David J. Kahle, Ph.D.

October 03, 2025

CONTACT INFORMATION

Department of Statistical Science
Baylor University
One Bear Place #97140
Waco, Texas 76798, USA
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RESEARCH INTERESTS

Statistical computing, data visualization, algebraic statistics, Bayesian statistics, pharmaceutical statistics, data science technologies, statistical machine learning

PROFESSIONAL EXPERIENCE

Associate Professor **August 2017 – Present**
Department of Statistical Science, **Baylor University**, Waco, Texas, USA

Research Fellow **September 2017 – Present**
Baylor Collaborative on Hunger and Poverty
Diana R. Garland School of Social Work, **Baylor University**, Waco, Texas, USA

Assistant Professor **August 2011 – July 2017**
Department of Statistical Science, **Baylor University**, Waco, Texas, USA

EDUCATION

Rice University, Houston, Texas, USA

Doctor of Philosophy (Ph.D.), Statistics **December 2011**

- *Minimum Distance Estimation in Categorical Conditional Independence Models*
- Advisor : Prof. Javier Rojo

Master of Arts (M.A.), Statistics **August 2006 – December 2010**

University of Richmond, Richmond, Virginia, USA

Bachelor of Arts (B.A.), Mathematics **August 2003 – June 2006**

AWARDS

Professional

- Mike Kutner Junior Faculty Travel Award, Southern Regional Council on Statistics, 2014, 2015.
- Travel Award, Korean National Institute for Mathematical Science's (NIMS) Thematic Program on Applied Algebraic Geometry, Summer 2014.
- Recognition for outstanding performance in the classroom by the Alpha Chi Omega women's fraternity (Theta Iota Chapter), Fall 2013.
- Boyd Harshbarger Travel Award, Southern Regional Council on Statistics, 2012.
- Wolfram Research's Mathematica Experts Live: One-Liner Competition 2012 Honorable Mention.

Graduate

- 2010 ggplot2 Case Study Competition grand prize winner.
- SACNAS Travel scholarship, 2008, 2009, 2010.
- George R. Brown Fellowship, 2008. Awarded by department for exceptional performance on qualifying exams.

Undergraduate

- Joint Mathematics Meetings Undergraduate Poster Session Winner, 2006.
- The National Dean's List, 2004, 2005, 2006.

- COMAP Mathematical Contest in Modeling Meritorious Ranking, 2005.
- Golden Key International Honour Society

Published Peer Reviewed Articles

24. Kim, F. S., D. Kahle, N. Fleming, M. Gallaugher, T. Houston, S. Lamsal, and R. X. Sturdivant (2025). "Comparing Costs and Utilization Between Provider Types for Back and Neck Pain: A Cross-Sectional Study." *Journal of Manipulative and Physiological Therapeutics*, 0(0):1–10. Available here.

23. Miyakawa, E. and D. Kahle (2025). "A Practical Comparison of Bayesian Computing Platforms in R." In: Han, H., Stamey, J. (eds) *New Frontiers in Data Science.* SDSC 2025. Communications in Computer and Information Science, vol 2556, 58–74. Springer, Cham. Available here.

22. Kahle, D. and J. Stamey (2025). "**invgamma**: The Inverse Gamma Distribution in R." *PeerJ Computer Science*, 11:e3205, 1–19. Available here.

21. Prajapati, P., J. Stamey, D. Kahle, J. Seaman, Z. Thomas, and M. Sonksen (2025). "Elicitation of a Prior for the Weibull Distribution." *Stats*, 8(3):1–14. Available here.

20. Hebdon, R., J. Stamey, D. Kahle, and X. Zhang (2024). "**unmconf**: An R Package for Bayesian Regression with Unmeasured Confounders." *BMC Medical Research Methodology*, 24(195):1–10. Available here.

19. Lamsal, S. and D. Kahle (2024). "In-Game Win Prediction Models for Cricket" in *Recent Advances in Next-Generation Data Science, Southwest Data Science Conference 2024.* Communications in Computer and Information Science, vol 2156, 148–168. Springer, Cham. Available here.

18. Otto, J. and D. Kahle (2023). "**ggdensity**: Improved Bivariate Density Visualization in R." *The R Journal*, 15(2): 220–236. Available here.

17. Casement, C. and D. Kahle (2023). "The Phoropter Method – A Stochastic Graphical Procedure for Prior Elicitation in Univariate Data Models." *Journal of Korean Statistical Society*, 52:60–82. Available here.

16. Kahle, D., C. O'Neill, and J. Sommars (2020). "A Computer Algebra System for R: Macaulay2 and the **m2r** Package." *Journal of Statistical Software*, 93(9):1–31. Available here.

15. Lukens, W., G. Stinchcomb, L. Nordt, D. Kahle, S. Driese, and J. Tubbs (2019). "Recursive Partitioning Improves Paleosol Proxies for Rainfall." *American Journal of Science*, 319:819–845. Available here.

14. Kahle, D. (2018). "Poisson Distribution." *The SAGE Encyclopedia of Educational Research, Measurement and Evaluation.* Ed. Bruce Frey.

13. Kahle, D. (2018). "Bayesian Statistics." *The SAGE Encyclopedia of Educational Research, Measurement and Evaluation.* Ed. Bruce Frey.

12. Kahle, D., R. Yoshida, and L. Garcia-Puente (2018). "Hybrid Schemes for Exact Conditional Inference in Discrete Exponential Families." *Annals of the Institute of Statistical Mathematics*, 70(5):983–1011. Available here.

11. Mansell, A., D. Kahle, and D. Bellert (2017). "Calculating RRKM Rate Constants from Vibrational Frequencies and their Dynamic Interpretation." *The Mathematica Journal*, 19:1–20. Available here.

10. Casement, C. and D. Kahle (2017). "Graphical Prior Elicitation in Univariate Models." *Communications in Statistics – Simulation and Computation*, 0(0):1–19. Available here.

9. Young, P., D. Kahle, and D. Young (2017). "On the Independence of Singular Multivariate Skew-Normal Components." *Statistics & Probability Letters*, 122: 58–62. Available here.

8. Kahle, D., J. Stamey, F. Natanegara, K. Price, and B. Han (2016). "Facilitated Prior Elicitation with the Wolfram CDF." *Biometrics & Biostatistics International Journal*, 3(6):1–6. Available here.

7. Kahle, D., P. Young, B. Greer, and D. Young (2016). "Confidence Intervals for the Ratio of Two Poisson Rates Under One-Way Differential Misclassification Using Double Sampling." *Computational Statistics & Data Analysis*, 95:122–132. Available here.

6. Wu, W., J. Stamey, and D. Kahle (2015). "A Bayesian Approach to Account for Misclassification and Overdispersion in Observational Count Data." *International Journal of Environmental Research and Public Health*, 12(9):10648–10661. Available here.

5. Sides, R., D. Kahle, and J. Stamey (2015). "Bayesian Sample Size Determination in Two-Sample Poisson Models." *Biometrics & Biostatistics International Journal*, 2(1):1–5. Available here.

4. Kahle, D. (2014). "Animating Statistics: A New Kind of Applet for Exploring Probability Distributions." *Journal of Statistics Education*, 20(2): 1–12. Available here.

3. Kahle, D. (2013). "**mpoly**: Multivariate polynomials in R." *The R Journal*, 5(1): 162–170. Available here.

2. Kahle, D. and H. Wickham (2013). "**ggmap**: Spatial visualization with ggplot2." *The R Journal*, 5(1): 144–161. Available here.

1. Stein, R. M., B. Buzcu-Guven, L. Dueñas-Osorio, D. Subramanian, D. Kahle (2013). "How risk perceptions influence evacuations from hurricanes and compliance with government directives." *Policy Studies Journal*, 41(2): 319–342. Available here.

Book Chapters

Daggers (†) indicate that the item is in press.

4. Kahle, D., J. Seaman, and J. Stamey (2022). "An Overview of Bayesian Computation" in *Case Studies in Bayesian Methods for Biopharmaceutical CMC*, eds. Paul Faya and Tony Pourmohamad. Chapman & Hall/CRC Biostatistics.

3. Seaman, J., D. Kahle, and J. Stamey (2022). "Basic Bayesian Model Checking" in *Case Studies in Bayesian Methods for Biopharmaceutical CMC*, eds. Paul Faya and Tony Pourmohamad. Chapman & Hall/CRC Biostatistics.

2. Kahle, D. and M. Sonksen (2019). "Computational Tools" in *Bayesian Applications in Pharmaceutical Development*, eds. Fanni Natanegara and Mani Lakshminarayanan. Chapman & Hall/CRC Statistics.

