Maria L. Weese

CONTACT INFORMATION	800 E. High Street Farmer School of Business (Office: 2021) Oxford, OH 45056	*Voice:* (513) 529-0591 *Email:* weeseml@miamioh.edu *Google Scholar:* https://goo.gl/92aQAn

RESEARCH INTERESTS

Analysis based Design, Data Stream Monitoring, Screening Design, Optimal Supersaturated Design

EDUCATION

University of Tennessee, Knoxville, TN

Ph.D., Statistics, May 2010

M.S., Statistics, May 2006

Virginia Tech, Blacksburg, VA

B.S., Chemical Engineering, Minor: Chemistry, May, 2001

ACADEMIC EXPERIENCE

Miami University, Department of Information Systems & Analytics

Associate Professor	**Aug. 2020 - present**
Richard T. Farmer Assistant Professor	**Aug. 2018 - July 2020**
Assistant Professor	**Aug. 2014 - July 2018**
Lecturer/Clinical Faculty	**Aug. 2012 - July 2014**
Visiting Assistant Professor	**Aug. 2010 - July 2012**

Miami University, Department of Statistics

Affiliate Member	**May 2019 - present**

University of Tennessee, Department of Statistics, Operations and Management Science

Graduate Teaching Associate	**Aug. 2006 - May 2010**

University of Tennessee, Statistical Consulting Center

Statistical Consultant	**May 2004 - July 2006**

PROFESSIONAL EXPERIENCE

Celanese Acetate, Celco Plant, Narrows, VA

Process Improvement Engineer II *Six Sigma Green Belt Certified*	**July. 2001 - May 2004**

PUBLICATIONS	Martinez, M.G., Weese, M.L., Jones-Farmer, L.A., (2020) A One Class Peeling method for multivariate outlier detection with application to Phase I Monitoring. *Quality and Reliability Engineering International.* 36(4):1272-1295.

Smucker, B.J., Edwards, D.J., Weese, M.L., Response Surface Models: To Reduce or Not to Reduce?. *In Press: Journal of Quality Technology*

Weese, M.L., Montgomery, D.J., Ramsey,P.J., (2017) Analyzing Definitive Screening Designs: Screening vs. Prediction. *Applied Stochastic Models in Business and Industry.* 34(2):244-255.

Ockuly, R. [1], A., Weese, M.L., Smucker, B.J., Edwards, D.J., Chang, L. [2], (2017) Response Surface Experiments: A Meta-Analysis. *Chemometrics and Intelligent Laboratory Systems.* 164:64-75.

Weese, M.L., Edwards, D.J., Smucker, B.J. (2017) A Criteria for Constructing Powerful Supersaturated Designs when Effect Directions are Known. *Journal of Quality Technology.* 49(3):265-277.

Campbell, J.T., Weese, M.L. (2017). Compositional Models and Organizational Research: Application of a Mixture Model to Nonexperimental Data in the Context of CEO Pay. *Organizational Research Methods.* 20(1):95-120.

Weese, M.L., Martinez, W.G., and Jones-Farmer, L.A. (2017) On the Selection of the Bandwidth Parameter for the k-Chart. *Quality and Reliability Engineering International.* 33(7):1527-1547.

Weese, M.L., Martinez, W.J., Megahed, F.M., Jones-Farmer, L.A. (2016) Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective. *Journal of Quality Technology.* 48(1):4-27.

Weese, M. L., Smucker, B. J., Edwards, D. J. (2015) Searching for Powerful Supersaturated Designs. *Journal of Quality Technology.* 47(1):66-84.

Edwards, D. J., Weese, M. L., Palmer, G. M.[1], (2014) Comparing Methods for Design Follow-Up: Revisiting a Metal Cutting Case Study. *Journal of Applied Stochastic Models in Business and Industry.* 30(4):464-478.

Weese, M. L., Leitnaker, M. G., (2012) Sequential Experimentation for Mixtures. *International Journal of Design of Experiments and Process Optimisation*, 3(1):33-42.

SUBMITTED ARTICLES	Weese, M.L., Stallrich, J.W., Smucker, B.J., Edwards, D.J., Strategies for Supersaturated Screening: Group Orthogonal and $Var(s+)$ Designs. *Under Review*

INVITED PRESENTATIONS	Weese, M.L., Smucker, B.J., Edwards, D.J., Stallrich, J.W., Ansong, E. [1], (2019) "Supersaturated Designs: Research-Based Best Practices and the Future". European Network for Business and Industrial Statistics, Budapest, Hungary.

