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Research Interests Covariance Modeling, Longitudinal Data Analysis, Missing Data Analysis, Time Series, Spatial Statistics, and RNA-sequencing.

Academic Appointments Associate Professor of Statistics, Department of Mathematics and Statistics, Connecticut College, New London, CT. July 2018 - present.
Assistant Professor of Statistics, Department of Mathematics and Statistics, Connecticut College, New London, CT. July 2012 - June 2018.

Education Ph.D. 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 Stat Research Institute, 2006
Dissertation Advisors: Dr. R. Srivastava and Dr. R. Parsad.
Dissertation Title: *Supersaturated Designs*.

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

Publications **Refereed Publications**

1. Kohli P., Siver P. A., Marsicano L., Hamer J. and Coffin A*. (2017). [Assessment of Long-term Trends for Management of Candlewood Lake, Connecticut, USA](#), *Lake and Reservoir Management*, 33(3), 280-300. Here * denotes an undergraduate student.
2. Harvill J. L., Kohli P. and Ravishanker N. (2017). [Clustering nonlinear, nonstationary time series using BSLEX](#), *Methodology and Computing in Applied Probability*, 19(3), 935-955.
3. Kohli P. (2016). [Fractional Bivariate Exponential Estimator for Long-range Dependent Random Field](#), *Spatial Statistics*, **15**, 22-38.
4. Kohli P., Garcia T. P. and Pourahmadi M. (2016). [Modeling the Cholesky factors of covariance matrices of multivariate longitudinal data](#), *Journal of Multivariate Analysis*, **145**, 87-100.
5. Kohli P. and Pourahmadi M. (2014). [Some prediction problems for stationary random fields with quarter-plane past](#), *Journal of Multivariate Analysis*, **127**, 112-125.
6. Garcia T. P., Kohli P. and Pourahmadi M. (2012). [Regressograms and mean-covariance models for incomplete longitudinal data](#), *The American Statistician*, **66**, 85-91.
7. Kohli P. and Pourahmadi M. (2011). [Nonparametric estimation of the innovation variance and judging the fit of ARMA models](#), *Economic Time Series: Modeling and Seasonality*, Eds. Bell W., Holan S. and McElroy T., Chapman & Hall/CRC Press.

8. Gupta S. and **Kohli P.** (2008). Analysis of supersaturated designs: a review, *Journal of Indian Society of Agricultural Statistics*, **62**, 156-168.

Patents

9. Srinivasan S. and **Kohli P.** (2014). *System and method for estimation in a multivariate, longitudinal setup*, WO2013126724 A2.
10. Srinivasan S. and **Kohli P.** (2013). *System and method for estimation of missing data in a multivariate, longitudinal setup*, US 20130226613 A1.

Conference Papers

11. Lòpez-Anuarbe M. and **Kohli P.** (2017). *Increasing support for men caregivers in the United States: A national study*, Society of Economics of the Household (SEHO).
12. Zhang Y., Madiri S., Zhang L. and **Kohli P.** (2010). *Statistical technique to handle data irregularities in field retroreflectivity of pavement markings*, Transportation Research Board 89th Annual Meeting, #10-3217.

Blog (online work with student)

13. Whitney J., **Kohli P.** and Cangelosi J*. (2015). *Keep the Talk Going, Dedicated to improving communication about relationships, sexuality, and intimacy*, May 2015. Here * denotes an undergraduate student.

Submitted Papers

14. Optimal site selection and spatial prediction.
15. Understanding Male Caregivers Emotional, Financial, and Physical Burden in United States.

Working Papers

16. A comparative analysis of covariance modeling techniques for multivariate longitudinal studies with application in clinical trials.
17. RNA-seq analysis of taste bud development in *Ambystoma Mexicanum*.

Honors and Awards

National Science Foundation (NSF) Travel Award, [24th ICSA/Graybill Joint Conference](#), Jun '15, Fort Collins, Colorado.

NSF Travel Award, [International Conference on Advances in Interdisciplinary Statistics and Combinatorics](#), Oct '14, Greensboro, NC.

National Institute of Statistical Sciences/American Statistical Association (NISS/ASA) Writing Award for Junior Researchers to support travel to attend [NISS/ASA Workshop](#), Jul '14 (Boston, MA) and Aug '13 (Montreal, Canada).

Young Researcher Award to support travel to attend [Dimension Reduction and High Dimensional Inference](#), University of Florida, Jan '14.

NSF Travel Grant for Junior Faculty, [2013 International Indian Statistical Association \(IISA\) Conference](#), Jan '13, Chennai, India.

[Carol J. Feltz Memorial Scholarship](#), Northern Illinois University, 2008.

[Council of Scientific and Industrial Research, National Junior Research Fellowship \(JRF\)](#), All India Rank 5, Indian Council of Agricultural Research, 2003-2006.

