# David J. Kahle, Ph.D.

CONTACT INFORMATION

Department of Statistical Science
Baylor University
One Bear Place #97140
Waco, Texas 76798, USA
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*Office*   (254) 710-6102
*E-mail*   david@kahle.io
*WWW*   www.kahle.io
*GitHub*   www.github.com/dkahle

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

22. 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 Therapeutics*, in press.

21. Miyakawa, E. and D. Kahle (2025). "A Practical Comparison of Bayesian Computing Platforms in R." in *Recent Advances in Next-Generation Data Science, Southwest Data Science Conference 2025*, in press.

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, Springer. 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.

5. †Mitchell, C., P. James, D. Kring, and D. Kahle. "Impact Induced Porosity of Meteor Crater."

4. Turner, D., D. Kahle, and R. Sturdivant. "**ggvfields**: Vector Field Visualization in R."

3. Otto, J. and D. Kahle. "**tldr**: Quick Documentation in the R Console."

2. Prajapati, P., J. Stamey, D. Kahle, J. Seaman, Z. Thomas, and M. Sonksen. "Elicitation of a Prior for the Weibull Distribution."

1. Kahle, D. and J. Stamey. "**invgamma**: The Inverse Gamma Distribution in R."

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."

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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 April 10, 2025.*

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: 253.

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: 3,202.

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: 27,864.

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: 41,382.

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: 318,412.

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, and current version 1.0.2. Downloads: 29,392.

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, and current version 0.2.1. 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: 39,224.

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: 31,633.

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: 104,063.

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: 7,286,311.

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 : $348,000                      Period : 06/01/2025 − 05/31/2026

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 : $311,284                      Period : 06/01/2024 − 05/31/2025

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

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.

**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**." *$45^{th}$ 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.

**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 Exponential 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 Alleghenies*, 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." *$43^{rd}$ 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.

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|---|---|
| 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 ($^\dagger$) indicate courses created or co-created.
- $^\dagger$STA 2300 – Intro to Data Science
- STA 2381 – Introductory Statistical Methods
- $^\dagger$STA 4360 – Bayesian Data Analysis
- $^\dagger$STA 4373 – Computational Methods in Statistics
- $^\dagger$STA 5V95 – Applied Predictive Modeling
- STA 6352 – Bayesian Theory
- STA 6360 – Bayesian Methods for Data Analysis
- $^\dagger$STA 6375 – Computational Statistics I
- $^\dagger$STA 6376 – Computational Statistics II
- $^\dagger$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)

**Service at the American Statistical Association (ASA)**

1. *2024-2025.* 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.

<table>
<tr><td>ACADEMIC<br>SERVICE</td><td>

**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

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<tr><td>ACADEMIC<br>COMMITTEES</td><td>

**Baylor University**, Waco, Texas, USA

*Post-doctoral mentorship*

2014–2015 – Philip Young (jointly)

*Ph.D. defense committees*

2025 – Dusty Turner, Indalecio Ruiz-Bolanos (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

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2013 – Ryan Sides, John Beeson
2012 – Stephanie Doherty, Brandi Falley

*Dissertation proposals*

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, ...)