Daniel K. Sewell

Address: Department of Biostatistics
N338 CPHB
University of Iowa
145 N. Riverside Dr. 52242
Phone: (319) 384-1585
Email: daniel-sewell@uiowa.edu

Education

2010-2015	University of Illinois at Urbana-Champaign
	PhD, Statistics Advisor: Professor Yuguo Chen
	Dissertation Title: Statistical Models and Inference for Dynamic Networks
2008-2010	University of Arkansas
	MS, Statistics
2002-2006	Harding University, Searcy, AR
	BA, Education

Research interests

Social network analysis	Statistical computing	Applied scientific problems
Clustering	Monte Carlo methodology	
Bayesian methodology	Data visualization	

Positions

2021-Present	University of Iowa	Iowa City, IA
	Associate Professor, Department of Biostatistics	
2015-2021	University of Iowa	Iowa City, IA
	Assistant Professor, Department of Biostatistics	
2020-Present	University of Iowa	Iowa City, IA
	Faculty Affiliate at the UI Public Policy Center	

Awards

2023	Inducted into the Delta Omega Honorary Society in Public Health
2023	Dr. Carol S. Gleich Development Award
2023	President & Provost Award for Teaching Excellence College of Public Health Nominee
2022	College of Public Health Faculty Teaching Award, University of Iowa
2022	President & Provost Award for Teaching Excellence College of Public Health Nominee
2019	International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics Best Paper Award
2017	Junior Faculty Research Opportunity Award, College of Public Health, University of Iowa
2015	New Faculty Research Award, College of Public Health, University of Iowa
2015	University of Illinois nomination for CGS/ProQuest Distinguished Dissertation Award (limit 1 nomination per university)
2014	Patrick J. Fett award for the best paper on the scientific study of Congress and the presidency
2014	Finalist for the Norton Prize for Outstanding Doctoral Thesis in Statistics
2014	University of Illinois Graduate College Travel Award
2007	Outstanding Calculus Award, Harding University

Publications

[1] Afifi et al. "The 'dirty work' of last responders: Occupational stigma risk and protective factors". In: *Journal of Occupational and Environmental* 21.3 (2024), pp. 145–151. DOI: 10.1080/15459624.2024.2302481.

[2] Barbara Baquero et al. "Effectiveness of implementing evidence-based approaches to promote physical activity in a Midwestern micropolitan area using a quasi-experimental hybrid type I study design". In: *BMC Public Health* 24.1 (2024), p. 1082. ISSN: 1471-2458. DOI: 10.1186/s12889-024-18523-9. URL: https://doi.org/10.1186/s12889-024-18523-9.

[3] Phylis J. Busienei et al. "Development of a protocol for using geo-trackers to identify zoonotic enteric pathogen transmission pathways in a pilot study in Kenya". In: *CABI One Health* 3.1 (2024). DOI: 10.1079/cabionehealth.2024.0011.

[4] Fanta D. Gutema et al. "*Enterococcus* contamination of infant foods and implications for exposure to food-borne pathogens in peri-urban neighborhoods of Kisumu, Kenya". In: *Epidemiology and Infection* 152 (2024), e23. DOI: 10.1017/S0950268824000062.

[5] Haomin Li et al. "Comparing multiple infection control measures in a nursing home setting: a simulation study". In: *Infection Control &; Hospital Epidemiology* (2024), pp. 1–8. DOI: 10.1017/ice.2024.43.

[6] Maldonado et al. "The association between state characteristics and Latinos' treated hypertension in established and new Latino destination states: A multilevel analysis". In: *Family & Community Health* 47.2 (2024), pp. 151–166. DOI: 10.1097/FCH.0000000000000393.

[7] Aaron C. Miller et al. "Hospitalizations among family members increase the risk of MRSA infection in a household". In: *Infection Control &; Hospital Epidemiology* (2024), pp. 1–7. DOI: 10.1017/ice.2024.106.

