

Yu (Joyce) Jiang

Associate Professor, Biostatistics

Division of Epidemiology, Biostatistics, and Environmental Health

School of Public Health, University of Memphis

216 Robison Hall, 3825 DeSoto Ave, Memphis, TN 38111

yjiang4@memphis.edu

Tel: 901-678-4641; Fax: 901-678-1715

URL: http://www.memphis.edu/sph/people/faculty_profiles/jiang.php

EDUCATION

2014 Ph.D in Biostatistics, University of Kansas Medical Center, Kansas City, KS, USA

2008 Ph.D in Human Nutrition, Kansas State University, Manhattan, KS, USA

2006 M.S. in Toxicology, Iowa State University, Ames, IA, USA

1999 M.S. in Chemistry, Ocean University of Qingdao (Ocean University of China), China

1996 B.S. in Chemistry, Ocean University of Qingdao (Ocean University of China), China

PROFESSIONAL EXPERIENCE

- 2021- Associate Professor (with tenure)
Division of Epidemiology, Biostatistics, and Environmental Health
School of Public Health, University of Memphis, Memphis, TN
Bioinformatics, University of Memphis, TN
- 2015- 2021 Assistant Professor
Division of Epidemiology, Biostatistics, and Environmental Health
School of Public Health, University of Memphis, Memphis, TN
Bioinformatics, University of Memphis, TN
- 2014 - 2015 Postdoc Research Associate
Department of Biostatistics, School of Public Health,
Yale University, New Haven, CT
VA Healthcare System Cooperative Studies Program Coordinating Center,
West Haven, CT
- 2010-2014 Graduate Research Assistant
Department of Biostatistics,
University of Kansas Medical Center, Kansas City, KS
- 2008-2010 Research Associate
Department of Human Nutrition,
Kansas State University, Manhattan, KS
- 2006-2008 Graduate Research Assistant
Department of Human Nutrition,
Kansas State University, Manhattan, KS
- 2005 Research Assistant

Department of Disease Resistant
Pioneer Hi-Bred International, Inc. Johnston, IA

2000-2005 Graduate Research Assistant
Department of Human Nutrition,
Iowa State University, Ames, IA

RESEARCH INTERESTS

Gene environmental interactions and chronic disease.
Bayesian sparse learning and its application in cancer and inflammatory disease.
Adaptive Bayesian prediction of patient recruitment in clinical trials.
Latent variable modeling, structural equation model and its application in social behavior studies.

PUBLICATIONS

Statistical methods

1. Wu M, **Jiang Y**, Ma S. Integration of Proteomics and Other Omics Data. *Methods Mol Biol.* 2021;2361:307-324.
2. Zhang S, Hu X, Luo Z, **Jiang Y**, Sun Y, Ma S. Biomarker-guided heterogeneity analysis of genetic regulations via multivariate sparse fusion. *Stat Med.* 2021 Jul 30;40(17):3915-3936.
3. Kasenda B, Liu J, **Jiang Y**, et al. Prediction of RECRUITment in randomized clinical Trials (RECRUIT-IT)-rationale and design for an international collaborative study. *Trials.* 2020;21(1):731.
4. Liu J, Wick J, **Jiang Y**, Mayo M, Gajewski B. Bayesian accrual modeling and prediction in multicenter clinical trials with varying center activation times. *Pharm Stat.* 2020. PMID: 32319194.
5. Ren J, Zou F, Li X, Chen Q, Zhang, H, Ma S, **Jiang Y**, Wu C Semi-parametric Bayesian variable selection for gene-environment interactions, *Stat Med.* 2020, 39 (5),
6. Zhou F, Ren J, Li G, **Jiang Y**, Li X, Wang W, Wu C. Penalized Variable Selection for Lipid–Environment Interactions in a Longitudinal Lipidomics Study. *Genes.* 2019 Dec;10(12):1002.
7. **Jiang Y**, Zhang H, Shan V, ..., Karmaus W, Estimation of Eosinophil Cells in Cord Blood with References Based on Blood in Adults via Bayesian Measurement Error Modeling, *Bioinformatics*, 2020, 36(6):1923-1924.
8. Ren J, Du Y, Li S, Ma S, **Jiang Y**, Wu C. Robust network-based regularization and variable selection for high-dimensional genomic data in cancer prognosis. *Genet Epidemiol.* 2019, 43(3):276-291.
9. Sun Y, Sun Z, **Jiang Y**, Li Y, Ma S. An integrative sparse boosting analysis of cancer genomic commonality and difference. *Stat Methods Med Res.* 2019, doi: 10.1177/0962280219859026.
10. Wu C, Zhou F, Ren J, Li X, **Jiang Y**, Ma S. A selective review of multi-level omics data integration using variable selection. *High Throughput.* 2019; 8(1).
11. Sun Y, **Jiang Y**, Li Y, Ma S. Identification of cancer omics commonality and difference via community fusion. *Stat Med.* 2019,38(7):1200-1212.

