

Hongying (Daisy) Dai, PhD

Home and Campus Addresses

College of Public Health
University of Nebraska Medical Center
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Education

Ph.D. Statistics, 2006, University of Kentucky
M.S. Statistics, 2004, University of Kentucky
M.S. Mathematics, 2004, University of Kentucky
B.S. Economics, 1997, University of International Business and Economics

Academic Appointments

2018- Present Associate Professor, Department of Biostatistics, College of Public Health
University of Nebraska Medical Center
2015-2018 Associate Professor, 2009-2015 Assistant Professor, Department of
Biomedical & Health Informatics, Department of Pediatrics, University of Missouri Kansas City
2009-2018 Research Faculty, Children's Mercy Hospital Kansas City
2006-2008 Assistant Professor in Statistics (Tenure Track), Department of Mathematics,
Columbus State University

Research Interests

- Multi-level spatial-temporal analysis using large-scale data linkage for national studies and population assessment, hierarchical likelihood modeling for competing risks, and survey methodology.
- Public health research on tobacco use and health disparities, such as policy research for Tobacco 21 and smoke-free air laws, national health survey research for youth e-cigarette and other substance use, socio-economic disparities and disease burden.
- Social media research for public health surveillance, including real-time forecast using Google Trend, sentiment analysis, and text mining using Twitter data.
- Mixture modeling, including latent class analysis (LCA), growth mixture modeling, latent transition analysis (LTA) to assess population heterogeneity.
- Development of novel statistical methods for big data, high dimensional data, multiple comparison adjustment, Multifactor Dimensionality Reduction (MDR) for complex genetic traits, semiparametric modeling.

Current Grant and Contract Support

Effects of the FDA Compliance Inspections of Tobacco Retailers on Youth E-cigarette and Cigar Use: A National Study
Principal Investigator: Dai \$165,165
Funding Agency: NIH/FDA
Start and End Dates: 9/14/2018-8/31/2020
Role: Principal Investigator

Impacts of Kansas City Area Tobacco 21 Initiative
Principal Investigators: Dai & Catley \$155,398
Funding Agency: Health Care Foundation of Greater Kansas City

Start and End Dates: 6/15/2017-6/14/2020

Role: Principal Investigator

Sterol and Isoprenoid Diseases Consortium Supplement 2018

Principal Investigator: Rizzo

\$58,479

Funding Agency: NIH/ NCATS

Start and End Dates: 9/15/2018-8/30/2019

Role: Biostatistician

Great Plains IDeA-CTR

Principal Investigator: Rizzo

\$14,584,760

Funding Agency: NIH/DHHS/NIGMS

Start and End Dates: 10/1/2018-06/30/2021

Role: Co-Investigator

Completed

Targeting PGE2 Receptors to attenuate shear stress-induced glomerular injury. \$2,006,845

Principal Investigator: Srivastava

Funding Agency: NIH/NIDDK

Start and End Dates: 8/27/2016-4/30/2021

Role: Co-Investigator

Longitudinal test of adherence & control in kids new to T1 diabetes & 5-9 yrs old \$1,776,142

Principal Investigator: Patton

Funding Agency: NIH (NIDDK)

Start and End Dates: 8/1/2014-7/31/2019

Role: Co-Investigator

Noncoding RNA and phenotypic variation in chromosome 22q11.2 deletion syndrome \$141,632

Principal Investigator: Raju

Funding Agency: New Investigator Award, Children's Mercy

Start and End Dates: 7/1/2015-6/30/2018

Role: Co-Investigator

The Effect of Treating Insulin Resistance & Androgen Excess on Metabolic and Neuro-functional Aspects of Adolescent PCOS \$140,000

Principal Investigator: Burgert

Funding Agency: Katharine Berry Richardson, Children's Mercy

Start and End Dates: 7/1/2015-6/30/2018

Role: Co-Investigator

Effect of obesity on pantoprazole pharmacokinetics and CYP2V19 activity in children and adolescents with GERD: a pilot study. \$100,000

Principal Investigator: Shakhnovich

Funding Agency: Marion Merrell Down Fund, Children's Mercy

Start and End Dates: 1/1/2013 - 8/31/2017

Role: Co-Investigator

Healthy home technical studies grant \$748,000

Principal Investigator: Kennedy

Funding Agency: Housing & Urban Development (HUD)

Start and End Dates: 11/01/2013 – 10/31/2017
Role: Co-Investigator

Autism and Obesity: Co-Occurring Conditions or Drug Side-Effects?
Principal Investigator: Talebizadeh
Funding Agency: Department of Defense
Start and End Dates: 9/30/2014-9/29/2016
Role: Co-Investigator

