

Carlos M. Carvalho, Ph.D.
Professor of Statistics
La Quinta Centennial Professor in Business

The University of Texas
McCombs School of Business
2110 Speedway Stop B6500,
Austin, TX 78712

Phone: (512) 471-5823
Mobile: (512) 944-7260
Fax: (512) 471-0587
Email: carlos.carvalho@mcombs.utexas.edu
<http://faculty.mcombs.utexas.edu/carlos.carvalho/>

Academic

THE UNIVERSITY OF TEXAS MCCOMBS SCHOOL OF BUSINESS
DEPARTMENT OF INFORMATION, RISK AND OPERATIONS MANAGEMENT
DEPARTMENT OF FINANCE
DEPARTMENT OF STATISTICS AND DATA SCIENCES Austin, TX
Professor of Statistics
La Quinta Centennial Professor in Business
Head of the McCombs Statistics Group

SALEM CENTER FOR POLICY
MCCOMBS SCHOOL OF BUSINESS Austin, TX
Executive Director, Since October 2017.

THE UNIVERSITY OF TEXAS MCCOMBS SCHOOL OF BUSINESS Austin, TX
Associate Professor of Statistics, September 2012 – August 2017.

THE UNIVERSITY OF TEXAS MCCOMBS SCHOOL OF BUSINESS Austin, TX
Assistant Professor of Statistics, July 2010 – August 2012.

THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS Chicago, IL
Assistant Professor of Econometrics and Statistics, July 2007 – June 2010.

DUKE UNIVERSITY Durham, NC
Post-Doctoral Research Associate, March 2006 – June 2007.

Education

DUKE UNIVERSITY Durham, NC
Ph.D. in Statistics, February 2006.
Thesis: *Structure and Sparsity in High-Dimensional Multivariate Analysis*
Advisor: Mike West

FEDERAL UNIVERSITY OF RIO DE JANEIRO Rio de Janeiro, Brazil
M.S. in Statistics, April 2002.
Thesis: *Bayesian Analysis of Stochastic Volatility Models with Multiple Regimes*
Advisor: Hedibert F. Lopes and Helio S. Migon

IBMEC BUSINESS SCHOOL Rio de Janeiro, Brazil
B.S. in Economics, December 1999.

Publications

1. **“How critical theory fundamentally challenges traditional inquiry in social science.”** (with Richard Lowery) *Journal of Law, Economic and Policy*, 2022.
2. **“Targeted Smooth Bayesian Causal Forests: An analysis of heterogeneous treatment effects for simultaneous versus interval medical abortion regimens over gestation.”** (with J. Starling, J. Murray, A. Aiken, P.A. Lohr and J. Scott) *Annals of Applied Statistics*, 2021.
3. **“Model Interpretation through Lower-dimensional Posterior Summarization.”** (with S Woody and J. Murray) *Journal of Computational and Graphical Statistics*, 2021.
4. **“Variable Selection and Interaction Detection with Bayesian Additive Regression Trees.”** (with McCulloch, Hahn and George) *Handbook on Bayesian Variable Selection*, 2021
5. **“Bayesian Regression Tree Models for Causal Inference.”** (with P.R. Hahn and J. Murray) *Bayesian Analysis*, 2020.
6. **“Monotonic Effects of Characteristics on Returns.”** (with J. Fisher and D. Puelz) *Annals of Applied Statistics*, 2020.
7. **“Optimal Asset Allocation with Multivariate Bayesian Dynamic Linear Models.”** (with J. Fisher and D. Pettenuzzo) *Annals of Applied Statistics*, 14, 2020.
8. **“Targeted Smooth BART: an analysis of patient-specific stillbirth risk.”** (with J. Starling, J. Murray, R. Bukowski and J. Scott) *Annals of Applied Statistics*, 14, 2020.
9. **“A National Experiment Reveals where a Growth Mindset Improves Achievement.”** (with Yaeger, D., J. Murray, et al.) *Nature*, 2019.
10. **“Post-processing posteriors over precision matrices to produce sparse graph estimates”** (A. Bashir, P.R. Hahn and B. Jones) *Bayesian Analysis*, 14, 2019.
11. **“Assessing Treatment Effect Variation in Observational Studies: Results from a Data Challenge.”** (with Feller, A., Murray, J, Yeager, D. and Woody, S.) *Observational Studies*, 5, 2019.
12. **“Portfolio Selection for Individual Passive Investing”** (with D. Puelz and P.R. Hahn) *Applied Stochastic Models in Business and Industry*, 2019.
13. **“On the Long Run Volatility of Stocks.”** (with Lopes, H.F. and McCulloch, R.) *Journal of the American Statistical Association*, 113, 2018.
14. **“Regularization and Confounding in Linear Regression for Treatment Effect Estimation”** (with P.R. Hahn, D. Puelz and J. He) *Bayesian Analysis*, 13, 2018.
15. **“Variable Selection in Seemingly Unrelated Regressions with Random Predictors”** (with D. Puelz and P.R. Hahn) *Bayesian Analysis*, 12, 2017.
16. **“Decoupling Shrinkage and Selection in Bayesian Linear Models: a Posterior Summary Perspective”** (with Hahn, R.) *Journal of the American Statistical Association*, 110, 2015.
17. **“A Tractable State-Space Model for Symmetric Positive-Definite Matrices”** (with Windle, J.) *Bayesian Analysis*, 9 (with Discussion), 2014.
18. **“LAMORE: A Stable, Scalable Approach to Latent Vector Autoregressive Modeling of Categorical Time Series”** (with Park, Y. and Ghosh, J.) *Journal of Machine Learning Research*, WC&P (AISTATS) 2014.
19. **“Partial Factor Modeling: Predictor-Dependent Shrinkage for Linear Regression.”** (with Hahn, P.R. and Mukherjee, S.) *Journal of the American Statistical Association*, 108, 2013.