1. Seaman, J., J. Stamey, D. Kahle, and S. Blair (2019). "A Brief Guide to Bayesian Model Checking" in *Bayesian Applications in Pharmaceutical Development*, eds. Fanni Natanegara and Mani Lakshminarayanan. Chapman & Hall/CRC Statistics.

Articles under Peer Review

Daggers (†) indicate that the item is currently in revision.

4. †Mitchell, C., P. James, D. Kring, and D. Kahle. "Impact Induced Porosity of Meteor Crater."
3. †Turner, D., D. Kahle, and R. Sturdivant. "**ggvfields**: Vector Field Visualization in R."
2. Otto, J. and D. Kahle. "**tldr**: Quick Documentation in the R Console."
1. Kim, F. S., D. Kahle, N. S. Fleming, M. Gallaugher, T. Houston, C. Fox, B. Cahill, and R. Sturdivant. "Comparing Costs and Utilization Between Airrosti and Five Provider Types for Musculoskeletal Pain."

Articles and Chapters in Preparation

6. Blair, S., D. Kahle, and J. Seaman. "Sensitivity to Prior Misspecification in the Mode-Percentile Method of Elicitation."
5. Morgan, N., M. Gallaugher, and D. Kahle. **ggclassify**: Visualizing Classifiers in R.
4. Young, P., D. Kahle, J. Patrick, and D. Young. "A Sufficient Linear-Dimension Reduction Model for Supervised Classification for Multiple Multivariate Skew-Normal Populations."
3. Kahle, D. and J. Hauenstein. "Stochastic Exploration of Real Varieties via Variety Distributions." arXiv:2410.16071.
2. Kahle, D. and J. Hauenstein. "Algebraic Pattern Recognition."
1. Ma, Q. and D. Kahle. "Parameterizing One-Dimensional Real Varieties with Deep Learning."

Copyrights

Daggers (†) indicate that the item is not yet publicly available.
Downloads are collected using **cranlogs**, *which only counts downloads from RStudio. Numbers are all time downloads as of October 03, 2025.*

24. Lamsal, S. and D. Kahle (2025). **vnorm**: Variety Normal Distribution. R package version controlled with Git on GitHub. License : MIT.
23. Turner, D., D. Kahle, and R. Sturdivant (2025). **ggvfields**: Vector Field Visualization in R. R package distributed by CRAN and version controlled with Git on GitHub. License : MIT. Downloads: 1,408.
22. Morgan, N., D. Kahle, and M. Gallaugher (2024–2025). **biroot**: Tools for Bivariate Level Sets in R. R package version controlled with Git on GitHub. License : MIT.
21. †Morgan, N., D. Kahle, and M. Gallaugher (2024–2025). **ggclassify**: Visualizing Classifiers in R. R package version controlled with Git on GitHub. License : MIT.
20. Hebdon R., J. Stamey, D. Kahle, and X. Zhang (2023–2025). **unmconf**: Modeling with Unmeasured Confounding. R package version controlled with Git on GitHub. License : MIT. Co-maintained through all versions—0.1.0. Downloads: 4,208.
19. Kahle, D. and J. Otto (2022–2025). **registers**: Registers for R. R package version controlled with Git on GitHub. License : MIT. Downloads: Unknown.
18. Otto, J. and D. Kahle (2022–2025). **tldr**: Short-form documentation in the R console. R package version controlled with Git on GitHub. License : MIT. Downloads: Unknown.

17. Otto, J. and D. Kahle (2021–2025). **ggdensity**: An R Package for Interpretable Visualizations of Density Estimates. R package distributed by CRAN and version controlled with Git on GitHub. License : MIT. Co-maintained through all versions—0.0.1, 0.1.0, and 1.0.0. Downloads: 34,019.

16. Kahle, D. (2018–2025). **bertini**: Bertini in R. R package version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0.0. Downloads: Unknown.

15. Gao, P., G. Innerst, D. Kahle, D. Kim, R. Yoshida, and X. Zhang (2017–2025). **tropical**: Tropical Geometry in R. R package version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0.0. Downloads: Unknown.

14. Casement, C. and D. Kahle (2016–2025). Interactive Graphical Elicitation Tool. Shiny App available from ccasement.shinyapps.io/graphicalElicitation/ and version controlled with Git on GitHub. License : MIT.

13. Kahle, D. (2016–2025). **betalu**: The Beta Distribution with Support [l,u]. R package version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0. Downloads: Unknown.

12. Kahle, D. (2016–2025). **dirchlet**: The Dirichlet Distribution. R package version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0. Downloads: Unknown.

11. Kahle, D. (2016–2025). **chi**: The Chi Distribution. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0. Downloads: 42,779.

10. Kahle, D. and J. Stamey (2016–2025). **invgamma**: The Inverse Gamma Distribution. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0, 0.1, and 1.0. Downloads: 366,366.

9. Kahle, D., C. O'Neill, and J. Sommars (2016–2025). **m2r**: Macaulay2 in R. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0.0, 0.1.0, 1.0.0, 1.0.1, 1.0.2, and current version 1.0.3. Downloads: 30,771.

8. Kahle, D., L. Garcia-Puente, and R. Yoshida (2016–2025). **latte**: LattE and 4ti2 in R. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0, 0.1, 0.2.0, 0.2.1, and current version 0.2.2. Downloads: Unknown.

7. Baker, M., R. King, and D. Kahle (2015–2025). **TITAN2**: Threshold Indicator Taxa Analysis. R package distributed by CRAN. License : GPL-2. Maintained from version 2.1 (CRAN genesis), 2.2, 2.3, 2.4, 2.4.1, 2.4.2, and current version 2.4.3. Downloads: 41,589.

6. Kahle, D., J. Stamey, and R. Sides (2015–2025). **bayesRates**: Two-Sample Tests and Sample Size Determination from a Bayesian Perspective. R package version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0, and current version 1.1.1. Downloads: Unknown.

5. Kahle, D., P. Young, and D. Young (2014–2025). **poisDoubleSamp**: Confidence Intervals with Poisson Double Sampling. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0, 0.1, 1.0 and current version 0.1. Downloads: 32,688.

4. Kahle, D., L. Garcia-Puente, and R. Yoshida (2014–2025). **algstat**: Algebraic Statistics in R. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0.0, 0.0.1, 0.0.2, 0.1.0, 0.1.1 and current version 1.0.0. Downloads: Unknown.

3. †Kahle, D., J. Stamey, and J. Seaman (2013–2025). **glmcmp**: Prior Elicitation in Generalized Linear Models. Internal R package. License: Proprietary package of Eli Lilly & Company and Baylor University. Maintained through all versions—0.0, 1.0, 1.1, 1.2, 1.2.1, 1.2.2, 1.2.3, 1.3.0, 1.3.1, 1.3.2, 1.4, 1.5, 1.6, 1.6.1, 1.6.2 and current version 1.7.

2. Kahle, D. (2012–2025). **mpoly**: Symbolic computation and more with multivariate polynomials. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.0.1, 0.0.2, 0.0.3, 0.0.4, 0.0.5, 0.0.6, 0.1.0, 0.1.1, 1.0.0, 1.0.1, 1.0.2, 1.0.3, 1.1.0, and current version 1.1.1. Downloads: 108,762.

1. Kahle, D., H. Wickham (2011–2025). **ggmap**: Spatial Visualization with **ggplot2**. R package distributed by CRAN and version controlled with Git on GitHub. License : GPL-2. Maintained through all versions—0.7, 1.2, 1.3, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5.2, 2.6, 2.6.1, 2.6.2, 3.0.0, 3.0.1, 4.0.0, and current 4.0.1. Downloads: 7,434,462.

Other Articles

16. Kahle, D., J. Stamey, and J. Seaman (2021). "An Introduction to JAGS for Bayesian Inference." An internal document of Eli Lilly & Company and Baylor University, 24 pages.

15. Seaman, J., J. Stamey, D. Kahle, and W. Landau (2021). "A Quick Guide to Priors for Variance Components and Covariance Matrices." An internal document of Eli Lilly & Company and Baylor University, 26 pages.

14. Elrod, C., D. Kahle, J. Seaman, J. Stamey, and J. Song (2019). "Totality of Evidence Modeling." An internal document of Eli Lilly & Company and Baylor University, 6 pages.

13. Kahle, D., J. Song, and J. Seaman (2019). "A Note on Hitting Time Probabilities." An internal document of Eli Lilly & Company and Baylor University, 8 pages.

12. Seaman, J., J. Stamey, D. Kahle, and S. Stanley (2018). "A Brief Introduction to Bayesian Methods." An internal document of Eli Lilly & Company and Baylor University, 117 pages.