[8] Hanh T. D. Pham and Daniel K. Sewell. "Automated detection of edge clusters via an overfitted mixture prior". In: *Network Science* 12.1 (2024), pp. 88–106. DOI: 10.1017/nws.2023.22.

[9] D.K. Sewell. "Posterior shrinkage towards linear subspaces". In: *Bayesian Analysis* 1.1 (2024), pp. 1–24.

[10] Shin-Ping Tu et al. "Patient care in complex Sociotechnological ecosystems and learning health systems". In: *Learning Health Systems* (2024), e10427. DOI: https://doi.org/10.1002/lrh2.10427.

[11] RA Afifi et al. "Ignored and distressed: A cross-sectional study of the impact of COVID-19 on last responders". In: *BMC Public Health* 23 (2023), p. 1637.

[12] Kelly K. Baker et al. "Protocol for the PATHOME study: a cohort study on urban societal development and the ecology of enteric disease transmission among infants, domestic animals and the environment". eng. In: *BMJ open* 13 (11 Nov. 2023), e076067.

[13] Yuguo Chen et al. "Editorial: Advances in Network Data Science". In: *Journal of Data Science* 21.3 (2023), pp. 443–445. ISSN: 1680-743X. DOI: 10.6339/23-JDS213EDI.

[14] Anna B. Correa et al. "Students supporting students: evaluating the impact of the COVID-19 pandemic on resident assistant mental health". In: *Journal of American College Health* (2023), pp. 1–11. DOI: 10.1080/07448481.2023.2201867.

[15] Adriana Maldonado et al. "Identifying the Social Determinants of Treated Hypertension in New and Established Latino Destination States". In: *Journal of Immigrant and Minority Health* 25 (2023), pp. 50–61.

[16] Aaron C Miller et al. "Comparison of different antibiotics and the risk for community-associated Clostridioides difficile Infection: A case–control study". In: *Open Forum Infectious Diseases* 10.8 (Aug. 2023), ofad413. ISSN: 2328-8957. DOI: 10.1093/ofid/ofad413. eprint: https://academic.oup.com/ofid/article-pdf/10/8/ofad413/51234077/ofad413.pdf. URL: https://doi.org/10.1093/ofid/ofad413.

[17] Sean M. Mullan et al. "Predicting use of a gait-stabilizing device using a Wii Balance Board". In: *PLOS ONE* 18.10 (Oct. 2023), pp. 1–12. DOI: 10.1371/journal.pone.0292548. URL: https://doi.org/10.1371/journal.pone.0292548.

[18] Kelly K. Baker et al. "Environmental and behavioral exposure pathways associated with diarrhea and enteric pathogen detection in five month old, peri-urban Kenyan infants: a cross-sectional study". In: *BMJ Open* 12 (2022), e059878.

[19] Elliot Burghardt, Daniel Sewell, and Joseph Cavanaugh. "Agglomerative and divisive hierarchical Bayesian clustering". In: *Computational Statistics & Data Analysis* 176 (2022), p. 107566. ISSN: 0167-9473.

[20] Tessa Heeren et al. "Applying network analysis to assess the development and sustainability of multi-sector coalitions". In: *PLOS ONE* 17.10 (Oct. 2022), pp. 1–15. DOI: 10.1371/journal.pone.0276114. URL: https://doi.org/10.1371/journal.pone.0276114.

[21] Vivian Hoffmann et al. "Milk Product Safety and Household Food Hygiene Influence Bacterial Contamination of Infant Food in Peri-Urban Kenya". In: *Frontiers in Public Health* 9 (2022), p. 772892. ISSN: 2296-2565. DOI: 10.3389/fpubh.2021.772892. URL: https://www.frontiersin.org/article/10.3389/fpubh.2021.772892.

[22] Samuel Justice et al. "Evidence of within-facility patient-patient Clostridiodes difficile infection spread across diverse settings". In: *Epidemiology and Infection* (2022), pp. 1–23. DOI: 10.1017/S0950268822001893.