Weese, M.L., Smucker, B.J., Edwards, D.J., Stallrich, J.W., Ansong, E. [1], (2019) "Supersaturated Designs: Research-Based Best Practices and the Future". Spring Research Conference, Blacksburg, VA.

Weese, M.L. (2018) Invited Attendee, Stu Hunter Research Conference, March 5-8, Roanoke, VA

Weese, M.L., Smucker, B.J., Edwards, D.J., (2017) "Analyzing Supersaturated Designs", Section on Physical and Engineering Sciences, Fall Technical Conference, October, Philadelphia, PA.

Weese, M.L., Smucker, B.J., Edwards, D.J., (2017) "Analyzing Supersaturated Designs", Invited Talk Section on Physical and Engineering Sciences, Joint Statistical Meetings, August, Baltimore, MD.

[1] Graduate Student
[2] Undergraduate Student

Weese, M.L., Martinez, W.G., Megahed, F.M., Jones-Farmer, L.A., (2017) "Statistical Learning methods and Process Monitoring", JQT Invited Session, Fall Technical Conference, October, Philadelphia, PA. *Presenter: Allison Jones-Farmer*

Weese, M.L. (2016) Invited Attendee, Stu Hunter Research Conference, March 6-9, Waterloo, CA

Weese, M.L., Smucker, B.J., Edwards, D.J. Ockuly, R.[1], Chang, L. [2], (2016) "A Meta-analysis quantifying effect sparsity, heredity and hierarchy in second-order designs", Spring Research Conference, May, Chicago, IL.

Weese, M.L., Martinez, W.G., Megahed, F.M., Jones-Farmer, L.A., (2015), "Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective", 32nd Annual Quality & Productivity Research Conference, June, Raleigh, NC.

Weese, M.L., (2015), "Together We can Do So Much: Fostering Successful Collaboration among Academia, Government and Industry", Panel Discussant, Spring Research Conference May, Cincinnati, OH.

Weese, M.L., Smucker, B.J., Edwards, D.J., (2015), "Supersaturated Designs, Definitive Screening Designs and the Dantzig Selector", March, Colloquia, Department of Statistics and Operations Management, Virginia Commonwealth University, Richmond, Virginia.

CONTRIBUTED PRESENTATIONS	Weese, M.L., Martinez, W.G., Jones-Farmer, L.A., (2020) "Stop Treating Supersaturated Designs like Other Screening Designs", Joint Statistical Meetings, August, Virtual.

Weese, M.L., Martinez, W.G., Jones-Farmer, L.A., (2018) "One Class Peeling for Outlier Detection in High Dimensions", Joint Research Conference, June, Santa Fe, NM.

Weese, M.L., Martinez, W.G., Jones-Farmer, L.A., (2016), "Recommendations on the Application of the k-chart", Fall Technical Conference, October, Minneapolis, MN.

Weese, M.L., Ramsey, P.J., Montgomery, D.J., (2015), "Analysis Strategies for Definitive Screening Design", Fall Technical Conference, October, Houston TX.

Weese, M.L., (2014), "Customer Behavior Outside 4 Walls: A Business Analytics Practicum Project using JMP", 2014, Poster Presentation, JMP Discovery Conference, September, Cary, NC.

Weese, M.L., Smucker, B.J., Edwards, D.J., (2014), "Searching for Powerful Supersaturated Designs", Fall Technical Conference, October, Richmond, VA.

FUNDUNG

---

[1] Graduate Student

[2] Undergraduate Student

Miami University
  ISA 491 Introduction to Data Mining in Business
  ISA 496 Business Analytics Practicum
  ISA/STA 365 Design of Experiments and Process Monitoring
  ISA 291 Regression Analysis in Business
  ISA 205 Introduction to Business Statistics
  Online ISA 205 Introduction to Business Statistics
  ISA 203 Supplementary Business Statistics
  Online ISA 203 Supplementary Business Statistics

University of Tennessee
  STAT 201 Introduction to Business Statistics
  STAT 365 Statistical Process Control

ADVISING

Lina Lu (2020) Topic: Optimizing s for OCP outlier detection. *Master's Project*

Eric Ansong (committee member) (2019) Title: SIC optimal supersaturated design. *Master's Project*

Mengdi Fu (co-advised with Byran Smucker) (2017) Title Using the Dantzig selector to analyze supersaturated experiments. *Master's Project*