Enteral Feeding Set Handling Techniques: A Comparison of Bacterial Growth, Nursing Time,
Labor, and Material Cost \$5000
Principal Investigator: Lyman
Funding Agency: Jonathan Rhoads Foundation from ASPEN
Start and End Dates: 7/1/2015-6/30/2016
Role: Biostatistician

Genetic variation and variability in posaconazole pharmacokinetics in children \$200,000
Principal Investigator: Yin
Funding Agency: Marion Merrell Dow Award
Start and End Dates: 7/1/2014-6/30/2016
Role: Biostatistician

Role of HbA1c Variability in Risk Prediction Models for Diabetes Mellitus (DM) Nephropathy in
Children with Type I Diabetes
Principal Investigator: Sripriya Raman
Funding Agency: Frontiers The Heartland Institute for Clinical and Translational Research
Start and End Dates: 3/1/2013-2/28/2014
Role: Co-Investigator

WEBSMART: Efficacy and Web-based Pain Self-management for adolescents with JIA.
Principal Investigator: Connelly \$2,047,717
Funding Agency: NIH (NIAMS)
Start and End Dates: 9/15/2011-6/30/2016
Role: Connelly

Chronic Graft versus Host Disease Treated with Extracorporeal Photopheresis
Principal Investigator: Abhyankar and Dalal
Funding Agency: Midwest Cancer Alliance
Start and End Dates: 12/4/2009 -6/30/2015
Role: Biostatistician

Analysis of circadian genes in autism: characterization of alternative splicing profile of JARID1
genes \$50,000
Principal Investigator: Talebizadeh
Funding Agency: Kansas City Area Life Sciences Institute
Start and End Dates: 7/1/2013 – 6/29/2014
Role: Biostatistician

The Impact of Dietary Fatty Acids on the Development of Food Allergic Sensitization
Principal Investigator: Ciaccio \$20,000
Funding Agency: Paul Henson Award (Children's Mercy Hospital)

Start and End Dates: 1/1/2013 – 12/31/2011

Role: Biostatistician

Use of Oral Baclofen for Treatment of Spasticity of Cerebral Palsy in Children \$549,528

Principal Investigator: Brunstrom

Funding Agency: NIH

Start and End Dates: 8/1/2007-6/30/2011

Role: Biostatistician

Statistical Software Development

R package “[CombinePValue](#)” to test whether a vector of p-values are jointly significant when we combine them together, available in [cran.r-project.org](#).

Honors and Awards

- 2017 Children’s Mercy Hospital, Research Impact Award
- 2016 Honorarium and Travel Award for invited presentation at the 2016 SOCN New Data Linkages Conference (sponsored by NSF)
- 2014 Travel Award for the Beyond Bioinformatics Opening Workshop, Statistical and Applied Mathematical Sciences Institute (NSF, Duke, NCSU, UNC, NISS)
- 2014 Travel Award for 2014 Conference on Nonparametric Statistics for Big Data
- 2013 Travel Award for 2013 ENAR Workshop for Junior Researchers in Biostatistics
- 2012 Bursary Award for research collaboration, issued by 1st Short Course on Statistical Genetics and Genomics, University of Alabama at Birmingham
- 2011 Travel Award for NIH Funded 1st Short Course on Statistical Genetics and Genomics, University of Alabama at Birmingham
- 2006 Biopharmaceutical Student Paper Competition Award (first place), Joint Statistical Meeting of American Statistical Association
- 2006 R.L. Anderson Award for Best Student, Department of Statistics, University of Kentucky)

Publications

Statistical Methodology and High Dimensional Data Research

1. **Dai H**, Charnigo, R. A Sentiment Analysis of MERS-COV Outbreak through Twitter Social Media Monitoring. *JP Journal of Biostatistics*. 2018, 15 (2): 107-125.
2. **Dai H**, Wu G, Wu M, Zhi D. An Optimal Bahadur-efficient Method in Detection of Sparse Signals with Applications to Pathway Analysis in Sequencing Association Studies. *PLoS ONE*. 2016 [Impact Factor=2.8] PMID:27380176 PMCID: PMC4933358
3. **Dai H**, Charnigo R. Compound Hierarchical Correlated Beta Mixture with an Application to Cluster Mouse Transcription Factor DNA Binding Data. *Biostatistics*. 2015 [Impact Factor=1.8] PMID:25964663 PMCID:PMC4701176
4. **Dai H**, Charnigo R. D_CDF Test of Negative Log Transformed P-values with Application to Genetic Pathway Analysis. *Statistics and Its Interface*. 2014, 7(2): 187-200. [Impact Factor=2.9]
5. **Dai H**, Leeder S, Cui Y. A Modified Generalized Fisher Method for Combining Probabilities from Dependent Tests. *Frontiers in Genetics*. 2014, 20. [Impact Factor=3.9], PMID: 24600471, PMCID: PMC3929847.
6. Fan Q, Charnigo R, Talebizadeh Z, **Dai H**. Hypothesis Testing in Normal Admixture Models to Detect Heterogeneous Genetic Signals. *Journal of Biometrics and Biostatistics*. 2014, 5:5.