11. Kahle, D., J. Stamey, and J. Seaman (2016). "An Introduction to **glmcmp**." A vignette for the **glmcmp** package, v.2.0. An internal document of Eli Lilly & Company and Baylor University, 16 pages.

10. Seaman, J., J. Stamey, D. Kahle, and S. Blair (2016). "A Brief Guide to Bayesian Model Checking." An internal document of Eli Lilly & Company and Baylor University, 18 pages.

9. Seaman, J., J. Stamey, S. Blair, and D. Kahle (2016). "Constructing a Prior on the Correlation Coefficient." An internal document of Eli Lilly & Company and Baylor University, 9 pages.

8. Baker, M., R. King, and D. Kahle (2015). "An Introduction to Threshold Indicator Taxa Analysis with **TITAN2** v2.1" A vignette for the **TITAN2** package, 18 pages.

7. Kahle, D., J. Stamey, and J. Seaman (2015). "An Introduction to **glmcmp** v1.5" A vignette for the **glmcmp** package. An internal document of Eli Lilly & Company and Baylor University, 18 pages.

6. Seaman, J., J. Stamey, S. Blair, and D. Kahle (2015). "An Introduction to Bayesian Meta Analysis: Part I." An internal document of Eli Lilly & Company and Baylor University, 36 pages.

5. Seaman, J., D. Kahle, J. Stamey, and S. Blair (2015). "Power Priors and Conditional Means Priors for Generalized Linear Models." An internal document of Eli Lilly & Company and Baylor University, 50 pages.

4. Seaman, J., J. Stamey, and D. Kahle (2014). "A Brief Introduction to Bayesian Methods." An internal document of Eli Lilly & Company and Baylor University, 81 pages.

3. Kahle, D., J. Stamey, F. Natanegara, K. Price, and B. Han (2014). "Facilitated Prior Elicitation with the Wolfram CDF." In *JSM Proceedings*, Statistical Computing Section. Alexandria, Virginia: American Statistical Association.

2. Krey, K., E. Nolen, D. Kahle, D. Burton, J. Wise, and J. Singletary (2013). "Assessing the Impact of School Breakfast: A Study of Breakfast in the Classroom in Little Rock School District." December 2013 Final Report to funder No Kid Hungry Center for Best Practices by the Texas Hunger Initiative at the Baylor University School of Social Work. Listed as first contributor.

1. Krey, K., E. Nolen, D. Kahle, D. Burton, J. Wise, and J. Singletary (2013). "Assessing the Impact of School Breakfast: A Study of Breakfast in the Classroom in Dallas Independent School District." December 2013 Final Report to funder Dairy MAX by the Texas Hunger Initiative at the Baylor University School of Social Work. Listed as first contributor.

Funded research

Asterisks (*) indicate that the item is in preparation.
Daggers (†) indicate that the item is under review.

34. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $700,000 Period : 01/01/2026 – 12/31/2027

33. Title : How Do Costs and Utilization Compare Between Airrosti and Traditional Providers of Musculoskeletal Treatments?
PI(s) : Forest S. Kim, Ph.D. (Clin. Assoc. Prof., Econ. and Director, Robbins MBA Healthcare Program, Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Neil Fleming, Ph.D. (Clin. Prof., Econ. and Clin. Prof., Robbins Institute for Health Policy & Leadership, Baylor)
Rodney Sturdivant, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Source : Airrosti Rehab Center, LLC Type : Research Contract
Amount : $60,000 Period : 07/01/2024 – 12/31/2024

32. Title : Statistical Innovations in the Design and Analysis of Clinical Trials and Development Decision Making
PI(s) : Jackson Barth, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Alcon, Inc. Type : Research Contract
Amount : $150,000 Period : 10/01/2024 – 09/30/2027

31. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $466,926 Period : 06/01/2024 – 12/31/2025

30. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2023 – 05/31/2024

29. Title : Comparing Costs and Utilization Between Airrosti® and Five Provider Types for Back and Neck Pain
PI(s) : Forest S. Kim, Ph.D. (Clin. Assoc. Prof., Econ. and Director, Robbins MBA Healthcare Program, Baylor)
Neil Fleming, Ph.D. (Clin. Prof., Econ. and Clin. Prof., Robbins Institute for Health Policy & Leadership, Baylor)
Rodney Sturdivant, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Source : Airrosti Rehab Center, LLC Type : Research Contract
Amount : [Redacted, $10–$50k] Period : 02/28/2023 – 05/31/2023
Role : Funded collaborator

28. Title : Computational Aspects of Bayesian Estimation for Unmeasured Confounding
PI(s) : David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
Source : CSL Behring Type : Research Contract
Amount : $25,000 Period : 01/01/2023 – 12/31/2023

27. Title : Computational Aspects of Bayesian Estimation for Unmeasured Confounding
PI(s) : David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
Source : CSL Behring Type : Research Contract
Amount : $30,000 Period : 01/01/2022 – 08/01/2022

26. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2022 – 05/31/2023

25. Title : FY21 Summer Meals to You Expansion Project (2022 Emergency Meals To You Expansion)
PI(s) : Kathy Krey, Ph.D. (Senior Director of Research & Administration Baylor Collaborative on Hunger and Poverty, Diana R. Garland School of Social Work)
Source : US Dept. of Agriculture (USDA) Role : Funded collaborator
Amount : $7,125,675 Period : 05/13/2022 – 06/30/2023

24. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2021 – 05/31/2022

23. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Joon Song, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2020 – 05/31/2021

22. Title : FY20 Summer Food Service Program Rural Summer Meals Demonstration Project
PI(s) : Kathy Krey, Ph.D. (Senior Director of Research & Administration
Baylor Collaborative on Hunger and Poverty, Diana R. Garland School of Social Work)
Benjamin Ryan, Ph.D. (Assoc. Clin. Prof., Env. Sci., Baylor)
Van Pham, Ph.D. (Prof., Econ., Baylor)
Carson Mencken, Ph.D. (Prof., Soc., Baylor)
Source : US Dept. of Agriculture (USDA) Role : Funded collaborator
Amount : $188,582,841 Period : 03/25/2020 – 06/30/2022
A public service and research program organizing, orchestrating, and assessing food deliveries to rural families during the summer, this work was expanded nationwide during the COVID19 pandemic. Role co-lead data science efforts.

21. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2019 – 05/31/2020

20. Title : FY19 Summer Food Service Program Rural Summer Meals Demonstration
PI(s) : Kathy Krey, Ph.D. (Senior Director of Research & Administration
Baylor Collaborative on Hunger and Poverty, Diana R. Garland School of Social Work)
Source : US Dept. of Agriculture (USDA) Role : Funded collaborator
Amount : $5,000,000 Period : 05/31/2019 – 06/30/2022

19. Title : HDR DSC: Modernizing Water and Wastewater Treatment through Data Science Education & Research
PI(s) : Amanda Hering, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
G. Michael Poor, Ph.D. (Assoc. Prof., Comp. Sci., Baylor)
Greg Hammerly, Ph.D. (Assoc. Prof., Comp. Sci., Baylor)
Douglas Nychka, Ph.D. (Prof., Appl. Math. and Stat., Colorado School of Mines)
Tzahi Cath, Ph.D. (Prof., Civ. and Env. Engr., Colorado School of Mines)
SP(s) : Jeanne Hill, Ph.D. (Sr. Lect., Stat. Sci., Baylor), funded
Grant Morgan, Ph.D. (Assoc. Prof., Ed. Psych., Baylor), funded
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor), funded
Greg Speegle, Ph.D. (Prof., Comp. Sci., Baylor), funded
Source : National Science Foundation
Harnessing the Data Revolution (HDR): Data Science Corps (DSC)
Amount : $1,332,848 Period : 09/01/2019 – 08/31/2022

18. Title : Bayesian Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2018 – 05/31/2019

17. Title : Applied Algebraic Statistics through R: Applications of Bertini
PI(s) : David Kahle, Ph.D. (Assoc. Prof., Stat. Sci., Baylor)
Source : Baylor University *Undergraduate Research and Scholarly Activities Program* (*URSA*)
Amount : $4,133 Period : 06/01/2018 – 05/31/2019

16. Title : Science Driven Adaptive Program – Bayesian
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2017 – 05/31/2018

15. Title : Applied Algebraic Statistics through R: Applications of LattE and 4ti2
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Baylor University *Undergraduate Research and Scholarly Activities Program* (*URSA*)
Amount : $3,200 Period : 06/01/2017 – 05/31/2018

