Harrison S. Quick, Ph.D

CONTACT INFORMATION	Division of Biostatistics University of Minnesota University Office Plaza, Suite 200, Room 229 2221 University Ave SE Minneapolis, MN 55414	Phone: 507-304-1668 Email: quic0038@umn.edu https://sites.google.com/site/harryq/

RESEARCH INTERESTS

Bayesian modeling, disclosure limitation, spatial data analysis, spatiotemporal modeling, statistical methods for occupational exposure assessment

EDUCATION

University of Minnesota, Minneapolis, MN

Ph.D., Biostatistics, July 2013

- Thesis Topic: *Spatiotemporal Gradient Modeling with Applications*
- Advisors: Bradley P. Carlin, Ph.D and Sudipto Banerjee, Ph.D

M.S., Biostatistics, Aug 2010

- Topic: *Assessing the Impact of the Density of Alcohol Establishments on Crime in Minneapolis Neighborhoods Using Univariate and Multivariate Conditionally Autoregressive Models*
- Advisor: Bradley P. Carlin, Ph.D

Minnesota State University, Mankato, MN

B.S., Mathematics and Statistics (Double Major), May 2008

- *Summa Cum Laude*

RESEARCH EXPERIENCE

Associate Professor of Biostatistics — Aug 2023 to Present
Division of Biostatistics
University of Minnesota

Assistant Professor of Biostatistics — Sept 2016 to July 2023
Department of Epidemiology and Biostatistics
Drexel University

Visiting Research Fellow — July 2018 to Dec 2018
Division of Research and Methodology
National Center for Health Statistics
Centers for Disease Control and Prevention

Senior Service Fellow — Sept 2014 to Aug 2016
Small Area Analysis Team
Epidemiology and Surveillance Branch
Division for Heart Disease and Stroke Prevention
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Supervisor: Michele Casper, Ph.D

Postdoctoral Researcher — Aug 2013 to Aug 2014
NSF–Census Research Network
Department of Statistics
University of Missouri
Supervisors: Scott H. Holan, Ph.D and Christopher K. Wikle, Ph.D

Research Assistant   May 2011 to July 2013
    Division of Biostatistics
    University of Minnesota
    Supervisor: Bradley P. Carlin, Ph.D

Research Assistant   June 2010 to May 2011
    Division of Epidemiology
    University of Minnesota
    Supervisors: Traci L. Toomey, Ph.D and Bradley P. Carlin, Ph.D

Research Assistant   Sept 2008 to Aug 2010
    Division of Biostatistics
    University of Minnesota
    Supervisors: Katherine Huppler-Hullsiek, Ph.D and Jason V. Baker, M.D., M.S.

REFEREED JOURNAL PUBLICATIONS

* Indicates student or trainee under my direct supervision

1. Baker, J., Duprez, D., Rapkin, J., Huppler-Hullsiek, K., **Quick, H.**, Grimm, R., Neaton, J.D., and Henry, K. (2009). "Untreated HIV infection and large and small artery elasticity." *JAIDS*, **52**, 25–31. [jaids]

2. Baker, J., Ayenew, W., **Quick, H.**, Huppler-Hullsiek, K., Tracy, R., Henry, K., Duprez, D., and Neaton, J.D. (2010). "High-density lipoprotein particles and markers of inflammation and thrombotic activity in patients with untreated HIV infection." *Journal of Infectious Diseases*, **201**, 285–292. [jid]

3. Baker, J., **Quick, H.**, Huppler-Hullsiek, K., Tracy, R., Duprez, D., Henry, K., and Neaton, J.D. (2010). "IL-6 and d-dimer levels are associated with vascular dysfunction in patients with untreated HIV infection." *HIV Medicine*, **11**, 608–609. [hivmed]

4. Kunisaki, K.M., **Quick, H.**, and Baker, J.V. (2011). "HIV antiretroviral therapy reduces circulating surfactant protein-D levels." *HIV Medicine*, **12**, 580–581. [hivmed]