[23] Aaron C. Miller et al. "Risk for asymptomatic household transmission of Clostridioides difficile infection associated with recently hospitalized family members". eng. In: *Emerging Infectious Diseases* 28.35447064 (May 2022), pp. 932–939. ISSN: 1080-6040. DOI: 10.3201/eid2805.212023. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9045444/.

[24] Daniel K. Sewell. "Leveraging network structure to improve pooled testing efficiency". In: *Journal of the Royal Statistical Society: Series C* 71.5 (2022), pp. 1648–1662.

[25] Daniel K. Sewell. "Network-informed constrained divisive pooled testing assignments". In: *Frontiers in Big Data* 5 (2022), p. 893760.

[26] Denise A. Devotta et al. "Watershed *Alnus* cover alters N:P stoichiometry and intensifies P limitation in subarctic streams". In: *Biogeochemistry* 153 (2021), pp. 155–176.

[27] D. M. Hasibul Hasan et al. "Modeling and Evaluation of Clustering Patient Care into Bubbles". In: *2021 IEEE 9th International Conference on Healthcare Informatics (ICHI)*. 2021, pp. 73–82. DOI: 10.1109/ICHI52183.2021.00023.

[28] S. Justice, D.K. Sewell, and A.C. Miller. "Inferring patient transfer networks between healthcare facilities". In: *Health Serv Outcomes Res Method* (2021).

[29] Haomin Li and Daniel K. Sewell. "A comparison of point estimators for the network autocorrelation model based on observed social networks". In: *Social Networks* 66 (2021), pp. 202–210.

[30] Daniel K. Sewell. "Model-based edge clustering". In: *Journal of Computational and Graphical Statistics* 30.2 (2021), pp. 390–405.

[31] Ying Zhang et al. "Mild cognitive impairment as an early landmark in Huntington Disease". In: *Frontiers in Neurology* 12 (2021), p. 678652.

[32] J. Daniel-Ulloa et al. "Demographic, psychosocial and perceived environmental factors associated with depression severity in a midwest micropolitan community". In: *Health Behavior Research* 3.2 (2020).

[33] Kerry M Dore et al. "GIS and GPS techniques in an ethnoprimatological investigation of St. Kitts vervet monkey (Chlorocebus aethiops sabaeus) crop-foraging behavior". In: *GIS and GPS in Primatology: A Practical Guide to Spatial Analysis*. Ed. by Christopher A. Shaffer et al. Cambridge University Press, 2020, p. 403.

[34] Hankyu Jang et al. "A data-driven approach to identifying asymptomatic *C. diff* cases". In: *The 3rd annual International Workshop on Epidemiology meets Data Mining and Knowledge Discovery (epiDAMIK) 2020* (2020).

[35] Abhijeet Kharkar et al. "Naturally emerging cohorting behavior of healthcare workers and its implications for disease spread". In: *Infection Control & Hospital Epidemiology* 41.S1 (2020), s329–s330. DOI: 10.1017/ice.2020.932.

[36] A.C. Miller et al. "Association of household exposure to primary *Clostridioides difficile* infection with secondary infection in family members". In: *JAMA Network Open* 3.6 (June 2020).

[37] Aaron C Miller et al. "Risk for *Clostridioides difficile* Infection Among Hospitalized Patients Associated With Multiple Healthcare Exposures Prior to Admission". In: *The Journal of Infectious Diseases* 224.4 (2020), pp. 684–694.

[38] Aaron Miller et al. "Risk of Hospital-Onset C. difficile Infection Increases With Prior Inpatient and Outpatient Visits". In: *Infection Control & Hospital Epidemiology* 41.S1 (2020), s78–s79.

[39] S. Pai et al. "Spatiotemporal clustering of in-hospital *Clostridioides difficile* infection (CDI)". In: *Infection Control and Hospital Epidemiology* 41.4 (2020), pp. 418–424.

[40] Linnea A. Polgreen et al. "A pharmacist intervention for monitoring and treating hypertension using bidirectional texting: PharmText BP". In: *Contemporary Clinical Trials* 98 (2020), p. 106169.