7. **Dai H**, Charnigo R, Vyhlidal C, Jones B, Bhandary M. Mixed Modeling and Sample Size Calculations for Identifying Housekeeping Genes. *Statistics in Medicine*. 2013, 32(18): 3115-25. [Impact Factor=2.1], PMID: 3444319.
8. **Dai H**, Charnigo R, Becker M, Leeder J, Motsinger-Reif A. Risk Score Modeling of Multiple Gene to Gene Interactions using Aggregated-Multifactor Dimensionality Reduction. *BMC BioData Mining*. 2013, 6(1):1. [Impact Factor=2.2] PMID:23294634 PMID: PMC3560267
9. Bhandary M, **Dai H**. An Alternative Test for the Equality of Variances for Several Populations in Randomized Complete Block Design. *Statistical Methodology*. 2013, 11, 22-35.
10. Charnigo R, Qian F, Bittel D, **Dai H**. Testing Unilateral versus Bilateral Normal Contamination. *Statistics and Probability Letters*. 2013, 83 (1): 163-167.
11. Charnigo R, Zhou F, **Dai H**. Contaminated Chi-Square Modeling and Large-Scale ANOVA Testing. *Journal of Biometrics and Biostatistics*. 2013, 4:1.
12. **Dai H**, Herskovic J, and Anton M. Comparison of Experimental Designs and Measurement Types: Two Satiety Studies, *Food Science and Technology Letters*. 2014, 5(1): 52-58.
13. **Dai H**, Charnigo R, Srivastava T, Talebizadeh Z, Ye S. Integrating P-values for Genetic and Genomic Data Analysis. *Journal of Biometrics and Biostatistics*. 2012, 3:e117.
14. **Dai H**, Bhandary M, Becker M, Leeder S, Gaedigk R, Motsinger-Reif A. Global Tests of P-values for Multifactor Dimensionality Reduction Models in Selection of Optimal Number of Target Genes. *BMC BioData Mining*. 2012, 5(3). [Impact Factor=2.2] PMID: 22616673 PMID: PMC3508622
15. Deng W, Charnigo R, **Dai H**, Kirby RS. Characterizing Components in a Mixture Model for Birthweight Distribution. *Journal of Biometrics & Biostatistics*. 2011, 2(118).
16. **Dai H** and Charnigo R. Contaminated Normal Modeling with Application in Microarray Experiments. *Canadian Journal of Statistics*. 2010, 38(2): 315-332.
17. Hao J, Bathke A, Skees JR, and **Dai H**. Weather Risks, Ratemaking, and Modeling the Tail Distribution: An Application of Extreme Value Theory. *International Journal of Ecological Economics and Statistics*. 2011, 20 (W11): 51-68.
18. Bhandary M, **Dai H**. An Alternative Test for the Equality of Variances for several Populations. *Journal of Communications in Statistics – Simulation and Computation*. 2009, 38(1): 109-117.
19. **Dai H**, Charnigo R. Inferences in Contaminated Regression and Density Models. *Sankhya*. 2008, 69(4): 842-869.
20. **Dai H**, Charnigo, R. Omnibus Testing and Gene Filtration in Microarray Data Analysis. *Journal of Applied Statistics*. 2007, 34(10): 1165-1183.

Population Health and Policy Research on Tobacco Use and Health Disparities

21. **Dai H**. Changes in Flavored Tobacco Product Use among Current Youth Tobacco Users in the United States: 2014 - 2017. *JAMA Pediatrics*. 2019. [Impact Factor=10.8], PMID: 30615022, [Altmetric: 82](#)
22. **Dai H**, Catley D, Richter K, Goggin K, Ellerbeck. Electronic Cigarettes and Future Marijuana Use: A Longitudinal Study. *Pediatrics*. 2018 May;141(5). [Impact Factor=5.8], PMID: 29686146, [Altmetric: 218](#)
23. **Dai H**. Attitudes toward Tobacco 21 among U.S. Youth. *Pediatrics*. 2017 Jul;140(1). [Impact Factor=5.8], PMID: 28630116, [Altmetric: 85](#)
24. **Dai H**. Tobacco Product Use Among Lesbian, Gay, and Bisexual Adolescents. *Pediatrics*. 2017 Apr;139(4). [Impact Factor=5.8], PMID: 28348201, [Altmetric: 109](#)
25. **Dai H**, Hao J. Flavored Electronic Cigarette Use and Smoking Among Youth. *Pediatrics*. 2016 Dec; 138(6). [Impact Factor=5.8], PMID: 27940718, [Altmetric: 821](#)