14. Title : A Computer Algebra System for R: Macaulay2 and the **m2r** Package
PI(s) : Christopher O'Neill, Ph.D. (Krener Asst. Prof., Math., UC Davis)
Jeff Sommars (Grad. Student, Math., Stat., and C.S., U Illinois Chicago)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : American Mathematical Society through the National Science Foundation
Amount : $1,500 Period : 05/03/2017 – 05/07/2017

13. Title : A Computer Algebra System for R: Macaulay2 and the **m2r** Package
PI(s) : Christopher O'Neill, Ph.D. (Krener Asst. Prof., Math., UC Davis)
Jeff Sommars (Grad. Student, Math., Stat., and C.S., U Illinois Chicago)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : American Mathematical Society through the National Science Foundation
Amount : $1,500 Period : 11/09/2016 – 11/13/2016

12. Title : Collaborative Research: CDS&E: Applied Algebraic Statistics through R
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : National Science Foundation: Division of Mathematical Sciences Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences (Award No. 1622449, CDS&E–MSS, PD 11-8069)
Amount : $63,897 Period : 09/15/2016 – 07/31/2019
Note : Collaborative proposal with Ruriko Yoshida, Ph.D. (Assoc. Prof., Op. Res., Naval Postgraduate School), $100,404

11. Title : Science Driven Adaptive Program – Bayesian
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : $311,284 Period : 06/01/2016 – 05/31/2017

10. Title : Mathematics Research Community 2016: Algebraic Statistics
PI(s) : Matthias Drton, Ph.D. (Prof., Stat., Washington)
Elizabeth Gross, Ph.D. (Asst. Prof., Math., San Jose State)
Serkan Hoşten, Ph.D. (Prof., Math., San Francisco State)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Sonya Petrović, Ph.D. (Asst. Prof., Appl. Math., IIT)
Source : American Mathematical Society through the National Science Foundation
Amount : Travel and accommodation for 40 graduate student, post-docs, and organizers
Period : 06/12/2016 – 06/18/2016

9. Title : Science Driven Adaptive Program – Bayesian
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : [Redacted, $250–$500k] Period : 06/01/2015 – 05/31/2016

8. Title : Development and Training for **glmcmp** Software
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : [Redacted, $10–$25k] Period : 01/01/2015 – 05/31/2015
Collab. : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)

7. Title : Validation of Onsite Health Diagnostics Statistical Tool
PI(s) : James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Onsite Health Diagnostics Type : Research Contract
Amount : $4,500 Period : 01/01/2015 – 05/31/2015

6. Title : Accelerating Algebraic Statistics: A Fast Hybrid Scheme for Exact Inference in Log-Linear Models with CUDA
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Nvidia Corporation
Amount : A hardware donation of a Tesla K40 GPU, valued at $3,000 – $4,000

5. Title : Effects of Universal Breakfast in the Classroom on Participation and Behavior
PI(s) : Jon Singletary, Ph.D. (Diana R. Garland Endowed Chair in Child and Family Studies, Baylor University School of Social Work)
Source : Share Our Strength Role : Unfunded collaborator
Amount : $50,000 Period : 01/01/2012 – 12/31/2013

4. Title : Effects of Universal Breakfast in the Classroom on Participation, Behavior and Flavored Milk Consumption
PI(s) : Jon Singletary, Ph.D. (Diana R. Garland Endowed Chair in Child and Family Studies, Baylor University School of Social Work)
Source : Dairy MAX, Inc. Role : Unfunded collaborator
Amount : $115,304 Period : 01/01/2012 – 12/31/2013

3. Title : Bayesian Methods for Pharmaceutical Statistics
PI(s) : John Seaman, Jr., Ph.D. (Prof., Stat. Sci., Baylor)
James Stamey, Ph.D. (Prof., Stat. Sci., Baylor)
Source : Eli Lilly & Company Type : Research Contract
Amount : [Redacted, $100–$250k] Period : 02/01/2012 – 12/31/2014
Collab. : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor), funded

2. Title : Facilitator : Interactive tools for Bayesian prior elicitation
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Baylor University *College of Arts and Sciences Summer Sabbatical*
Amount : $16,440 Period : 06/01/2013 – 07/31/2013

1. Title : Baylor University Interactive Statistics Modules (BaylorISMs)
PI(s) : David Kahle, Ph.D. (Asst. Prof., Stat. Sci., Baylor)
Source : Baylor University *Undergraduate Research and Scholarly Activities Program (URSA)*
Amount : $5,000 Period : 06/01/2012 – 05/31/2013

Invited Presentations

Asterisks (*) indicate a scheduled talk. Bold indicates presenter.

Kahle, D. "Experiments with Variety Distributions and Variety Regression." *The 7th Annual Meeting of SIAM Texas-Louisiana Section*, Baylor University, Waco, Texas, USA, October 11–13, 2024.

Kahle, D., J. Seaman, and J. Stamey. "An Intuitive Introduction to Bayesian Computation." *Bayesian Statistics Seminar Series*, Eli Lilly & Company, Online, December 7, 2023.

Kahle, D. and J. Hauenstein. "Variety Distributions and Applications." *Seminar*, Department of Statistics and Data Science, Southern Methodist University, Dallas, Texas, USA, November 17, 2023.

Kahle, D. and J. Hauenstein. "An Invitation to Algebraic Statistics via Variety Distributions." Banquet speaker, *Southern Regional Council on Statistics Summer Research Conference*, Baylor University, Waco, Texas, USA, June 12–14, 2023.

Kahle, D.. "Practical Strategies for Bayesian Computation." Eli Lilly & Company, Online, May 27, 2022.

Seaman, J., **J. Stamey**, and **D. Kahle**. "A Brief Introduction to Bayesian Methods." Eli Lilly & Company, Online, September 29, 2021.

Seaman, J., **J. Stamey**, and **D. Kahle**. "Priors for Variance Components and Covariance Matrices." Eli Lilly & Company, Online, July 30, 2021.

Seaman, J., **J. Stamey**, and **D. Kahle**. "An Introduction to Bayesian Meta-Analysis and Network Meta-Analysis II." Eli Lilly & Company, Online, April 20, 2021.

Seaman, J., **J. Stamey**, and **D. Kahle**. "An Introduction to Bayesian Meta-Analysis and Network Meta-Analysis I." Eli Lilly & Company, Online, March 16, 2021.

Seaman, J., **J. Stamey**, and **D. Kahle**. "A Brief Introduction to Bayesian Hierarchical Modeling." Eli Lilly & Company, Online, October 20, 2020.

Seaman, J., **J. Stamey**, and **D. Kahle**. "A Brief Introduction to Bayesian Methods." Eli Lilly & Company, Online, March 24, 2020.

Kahle, D. and Q. Ma. "Exploring Varieties – A Practical Guide." *The 2nd Annual Meeting of SIAM Texas-Louisiana Section*, Southern Methodist University, Dallas, Texas, USA, November 1–3, 2019. Slides/code available here.

Kahle, D. and Q. Ma. "Parameterizing Algebraic Curves using Autoencoders." *AMS Special Session on Applications of Algebra and Geometry Fall Central Sectional Meeting*, University of Wisconsin-Madison, Madison, Wisconsin, USA, September 14–15, 2019.

Beattie, S., **M. Gamalo**, **D. Kahle**, and **A. Nikooienejad**. "Statistical Inference in the 21st Century: A World Beyond $p < .05$." Panelist, organized by Richard Payne. *Bayesian Seminar Series*, Eli Lilly & Company, Indianapolis, Indiana, July 26, 2019.

Kahle, D., J. Hauenstein, and Q. Ma. "Stochastic Exploration of Real Varieties and Applications." *Summer School on Randomness and Learning in Non-Linear Algebra*, Max Planck Institute for Mathematics in the Sciences, Leipzig, Saxony, Germany, July 1–5, 2019. Slides/code available here.

Kahle, D., and J. Hauenstein. "Stochastic Exploration of Real Varieties." *Workshop on Nonlinear Algebra in Applications*, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, Rhode Island, USA, November 12–16, 2018. Recording here.

Seaman, J., D. Kahle, and J. Stamey. "An Overview of Bayesian Statistics for Non-statisticians." Eli Lilly & Company, Indianapolis, Indiana, USA, October 10, 2018.

Kahle, D. "Algebraic Statistics through R." *Department of Statistics Colloquium*, Pennsylvania State University, State College, Pennsylvania, USA, April 19, 2018.

Seaman, J., **J. Stamey**, and **D. Kahle**. "A Brief Introduction to Bayesian Hierarchical Models." Eli Lilly & Company, Indianapolis, Indiana, USA, April 10, 2018.

Kahle, D. "Research in Statistics." *Baylor Undergraduate Research in Science and Technology (BURST)*, Baylor University, Waco, Texas, USA, April 5, 2018.

