

HOWARD D. BONDELL
Head of School and Professor of Statistical Data Science
Co-Director | Melbourne Centre for Data Science
School of Mathematics and Statistics | University of Melbourne

Office: Peter Hall Building Room G33
University of Melbourne, VIC 3010

Email: howard.bondell@unimelb.edu.au
Phone: (03) 8344 0169

- Education* **Rutgers University, Piscataway, NJ, USA**
Ph.D., Statistics, 2005.
Dissertation Title: *Robust Logistic Regression via the Case-Control Formulation.*
Advisor: *David E. Tyler*
- M.S.**, Statistics, 2002.
 B.A., Mathematics, 1998.
- Research Interests* Model selection, robust estimation, regularization, Bayesian methods, and all aspects of modelling and handling uncertainty in statistical and machine learning approaches.
- Professional Experience* **University of Melbourne, School of Mathematics and Statistics, VIC, Australia**
Head of School, 2021-present.
Co-Director, Melbourne Centre for Data Science, 2020-present.
Professor of Statistical Data Science, 2018-present.
- North Carolina State University, Department of Statistics, NC, USA**
Professor of Statistics, 2016-2017.
Director of Graduate Programs in Statistics and Data Science, 2013-2017.
Associate Professor of Statistics, 2011-2016.
Assistant Professor of Statistics, 2005-2011.
- University of Technology - Sydney, School of Mathematics and Statistics, NSW, Australia**
Visiting Associate Professor, 2013.
- Centre for Mathematics, Informatics, and Statistics, CSIRO, North Ryde, NSW, Australia**
Visiting Research Scientist, 2013.
- Rutgers University, Department of Statistics, USA**
Statistical Consultant, 2002-2005.
Instructor, 2000-2005.
- National Institutes of Health, Institute of Child Health and Human Development, USA**
Research Fellow, 2003. Division of Epidemiology, Statistics, and Prevention.
- Point Pleasant Borough High School, Point Pleasant, NJ, USA**
High School Mathematics Teacher, 1998-2000.

*Honours &
Awards*

Australian Research Council Future Fellowship, 2020-2024.

Project: *Statistical Modelling in the Era of Data Science: Theory and Practice.*

Fellow of the American Statistical Association, 2017.

Citation: *For outstanding methodological contributions in the areas of robustness, variable selection, and quantile regression; for exemplary leadership and mentoring of students and colleagues; and for service to the ASA and the profession.*

NCSU Diversity Doctoral Mentoring Fellow, 2016-2017.

NCSU Statistics D.D. Mason Faculty Award, 2014.

Citation: *This award is made in recognition of Professor Bondell's outstanding teaching and publication record, his direction of numerous PhD student theses, and his service as Director of the Graduate Program and on many departmental committees.*

'Highlights of JCGS' Invited Session at JSM 2013.

'Best of Technometrics' invited paper session at JSM 2009.

*Editorial &
Review
Service*

Associate Editor:

Australian and New Zealand Journal of Statistics, 2019-present.

Journal of the Royal Statistical Society: Series B, 2017-present.

Journal of the American Statistical Association: Theory and Methods, 2008-present.

Biostatistics, 2010-2017.

Biometrics, 2008-2014.

Consulting Editor:

Journal of Emergency Nursing, 2003-2008.

Reviewer for manuscripts in over 30 journals (statistical, as well as other fields).

Grant Review Panels:

Australian Research Council

US National Science Foundation

US National Institutes of Health

National Science Foundation of Hong Kong

Program Review:

Chair, External Review of Graduate Program in Statistics, University of Utah, 2015-2016.

*Other
Professional
Service*

University of Melbourne

Steering Committee, Centre for AI and Digital Ethics, 2020-present.

Deputy Head of School, 2019-2020.

Coordinator, Master of Data Science, 2018-2021.

Steering Committee, Data, Systems and Society Research Network (DSSRN), 2018-2019.

External

Advisory Board, Mathematical Research Institute (MATRIX), 2021-present.

Joint Venture Partner Committee, Australian Mathematical Society, 2021-present.

North Carolina State University

Director of Graduate Programs, 2013-2017.

Graduate Admissions Committee 2012-2017.

Course and Curriculum Committee, 2006-2017.

