SAMANTHA 'SAM' C. BATES PRINS

EDUCATION

Ph.D. Statistics (2001)	University of Washington, Seattle, WA.
M.S. Statistics (1998)	University of Washington, Seattle, WA.
B.Sc. First Class Honors, Statistics (1996)	University of Auckland, Auckland, New Zealand.

PROFESSIONAL EXPERIENCE

05/2022-Pres.	Dean of College of Science and Mathematics, JMU.
08/2020-04/2022	Interim Dean of College of Science and Mathematics, JMU.
01/2020-07/2020	Associate Dean of College of Science and Mathematics, JMU.
07/2017-2019	Interim Head of Department of Biology, JMU.
2016-Pres.	Professor, Department of Mathematics & Statistics, JMU.
2016-Pres.	Graduate Faculty, JMU.
2015-07/2017	Assistant Department Head, Department of Mathematics & Statistics, JMU.
2010-2014	Faculty Associate, Center for Faculty Innovation, JMU.
2010-2016	Associate Professor, Department of Mathematics & Statistics, JMU.
2006-2010	Assistant Professor, Department of Mathematics & Statistics, JMU.
2001-2006	Assistant Professor, Department of Statistics, Virginia Tech.
1997-2001	Research Assistant, Department of Statistics, University of Washington.
2000	Instructor, "Statistics for Engineers," University of Washington.
1999-2000	Lead Teaching Assistant, Department of Statistics, University of Washington.
1996-1997	Teaching Assistant, Department of Statistics, University of Washington.
1996	Junior Lecturer, Department of Statistics, University of Auckland.

SELECTED PROFESSIONAL ACTIVITIES

2022-Pres.	Co-chair Joint Faculty Senate/Provost Attendance Policy Task Force.
2021-2022	Co-chair Provost's Professional and Cultural Names Task Force.
2021-Pres.	Member JMU Quality Enhancement Plan Working Group on "Early Alerts: Improving Retention and Closing the Equity Gap".
2020-Pres.	Member Science and Public Health Advisory Team, JMU.
2020-2022	Member, Classroom Configurations and Scheduling Working Group, JMU.
2017-2021	Chair, Provost's Honors and Awards Committee, JMU.
2020-2021.	Member, Campus Technology Response Team, JMU.
2012-13, 2014-15	Member, Personnel Committee, Department of Mathematics & Statistics, JMU.
2014-2017	Member & Chair, Assessment Committee, Department of Mathematics & Statistics, JMU.
2013-2017	Advisor for Statistics Minor Option 2, Department of Mathematics & Statistics, JMU.
2006-2017	Director, Statistical Consulting Center, Department of Mathematics & Statistics, JMU.
2012	Member, Student Evaluation of Teaching Taskforce, JMU.
2012	Member, American Statistical Association's Panel on Future Directions of ASA Journals.
2010-2014	Chair, Recruitment & Activities Committee, Department of Mathematics & Statistics, JMU.
2010	Member, Geospatial Technologies Taskforce (2/10-5/10), JMU.
2009	Member, American Statistical Association's Publications Workgroup.
2008-2012	Member, JMU Employee Advisory Committee.
2008-2012	Classification Society Distinguished Dissertation Award Evaluation Committee Chair, Classification Society.
2007-2012	Director (Elected), Classification Society.
2006-2007	President, Statistics Section, Virginia Academy of Sciences.

2001-Pres. Reviewer for Environmental Monitoring & Assessment, The American Statistician, Journal of Classification, Journal of Classification and Simulation, Journal of Computational and Graphical Statistics, Journal of Statistical Computation, Journal of Statistics Education, Journal of Microbiology and Biology Education, Nature Communications, and the National Science Foundation.

COURSES AND MENTORING AT JMU

Summer REU mentorship: NSF REU 2017 with Dr. Eva Strawbridge (4), REU 2015 (1), NSF REU 2009 (2), REU 2008.

MATH 626E: Biological Statistics (Graduate Course)
MATH 485/428: Statistical Consulting (1-3CR)
MATH 427: Probability & Mathematical Statistics II
MATH 322: Applied Linear Regression
MATH 318: Introduction to Probability & Statistics
MATH 220: Elementary Statistics
MATH 499: Senior Honors Project (2 different projects)
MATH 429: Research Project in Statistics (5 different projects)
MATH 426: Probability & Mathematical Statistics I
MATH 321: Analysis of Variance & Experimental Design
MATH 280/309: SAS Programming and Data Management

RESEARCH/SCHOLARSHIP INTERESTS

Leadership, learner-centered instruction, active learning, faculty development, scholarship of teaching and learning, Bayesian methods, importance sampling, deterministic models, clustering, nearest neighbor methods, ecological assessment.

