Cici X.C. Bauer, Ph.D.
Assistant Professor
Department of Biostatistics and Data Science
University of Texas Health Science Center in Houston
Last Updated: April 22, 2021

Contact Information
webpage: https://cicibauer.netlify.com
office: E819, 1200 Pressler Street, Houston, TX 77030
phone: (713)500-9581
e-mail: cici.x.bauer@uth.tmc.edu

RESEARCH EXPERTISE/INTERESTS

Bayesian spatial-temporal modeling; Hierarchical models for complex survey data; Statistical analysis of data from wearable devices; Social determinants of health; Health disparity

EDUCATION

Ph.D., Statistics, University of Washington Seattle, August 2012

- Dissertation: *Bayesian Modeling of Health Data in Space and Time*
- Advisor: Dr. Jon Wakefield
- Committee: Dr. Vladimir Mini, Dr. Steve Self, Dr. Peter Guttorp and Dr. Paul Sampson

PROFESSIONAL APPOINTMENTS

Assistant Professor (Tenure Track) 09/2018 – Present
Department of Biostatistics and Data Science
School of Public Health, University of Texas Health Science Center at Houston

Affiliate Member 04/2021 – Present
The Cancer Prevention and Control Research Network (CPCRN)

Faculty Affiliate 06/2019 – Present
Center for Health Promotion and Prevention Research
School of Public Health, University of Texas Health Science Center at Houston

Member 12/2019 – Present
Center for Population Health Informatics, School of Biomedical Informatics
University of Texas Health Science Center at Houston

Associate Director of Statistics 09/2016 – 08/2018
Early Clinical Development Research, Pfizer Inc., Cambridge, MA

Assistant Professor (Tenure Track) 09/2012 – 09/2016
Department of Biostatistics, Brown University

Faculty Affiliate 09/2012 – 09/2016
Spatial Structures for the Social Sciences (S4), Brown University

Fellow 05/2015 – 09/2016
Institute at Brown for the Study of Environment and Society (IBES)

Brown University

Core Faculty 09/2013 – 09/2016
Biostatistics core, Hasbro Children's Hospital, Providence, Rhode Island

Research Assistant 01/2010 – 08/2012
Statistical Center for HIV/AIDS Research & Prevention (SCHARP),
Fred Hutchinson Cancer Research Center, Seattle, Washington

Biometrician II 08/2005 – 06/2007
Alaska Department of Fish and Game Wildlife Conservation, Fairbanks, Alaska

PUBLICATIONS

*share the lead authorship; †indicates student/postdoc authorship

[1] Hong S, Liu F, **Bauer C**, Chen Y, Tu W, Zhang J, Hu J, Zhang W, Hu Y, Lynn HS, Li Y, Chang Z, Zhang ZJ. Intra-area factors dominate the spatio-temporal transmission heterogeneity of Hand, Foot, and Mouth disease in China: a modelling study. *Science of the Total Environment*. 2021;775(7):145859.

[2] **Bauer C**, Champagne-Langabeer T, Bakos-Block C, Zhang K, Persse D, Langabeer J. Patterns and risk factors of opioid-suspected EMS overdose incidents in Houston metropolitan Area, 2015-2019: a Bayesian spatiotemporal analysis. *PLOS One*. 2021;16(3):e0247050. PMID: 33705402.

[3] Suk R†, Sonawane K, **Bauer C**, Lairson D, Deshmukh AA. Risk of anal cancer in inflammatory bowel disease patients in the US: a population-based study 2008–2018. Gastroenterology. 2021;160(3):S28-S29.

[4] Zhang K†, Reininger B, Lee M, Xiao Q, **Bauer C**. Individual and community social determinants of health on diabetes management in a Mexican American population. *Frontiers in Public Health*. 2021;8:633340. PMID: 33614572.

[5] Zhang D, **Bauer C**, Powell-Wiley T, Xiao Q. Neighborhood socioeconomic status trajectories and weight change in a large US cohort of older men and women. *JAMA Network Open*. 2021;4(2):e2036809. PMID: 33544146.

[6] Xiao Q, **Bauer C**, Layne T, Playdon M. The association between overnight fasting and body mass index in older adults: the interaction between duration and timing. *International Journal of Obesity*. 2021 Mar;45(3):555-564. PMID: 33214704.