American Statistical Association

Treasurer, Section on Nonparametric Statistics, 2021-2022.

Leo Breiman Award Committee, Section on Statistical Learning and Data Mining, 2017-2018.

Chair, Student Paper Award Committee, Section on Nonparametric Statistics, 2016-2019.

Program Chair, Section on Statistical Learning and Data Mining, 2015-2016.

Chair for Continuing Education, Section on Statistical Learning and Data Mining, 2012-2015

Student Paper Award Committee, Section on Statistical Learning and Data Mining, 2012, 2013.

Local Assistance Committee, JSM, 2002.

Statistical and Applied Mathematical Sciences Institute (SAMSI)

NC State University Directorate Liaison, 2010-2014.

International Conference on Artificial Intelligence and Statistics

Senior Program Committee, AISTATS, 2011.

PhD

Students

Supervised

As Primary

Supervisor

North Carolina State University

Arun Krishna --- May 2009 (Biostatistician, Novartis)

Dhruv Sharma --- May 2010 (Senior Statistician, Michigan State University - Statistics)

Funda Gunes --- May 2010 (Assistant Professor, Duke University – Biostatistics)

Meg Koehler-Neely --- August 2011 (Associate Professor, Duke University - Biostatistics)

Liewen Jiang --- May 2012 (Biostatistician, Novartis)

Justin Post --- May 2012 (Associate Professor, NC State University - Statistics)

Chen-Yen Lin --- August 2012 (Biostatistician, Eli Lilly)

Dehan Kong --- August 2013 (Assistant Professor, University of Toronto - Statistics)

Na Zhang --- August 2014 (Biostatistician, Bristol-Myers-Squibb)

Kehui Wang --- May 2015 (Biostatistician, PPD Clinical Research Organization)

Tian Chen --- May 2015 (Biostatistician, Bristol-Myers-Squibb)

Zhongkai Liu --- May 2016 (Research Data Scientist, Microsoft)

Yan Zhang --- August 2016 (Assistant Professor, Hong Kong University – Statistics)

Yingzi Xu --- August 2016 (Research Data Scientist, Apple)

Lixia Zhang --- December 2016 (Research Data Scientist, Berg Health)

Yiqing Tian --- December 2017 (Biostatistician, Q-Squared Solutions)

Brian Naughton --- December 2017 (Research Data Scientist, Google)

Lin Su --- May 2018 (Research Data Scientist, Facebook)

Yaqing Zhao --- May 2018 (Quantitative Associate, Wells Fargo)

Rui Li --- May 2019 (Research Data Scientist, Facebook)

Anthony Franklin --- August 2019 (Research Data Scientist, Microsoft)

Jiajun Yin --- August 2020 (Research Data Scientist, Amazon)

Yue Yang --- August 2020 (Biostatistician, Eli Lilly)

University of Melbourne

Jiangrong Ouyang --- In progress

Dong Luo --- In progress

Alejandro Casar Berazaluze --- In progress

William Rudd --- In progress

Nathaniel Bloomfield --- In progress

Served on over 100 PhD and MSc committees.

Current External Funding

ARC Future Fellowship, 2020-2024
 Role: Chief Investigator
 (*Chief Investigator*: Howard Bondell, Total Amount: \$1,295,000 AUD)

ARC Training Industrial Transformation Training Centre, 2021-2025
 Role: Chief Investigator
 (Total Amount: \$4,860,000 AUD)

US Army Research Office, 2018-2022
 Role: Chief Investigator
 (*Additional Chief Investigators*: Antoinette Tordesillas, James Bailey, and Ben Rubenstein, Total Amount: \$522,000 AUD)

Previous External Funding

US National Institutes of Health – P01 CA142538, 2010-2018
 Role: Co-investigator
 (*Chief Investigators*: Michael Kosorok, Marie Davidian, and Stephen George, Total Amount: \$7,526,516 USD)

US National Science Foundation - DMS 1308400, 2013-2017
 Role: Chief Investigator
 (*Chief Investigator*: Howard Bondell, Total Amount: \$150,000 USD)

US National Science Foundation - DMS 1005612, 2010-2014
 Role: Chief Investigator
 (*Chief Investigator*: Howard Bondell, Total Amount: \$130,000 USD)