20. **“DYNA-CARE: Dynamic Cardiac Arrest Risk Estimation.”** (with Ho, Park and Ghosh). *Journal of Machine Learning Research*, WC&P (AISTATS) 2013.
21. **“DYNACARE-OP: Dynamic Cardiac Arrest Risk Estimation Incorporating Ordinal Features.”** (with Ho, Park and Ghosh). *ICML 2013, Healthcare Workshop*.
22. **Online Bayesian Learning in Dynamic Models: An illustrative Introduction to Particle Methods** (with Lopes, H.F.) *In Hierarchical Models and Markov Chain Monte Carlo - In Honor of Adrian F. M. Smith*, 2013.
23. **“A Sparse Factor-Analytic Probit Model for Congressional Voting Patterns.”** (with Hahn, P.R. and Scott, J.) *Journal of the Royal Statistical Society C*, 61, 2012.
24. **“Bayesian Statistics with a Smile: a Resampling-Sampling Perspective.”** (with Lopes, H. and Polson, N.) *Brazilian Journal of Probability and Statistics*, 26, 2012.
25. **“Dynamic Financial Index Models: Modeling Conditional Dependencies via Graphs.”** (with Wang, H. and Reeson, C.) *Bayesian Analysis*, 6, 2011.
26. **“Particle Learning for Sequential Bayesian Computation.”** (with Lopes, H., Johannes M. and Polson, N.) *Bayesian Statistics 9*, 2011.
27. **“Dynamic Stock Selection Strategies: a Structured Factor Model Framework.”** (with Lopes, H. and Aguilar, O.) *Bayesian Statistics 9*, 2011.
28. **“The Horseshoe Estimator for Sparse Signals.”** (with Polson, N.G. and Scott, J.) *Biometrika*, 97, 2010.
29. **“Particle Learning and Smoothing.”** (with Johannes, M., Lopes, H.F. and Polson, N.G.) *Statistical Science*, 25 (1), 2010.
30. **“Particle Learning for General Mixtures.”** (with Lopes, H.F., Polson, N.G. and Taddy, M.) *Bayesian Analysis*, 5, 2010.
31. **“Simulation of Hyper-Inverse Wishart Distributions in Non-decomposable Graphs”** (with Wang, H.) *Electronic Journal of Statistics*, 4, 2010.
32. **“Volatility in Prediction Markets: A Measure of Information Flow in Political Campaigns.”** (with Rickershauser, J.) *The Handbook of Applied Bayesian Analysis*, 2010.
33. **“Futures Markets, Bayesian Forecasting and Risk Modeling.”** (with Quintana, J.M. and Scott, J.) *The Handbook of Applied Bayesian Analysis*, 2010.
34. **“In-Vitro to In-Vivo Factor Profiling in Expression Genomics.”** (with Lucas, J., Merl, D. and West, M.) *Bayesian Modeling in Bioinformatics*, 2010.
35. **“Objective Bayesian Model Selection in Gaussian Graphical Models.”** (with Scott, J.) *Biometrika*, 96, 2009.
36. **“Handling Sparsity via the Horseshoe.”** (with Polson and Scott, J.) in *Journal of Machine Learning Research*, W&CP 5 (AISTats) 2009.
37. **“A Genomic Strategy to Elucidate Modules of Oncogenic Pathway Signaling Networks.”** (with Chang, J., Mori, S., Bild, A., Gatz, M., Wang, Q., Lucas, J., Potti, A., Febbo, P., West, M. and Nevins, J.) *Molecular Cell*, 34, 2009.
38. **“Cross-study Projections of Genomic Biomarkers: An Evaluation in Cancer Genomics.”** (with Lucas, J., Chen, J., Chi, J. and West, M.) *PLoS One* 4(2), 2009.
39. **“A Bayesian Analysis Strategy for Cross-study Translation of Gene Expression Biomarkers.”** (with Lucas, J. and West, M.) *Statistical Applications in Genetics and Molecular Biology*, 8 (1), 2009.