[41] Daniel K. Sewell and Aaron Miller. "Simulation-free estimation of an individual-based SEIR model for evaluating nonpharmaceutical interventions with an application to COVID-19 in Iowa". In: *PLOS One* 15.11 (2020), e0241949.

[42] Daniel K. Sewell et al. "Predicting an optimal composite outcome variable for Huntington's disease clinical trials". In: *Journal of Applied Statistics* 48.7 (2020).

[43] Alan Dow et al. "Evaluating a center for interprofessional education via network analysis". In: *Academic Medicine* 95.2 (2019), pp. 207–212.

[44] Hankyu Jang et al. "Evaluating architectural changes to alter pathogen dynamics in a dialysis unit". In: *International Conference on Advances in Social Networks Analysis and Mining '19* (2019).

[45] C. M. Kava et al. "Associations between organizational culture, workplace health climate, and employee smoking at smaller workplaces." In: *Tobacco Use Insights* 12.1179173X1983584 (2019).

[46] Danielle Medgyesi et al. "The landscape of enteric pathogen exposure for children during play in public domains of low-income, Kisumu, Kenya". In: *PLOS Neglected Tropical Diseases* 13.3 (2019), e0007292.

[47] Daniel K. Sewell. "Analysis of network interventions with an application to hospital acquired infections". In: *Statistics in Medicine* 38 (2019), pp. 5376–5390.

[48] Daniel K. Sewell. "Latent space models for network perception data". In: *Network Science* 7.2 (2019), pp. 160–179.

[49] Daniel K. Sewell. "Multilinear tests of association between networks". In: *Proceedings of the Meeting of the Classification and Data Analysis Group '19* (2019).

[50] Daniel K. Sewell et al. "Estimating the attributable disease burden and effects of inter-hospital patient sharing on *Clostridium difficile* infections". In: *Infection Control and Hospital Epidemiology* 40.6 (2019), pp. 656–661.

[51] Xi Zhu et al. "Measuring electronic communication networks in virtual care teams using electronic health records access-log data". In: *International Journal of Medical Informatics* 128 (2019), pp. 46–52.

[52] Chris A. Anthony et al. "The seasonal variability of surgical site infections in knee and hip arthroplasty". In: *The Journal of Arthroplasty* 33.2 (2018), 510–514.e1.

[53] Sato Ashida et al. "Social network members who engage in activities with older adults: do they bring more social benefits than other members?" In: *Ageing and Society* (2018), pp. 1–20.

[54] Kelly K. Baker et al. "Fecal fingerprints of enteric pathogen contamination in low-income neighborhoods of Kisumu, Kenya: The role of human and domestic animal sources in environmental pathogen contamination patterns". In: *Environmental Science & Technology* 52.18 (2018), pp. 10263–10274.

[55] Barbara Baquero et al. "Active Ottumwa: Adapting evidence-based recommendations to promote physical activity in a micropolitan new destination community". In: *International Journal of Environmental Research and Public Health* 15.5 (2018).

[56] Christine M. Kava et al. “A qualitative assessment of the smoking policies and cessation activities at smaller workplaces”. In: *BMC Public Health* 18.1 (Sept. 2018), p. 1094. ISSN: 1471-2458.

[57] Christine M. Kava et al. “Organizational culture and the adoption of anti-smoking initiatives at small to very small workplaces: An organizational level analysis”. In: *Tobacco Prevention & Cessation* 4 (2018).

[58] Danielle N Medgyesi et al. “Where children play: Young child exposure to environmental hazards during play in public areas in a transitioning internally displaced persons community in Haiti”. In: *International Journal of Environmental Research and Public Health* 15.8 (2018), p. 1646.

[59] Kristen M. Metcalf et al. “Calibration of the global physical activity questionnaire to accelerometry measured physical activity and sedentary behavior”. In: *BMC Public Health* 18.1 (Mar. 2018), p. 412. ISSN: 1471-2458.

[60] Daniel K Sewell. “Simultaneous and temporal autoregressive network models”. In: *Network Science* 6.2 (2018), pp. 204–231.

