Limits." Presented at the 2007 Joint Statistical Meetings in Salt Lake City, UT; July 2007.
- Blankenship, E., Eskridge, K., Kachman, S., Stroup, W. and Zhang, S. "Good Writing in Statistics: What's Expected, Why it Matters." Presented as a Statistics Department Seminar at the University of Nebraska in Lincoln, NE; April 2008.
- Green, J. L., Stroup, W. W. and Blankenship, E. E. "Introductory Statistics: Perspectives of Departments, Instructors, and Students." Presented at the 2008 Joint Statistics Meetings in Denver, CO; August 2008.
- Blankenship, E. E. "Documenting the Scholarship of Teaching." Presented as a Statistics Department Seminar at the University of Nebraska in Lincoln, NE; March 2009.
- Green, J. L. and Blankenship, E. E. "Change Agents for Teaching and Learning Statistics (CATALST): Radically Redefining the Introductory Statistics Classroom." Presented as a Statistics Department Seminar at the University of Nebraska in Lincoln, NE; November 2011.
- Green, J. L. and Blankenship, E. E. "Cutting Through the Theory: Emphasizing Statistical Thinking in Mathematical Statistics." Presented at the 2012 Joint Mathematics Meetings in Boston, MA; January 2012.
- Blankenship, E. E. and Green, J. L. "Teaching a CATALST Course for Pre-Service Elementary Teachers." Presented at the 2012 Joint Statistics Meetings in San Diego, CA; July 2012.
- Green, J. L. and Blankenship, E. E. "Developing teachers of statistics: redefining the introductory statistics classroom." Topic-contributed presentation at the Joint Statistics Meetings in San Diego, CA; August 2012.
- Green, J. L. and Blankenship, E. E. "Making Change Happen in Mathematical Statistics." Refereed poster presented at the 2013 United States Conference on Teaching Statistics in Cary, NC; May 2013.
- Blankenship, E. E. "The Second Course and Beyond." Topic-contributed presentation at the Joint Statistics Meetings in Montreal, QC; August 2013.
- Green, J. L. and Blankenship, E. E. "Embracing Reform in Mathematical Statistics." Roundtable presentation at the Joint Statistics Meetings in Boston, MA, August, 2014.
- Green, J. L., Kerby, A. T., Blankenship, E. E., Schmid, K. K., and Smith, W. M. "Introductory Statistics: Preparing In-Service Middle-Level Mathematics Teachers for Classroom Research." Presented at the Joint Statistics Meetings in Chicago, IL; August, 2016.
- Blankenship, E. E. and Burnham, E. "Simulation-Based Inference in a Large, Online Intro Course: Meaningful Assessment with Minimal Grading." Presented at the Joint Statistics Meetings in Vancouver, BC; July, 2018.
- Blankenship, E. and Burnham, E. "Lessons Learned: Revising an Online Introductory Course." Presented at the 2019 Joint Statistics Meetings in Denver, CO; August, 2019.
- Burnham, E. and Blankenship, E. "Increasing Instructor-Student Interactions in a Large, Online Intro Course." Presented at the 2020 Joint Statistics Meeting (virtual); August, 2020.

**PhD STUDENT SUPERVISION:** year graduated, current location

Ella Burnham (2021, Winona State University); Dola Pathak (2018, Michigan State University); Julie Garai (2017, Incredible Health); Pamela Fellers (2014, zyBooks); Trevor Hefley (2014, Kansas State University); Jennifer Green (2010, Michigan State University); Jacqueline Wroughton Herman (2007, Northern Kentucky University)

**HONORS AND AWARDS:**

Washington School District Hall of Honor–Alumni Inductee

WINGS Foundation, Washington, MO; September, 2022

Best Contributed Presentation Award

Awarded to “Lessons Learned: Revising an Online Introductory Course,” JSM 2019 Presentation  
American Statistical Association, Section on Teaching Statistics in the Health Sciences