Kahle, D. "Becoming a Statistician." *Baylor Undergraduate Research in Science and Technology (BURST)*, Baylor University, Waco, Texas, USA, November 16, 2017.

Kahle, D., C. O'Neill, and J. Sommars. "**m2r**: Macaulay2 in R." *AMS Special Session on Applicable and Computational Algebraic Geometry Fall Central Sectional Meeting*, University of North Texas, Denton, Texas, USA, September 9–10, 2017. Slides available here.

Kahle, D. "Algebraic Statistics in R – A State of the Union." *SIAM 2017 Conference on Applied Algebraic Geometry*, Georgia Tech, Atlanta, Georgia, USA, July 31–August 4, 2017. Slides available here.

Kahle, D. "An Introduction to Applied Algebraic Statistics through R." *Statistics Colloquium Lecture*, Baylor University, Waco, Texas, USA, October 6, 2016. Slides available here.

Kahle, D. "**glmcmp** 2.0: Conditional Means Priors in R" *Eli Lilly & Company Science Driven Adaptive Program (SDAP) online meeting on prior elicitation tools.* October 5, 2016.

Kahle, D. "Simple Algebraic Regression." *2016 Society for Industrial and Applied Mathematics (SIAM) Annual Meeting*, The Westin Boston Waterfront, Boston, Massachusetts, USA, July 11–15, 2016. Slides available here.

Kahle, D., R. Yoshida, and L. Garcia-Puente. "Applied Algebraic Statistics in R: The **algstat** Package." *2016 Mathematics Research Community*, Snowbird Ski and Summer Resort, Snowbird, Utah, USA, June 12–18, 2016.

Kahle, D. "Reflections on Big Data: What it is, why you should care, and why you shouldn't." *Baylor Undergraduate Research in Science and Technology (BURST)*, Baylor University, Waco, Texas, USA, November 19, 2015.

Kahle, D. and **M. Sonksen.** "Getting Started with **glmcmp**." *Eli Lilly & Company Bayesian Educational Training (BET) Forum online meeting.* September 25, 2015.

Kahle, D. and **M. Sonksen.** "Getting Started with **glmcmp**." *Eli Lilly & Company Bayesian Central Hub online meeting.* August 28, 2015.

Kahle, D. "**glmcmp** Nonlinear Programming." *Eli Lilly & Company Science Driven Adaptive Program (SDAP) online meeting on prior elicitation tools.* August 26, 2015.

Kahle, D., R. Yoshida, and L. Garcia-Puente. "Applied Algebraic Statistics in R with **algstat**." *SIAM 2015 Conference on Applied Algebraic Geometry*, National Institute for Mathematical Sciences, Daejeon, Hoseo, South Korea, August 3–7, 2015.

Kahle, D. "Recent Advances in Visualizing Spatial Data in R with **ggmap**." *45th Symposium on the Interface of Computing Science and Statistics: Data Science*, Waterfront Place Hotel, Morgantown, West Virginia, USA, June 10–13, 2015. Slides available here.

Kahle, D. and **J. Stamey.** "Reference Priors in **glmcmp**." *Eli Lilly & Company Science Driven Adaptive Program (SDAP) online meeting.* April 17, 2015.

Kahle, D. and **J. Stamey.** "Induced Priors on Unelicited Scenarios: Preliminary results for a hypothetical pilot study." *Eli Lilly & Company Science Driven Adaptive Program (SDAP) online meeting.* February 20, 2015.

Seaman, J., **J. Stamey**, and **D. Kahle**. "A Brief Introduction to Bayesian Methods." Eli Lilly & Company, Indianapolis, Indiana, USA, November 18, 2014.

Kahle, D. and **J. Stamey.** "Logistic Regression with Conditional Means Priors and **glmcmp**." *Eli Lilly & Company Science Driven Adaptive Program (SDAP) online meeting.* June 27, 2014.

Kahle, D. "**algstat**: Algebraic Statistics for the Masses." University of Kentucky, Lexington, Kentucky, USA, September 11, 2014. Slides available here.

Kahle, D. and L. Garcia-Puente. "Algebraic Statistics in R: Discrete Multivariate Analysis and the **algstat** Package." *Southern Regional Council on Statistics Summer Research Conference*, Hotel Galvez, Galveston, Texas, USA, June 1–4, 2014. Poster available here.

Kahle, D. "Can you see me now? A consumers' guide to data visualization." *Together at the Table: Hunger Summit at Baylor University*, Baylor University, Waco, Texas, USA, October 24–25, 2013. Slides available here.

Kahle, D. "Introducing Algebraic Statistics." Stephen F. Austin State University, Nacogdoches, Texas, USA, October 7, 2013. Slides available here.

Kahle, D. "Introducing Algebraic Statistics." *Southern Regional Council on Statistics Summer Research Conference*, Montgomery Bell State Park, Burns, Tennessee, USA, June 2–5, 2013. Slides available here.

Kahle, D. "The Grammar of Graphics and Spatial Visualization in R." *Sam Houston State University*, Huntsville, Texas, USA, October 3, 2012. Slides available here.

Kahle, D. "The Algebraic Side of Contingency Tables." *2012 Conference of Texas Statisticians*, Lamar University, Beaumont, Texas, March 3, 2012. Slides available here.

Conference Presentations

Bold denotes presenter. Daggers (†) indicate that the item is in under review.

Kim, F. S., D. Kahle, N. Fleming, M. Gallaugher, T. Houston, **C. Fox**, B. Cahill, R. Sturdivant. "Comparing Costs and Utilization Between Airrosti and Five Provider Types for Musculoskeletal Pain." *U.S. Army Medical Center of Excellence Graduate School Research and Education Symposium 2025*, UT Health Science Center, San Antonio, Texas, USA, June 5–6, 2025.

Miyakawa, E. and **D. Kahle**. "A Practical Comparison of Bayesian Computing Platforms in R." *2025 Southwest Data Science Conference*, Baylor University, Waco, Texas, USA, March 21, 2025.

Hebdon, R., J. Stamey, D. Kahle, and X. Zhang. "**unmconf**: An R Package for Bayesian Regression with Unmeasured Confounders." *International Society for Pharmacoepidemiology (ISPE) 2024 Mid-Year Meeting*, Hilton Orlando Lake Buena Vista, Lake Buena Vista, Florida, USA, April 15, 2024. (Poster)

Lamsal, S. and D. Kahle. "In-game Win Prediction Models for Cricket." *2024 Southwest Data Science Conference*, Baylor University, Waco, Texas, USA, March 22, 2024. (Poster)

Lamsal, S. and D. Kahle. "In-game Win Prediction Models for Cricket." *2024 American Statistical Association Conference on Statistical Practice*, The Ritz Carlton, New Orleans, Louisiana, USA, February 27–29, 2024. (Poster)

Kahle, D. and J. Hauenstein. "Variety Distributions and Applications." *Computations and Data in Algebraic Statistics*, *Banff International Research Station for Mathematical Research and Discovery*, Casa Matemática Oaxaca, San Felipe del Agua, Oaxaca, Mexico, May 14–19, 2023.

Otto, J. and D. Kahle. "**tldr**: Quick Documentation in the R Console." *2023 Joint Statistical Meetings*, Metro Toronto Convention Centre, Toronto, Ontario, Canada, August 5–10, 2023.

Otto, J., P. Faya, J. Stamey, and D. Kahle. "A Bayesian approach to Deming regression with pharmaceutical applications." *Southern Regional Council on Statistics Summer Research Conference*, Villas by the Sea, Jekyll Island, Georgia, USA, October 2–5, 2022.

Otto, J. and D. Kahle. "**ggdensity**: Improved Bivariate Density Visualization in R." *2022 Joint Statistical Meetings*, Walter E. Washington Convention Center, Washington D.C., USA, August 6–11, 2022.

Otto, J. and D. Kahle. "**ggdensity**: Improved Bivariate Density Visualization in R." *2022 useR!*, Online, June 20–23, 2022.

Otto, J. and D. Kahle. "**ggdensity**: Improved Bivariate Density Visualization in R." *2022 Symposium on Data Science & Statistics: Beyond Big Data: Influencing Science, Technology, and Society*, The Westin Pittsburgh, Pittsburgh, Pennsylvania, USA, June 7–10, 2022.

Ma, Q. and D. Kahle. "Model Selection in Algebraic Pattern Recognition." *2021 Joint Mathematics Meetings*, Washington State Convention Center, Seattle, Washington, USA, August 7–12, 2021.

Ma, Q. and D. Kahle. "Parameterizing Varieties with Deep Learning." *The 2nd Annual Meeting of SIAM Texas-Louisiana Section*, Southern Methodist University, Dallas, Texas, USA, November 1–3, 2019.