US National Institutes of Health - R01 MH84022, 2009-2013
 Role: Chief Investigator
 (*Additional Chief Investigator*: Jung-Ying Tzeng, Total Amount: \$1,111,615 USD)

US National Science Foundation - DMS 0705968, 2007-2011
 Role: Chief Investigator
 (*Chief Investigator*: Howard Bondell, Total Amount: \$139,999 USD)

NCSU Faculty Research and Professional Development Grant, 2006-2007
 Role: Chief Investigator
 (*Chief Investigator*: Howard Bondell, Total Amount: \$4,000)

Recent Presentations

University of New South Wales, School of Mathematics & Statistics, *Sydney, NSW*, October 2021
 Humboldt University, Dept. of Mathematics and Statistics, *Berlin, Germany*, December 2020.
 VIC Biostat Research Group, *Melbourne, VIC*, May 2020.
 Statistical Society of Australia, *Canberra, ACT*, April 2020.
 University of Melbourne, Complex Human Data Hub, *Melbourne, VIC*, April 2020.
 University of Melbourne, Quantitative Methods Network, *Melbourne, VIC*, March 2020.
 Workshop on Statistical Methods for Data Science, *Creswick, VIC*, December 2019.
 Rutgers University, Dept. of Statistics and Biostatistics, *Piscataway, NJ, USA*, May 2019.
 NC State University, Dept. of Statistics, *Raleigh, NC, USA*, April 2019.
 Melbourne Bayesian Workshop, *Melbourne, VIC*, February 2019.
 Workshop on Modelling, Experiments, and Data, *Melbourne, VIC*, December 2018.
 Data, Systems, and Society Research Network Symposium, *Melbourne, VIC*, November 2018.
 Joint Statistical Meetings, *Vancouver, BC, Canada*, August 2018.
 IMS Asia Pacific Rim Meeting, *Singapore*, June 2018.

University of New South Wales, Dept. of Statistics, *Sydney, NSW*, May 2018.
 Public Lecture hosted by Statistical Society of Victoria, *Melbourne, VIC*, March 2018.
 University of Melbourne, School of Maths and Statistics, *Melbourne, VIC*, March 2018.
 University of Buffalo, Dept. of Biostatistics, *Buffalo, NY, USA*, April 2017.
 University of Melbourne, School of Maths and Statistics, *Melbourne, VIC*, March 2017.
 Univ. of Technology Sydney, Dept. of Maths and Statistics, *Sydney, NSW*, March 2017.
 University of Pittsburgh, Dept. of Statistics, *Pittsburgh, PA, USA*, January 2017.
 NC State University, Dept. of Statistics, *Raleigh, NC, USA*, January 2017.
 University of Chicago, Dept. of Statistics, *Chicago, IL, USA*, October 2016.
 International Biometrics Conference, *Victoria, BC, Canada*, July 2016.
 SAMSI Undergraduate Workshop, *Raleigh, NC, USA*, May 2016.
 University of Georgia, Dept. of Statistics, *Athens, GA, USA*, March 2016.
 Joint Statistical Meetings, *Seattle, WA, USA*, August 2015.
 Quality & Productivity Research Conference, *Raleigh, NC, USA*, June 2015.
 Frontiers in Applied & Computational Mathematics, *Newark, NJ, USA*, June 2015.
 Joint Statistical Meetings, *Boston, MA, USA*, August 2014.
 UNC – Chapel Hill, Dept. of Biostatistics, *Chapel Hill, NC, USA*, March 2014.
 MD Anderson Cancer Center, Dept. of Biostatistics, *Houston, TX, USA*, October 2013.
 Joint Statistical Meetings, *Montreal, Quebec, Canada*, August 2013.
 University of Sydney, Dept. of Math and Statistics, *Sydney, NSW*, May 2013.
 University of Queensland, Dept. of Math and Statistics, *Brisbane, QLD*, May 2013.
 Center for Mathematics, Informatics, Statistics, CSIRO, *North Ryde, NSW*, March 2013.
 Univ. of Technology Sydney, Dept. of Math and Statistics, *Sydney, NSW*, March 2013.
 University of Melbourne, Dept. of Math and Statistics, *Melbourne, VIC*, February 2013.
 Meeting the Challenges in High Dimensions Workshop, *Singapore*, October 2012.
 Large Scale Statistical Inference and Learning Workshop, *Minneapolis, MN, USA*, April 2012.
 Georgia Tech University, Dept. of Industrial and Systems Eng., *Atlanta, GA, USA*, March 2012.

