



Jeffrey S. Buzas

Innovation Hall

Department of Mathematics and Statistics

University of Vermont, Burlington

(802) 656-2971

Jeff.Buzas@uvm.edu

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

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

Signi cant 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
-

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.

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

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 Kaufman, 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., Znojkwicz, 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**

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 Je84(J.)5ed

- Buzas, J. S. "Covariate measurement error in survival data", pages 321-342, CRC Handbook of Mea-

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 WinBUVal(Mixed)-333(333(Wi0 468 2.925 Td [(5.)TJo-27(del)- -14soaaFPi33(Mo)]TJo-27(d
- 5.