40. **“High-Dimensional Sparse Factor Modeling: Applications in Gene Expression Genomics.”** (with Chang, J., Lucas, J., Wang, Q., Nevins, J.R. and West, M.) *Journal of the American Statistical Association*, 103, 2008.
41. **“Flexible Covariance Estimation in Graphical Gaussian Models.”** (with Rajaratnam, B. and Massam, H.) *Annals of Statistics*, 36, 2008.
42. **“Feature-Inclusion Stochastic Search for Gaussian Graphical Models.”** (with Scott, J.) *Journal of Computational and Graphical Statistics*, 17, 2008.
43. **“Simulation of Hyper-Inverse Wishart Distributions in Graphical Models.”** (with Massam, H. and West, M.) *Biometrika*, 94, 2007.
44. **“Dynamic Matrix-Variate Graphical Models.”** (with West, M.) *Bayesian Analysis*, 2, 2007.
45. **“Dynamic Matrix-Variate Graphical Models – A Synopsis.”** (with West, M.) *Bayesian Statistics* 8, 2007.
46. **“Simulation-based Sequential Analysis of Markov Switching Stochastic Volatility Models.”** (with Lopes, H.F.) *Computational Statistics and Data Analysis*, 51, 2007.
47. **“Factor Stochastic Volatility with Time-varying Loadings and Regime Switching.”** (with Lopes, H.F.) *Journal of Statistical Planning and Inference*, 137, 2007.
48. **“Sparse Statistical Modeling in Gene Expression Genomics.”** (with Lucas, J., Wang, Q., Bild, A., Nevins, J.R. and West, M.) in *Bayesian Inference for Gene Expression and Proteomics*, 2006.
49. **“Experiments in Stochastic Computation for High-dimensional Graphical Models.”** (with Jones, B., Dobra, A., Hans, C., Carter, C. and West, M.) *Statistical Science*, 20, 2005.

Working Papers

1. **“Estimating heterogeneous effects of continuous exposures using Bayesian tree ensembles: revisiting the impact of abortion rates on crime”** (with S Woody and J. Murray) 2020 (submitted).
2. **“Bayesian Inference for Treatment Effects under Nested Subsets of Controls.”** (with S Woody and J. Murray) 2020 (submitted).
3. **“Industry Level Baseline Risk of COVID-19 Infection.”** (with T. Canaan and R. Lowery) 2020 (submitted).
4. **“Variable Selection with Bayesian Additive Regression Trees”** (with E. George, R. Hahn and R. McCulloch). 2020.
5. **“Decoupling Shrinkage and Selection in Gaussian Linear Factor Analysis”** (with H. Bonfarine, J. Murray and H. Lopes) 2020 (submitted).
6. **“Variable Selection in Non-Linear Regression Models.”** (with P.R. Hahn and R. McCulloch) 2020 (working paper).
7. **“A Projection Approach for Multiple Monotone Regression.”** (with Lin, St. Thomas, Piegorsch and Scott) 2017 (Tech Report).
8. **“Efficient Data Augmentation in Dynamic Models for Binary and Count Data.”** (with Windle, J. Scott, J. and Sun, L.) 2014 (Tech Report).
9. **“Risk Assessment in Large Portfolios: Why Imposing the Wrong Constraints Hurts.”** (with Bianchi, D.) 2012 (Tech Report).
10. **“Extending the Black-Litterman Portfolio Allocation Strategy.”** (with Bianchi, D.) 2012 (Tech Report).

