Jeffrey S. Buzas

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LEADERSHIP EXPERIENCE

Chair, Department of Mathematics and Statistics

2014-2021

University of Vermont

During my tenure as chair, the Department of Mathematics and Statistics consisted of approximately 40 faculty and two staff members. Faculty were varied in both their appointment type (14 Lecturers, 20 TT faculty, 7 Research Faculty) and research interests (pure and applied mathematics, statistics, complex systems). The department offers undergraduate degrees in Mathematics, Statistics, and Data Science (inter-departmental degree), and graduate degrees in Mathematics, Statistics, and Complex Systems & Data Science (inter-departmental degree). We offer over 200 sections of mathematics and statistics courses per academic year, teaching over 26,000 student credit hours spread over more than 5,300 distinct students.

Principal Responsibilities

- Management of department faculty including workload assignment, RPT, grievance and conflict resolution, and annual evaluations
- Preparing and managing budgets
- Fostering excellence in teaching, scholarship and service
- Recruitment of faculty and staff
- Scheduling and leading department faculty meetings
- Oversee management of academic programs
- Teaching

Selected Initiatives

- Departmental Vision
- Creation of inter-departmental degree in Data Science
- Hire diversity candidates for tenure track and lecturer positions
- Increased majors by 14%
- Revision of faculty evaluation guidelines
- Creation of assessment plans for undergraduate and graduate degrees
- Creation of Data Science degree (jointly with Department of Computer Science)
- Exit survey for majors

Director, Statistics Program, Department of Mathematics and Statistics 2009-
University of Vermont

Note: I was interim director from 2009 to 2011.

Principal Responsibilities

- Management of academic programs in statistics and biostatistics (graduate and undergraduate) including course scheduling and curriculum revisions
- Management of program faculty including workload assignment, RPT, grievance and conflict resolution, and annual evaluations
- Fostering excellence in teaching, scholarship and service
- Recruitment of faculty
- Scheduling and leading Statistics Program faculty meetings
- Teaching

Selected Initiatives

- Significant curricular revisions including creation of new courses, course sequences, and certificates
- Creation of university wide group Stats@UVM
- Creation of PhD track in statistics
- Increased minors by a factor of 2.3
- Increased majors by a factor of 4.0
- Revision of degree requirements for major and minor
- Created two Research Assistant Professor positions
- Career night for Statistics undergraduate and graduate students
- STEMbridge program in Statistics

Acting Director, Statistics Program, Department of Mathematics and Statistics
Fall 2004
University of Vermont

ACADEMIC AND PROFESSIONAL POSITIONS

Professor of Statistics 2012-

Associate Professor of Statistics 1999-2013
University of Vermont

Assistant Professor of Statistics 1993-1999
University of Vermont

Senior Statistician 2003-

Vermont Oxford Network

Extended Student 2006-2007
Esalen Institute, Big Sur, California

Statistician 2005-2008
Precision Bioassay INC

Consultant 1989-1990
Research Triangle Institute
Analyzed data from clinical trials in AIDS research

Statistician II 1987-1989
Research Triangle Institute
Responsible for the design, monitoring, and analysis of phase I, II, and III clinical trials in AIDS research

EDUCATION

Ph.D. Statistics 1989-1993
North Carolina State University

M.S. Statistics 1985-1987
University of North Carolina at Chapel Hill

B.S. Mathematics 1985
University of Maryland at College Park

EDITORIAL RESPONSIBILITIES, CONFERENCE AND GROUP ORGANIZATION

- 2020 Invited session organizer for IMS/ASA Spring Research Conference (Covid-19 canceled–Oakland University, Rochester, MI)
- 2019 New England Statistical Symposium, Program Committee (Hartford, CT)
- Organizing Committee for 2018 ASA Statistics and Biostatistics chairs workshop (Alexandria, VA)
- Burlington Data Scientists, CO-Organizer and Co-Founder of group that meets twice a month, 2013 to present. Currently over 750 members
- Organizing Committee for International Conference on Robust Statistics 2012 (Conference held at University of Vermont)
- Associate Editor *Journal of the American Statistical Association* 2008-2011

