Daniel K. Sewell

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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

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
	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
	Annika Helverson	Biostatistics
	Logan Harris	Biostatistics
	Devin Spolsdoff	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

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

Year	
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 17th *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

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

BMC Infectious Diseases

Computational Statistics and Data Analysis

Communications in Statistics

Expert Systems with Applications

Extremes

Great Plains IDeA CTR Pilot Program

International Journal of Nursing Practice

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

Journal of Statistical Planning and Inference

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