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

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	**College of Public Health Nominee for the President and Provost Award for Teaching Excellence, University of Iowa**
2022	**College of Public Health Nominee for the President and Provost Award for Teaching Excellence, University of Iowa**
2022	**College of Public Health Faculty Teaching Award, University of Iowa**
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

Recent Teaching Experience

Date	*Course*	*Semester Hours*	*# Advisees*
F2023	BIOS 7600: Statistical Analysis of Network Data	2s.h.	
F2023	BIOS 7900: Thesis/Dissertation		5
S2023	BIOS 5710: Biostatistical Methods I	4s.h.	
S2023	BIOS 7900: Thesis/Dissertation		3
S2023	BIOS 7500: Preceptorship		1
S2023	BIOS 7800: Independent Study in Biostatistics	3s.h.	2
F2022	BIOS 6810: Bayesian Methods and Design	3s.h.	
F2022	BIOS 7900: Thesis/Dissertation		3
S2022	BIOS 7600: Statistical Analysis of Network Data	1-2s.h.	
S2022	BIOS 7900: Thesis/Dissertation		2
F2021	BIOS 5710: Biostatistical Methods I	4s.h.	
F2021	BIOS 7500: Preceptorship		3
F2021	BIOS 7900: Thesis/Dissertation		3
S2021	BIOS 5720: Biostatistical Methods II	4s.h.	
S2021	BIOS 7900: Thesis/Dissertation		3
F2020	BIOS 6810: Bayesian Methods and Design	3s.h.	
F2020	BIOS 7900: Thesis/Dissertation		3
S2020	BIOS 5710: Biostatistical Methods I	4s.h.	
S2020	BIOS 7900: Thesis/Dissertation		1
F2019	BIOS 7500: Preceptorship		2
F2019	BIOS 7900: Thesis/Dissertation		1
S2019	BIOS 6810: Bayesian Methods and Design	3s.h.	
F2018	BIOS 7600: Statistical Analysis of Network Data	1-2s.h.	
S2018	BIOS 5720: Biostatistical Methods II	4s.h.	
F2017	BIOS 5710: Biostatistical Methods I	4s.h.	
S2017	BIOS 6810: Bayesian Methods and Design	3s.h.	
S2017	BIOS 7900: Thesis/Dissertation		1

Advising

PhD Advisor	Alan Arakkal	Biostatistics
	Elliot Burghardt	Biostatistics
	Scott Cleven	Biostatistics
	Haomin Li	Biostatistics
	Lauren Mudd	Biostatistics
	Kailey Mulligan	Biostatistics
	Hannah Pham	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
Master's Preceptorship	Scott Cleven	Biostatistics
	Sabin Gaire	Biostatistics
	Blaize Kandler	Biostatistics
	Seungwon Kim	Geographical and Sustainability Sciences
	Haomin Li	Biostatistics
	Hannah Pham	Biostatistics
	Eldon Sorenson	Biostatistics

Other Teaching Activities

2023	Guest Lecturure, Iowa Summer Institute for Biostatistics	*Network Analysis: Discovering the Connections Around Us*
2023	REU Supervisor, Iowa Summer Institute for Biostatistics	*Comparing exposure pathways of enteric pathogens for infants living in low to middle income countries*
2022	Guest Lecturure, Iowa Summer Institute for Biostatistics	*Network Analysis: Discovering the Connections Around Us*
2022	REU Supervisor, Iowa Summer Institute for Biostatistics	*Effects of Hospitals as Reservoirs for Disease in the Community*
2021	Guest Lecturure, Iowa Summer Institute for Biostatistics	*Network Analysis: Discovering the Connections Around Us*
2021	REU Supervisor, Iowa Summer Institute for Biostatistics	*Discovering Latent Patterns in Health Behaviors and Environment and Their Relationship With Infant Health Outcomes in Low-to-Middle Income Countries*
2020	Webinar through the American Statistical Association Web-Based Lectures	*Introductory Overview Lectures in Social Networks*
2020	REU Supervisor, Iowa Summer Institute for Biostatistics	*Investigating the Relationship Between Food Contamination and Enteric Pathogen Infections in Infants Living in Low-to-Middle Income Countries*
2016-2019	Curricula development	*BIOS 7330 Advanced Biostatistical Computing*
2019	Short course at Sapienza Universitá di Roma	*Introduction to statistical analysis of network data*
2019	Short course at the University of Iowa Data Science Institute (Summer)	*Networks in R*
2018	REU Supervisor, Iowa Summer Institute for Biostatistics	*Intervening in Clostridium difficile Infections in Hospitals*
2017	Short course at the University of Iowa Data Science Institute (Summer)	*Networks in R*
2017	Short course at the University of Iowa Data Science Institute (Winter)	*Networks in R*
2017	REU Supervisor, Iowa Summer Institute for Biostatistics	*The Effect of Hospital Networks on Clostridium difficile Infection Rates*
2016	Workshop at the Informatics Showcase, University of Iowa	*Introduction to R*
2016	REU Supervisor, Iowa Summer Institute for Biostatistics	*Predicting Crop Damage by Vervet Monkeys on the Island of St. Kitts*

Presentations

–Invited Talks–

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 | "Divisive Hierarchical Bayesian Clustering of Longitudinal Data," at CMStatistics, London, England
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

–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

Externally Funded Research*

(PI) SMART Cancer Care Teams: Enhancing EHR Communication to Improve Interprofessional Teamwork (1 R01 CA273058-01)

(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)

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

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

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

Contact Network Transmission Modeling of Healthcare Associated Infections (5 U01 CK000594-02)

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)

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

*Only those research projects which have contributed substantively to lecture materials or other course content in University of Iowa courses are included here.