11. **“Dynamic Graphical Models and Portfolio Allocations for Structured Mutual Funds.”** (with Reeson, C. and West, M.) 2009 (Tech Report).
12. **“Developing and Testing Theories of the Causes of War: Assessing Key Events Leading to the Iraq War Using Prediction Markets.”** (with Rickershauser, J.) 2008 (Tech Report).
13. **“Smoothing the Transition.”** *ISBA Bulletin* 14 (4), 2007.
14. **“BFRM: Bayesian Factor Regression Modeling.”** (with Wang, Q., Lucas, J. and West, M.) *ISBA Bulletin* 14 (2), 2007.

Opinion

1. **“Even with cases rising, Texas has New York beat on tackling coronavirus. Here’s why.”** Fort Worth Telegram, June 2020.
2. **“Reopening Texas is a scientific valid option.”** (with R. Lowery), Houston Chronicle, Statesman, May 2020.
3. **“When water is scarce, prices should go up.”** (with R. Lowery), Texas Tribune, October 2018.
4. **“Paid sick leave will hurt the most vulnerable.”** (with R. Lowery), Texas Tribune, March 2018.
5. **“Taxing tuition waivers would benefit schools’ research missions.”** (with R. Lowery), *The Hill*, December, 2017.

Awards

La Quinta Centennial Professorship (since 2019)
The University of Texas, Austin.

CBA Foundation Advisory Council Centennial Fellow (2012-2019)
The University of Texas, Austin.

Donald D. Harrington Faculty Fellow (2009-10) – The University of Texas, Austin.

IBM Corporation Scholar (2008-09) – The University of Chicago.

Dennis V. Lindley Prize (2007) for innovative research in Bayesian Statistics, by the International Society for Bayesian Analysis. Honorable Mention for “Dynamic Matrix-Variate Graphical Models.”

Leonard J. Savage Award (2006) for outstanding doctoral dissertation in Bayesian econometrics and statistics, by the International Society for Bayesian Analysis. Honorable Mention.

Talks

Searching for Dusty Corners: Understanding Predictability of the Cross Section of Returns
– BYU, Stats Seminar, January 2022.

OLS, R.I.P., Machine Learning for the Social Sciences
– UCLA, Stats Seminar, May 2021.

Searching for Dusty Corners: Understanding Predictability of the Cross Section of Returns
– Queen Mary University London, UK May 2021.

Searching for Dusty Corners: Understanding Predictability of the Cross Section of Returns
– CMSTAT, London, UK December 2020.

Discussion in Policy Analytics
– Southern Economic Association, New Orleans,. November 2020.

OLS, R.I.P., Machine Learning for the Social Sciences

– UT Austin, Engineering, October 2020.

OLS, R.I.P., Machine Learning for the Social Sciences

– CMSTAT, London, UK December 2019.

OLS, R.I.P., Machine Learning for the Social Sciences

– George Mason University, Economics Seminar, November 2019.

Searching for Dusty Corners: Understanding Predictability of the Cross Section of Returns

– AI/ML in Finance, Royal Society, UK, October 2019.

Bayesian regression tree models for causal inference: Regularization, confounding, and heterogeneous effects

– Barcelona Graduate School of Economics Summer Forum, June 2019.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

– International Methods Colloquium, April 2019.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

–University of Arkansas, April 2019.

On The Long Run Volatility of Stocks

–ISBA 2018, Edinburgh, UK, June 2018.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

–Brandeis University, April 2018.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

–CFE-ERCIM Conference, London, UK December 2017.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

–UT Austin, Finance Department. December 2017.

Nonparametric Regression Models of Multilevel, Heterogeneous Treatment Effects

–Rice University, November 2017.

Bayesian Causal Forests

–Atlantic Causal Inference Conference. Chapel Hill, NC, May 2017

Bayesian Causal Forests

–Columbia University, April 2017.

Bayesian Causal Forests

–New York University, April 2017.