UNIVERSITY SERVICE

Significant service roles include:

- Graduate Program Coordinator for Statistics/Biostatistics, 2003-2006, 2009-2010, 2017-2022

- Served on numerous doctoral dissertation and masters thesis committees in several areas including Engineering, Natural Resources, Computer Science and Food Science
- Chair, Faculty Search Committee, Statistics Program, 1998, 2005, 2011, 2020, 2021, 2023
- Chair, Department of Civil and Environmental Engineering Chair search, 2017
- Chair, Department of Mechanical Engineering Chair search, 2016, 2024
- Innumerable search committees including Dean search committee, 2013
- Faculty Senator, 2007-2013
- UVM Mindfulness Practice Center Steering Committee, 1998-2013
- Served on many reappointment, promotion, and tenure committees, often in capacity of chair

TEACHING

PhD supervised:

1. Damin Zhu 2023: Estimation in Generalized Estimating Equation measurement error models using instrumental variables/ Estimating the cardinality of latent defective edges in hypergraphs
2. Lucy Greenberg: In process

Teaching load:

- AY94 One course per semester
- AY95-AY98 Two courses per semester
- AY99-AY06– Three courses per semester (7 credits/semester) in two 3 credit lecture courses and one, 1 credit lecture course.
- AY08-AY09 – Two courses per semester (6 credits/semester).
- AY10 to present–one course per semester (administrative load).

Courses taught:

1. Basic Statistical Methods, STAT 141, 1994-2006, 2015
2. Applied Probability, STAT 151, Fall 2002
3. Business Statistics, STAT 183, Spring 2000
4. Statistical Methods I, STAT 211, 2010
5. Statistical Methods II (Experimental Design and Regression Methods), STAT 221, Fall 1998
6. Quality and Productivity, STAT 224, Fall 2011
7. Applied Regression Analysis, STAT 225, Fall 1996-1998

8. Applied Survival Analysis, STAT 229, Spring 1999, 2001,2003,2005
9. Design of Experiments, STAT 231, Spring 1996-2000, 2017
10. Applied Nonparametric Statistics, STAT 237, Fall 2004, 2009
11. Statistical Theory, STAT 241, Spring 2004,2005,2006,2008,2009,2012
12. Probability Theory, STAT 251, Fall 1993, 2012, 2014, 2023, 2024
13. Applied Discrete Stochastic Process Models, STAT 252a, Fall 1994, Spring 1999
14. Applied Continuous Stochastic Process Models, STAT 252b, Fall 1994
15. Statistical Theory, STAT 261, Spring 1994, 2013, 2015
16. Statistics Practicum, STAT 281, multiple semesters
17. Seminar in Experimental Design and Regression Methods, STAT 321, Spring 1994-Fall 1998
18. Applied Biostatistics, STAT 308, Fall 1999, 2000,2004,2005,2007-2010
19. Seminar on Multivariate Models, STAT 323, Fall 1997-2003
20. Seminar on Applied Regression, STAT 325, Fall 1999
21. Seminar on Survival Analysis, STAT 329, Spring 1999
22. Bayesian Inference, STAT 330, Spring 2009, 2013, 2016-2020
23. Theory of Linear Models, STAT 360, Spring 2010,2018-2020
24. Seminar in Statistics and Biostatistics, STAT 380, Fall 2003, Spring 2004
25. Statistics Practicum graduate level, STAT 381, multiple semesters
26. Seminar in Meta-analysis, STAT 395, Fall 2000
27. Consulting Practicum graduate level, STAT 385, 2004-2008
28. Regression Methods, STAT 395, 2000
29. Seminar in Statistics and Biostatistics, STAT 395, 2002
30. Large Sample Theory, STAT 395, 2019, 2020
31. Statistics and Data Science Capstone course, 2024, 2025

PEER-REVIEWED JOURNAL PAPERS [metrics]

Nansi S. Boghossian, PhD;a Joshua Radack, MS;b Molly Passarella, MS;b Ciaran S. Phibbs, PhD;c,d Lucy T. Greenberg, MS;e Jeffrey S. Buzas, PhD;f George R. Saade, MD;g Jeannette Rogowski, PhD;e Scott A. Lorch MD, "Maternal Vulnerability and Severe Maternal Morbidity ", *submitted* , (2024).

