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Multiple Responses Using Hypervolume", ***Quality Reliability Engineering International***, accepted.

2. Anderson-Cook, C.M., Lu, L. (2017) "Assessment and Construction of Designed Experiments", ***Encyclopedia of Statistics in Quality and Reliability***, © John Wiley & Sons, accepted.
3. Lu, L., and Anderson-Cook, C.M. (2017) "Choosing a Reliability Inspection plan for Interval Censored Data", ***Quality Engineering***, **29**(3), 512-535.
4. Chen, S., Lu, L., Li, M. (2017) "Multi-State Reliability Demonstration Tests", ***Quality Engineering***, **29**(3), 431-445.
5. Lu, L., Chapman, J.L., Anderson-Cook, C.M. (2017), "Multiple Response Optimization for Higher Dimensions in Factors and Responses", ***Quality Reliability Engineering International***, **33**, 727-744.
6. Anderson-Cook, C.M., Cao, Y., Lu, L. (2017), "Understanding Aspects Influencing Different Types of Multiple Response Optimization", ***Quality Engineering***, **29**(2), 329-341.
7. Anderson-Cook, C.M., Lu, L. (2016), "Best Bang for the Buck: Part 2 – Choosing Between Different Sized Designs", ***Quality Progress***, **49**(11), 50-52.
8. Anderson-Cook, C.M., Lu, L. (2016), "Best Bang for the Buck: Part 1 – The Size of Experiments Relative to Design Performance", ***Quality Progress***, **49**(10), 45-48.
9. Lu, L., Li, M., Anderson-Cook, C.M. (2016), "Multiple Objective Optimization in Reliability Demonstration Test", ***Journal of Quality Technology***, **48**(4), 326-342.
10. Anderson-Cook, C.M., Yongtao, C., Lu, L. (2016), "Maximize, Minimize or Target: optimization for a fitted response from a designed experiment", ***Quality Progress***, **49**(4), 52-55.
11. Chapman, J.L., Lu, L., Anderson-Cook, C.M. (2015) "Impact of Response Variability on Pareto Front Optimization" ***Statistical Analysis and Data Mining*****, 8,** 314-328.
12. Anderson-Cook, C.M., Lu, L. (2015) "Much-Needed Structure: A New 5-Step Decision-Making Process Helps You Evaluate, Balance Competing Objectives" **Quality Progress 48**(10) 42-50.
13. Lu, L., Anderson-Cook, C.M. (2015), "Improving Reliability Understanding, Estimation and Prediction with Usage Information", ***Quality Engineering***, **27**,304-316.
14. Lu, L. (2015), "Quality Improvement through Planned Experimentation, 3rd Edition", ***Journal of Quality Technology***, **47** (1), 85-86.
15. Anderson-Cook, C.M., Lu, L. (2014), "Divide and Conquer: Understanding Trade-offs by Studying Separate Relationships", ***Quality Progress***, **47**(10), 46-48.
16. Chapman, J.L., Lu, L., Anderson-Cook, C.M. (2014), "Incorporating Response Variability into Pareto Front Optimization", ***Computers and Industrial Engineering***, **76**, 253-267.
17. Lu, L., Robinson, T.J. Anderson-Cook, C.M., (2014), "A Case Study to Select an Optimal Split-Plot Design for a Mixture-Process Experiment Based on Multiple Objectives", ***Quality Engineering***, **26**, 424-439.
18. Lu, L., Johnson, M.E., Anderson-Cook, C.M., (2014), "Selecting a Best Two-Level 16-run Screening Design from the Catalog of Non-Isomorphic Regular and Non-Regular Designs for Six to Eight Factors", ***Quality Engineering***, **26**, 269-284.