Variable Selection in Non-Linear Models: a Posterior Summary Approach

–CFE-ERCIM Conference, Seville, Spain, December 2016.

On The Long Run Volatility of Stocks

–Nova Business School, Portugal, Dec 2016.

Shrinkage in Treatment Effect Estimation

–SIAM, November 2016.

Shrinkage in Treatment Effect Estimation

–ISBA 2016, Cagliari, Italy, June 2016.

Variable Selection in Non-Linear Models: a Posterior Summary Approach
-ISBA 2016, Cagliari, Italy, June 2016.

Heterogeneous Treatment Effect Estimation
-UT Austin, Finance Department. May 2016.

Treatment Effect Estimation with Many Potential Cofounders
-INSPIER Business School, Sao Paulo, Brazil. March 2016.

Treatment Effect Estimation with Many Potential Cofounders
-CFE-ERCIM Conference, London, UK December 2015.

Penalized Utility-based Posterior Summaries
-Ohio State University, November 2015.

Bayes Two Step: Penalized Utility-based Posterior Summaries
-JSM 2015, Seattle, WA, August 2015.

Utility-based Variable Selection in Non-Linear Models
-BNP 2015, Raleigh, NC, June 2015.

Decoupled Shrinkage and Selection in Regression Models
-Warwick University, UK, May 2015.

On The Long Run Volatility of Stocks
-Cambridge University, UK, May 2015.

On The Long Run Volatility of Stocks
-Caltech, April 2015.

On The Long Run Volatility of Stocks
-CFE-ERCIM Conference, Pisa, Italy December 2014.

Decoupled Shrinkage and Selection in Linear Models
-Harvard University, October 2014.

Decoupled Shrinkage and Selection in Linear Models
-ISBA 2014, Cancun, Mexico, July 2014.

Testing Asset Pricing Models
-SBIES 2014 – Chicago, May 2014.

On The Long Run Volatility of Stocks
-Bocconi University, Milan, Italy, October 2013.

Decoupled Shrinkage and Selection in Linear Models
-Bocconi University, Milan, Italy, October 2013.

On The Long Run Volatility of Stocks
-The University of Texas at Austin, SSC Brown Bag Series, April 2013.

Decoupled Shrinkage and Selection in Linear Models
-EMR, Brazil, February 2013.

Decoupled Shrinkage and Selection in Linear Models
-Imperial College London, December 2012.

Decoupled Shrinkage and Selection in Linear Models

-CFE-ERCIM Conference, Oviedo, Spain December 2012.

Decoupled Shrinkage and Selection in Linear Models

-University of South Carolina, November 2012.

Decoupled Shrinkage and Selection in Linear Models

-Duke University, October 2012.

Testing Factor Asset Pricing Models

-ISBA 2012, Kyoto, Japan, June 2012.

From Data to Decisions

-The University of Texas at Austin, Dean's Scholars Research Seminar, April 2012.

On The Long Run Volatility of Stocks

-The University of Chicago, Booth School of Business – Seminar Speaker, February 2012.

On The Long Run Volatility of Stocks

-The University of Pennsylvania, Wharton School of Business – Seminar Speaker, October 2011.

Testing Factor Asset Pricing Models

-The University of Texas at Austin, Finance Department Brown Bag Series, September 2011.

On The Long Run Volatility of Stocks

-Hierarchical Models and MCMC – Greece, June 2011.

On The Long Run Volatility of Stocks

-University of California, Irvine – Seminar Speaker, May 2011.

On The Long Run Volatility of Stocks

-SBIES 2011 – St. Louis, April 2011.

On The Long Run Volatility of Stocks

-The University of Texas at Austin, Finance Department Brown Bag Series, April 2011.

On The Long Run Volatility of Stocks

-Carnegie Mellon University, Statistics Department – Seminar Speaker, March 2011.

On The Long Run Volatility of Stocks

-The University of Texas at Austin, Mechanical Engineering Department – Seminar Speaker, February 2011.

Computational Methods for Bayesian Inference in Macroeconomic Models

-Opposition to Ingvar Strid's Ph.D defense. Stockholm School of Economics, Sweden, November 2010.

Dynamic Stock Selection Strategies: A Structured Factor Model Framework

-Texas A&M University – Seminar Speaker, November 2010.

On the Long Run Volatility of Stocks

-INFORMS 2010 – Austin, TX. November 2010.