Jeannette A. Rogowski, PhD; Lucy Greenberg, MS; Erika M. Edwards, PhD, MPH; Danielle E.Y. Ehret, MD, MPH; Jeffrey S. Buzas, PhD; Jeffrey D. Horbar, MD, "Health System Variation in Mortality and Length of Stay for Very Preterm Infants ", *submitted* , (2024).

Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Racial Inequality in the Delivery Hospital ", *submitted* , (2024).

Mandar M. Dewoolkar, Kate D. Johnson, John E. Lens, Jeffrey S. Buzas, Courtney D. Giles, and Priyantha Wijesinghe, "Analysis of student reflections from engineering capstone courses to evaluate service-learning experiences and their effectiveness ", *submitted* , (2024).

Nansi Boghossian, Lucy Greenberg; Jeffrey Buzas; Ciaran Phibbs; Molly Passarella; Jeannette Rogowski; Scott Lorch, "The Relationship between Various Measures of Perinatal Quality", *Submitted, American Journal of Perinatology,* , (2024).

Samuel H. Nyarko, PhD; Lucy T. Greenberg, MS; Ciaran S. Phibbs, PhD; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD; Jeannette Rogowski, PhD; George R. Saade, MD; Molly Passarella, MS; Nansi S. Boghossian, PhD, "Contribution of maternal age to increasing SMM during delivery and 1-year postpartum ", *Submitted* , (2024).

Samuel H. Nyarko, PhD; Lucy T. Greenberg, MS; Ciaran S. Phibbs, PhD; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD; Jeannette Rogowski, PhD;h George R. Saade, MD; Molly Passarella, MS; Nansi S. Boghossian, PhD, "Association between iron deficiency anemia and severe maternal morbidity: A retrospective cohort study ", *Annals of Epidemiology* **10**, 10-15 (2024).

Hannah Lacasse, Jeff Buzas, Jane Kolodinsky, Tyler Mark, Rebecca Hill, Will Snell , "Hemp food motivations: The role of food/diet preference, health conditions, and socio-demographic characteristics on hemp food purchases ", *Submitted* , (2024).

Samuel Nyarko, Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Association between maternity care deserts and severe maternal morbidity ", *Submitted* , (2024).

Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Racial and Ethnic Disparities in Severe Maternal Morbidity from Pregnancy through 1-year Postpartum ", *American Journal of Obstetrics & Gynecology Maternal-Fetal Medicine* **6**, 101412 (2024).

Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Severe Maternal Morbidity from Pregnancy through 1-year Postpartum ", *To appear, American Journal of Obstetrics & Gynecology Maternal-Fetal Medicine* , (2024).

Hannah Lacasse, Jeff Buzas, Jane Kolodinsky, Tyler Mark, Rebecca Hill, Will Snell , "Determinants of behavior towards hemp-based products: An application of the theory of planned behavior ", *British Food Journal* **126**, 394-414 (2024).

Horbar, J.D., Greenberg, Buzas, J.S., Ehret, D., Soll, R., Edwards, E.M. , "Trends in Mortality and Morbidities for Infants Born 24 to 28 Weeks in the U.S.: 1997 to 2021 ", *Pediatrics* , https://doi.org/10.1542/peds.2023-064153 (2024).

Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Association between stillbirth and severe maternal morbidity", *American Journal of Obstetrics & Gynecology* , DOI:https://doi.org/10.1016/j.ajog.2023.08.029 (2023).