26. Dai H, Meyer. A Population Study of Health Status Among Sexual Minority Older Adults in Select U.S. Geographic Regions. *Health Education & Behavior*. 2019 Jan. [Impact Factor=2.4], PMID: 30606058
27. Dai H, Leventhal A. Association of Electronic Cigarette Vaping and Subsequent Smoking Relapse Among Former Smokers. *Drug and Alcohol Dependence*, 2019. [Impact Factor=3.3]
28. Dai H, Hao J. Flavored Tobacco Use among U.S. Adults by Age Group: 2013-2014. *Substance Use and Misuse*. 2018 Oct 31:1-9. [Impact Factor=1.2], PMID: 30380969.
29. Dai H, Clements M. Trends in Health Care Provider Advice on Youth Tobacco Use: 2011 – 2015. *American Journal of Preventive Medicine*. 2018 Aug; 55(2):222-230. [Impact Factor=4.5], PMID: 29934017.
30. Dai H, Hao J, Catley D. Studies on Vape Shop Density, a Response from the Authors. *Nicotine and Tobacco Research*. 2018 Jul; 20(8):1027-1028. [Impact Factor=4.6], PMID: 29065192.
31. Dai H. Single, Dual, and Poly Use of Flavored Tobacco Products among Youth in the United States: 2014. *Preventing Chronic Disease*. 2018 Jun; 15:170389. [Impact Factor=2.2], [Altmetric: 14](#)
32. Dai H, Hao J. The Effects of Tobacco Control Policies on Retailer Sales to Minors in the United States, 2015. *Tobacco Control*. 2018 May; 27(3):258-260. [Impact Factor=6.3], PMID: 28219976.
33. Dai H, Hao J. Temporal Trends of Sources of Cigarettes among U.S. High School Students: 2001-2015. *Nicotine and Tobacco Research*. 2018 Jan. [Impact Factor=4.6] PMID: 29342310
34. Dai H, Catley D. The Effects of Assurances of Voluntary Compliance on Retail Sales to Minors in the United States: 2015-2016. *Preventive Medicine*. 2018 Jun; 111:410-414. [Impact Factor=3.1], PMID:29222044.
35. Dai H, Hao J. The Prevalence of Exposure to Workplace Secondhand Smoke in the US: 2010 to 2015. *Nicotine and Tobacco Research*. 2017 Nov; 19(11): 1300–1307. [Impact Factor=4.6], PMID: 27986913
36. Dai H. Exposure to Advertisements and Marijuana Use Among US Adolescents. *Preventing Chronic Disease*. 2017 Nov; 14:170253. [Impact Factor=2.2], PMID: 29191259, PMID: PMC5716812.
37. Dai H, Hao J. Geographic Density and Proximity of Vape Shops to Colleges in the USA. *Tobacco Control*. 2017 Jul, 26(4) 379-385 [Impact Factor=6.3], PMID: 27302700.
38. Dai H, Hao J. Direct Marketing Promotions and Electronic Cigarette Use among U.S. Adults, National Adult Tobacco Survey, 2013-2014. *Preventing Chronic Disease*. 2017 Sep; 14:E48. [Impact Factor=2.2], PMID: 28934079.
39. Dai H, Hao J, Catley D. Vape Shop Density and Socio-demographic Disparities: A U.S. Census Tract Analysis. *Nicotine and Tobacco Research*. 2017 Nov 1;19(11):1338-1344 [Impact Factor=4.6], PMID:28371830.
40. Dai H, Hao J. Sleep Deprivation and Chronic Health Conditions Among Sexual Minority Adults. *Behavioral Sleep Medicine*. 2017 Jun; 28: 1-15. [Impact Factor=2.5], PMID: 28657361.
41. Dai H, Hao J. Electronic Cigarette and Marijuana Use among Youth in the United States. *Addictive Behaviors*. 2017 Mar; 66:48-54. [Impact Factor=2.8], PMID: 27871045.
42. Dai H, Hao J. Exposure to Advertisements and Susceptibility to Electronic Cigarette Use Among Youth. *Journal of Adolescent Health*. 2016 Dec; 59(6):620-626. [Impact Factor=3.8]. PMID: 27528472