[7] Shrestha S, **Bauer C**, Hendricks B, Stopka T. Spatial epidemiology: an empirical framework for syndemics research. *Social Science & Medicine*. 2020:113352. PMID: 32950331.

[8] Miao H, Gao Q, Feng H, Zhong C, Zhu P, Wu L, Swartz M, Luo X, DeSantis SM, Lai D, **Bauer C**, Pérez A, Rong L, Lairson D. Mathematical modeling of business reopening when facing SARS-CoV-2 pandemic: protection, cost and risk. *Frontiers in Applied Mathematics and Statistics*. 2020;6.

[9] Sonawane K, Zhu Y, Montealegre J, Lairson DR, **Bauer C**, McGee LU, Giuliano AR, Deshmukh A. Parental intent to initiate and complete the human papillomavirus vaccine series in the USA: a nationwide, cross-sectional survey. *The Lancet Public Health*. 2020;5(9):e484-e492. PMID: 32707126.

[10] Xie L†, Atem F, Gelfand A, **Bauer C**, Messiah S. United States prevalence of pediatric asthma by environmental tobacco smoke exposure, 2016-2017. *Journal of Asthma*. 2020;Jan 6:1-8. PMID: 31877060.

[11] Logan J, **Bauer C**, Ke J, Xu H, Li F. Models for small area estimation for census tracts. *Geographical Analysis*. 2020;52(3):325–350. PMID: 33041360.

[12] Dumont M, Roy M, Jodoin PM, Morency F, Houde JC, Xie Z, **Bauer C**, Samad T, Van Dijk K, Goodman J, Descoteaux M. Free water in white matter differentiates MCI and AD from control subjects. *Frontiers in Aging Neuroscience*. 2019;11:270. PMID: 31632265.

[13] Sahlu I†, **Bauer C***, Ganaba R, Preux P, Cowan L, Dorny P, Millogo A, Carabin H. The impact of imperfect screening tools on measuring the prevalence of epilepsy and headaches in Burkina Faso. *PLOS Neglected Tropical Diseases*. 2019;13(1):e0007109. PMID: 30653519. *equal contribution as first author

[14] Sahlu I†, Carabin H, Ganaba R, Preux P, Cisse, A.K., Tarnagda Z, Gabriel S, Dermauw V, Dorny P, **Bauer C**, Millogo A. Estimating the association between being seropositive for cysticercosis and the prevalence of epilepsy and severe chronic headaches in 60 villages of rural Burkina Faso. *PLOS Neglected Tropical Diseases*. 2019;13(1):e0007101. PMID: 30677038.

[15] **Bauer C**, Wakefield J. Stratified space-time infectious disease modeling: with an application to hand, foot and mouth disease in China. *Journal of the Royal Statistical Society Series C*. 2018;67:1379-1398.

[16] Servadio J†, Rosenthal S, Carlson L, **Bauer C**. Climate patterns and mosquito-borne disease outbreaks in south and southeast Asia. *Journal of Infection and Public Health*. 2018:11(4):566-571. PMID: 29274851.

[17] Carabin H, Millogo A, Ngowi H, **Bauer C**, Dermauw V, Cissé A, Sahlu I, Salvatore A, Preux P, Somé T, Tarnagda Z, Gabrië S, Cissé R, Ouédraogo J, Cowan L, Boncoeur M, Dorny P, Ganaba R. Effectiveness of a community-based educational programme in reducing the cumulative incidence and prevalence of human Taenia solium cysticercosis in Burkina Faso in 2011-14 (EFECAB): a cluster-randomised controlled trial. *The Lancet Global Health*. 2018;6(4):e411-e425. PMID:29530423.

[18] Harrington C, Holub S, **Bauer C**, Steel E. Tree roots in Douglas-fir forests in the Pacific Northwest in relation to depth, space, coarse organic matter and mineral fragments. *Northwest Science*. 2017:91(4):326-343.

[19] Fish L, Wakefield J, **Bauer C**, Self S. Time series modeling of pathogen-specific disease probabilities with incomplete data. *Biometrics*. 2017;73(1):283-293. PMID:27378138.

[20] **Bauer C**, Wakefield JC, Rue H, Self SG, Feng Z, Wang Y. Bayesian spline models for the analysis of spatio-temporal count data. *Statistics in Medicine*. 2016;35(11). PMID: 26530705.