5. Toomey, T.L., Erickson, D.J., Carlin, B.P., **Quick, H.S.**, Harwood, E.M., Lenk, K.M., and Ecklund, A.M. (2012). "Is the density of alcohol establishments related to non-violent crime?" *J. Stud. Alcohol Drugs*, **73**, 21–25. [jsad]

6. Toomey, T.L., Erickson, D.J., Carlin, B.P., Lenk, K.M., **Quick, H.S.**, Jones, A.M., and Harwood, E.M. (2012). "The association between density of alcohol establishments and violent crime within urban neighborhoods." *Alcohol. Clin. Exp. Res.*, **36**, 1468–1473. [acer]

7. **Quick, H.**, Banerjee, S., and Carlin, B.P. (2013). "Modeling temporal gradients in regionally aggregated California asthma hospitalization data." *Ann. Appl. Stat*, **7**, 154–176. [aoas]

8. **Quick, H.**, Groth, C., Banerjee, S., Carlin, B.P., Stenzel, M.R., Stewart, P.A., Sandler, D.P., Engel, L.S., and Kwok, R.K. (2014). "Exploration of the use of Bayesian modeling of gradients for censored spatiotemporal data from the *Deepwater Horizon* oil spill." *Spat. Stat.*, **9**, 166–179. [spasta]

9. Erickson, D.J., Carlin, B.P., Lenk, K.M., **Quick, H.S.**, Harwood, E.M., and Toomey, T.L. (2015). "Do neighborhood attributes moderate the relationship between alcohol establishment density and crime?" *Prevention Science*, **16**, 254–264. [prevsci]

10. Casal, C., Alvarez, J., Bezos, J., **Quick, H.**, Diez-Guerrier, A., Romero, B., Saez, J.L., Liandris, E., Navarro, A., Perez, A., Dominguez, L., and de Juan, L. (2015). "Effect of the inoculation site on the outcome of the cervical intradermal tuberculin test in cattle." *Preventive Veterinary Medicine*, **121**, 86–92. [prevetmed]

11. **Quick, H.**, Banerjee, S., and Carlin, B.P. (2015). "Bayesian modeling and analysis for gradients in spatiotemporal processes." *Biometrics*, **71**, 575–584. [biom]

12. **Quick, H.**, Holan, S.H., and Wikle, C.K. (2015). "Zeros and ones: A case for suppressing zeros in sensitive count data with an application to stroke mortality." *Stat*, **4**, 227–234. [stat]

13. **Quick, H.**, Carlin, B.P., and Banerjee, S. (2015). "Heteroscedastic conditional auto-regression models for areally referenced temporal processes for analysing California asthma hospitalization data." *J. Roy. Statist. Soc., Ser. C (Applied Statistics)*, **64**, 799–813. [jrss-c]

14. **Quick, H.**, Holan, S.H., Wikle, C.K., and Reiter, J.P. (2015). "Bayesian marked point process modeling for generating fully synthetic public use data with point-referenced geography." *Spat. Stat.*, **14**, 439–451. [spasta]

15. Vaughan, A.S., **Quick, H.**, Pathak, E., Kramer, M., and Casper, M. (2015). "Disparities in temporal and geographic patterns of declining heart disease mortality by race and sex in the United States, 1973–2010." *J. Am. Heart Assoc.*, **4**:e002567. [jaha]

16. Huynh, T., **Quick, H.**, Ramachandran, G., Banerjee, S., Stenzel, M., Blair, A., Sandler, D., Engel, L., Kwok, R.K., and Stewart, P.A. (2016). "A comparison of the β-substitution method and a Bayesian approach for analyzing left-censored data for the GuLF STUDY." *Ann. Occ. Hyg.*, **60**, 56–73. [annhyg]

17. Casper, M., Kramer, M., **Quick, H.**, Schieb, L., Vaughan, A.S., and Greer, S. (2016). "Changes in the geographic patterns of heart disease mortality in the United States 1973 to 2010." *Circulation*, **133**, 1171–1180. [circ]

18. **Quick, H.**, Huynh, T., and Ramachandran, G. (2017). "A method for constructing informative priors for Bayesian modeling of occupational hygiene data." *Ann. Work Exp. Health*, **61**, 67–75. [annweh]