Social Media Surveillance Research

43. **Dai H**, Hao J. Mining Social Media Data for Opinion Polarities about Electronic Cigarettes. *Tobacco Control*. 2017 Mar; 26(2):175–180. [Impact Factor=6.3], PMID:26980151.
44. **Dai H**, Hao J. Mining Social Media Data on Marijuana Use for Post Traumatic Stress Disorder. *Computers in Human Behavior*. 2017 May; 70: 282-290. [Impact Factor=3.7]
45. **Dai H**, Deem M, Hao J. Geographic Variations in Electronic Cigarette Advertisements on Twitter in the United States. *International Journal of Public Health*. 2017 May; 62(4): 479-487. [Impact Factor=2.7], PMID: 27742923.
46. **Dai H**, Lee B, Hao J. Predicting Asthma Prevalence by Linking Social Media Data and Traditional Surveys. *The Annals of the American Academy of Political and Social Science*. 2017 Jan; 669(1):75-92. [Impact Factor=1.7]
47. Hao J, **Dai H**. Payday Loan Marketing in Social Networks. *Journal of Consumer Affairs*. 2017 May; 52(2):441-451. [Impact Factor=1.1]
48. Hao J, **Dai H**. Social Media Content and Sentiment Analysis on Consumer Security Breaches. *Journal of Financial Crime*. 2016, 23(4): 855 – 869.

Other Collaborative Studies

49. Cuna A, Lewis T, **Dai H**, Nyp M, Truog W. Timing of postnatal corticosteroid treatment for bronchopulmonary dysplasia: effect on outcomes. *Pediatric Pulmonology*. 2018. [Impact Factor=2.9], PMID: 29191259
50. Kumar D, New J, Vishwakarma V, Joshi R, Enders J, Lin F, Dasari S, Gutierrez W, Leef G, Ponnurangam S, Chavan H, Ganaden L, Thornton M, **Dai H**, Tawfik O, Straub J, Shnayder Y, Kakarala K, Tsue T, Girod D, Houten V, Anant S, Krishnamurthy P, Thomas S. Cancer-associated fibroblasts drive glycolysis in a targetable signaling loop implicated in head and neck squamous cell carcinoma progression. *Cancer Research*. 2018 Jul; 78(14):3769-3782. PMID: 29769197. PMCID: PMC6050074. [Impact Factor=9.3]
51. Sanderson K, Yu Y, **Dai H**, Willig L, Warady B. Outcomes of infants receiving chronic peritoneal dialysis: an analysis of theUSRDS registry. *Pediatric Nephrology*. 2018. PMID:3014117 [Impact Factor=2.3] PMID: 30141177
52. Lalan S, **Dai H**, Warady B. Outcomes of infants receiving chronic peritoneal dialysis: an analysis of theUSRDS registry. *Pediatric Nephrology*. 2018 [Impact Factor=2.3]
53. Cuna A, Liu C, Govindarajan S, Queen M, **Dai H**, Truog W. Usefulness of an Online Risk Estimator for Bronchopulmonary Dysplasia in Predicting Corticosteroid Treatment in Preterm Infants. *The Journal of Pediatrics*. 2018 [Impact Factor=3.9]
54. New J, Arnold L, Ananth M, Alvi S, Thornton M, Werner L, Tawfik O, **Dai H**, Shnayder Y, Kakarala K, Tsue T, Girod D, Ding W, Anant S, Thomas S. Secretory autophagy in cancer-associated fibroblasts promotes head and neck cancer progression and offers a novel therapeutic target. *Cancer Research*. 2017; 77(23):6679-6691. PMID: 28972076. PMCID: PMC5712244 [Impact Factor=9.3] PMID: 28972076 PMCID: PMC5712244
55. Srivastava T, **Dai H**, Heruth D, Alon U, Garola R, Zhou J, Duncan S, El-Meanawy A, McCarthy E, Sharma R, Johnson M, Savin V, Sharma M. Mechanotransduction Signaling in Podocytes from Fluid Flow Shear Stress. *American Journal of Physiology - Renal Physiology*. 2017 in press. [Impact Factor=3.6] PMID:28877882 PMCID: PMC5866353
56. Jones B, Sherwin M, Liu X, **Dai H**, Vyhlidal C. Genetic Variation in the Histamine Production, Response, and Degradation Pathway is associated with Histamine Pharmacodynamic Response in Children with Asthma. *Frontiers in Pharmacology, section Pharmacogenetics and Pharmacogenomics*. January 2017. [Impact Factor=4.4]
57. D'Silva L, Whitney S, **Dai H**, Santos M, Kluding P. "The Impact of Diabetes on Mobility, Balance, and Recovery after Repositioning Maneuvers in Individuals with