Connecticut College Awards and Grants	<p>Faculty-Student Engagement Fund in fall '14, '17 and spring '15, '16, '17, '18.</p> <p>Center for Teaching and Learning (CTL) Featured Assignment Recognition in spring '16.</p> <p>R. F. Johnson Faculty Research Fund in Sep '12, Jul '13, Oct '13, Jan '14, and Oct '16.</p> <p>Research Matters Research Grant in '14, '15 and '17.</p> <p>Susan Eckert Lynch '62 Faculty Research Funds in '14-'15 and '15-'16.</p>
Meetings, Presentations, Workshops	<p><u>Meetings</u></p> <p>DataFest, Wesleyan University, CT, Apl. '16, '17 and '18.</p> <p>Women in Statistics and Data Science, La Jolla, CA, Oct '17.</p> <p>Connecticut Annual Statisticians Meeting, Bristol, CT, Apr '17.</p> <p>21st New England Isolated Statisticians Meeting (NEISM), Stonehill College, MA, Oct '16.</p> <p>National Bureau of Economic Research and National Science Foundation (NBER-NSF) Time Series Conference, Columbia University, NY, Sep '16.</p> <p>International Conference on Mathematics and Statistics, Boston, MA, Apr '16.</p> <p>Thirteenth Annual ASA CT Chapter Mini-Conference Using Statistical Models for Prediction, University of Connecticut Health Center, Farmington, CT, Apr '15.</p> <p><u>Recent Presentations</u></p> <p>Modeling the Cholesky factors of covariances in multivariate longitudinal data, <i>Aspects of Covariance Estimation</i>, 2018 IISA Conference, Gainesville, Florida, May 17-20 '18 (invited).</p> <p>RNA-Sequencing, <i>Recent Developments in Bioinformatics</i>, 2017 IISA Conference, Hyderabad, India, Dec '17 (invited).</p> <p>Modeling Dependence in Multivariate Longitudinal Studies, Faculty at Work, Connecticut College, CT, Nov '16 (invited).</p> <p>Covariance Modeling of Multivariate Longitudinal Data with Application in Clinical Trials, 2015 IISA Conference, Pune, India, Dec '15 (invited).</p> <p>Clustering of Nonlinear and Nonstationary Time Series Using BSLEX, Syracuse University, NY, Nov '15 (invited).</p> <p>Clustering Time Series: A PSLEX-Based Approach, Advanced Development in Big Data Analytics Tools, 24th ICSA/Graybill Joint Conference, Fort Collins, Colorado, Jun '15 (invited).</p> <p>Technology: An Indispensable Tool for Teaching Statistics in the 21st Century, 27th International Conference on Technology in Collegiate Mathematics, Las Vegas, NV, Mar '15.</p> <p>Time Series Clustering, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, Oct '14 (invited).</p> <p>Restricted Linear Covariance Models for Multivariate Longitudinal Data, 16th Meeting of New Researchers in Statistics and Probability, Harvard University, Boston, MA, Jul '14.</p> <p>Prediction of Stationary Random Fields with Quarter-Plane Past: A Time-Series Approach, International Society of Nonparametric Statistics Conference, Spain, Jun '14 (invited).</p> <p>Clustering Financial Time Series, International Symposium on Business and Industrial Statistics (ISBIS), Duke University, NC, Jun '14 (invited).</p> <p>Covariance Estimation for Multivariate Longitudinal Data, Dimension Reduction and High Dimensional Inference, University of Florida, Gainesville, FL, Jan '14.</p>

Recent Workshops

Post-tenure Pathfinders Program, National Center for Faculty Development and Diversity, May - Aug 2018.

Faculty Success Program, National Center for Faculty Development and Diversity, May - Aug 2017.

Participant in Tempel Summer Institute, Connecticut College, Jun '16 and June '17.

Organized and conducted a two-day workshop on introducing R for applications in life sciences, Connecticut College, Jul '15.

GCAT-SEEKquence workshop, *The Genome Consortium for Active Teaching NextGen Sequencing Group*, Juniata College, PA, Jun '15.

Co-organized and conducted a three-day workshop on introducing the recent advances in statistical techniques for researchers in Biology, Botany and Neuroscience, Connecticut College, CT, Jan '14.

Teaching at Connecticut College

1. Introduction to Statistics: fall '13 and spring '15, '16
2. Introduction to Statistical Methods: fall '12, '13, '14
3. Advanced Regression Techniques: spring '13, '18 and fall '13, '14
4. Introduction to Time Series Analysis: spring '14, '15, '16, '17, '18
5. Probability: fall '12, and spring '14, '17
6. Mathematical Statistics: spring '13, '16 and fall '14, '17
7. Statistical Computing with R: fall '17
8. Individual Study: fall '13, '14 and spring '15, '14

Service

Connecticut College

- Committees: Committee on Faculty Compensation (CFC), Committee on Academic Standing (CAS), and Committee on the Status of Faculty Women (CSFW).
- Member of the core working group for the Public Health and Data Analytic (under development) Pathways.
- Organized statistics workshops in winter 2014 and summer 2015 for faculty in life sciences.
- Faculty Connections Program.
- Ammerman Center for Arts and Technology (CAT) Fellow.
- Judge in the Annual Summer Research Student Poster Sessions.

Department of Mathematics and Statistics

- Math major and Applied Statistics minor advisor.
- Search committee member: Stat tenure-track, Math tenure-track, three-year visiting, two-year visiting, and visiting lecturer.
- Mentor for *Women in Math Group*, Connecticut College.
- Mentor for student teams participating in DATAFEST, Wesleyan University, '16, '17 and '18.

Professional

- Peer reviewer for the journals *Computational Statistics and Data Analysis*, *Electronic Journal of Statistics*, *Journal of Multivariate Analysis*, *MAA Book Reviews*, *Mathematical Reviews*, *Sankhya*, *Scandinavian Journal of Statistics*, *Statistica Sinica*, *Statistica Neerlandica*, *Statistics and Probability Letters*, *Stochastic Processes and their Applications*, *Women's Reproductive Health*.
- Participated in AP Statistics Faculty Colloquium, Chicago IL.
- Mentor in the *Association for Women in Mathematics (AWM)*, fall '15-present.
- Judged the Undergraduate Statistics Project Competition (USPROC), '17.
- Professional Memberships: *American Statistical Association (ASA)*, *Association for Women in Mathematics (AWM)*, *Eastern North American Region/International Biometric Society (ENAR)*, *Institute of Mathematical Statistics (IMS)*, *International Indian Statistical Association (IISA)*.