[61] Daniel K. Sewell. “Visualizing data through curvilinear representations of matrices”. In: *Computational Statistics & Data Analysis* 128 (2018), pp. 255–270.

[62] Chris Anthony et al. “The seasonal variability in surgical site infections and association with warmer weather: a population-based investigation”. In: *Infection Control & Hospital Epidemiology* 38.7 (2017), pp. 809–816.

[63] William Bernhard, Daniel K. Sewell, and Tracy Sulkin. “A clustering approach to legislative styles”. In: *Legislative Studies Quarterly* 42.3 (2017), pp. 477–506.

[64] Alan W. Dow et al. “Teamwork on the rocks: Rethinking interprofessional practice as networking”. In: *Journal of Interprofessional Care* 31.6 (2017). PMID: 28792251, pp. 677–678.

[65] Ryan Peterson et al. “Warmer weather as a risk factor for cellulitis: a population-based investigation”. In: *Clinical Infectious Diseases* 65.7 (2017), pp. 1167–1173.

[66] Daniel K Sewell. “Heterogeneous susceptibilities in social influence models”. In: *Social Networks* 52 (2017), pp. 135–144.

[67] Daniel K Sewell. “Network autocorrelation models with egocentric data”. In: *Social Networks* 49 (2017), pp. 113–123.

[68] Daniel K Sewell and Yuguo Chen. “Latent space approaches to community detection in dynamic networks”. In: *Bayesian Analysis* 12.2 (2017), pp. 351–377.

[69] Jacob E Simmering et al. “Weather-dependent risk for Legionnaires’ Disease, United States”. In: *Emerging Infectious Diseases* 23.11 (2017), pp. 1843–1851.

[70] Daniel K Sewell and Yuguo Chen. “Latent space models for dynamic networks with weighted edges”. In: *Social Networks* 44 (2016), pp. 105–116.

[71] Daniel K Sewell et al. “Model-based longitudinal clustering with varying cluster assignments”. In: *Statistica Sinica* 26.1 (2016), pp. 205–233.

[72] Daniel K Sewell and Yuguo Chen. “Analysis of the formation of the structure of social networks by using latent space models for ranked dynamic networks”. In: *Journal of the Royal Statistical Society: Series C* 64.4 (2015), pp. 611–633.

[73] Daniel K Sewell and Yuguo Chen. “Latent space models for dynamic networks”. In: *Journal of the American Statistical Association* 110.512 (2015), pp. 1646–1657.

[74] Daniel K Sewell et al. “A parameter estimation method for fluorescence lifetime data”. In: *BMC Research Notes* 8.1 (2015), p. 230.

Publications under review

[75] Li, H. and Sewell, D.K. Model-based edge clustering for weighted networks with a noise component. *Invited revision to CSDA.*

[76] Houser, S.A., Sewell, D.K., Medgyesi, D.N., Brogan, J.M., Creve-Coeur, J.P., and Baker, K.K. A Multi-Pathogen Behavioral Exposure Model for Young Children Playing in Public Spaces in Developing Communities. *Invited revision to PLOS Neglected Tropical Diseases*

[77] Pham, H.T.D. and Sewell, D.K. Homophily-adjusted social influence estimation. *Under review.*

[78] Sewell, D.K. and Baker, K.K. Estimating risk factors for pathogenic dose accrual from longitudinal data. *Under review.*

[79] Gutema, F.D., Okoth, B., Denge, J., Sharon, C., Simiyu, S., Mberu, B., Sewell, D.K. and Baker, K.K. (2024+). Spatial-temporal patterns in enteric pathogen contamination of soil in public environments of low-and middle-income neighborhoods in Nairobi, Kenya. *Under review.*

Software

Author of R packages `dnc`, `STAR`, `curveRep`, `LSMNP`, `LSEC`, `marginalMeans`, `SUBSET`, `LADIE`

GPAQ calibration web application

University of Iowa COVID-19 Nonpharmaceutical Intervention Evaluation Web Application