On the Long Run Volatility of Stocks

-Rice University, Economics Department – Seminar Speaker. October 2010.

From Data to Decisions

-The University of Texas at Austin, Undergraduate Seminar. September 2010.

Dynamic Stock Selection Strategies: A Structured Factor Model Framework

-9th Valencia International Meeting on Bayesian Statistics. Benidorm, Spain – Invited Speaker. June 2010.

On the Long Run Volatility of Stocks

-The University of Warwick Model Uncertainty Workshop. Coventry, U.K. – Invited Speaker. June 2010.

Dynamic Stock Selection Strategies: A Structured Factor Model Framework

-M.D. Anderson Cancer Center, Houston, TX – Seminar Speaker, May 2010.

From Data to Decisions

-Harrington Fellowship Symposium, Amarillo College, TX. April 2010.

Complex Dynamic Models in Empirical Asset Pricing

-University of Southern California, Marshall School of Business – Seminar Speaker, April 2010.

Time-Varying Predictive Systems

-NESS, Harvard University, Cambridge, MA. April 2010.

Particle Learning and Smoothing

-10th Bayesian Brazilian Meeting. Angra dos Reis, Brazil. March 2010.

Structuring Covariances

-The University of Texas at Austin, McCombs School of Business – Seminar Speaker, December 2009.

Dynamic Financial Index Models: Modeling Conditional Dependencies via Graphs

-Transition Workshop on Sequential Monte Carlo Methods. SAMSI, NC, November 2009.

Handling Sparsity via the Horseshoe

-JSM 2009 – Invited talk. Washington, D.C., August 2009.

Handling Sparsity via the Horseshoe

-O-Bayes 2009 – Wharton School of Business, Philadelphia, PA, June 2009.

Handling Sparsity via the Horseshoe

-University of Washington – Seminar Speaker, May 2009.

Handling Sparsity via the Horseshoe

-SBIES 2009 – St. Louis, MO, May 2009.

Handling Sparsity via the Horseshoe

-Ohio State University – Seminar Speaker, April 2009.

Handling Sparsity via the Horseshoe

-The University of Cambridge, UK – Seminar Speaker, April 2009.

Handling Sparsity via the Horseshoe

-AISTats 2009 – Invited Speaker. Clearwater, FL, April 2009.

Particle Learning and Smoothing

-Illinois Institute of Technology – Seminar Speaker, March 2009.

Model Assessment and Adaptive Design

-Midterm Workshop on Sequential Monte Carlo Methods. SAMSI, NC, February 2009.

Sparse Factor Modeling and Cross-study Projections of Genomic Biomarkers

-The University of Chicago – Human Genetics Department, January 2009.

Handling Sparsity via the Horseshoe

-Duke University – Seminar Speaker, November 2008.

High-Dimensional Sparse Factor Modeling

-Rice University – Seminar Speaker, September 2008.

Particle Learning and Smoothing

-Workshop on Sequential Monte Carlo Methods. SAMSI, NC, September 2008.

Objective Bayesian Model Selection in Gaussian Graphical Models

-The University of Chicago Graduate School of Business – Brown-Bag Series in Econometrics and Statistics. June 2008.

Dynamic Matrix-Variate Graphical Models

-Workshop on Bayesian Inference. Federal University of Rio de Janeiro, Brazil. February 2008.

Objective Bayesian Model Selection in Gaussian Graphical Models

-9th Bayesian Brazilian Meeting. Maresias, Brazil. February 2008.

Objective Bayesian Model Selection in Gaussian Graphical Models

-Virginia Tech – Seminar Speaker, January 2008.

Objective Bayesian Model Selection in Gaussian Graphical Models

-The University of Chicago – Seminar Speaker, November 2007.

Structure and Sparsity in High-dimensional Multivariate Analysis

-JSM 2007 - Invited talk. Salt Lake City, UT, August 2007.

Flexible Covariance Estimation in Graphical Models

-Workshop on Random Matrices and Higher Dimensional Inference. AIM Research Conference Center, Palo Alto, California. April 2007.

Dynamic Matrix-Variate Graphical Models

-University of California, Berkeley – Seminar Speaker, February 2007.

Dynamic Matrix-Variate Graphical Models

-University of California, Irvine – Seminar Speaker, February 2007.