19. **Quick, H.**, Waller, L.A., and Casper, M. (2017). "Multivariate spatiotemporal modeling of age-specific stroke mortality." *Ann. Appl. Stat*, **11**, 2170–2182. [aoas]

20. **Quick, H.**, Waller, L.A., and Casper, M. (2018). "A multivariate space-time model for analysing county-level heart disease death rates by race and sex." *J. Roy. Statist. Soc., Ser. C (Applied Statistics)*, **67**, 291–304. [jrss-c]

21. **Quick, H.**, Holan, S.H., and Wikle, C.K. (2018). "Generating partially synthetic geocoded public use data with decreased disclosure risk using differential smoothing." *J. Roy. Statist. Soc., Ser. A (Statistics in Society)*, **181**, 649–661. [jrss-a]

22. Tabb, L.P., McClure, L.A., **Quick, H.**, Purtle, J., and Diez Roux, A.V. (2018). "Assessing the spatial heterogeneity in overall health across the United States using spatial regression methods: The contribution of health factors and county-level demographics." *Health & Place*, **51**, 68–77. [healthplace]

23. **Quick, H.** and Waller, L.A. (2018). "Using spatiotemporal models to generate synthetic data for public use." *Spatial Spatio-temporal Epidemiol.*, **27**, 37–45. [sste]

24. Vaughan, A., Schieb, L., **Quick, H.**, Kramer, M.R., and Casper, M. (2018). "Before the here and now: What can we learn from variation in spatiotemporal patterns of changing heart disease mortality by age group, time period, and birth cohort?" *Soc. Sci. Med.*, **217**, 97–105. [socscimed]

25. Vaughan, A., **Quick, H.**, Schieb, L., Kramer, M., Taylor, H., and Casper, M. (2019). "Changing rate orders of race-gender heart disease death rates: An exploration of county-level race-gender disparities." *SSM — Population Health*, **7**, 100334. [ssmph]

26. Huynh, T., Ramachandran, G., **Quick, H.**, Hwang, J., Raynor, P.C., Alexander, B.H., and Mandel, J.H. (2019). "Ambient fine aerosol concentrations in multiple metrics in taconite mining operations." *Ann. Work Exp. Health*, **63**, 77–90. [annweh]

27. **Quick, H.**, Tootoo, J., Li, R., Vaughan, A., Schieb, L., Casper, M., and Miranda, M.L. (2019). "The Rate Stabilizing Tool: Generating stable local-level measures of chronic disease." *Prev. Chronic Dis.*, **16**:180442. [pcd]

28. Schinasi, L.H., **Quick, H.**, Clougherty, J.E., and De Roos, A.J. (2019). "Green space and infant mortality in Philadelphia, PA." *J. Urban Health*, **96**, 497–506. [urban]

29. **Quick, H.** (2019). "Estimating county-level mortality rates using highly censored data from CDC WONDER." *Prev. Chronic Dis.*, **16**:180441. [pcd]

30. **Quick, H.**, *Terloyeva, D., *Wu, Y., Moore, K., and Diez Roux, A.V. (2020). "Trends in tract-level prevalence of obesity in Philadelphia by race, space, and time." *Epidemiology*, **31**, 15–21. [epi]

31. Bilal, U., Hessel, P., Perez-Ferrer, C., Michael, Y., Alfaro, T., Tenorio-Mucha, J., de Friche, A.A., Pina, M.F., Vives, A., **Quick, H.**, Alazraqui, M., Rodriguez, D., Miranda, J.J., Diez-Roux, A.V., and the SALURBAL study team. (2021). "Life expectancy and mortality in 363 cities of Latin America." *Nature Medicine*, **27**, 463–470. [natmed]

32. **Quick, H.**, *Song, G., and Tabb, L.P. (2021). "Evaluating the informativeness of the Besag-York-Mollié CAR model." *Spatial Spatio-temporal Epidemiol.*, **37**, 100420. [sste]

33. Goldstein, N.D., **Quick, H.**, and Burstyn, I. (2021). "Effect of adjustment for case misclassification and infection date uncertainty on estimates of COVID-19 effective reproduction number." *Epidemiology*, **32**, 800–806. [epi]