Teaching Experience

–Instructor–

		Terms Instructed
University of Iowa	BIOS 5710: Biostatistical Methods I	3
	BIOS 5720: Biostatistical Methods II	6
	BIOS 6810: Bayesian Methods and Design	4
	BIOS 7600: Statistical Analysis of Network Data	3
University of Illinois	STAT 200: Statistical Analysis	1
University of Arkansas	STAT 2303: Principles of Statistics	1
	MATH 2043: Survey of Calculus	1
	MATH 1203: College Algebra	2

Advising

PhD Advisor	Elliot Burghardt	Biostatistics
	Haomin Li	Biostatistics
	Hannah Pham	Biostatistics
	Scott Cleven	Biostatistics
	Alan Arakkal	Biostatistics
	Kailey Mulligan	Biostatistics
Committee member	Brandon Butcher	Biostatistics
	Annika Helverson	Biostatistics
	Christine Kava	Community and Behavioral Health
	Samuel Justice	Statistics and Actuarial Science
	Seungwon Kim	Geographical and Sustainability Sciences
	Adriana Maldonado	Community and Behavioral Health
	Kyle Peterson	Interdisciplinary Graduate Program in Informatics
	Michael Seedorff	Biostatistics
	Eldon Sorenson	Biostatistics
	Caitlin Ward	Biostatistics
Master's Preceptorship	Amy Hahn	Biostatistics
	Scott Cleven	Biostatistics
	Sabin Gaire	Biostatistics
	Blaize Kandler	Biostatistics
	Seungwon Kim	Geographical and Sustainability Sciences
	Haomin Li	Biostatistics
	Hannah Pham	Biostatistics
	Eldon Sorenson	Biostatistics

Editorial Boards

Journal of the American Statistical Association	Associate Editor
Journal of Data Science	Guest editor for "Advances in network data science"

Financial Support

–Active–

(PI) Statistical and Agent-based Modeling of Complex Microbial Systems: A Means for Understanding Enteric Disease Transmission Among Children in Urban Neighborhoods of Kenya (1 R01 TW011795-01)

University of Iowa COVID-19 Flex Funding Award

Connected Cancer Care: EHR Communication Networks in Virtual Cancer Care Teams (1 R21 HS026075-01A1)

A Pharmacist Intervention for Monitoring and Treating Hypertension Using Bidirectional Texting (1 R61 HL144880-01A1)

University of Iowa Prevention Research Center for Rural Health (5 U48 DP005021-05; 6 U48 DP006389-02)

Contact Network Transmission Modeling of Healthcare Associated Infections (5 U01 CK000531-02)

Iowa Summer Institute for Research Education in Biostatistics (1 R25 HL147231-01)

–Completed–

Grinnell College & U. Iowa Residential College/Schools Prevention and Control of SARS-CoV-2

Market to Mouth Infant Food Contamination Study: A Collaboration between the Safe Start Study and IFPRI (2018X134.UOI)

Care Coordination Networks (UI Public Policy Center Summer Scholars Project)

Statistical Disease Modeling and Clinimetrics to Prepare for Preventive Trials in Huntington Disease (5 R01 NS103475-02)

Preparing for Preventive Clinical Trials in Huntington's Disease (1 R01 NS105509-01)

New Faculty Research Award

Junior Faculty Research Opportunity Award

e-Health (82154300)