12. Wu, C., Zhang, Q., **Jiang, Y.** and Ma, S., Robust network-based analysis of the associations between (epi) genetic measurements. *Journal of Multivariate Analysis*.2018;168:119-130.
13. Wu C, **Jiang Y**, Ren J, Cui Y, Ma S. Dissecting gene-environment interactions: A penalized robust approach accounting for hierarchical structures. *Stat Med*. 2018; 37(3):437-456.
14. Ren J, He T, Li Y, Liu S, Du Y, **Jiang Y**, Wu C. Network-based regularization for high dimensional SNP data in the case-control study of Type 2 diabetes. *BMC Genet*. 2017; 18(1):44.
15. **Jiang Y**, Huang Y, Du Y, Zhao Y, Ren J, Ma S, and Wu C. Identification of prognostic genes and pathways in lung adenocarcinoma using a Bayesian approach. *Cancer Informatics*. 2017;15 10.1177/1176935116684825.
16. Chai H, Zhang Q, **Jiang Y**, Wang G, Zhang S, Ahmed S, Ma S. Identifying gene-environment interactions for prognosis using a robust approach. *Econometrics and Statistics*. 2017; 4:105-120.
17. **Jiang Y**, Shi X, Zhao Q, Krauthammer M, Rothberg BE, Ma S. Integrated analysis of multidimensional omics data on cutaneous melanoma prognosis. *Genomics*. 2016; 107(6):223-30. (The first two authors contributed equally)
18. **Jiang Y**, Simon S, Mayo MS, Gajewski BJ, Modeling and Validating Bayesian Accrual Models on Clinical Data and Simulations Using Adaptive priors. *Stat Med*. 2015;34(4):613-29.
19. **Jiang Y**, Boyle DK, Bott MJ, Wick JA, Yu Q, Gajewski BJ. Expediting clinical and translational research via Bayesian instrument development. *Applied Psychological Measurement*. 2014, 38(4):296-310.
20. Gajewski BJ, **Jiang Y**, Yeh H, Engelman K, Teel C, Choi W, Greiner K, Daley C, Teaching confirmatory factor analysis to non-statisticians: A case study for estimating reliability of psychometric instruments. *Case Studies in Business, Industry, and Government Statistics*. 2014, 5(2): 88-101.
21. Yeh H-W, **Jiang Y**, Garrard L, Lei Y, Gajewski BJ, A Bayesian model for censored positive count data in evaluating breast cancer progression. *Model Assisted Statistics and Applications*. 2013, 8(2):143-150

Statistical Software

22. Liu J, Wick JA, Mudaranthakam DP, **Jiang Y**, Mayo MS, Gajewski BJ. Accrual prediction Program: A web-based clinical trials tool for monitoring and predicting accrual for early-phase cancer studies. *Clin Trials*. 2019, 16(6):657-664. doi: 10.1177/1740774519871474.
23. **Jiang Y**, Guarino P, Ma S, Simon S, Mayo MS, Raghavan R, Gajewski BJ. Bayesian accrual prediction for interim review of clinical studies: open source R package and smartphone application. *Trials*. 2016;17(1):336. (*Corresponding author*)