[21] Carabin H, Millogo A, Cissé A, Gabrië S, Sahlu I, Dorny P, **Bauer C**, Tarnagda Z, Cowan L, Ganaba R. Prevalence of and factors associated with human cysticercosis in 60 Villages in three provinces of Burkina Faso. *PLOS Neglected Tropical Diseases*. 2015:9(11):e0004248. PMID: 26588468.

[22] Smith KF*, Goldberg M, Rosenthal S, Carlson L, Chen J, **Chen(Bauer) C***, Ramachandran, S*. Global rise in human infectious disease outbreaks. *Journal of the Royal Society Interface*. 2014:11(101):20140950. PMID: 25401184. *equal contribution as first author

[23] **Chen(Bauer) C**, Wakefield JC, Lumley T. The use of sampling weights in Bayesian hierarchical models for small area estimation. *Spatial and Spatio-temporal Epidemiology*. 2014;11:33-43. PMID: 25457595.

[24] Mercer L, Wakefield JC, **Chen(Bauer) C**, Lumley T. A Comparison of Spatial Smoothing Weighting Methods for Small Area Estimation. *Spatial Statistics*. 2014;8:69-85. PMID: 24959396.

[25] Yang Y, Feng Z, Self SG, Gao Y, Wakefield J, Wang L, Zhang J, **Chen(Bauer) C**, Yao L, Stanaway J, Wang Z, Yang W, Wang Y. Hand, foot and mouth disease in China: patterns of spread during 2008-2009. *Epidemiology*. 2011:22(6):781–792. PMID: 21968769.

[26] Rupp TS, **Chen(Bauer) C**, Olson M. Sensitivity of simulated boreal fire dynamics to uncertainties in climate drivers. *Earth Interactions*. 2007;11:3-21.

CONFERENCE ABSTRACT

- Risk of anal cancer in inflammatory bowel disease patients in the US: a population-based study 2008-2018. Suk R, Sonawane K, **Bauer C**, Lairson D, Deshmukh A.A. *2021 Crohn's & Colitis Congress*.
- National prevalence of parent-reported asthma diagnosis in environmental tobacco smoke - exposed versus non-exposed children and adolescents, 2016-2017. Xie L, **Bauer C**, Messiah S. *APHA's 2019 Annual Meeting and Expo*.

RESEARCH GRANTS AND CONTRACTS

Active

- **Cancer Prevention and Research Institute of Texas (CPRIT)** 12/2016–11/2021 (NCE)
  RP170493
  For Our Children: A tailored multi-level intervention for parents and healthcare providers to in crease HPV vaccination rates.
  The study aims to improve vaccination rates among Hispanic adolescents (aged 11-17). Group randomized trial of a multi-level intervention using a tailored interactive multimedia intervention (TIMI) for parents, parental text messaging, and healthcare providers training through an interactive app.
  PI: Fernandez M, UTHealth
  Role: Biostatistician (contributed time 04/2021–11/2021) 5%
  Total funding: $1,413,306
- **Valley Baptist Legacy Foundation** 03/2021–03/2024
  Support for the establishment of a public health laboratory and an integrated health data management system for the Cameron County and major municipalities
  PI: Fisher-Hoch SP, UTHealth
  Role: Biostatistician (10% in Year 1 and 15% in Year 2-3)
  Total funding: $750,000

- **National Aeronautics & Space Administration (NASA)** 01/2021 - 01/2025
  Apply NASA's earth observation product to improve Artificial Light at Night (ALAN) mapping and public health surveillance
  PI: Xiao Q, UTHealth
  Role: Co-Investigator (8% in Year 1 and 10% in Year 2-4)
  Total funding: $497,301

- **NIH 3UL1TR003167-02S10** 09/2020 – 08/2022
  RADx: Understanding and addressing COVID-19 testing disparities in vulnerable populations: A multilevel and multi-method approach (CCTS competitive revision)
  Building on the partnerships and resources of the Center for Clinical and Translational Science (CCTS), the goal of the study is to partner with our community and stakeholder colleagues to identify dynamic disease hotspots and testing deserts in racially diverse neighborhoods of the target regions; and, to use that information to inform the rapid adaptation and deployment of multilevel level just-in-time adaptive intervention strategies to reach vulnerable populations.
  mPI: McPherson D/Fernandez M, UTHealth
  Role: Co-Investigator/Co-director of Biostatistics core