Presentations

–Invited Talks–

2024	"Homophily-adjusted social influence estimation," at *Joint Statistical Meetings*, Portland, OR
2024	"Healthcare disparities exhibited in length of stay for inpatient visits," for the CDC MInD Healthcare Network, Virtual
2023	"Divisive Hierarchical Bayesian Clustering on Longitudinal Data: Identifying Parkinson's Disease Subtypes," at *Joint Statistical Meetings*, Toronto, CA
2023	"Agglomerative and Divisive Hierarchical Bayesian Clustering," at the Summer Session of the Working Group on Model-Based Clustering, Pittsburgh, PA
2023	"Comparing multiple infection control measures in a nursing home setting: A simulation study," for the CDC MInD Healthcare Network, Virtual
2022	"The community-hospital feedback loop," at the MInD Grantee Meeting 2022, Atlanta, GA
2022	"Automated detection of edge clusters," at Social Networks and Beyond, New York, NY
2021	"Model-based edge clustering," at the Summer Session of the Working Group on Model-Based Clustering, Athens, Greece
2020	"Model-based edge clustering," at the University of Iowa, Department of Statistics
2020	"Facing the Facts: The Role of Face Coverings in Containing COVID-19" College of Public Health webinar on face coverings
2020	"Understanding, Predicting and Planning for Resilience- Epidemiologic Modeling," Office of the Vice President for Research Webinar on COVID-19
2020	"Mining Social Network Data - EDA & Visualization ," ASA Statistical Learning and Data Science Section webinar series "Introductory Overview Lectures in Data Science"
2019	"Model-based edge clustering," at Shambaugh Conference on International Relations and Network Analysis, University of Iowa
2019	"Multilinear tests of association between two networks," at Classification and Data Analysis Group Meeting, Cassino, Italy
2018	"Heterogeneous susceptibilities in network influence models," at CMStatistics, Pisa, Italy
2018	"Estimating the attributable disease burden and effects of inter-hospital patient sharing on *Clostridium difficile* infections in California," at the International Conference on Emerging Infectious Diseases, Atlanta, GA
2017	"Simultaneous and temporal autoregressive network models," at Iowa State University, Department of Statistics
2017	"Statistical analysis of networks in bioinformatics: Getting the right data," Informatics Showcase, University of Iowa
2017	"Measuring electronic communication networks in virtual healthcare teams using electronic health records cccess-log data," with Zhu X, Tu SP, Hall L, Mishra V, Yao A, Dow A, and Banas C., at *INSNA Sunbelt Conference*, Beijing, China

2017 | "The effects of analyzing subsets of hospital patient transfer networks" at the University of Iowa, Department of Geographical and Sustainability Sciences

2016 | "Clustering dynamic and evolving data" at the University of Iowa, Department of Biostatistics

2016 | "Clustering dynamic and evolving data" at the University of Iowa, Department of Political Science

2016 | "Simultaneous and temporal autoregressive network models," at *INSNA Sunbelt Conference*, Newport Beach, CA

2016 | "Social network analysis," at the Center for Comprehensive Access And Delivery Research And Evaluation

2015 | "Latent space models for dynamic networks," at the University of Iowa, Department of Statistics and Actuarial Science

2015 | "Latent space models for dynamic networks," at the University of Iowa, Department of Computer Science

2015 | "Analysis of the formation of the structure of social networks," at 17^{th} *Meeting of New Researchers in Statistics and Probability*, Seattle, WA

2015 | "Latent space models for dynamic networks," at Texas A&M

2015 | "Latent space models for dynamic networks," at Duke University

2015 | "Latent space models for dynamic networks," at the University of Michigan

2015 | "Latent space models for dynamic networks," at the University of Missouri

2015 | "Latent space models for dynamic networks," at Notre Dame University

2015 | "Latent space models for dynamic networks," at the University of Alberta

2015 | "Latent space models for dynamic networks," at the University of Colorado, Denver

2015 | "Latent space models for dynamic networks," at Portland State University

2015 | "Latent space models for dynamic networks," at University of Iowa, Department of Biostatistics

2015 | "Latent space models for dynamic networks," at Binghamton University

2015 | "Latent space models for dynamic networks," at Miami University

2014 | "Legislative style," with W. Bernhardt and T. Sulkin, *Annual Meeting of the Midwest Political Science Association*, Chicago, IL

2014 | "Latent space models for dynamic networks," *Midwest Statistics Research Colloquium*, Chicago, IL

–Invited Posters–

2020 | "Estimating the Impact of County Boundaries on State-wide Patient-sharing Network Models," at *Decennial 2020: 6th International Conference on Healthcare Associated Infections*, Atlanta, GA