Innerst, G. and D. Kahle. "An Algebraic Approach to Minimum Chi-Square Estimation." *2019 Joint Mathematics Meetings*, Baltimore Convention Center, Baltimore, Maryland, USA, January 16–19, 2019.

Hossu, P., C. Sun, G. Innerst, R. Hebdon, and D. Kahle. "Algebraic Curve Fitting in R." *2019 Joint Mathematics Meetings*, Baltimore Convention Center, Baltimore, Maryland, USA, January 16–19, 2019. (Poster; Award: Outstanding Poster)

Innerst, G. and D. Kahle. "An Algebraic Approach to Minimum Chi-Square Estimation." *2018 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Diversity in STEM Conference*, Henry B. González Convention Center, San Antonio, Texas, USA, October 11–13, 2018. (Poster)

Hebdon, R., P. Hossu, G. Innerst, C. Sun, and D. Kahle. "Algebraic Curve Fitting in R." *2018 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Diversity in STEM Conference*, Henry B. González Convention Center, San Antonio, Texas, USA, October 11–13, 2018. (Poster)

Hossu, P., C. Sun, G. Innerst, R. Hebdon, and D. Kahle. "A Geometrically-Inspired Discrepancy for Categorical Probability Distributions." *Annual College of Science Poster Day*, Illinois Institute of Technology, Chicago, Illinois, USA, August 17, 2018. (Poster; Award: Best Applied Math Poster)

Lukens, W. E., G. Stinchcomb, L. Nordt, S. Driese, D. Kahle, and J. Tubbs. "A Re-evaluation of Paleosol Elemental Proxies for Climate Through Cross-validation and Machine Learning." *2018 Goldschmidt Conference*, Hynes Convention Center, Boston, Massachusetts, USA, August 12–21, 2018.

Innerst, G., D. Kim, P. Gao, and D. Kahle. "MCMC Strategies to Enhance Exact Conditional Inference for Discrete Exponential Families." *2017 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Diversity in STEM Conference*, Salt Palace Convention Center, Salt Lake City, Utah, USA, October 19–21, 2017.

Kim, D., P. Gao, G. Innerst, and D. Kahle. "Accelerating Exact Conditional Inference in Discrete Exponential Family Models." *2017 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Diversity in STEM Conference*, Salt Palace Convention Center, Salt Lake City, Utah, USA, October 19–21, 2017.

Kahle, D., J. Stamey, M. Sonksen, and K. Price. "**glmcmp**: Prior Elicitation in R." *2017 Joint Statistical Meetings. Topic Contributed Session : What do the Experts Believe? Leveraging expert knowledge to develop robust informative priors to aid decision making in drug and medical device development*, Baltimore Convention Center, Baltimore, Maryland, USA, July 29–August 3, 2017.

Casement, C. and D. Kahle. "Lineup-Style Methods for Graphical Prior Elicitation." *2016 Conference of Texas Statisticians*, Trinity University, San Antonio, Texas, USA, April 8–9, 2016. (Award: Best Interdisciplinary Poster)

Casement, C. and D. Kahle. "Prior Elicitation via a Rorschach-Style Graphical Procedure." *2016 Eastern North American Meetings (ENAR) of the International Biometric Society*, JW Marriott, Austin, Texas, USA, March 6–9, 2016. (Poster)

Blair, S., D. Kahle, and J. Seaman. "Sensitivity in Prior Elicitation." *2016 Eastern North American Meetings (ENAR) of the International Biometric Society*, JW Marriott, Austin, Texas, USA, March 6–9, 2016. (Poster)

Garcia-Puente, L. and D. Kahle. "**AlgStat**: An R package for algebraic statistics." *Algebraic Statistics 2015*, Università degli Studi di Genova, Genoa, Italy, June 8–11, 2015. (Tutorial)

Young, P., D. Kahle, and D. Young. "Confidence Intervals for the Ratio of Two Poisson Rates Under Differential Misclassification Using Double Sampling." *Southern Regional Council on Statistics Summer Research Conference*, Courtyard Marriott, Carolina Beach, North Carolina, USA, June 7–10, 2015. (Poster)

Kahle, D., R. Yoshida, and L. Garcia-Puente. "Sampling From Discrete Exponen-

tial Families Conditional on Their Sufficient Statistics." *Southern Regional Council on Statistics Summer Research Conference*, Courtyard Marriott, Carolina Beach, North Carolina, USA, June 7–10, 2015. (Poster)

Garcia-Puente, L. and D. Kahle. "**AlgStat**: An R package for algebraic statistics." *Joint Workshop on Limit Theorems and Algebraic Statistics*, Institute of Information Theory and Automation, Academy of Sciences of the Czech Republic, Prague, Czech Republic, August 25–29, 2014.

Cheng, J., D. Kahle, and J. Seaman. "Eliciting Informative Priors for Bayesian Hurdle Models." *2014 Joint Statistical Meetings : Global Impact - Past, Present, and Future*, Boston Convention and Exhibition Center, Boston, Massachusetts, USA, August 2–7, 2014. (Poster)

Kahle, D. and L. Garcia-Puente. "Algebraic Statistics in R: Markov Bases." *2014 NIMS Thematic Program on Applied Algebraic Geometry: Algebraic Statistics*, National Institute for Mathematical Sciences, Daejeon, Hoseo, South Korea, July 14–17, 2014.

Garcia-Puente, L. and D. Kahle. "Markov bases for noncommutative Fourier analysis of partially ranked data." *as2014: Algebraic Statistics Conference*, Illinois Institute of Technology, Chicago, Illinois, USA, May 19–22, 2014.

Kahle, D. "Visualizing Big Data in the Introductory Course." *The Second Biennial Electronic Conference on Teaching Statistics (eCOTS)*, Online, May 19–23, 2014. (Screencast recording)

Cheng, J., D. Kahle, and J. Seaman. "Eliciting Priors for Hurdle Models with Shared Covariates." *Women in Statistics Conference*, Embassy Suites, Cary, North Carolina, USA, March 15–17, 2014. (Poster)

Cheng, J., J. Seaman, and D. Kahle. "Priors for Bayesian Hurdle Models." *2014 Eastern North American Meetings (ENAR) of the International Biometric Society*, Baltimore Marriott Waterfront, Baltimore, Maryland, USA, March 16–19, 2014. (Poster)

Kahle, D., J. Stamey, K. Price, F. Natanegara, and B. Han. "Advances in Facilitated Prior Elicitation." *2013 Joint Statistical Meetings. Topic Contributed Session : Bayesian Computations: Challenges, Solutions, and Implementations in Medical Product Development*, Palais des Congrès de Montréal, Montréal, Québec, Canada, August 3–8, 2013. Slides available here.

Garcia-Puente, L. and D. Kahle. "Identifiability of Structural Equation Models on 6 Random Variables." *2013 Society for Industrial and Applied Mathematics (SIAM) Conference on Applied Algebraic Geometry*, Colorado State University, Fort Collins, Colorado, USA, August 1–4, 2013.

Warnick, R. and D. Kahle. "Interactive Modules as Tools for Illustrating Statistical Concepts." *2013 URSA Scholars' Week*, Baylor University, Waco, Texas, USA, April 8–11, 2013.

Warnick, R. and D. Kahle. "Interactive Modules as Tools for Illustrating Statistical Concepts." *2013 American Statistical Association Conference on Statistical Practice*, Sheraton New Orleans Hotel, New Orleans, Louisiana, USA, February 21-?23, 2013. (Poster)

Kahle, D. and H. Wickham. "**ggmap**: Interfacing ggplot2 and RgoogleMaps." *The 8th International R Users Meeting*, Vanderbilt University, Nashville, Tennessee, USA, June 12-15, 2012. Slides available here.

Kahle, D. "**mpoly**: Multivariate polynomials in R." *Algebraic Statistics in the Alleghe-*

nies, The Pennsylvania State University, University Park, Pennsylvania, USA, May 16–18, 2012. (Poster)

Kahle, D. and H. Wickham. "**ggmap**: Spatial visualization with ggplot2." *Southern Regional Council on Statistics Summer Research Conference*, Jekyll Island, Georgia, USA, June 2–6, 2012. (Poster)

Kahle, D. "**mpoly**: Multivariate polynomials in R." *43rd Symposium on the Interface of Computing Science and Statistics: Future of Statistical Computing: Internet Scale Data, Flexible Modeling, and Visualization*, Rice University, Houston, Texas, USA, May 16–18, 2012. Slides available here.