Completed

- **University of Texas College of Pharmacy** 03/2020–08/2020
  Integrated Opioid Response Team Training Program
  This project provides study design and analytical expertise for the development of an integrated emergency response program for opioids and other drug-related disorders.
  PI: Langabeer J, UTHealth
  Role: Biostatistician (10%)

- **Texas Department of State Health Services (DSHS)** 01/2020–12/2020
  Rider 29 - Cost Analysis of outbreaks involving certain vaccine-preventable diseases
  PI: Sonawane K, UTHealth
  Role: Co-Investigator (5%)
  This project studies and assesses the direct and indirect economic costs incurred by DSHS and local public health organizations in responding to vaccine-preventable disease outbreaks.
  Total funding: $140,000

- **Massachusetts Department of Public Health (MDPH)** 01/2019–12/2019
  High-risk opioid prescribers and overdose in MA: a mixed methods approach
  PI: Stopka T, Tufts University
  Role: Statistics consultant
  This project aims to conduct spatial and statistical analyses by employing a mixed methods "prescriber-centered" approach to assess opioid prescribing rates and associations with fatal and non-fatal opioid overdoses in communities across the state of Massachusetts.

- **NIH/NCI R01CA095994** 2014–2018
  Spatio-temporal epidemiology: methods and applications
  This project proposes new statistical methodology development methods for the prediction of space-time health data.
  PI: Wakefield J, University of Washington Seattle
  Role: **subcontract-PI** (2014–2016)
  Total Funding: $1,622,394

- **NIH/NINDS R01NS064901** 2014–2017
  EFECAB: improving pig management to prevent epilepsy in Burkina Faso
  PI: Carabin H, University of Oklahoma Health Sciences Center
  Role: Statistics consultant
  Total Funding: $2,294,999

- **NIH/NIAID R21AI119773** 2015–2017
  Spatial-temporal modeling for surveillance data of multiple pathogens
  PI: Yang Y, University of Florida
  Role: **subcontract-PI** (2015–2016)
  This project proposes new statistical methods for analyzing infectious disease surveillance data to address the challenges of multiple transmission routes, multiple co-circulating pathogen types and complex system of immunity, cross-immunity and unobserved asymptomatic infections.
  Total Funding:$435,990/Direct Costs:$328,472/Indirect Costs:$107,518

- **CFAR Developmental Grant** 2015–2016
  The spatial pattern of HIV treatment cascade from home-based counseling and testing in western Kenya
  Role: **Principle Investigator**
  The project investgates the spatial patterns of linkage to and retention in HIV care from home-cased counseling and testing (HBCT) program in Western Kenya.
  Total Funding: $40,000

- **NIH/NICHD R21HD078762** 2014–2016
  Investigating and extending Bayesian methods for small area estimation
  PI: Logan J, Brown University
  Role: Co-Investigator
  This project evaluates the performance of Bayesian models for small area estimation with a particular focus on their performance with population data of the type provided by the census.
  Total Funding: $441,796/Direct Costs:$271,875/Indirect Costs:$169,921

- **NIH/NINDS F31NS093983** 2015–2017
  Epidemiological and spatial methods to improve estimates of neurological disorders from population based studies.
  PI: Sahlu I, Brown University
  Role: Mentor
  This NIH F31 training grant provides predoctoral individuals with supervised research training in specified health and health-related areas leading toward the research doctoral degree.

- **Seed Grant** 2014–2016
  Institute at Brown for the Study of Environment and Society (IBES)
  Effects of climate and land-cover change on human infectious disease outbreaks
  PI: Smith K, Brown University/Bauer C
  Role: Co-Investigator (2014–2015)/**Principle Investigator** (2015–2016)
  Total Funding: $150,000

- **Seed Grant** 2013–2014
  Institute at Brown for the Study of Environment and Society (IBES)
  Communications and socio-environmental drivers of disease outbreaks
  PI: Smith K, Brown University
  Role: Co-Investigator

Total Funding: $20,000

- **Salomon Faculty Research Awards**, Brown University 2012–2013
  Small-area estimation using complex survey data
  Role: **Principle Investigator**
  Total Funding: $7,500

- **USDA Forest Service**, PNW Research Station, Olympia, WA Summer 2011
  Statistical analysis of spatial variability and correlation among various soil characteristics
  Role: Statistics consultant