GRANTS FUNDED

U.S. EPA STAR grant: "Model-Based Clustering for Classifications of Aquatic Systems and Diagnosis of Ecological Stress." Co-PI with E. P. Smith, S. Mostaghimi, G. Yagow, K. Brannen, and D. Orth. Project period 12/1/2003-11/30/2006. Amount Funded: $843,771.

U.S. EPA P3 Phase 1 grant:"Promoting Sustainability on Campuses: A College Student Run, Electric-Assisted Bicycle Competition for High Schools." Co-PI with R. J. Prins. Project period 8/2008-8/2009. Submitted December 2007. Amount Funded: $10,000.

Department of Nursing Faculty Development Scholarship Grant 2013-2014: "Pediatric Respite Care Program: Evaluation of Student Learning Outcomes in a Child Health Clinical. Co-PI with: M. Leisen (Nursing), J. Strunk (Nursing), D. Gleason (Nursing), N. Puffenbarger (Nursing). Project period: Spring 2014. Amount funded: $1,000.

CSM Summer Teaching Grant 2014:"Case Studies in Statistics: Connecting the Disciplines." PI. Project period summer 2014. Amount Funded: $4,000.

4VA Course Redesign Initiative Subgrant 2015: "Quantifying The Extent To Which Active Learning Strategies Are Used In Higher Education". PI with P. Ludwig (Biology). Project period 2015-2016. Amount Funded: $14,000.

PUBLICATIONS IN REFEREED JOURNALS

Undergraduate student author underlined; graduate student author denoted *.

- Ludwig, P. M. and Bates Prins, S. C. (2019). A validated novel tool for capturing faculty-student joint bheaivors with the COPUS instrument. *Journal of Microbiology and Biology Education*, 20(3).
- Granered, N. and Bates Prins, S. C. (2016). Identifying outlying observations in regression trees. *Missouri Journal of Mathematical Sciences*, 28(1):76-87.
- Hurney, C.A., Harris, N.L., Bates Prins, S.C.,and Kruck, S.E.(2014).The impact of a learner-centered,mid-semester course evaluation (SGID) on students. *Journal of Faculty Development,* 28(3):55-62.
- Frazee, A. C., Hathcock, M. A., and Bates Prins, S. C. (2010). Distance functions and attribute weighting in a k-nearest neighbors classifier with an ecological application. *Electronic Proceedings of Undergraduate Mathematics Day at the University of Dayton*, 4(3):1-13.
- Bates Prins, S. C. (2009). Student-centered instruction in a theoretical statistics course. *Journal of Statistics Education*, 17(3).
- Zhang*, H., Thieling, T., Bates Prins, S. C., Hudy, M., and Smith, E. P. (2008). Model-based clustering in a brook trout classification study within the eastern United States. *Transactions of the American Fisheries Society*, 137(3):841-851.

- Bates Prins, S. C. and Smith, E. P. (2007). Using biological metrics to score and evaluate sites: A nearest-neighbour reference condition approach. *Freshwater Biology*, 52(1):98-111.
- Prins, R. J., Kasarda, M. E. F., and Bates Prins, S. C. (2007). A system identification technique using bias current perturbation for determining the effective rotor origin of active magnetic bearings. *Journal of Vibration and Acoustics*, 129(3):317-322.
- Bates, S. C., Cullen, A., and Raftery, A. E. (2003). Bayesian uncertainty assessment in multicompartment deterministic simulation models for environmental risk assessment. *Environmetrics*, 14(4):355-371.

INVITED OR PEER-REVIEWED PRESENTATIONS OR POSTERS

Items are oral presentations unless otherwise indicated. All authors presented unless otherwise indicated.

11/2015 "Methodological Considerations in Conducting EEG Research Using Low-Cost EEG Devices". Peer-reviewed presentation for the 2015 AECT International Convention in Indianapolis, IN. Authors: Ingram, R.E., Estes, M.D., and Bates Prins, S.C. Peer-reviewed presentation.

07/2015 "Using the Readiness Assurance Process and Metacognition in an Operating Systems Course". Peer-reviewed presentation for 20th Annual Conference on Innovation and Technology in Computer Science Education, Vilnius, Lithuania. Authors: Kirkpatrick, M.S. (speaker), and Bates Prins, S.C. Peer-reviewed presentation.