Becky Ockuly (co-advised with Byran Smucker;) (2016). Title: Response Surface Experiments: A Meta-Analysis. *Master's Project*

SERVICE

To Miami University:

Committees:
  Search Committee, Information Systems & Analytics, Analytics Position (2018-2019)
  Search Committee, Information Systems & Analytics, Information Systems and Analytics Position (2017-2018)
  DataFest Judging committee (2016-2019)
  ISA Technology service committee (2016-2017)
  Farmer School of Business Commencement and Anderson Speaker Series committee (2017-2019)
  Search Committee, Farmer School of Business, Associate Dean Position (Summer 2015)
  Farmer School of Business e-Learning committee (2013-2014, 2014-2015, 2015-2016)
  ISA STAR Seminar Series committee chair (2013-2014, 2014-2015)

Other:
  Advisor to Business Analytics minors, co-majors and ISA majors (approximately 60-80 students per semester)
  Careers in Quantitative Skills Day (2015-2019): Prepared and lead session for high school girls
  Proctored SAS Professional Predictive Analytics Certification Exam for ISA 491 students (86% pass rate) (2016-2018)
  Lean-In Group (2014-2016): Informal group for graduating female analytic students
  SAS Data Mining Certificate Coordinator (2013-2017): Coordination of awards to students
  ISA 205 Course Coordinator (2013-2104): Coordinated all instructors of ISA 205
  CELTUA Top 25 Coordinator for ISA 205 (2013-2014): Managed the Miami University Top 25 course requirements for ISA 205

Center for Analytics and Data Science:
  Faculty Project Lead *Using Machine Learning in the search for antibiotic inhibitors: Miami University Chemistry Department* (Spring 2020)
  Faculty Project Lead *Subscription payment modeling: Local Payment Processing Corporation* (Fall 2020)

Faculty Project Lead *Data Exploration: Large Local Grocery Chain* (Spring 2019)
Faculty Project Lead *Market Segmentation: Large Local Bank* (Fall 2018)
Faculty Project Lead *Modeling: Butler County Landbank Round 2* (Spring 2016)

To the Profession:

Editorial Review Board Member, *Quality Engineering*

Editorial Review Board Member, *Quality and Reliability Engineering International*

Journal Reviewer: *Applied Stochastic Models in Business and Industry, Chemometrics and Intelligent Laboratory Systems, Computational Statistics and Data Analysis, Informs Transactions on Education, International Journal of Production Research, Laboratory Animals, Journal of Statistical Planning and Inference, Journal of Quality Technology, Technometrics, Quality Engineering*

Invited Session Organizer, "The Future of Designed Experiments in the Era of Big Data", JSM 2020
Invited Session Organizer, "Analysis Based Design", ICODOE 2019
Chair and member, Youden and Wilcoxn Award Committee, (2018-2020)
Sponsorship Chair, Joint Research Conference (2018)
Fall Technical Conference Publicity Chair, Quality & Progress, American Statistical Association (2016-2019)
Shewell Award Judge for best presentation at the 2014 Fall Technical Conference (2015)
FTC Short Course Rep, Chemical Industries & Process Division, American Society for Quality (2014-2017)
Secretary, Chemical Industries & Process Division, American Society for Quality (2012-2014)
Fall Technical Conference Assistant Program Chair, Chemical Industries and Process Division, American Society for Quality (2012)
Membership Chair, Section on Physical & Engineering Sciences, American Statistical Association (2011-2013)
Quality & Progress Research Conference Session Chair (2015, 2017)
Fall Technical Conference Session Chair (2015, 2016, 2017)
Session Chair, Joint Statistical Meetings (2011, 2014, 2017)

PROFESSIONAL ACTIVITIES	Member American Statistical Association Member American Society for Quality
HONORS AND AWARDS	*Outstanding Professor Award Nominee* for the Miami University Associated Student Government, 2017 and 2014 (this is a campus-wide nomination for a faculty member who made significant difference in students' lives and careers). *Smucker Teaching Award Nominee* for Farmer School of Business, 2015-2018. *Best Presentation Honorable Mention* from the Section for Physical and Engineering Sciences of the American Statistical Association, Joint Statistical Meetings, Boston, MA 2014 *Outstanding Poster Presentation Award* from the Section for Physical and Engineering Sciences of the American Statistical Association, Joint Statistical Meetings, Washington DC, 2009