34. **Quick, H.** (2021). "Generating Poisson-distributed differentially private synthetic data." *J. Roy. Statist. Soc., Ser. A (Statistics in Society)*, **184**, 1093–1108. [jrss-a]

35. Groth, C.P., Huynh, T., Banerjee, S., Ramachandran, G., Stewart, P.A., **Quick, H.**, Sandler, D.P., Blair, A., Engel, L.S., Kwok, R.K., and Stenzel, M.R. (2022). "Linear relationships between total hydrocarbons and benzene, ethylbenzene, toluene, xylene, and hexane during the *Deepwater Horizon* response and clean-up." *Ann. Work Exp. Health*, **66**, i71–i88. [annweh]

36. Huynh, T.B., Groth, C.P., Ramachandran, G., Banerjee, S., Stenzel, M., **Quick, H.**, Blair, A., Engel, L.S., Kwok, R.K., Sandler, D.P., and Stewart, P.A. (2022). "Estimates of occupational inhalation exposures to six oil-related compounds on the four rig vessels responding to the *Deepwater Horizon* oil spill." *Ann. Work Exp. Health*, **66**, i89–i110. [annweh]

37. **Quick, H.** (2022). "Improving the utility of Poisson-distributed, differentially private synthetic data via prior predictive truncation with an application to CDC WONDER." *Journal of Survey Statistics and Methodology*, **10**, 596–617. [jssam]

38. Ransome, Y., Luan, H., Dean, L.T., **Quick, H.**, Nassau, T., Kawachi, I., and Brady, K.A. (2022). "Is race-specific neighborhood social cohesion key to reducing racial disparities in late HIV diagnosis: A multiyear ecological study." *Spatial Spatio-temporal Epidemiol.*, **42**, 100508. [sste]

39. Rodríguez López, S., Tumas, N., Bilal, U., Moore, K., Acharya, B., **Quick, H.**, Quistberg, A.D., Acevedo, G.E., and Diez Roux, A.V. (2022). "Intraurban socioeconomic inequalities in life expectancy: A cross-sectional small-area estimation in the city of Córdoba, Argentina (2015–2018)." *BMJ Open*, **12**:e061277. [bmjopen]

40. Trotta, A., Bilal, U., Acharya, B., **Quick, H.**, Moore, K., Perner, M.S., Alazraqui, M., and Diez Roux, A.V. (2023). "Spatial inequities in life expectancy in small areas of Buenos Aires, Argentina 2015–2017." *J. Urban Health.* [juh]

41. Dsouza, N., Carroll-Scott, A., Headen, I., Bilal, U., Reis, R., **Quick, H.**, Abraham, M., Martinez-Donate, A. (2023). "Investigating the process of livability measurement: A scoping review." To appear in *Cities and Health*.

42. Yang, N., **Quick, H.**, Melly, S.J., Mullin, A.M., Zhao, Y., Edwards, J., Clougherty, J.E., Schinasi, L.H., and Burris, H.H. (2023). "Spatial patterning of spontaneous and medically indicated preterm birth in Philadelphia." *Am J Epidemiol.* In press.

SUBMITTED
MANUSCRIPTS

43. *Song, G., Tabb, L.P., and **Quick, H.** "Geographic and racial disparities in the incidence of low birthweight in Pennsylvania." arXiv preprint 2106.10571. [arXiv]

44. Terloyeva-Christensen, D., **Quick, H.**, Friedman, M.R., Plankey, M., Hyong-Jin Cho, J., D'Souza, G., Stosor, V., and Welles, S.L. "Effect of antidepressant therapy on human immunodeficiency virus outcomes in men living with HIV and depression."

45. Vader, D.T., Cohen, C., Goldstein, N.D., Lee, B.K., **Quick, H.**, and Evans, A.A. "Re-estimating prevalence of adult hepatitis B virus immunity in the United States: self-reported vaccination, immunologic markers, and bias correction."