19. Chapman, J.L., Lu, L., Anderson-Cook, C.M. (2014), "Process Optimization for Multiple Responses Utilizing the Pareto Front Approach", ***Quality Engineering***, **26**, 253-268.
20. Lu, L., Anderson-Cook, C.M. (2014), "Balancing Multiple Criteria Incorporating Cost Using Pareto Front Optimization for Split-Plot Designed Experiments", ***Quality and Reliability Engineering International***, **30**, 37-55.
21. Lu, L., Anderson-Cook, C.M., Lin, D. (2014), "Optimal Designed Experiments Using a Pareto Front Search for More Focused Desirability Function Weights", ***Computational Statistics and Data Analysis***, **71**, 1178-1192.
22. Lu, L., Chapman, J.L., Anderson-Cook, C.M. (2013), "A Case Study on Selecting a Best Allocation of New Data for Improving the Estimation Precision of System and Sub-System Reliability using Pareto Fronts", ***Technometrics***, **55**(4), 473-487.
23. Lu, L., Anderson-Cook, C.M. (2013), "Adapting the Hypervolume Quality Indicator to Quantify Trade-offs and Search Efficiency for Multiple Criteria Decision-making using Pareto Fronts", ***Quality and Reliability Engineering International***, **29**, 1117-1133.
24. Lu, L., Anderson-Cook, C.M., and Robinson, T.J. (2012), "A Case Study to Demonstrate Pareto Frontiers for Selecting a Best Response Surface Design with Simultaneously Optimizing Multiple Criteria", ***Applied Stochastic Models in Business and Industry***, **28**, 206-221.
25. Pintar, A., Lu, L., Anderson-Cook, C.M., and Gary L. Silver (2012), "Bayesian Estimation of Reliability for Batches of High Reliability Single-Use Parts", ***Quality Engineering***, **24**(4), 473-485.
26. Anderson-Cook, C.M., and Lu, L. (2012), "Weighing Your Options – Decision making with the Pareto-front approach", ***Quality Progress***, **45**(10), 50-52.
27. Anderson-Cook, C.M., and Lu, L. (2012), "Discussion of 'Optimum Design of Experiments for Statistical Inference' by Gilmour and Trinca", ***Journal of the Royal Statistical Society Series C (Applied Statistics)***, **61**, 377-378.
28. Lu, L. and Anderson-Cook, C.M. (2012), "Rethinking the Optimal Response Surface Design for a First-Order Model with Two-Factor Interactions, when Protecting against Curvature", ***Quality Engineering***, **24**(3), 404-421.
29. Anderson-Cook, C.M. and Lu, L. (2012) "Editorial for Statistical Engineering Special Issue", ***Quality Engineering***, **24**(2), 107-109.
30. Anderson-Cook, C.M., Lu, L., Clark, G., DeHart, S.P., Hoerl, R., Jones, B., MacKay, R.J., Montgomery, D.C., Parker, P.A., Simpson, J., Snee, R., Steiner, S., Van Mullekom, J., Vining, G.G., Wilson, A.G. (2012) "Statistical Engineering - Roles for Statisticians and the Path Forward", ***Quality Engineering***, **24**(2), 133-152.
31. Anderson-Cook, C.M., Lu, L., Clark, G., DeHart, S.P., Hoerl, R., Jones, B., MacKay, R.J., Montgomery, D.C., Parker, P.A., Simpson, J., Snee, R., Steiner, S., Van Mullekom, J., Vining, G.G., Wilson, A.G. (2012) "Statistical Engineering - Forming the Foundations", ***Quality Engineering***, **24**(2), 110-132.
32. Lu, L., Anderson-Cook, C.M., and Robinson, T.J. (2011) "Optimization of Designed Experiments based on Multiple Criteria Utilizing Pareto Frontier", ***Technometrics***, **53**, 353-365.