Guven, B., **L. Dueñas-Osorio**, R. M. Stein, D. Subramanian, J. Salazar, and D. Kahle. "Storm Risk Calculator for the City of Houston." *Presentation before the City of Houston Office of Emergency Management* , City Hall, Houston, Texas, USA, May 3, 2012.

Guven, B., L. Dueñas-Osorio, R. M. Stein, D. Subramanian, and D. Kahle. "Storm Risk Calculator for the City of Houston." *2012 National Hurricane Conference*, Orlando, Florida, USA, March 26–29, 2012.

Kahle, D., L. Dueñas-Osorio, D. Subramanian, and R. M. Stein. "A Comparison of Hurricane Induced Power Outage Models : Component vs. Statistical Models." *2011 National Hurricane Conference*, Atlanta, Georgia, USA, April 18–22, 2011.

Kahle, D. "Minimum Distance Estimation for Contingency Table Models." *2010 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference*, Anaheim, California, USA, September 29–October 3, 2010. (Poster)

Kahle, D. "Advances in Contingency Table Model Estimation." *2010 Pan-American Advanced Studies Institute : Cutting-edge Topics in Theoretical Statistics and Applications in Genetics and Bioinformatics*, Centro de Investigación en Matemáticas, Guanajuato, Mexico, May 2–8, 2010. (Poster)

Kahle, D. "Computational Survival Analysis with R." *2006 Pan-American Advanced Studies Institute : Mathematical Models in Population Dynamics*, Universidad de El Salvador (UES), San Salvador, El Salvador, February 24–26, 2010.

Kahle, D. and D. Homrighausen. "An Investigation into Statistical Tests for Stochastic Dominance with Applications to Economic Decision Theory." *2006 Joint Mathematics Meetings*, San Antonio, Texas, USA, January 12–15, 2006. (Poster)

Kahle, D. and D. Homrighausen. "An Investigation into Statistical Tests for Stochastic Dominance with Applications to Economic Decision Theory." *2005 Shenandoah Undergraduate Mathematics and Statistics Conference*, James Madison University, Harrisonburg, Virginia, USA, November 12, 2005.

Academic Experience

Baylor University, Waco, Texas, USA

Associate Professor of Statistical Science **August 2017 – Present**

- Teaching, research/creative activity, University and community service, direction of undergraduate and graduate students, and other related duties pertaining to advancing the mission of Baylor University.

Assistant Professor of Statistical Science **August 2011 – August 2017**

- Teaching, research/creative activity, University and community service, direction of undergraduate and graduate students, and other related duties pertaining to advancing the mission of Baylor University.

Rice University, Houston, Texas, USA

Graduate Research Assistant **Fall 2009, August 2010 – May 2011**

- Working with a highly interdisciplinary team modeling hurricane risk and designing evacuation policies for Houston. The team includes faculty members from Political Science, Computer Science, and Civil and Environmental Engineering.

Graduate Research Assistant **January 2009 – December 2009**

- Investigated questions of tail behavior and tail categorization of probability laws.

Graduate Research Assistant **August 2006 – May 2007**

- Investigated normalization and peak detection of mass spectrometry proteomic data (SELDI-TOF) for child osteosarcoma studies. This was a collaborative effort with Texas Children's Hospital in the Texas Medical Center.

Undergraduate Researcher **Summer 2004, Summer 2005**

- Participated in the Rice University Summer Institute of Statistics (RUSIS), 2004. Investigated imputation methods for missing data in microarray experiments.
- ——, 2005. Investigated power in hypothesis tests of stochastic dominance.

Doctoral Students Advised

Thomas Reinke. Expected May 2027. TBD. Co-advised with Michael Gallaugher, Ph.D.

Anupama Kannan. Expected December 2026. TBD. Co-advised with Michael Gallaugher, Ph.D.

Nathaniel Morgan. Expected May 2026. TBD. Co-advised with Michael Gallaugher, Ph.D.

Sonish Lamsal. Expected December 2025. TBD.

Dusty Turner. Principled Tools for Modeling and Visualizing 2D Vector Fields. March 2025. Co-advised with Rodney Sturdivant, Ph.D. Currently Academy Professor at the United States Military Academy at West Point.

James Otto. Computational Tools for Data Visualization, Bayesian Deming Regression, and Software Documentation. May 2023. Currently Senior Statistician at Alcon.

Evan Miyakawa. Contributions to the Practical Application of Bayesian Methods to Survival Analysis in Clinical Trials. February 2022. Currently Founder and CEO at EvanMiya CBB Analytics. Co-advised with James Stamey, Ph.D.

Qida Ma. Contributions to Algebraic Pattern Recognition and Integrated Likelihood Ratio Confidence Intervals. March 2021. Currently Data Scientist II at Microsoft. Co-advised with Dean Young, Ph.D.

Grant Innerst. Contributions to Computational Algebraic Statistics. July 2019. Associate Professor (with tenure) in the Department of Mathematics at Shippensburg University, Shippensburg, PA.

Christopher Casement. "Graphical Methods in Prior Elicitation." June 2017. Associate Professor (with tenure) in the Department of Mathematics at Fairfield University, Fairfield, CT.

Somer Blair. "Contributions to the Theory and Practice of Prior Elicitation in Biopharmaceutical Research." February 2017. Currently Associate Director of Biostatistics, Evidence Generation, Daiichi Sankyo. Co-advised with John Seaman, Jr., Ph.D.

Wenqi (Robin) Wu. "Network Meta-Analysis with Rare Events and Misclassified Response." April 2016. Currently Senior Data Scientist at PayPal, Philadelphia, PA. Co-advised with James Stamey, Ph.D.

Joyce Cheng. "Bayesian Methods for Hurdle Models." February 2015. Currently Mathematical Statistician in the Office of Biostatistics at the U.S. Food and Drug Administration, Washington D.C. Co-advised with John Seaman, Jr., Ph.D.

Ryan A. Sides. "Sample Size Determination for Two Sample Binomial and Poisson Data Models Based on Bayesian Decision Theory." August 2013. Currently Founder and Lead Statistician at Picks with the Professor. Co-advised with James Stamey, Ph.D.

Teaching Experience

Baylor University, Waco, Texas, USA

Assistant/Associate Professor **Fall 2011 – Present**

Daggers (†) indicate courses created or co-created.

- †STA 2300 – Intro to Data Science
- STA 2381 – Introductory Statistical Methods
- †STA 4360 – Bayesian Data Analysis
- †STA 4373 – Computational Methods in Statistics
- †STA 5V95 – Applied Predictive Modeling
- STA 6352 – Bayesian Theory
- STA 6360 – Bayesian Methods for Data Analysis
- †STA 6375 – Computational Statistics I
- †STA 6376 – Computational Statistics II
- †STA 6380 – Modern Trends in Computational Data Science

Rice University, Houston, Texas, USA

Instructor **Summer 2008, Summer 2009, Summer 2010**

- Designed, authored, and presented 3-hour daily labs and lectures in statistical computing and graphics for the statistics research experience for undergraduates (REU) the Rice University Summer Institute of Statistics (RUSIS). Provided computational and theoretical support for students' research projects.

Teaching Assistant **August 2007 – December 2008**

- Provided in class and out of class support for undergraduate and first-year graduate mathematical statistics courses.
- Assisted in the development of an undergraduate calculus-based statistics course emphasizing civil and environmental engineering.
- Graded daily assignments.

University of Richmond, Richmond, Virginia, USA

Peer Academic Skills Tutor Supervisor **August 2005 – June 2006**

- Tutored students and managed the Academic Skills Center.

Peer Academic Skills Tutor **August 2004 – August 2005**

- Tutored students in general study skills as well as mathematics and French.

Professional affiliations

American Statistical Association (ASA)
— Section on Bayesian Statistical Science
— Biopharmaceutical Section
— Section on Statistical Graphics
— Section on Statistical Computing
— Section on Statistical Learning and Data Science
— Section on Statistics and Data Science Education (Past)
Institute of Mathematical Statistics (IMS) (Past)
Mathematical Association of America (MAA) (Past)
American Mathematical Society (AMS) (Past)
Society for Industrial and Applied Mathematics (SIAM)
— Activity Group on Algebraic Geometry ($SIAG^2$)
Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) (Past)

Professional Service

Service at the American Statistical Association (ASA)

1. *2025-2026.* Secretary / Treasurer (elected), *Section on Statistical Graphics*

Service at the National Science Foundation (NSF)

Grant Proposal Panel Reviewer

1. Directorate for Mathematical & Physical Sciences (MPS)
   Division of Mathematical Sciences (DMS)
   Computational and Data-Enabled Science and Engineering (CDS&E), Fall 2018.