2020 | "Exploring the Potential Limitations of Using Medicare Data to Study the Spread of Infections from Hospital Transfers," at *Decennial 2020: 6th International Conference on Healthcare Associated Infections*, Atlanta, GA

–Contributed Talks–

2016	"Simultaneous and temporal autoregressive network models," at *Joint Statistical Meetings*, Chicago, IL
2015	"Analysis of the formation of the structure of social networks," at *Joint Statistical Meetings*, Seattle, WA
2014	"Detecting influence in dynamic networks," *Joint Statistical Meetings*, Boston, MA
2014	"Community detection for dynamic networks," *Bohrer Workshop in Statistics*, Department of Statistics, University of Illinois at Urbana-Champaign
2013	"Latent space models for dynamic networks," *Bohrer Workshop in Statistics*, Department of Statistics, University of Illinois at Urbana-Champaign
2011	"A parameter estimation method for single molecule fluorescence lifetime data," *Bohrer Workshop in Statistics*, Department of Statistics, University of Illinois at Urbana-Champaign

–Workshops–

2020	Webinar on "Introductory Overview Lectures in Social Networks" through the American Statistical Association Web-Based Lectures
2019	Short course "Introduction to statistical analysis of network data" at Sapienza Universitá di Roma
2019	Short course "Networks in R" at *University of Iowa Data Science Institute* (Summer)
2017	Short course "Networks in R" at *University of Iowa Data Science Institute* (Summer)
2017	Short course "Introduction to R" at *University of Iowa Data Science Institute* (Winter)
2016	Workshop on "Introduction to R," at *Informatics Showcase*, University of Iowa

Refereed Journals/Funding Agencies

Applied Network Analysis

Annals of Applied Statistics

Bayesian Analysis

Biometrics

BMJ Open

Computational Statistics and Data Analysis

Communications in Statistics

Expert Systems with Applications

Extremes

Great Plains IDeA CTR Pilot Program

JAMA Network Open

Journal of Allergy and Clinical Immunology

Journal of the American Statistical Association T&M

Journal of the American Statistical Association A&CS

Journal of Computational and Graphical Statistics

Journal of Econometrics

Journal of Educational and Behavioral Statistics

Journal of Medical Internet Research AI

Journal of Multivariate Analysis

Journal of the Royal Statistical Society, Series A

Journal of the Royal Statistical Society, Series B

Journal of the Royal Statistical Society, Series C

Multivariate Behavioral Research

Network Science

National Science Foundation

PLOS One

Polish National Science Centre

Psychometrika

Social Networks

Statistics and Computing

Statistics and Its Interface

Statistics in Medicine

Statistical Methods & Applications

Professional Activities

2024-present	Associate Editor, Scientific Reports
2022-present	Associate Editor, Journal of the American Statistical Association
2021-present	Guest Editor, Journal of Data Science
2018-present	Biostatistics Colloquium Committee (Chair)
2018-present	Chapter representative of the Iowa Chapter of the American Statistical Association
2016-2018, 2020	Faculty mentor for the Iowa Summer Institute in Biostatistics at the University of Iowa
2016-2017	Member of faculty search committee for the Department of Biostatistics at the University of Iowa
2015-2018	Member of the advanced statistical computing course exploratory committee for the Department of Biostatistics at the University of Iowa
2015-present	Member of M.S. Exam Committee for the Department of Biostatistics at the University of Iowa
2015-present	Member of the computing committee for the Department of Biostatistics at the University of Iowa
2015-2018	Member of graduate admissions committee for the Department of Biostatistics at the University of Iowa
2015-present	Member of the awards committee for the College of Public Health at the University of Iowa
2015-2016	Member of student paper award committee of the ASA nonparametric statistics section
2016	College of Public Health representative and member of the Hancher-Finkbine dinner medallion selection committee at the University of Iowa

Professional Associations

International Network for Social Network Analysis

American Statistical Association

Institute of Mathematical Statistics

International Society for Bayesian Analysis