- Benign Paroxysmal Positional Vertigo”, *Journal of Diabetes and Its Complications*. 2017. [Impact Factor=3.0]
58. Akangire G, Manimtim W, Nyp M, Townley N, **Dai H**, Norberg M, Taylor J, “Factors Leading to Re-hospitalization for Tracheostomized, Ventilator-Dependent Infants Through 2 Years of Age”, *Journal of Perinatology*. 2017. [Impact Factor=2.1]
 59. D’Silva L, Kluding P, Whitney S, **Dai H**, Santos M. “Postural sway in individuals with type 2 diabetes and concurrent benign paroxysmal positional vertigo”, *The International Journal of Neuroscience*. 2017. PMID: 28385058 PMCID:PMC5857488
 60. Cuna A, Lewis T, Oschman A, **Dai H**, Govindarajan S, Brophy K, Norberg M, Nyp M, Truog W, Outcomes of infants who failed to extubate with systemic corticosteroids, *American Journal of Perinatology*. 2017. PMID:28704843
 61. Chlebowski M, **Dai H**, Kaine S. The Effect on Somatic Growth of Surgical and Catheter Treatment of Secundum Atrial Septal Defects, *Pediatric Cardiology*. 2017
 62. Rosterman J, Truog W, Escobar H, Meinert K, Holmes A, **Dai H**, Manimtim W. The impact of neurally adjusted ventilatory assist (NAVA) mode on respiratory severity score and energy expenditure in infants: a randomized crossover trial. *Journal of Perinatology*. 2017 [Impact Factor=2.1] PMID: 29072677
 63. McLaughlin M, He Y, Brunstrom-Hernandez J, Thio L, Carleton B, Ross C, Gaedigk A, Lewandowski A, **Dai H**, Jusko W, Leeder J. Pharmacogenomic Variability of Oral Baclofen Clearance and Clinical Response in Children with Cerebral Palsy. *PM&R*. 2017 PMID:28867665 PMCID: PMC5880219
 64. Lyman B, Williams M, Sollazzo J, Hayden A, Hensley P, **Dai H**, Roberts C. Enteral Feeding Set Handling Techniques, *Nutrition in Clinical Practice*. December, 2016. [Impact Facto=2.5]
 65. Lawson C, Attard T, Septer S, **Dai H**. Genetic Counselor Practices Involving Pediatric Patients with FAP: an Investigation of their Self-Reported Strategies for Genetic Testing and Hepatoblastoma Screening. *Journal of Genetic Counseling*. 2016. [Impact Factor=2.0] PMID: 27913912
 66. D’Silva L, Staecker H, Lin J, Maddux C, Ferraro J, **Dai H**, Kluding P. Otolith Dysfunction in persons with both Diabetes and Benign Paroxysmal Positional Vertigo, *Otology and Neurotology* [Impact Factor=2.0] PMID: 27930443 PMCID:PMC5303120
 67. Cuna A, Govindarajan S, Oschman A, **Dai H**, Brophy K, BS, Norberg M, Truog W. A Comparison of 7-day Versus 10-day Course of Low-Dose Dexamethasone for Chronically Ventilated Preterm Infants. *Journal of Perinatology*. 2016. [Impact Factor=2.0] PMID: 27906194
 68. Taylor JM, Oladitan L, Degnan A, Henderson S, **Dai H**, Warady BA. Psychosocial factors that create barriers to managing serum phosphorus levels in pediatric dialysis patients: a retrospective analysis. *J Ren Nutr*. 2016. [Impact Factor=2.3]. PMID: 26993357
 69. Lalan S, **Dai H**, Warady B. Hypogammaglobulinemia in Infants Receiving Chronic Peritoneal Dialysis. *Pediatric Nephrology*. 2016 [Impact Factor 2.3] PMID:27718085
 70. Pudur S, Srivastava T, Sharma M, Sharma R, Tarima S, **Dai H**, McCarthy E, Savin V. Serum glomerular albumin permeability activity: association with rapid progression to end-stage renal disease in focal segmental glomerulosclerosis. *SpringerPlus*. 2016. PMID: 27104120 PMCID:PMC4828406
 71. Pearce R, Gaedigk R, Twist G, **Dai H**, Riffel A, Leeder JS and Gaedigk A. Developmental Expression of CYP2B6: A Comprehensive Analysis of mRNA Expression, Protein Content and Bupropion Hydroxylase Activity and the Impact of Genetic Variation. *Drug Metabolism & Disposition*. July 2016. [Impact Factor=3.3] PMID:26608082 PMCID: PMC4931886.
 72. Raman S, **Dai H**, DeLurgio S, Williams D, Lind M, Patton S, Spertus J, Kosiborod M, Clements M. High Hemoglobin A1c Variability is Associated with Early Risk of