Service at Professional Gatherings
Sessions at meetings (O = organized, C = chaired, J = poster competition judge)

1. "AI and Applied Data Science A", *2024 Southwest Data Science Conference*, Baylor University, Waco, TX, March 22, 2024. (C; with Pablo Rivas)
2. "Software and Computation in Algebraic Statistics I", *SIAM 2017 Conference on Applied Algebraic Geometry*, Georgia Institute of Technology, Atlanta, Georgia, July 31–August 4, 2017. (OC; with Elizabeth Gross)
3. "Software and Computation in Algebraic Statistics II", *SIAM 2017 Conference on Applied Algebraic Geometry*, Georgia Institute of Technology, Atlanta, Georgia, July 31–August 4, 2017. (OC; with Elizabeth Gross)
4. *2017 Joint Mathematical Meetings*, Atlanta, Georgia, January 4–7, 2017. (J)
5. "Markov Bases and their Applications in Statistics I", *SIAM 2015 Conference on Applied Algebraic Geometry*, National Institute for Mathematical Sciences, Daejeon, Hoseo, South Korea, August 3–7, 2015. (OC; with Ruriko Yoshida)
6. "Markov Bases and their Applications in Statistics II", *SIAM 2015 Conference on Applied Algebraic Geometry*, National Institute for Mathematical Sciences, Daejeon, Hoseo, South Korea, August 3–7, 2015. (OC; with Ruriko Yoshida)
7. *2015 Southern Regional Council of Statistics (SRCOS) Summer Research Conference*, Carolina Beach, North Carolina, June 7–10, 2015. (J)
8. *2013 Conference of Texas Statisticians*, Rice University, Houston, Texas, March 22–23, 2013. (J)

Service with Peer-Reviewed Journals

Associate Editor of **August 2014 – March 2017**
Biometrics & Biostatistics International Journal

Ad hoc reviewer for

- Journal of Statistical Software
- The R Journal
- Journal of Algebraic Statistics
- Journal of Software for Algebra and Geometry
- Pharmaceutical Statistics
- The American Mathematical Monthly
- The American Statistician
- Journal of Computational and Graphical Statistics
- Journal of Statistics and Data Science Education
- Computational Statistics & Data Analysis
- SoftwareX

Service with Publishers

Wiley Science Advisors for John Wiley & Sons, Inc. **May 2010 – January 2017**

- Responsibilities include providing opinions on new devices and technologies, the "Generation Y" scientific community, and literature research preferences.

Student Advisory Board for John Wiley & Sons, Inc. **June 2009 – Dec 2011**

- Responsibilities include providing opinions on publishing decisions, market feedback, and technology usage.

Academic Service

Baylor University, Waco, Texas, USA

University Service

Libraries/ITS Advisory Committee **August 2019 – Present**
Student Life and Services Committee **August 2018 – July 2021**
Invitation to Excellence, 2012, 2017
2024 – Distinguished Scholars Day statistics representative
2015, 2016, 2019 – Undergraduate Research and Scholarly Achievement (URSA) grant reviewer

College Service

2024 – Summer Research Awards (SRA), 2025 (sabbatical) grant reviewer
2023 – Summer Research Awards (SRA), 2024 (sabbatical) grant reviewer
2022 – Summer Research Awards (SRA), 2023 (sabbatical) grant reviewer
2021 – Summer Research Awards (SRA), 2022 (sabbatical) grant reviewer

Departmental Service

2018–2024 – Author/grader, computational statistics Ph.D. qualifying exam
2024 – Chair, Tenure line hiring committee, assistant-associate level
2019 – Chair, Tenure line hiring committee, assistant level
2018 – Chair, Chair search committee
2015 – Member, Tenure line hiring committee, associate/full level
2012 – Member, Tenure line hiring committee, open rank

Academic Committees

Baylor University, Waco, Texas, USA

Post-doctoral mentorship

2014–2015 – Philip Young (jointly)

Ph.D. defense committees

2025 – Dusty Turner, Indalecio Ruiz-Bolanos (mathematics), Guanjie Huang (mathematics)
2024 – Debajeet Barman (geosciences)
2023 – James Otto, Jasmin Mohn (mathematics)
2022 – Evan Miyakawa, Mads Reynolds (mathematics), Alan Mullenix (mathematics)
2021 – Qida (Jerry) Ma, Jack Rebrovich (mathematics), Ian Grigsby (mathematics), Tavish Dunn (mathematics), Joseph Thangraj (geosciences)
2020 – John Miller (mathematics)
2019 – Stephen Cook (biology)
2018 – Qi (Kate) Zhou, Ben Barnard
2017 – Somer Blair, Tyler Nelson, Chris Casement, Madeline Drevets, Gabriel Odom
2016 – Mark Eschmann, Wenqi (Robin) Wu, Jonathon Vallejo
2015 – Joyce Cheng, Kristen Tecson, Michelle Marcovitz, Yuanyuan Guo
2014 – Forrest Williamson
2013 – Ryan Sides, John Beeson
2012 – Stephanie Doherty, Brandi Falley

Dissertation proposals

2025 – Anupama Kannan
2024 – Dusty Turner, Nathaniel Morgan, Sandra Rosero Rueda (geosciences), Nnamdi Ajah (geosciences)
2023 – Sonish Lamsal
2022 – Yashwant Soni (geosciences)
2021 – James Otto, Benjamin Sadler (geosciences)
2020 – Evan Miyakawa, Joseph Thangraj (geosciences)
2019 – Qida (Jerry) Ma, Debajeet Barman (geosciences)
2018 – Alden Netto (geosciences)
2017 – Chris Elrod, Grant Innerst
2016 – Chris Casement, Youjiao (Gary) Yu, Stephen Cook (biology), James Parker (geosciences)
2015 – Jonathon Vallejo, RJ Waken, Qi (Kate) Zhou, Hannah Mejia (geosciences)
2014 – Wenqi Wu, Wencong Chen, Somer Blair
2013 – Kristen Tecson
2012 – Forest Williamson, Yuanyuan Guo, Ryan Sides, Jack Knorr
2011 – Ross Bray

Master's defense committees

2022 – Christopher Mitchell (geosciences), Brady Spears (geosciences), Aicha Coulibaly (geosciences)
2020 – Hugo Rodrigues (economics)
2016 – Ran Duan (economics), Kenton Shaw (geosciences), Gift Ntuli (geosciences)
2014 – Martin Schwed (geosciences)

Master's thesis proposals

2023 – Luis Muñoz Santos (geosciences)
2021 – Aicha Coulibaly (geosciences), Brady Spears (geosciences)
2019 – Christopher Mitchell (geosciences)
2015 – Gift Ntuli (geosciences), Kenton Shaw (geosciences)
2013 – Martin Schwed (geosciences)

Master's oral examinations

2024 – Theophilus Anim Bediako, Jacob Moore, Carson Slater
2023 – Anupama Kannan
2022 – Weijiang Hou, Nathaniel Morgan
2021 – Randy Nguyen
2019 – Graham Seacat, Prescott Duszynski
2018 – Evan Miyakawa
2017 – Divya Lakshminarayanan, Austin Workman
2016 – Andy Lawler, Courtney Weber, Allan Hill, Grant Innerst
2015 – Morgan McCreary
2014 – Matt Seale
2013 – Soo Park, Justin Sims
2012 – Yuanyuan Guo, Victoria Romberg, Amy Buros, Joyce Cheng, Caleb Stein, Kristen Tecson
2011 – Forest Williamson

Undergraduate thesis/major capstone experience committees

2022 – Will Stamey (Baylor business fellows)
2019 – Kyle Binder (mathematics)
2018 – Brian King, Melody Horn (computer science)
2013 – Allison Hainline

Undergraduate research projects

2018 – Philip Hossu, Ryan Hebdon
2017 – Peixin Gao, Dohyun Kim
2012 – Ryan Warnick

Technical Competencies

Extensive experience with Monte Carlo simulation, Bayesian statistics, data visualization, and R package development.

Programming. R/RStudio (including Quarto/R Markdown, Sweave, and Shiny app development), Wolfram (Mathematica), various shells (zsh preferred), C++; basic experience with html, css, JavaScript

Bayesian engines. Stan, JAGS, various BUGS implementations

Version Control. Git, GitHub user @dkahle

Applications. RStudio, TEX / LATEX / BIBTEX, Vim, Apple Productivity Apps (Pages, Keynote, Numbers), XCode, Microsoft Office, Camtasia

Operating Systems. MacOS, Microsoft Windows, and standard Linux distributions – Debian (Ubuntu, Kali, ...), Red Hat (RHEL, CentOS, Fedora, Amazon Linux, ...)