Nansi S. Boghossian, PhD; Lucy T. Greenberg, MS; George R. Saade, MD; Jeannette Rogowski, PhD; Ciaran S. Phibbs, PhD; Molly Passarella, MS; Jeffrey S. Buzas, PhD; Scott A. Lorch, MD, "Association of Sickle Cell Disease With Racial Disparities and Severe Maternal Morbidities in Black Individuals", *JAMA Pediatrics* , JAMA Pediatr. doi:10.1001/jamapediatrics.2023.1580 (2023).

Kolodinsky, J., Buzas, J.S., Rose, N., Zheng, Y., "Neither, either, or both? Who sees GM and non-GM food labels?", *Journal of the Agricultural and Applied Economics Association* , https://onlinelibrary.wiley.com/doi/10.1002/jaa2.32 (2022).

Buzas, J.S., and Warrington, G.S., "Simulated Packing and Cracking", *Election Law Journal* , https://doi.org/10.1089/elj.2020.0673 (2021).

Hayek, L., Buzas, M.A., Buzas-Stephens, P., Buzas, J.S., " On replicates for comparing species densities in space and time", *Journal of Foraminiferal Research* **51**, 92-97 (2021).

Hanley, J.P., Rizzo, D.M. , Buzas, J.S., and Eppstein, M.J., "A Tandem Evolutionary Algorithm for Identifying Optimal Association Rules from Complex Data", *Evolutionary Computation* **28**, 87-114 (2020).

Rysavy, M.A., Horbar, J.D., Bell, E.F., Lei, L., Greenberg, L.T, Tyson, J.E., Patel, R. M., Carlo, W.E. Younge, N., Green, C.,Edwards, E.M., Buzas, J.S., Das, A.,Higgins, R.D., "Assessment of an Updated Neonatal Research Network Extremely Preterm Birth Outcome Model in the Vermont Oxford Network", *JAMA Pediatrics* **174(5):e196294.**, doi:10.1001/jamapediatrics.2019.6294 (2020).

Kong, X., Ho, A.,Munoz, B., West, S., Strauss, R., Jha, A., Ervin, A.M.,Buzas, J.,Singh, M., Cheetham, J., Ip, M., Scholl, H.,, "Reproducibility of measurements of retinal structural parameters using optical coherence tomography in Stargardt disease", *TVST* **8**, 3 (2019).

Osler, T., Glance, L., Buzas, J., Hosmer, D., "Injury scoring: Then, Now, and into the 21st Century", *Injury* **50**, 2-3 (2019) **Editorial**.

Osler, T., Glance, L., Cook, A., Buzas, J., Hosmer, D., "A Trauma Mortality Prediction Model Based on the ICD-10-CM Lexicon: TMPM-ICD10", *Journal of Trauma Acute Care Surgery* **doi: 10.1097/TA.0000000000002194**, (2019).

Osler, T., Yuan, D., Holden, J., Huang, Z., Cook, A., Glance, L., Buzas, J., Hosmer, D., "Variation in Readmission Rates Among Hospitals Following Admission for Traumatic Injury", *Injury* **50**, 173-177 (2019).

Ehret, D.Y., Greenberg, L., Edwards,E., Bernstein, I., Buzas, J.S., Soll, R., Horbar, J., "Association of Antenatal Steroids and Survival Among Infants Born 22 to 25 weeks Gestation", *JAMA Network Open* **1(6):e183235. doi:10.1001/jamanetworkopen.2018.3235**, (October 12, 2018).

Horbar, J.D., Edwards, E., Greenberg, G., Morrow, K. A., Soll, R., Buus-Frank, M., Buzas, J. S., "Variation in Performance of Neonatal Intensive Care Units in the United States", *JAMA Pediatrics* **171**, e164396-e164396 (2017) **With editorial comment**.

Osler, T., Glance L., Cook A., Buzas, J. S. ,Hosmer, D., "The Differential Association of Glasgow Coma Score with Mortality in Patients With and Without Head Injury", *Injury* **47**, 1879-1885 (2016) **With editorial comment**.