46. Vaughan, A.S, **Quick, H.**, Woodruff, R.C., Beck, K., DeLara, D., and Casper, M. "Applying a novel Bayesian spatiotemporal model to examine excess county-level cardiovascular disease death rates during the COVID-19 pandemic."

47. **Quick, H.** and *Song, G. "Reliable event rates for disease mapping." arXiv preprint 2302.04582. [arXiv]

<table>
<tr><td>OTHER
PUBLICATIONS</td><td>

48. **Quick, H.** (2018). "ASA/NCHS Fellow bridges gap, reaps rewards." *Amstat News*, **497**, 21. [amstat]

49. **Quick, H.**, Hirsch, J.A., Moore, K.A., Terloyeva, D., and Diez Roux, A.V. (2019). "Borrowing information from neighbors: Estimating health in small areas." *Drexel University Urban Health Collaborative*, Methods Brief. [uhc]

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EXTERNAL
RESEARCH
SUPPORT

Active

- Role: **Principal Investigator**; $1,206,574 / 25% effort · · · Sept 2022 – Aug 2026
  Small Area Estimation for State and Local Health Departments
  National Heart, Lung, and Blood Institute, R01HL158802

- Role: **Principal Investigator**; $433,497 / 20% effort · · · May 2020 – April 2025
  CAREER: The Intersection of Spatial Statistics and Differential Privacy
  National Science Foundation, NSF-SES-1943730

- Role: **Principal Investigator**; $90,242 / 27% effort · · · July 2021 – June 2023
  CDC IPA: Spatial and Spatio-Temporal Surveillance of Heart Disease and Stroke
  Division of Heart Disease and Stroke Prevention
  Centers for Disease Control and Prevention

Past

- Role: **Principal Investigator**; $236,363 / 25% effort · · · Sept 2021 – Aug 2022
  Small Area Estimation for State and Local Health Departments
  National Heart, Lung, and Blood Institute, R56HL158802
  - *This bridge-funding award covered the first year of an R01 proposal of the same name.*

- Role: Co-Investigator (PI: Diez Roux); $12,191,632 / 5% effort · Apr 2017 – Mar 2022
  What makes cities healthy, equitable and environmentally sustainable? Lessons from Latin America [drexel]
  Wellcome Trust (Our Planet Our Health)

- Role: Co-Investigator (PI: Bilal); $1,249,997 / 10% effort · · · Sept 2018 – Aug 2021
  The Health Consequences of Urban Scaling
  NIH Director's Early Independence Awards, 1DP5OD026429-01

- Role: Co-Investigator (PI: Massey); $2,354,069.32 / 5% effort · July 2019 – June 2021
  Hashtag HPV: Engaging parents through social media to increase HPV vaccination
  National Cancer Institute, 1R01CA229324-01A1

- Role: **Principal Investigator**; $79,298.72 / 15% effort · · · Aug 2019 – July 2020
  Improving the Utility of the County Health Rankings Using Spatial Bayesian Models
  County Health Rankings Research Grants / University of Wisconsin - Madison

- Role: Co-Investigator (PI: Schinasi); $36,457.47 / 5% effort · · · July 2019 – June 2020
  March of Dimes Transdisciplinary Research for the Study of Preterm Birth
  March of Dimes (subcontract with University of Pennsylvania)

- Role: Co-Investigator (Sub-PI: Diez Roux); $385,600 / 10% effort · · · Jan 2019 – June 2020
  Community IMPACT: Reducing Cancer and Improving Health Outcomes in Philadelphia Neighborhoods
  Lazarex Cancer Foundation / Silicon Valley Community Foundation

- Role: Co-Investigator (Sub-PI: Diez Roux); $60,000 / 5% effort July 2018 – June 2019
  Linking local data for target action among Philadelphia's most vulnerable neighborhoods
  [phillyhealthrankings.org]
  Philadelphia Dept of Public Health / Urban Institute

- Role: **Principal Investigator**; $95,530 / 100% effort July 2018 – Dec 2018
  Improving the utility of CDC WONDER via the development of software for analyzing censored data and dissemination of synthetic data for public use
  ASA & NCHS Research Fellowship Program