Dynamic Matrix-Variate Graphical Models

-The University of Texas at Austin, McCombs School of Business – Seminar Speaker, January 2007.

Dynamic Matrix-Variate Graphical Models

-University of California, Santa Cruz – Seminar Speaker, January 2007.

High-Dimensional Sparse Factor Modeling: Applications in Gene Expression Genomics

-University of Chicago Graduate School of Business – Seminar Speaker, January 2007.

Dynamic Matrix-Variate Graphical Models

-University of Pennsylvania, The Wharton School of Business – Seminar Speaker, January 2007.

Dynamic Matrix-Variate Graphical Models

-University of Southern California, Marshall School of Business – Seminar Speaker, January 2007.

Exploring Oncogenic Pathways Using High Throughput Data

-The Science of Cancer Modeling. National Cancer Institute, Bethesda, MD, December 2006.

Dynamic Matrix-Variate Graphical Models

-University of Chicago Graduate School of Business – Seminar Speaker, October 2006.

Dynamic Matrix-Variate Graphical Models

-Bayesian Focus Week – High Dimensional Inference in Random Matrices SAMSI, October 2006.

Non-Gaussian Sparse Factor Models and Latent Factor Regression

-JSM 2006 - Invited talk. Seattle, WA, August 2006.

High-Dimensional Sparse Factor Models

-9th Meeting of New Researchers in Statistics and Probability. University of Washington, WA, August 2006.

Integration of Oncogenic Networks in Cancer Phenotypes

-NCI/ICBP Meeting. Nashville, TN, May 2006.

Factor Stochastic Volatility – Time varying loadings and Regime switching

-JSM 2005 - Invited talk. Minneapolis, MN, August 2005.

Gaussian Graphical Models: Model Selection and Covariance Estimation

-Federal University of Rio de Janeiro – Operational Research Department – Seminar Speaker, Rio de Janeiro, Brazil, March 2005.

Sampling from the hyper-Wishart on decomposable models

-2nd Latin American ISBA Meeting - COBAL 2005. Los Cabos, Mexico, February 2005.

Unrestricted Gaussian Graphical Model Determination

-Federal University of Rio de Janeiro – Department of Mathematics and Statistics – Seminar Speaker, Rio de Janeiro, Brazil, July 2003.

Marginal Likelihood Computation for Non Decomposable Gaussian Graphical Models

-Workshop on Stochastic Computation, SAMSI, NC, February 2003.

Simulation-based sequential analysis of Markov switching stochastic volatility models

-2nd Brazilian Finance Meeting, Rio de Janeiro, Brazil, July 2002.

Service Activities

Journal of the American Statistical Association.

-Associate Editor (since 2013).

Journal of Business and Economic Statistics.

-Associate Editor (since 2018).

The University of Texas at Austin

-Faculty Council Member. (2018-2019).

International Society for Bayesian Analysis (ISBA).

-Program Committee ISBA 2018.

International Society for Bayesian Analysis (ISBA).
-Program Chair EFaB (2017-2018).

O'Bayes 2017 -Member of the organizing committee.

International Society for Bayesian Analysis (ISBA).
-Board Member (2014-2017).

Electronic Journal of Statistics.
-Associate Editor (2008-2015).

2014 Savage Award – ISBA.
- Member of the reviewing committee.

2013 Savage Award – ISBA.
- Member of the reviewing committee.

2013 AISTATs
-Conference Chair.

The University of Texas at Austin
-Lead on dual degree development. CS/BHP. (2017-2019).

The University of Texas at Austin
-Member of the Provost Faculty Working Group charing the University's "Evaluations and Outcomes" committee (2014-2015).

McCombs School of Business
-Member of the MBA Program committee (since 2013).

IROM Department
-Chair of the faculty search committee (2016-2017).

IROM Department
- Member of MSBA admissions committee (since 2014).

IROM Department
-Member of the MS in Business Analytics curriculum committee (since 2012).

IROM Department
- Member of the executive committee (2014-2016).

IROM Department
- Chair of STA309 standardization committee (2014-2015).

IROM Department and DSSC
-Chair of the faculty search committee (2012-2013).

IROM Department
-Member of the MS in Business Analytics development committee (2011-2013).

UT Division of Statistics and Scientific Computation
-Member of the Ph.D. committee working on the creation of the program (2010-2011).