Manukyan, N., Eppstein, M.J. and Buzas, J.S., "Tunably Rugged Landscapes With Known Maximum and Minimum", *IEEE Transactions on Evolutionary Computation* **20**, 263-274 (2016).

Horbar, J.D., Ehrenkranz, R.A., Badger, G., Edwards, E., Morrow, K. A., Soll, R., Buzas, J. S., Bertino, E., Gagliardi, L., and Bellu, R., "Weight Growth Velocity and Postnatal Growth Failure in Infants 501 to 1500 grams: 2000 to 2013", *Pediatrics* **136**, 2015-0129 (2015).

Osler, T., Glance L., Li, Wenjun, Buzas, J. S. ,Hosmer, D., "Survival Rates in Trauma Patients Following Health Care Reform in Massachusetts", *JAMA Surgery* **150**, 609-615 (2015) **With invited commentary**.

Osler, Turner MD, MSc; Glance, Laurent G. MD; Li, Wenjun PhD; Buzas, Jeffery S. PhD; Wetzel, Megan L. MSc; Hosmer, David W. PhD, "Trauma care does not discriminate: The association of race and health insurance with mortality following traumatic injury", *Journal of Trauma and Acute Care Surgery* **78**, 1026-1033 (2015).

Buzas, J. S., and Dinitz, J., "An analysis of *NK* landscapes: Interaction structure, statistical properties and expected number of local optima", *IEEE Transactions on Evolutionary Computation* **18**, 807-818 (2014).

Soll, R., Edwards, E., Badger, G., Kenny, M., Morrow, K. A., Carpenter J., Buzas, J. S.,Horbar, J.D., "Obstetric and Neonatal Care Practices for Infants 501 to 1500g from 2000 to 2009", *Pediatrics* **132**, 222-228 (2013).

Eppstein, M., Horbar, J.D. Buzas, J. S., and Kauffman, S., "Searching the clinical fitness landscape", *PloS one* **7**, e49901 (2012).

Horbar, J.D., Carpenter J., Badger, G., Kenny, M., Morrow, K. A., Soll, R., Buzas, J. S., "Mortality and Neonatal Morbidity Among Infants 501 to 1500 Grams From 2000 to 2009", *Pediatrics* **129**, 1019-1026 (2012).

Correa de Sa, D.D., Thompson, N., Stinnett-Donnelly, J., Znojkiewicz, P., Habel, N., Mueller, J.G. Bates, J.H.T., Buzas, J. S., Spector, P.S., "Electrogram Fractionation: The Relationship between Spatio-Temporal Variation of Tissue Excitation and Electrode Spatial Resolution", *Circulation: Arrhythmia and Electrophysiology* **4**, 909-916 (2011).

Buzas, J. S., Wager, C. and Lansky, D., "Split-plot designs for robotic serial dilution assays", *Biometrics* **67**, 1189-1196 (2011).

Long, R.A., T.M. Donovan, P. MacKay, W.J. Zielinski, and J.S. Buzas, "Predicating carnivore occurrence with data collected via multiple, noninvasive methods", *Landscape Ecology* **26**, 327-340 (2011).

Buzas, J. S., "A Note on Corrected Scores for Logistic Regression", *Statistics and Probability Letters* **79**, 2351-2358 (2009).

Osler, T., Glance L., Buzas, J. S., Mukamel, D., Wagner, J., Dick, A., "A Trauma Mortality Prediction Model Based on the Anatomic Injury Scale", *Annals of Surgery* **247**, 1041-1048 (2008).

Long, R.A., T.M. Donovan, P. MacKay, W.J. Zielinski, and J.S. Buzas, "Effectiveness of scat detector dogs for detecting forest carnivores", *Journal of wildlife management* **71**, 2007-2017 (2007).

Long, R.A., T.M. Donovan, P. MacKay, W.J. Zielinski, and J.S. Buzas, "Comparing the effectiveness of scat detector dogs, remote cameras, and hair snares for surveying carnivores", *Journal of wildlife management* **71**, 2018-2025 (2007).