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INTERNAL
RESEARCH
SUPPORT

Past
- Role: **Principal Investigator**; $7,250 (salary for student) Apr – Sept 2021
  Drexel Research Co-op Program Funding [drexel]
  Steinbright Career Development Center, Drexel University

- Role: **Principal Investigator**; $7,000 / 50% effort Summer 2019
  The intersection of differential privacy and spatial statistics: Generating synthetic data with provable privacy protections and high utility
  Faculty Summer Research Award [drexel]
  Office of Faculty Affairs, Drexel University

- Role: **Principal Investigator**; $20,000 (salary for student) July 2017 – June 2018
  Development of Bayesian spatiotemporal models for small area estimation with an application to tract-level obesity rates in Philadelphia County
  Pilot Funding [drexel]
  Urban Health Collaborative, Drexel University

AWARDS

Travel Awards
- International Travel Award, Drexel University Aug – Sept 2017
  - Financial assistance to present my research at the EPICOH 2017 symposium in Edinburgh, UK and the Geomed 2017 conference in Porto, Portugal.
- Student Paper Competition Award, Section on Bayesian Statistical Science Aug 2013
  - Financial assistance to present my research (Quick et al., 2015) at the Joint Statistical Meetings in Montréal, Canada.
- Workshop on Environmetrics, Raleigh, NC Oct 2012
- Case Studies in Bayesian Statistics and Machine Learning, Pittsburgh, PA Oct 2011
- IMS/ISBA Joint International Meeting, Park City, UT Jan 2011

Student Awards — University of Minnesota, Division of Biostatistics
- Best Student Paper Award (Quick et al., 2015) May 2013
- Outstanding Teaching Assistant Award May 2012
- Outstanding Research Assistant Award May 2011
- James R. Boen Student Achievement Award May 2009

Student Awards — University of Minnesota, Graduate School
- Doctoral Dissertation Fellowship 2012–2013
  - The Doctoral Dissertation Fellowship (DDF) program is intended to give the most accomplished final-year PhD candidates an opportunity to complete the dissertation within the 2012–13 academic year by devoting full-time effort to research and writing.

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PRESENTATIONS   Professional Meetings ([†] denotes an invited talk)

- [Joint Statistical Meetings](), Washington, DC   Aug 2022
- [†][ISBA World Meeting](), Montréal, Québec, Canada   June 2022
- [†][Joint Mathematical Meetings](), Seattle, WA (virtual)   April 2022
- [Biometric Society (ENAR) Regional Meeting](), Houston, TX   Mar 2022
- [†][Federal Committee on Statistical Methodology Conference]() (virtual)   Nov 2021
- [SAE2021](), Naples, Italy (virtual)   Sept 2021
- [Theory and Practice of Differential Privacy](), Virtual Workshop   July 2021
- [Biometric Society (ENAR) Regional Meeting](), Baltimore, MD (virtual)   Mar 2021
- [†][Federal Committee on Statistical Methodology Conference]()   Sept 2020
  Confidentiality and Data Access Webinar Series
- [Joint Statistical Meetings](), Philadelphia, PA (virtual)   Aug 2020
- [†][Biometric Society (ENAR) Regional Meeting](), Nashville, TN (virtual)   Mar 2020
- [†][Geomed 2019](), Glasgow, UK   Aug 2019
- [Current Trends in Survey Statistics](), Singapore   Aug 2019
- [Joint Statistical Meetings](), Denver, CO   Aug 2019
- [†][Society for Epidemiologic Research](), Minneapolis, MN   June 2019
- [Biometric Society (ENAR) Regional Meeting](), Philadelphia, PA   Mar 2019
- [Joint Statistical Meetings](), Vancouver, BC, Canada   July 2018
- [Geomed 2017](), Porto, Portugal   Sept 2017
- [Intl. Symp. on Epi. in Occupational Health (EPICOH)](), Edinburgh, UK   Aug 2017
- [Joint Statistical Meetings](), Baltimore, MD   Aug 2017
- [†][New England Statistical Symposium](), Storrs, CT   Apr 2017
- [Biometric Society (ENAR) Regional Meeting](), Washington, DC   Mar 2017
- [Joint Statistical Meetings](), Chicago, IL   Aug 2016
- [Biometric Society (ENAR) Regional Meeting](), Austin, TX   Mar 2016
- [Joint Statistical Meetings](), Seattle, WA   Aug 2015
- [G70: A Celebration of Alan Gelfand's 70th Birthday](), Durham, NC   Apr 2015
- [NCRN Fall Meeting](), New York, NY   Sep 2014
- Joint Statistical Meetings, Boston, MA   Aug 2014
- IMS New Researchers Conference, Cambridge, MA   July 2014
- International Indian Statistical Association, Riverside, CA   July 2014
- Joint Statistical Meetings, Montréal, Québec, Canada   Aug 2013
- Biometric Society (ENAR) Regional Meeting, Orlando, FL   Mar 2013
- Workshop on Environmetrics, Raleigh, NC   Oct 2012
- Joint Statistical Meetings, San Diego, CA   Aug 2012
- Biometric Society (ENAR) Regional Meeting, Washington, D.C.   Apr 2012
- Case Studies in Bayesian Statistics and Machine Learning, Pittsburgh, PA   Oct 2011
- Biometric Society (ENAR) Regional Meeting, Miami, FL   Mar 2011
- IMS/ISBA Joint International Meeting, Park City, UT   Jan 2011