TEACHING AND STUDENT ADVISING

TEACHING (†Designed new course, ‡Substantial revision/redesign)

Univerisity of Texas Health Science Center in Houston

Course Title	Semester	Enrollment
Introduction to Biostatistics in Public Health (PH 1690)	Fall 2020	52
Introduction to Biostatistics in Public Health (PH 1690)	Spring 2020	64
Introduction to Biostatistics in Public Health (PH 1690)	Fall 2019	47
†Spatial-temporal Analysis of Population Health Data	Spring 2021	9
†Spatial-temporal Analysis of Population Health Data	Spring 2020	7

Brown University

- ‡Principles of Biostatistics and Data Analysis (PHP 2510), Fall 2013/2014/2015
- †Spatial Statistics (PHP 2604), Spring 2013/2014/2016
- †Generalized Linear Models (PHP 2605), Spring 2015
- ‡Introduction to Spatial Statistics Workshop (3 hours), S4 GIS Institute, Winter 2013/Summer 2014
- Brown IMSD: Introduction to Statistics. Summer 2014. 4 hours.

Lectures/Workshop Taught Elsewhere

- Guest lecture on 'geospatial approaches in disease control/prevention and its application in epidemiology' in PH2990 Epidemiology Seminar, UTSPH, Spring 2020.
- Guest lecture on 'Hypothesis Testing' in PH2770 NIH Proposal Development, a required course for Epidemiology PhD students, Department of Epidemiology, UTSPH, Fall 2019.
- Introduction to Statistics (Stat 300), an elementary statistics course for undergraduate students. University of Alaska Fairbanks, Fairbanks, Alaska, Fall 2005/Spring 2006.
- Analysis of Epidemiological Data, Brown-China NIEHS Epidemiology and Biostatistics Workshop. 2 hours. Xi'an, China, Summer 2015.

STUDENT ADVISING

Thesis/Dissertation Advisor

- Brian Heckler, MS Biostatistics, UTSPH, current.
  Studying the impact of rest-activity rhythms on metabolic health using a circadian hidden Markov

model approach.

- Kehe Zhang, MS Biostatistics, UTSPH, graduated August 2020.
  The social determinants of health in the effectiveness of Salud y Vida program on diabetes management – a Bayesian multilevel modeling approach.
- Emily Silvia, MPH, 2016, Brown University.
  Geographic variation in receipt of rehabilitation services post lower limb amputation surgery in the VA system.
- Jun Ke, MS Biostatistics, 2016, Brown University.
  Spatial boundary detection using Bayesian hierarchical modeling.
- Zihao Zhang, MS Biostatistics, 2016, Brown University.
  The association between ambient air pollution exposure and birth outcome: an analysis from a cohort study in Wuhan, China.
- Joe Servadio, MS Biostatistics, 2015, Brown University.
  Climate determinants of vector-born infectious disease outbreaks in Asia.
  Winner of the best poster for Master's students, Brown University School of Public Health Research Day, 2015
- Alyssa Feldman, MS Biostatistics, 2014, Brown University.
  Analyses of the temporal trends of global infectious disease outbreaks.

Thesis/Dissertation Committee Member/Reader

- Ariana L. Garza, PhD Epidemiology, current, UTSPH-Brownsville (Committee Member).
  Metabolic and genetic determinants of elevated liver fat content in the FELS longitudinal study.
- Isela De La Certa, PhD Epidemiology, current, UTSPH-Brownsville (Committee Member).
  Improving local COVID19 outbreak response using precision public health
- Vijayashri Rallapalli, PhD Management, Policy and Community Health (MPACH), UTSPH (Committee Member).
  Geographic Variation in Hepatocellular Carcinoma Incidence and its Association with Area-Based Socioeconomic Measures in Texas from 2007-2016: A Population Based Study
- Ee Vien Low, PhD Pharmacy, current, University of Houston (Committee Member).
  Physical and Mental Health Among Mexican American Children and Adolescents Living on the US-Mexico Border
- Immanuelle Azebe-Osime, MPH Epidemiology, UTSPH, current (Committee Member).
  Trends and risk factors for hospital delivery associated blood transfusions in Texas, 2009-2018: A cross sectional study.
- Temitope Oluwadairo, PhD Epidemiology, UTSPH, graduated May 2021(Committee Member).
  Evaluation of a low-cost sensor device for the assessment of community exposures to fine particulate matter in Houston, Texas.
- Randa Hamden, PhD Management, UTSPH, graduated May 2021 (Committee Member).
  The impact of hurricane HARVEY on maternal health outcomes in FEMA designated disaster areas in Texas
- Ryan Suk, PhD Health Economics, UTSPH, graduated December 2020 (Committee Member).
  The burden of HPV-associated cancer in inflammatory bowel disease patients.