Kannoth, V., Lee, B. S., Buzas, J. S., "Statistical cost modelling of financial time series functions", *International Journal of Computers and Applications* **28**, 181-188 (2006).

Donovan, T., Buzas, J. S., Jones, P., Gibbs, H. L., "Tracking Dispersal in Birds: Assessing the potential of elemental markers", *The Auk* **124**, 500-511 (2006).

Horbar, J.D., Carpenter J., Buzas, J. S., Soll, R. F., Suresh, G., Bracken, M. B., Leviton, L. L., Plsek, P. E., Sinclair, J. C., "Collaborative quality improvement to promote evidence based surfactant for preterm infants: a cluster randomized trial", *British Medical Journal* **329**, 1004 (2004).

Horbar, J.D., Carpenter J., Buzas, J. S., Soll, R. F., Suresh, G., Bracken, M. B., Leviton, L. L., Plsek, P. E., Sinclair, J. C., "Timing of Initial Surfactant Treatment for Infants 23 to 29 Weeks Gestation: Is routine practice evidence based?", *Pediatrics* **113**, 1593-1602 (2004).

Lee, B. S., Chen, L., Buzas, J. S. , and Kannoth V., "Regression-Based Self-Tuning Modeling of Smooth User-Defined Function Costs for an Object-Relational Database Management System Query Optimizer", *The Computer Journal* **47**, 673-693 (2004).

Tosteson T., Buzas, J.S. and Demidenko E., "Effect of regressor forecast error on the variance of regression forecasts", *Statistics in Medicine* **22**, 1069-1082 (2003).

Tashman, L. J., Bakken, T., and Buzas, J. S., "Exact asymptotic sample size calculations for generalized regression models with covariate measurement error", *Journal of Forecasting* **19**, 587-600 (2000).

Knuiman, M. W., Divitini, M. L., Buzas, J. S., and FitzGerald, P.E.B., "Adjustment for regression dilution in epidemiological regression analyses", *Annals of Epidemiology* **8**, 56-63 (1998).

Buzas J. S., "Unbiased scores in proportional hazards regression with covariate measurement error", *Journal of Statistical Planning and Inference* **67**, 247-257 (1998).

Buzas J. S., "Instrumental variable estimation in nonlinear measurement error models", *Communications in Statistics,Theory and Methods* **26**, 2861-2877 (1997).

Buzas J. S., "Fast estimators of the jackknife", *The American Statistician* **51**, 235-240 (1997).

Buzas J. S. and Stefanski L. A., "A note on corrected-score estimation", *Statistics and Probability Letters* **28**, 1-8 (1996).

Buzas J. S. and Stefanski L. A., "Instrumental Variable Estimation in Generalized Linear Measurement Error Models", *Journal of the American Statistical Association* **91**, 999-1006 (1996).

Buzas J. S. and Stefanski L. A., "Instrumental variable estimation in probit measurement error models", *Journal of Statistical Planning and Inference* **55**, 47-62 (1996).

Dywer, G. S., Cronin, T. M., Baker, P. A., Raymo, M. E., Buzas, J. S., and Correge, T., "North Atlantic Deep-Water Temperature Change During Late Pliocene and Late Quaternary Climatic Cycles: New Insight From Ostracode Shell Chemistry", *Science* **270**, 1347-1351 (1995).

Stefanski L. A. and Buzas J. S., "Instrumental variable estimation in binary measurement error models", *Journal of the American Statistical Association* **90**, 541-550 (1995).

Mildvan D., Buzas J. S. et. al., "An open label dose ranging trial of AL721 in patients with PGL or ARC", *Journal of Acquired Immune Deficiency Syndromes* **4**, 945-951 (1991).