Statistical Application

24. Satapathy SK, Kuntzen C, Qiu H, **Jiang Y**, Bodenheimer HC, Roth NC, Lee TP, Hirsch JS, Trindade AJ, Bernstein DE; Northwell Health COVID-19 Research Consortium. Severity of liver test abnormalities in coronavirus disease 2019 depends on comorbidities and predicts

- early in-hospital mortality. *Eur J Gastroenterol Hepatol*. 2021 Dec 1;33(1S Suppl 1):e320-e328.
25. Ahuja N, Kedia SK, Dillon PJ, **Jiang Y**, Yu X. Perception and intention of using less harmful and less addictive hypothetical modified risk tobacco products among never tobacco users in the united states. *Addict Behav*. 2021 Nov;122:107016.
 26. Giammarino AM, Qiu H, Bulsara K, Khan S, **Jiang Y**, Da BL, Bernstein DE, Satapathy SK. Community Socioeconomic Deprivation Predicts Nonalcoholic Steatohepatitis. *Hepatol Commun*. 2021 Oct 20. doi: 10.1002/hep4.1831.
 27. Huang C, **Jiang Y**, Yan J. Comparative analyses of ACE2 and TMPRSS2 gene: Implications for the risk to which vertebrate animals are susceptible to SARS-CoV-2. *J Med Virol*. 2021 Sep;93(9):5487-5504.
 28. Higgins D, Mukherjee N, Pal C, Sulaiman IM, **Jiang Y**, Hanna S, Dunn JR, Karmaus W, Banerjee P. Association of Virulence and Antibiotic Resistance in Salmonella-Statistical and Computational Insights into a Selected Set of Clinical Isolates. *Microorganisms*. 2020 Sep 24;8(10):1465. doi: 10.3390/microorganisms8101465. PMID: 32987719; PMCID: PMC7598717.
 29. Lee YS, Zhang H, **Jiang Y**, Kadalayil L, Karmaus W, Ewart SL, H Arshad S, Holloway JW. Epigenome-scale comparison of DNA methylation between blood leukocytes and bronchial epithelial cells. *Epigenomics*. 2021 Apr;13(7):485-498. doi: 10.2217/epi-2020-0384.
 30. Satapathy SK, Kuntzen C, Qiu H, **Jiang Y**, Bodenheimer HC, Roth NC, Lee TP, Hirsch JS, Trindade AJ, Bernstein DE; Northwell Health COVID-19 Research Consortium. Severity of liver test abnormalities in coronavirus disease 2019 depends on comorbidities and predicts early in-hospital mortality. *Eur J Gastroenterol Hepatol*. 2021 Feb 5. PMID: 33560687.
 31. Satapathy SK, Tran QT, Kovalic AJ, Bontha SV, **Jiang Y**, Kedia S, Karri S, Mupparaju V, Podila PSB, Verma R, Maluf D, Mas V, Nair S, Eason JD, Bridges D, Kleiner DE. Clinical and Genetic Risk Factors of Recurrent Nonalcoholic Fatty Liver Disease After Liver Transplantation. *Clin Transl Gastroenterol*. 2021 Feb, PMC7864756.
 32. Kedia SK, Ali B, **Jiang Y**, Arshad H, Satapathy SK, Gonzalez HC. Post-liver transplant outcomes in patients with major psychiatric diagnosis in the United States. *Ann Hepatol*. 2021 Jan 19;22:100311. PMID: 33482365.
 33. Mallisetty Y, Mukherjee N, **Jiang Y**, Chen S, Ewart S, Arshad SH, Holloway JW, Zhang H, Karmaus W. Epigenome-Wide Association of Infant Feeding and Changes in DNA Methylation from Birth to 10 Years. *Nutrients*. 2020 Dec 30;13(1):99.
 34. Luo R, Mukherjee N, Chen S, **Jiang Y**, Arshad SH, Holloway JW, Hedman A, Gruziova O, Andolf E, Pershagen G, Almqvist C, Karmaus WJ. Paternal DNA Methylation May Be Associated With Gestational Age at Birth. *Epigenet Insights*. 2020 Sep 10;13:2516865720930701.
 35. Kheirikhah Rahimabad P, Arshad SH, Holloway JW, Mukherjee N, Hedman A, Gruziova O, Andolf E, Kere J, Pershagen G, Almqvist C, **Jiang Y**, Chen S, Karmaus W. Association of Maternal DNA Methylation and Offspring Birthweight. *Reprod Sci*. 2020 doi: 10.1007/s43032-020-00281-9. PMID: 32754889.
 36. Kabir U, Askew A, **Jiang Y**, Bhuyan SS, Ezekekwa E, Dobalian A, Moderate psychological distress as a barrier to breast cancer screening among women, *Journal of Hospital Administration*. 2020 9(4) DOI:10.5430/jha.v9n4p1
 37. Yu X, Duan J, **Jiang Y**, Zhang H. Distinctive trajectories of the COVID-19 epidemic by age and gender: A retrospective modeling of the epidemic in South Korea. *Int J Infect Dis*. 2020 Jul 2; 98:200-205. doi: 10.1016/j.ijid.2020.06.101. PMID: 32623081; PMCID: PMC7330572.