Seminar on Bayesian Inference in Econometrics and Statistics (SBIES).
-Organizer. UT Austin, May 2010.

2010 NIPS.

-Member of the Reviewing Committee.

2010 AISTats.

-Member of the Reviewing Committee.

Symposium on Bayesian Non-Parametrics.

-Organizer. UT Austin, March 2010.

Symposium on Quantitative Methods in Finance: A Bayesian Perspective.

-Organizer. UT Austin, December 2009.

Program on Sequential Monte Carlo Methods, SAMSI, NC.

-Research Group Leader, 2008/2009.

2009 NIPS.

-Member of the Reviewing Committee.

2009 NecSys.

-Associate Editor.

Seminar on Bayesian Inference in Econometrics and Statistics (SBIES).

-Organizer. Chicago, May 2008.

BEST Award for Student Research, Duke University.

-Member of the Selection Committee, 2008-2017.

Ph.D. Committees

-*Pedro Fillipini Santos* - **(co-advisor)** UT Austin, Statistics, May 2024.

-*Frank Rotiroti* - **(co-advisor)** UT Austin, Statistics, May 2025.

-*Spencer Woody* - UT Austin, Statistics, June 2020.

-*Jennifer Starling* - UT Austin, Statistics, May 2020.

-*Jiangang Zeng* - UT Austin, Economics, June 2020.

-*Guy Cole* - UT Austin, Statistics, Dec 2019.

-*Jared Fisher* - **(advisor)** UT Austin, IROM, May 2019.

-*Amin Shams* - UT Austin, Finance, May 2019.

-*Xinchen Gu* - UT Austin, Economics, June 2018.

-*David Puelz* - **(advisor)** UT Austin, IROM, May 2018.

-*Mark Bond* - UT Austin, Education, May 2018.

-*Katherine Bonnen* - UT Austin, Neuroscience, January 2018.

-*Xiao Han* - UT Austin, IROM, December 2017.

-*Wesley Tansey* - UT Austin, Computer Science, May 2017.

-*Qian Feng* - UT Austin, Economics, May 2017.

- Kenneth Latimer* - UT Austin, Neuroscience, July 2015.
- Prasad Buddhavarapu* - UT Austin, Engeneering, July 2015.
- Gonzalo Maturana* - UT Austin, Finance, May 2015.
- Chi-San Ho* - UT Austin, IROM Department, September 2014.
- Daniele Bianchi* - (**co-advisor**) Bocconi University (Finance), October 2013.
- Nicholas Crain* - UT Austin, Finance Department, May 2013.
- Jesse Windle* - (**advisor**) UT Austin, Mathematics Department, May 2013.
- Eamon O'Dea* - UT Austin, Ecology, Evolution and Behavior, May 2013.
- Nicholas Hirschey* - UT Austin, Finance Department, June 2012.
- Daniel Zantedeschi* - UT Austin, IROM Department, April 2012.
- Anne Marie Fictl* - Massey University, NZ. December 2011.
- Shameek Sinha* - UT Austin, Marketing Department, April 2011.
- Richard Hahn* - (**co-advisor**) Duke University, March 2011.
- Ingvar Strid* - (opponent) Stockholm School of Economics, November 2010.
- Jarad B. Niemi* - Duke University, 2009.
- Esther Salazar* - UFRJ - Brazil, 2008.

M.Sc. Committees / Advisor

- Minle Xu* – DSSC, Sept. 2014.
- Novin Ghaffari* - (advisor) – DSSC, May 2014.
- Min Fun* - (advisor) – DSSC, May 2013.
- Tian Lan* - (advisor) – DSSC, May 2013.
- Leonardo Nassif* - (co-advisor) UFRJ - Brazil, December 2010.

Undergraduate Students

- Vik Shirvaikar* - Honors Senior Thesis Advisor – UT Polymathic Scholars, 2019.
- Steve Karson* - Honors Senior Thesis Advisor – UT Economics, 2012.

Teaching Awards

FACULTY HONOR ROLL
 The University of Texas MBA, Fall 2018.
 Dallas Program.

FACULTY HONOR ROLL
 The University of Texas MBA, Fall 2017.
 Dallas Program.

MBA APPLAUSE AWARD
The University of Texas MBA, Fall 2013.

FACULTY HONOR ROLL
The University of Texas MBA, Fall 2011.
Houston Program.