Publications

- 1) James, N., Menzies, M., Bondell, H.
Comparing the dynamics of COVID-19 infection and mortality in the United States, India, and Brazil
 (2022) *Physica D: Nonlinear Phenomena*, 432, art. no. 133158.
- 2) James, N., Menzies, M., Bondell, H.
In search of peak human athletic potential: A mathematical investigation
 (2022) *Chaos*, 32 (2), art. no. 023110.
- 3) Baker, C.M., Chades, I., McVernon, J., Robinson, A.P., Bondell, H.
Optimal allocation of PCR tests to minimise disease transmission through contact tracing and quarantine
 (2021) *Epidemics*, 37, art. no. 100503.
- 4) Zhou, S., Tordesillas, A., Pouragha, M., Bailey, J., Bondell, H.
On local intrinsic dimensionality of deformation in complex materials
 (2021) *Scientific Reports*, 11 (1), art. no. 10216.
- 5) James, N., Menzies, M., Bondell, H.
Understanding spatial propagation using metric geometry with application to the spread of COVID-19 in the United States
 (2021) *EPL*, 135 (4), art. no. 48004.
- 6) Li, R., Reich, B.J., Bondell, H.D.
Deep distribution regression
 (2021) *Computational Statistics and Data Analysis*, 159, art. no. 107203.
- 7) Hui, F.K.C., Bondell, H.D.
A shared parameter mixture model for longitudinal income data with missing responses and zero rounding
 (2021) *Australian and New Zealand Journal of Statistics*, 63 (2), pp. 221-240.

- 8) Hui, F.K.C., Bondell, H.D.
Spatial Confounding in Generalized Estimating Equations
(2021) *American Statistician*.
- 9) Huberman, D.B., Reich, B.J., Bondell, H.D.
Nonparametric conditional density estimation in a deep learning framework for short-term forecasting
(2021) *Environmental and Ecological Statistics*.
- 10) Szczytko, R., Stevenson, K.T., Peterson, M.N., Bondell, H.
How combinations of recreational activities predict connection to nature among youth
(2020) *Journal of Environmental Education*, 51 (6), pp. 462-476.
- 11) Zhao, Y., Bondell, H.
Solution paths for the generalized lasso with applications to spatially varying coefficients regression
(2020) *Computational Statistics and Data Analysis*, 142, art. no. 106821.
- 12) Zhang, Y.D., Naughton, B.P., Bondell, H.D., Reich, B.J.
Bayesian Regression Using a Prior on the Model Fit: The R2-D2 Shrinkage Prior
(2020) *Journal of the American Statistical Association*.
- 13) Zhou, S., Bondell, H., Tordesillas, A., Rubinstein, B.I.P., Bailey, J.
Early identification of an impending rockslide location via a spatially-aided gaussian mixture model
(2020) *Annals of Applied Statistics*, 14 (2), pp. 977-992.
- 14) Tian, Y., Bondell, H.D., Wilson, A.
Bayesian variable selection for logistic regression
(2019) *Statistical Analysis and Data Mining*, 12 (5), pp. 378-393.
- 15) Stevenson, K.T., Peterson, M.N., Bondell, H.D.
The influence of personal beliefs, friends, and family in building climate change concern among adolescents
(2019) *Environmental Education Research*, 25 (6), pp. 832-845.
- 16) Liu, Z., Bondell, H.D.
Binormal Precision–Recall Curves for Optimal Classification of Imbalanced Data
(2019) *Statistics in Biosciences*, 11 (1), pp. 141-161.
- 17) Su, L., Bondell, H.D.
Best linear estimation via minimization of relative mean squared error
(2019) *Statistics and Computing*, 29 (1), pp. 33-42.
- 18) Stevenson, K.T., Nils Peterson, M., Bondell, H.D.
Developing a model of climate change behavior among adolescents
(2018) *Climatic Change*, 151 (3-4), pp. 589-603.
- 19) Frew, K.N., Peterson, M.N., Sills, E., Moorman, C.E., Bondell, H., Fuller, J.C., Howell, D.L.
Market and nonmarket valuation of North Carolina's tundra swans among hunters, wildlife watchers, and the public
(2018) *Wildlife Society Bulletin*, 42 (3), pp. 478-487.
- 20) Zhang, Y., Bondell, H.D.
Variable selection via penalized credible regions with Dirichlet-Laplace global-local shrinkage priors
(2018) *Bayesian Analysis*, 13 (3), pp. 823-844.
- 21) Kong, D., Bondell, H.D., Wu, Y.
Fully efficient robust estimation, outlier detection and variable selection via penalized regression
(2018) *Statistica Sinica*, 28 (2), pp. 1031-1052.
- 22) Rodriguez, S.L., Peterson, M.N., Cabbage, F.W., Sills, E.O., Bondell, H.D.
What is private land stewardship? Lessons from agricultural opinion leaders in North Carolina
(2018) *Sustainability (Switzerland)*, 10 (2), art. no. 297.

