Priya Kohli, PhD

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Research Interests Covariance Modeling, Faculty Salary Modeling, Financial Modeling, Multivariate Longitudinal Data, Missing Data, RNA-Sequencing, and Time Series Analysis. Interdisciplinary work in Dialogue Health same Jacksonia Heneticia Francisco and Environmental Studies.

Biology, Health care, Ischemic Hepatitis, Economics, and Environmental Studies.

Academic Appointments Chair, Department of Mathematics and Statistics,

Connecticut College, July 2023 - Present.

Assistant Chair, Department of Mathematics and Statistics,

Connecticut College, July 2021 - June 2022.

Visiting Scientist in Data Science, Data Science Initiative,

Brown University, January - August 2019.

Professor of Statistics, Department of Mathematics and Statistics,

Connecticut College, July 2024 - Present.

Associate Professor of Statistics, Department of Mathematics and Statistics,

Connecticut College, July 2018 - Present.

Assistant Professor of Statistics, Department of Mathematics and Statistics,

Connecticut College, July 2012 - June 2018.

Education

PhD Statistics, Texas A&M University, 2012

Dissertation Advisors: Dr. M. Pourahmadi and Dr. W. Chen. Dissertation Title: Prediction and Estimation of Random Fields.

M.S. Applied Probability and Statistics, Northern Illinois University, 2008

M.Sc. Agricultural Statistics, Indian Agricultural Statistics Research Institute, 2006

Dissertation Advisors: Dr. R. Srivastava and Dr. R. Parsad.

Dissertation Title: Supersaturated Designs.

B.Sc. (Honors) Physics, Delhi University, India, 2003.

Curriculum
Development
at Connecticut
College

Developed a major and minor in Statistics and Data Science (SDS).

Core Faculty Member for (a) Data, Information, Society Pathway, and (b) Public Health

Pathway.

New Courses Developed: Introduction to Time Series Analysis, Statistical Computing with R, Probability and Statistical Models, Statistical Consulting, Statistical Machine Learning (Co-developed), Statistical Research.

Existing Courses Updated: Introduction to Statistics, Introduction to Statistical Methods, Advanced Regression Techniques, Probability and Mathematical Statistics.

Recent Publications

Beard, C., Utterback, U., Kohli, P., Lee, W. and Ghosh, A.(2024). Predicting the outcome of Ischemic Hepatitis with real patient data using machine learning tools. Under Review.

Kohli, P. (2024). Multivariate longitudinal mean-covariance graphical models. Under Review.

Kohli, P. (2024). Optimal site selection in spatial prediction. Under Review.

Hensley, E.*, Kohli, P., and Mukerji, P. (2024). Mobile money in public health crisis: Ebola and lessons for COVID-19 and beyond. Under Review.

Kohli, P., Du, S.*, and Shen, H.* (2021). Graphical models for mean and covariance of multivariate longitudinal data. *Statistics in Medicine*, 15;40(23):4977-4995. R package MLGM.

Marazzi, L.*, Kohli, P., and Eastman, D. (2020). Transcriptome dataset for RNA-seq analysis of axolotl embryonic oropharyngeal endoderm explants. *Data in Brief*, 32, 106126.

Kohli, P., Marazzi, L.*, and Eastman, D. (2020). Transcriptome analysis of axolotl oropharyngeal explants during taste bud differentiation stage. *Mechanisms of Development*. 161, 103597.

Lòpez-Anuarbe M+ and Kohli P.+ (2019). Understanding male caregivers' emotional, financial, and physical burden in the United States. *Healthcare*, 7(2). E72.

+ Both authors contributed equally to this work

Working Papers

Kohli, P. Deep learning for multivariate longitudinal data to study the relationship between glycemic variability and cardiovascular disease in patients with type 2 diabetes.

Eagle, E.*, Siver, P. and Kohli, P. Long-term temperature trends in New England.

Wang, W.* and Kohli, P. Impact of COVID-19 on housing price trends in Connecticut.

Here * denotes an undergraduate student.

Recent Grants

Kohli, P. (2021), Connecticut College Open Education Resource (OER) Grant for adopting new material for the Mathematical Statistics course. Funded.

Kohli, P. and Zhuang, Y. (2020). Connecticut College Open Education Resource (OER) Grant Application for adopting new material for the Advanced Regression Techniques course.

Zhuang, Y. and Kohli. P (2020). Adopting new OER Material for the Introduction to Statistics course. Adoption Grant from Connecticut Open Educational Resources Grant Program. Funded.

Faculty-Student Engagement Fund, Connecticut College: Funded in 2018, 2020, 2021, and 2023.