REFEREED CONFERENCE PAPERS

Kolodinsky, Jane, Hannah Lacasse, Jeff Buzas, Tyler Mark, Rebecca Hill, Will Snell, Heather Darby, Jonathan Shepherd, Yuqing Zheng, " Consumer trust in information about CBD and hemp food products (ABST).", *Proceedings of the International Food Marketing Research Symposium 2024, Tromso, Norway,* , pp 114-119. (2024).

Manukyan, N., Eppstein, M.J., Buzas, J.S., "NM Landscapes: Beyond NK", *Proceedings Companion of the 2014 Genetic and Evolutionary Computation Conference (GECCO)* , pp. 203-204 (2014).

Hanley, J.P., Eppstein, M.J., Buzas, J.S., and Rizzo, D.M., "Analyzing the Multivariate Interactions of the Physical, Chemical, and Biological Variables that Characterize Stream Health Using a Genetic Algorithm", *full paper to GECCO* , (2016) **Nominated for Best paper award**.

INVITED BOOK CHAPTERS

- Jane Kolodinsky, Hannah Lacasse, Tyler Mark, Jeff Buzas, Rebecca Hill, Heather Darby, William Snell Understanding and improving consumer attitudes to hemp production, (2024) Burleigh Dodds Science Publishing. Forthcoming.
- Buzas, J. S., Stefanski, L.A., Tosteson, T.D."Measurement Error", Handbook of Epidemiology 3rd Edition (Springer-Verlag 2025). Editors W. Ahrens and I. Pigeot. April, 2025.

- Buzas, J. S."Covariate measurement error in survival data", pages 321-342, CRC Handbook of Measurement Error Models (CRC Press 2021). Editors Grace Y. Yi, Aurore Delaigle, Paul Gustafson.
- Yi, G. and Buzas, J. S. "Measurement Error Models - A Brief Account of Past Developments and Modern Advancements", pages 3-36, CRC Handbook of Measurement Error Models (CRC Press 2021). Editors Grace Y. Yi, Aurore Delaigle, Paul Gustafson.
- Buzas, J. S., Stefanski, L.A., Tosteson, T.D."Measurement Error", pages 1241-1282, Handbook of Epidemiology 2nd Edition (Springer-Verlag 2014). Editors W. Ahrens and I. Pigeot.
- Buzas, J. S., Stefanski, L.A., Tosteson, T.D."Measurement Error", pages 729-765, Handbook of Epidemiology (Springer-Verlag 2005). Editors W. Ahrens and I. Pigeot.

BOOK REVIEWS

"Measurement Error in Nonlinear Models," by Carroll, Ruppert and Stefanski. *Journal of the American Statistical Association*, 92, 385-386 (1997).

"Measurement Error and Misclassification in Statistics and Epidemiology: Impacts and Bayesian Adjustments," by P Gustafson. *Biometrics*, 62, 307-308 (2006).

RECENT RESEARCH FUNDING

- UVM Principal Investigator– R01 sub-award: "Impact of 12-month Postpartum Insurance Extensions on Maternal and Newborn Health", "Funding Agency: NIH", Status:Under review. Duration: 2025-2030 .
- UVM Principal Investigator "Post-Dobbs Abortion Restrictions: Effects on Maternal and Infant Health and Racial and Ethnic Disparities in the U.S", "Funding Agency: Society of Family Planning", Status:Under review. Duration: January 2025- December, 2025 .
- UVM Principal Investigator– R01 sub-award: "The Role of Postpartum Insurance Coverage on Healthcare Utilization, Treatment, and Outcomes One Year Later", "Funding Agency: NIH", Status:Under review. Duration: 2025-2030 .
- UVM Co-Principal Investigator– R01 sub-award: "Public Policies to Optimize Outcomes of Premature Infants.", "Funding Agency: NIH", Status: Scored highly, awaiting funding letter. Duration: 2024-2029 .
- UVM Co-Investigator: Investigating market opportunities for novel hemp based products.", "Funding Agency: USDA-NIFA-AFRI", Status: Funded. Duration: 2023-2027 .
- UVM Principal Investigator– R01 sub-award: Hospital quality, Medicaid expansion and racial/ethnic disparities in maternal mortality and morbidity, "Funding Agency: NIH", Status: Awarded. Duration: 2021-2024 .
- Co- Principal Investigator– UVM Catalyst Award: Estimating Consumer Demand Segments for Hemp Based Products: From Vermont to the U.S., "Status: Awarded. Duration 2021-2022",

  .
- Principal Investigator: Statistical Support for the Vermont Oxford Network, "Funding agency: Vermont Oxford Network", Total annual direct costs:≈$200,000 Duration: 9/2011-12/2021 .