33. Lu, L., Anderson-Cook, C.M., and Wilson, A.G. (2011), "Choosing a Consumption Strategy for A Population of Systems based on Reliability", ***Proceedings of the Institution of Mechanical Engineers, Part O, Journal of Risk and Reliability***, **225**, 407-423.
34. Lu, L., Anderson-Cook, C.M., Otieno, S., and Hamada, M.S. (2011) "Metrics, Design and Analysis of Simulation Studies for Evaluating Directional Data Methods", ***Journal of Statistical Theory and Applications***, **10**, 115-142.
35. Lu, L., Anderson-Cook, C.M. (2011) "Using Age and Usage for Prediction of Reliability of an Arbitrary System from a Finite Population", ***Quality and Reliability Engineering International***, **27**, 179-190.
36. Lu, L., Anderson-Cook, C.M. (2011) "Prediction of Reliability of an Arbitrary System from a Finite Population", ***Quality Engineering***, **23**, 71-83.
37. Anderson-Cook, C.M., and Lu, L. (2010) "A Sample Plan: Leverage Supplemental Information to Increase Efficiency of Data Collection", ***Quality Progress***, **43**(10), 54-56.
38. Anderson-Cook, C.M., Lu, L., Morzinski, J. (2010) "Mixed Messages: Prevent Confusion about Statistical Terms that Have Multiple Meanings and Connotations", ***Quality Progress***, **43**(11), 36-43.
39. Larsen, M.D., and Lu, L. (2007), "Discussion of `Bayesian Checking of the Second Level of Hierarchical Models' by Bayarri and Castellanos: Cross-validated Posterior Predictive Checks Using Discrepancy Measures", ***Statistical Science***, **22**(3), 359-362.

Submitted Articles

1. Burke, S.E., Anderson-Cook, C.M., Lu, L., Borror, C.M., Montgomery, D.C. (2017), "Design of Experiment Selection Using Layered Pareto Fronts", ***Journal of Quality Technology***, in revision.
2. Chen, S., Lu, L., Xiang, Y., Sagues, A.A., Li, M. (2017) "A Data-driven Heterogeneity Quantification Approach for Chloride Ingress Profiles of Aging Marine Infrastructures", ***Reliability Engineering & System Safety***, in revision.
3. Burke, S.E., Anderson-Cook, C.M., Lu, L., Montgomery, D.C. (2017) "Prioritization of Stockpile Maintenance with Layered Pareto Fronts", ***Quality Engineering***, in revision.
4. Anderson-Cook, C.M., Lu, L. (2017) "Graphics to Facilitate Informative Discussion and Team Decision-Making", ***Applied Stochastic Models in Business and Industry***, submitted.
5. Chapman, J.L., Lu, L., Anderson-Cook, C.M. (2017), "Selecting A Consumption Strategy with Optimization Reliability", ***Naval Research Logistics***, submitted.

GRANTS AWARDED

- American Educational Research Association (AERA) dissertation grant sponsored jointly by the National Science Foundation (NSF) and the National Center for Education Statistics (NCES), 2007-2008, $15,000.
- Travel support of $1,000 from the Statistical and Applied Mathematical Sciences Institute (SAMSI) for participating the Workshop on Statistics and Applied Mathematics in Forensic Sciences sponsored by NSF, 2015.
- USF CAS Travel Grant, 2016 – 2017, $1,000.

- AWM-NSF Mathematics Travel Grant, 2017-2018, $2,300.
- USF CAS Travel Grant, 2017, $1,000.
- USF CAS Pilot Study Award, 2017, $5,000.

CONFERENCE PRESENTATIONS

Invited

1. “Select an Optimal Consumption Strategy based on Multiple Reliability Criteria Utilizing Pareto Frontier" (2011), Quality and Productivity Research Conference, Roanoke, Virginia.
2. “Using Multiple Objectives to Select a Best 16-Run Regular or Non-Regular Screening Design for 6 to 8 Factors”, Fall Technical Conference, 2014, Richmond, Virginia.
3. “Selecting A Consumption Strategy with Optimized Reliability”, ASA/IMS Spring Research Conference, Chicago, Illinois, 2016.
4. “Multiple Objective Optimization in Reliability Demonstration Tests”, 2016 IIE Annual Conference, Industrial and Systems Engineering Research Sessions (ISERC), San Diego, California.
5. “Improving Reliability Understanding through Estimation and Prediction with Usage Information”, Fall Technical Conference, 2016, Minneapolis, MN.
6. “Multiple Objective Optimization in Reliability Demonstration Test”, 2017 Spring Research Conference, New Brunswick, NJ, 2017.
7. “Using Multiple Criteria for Identifying Promising Solutions for the Inverse Problem”, Quality and Productivity Research Conference (QPRC), Storrs, CT, 2017.