- 23) Kong, D., Bondell, H., Shen, W.
Outlier detection and robust estimation in nonparametric regression
(2018) *International Conference on Artificial Intelligence and Statistics, AISTATS 2018*, pp. 208-216.
- 24) Li, Q., Guindani, M., Reich, B.J., Bondell, H.D., Vannucci, M.
A Bayesian mixture model for clustering and selection of feature occurrence rates under mean constraints
(2017) *Statistical Analysis and Data Mining*, 10 (6), pp. 393-409.
- 25) Mitra, R., McNeal, K.S., Bondell, H.D.
Pupillary response to complex interdependent tasks: A cognitive-load theory perspective
(2017) *Behavior Research Methods*, 49 (5), pp. 1905-1919.
- 26) Peterson, M.N., Chesonis, T., Stevenson, K.T., Bondell, H.D.
Evaluating relationships between hunting and biodiversity knowledge among children
(2017) *Wildlife Society Bulletin*, 41 (3), pp. 530-536.
- 27) Huque, M.H., Bondell, H.D., Carroll, R.J., Ryan, L.M.
Spatial regression with covariate measurement error: A semiparametric approach
(2016) *Biometrics*, 72 (3), pp. 678-686.
- 28) Chitwood, M.C., Peterson, M.N., Bondell, H.D., Lashley, M.A., Brown, R.D., Deperno, C.S.
Perspectives of wildlife conservation professionals on intensive deer management
(2015) *Wildlife Society Bulletin*, 39 (4), pp. 751-756.
- 29) Li, M., Staicu, A.-M., Bondell, H.D.
Incorporating covariates in skewed functional data models
(2015) *Biostatistics*, 16 (3), pp. 413-426.
- 30) Neely, M.L., Bondell, H.D., Tzeng, J.-Y.
A penalized likelihood approach for investigating gene-drug interactions in pharmacogenetic studies
(2015) *Biometrics*, 71 (2), pp. 529-537.
- 31) Kong, D., Bondell, H.D., Wu, Y.
Domain selection for the varying coefficient model via local polynomial regression
(2015) *Computational Statistics and Data Analysis*, 83, pp. 236-250.
- 32) Huque, M.H., Bondell, H.D., Ryan, L.
On the impact of covariate measurement error on spatial regression modelling
(2014) *Environmetrics*, 25 (8), pp. 560-570.
- 33) Stevenson, K.T., Peterson, M.N., Bondell, H.D., Moore, S.E., Carrier, S.J.
Overcoming skepticism with education: interacting influences of worldview and climate change knowledge on perceived climate change risk among adolescents
(2014) *Climatic Change*, 126 (3-4), pp. 293-304.
- 34) Stevenson, K.T., Peterson, M.N., Carrier, S.J., Strnad, R.L., Bondell, H.D., Kirby-Hathaway, T., Moore, S.E.
Role of significant life experiences in building environmental knowledge and behavior among middle school students
(2014) *Journal of Environmental Education*, 45 (3), pp. 163-177.
- 35) Jiang, L., Bondell, H.D., Wang, H.J.
Interquantile shrinkage and variable selection in quantile regression
(2014) *Computational Statistics and Data Analysis*, 69, pp. 208-219.
- 36) Sharma, D.B., Bondell, H.D., Zhang, H.H.
Consistent group identification and variable selection in regression with correlated predictors
(2013) *Journal of Computational and Graphical Statistics*, 22 (2), pp. 319-340.
- 37) Reich, B.J., Bandyopadhyay, D., Bondell, H.D.
A nonparametric spatial model for periodontal data with nonrandom missingness
(2013) *Journal of the American Statistical Association*, 108 (503), pp. 820-831.