REVIEWER FOR

Including but not limited to:

Journal of the American Statistical Association, Technometrics, Annals of Statistics, Biometrika, Journal of the Royal Statistical Society, Biostatistics, Biometrics, International Statistical Review, The American Statistician, Journal of Educational and Behavioral Statistics, Journal of Statistical Planning and Inference, Statistics and Probability Letters, Communications in Statistics, Scandinavian Journal of Statistics, Canadian Journal of Fisheries and Aquatic Sciences, Journal of Econometrics, Journal of Paleobiology, American Journal of Epidemiology, Journal of Statistical Computation and Simulation, Journal of Multivariate Analysis, Statistica Sinica, Statistics in Medicine, Stat, Pediatrics

PROFESSIONAL DEVELOPMENT

Statistics Short Courses

1. Mixed Models, Summer 2000.
2. Cluster Randomized trials, Spring 2001.
3. Hierarchical Models in Health Services and Outcomes Research, Spring 2002.
4. Model Selection and Multimodel Inference, November 2004.
5. Bayesian Inference using WinBUGS, Spring 2009.
6. Comparative Effectiveness Research, Spring 2010.
7. Enhancing Big Data Projects Through Statistical Engineering , Spring 2014.
8. Nonparametric Regression , Summer 2016.
9. Machine Learning, Spring 2019.

Administration

1. Academic Chairs Conference, February 2015
2. Statistics Chairs meeting at Joint Statistical Meetings, August 2015
3. Academic Chairs Conference, February 2016
4. Statistics and Biostatistics Chairs conference (NSF supported), July 2016
5. Statistics Chairs meeting at Joint Statistical Meetings, August 2016
6. Mathematics Chairs and NSF meeting at Joint Mathematics Meetings, January 2017
7. Statistics Chairs meeting at Joint Statistical Meetings, August 2017
8. Statistics and Biostatistics Chairs conference, June 2018

RECENT PRESENTATIONS AND COLLOQUIA

1. Buzas, J.S., (2024), University of New Hampshire, Department of Mathematics and Statistics seminar
2. Buzas, J.S., (2022), Detroit ASA Chapter.
3. Buzas, J.S., (2022), Invited talk at Emerging Challenges for Statistics and Data Sciences: Complex Data with Missingness, Measurement Errors, and High Dimensionality (Banff International Research Station for Mathematical Innovation and Discovery, Canada)
4. Buzas, J.S., (2020), IMS/ASA Spring Research Conference (Covid canceled–Oakland University, Rochester, MI)
5. Buzas, J.S., (2020), Ohio State University, Department of Biostatistics Seminar, Columbus, OH
6. Buzas, J.S., (2019), CFE-CMStatistics, 12th International Conference on Computational and Methodological Statistics, Special Invited Talk, London, UK
7. Buzas, J.S., (2019), Covariate measurement error models, past developments and modern advancements; Joint Statistical Meetings, 2019, Invited talk, Denver, CO
8. Buzas, J.S., (2018), Panelist: So you think you want to be a chair? Joint Statistical Meetings, 2018 Panel Discussion, Vancouver, Canada
9. Buzas, J.S., (2018), Panelist and Moderator: Educational Challenges and Opportunities in a Data Science Era, 2018 ASA Statistics and Biostatistics Department Chairs Meeting, Alexandria, VA

PROFESSIONAL MEMBERSHIPS

- American Statistical Association
- International Biometric Society