- Lauryn Winter, MPH Epidemiology, UTSPH, graduated December 2020 (Committee Member). *Characterization of age-associated COPD progression in the COPD gene cohort.*
- Abigail Sedory, PhD Biostatistics, UTSPH, graduated May 2020 (External Reviewer). *Sample size calculations for longitudinal mediation analysis with continuous-time Markov chain variables.*
- Xinyue Qi, PhD Biostatistics, UTSPH, graduated 2019 (External Reviewer). *Bayesian modeling of censored data with application to meta-analysis of immunotherapy trials*
- Ida Sahlu, PhD Epidemiology, 2014-2017, Brown University (Committee Member). *Estimating the burden of neurological disorders in low-resource settings.*
- Bahar Erar, PhD Biostatistics, 2013-2016, Brown University (Committee Member). *Whole genome regression for modeling gene×environment interactions in structured populations.*
- Frances Terry, MPH, 2014-2015, Brown University (Reader).

Visiting Student/Summer Internship Supervised

- Dileka Gunawardana, CPRIT summer undergraduate innovation Program, Summer 2020, Rice University.
- Gabriella Novak, undergraduate summer intern, Summer 2019, University of Rochester.
- Ping Wang, PhD exchange student, Spring 2015, School of Public Health, City University of Hong Kong.

PROFESSIONAL SERVICE

Department Service:

- Chair of faculty search committee (Non Tenure Teaching-track) — Fall 2018 – Fall 2019
  Department of Biostatistics and Data Science, UTSPH
- Student admission committee — Spring 2019 – present
  Department of Biostatistics and Data Science, UTSPH
- Teaching quality and efficiency committee — Spring 2019 – present
  Department of Biostatistics and Data Science, UTSPH
- Data science track in Biostatistics ScM program ad-hoc committee — Spring 2016
  Department of Biostatistics, Brown University
- Faculty liaison for Sheridan teaching center — Fall 2014 – Spring 2016
  Department of Biostatistics, Brown University
- Graduate program committee — Fall 2013/Fall 2014/Fall 2015/Spring 2016
  Department of Biostatistics, Brown University
- PhD qualifying exam committee — Spring 2015
  Department of Biostatistics, Brown University
- Master program admission committee — Spring 2013/2015/2016
  Department of Biostatistics, Brown University
- PhD program admission committee — Spring 2014
  Department of Biostatistics, Brown University

- Biostatistics seminar organizing committee — Fall 2013 – Spring 2014
  Department of Biostatistics, Brown University

School and University:

- Lead, Biostatistics Teaching Assistants (TA) bootcamp, UTSPH — Summer 2020
- Member, UTHealth COVID-19 Research Task Force — Spring 2020 – present
  Informatics workgroup
- Member, UTSPH – MD Anderson population health initiative — Spring 2020 – present
  Community engagement & service delivery workgroup
- Member, Faculty search committee for UTSPH Brownsville — Fall 2019 – present
- Member, MPH admission committee, School of Public Health, Brown University — Spring 2016
- MPH core advisor, School of Public Health, Brown University — 2013 – 2015
- Member, graduate curriculum committee, School of Public Health, Brown University — 2014 – 2015

Conference Organizing and Service to Professional Societies

- Organizer. ICSA invited session "Bayesian analysis of complex survey data", — 2020
  ICSA 2020 Applied Statistics Symposium, Houston, TX.
- Member. Local organizing committee/Poster session committee — 2020
  ICSA 2020 Applied Statistics Symposium, Houston, TX.
- Volunteer. StatFest2019 — 2019
  The University of Texas Health Science Center at Houston, Houston, TX.
- Organizer. Topic-contributed paper session 'Recent advances in spatial and and spatial-temporal analysis — 2019
  Joint Statistical Meetings (JSM), Denver, US.
- Co-chair. Local organizing committee — 2018
  4^{th} International Conference on Big Data and Information Analytics, Houston, TX.
- Organizer. Invited session 'Recent advances in Spatial statistics' — 2015
  The 29th New England Symposium (NESS), University of Connecticut, CT.