Contributed

1. “A Comparison of Methods for a Survey of High School Students in Iowa” (2006), Joint Statistical Meeting, Survey Research Methods Section, American Statistical Association, Seattle, Washington.
2. “Variance Estimation in a High School Student Survey with One-per-stratum Strata" (2007), the Third International Establishment Survey Conference, Montreal, Canada.
3. “Small Area Estimation in a Survey of High School Students in Iowa" (2007), Joint Statistical Meeting, Survey Research Methods Section, American Statistical Association, Salt Lake City, Utah.
4. “Selection of Hierarchical Bayesian Models via Benchmarking" (2008), Joint Statistical Meeting, Survey Research Methods Section, American Statistical Association, Denver, Colorado.
5. “Prediction of Population Performance Based on Reliability" (2010), INFORMS Annual Meeting, Institute for Operations Research and the Management Science, Austin, Texas.
6. “Search Algorithms and Selection of Optimal Choices for Focused Preference of Multiple Objectives”, Joint Statistical Meeting, Montreal, Quebec, Canada, 2013.

Posters

1. “Pareto Front Optimization for Multiple Process or Product Responses in the Presence of Model Estimation Uncertainty”, Joint Statistical Meeting, Montreal, Quebec, Canada, 2013, Los Alamos Technical Report LA-UR-13-25888.

EDITORIAL CONTRIBUTIONS

- Serve on Editorial Review Board for Quality Engineering from Jan, 2016 to present
- Guest Editor for Special Issue on "Statistical Engineering" in *Quality Engineering*, 2012.
- Reviewer for *Technometrics*, *Journal of Quality Technology*, *Journal of Statistics Education*, *Journal of Statistical Planning and Inference*, *Quality & Reliability Engineering International*, *Quality Engineering*, *Statistics & Computing*, *Journal of Official Statistics*.

AWARDS

- American Society for Quality 2016 Silver Innovation Performance Award. The Statistics Division received the award for the 2016 book, *Statistical Roundtables: Insights and Best Practices* (Anderson-Cook and Lu) for the way that information and knowledge was shared to benefit their members.
- Recipient (with Christine M. Anderson-Cook and Mark E. Johnson) of the ASQ Chemical and Process Industries Division Shewell Award for best paper based on "excellence of presentation and written manuscript" at the 2014 Fall Technical Conference, Richmond, VA.
- Recipient (with Christine M. Anderson-Cook and Timothy Robinson) of the ASQ Chemical and Process Industries Division Shewell Award for best paper based on "excellence of presentation and written manuscript" at the 2011 Fall Technical Conference.
- American Society for Quality Statistics Division 2010 Fall Technical Conference Early Career Grants, Birmingham, Alabama, 2010
- American Statistical Association (ASA) Survey Research Methods Section (SRMS) 2007 Student Travel Award for the Joint Statistical Meetings, Salt Lake City, Utah, 2007
- Institute of Mathematical Statistics (IMS) Laha Travel Award for the Joint Statistical Meetings, Salt Lake City, Utah, 2007
- Bayesian Inference in Econometrics and Statistics (SBIES) Meeting Travel Award, Iowa City, Iowa, 2006
- Vera David Graduate Fellowship from Department of Statistics at Iowa State University given to a female graduate student based on academic achievement, 2004
- Premium for Academic Excellence Award (PACE) from Department of Statistics at Iowa State University, 2003

COMPUTING SKILLS

- Programming: proficiency in R, experience in SAS, JMP, Matlab