01/2015 "Factors In University Students' And Employees' Decisions About Bicycling As A Mode Of Transportation." Peer-reviewed poster at Transportation Research Board 2015 Annual Meeting, Washington, DC. Authors: Bates Prins, S.C., Barrella, E.M. (speaker), Brodrick Hartman, C-J., Baller, S.L., and Polacek, G.N.L.J. Peer-reviewed presentation.

10/2011 "Supporting Scholarship through Collaborative Campus Initiatives." Peer-reviewed oral presentation at 2011 Professional and Organizational Development (POD), Atlanta, GA. Authors: Meixner, C. (speaker) and Bates Prins, S.C. Peer-reviewed presentation.

11/2010 "Encouraging Adaptation: A Continuum of Team Based Learning." Peer-reviewed oral presentation at 2010 Professional and Organizational Development (POD), St. Louis, MO. Authors: Bates Prins, S.C., Broscheid, A. and Varga, K. Peer-reviewed presentation.

11/2010 "Supporting Scholarship: A Multitude of Gateways for Faculty Development Centers." Peer-reviewed poster session at 2010 Professional and Organizational Development (POD), St. Louis, MO. Authors: Meixner, C.M. (speaker), Eck, B. and Bates Prins, S.C.

08/2007 "Searching for Ecological Environmental Relationships." Invited oral presentation at Joint Statistical Meetings, Salt Lake City, UT.

05/2007 "Bayesian Uncertainty Assessment for Multicompartment Deterministic Simulation Models." Invited oral presentation at SAMSI 2006 Program on Development, Assessment and Utilization of Complex Computer Models Transition Workshop, Raleigh, NC.

06/2005 "Scaling by Reference Conditions for Ecological Assessment." Invited oral presentation at Interface/CSNA Meeting, St. Louis, MO.

11/2004 "Bayesian Uncertainty Assessment for Multicompartment Deterministic Simulation Models." Invited oral presentation at ISDS Seminar Series, Duke University, NC.

08/2000 "Assessing Deterministic Environmental Exposure Models." Invited oral presentation at Joint Statistical Meetings, Indianapolis, IN.

04/2000 "Bayesian Assessment of Uncertainty in Deterministic Environmental Exposure Models." Invited oral presentation at Annual Interface Meeting, New Orleans, LA.

POSTERS AND PRESENTATIONS BY STUDENTS AT JMU

Undergraduate students underlined, graduate students italicized

10/2017 Keifer, P., Ling, S., Nivitanont, J., McKeen, L., Bates Prins, S.C., and Strawbridge, E. "Quantifying Uncertainty in a Model of Visceral Leishmaniasis in Malta." Council on Undergraduate Research Experiences for Undergraduates (REU) Symposium, Alexandria, VA.

Spr. 2015 Granered, N. "Outlier Detection in Regression Trees." Department of Mathematics & Statistics Colloquia, JMU, Harrisonburg, VA.

Spr. 2012 Zirkle, K.W. "Predicting Water Quality in the Shenandoah Valley." Department of Mathematics & Statistics Colloquia, JMU, Harrisonburg, VA.

11/2009 Frazee, A.C. and Hathcock, M.A. "Distance Functions and Attribute Weighting in a k-Nearest Neighbors Classifier with an Ecological Application." University of Dayton Undergraduate Mathematics Day, Dayton, OH.

04/2009 Beckom, M. "A Survey to Determine the Potential Use and Desired Features of an Electric-Assisted Bicycle." Department of Mathematics & Statistics Colloquia, JMU, Harrisonburg, VA.

04/2009 Beckom, M., Crisman, P., Dick, B., Giller-Leinwohl, A., Haling, L., Loflin, R., Loizou, L., Long, A., Reiser, P. and Sweet, S. "Promoting Sustainability on Campuses: A College Student Run, Electric-Assisted Bicycle Competition for High Schools." Fifth Annual National Sustainable Design Expo, April 18-20, National Mall, Washington, DC.

10/2008 Beckom, M. and Spencer, M. "Nearest neighbor distance measures for mixed variables in an ecological setting." Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS), Harrisonburg, VA.

SELECTED WORKSHOP DEVELOPMENT AND FACILITATION

- "Understanding Statistics in Research Articles."
- "Interpreting Results from Student Evaluations of Teaching."
- "jmUDESIGN-STEM Summer Institute."
- "Modifying Team-Based Learning for Your Course."
- "Analyzing and Understanding Survey Data."
- "The Ins & Outs of Team Learning."
- "Pedagogy Speed Dating."
- "End of Course Ratings: What Do They Mean and What Can We Learn From Them?"
- "Team-Based Learning Lockdown."
- "Can Your Students POGIL? (Lockdown Version)"
- "Let's Assess. . . Student Learning in the Learner-Centered Classroom?"