- Microalbuminuria in Children with T1D. *Pediatric Diabetes*. September 2016. [Impact Factor=3.5] PMID: 26377593.
73. Taylor J, Go M, Nyp M, Legino J, Norberg M, **Dai H**, Truog W. Re-hospitalization in Infants Born < 29 Weeks' Gestation during the First 2 Years of Life: Risk Assessment. *American Journal of Perinatology*. 2016.
 74. Voytek Slowik, Thomas Attard, **Dai H**, Shah R, Septer S. Desmoid Tumors Complicating Familial Adenomatous Polyposis: A Meta-Analysis Mutation Spectrum Of Affected Individuals, *BMC Gastroenterology*. 2015, 15:84. [Impact Factor=2.7]
 75. Singh J, Merrill E, Sandesara P, Schoeneberg L, **Dai H**, Raghuvver G. Vitamin D, Low Grade Inflammation and Cardiovascular Risk in Young Children – A Pilot Study, *Pediatric Cardiology*. 2015. PMID: 25832850
 76. Anvari S, Vyhlidal C, Rezaiekhalthigh M, **Dai H**, Jones B. Genetic Variation Along the Histamine Pathway In Children with Allergic vs Non-Allergic Asthma. *American Journal of Respiratory Cell and Molecular Biology*. 2015. [Impact Factor=4.1] PMID: 25909280 PMID:PMC4742940
 77. Ghufran B, Broussard J, **Dai H**, Ugrasbul F. The Dilemma of Diagnosing Type-2 Diabetes Mellitus [T2DM] in Overweight Children and Adolescents." *International Journal of Sciences: Basic and Applied Research*. 2015.
 78. Merrill E, Schoeneberg L, Sandersara P, Molitor-Kirsch E, O'Brien J, **Dai H**, Raghuvver G. Outcomes Following Prolonged Extracorporeal Membrane Oxygenation Support in Children with Cardiac Disease- Extracorporeal Life Support Organization Registry Study, *The Journal of Thoracic and Cardiovascular Surgery*. 2014, 148(2):582-588. [Impact Factor=2.3]
 79. Taylor J, Nyp M, Norberg M, **Dai H**, Escobar H, Ellerbeck E, Truog W. Impact of Intercurrent Respiratory Infections on Lung Health in Infants Born < 29 Weeks with Bronchopulmonary Dysplasia, *Journal of Perinatology*. 2014, 34(3): 223-228. [Impact Factor=2.1] PMID: 24335997
 80. He Y, Brunstrom-Hernandez J, Thio L, Lackey S, Gaebler-Spira D, Kuroda M, Stashinko E, Hoon A, Vargus-Adams J, Stevenson RD, Lowenhaupt S, McLaughlin J, Christensen A, Dosa N, Butler M, Schwabe A, Lopez C, Roge D, Kennedy D, Tilton A, Krach L, Lewandowski A, **Dai H**, Gaedigk A, Leeder J, Jusko W. Population Pharmacokinetics of Oral Baclofen in Pediatric Patients with Cerebral Palsy. *The Journal of Pediatrics*. 2014, 164(5): 1181 -1188. [Impact Factor=3.9] PMID: 24607242 PMID:PMC3992203
 81. Denney L, Ferris L, **Dai H**, Maletsky L. Analysis of a Rotary Task Following Total Knee Arthroplasty: Stair Descent with a Cross-over Turn. *Journal of Engineering in Medicine*. 2014, 228 (5): 429 - 438. PMID:24714442
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Media Outreach

- November 2016, Media interview on “Flavored Electronic Cigarette Use and Smoking Among Youth” published in *Pediatrics*. This study received 100 media citations, including [Altmetric](#), [New York Times](#), [HealthDay News](#), [Yahoo News](#), [Fox News](#), [2minutesmedicine](#), [MedPage Today](#), [Reuters Health](#), [WebMD.com](#), [Health.com](#).
- December 2016, Media interview on “Exposure to Advertisements and Susceptibility to Electronic Cigarette Use Among Youth.” published in *Journal of Adolescent Health*. [Science News for Students](#)
- March 2017, Media interview on “Tobacco Product Use Among Lesbian, Gay, and Bisexual Adolescents” published in *Pediatrics*. This study received multiple media citations, including [Altmetric](#), [Reuters](#), [Physician’s Briefing](#), [International Business Times](#), [Huffington Post](#), [Health Newsline](#), [KDAL-FM](#), [WHTC-AM](#), [M.D. Alert](#), [New England Cable News](#), [WNYT-TV ! NBC News](#), [Business Insider](#), [Pink News](#), [Doctor’s Lounge](#), [WTAG-FM](#).
- June 2017, Media interview on “Attitudes toward Tobacco 21 among U.S. Youth” published in *Pediatrics*. This study received multiple media citations, including [Altmetric](#), [Reuters](#), [Physician’s Briefing](#), [International Business Times](#), [Huffington Post](#), [Health Newsline](#), [KDAL-FM](#), [WHTC-AM](#), [M.D. Alert](#), [New England Cable News](#), [WNYT-TV ! NBC News](#), [Business Insider](#), [Pink News](#), [Doctor’s Lounge](#), [WTAG-FM](#)
- December 2017, Expert commentary on “One in four gay, lesbian, bisexual teens attempt suicide”, [Reuters](#).
- March 2018, Expert commentary on “More U.S. schools offering safe spaces for LGBTQ youth”, [Reuters](#).
- April 2018, Media interview on “Electronic Cigarettes and Future Marijuana Use: A Longitudinal Study.” published in *Pediatrics*. This study received multiple media citations,

including [Altmetric](#), [Reuters](#), [Yahoo! 7 News](#), [Aol.](#), [Business Insider](#), [HealthDay News](#), [U.S. News & World Report](#), [Newsmax](#), [Doctors Lounge](#), [Medical Xpress](#), [The Inquirer](#), [MD Edge](#), [2-Minute Medicine](#), [WITN-TV](#) and [WTHR-TV](#).