Outstanding Teaching and Instructional Creativity Award

University of Nebraska System, 2017

Distinguished Teaching Award

University of Nebraska College of Agricultural Sciences and Natural Resources, 2016

Fellow, American Statistical Association (elected 2015)

Journal of Statistics Education Jackie Dietz Best JSE Paper Award,

Awarded to Green and Blankenship (2013) by the Journal of Statistics Education/ASA, August 2014

2014 ASABE Superior Paper Award, awarded to Howard et al. (2013)

Presented by the American Society of Agricultural and Biological Engineers, July 2014

2013 Mu Sigma Rho William D. Warde Statistical Education Award,

Presented by Mu Sigma Rho: The National Statistics Honorary Society, August 2013

Holling Family Award Program for Teaching Excellence,

University of Nebraska Institute of Agriculture and Natural Resources,

Senior Faculty Teaching Award, March 2012

Outstanding Peer-Reviewed Publication, Mississippi Chapter of the Wildlife Society

Awarded to Puckett et al. (2009), September 2010

Faculty Leadership for Writing Initiative Award

Presented by the University of Nebraska Faculty Leadership for Writing Initiative, May 2009

**SELECTED PROFESSIONAL ORGANIZATIONS:**

American Statistical Association

**SELECTED PROFESSIONAL SERVICE:**

Early Career Impact Award Selection Committee, Mu Sigma Rho; 2021-2023; Committee chair, 2023

Editor Search Committee Member, Journal of Statistics Education; 2021

Charter Committee, ASA Section on Statistical Education; 2018–2019

Council of Sections Rep, ASA Section on Statistical Education; 2017–2019

Best Journal of Statistics Education Paper Award Committee; 2017–2022; Committee chair, 2020-2022

Program Chair, Section on Statistical Education, Joint Statistics Meetings, 2015

Program Chair-Elect, Section on Statistical Education, Joint Statistics Meetings, 2014

Associate Editor, Journal of Statistics Education; 2008–present

Committee Member, W. J. Youden Award in Interlaboratory Testing; 2009–2015

## **SELECTED UNIVERSITY SERVICE:**

Member, University of Nebraska Outstanding Teaching and Instructional Creativity Award Selection Committee; 2023–present  
Member, Women Supporting Women in IANR Steering Committee; 2022–2025  
Member, CASNR Student Success working group; 2022–present  
Member, Bachelor of Science in Public Health planning committee; 2022  
Faculty Advisor, Sigma Alpha Agriculture Sorority; 2016–2022  
Member, Academic Program Review Team for the Department of English; October, 2016  
Member, Outstanding Academic Advising Award Selection Committee; March, 2016  
Member, UNL Reaffirmation of Accreditation Workgroup; 2015  
Member, Life Sciences Advisory Council; 2010–2022  
Member, ADVANCE Nebraska Committee; 2009 - 2013  
Co-Coordinator, ACE Outcome 1 Assessment Pilot Project; 2009–2011  
Member, Academic Rights and Responsibilities Panel; 2008–2010  
Secretary, UNL Chapter of Sigma Xi; 2007–2010  
Chair, College of Agricultural Sciences and Natural Resources Teaching and Learning Improvement Committee; 2007–2009  
Member, Math in the Middle Curriculum Review Committee; 2006  
Member, UNL Academic Senate; 2004–2007

## **SELECTED DEPARTMENT SERVICE:**

Co-Chair, Statistics Department Head Search Advisory Committee (2023)  
Co-Director, UNL Data Science Undergraduate Degree Program (2023–present)  
Chair, Department Undergraduate Degree Proposal Committee, 2020.  
Chair, Department Undergraduate Curriculum Committee, 2014–present.  
Coordinator, Department ACE Assessment; 2009–2016; 2024-2025  
Member, Department Executive Committee; 2005–2007, 2009–2011  
Faculty Advisor, Statistics Graduate Student Association; 2006–present  
Co-Chair, Department Curriculum Committee; 2002–2014  
Chair, Department Comprehensive Exam Committee; 1999-2006