- 38) Bondell, H.D., Stefanski, L.A.
Efficient robust regression via two-stage generalized empirical likelihood
(2013) *Journal of the American Statistical Association*, 108 (502), pp. 644-655.
- 39) Lin, C.-Y., Bondell, H., Zhang, H.H., Zou, H.
Variable selection for non-parametric quantile regression via smoothing spline analysis of variance
(2013) *Stat*, 2 (1), pp. 255-268.
- 40) Stevenson, K.T., Peterson, M.N., Bondell, H.D., Mertig, A.G., Moore, S.E.
Environmental, Institutional, and Demographic Predictors of Environmental Literacy among Middle School Children
(2013) *PLoS ONE*, 8 (3), art. no. e59519.
- 41) Post, J.B., Bondell, H.D.
Factor Selection and Structural Identification in the Interaction ANOVA Model
(2013) *Biometrics*, 69 (1), pp. 70-79.
- 42) Jiang, L., Wang, H.J., Bondell, H.D.
Interquantile shrinkage in regression models
(2013) *Journal of Computational and Graphical Statistics*, 22 (4), pp. 970-986.
- 43) Bondell, H.D., Reich, B.J.
Consistent high-dimensional Bayesian variable selection via penalized credible regions
(2012) *Journal of the American Statistical Association*, 107 (500), pp. 1610-1624.
- 44) Peterson, M.N., Thurmond, B., McHale, M., Rodriguez, S., Bondell, H.D., Cook, M.
Predicting native plant landscaping preferences in urban areas
(2012) *Sustainable Cities and Society*, 5 (1), pp. 70-76.
- 45) Rodriguez, S.L., Peterson, M.N., Cabbage, F.W., Sills, E.O., Bondell, H.D.
Private landowner interest in market-based incentive programs for endangered species habitat conservation
(2012) *Wildlife Society Bulletin*, 36 (3), pp. 469-476.
- 46) Dalrymple, C.J., Peterson, M.N., Cobb, D.T., Sills, E.O., Bondell, H.D., Dalrymple, D.J.
Estimating public willingness to fund nongame conservation through state tax initiatives
(2012) *Wildlife Society Bulletin*, 36 (3), pp. 483-491.
- 47) Gunes, F., Bondell, H.D.
A confidence region approach to tuning for variable selection
(2012) *Journal of Computational and Graphical Statistics*, 21 (2), pp. 295-314.
- 48) Reich, B.J., Kalendra, E., Storlie, C.B., Bondell, H.D., Fuentes, M.
Variable selection for high dimensional Bayesian density estimation: Application to human exposure simulation
(2012) *Journal of the Royal Statistical Society. Series C: Applied Statistics*, 61 (1), pp. 47-66.
- 49) Reich, B.J., Bondell, H.D., Li, L.
Sufficient Dimension Reduction via Bayesian Mixture Modeling
(2011) *Biometrics*, 67 (3), pp. 886-895.
- 50) Reich, B.J., Bondell, H.D.
A Spatial Dirichlet Process Mixture Model for Clustering Population Genetics Data
(2011) *Biometrics*, 67 (2), pp. 381-390.
- 51) Freire, M., Robertson, I., Bondell, H.D., Brown, J., Hash, J., Pease, A.P., Lascelles, B.D.X.
Radiographic evaluation of feline appendicular degenerative joint disease vs. macroscopic appearance of articular cartilage
(2011) *Veterinary Radiology and Ultrasound*, 52 (3), pp. 239-247.
- 52) Storlie, C.B., Bondell, H.D., Reich, B.J., Zhang, H.H.
Surface estimation, variable selection, and the nonparametric oracle property
(2011) *Statistica Sinica*, 21 (2), pp. 679-705.