Conferences and Talks

How a Collaboration with Institutional Research Can Inform Strategic Initiatives, The Annapolis Group of Liberal Arts Colleges, Annapolis, MD, June 15-18, 2024.

Program Committee Member, 37th New England Statistics Symposium (NESS), May 20-24, 2024, University of Connecticut, Storrs, CT.

International Day of Statistics and Data Science, hosted by Caucus for Women in Statistics and Data Science and American Statistical Association, October 10, 2023.

HERS Leadership Institute, Bridgewater State University, MA, June 6-14, 2023.

A Computational Modeling Approach to Understand the Outcome of Ischaemic Hepatitis, at the 2023 SIAM Conference on Applications of Dynamical Systems (DS23), May 14-18, 2023.

Doan, N. presented our joint work Neural and Cognitive Development in a Rodent Model of PTSD from Maternal Maltreatment at the 36th Annual NEURON Conference, Quinnipiac University, North Haven, CT, United States. April 23, 2023.

Advisor for DataFest, American Statistical Association, Wesleyan University, April 21-23, 2023.

The 21st Annual CT Chapter Mini-conference, Information Integration, April 14, 2023.

Hensley, E. presented our joint work *Mobile Money: Innovations in Finance and Pandemic Lessons from Ebola to COVID-19* at the Eastern Economic Association Meetings, February 23-26, 2023, New York, NY.

Participated in National AI-Campus Chairs Council Meeting, Virtual, January 12, 2023.

Organized the American Statistical Association, Connecticut Chapter Virtual Career Panel, December 15, 2022.

Presented *Panel Data Regression*, Invited talk, Department of Mathematics, Wellesley College, November 9, 2022.

Presented Multivariate Longitudinal Mean-Covariance Graphical Models at the 2022 Women in Statistics and Data Science Conference, St. Louis, Missouri, October 6-8, 2022.

• Organized Recent Advances in Repeated Measures Data Session at the New England Statistics Symposium, Statistics: The Heart of Data Science, University of Connecticut, Storrs, May 22-25, 2022.

Co-organized the 20th Annual CT Chapter Mini-conference, Complex Innovative Clinical Trial Designs – Case Studies and The Way Forward, April 29, 2022.

Service Connecticut College

Priorities, Planning, and Budget Committee (PPBC), Chair, July 2021 - June 30, 2023, and Elected Faculty Representative, July 2019 - Present.

STEM Committee Chair, Fall 2023.

Search Committee Member for Vice President of Finance and Administration, July 2022 - March 2023.

Search Committee Member for Quantitative Center Director at Academic Resource Center, July 2022 - May 2023.

Committee on Faculty Compensation (CFC): Statistical Consultant July 2013- June 15 and Elected Member July 15 -June 2018.

Core Faculty Member for Data, Information, and Society Pathway, January 2019 - Present and Public Health Pathway, Core Faculty Member, August 2015 - Present.

Committee on Status of Faculty Women (CSFW), 2016-18.

Committee for Academic Standing (CAS), faculty member, 2014-2016.

Ammerman Center of Arts and Technology, Faculty Fellow, 2014-2017.

American Statistical Association, Connecticut Chapter

Fellow, August 2023-Present.

Ex-Officio and Committee Members, August 2022 - August 2023.

President, August 2021 - August 2022, and August 2019 - August 2020.

Treasurer, August 2020 - July 2021.

Vice President, August 2018 - July 2019.

Council of the New England Statistical Society (NESS), Elected Member, June 2018-2022.

Artificial Intelligence Meeting of Rhode Island Regional Academic Institutions, August 2022-Present

National Center for Faculty Development and Diversity (NCFDD)

Coach, Faculty Success Program, Spring 2019.

Post-Tenure Pathfinders, Fall 2018.

14-Day Writing Challenge, Spring 2021, Fall 2020, and Fall 2017.

Faculty Success Program, Summer 2017.

Association for Women in Mathematics (AWM), Mentor, August 2015 - Present.

Peer reviewer for AIMS Mathematics, Biostatistics, Computational Statistics and Data Analysis, Econometric Theory, Electronic Journal of Statistics, Journal of Multivariate Analysis, MAA Book Reviews, Mathematical Reviews, Sankhya, Scandinavian Journal of Statistic, Statistica Sinica, Statistica Neerlandica, Statistics and Probability Letters, Statistics in Medicine, Stochastic Processes and their Applications, and Women's Reproductive Health. American Sta-

Professional Memberships:

tistical Association (ASA), Association for Women in Mathematics (AWM), Caucus for Women in Statistics (CWS), and International Indian Statistical Association (IISA).

Softwares and Scripting Language:

R (RStudio), SAS, MATLAB, C++, and PYTHON.