- August 2018, Expert commentary on “Vaping, other tobacco products tied to higher risk that teens will try marijuana”, [Reuters](#)
- August 2018, Expert commentary on “Teens who vape or use hookah are more likely to use marijuana later, study finds”, [CNN.com](#).
- October 2018, [UNMC: E-cigarette, cigar use among youth focus of study - Hongying Dai, Ph.D., associate professor of biostatistics, UNMC College of Public Health, will conduct the NIH-funded study.](#)
- January 2019, six media interviews on “Changes in Flavored Tobacco Product Use among Current Youth Tobacco Users in the United States: 2014 – 2017” published in *JAMA Pediatrics*, including [Reuters](#), [MedicalResearch](#), [MEDPAGETODAY](#), [United Press International](#), [MD Magazine](#)

Academic Advising

- 2018-: Dissertation Advisor for Adam Kusi Appiah, Ph.D. student in Biostatistics at UNMC
- 2018-: Dissertation committee member for Karl Stessy Bisselou Moukagna, Ph.D. student in Biostatistics at UNMC
- 2018-: Dissertation committee member for Ellen Kerns, Ph.D. student in Biomedical Informatics at UNMC
- 2018-: Dissertation committee member for Mariam Taiwo, Ph.D. student in Health Promotion & Disease Prevention Research at UNMC
- 2016-2018: Mentor for Dr. Janelle Noel-MacDonnell, a post-doctoral scholar at CMH
- 2018: Mentor for Irene Guo, a summer intern student at CMH
- 2016-2017: Co-Mentor for William Chew, a summer intern student at CMH
- 2014-2015: Scholarship oversight committee for Nazia Tabassum: Pediatric Hematology Oncology Fellow PGY6
- 2018: Dissertation committee member for Raje Nikita on the Master of Science in Clinical Research (MSCR) at KUMC.
- 2018: Co-mentor for July Jean, Developmental-Behavioral Fellow, “Patterns of Use of Non-Ambulatory Services in Pediatric Patients with Attention Deficit/Hyperactivity Disorder” oral presentation at CMH Research Days May 15-17.

Editorial Duties and Grant Review Services

Journal Services

- Associate Editor, *BMC Public Health* (2018-)
- Editorial Board Member for 'JP Journal of Biostatistics' (2010 –)
- Editorial Board Member for 'Journal of Biometrics & Biostatistics' (2012 -)
- Editorial Board Member for 'Frontiers in Genetics' (2011 -)
- Referee for *Biostatistics*, *Frontiers in Bioengineering and Biotechnology*, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, *Frontiers in Genetics*, *Computers in Biology and Medicine*, *Medical Science Monitor*, *Journal of Data Science*, *Journal of Probability and Statistical Science*, *Journal of Statistical Theory and Practice*,

Journal of Statistical Planning and Inference, Journal of Biometrics & Biostatistics, Tobacco Control, Nicotine and Tobacco Dependence, Drug and Alcohol Dependence, Journal of Adolescent Health, Tobacco Induced Disease

Committee:

- 2019-: Committee member of COPH cancer workgroup, UNMC
- 2018-: Committee member for Data and Safety Monitoring Committee at the Buffett Cancer Center, UNMC
- 2014 – 2018: Committee member for research project review system at CMH.
- 2015: Interview panel member for B.A./M.D. program in School of Medicine at University of Missouri Kansas City.

Grant Review and judge:

- 2010: Special Emphasis Panel member for clinical scholar awards Reviewer for Katharine B. Richardson (KBR) Foundation Award
- 2010: Special Emphasis Panel member for clinical scholar awards for Young Investigator Award in Clinical/Translational Research
- 2017: Judge for the 9th Annual Quality Poster Session scheduled for Thursday, The Center for Clinical Effectiveness, October 19th.
- 2018: Serve as a judge for the resident/fellow poster sessions in the 5th Annual Vijay Babu Rayudu Quality & Patient Safety Day, University of Missouri Kansas City, May 11.
- 2018: Judge for the oral presentations at CMH Research Days May 15-17, 2018.

Memberships and Offices in Professional Societies

American Statistical Association

The Society of Nicotine and Tobacco Research (SNRT)

The International Biometric Society: The East North American Region (ENAR)