- 53) Bondell, H.D., Reich, B.J., Wang, H.
Noncrossing quantile regression curve estimation
(2010) *Biometrika*, 97 (4), pp. 825-838.
- 54) Bondell, H.D., Krishna, A., Ghosh, S.K.
Joint Variable Selection for Fixed and Random Effects in Linear Mixed-Effects Models
(2010) *Biometrics*, 66 (4), pp. 1069-1077.
- 55) Zamprogno, H., Hansen, B.D., Bondell, H.D., Sumrell, A.T., Simpson, W., Robertson, I.D., Brown, J., Pease, A.P., Roe, S.C., Hardie, E.M., Wheeler, S.J., Lascelles, D.X.
Item generation and design testing of a questionnaire to assess degenerative joint disease-associated pain in cats
(2010) *American Journal of Veterinary Research*, 71 (12), pp. 1417-1424.
- 56) Koehler, M.L., Bondell, H.D., Tzeng, J.
Evaluating haplotype effects in case-control studies via penalized-likelihood approaches: Prospective or retrospective analysis?
(2010) *Genetic Epidemiology*, 34 (8), pp. 892-911.
- 57) Storlie, C.B., Bondell, H.D., Reich, B.J.
A locally adaptive penalty for estimation of functions with varying roughness
(2010) *Journal of Computational and Graphical Statistics*, 19 (3), pp. 569-589.
- 58) Reich, B.J., Bondell, H.D., Wang, H.J.
Flexible Bayesian quantile regression for independent and clustered data
(2010) *Biostatistics*, 11 (2), pp. 337-352.
- 59) Tzeng, J.-Y., Bondell, H.D.
A comprehensive approach to haplotype-specific analysis by penalized likelihood
(2010) *European Journal of Human Genetics*, 18 (1), pp. 95-103.
- 60) Krishna, A., Bondell, H.D., Ghosh, S.K.
Bayesian variable selection using an adaptive powered correlation prior
(2009) *Journal of Statistical Planning and Inference*, 139 (8), pp. 2665-2674.
- 61) Reich, B.J., Storlie, C.B., Bondell, H.D.
Variable selection in Bayesian smoothing spline ANOVA models: Application to deterministic computer codes
(2009) *Technometrics*, 51 (2), pp. 110-120.
- 62) Bondell, H.D., Reich, B.J.
Simultaneous factor selection and collapsing levels in ANOVA
(2009) *Biometrics*, 65 (1), pp. 169-177.
- 63) Bondell, H.D., Li, L.
Shrinkage inverse regression estimation for model-free variable selection
(2009) *Journal of the Royal Statistical Society. Series B: Statistical Methodology*, 71 (1), pp. 287-299.
- 64) Bondell, H.D., Reich, B.J.
Simultaneous regression shrinkage, variable selection, and supervised clustering of predictors with OSCAR
(2008) *Biometrics*, 64 (1), pp. 115-123.
- 65) Bondell, H.D.
A characteristic function approach to the biased sampling model, with application to robust logistic regression
(2008) *Journal of Statistical Planning and Inference*, 138 (3), pp. 742-755.
- 66) Bondell, H.D.
On robust and efficient estimation of the center of symmetry
(2008) *Communications in Statistics - Theory and Methods*, 37 (3), pp. 318-327.
- 67) Bondell, H.D.
Testing goodness-of-fit in logistic case-control studies
(2007) *Biometrika*, 94 (2), pp. 487-495.

- 68) Bondell, H.D., Liu, A., Schisterman, E.F.
Statistical inference based on pooled data: A moment-based estimating equation approach
(2007) *Journal of Applied Statistics*, 34 (2), pp. 129-140.
- 69) Bondell, H.D.
Minimum distance estimation for the logistic regression model
(2005) *Biometrika*, 92 (3), pp. 724-731.
- 70) Schisterman, E.F., Perkins, N.J., Liu, A., Bondell, H.
Optimal cut-point and its corresponding Youden index to discriminate individuals using pooled blood samples
(2005) *Epidemiology*, 16 (1), pp. 73-81.