Federal Government
- Ask the Methodologist, NCHS, Hyattsville, MD   July 2018
- CDAC/FCSM Workshop on New Advances in Disclosure Limitation   Sept 2017
  Washington, DC
- CDC Statistics Day, Chamblee, GA   Sept 2015
- CDC GIS Day, Chamblee, GA   Nov 2014, 2015

University of Minnesota
- Mostly Markov Chain Seminar Series   Nov 2011

- School of Public Health Research Day   Apr 2011, 2013

Other Invited Presentations
- Department of Biostatistics and Bioinformatics   Feb 2022
  George Washington University, Washington, DC
- Department of Biostatistics, Columbia University, New York, NY   Jan 2022
- Department of Statistics, George Mason University, Fairfax, VA   Mar 2021
- Department of Statistics, Penn State University, State College, PA   Mar 2021
- Department of Biostatistics, Yale University, New Haven, CT   Oct 2020
- Department of Epidemiology and Biostatistics   Sept 2020
  Drexel University, Philadelphia, PA
- Department of Biostatistics and Data Science   Mar 2019
  The University of Texas Health Science Center, Houston, TX
- ASA Philadelphia Chapter, Philadelphia, PA   Jan 2019
- Philadelphia Department of Public Health, Philadelphia, PA   Sept 2017
- Department of Epidemiology and Biostatistics, SUNY-Albany, Albany, NY   Apr 2016
- Division of Biostatistics, The Ohio State University, Columbus, OH   Mar 2016
- Department of Biostatistics, University of Michigan, Ann Arbor, MI   Feb 2016
- Department of Statistics, Colorado State University, Ft. Collins, CO   Feb 2016
- Department of Epidemiology and Biostatistics   Jan 2016
  Drexel University, Philadelphia, PA
- Department of Biostatistics and Epidemiology   Jan 2016
  University of Massachusetts Amherst, Amherst, MA
- Department of Bioinformatics and Biostatistics   Dec 2015
  University of Louisville, Louisville, KY

Teaching Experience	Instructor	Springs 2018 – present

Teaching Experience

Instructor   Springs 2018 – present
BST 604 - Applied Bayesian Data Analysis
Department of Epidemiology and Biostatistics, Drexel University

Instructor   2019/2020, 2021/2022
BST 626–628 - Research Skills in Biostats I–III
Department of Epidemiology and Biostatistics, Drexel University

Instructor   Winter 2021
BST T680 - Introduction to Spatial Statistics
Department of Epidemiology and Biostatistics, Drexel University

Instructor   Summers 2017 – present
Introduction to Bayesian Analysis for Public and Urban Health
One week shortcourse in conjunction with the UHC Summer Institute
Urban Health Collaborative, Drexel University