TALKS AND PRESENTATIONS

- Invited talk: Supporting local public health departments in COVID-19 control and mitigation – my humble experience and lessons
  ASA North Texas Chapter, November 2020.
- Invited talk: Supporting local public health departments in COVID-19 control and mitigation – my humble experience and lessons
  Department of Biostatistics and Data Science,UTSPH, November 2020.
- Invited talk: Spatial-temporal statistical models: some methods and applications.
  Department of Mathematics, University of Houston, Houston, TX, February 2019.
- Contributed talk: Probabilistic modeling of sleep and awake states in Alzheimer's disease.
  Contributed e-poster: Using wearable devices to quantify modulation of circadian rhythms.

Joint Statistical Meetings (JSM), Vancouver, Canada, August 2018.

- Invited talk: Bayesian space-time models for the analysis of infectious disease surveillance data.
  Department of Biostatistics, Yale University, April 5, 2016.
- Invited talk: Spatial-temporal statistical models: some methods and applications.
  IBM Thomas J. Watson Research Center, September 18, 2015.
- Module of Analysis of epidemiological data, Brown-China NIEHS Epidemiology & Biostatistics Workshop, Xi'an China, June 2-5, 2015
- Statistical analysis of the ambient air pollution data in Wuhan, China.
  China Forum on Public Health, Environment, and Health Policy, Brown University, April, 2015
- Session organizer (invited): Recent advances in Spatial statistics.
  The 29th New England Symposium (NESS), University of Connecticut, April, 2015
- Invited talk: The use of sampling weights in Bayesian hierarchical models for small area estimation.
  Department of Statistics, University of Connecticut, CT, November, 2014
- Invited talk: The use of sampling weights in Bayesian hierarchical models for small area estimation.
  Department of Management Science, Tokyo University of Science, Tokyo, Japan, July 2014
- Invited talk: Bayesian spline models for the analysis of spatial-temporal count data.
  The 3rd IMS-APRM (Institute of Mathematical Statistics Asia Pacific Rim Meeting), Taipei, Taiwan, July 2014
- Invited talk: Bayesian spatial-temporal models for the analysis of China Hand-foot-mouth surveillance data.
  China CDC, Beijing, China, June 2014
- Contributed poster: Bayesian spline models for the analysis of spatial-temporal count data.
  1st Women in Statistics Conference, Cary, NC, May 2014
- Contributed talk: Space-time models for aggregated infectious disease data with different strains.
  Joint Statistical Meetings (JSM), Montreal, Canada, August 2013.
- Invited: Bayesian spline models for the analysis of spatial-temporal count data.
  15th IMS New Researchers Conference, Montreal, Canada, August 2013.
- Invited talk: Bayesian spline models for the analysis of spatial-temporal count data (In the session of Recent Development in Spatial Statistics)
  The 27th New England Symposium (NESS), University of Connecticut, April 2013
- Invited talk: Bayesian modeling of health data in space and time
  Department of Mathematics and Statistics, University of Massachusetts Amherst, April 2013
- Invited talk: Spatial statistics and its applications.
  S4 GIS Institute, Brown University, January 2013
- Contributed poster: Bayesian spline models for the analysis of spatial-temporal count data.
  Spatial Statistics Conference, University of Miami, December 2012
- Contributed talk: The use of sampling weights in Bayesian hierarchical models for small area estimation.
  Joint Statistical Meetings (JSM), San Diego, CA, July 2012.

AWARDS AND HONORS

- Travel award for Woman in Statistics conference, Raleigh, NC, May 2014 ($500)
- Sheridan junior faculty teaching fellow award, Brown University, 2013–2014 (5 recipients total)
- Travel award for the Joint Statistical Meeting (JSM), University of Washington Seattle, 2012
- Tuition award for the 2nd Summer Institute in Statistics and Modeling in Infectious Diseases (SISMID), Seattle, WA, 2010
- Top scholar award, Department of Statistics, University of Washington Seattle, 2007

PROFESSIONAL MEMBERSHIPS

American Statistical Association, 2010 – present