Co-instructor   Summers 2013 – 2017
PUBH 6400/6431 - Topics in Hierarchical Bayesian Analysis
with Bradley P. Carlin
In conjunction with the Summer Public Health Institute
Division of Biostatistics, University of Minnesota

Teaching Assistant   Springs 2011 & 2012
PUBH 7440 - Introduction to Bayesian Analysis
Instructor: Bradley P. Carlin, Ph.D

Division of Biostatistics, University of Minnesota

SERVICE		
	External Service	
	• Co-Chair, Regional Advisory Board, ENAR	2023–2025
	• Program Chair for the 2022 ENAR Spring Meeting	2021–2022
	• Regional Advisory Board, ENAR	2020–2022

Departmental Service (Dept. of Epi/Biostat, Drexel University)
- Co-Chair, Assist. Prof. Biostat. Faculty Search Committee   2021/2022
- Co-Chair, Recruitment, Admissions, & Retention Subcommittee   2019 – present
- Co-Chair, Epi/Bio Seminar Committee   2017 – present
- Biostat Program Committee   2017 – present
- Assist. Prof. Biostat. Faculty Search Committee   2017/2018
- Open-Rank Biostat. Faculty Search Committee   2016/2017

Departmental Service (University of Minnesota)
- Recruiting Committee, Division of Biostatistics   May 2010 – May 2013
- Search Committee, School of Public Health   June 2010 – Aug 2010
  Position to fill: SPH Coordinator of Recruitment and Student Leadership

Thesis Committees
(Drexel University unless otherwise noted; **students in bold** under my direct supervision)
- Erica Smith, Ph.D, Epidemiology   Completed May 2019
  Social Determinants of Health as Upstream Risk Factors for Salmonella *and* Campylobacter *Infections in Pennsylvania*
- Ana Ortigoza, Ph.D, Epidemiology   Completed July 2019
  Influence of the Social Urban Environment on Infant Mortality in Latin American Cities
- Daniel Vader, Ph.D, Epidemiology   Completed May 2020
  Misclassification and Biased Estimates of Adult Hepatitis B Immune Prevalence in the United States
- Dina Terloyeva-Christensen, Ph.D, Epidemiology   Completed Dec 2020
  Effect of Antidepressant Therapy on the Outcomes of Human Immunodeficiency Virus Disease in HIV-Infected Persons with Depression — The Mediating Effect of Adherence to Antiretroviral Treatment and Inflammation
- Nishita Dsouza, Ph.D, Community Health & Prevention   Completed June 2022
  Measuring Livability and its Influence on Health
- Shanika De Silva, Ph.D, Biostatistics   Completed Dec 2022
  Propensity Scores for Spatial, Temporal, and Spatiotemporal Data
- **Guangzi Song, Ph.D, Biostatistics**   **Completed Dec 2022**
  Estimating the Informativeness of the Conditional Autoregressive Model Framework with Applications
- Melissa Meeker, Ph.D(c), Biostatistics   Completed May 2023
  A Spatial Extension of the Random Forest Algorithm
- Ruby Bayliss, Ph.D(c), Biostatistics   In Progress
- Tuhina Srivastava, Ph.D(c), Epidemiology (University of Pennsylvania)   In Progress
- Kevin Martinez Folgar, Ph.D(c), Epidemiology   In Progress
- Yang Xu, Ph.D(c), Biostatistics   In Progress
- Cameron Bale, Ph.D(c), Business Analytics   In Progress

MS Student Trainees (Drexel University)
- Yaxin Wu, MS, Biostatistics — Research Assistant   June 2017 – May 2018

- Guangzi Song, MS, Biostatistics — Research Assistant   June 2018 – March 2019
- Kara Beck, MS, Biostatistics — Research Assistant   June 2020 – Sept 2020
- David DeLara, MS, Economics — Research Assistant   April 2021 – Aug 2021

Outside Mentoring
- Mentor, Philadelphia Chapter of the ASA   2017/2018
- Mentor, SPH Mentor Program, University of Minnesota   2015 – present
  - Recipient of the 2019–2020 "Outstanding Mentor Award" [umn]