38. Satapathy SK, Thornburgh C, Heda R, **Jiang Y**, ... and Maluf D. Predicting harmful alcohol relapse after liver transplant: the HALT score. Clin Transplant. 2020;e14003. doi:10.1111/ctr.14003
39. Kedia SK, Dillon PJ, **Jiang Y**, James W, Collins AC, Bhuyan SS. The Association Between Substance Use and Violence: Results from a Nationally Representative Sample of High School Students in the United States [published online ahead of print, 2020 Jun 4]. Community Ment Health J. 2020;10.1007/s10597-020-00648-x. doi:10.1007/s10597-020-00648-x
40. Satapathy SK, Gonzalez HC, Vanatta J. ..., **Jiang Y**..., et al. A pilot study of ex-vivo MRI-PDFF of donor livers for assessment of steatosis and predicting early graft dysfunction. PLoS One. 2020;15(5):e0232006.
41. Reddy YK, Marella HK, **Jiang Y**, et al. Natural History of Non-Alcoholic Fatty Liver Disease: A Study With Paired Liver Biopsies. J Clin Exp Hepatol. 2020;10(3):245-254.
42. Chen S, Refaey H, Mukherjee N, Solatikia F, **Jiang Y**, Arshad SH, Ewart S, Holloway JW, Zhang H, Karmaus W. Age at onset of different pubertal signs in boys and girls and differential DNA methylation at age 10 and 18 years: an epigenome-wide follow-up study. Hum Reprod Open. 2020 Mar 12;2020(2).
43. Marella HK, Reddy YK, **Jiang Y**, Ganguli S, Podila PSB, Snell PD, Kovalic AJ, Cholanteril G, Singal AK, Nair S, Maliakkal B, Satapathy SK. Accuracy of noninvasive fibrosis scoring systems in african american and white patients with nonalcoholic fatty liver disease. Clin Transl Gastroenterol. 2020 Apr;11(4):e00165. doi: 10.14309/ctg.00000000000000165.
44. Higgins D, Karmaus W, **Jiang Y**, Banerjee P, Sulaiman IM, Arshad HS. Infant wheezing and prenatal antibiotic exposure and mode of delivery: a prospective birth cohort study. J Asthma. 2020 Mar 6;1-12. doi: 10.1080/02770903.2020.1734023.
45. Ali B, **Jiang Y**, Agbim U, Kedia SK, Satapathy SK, Barnes M, Maliakkal B, Nair SP, Eason JD, Gonzalez HC. Effect of opioid treatment on clinical outcomes among cirrhotic patients in the United States. Clin Transplant. 2020 Feb 25:e13845.doi: 10.1111/ctr.13845.
46. Shen Y, Zhang H, **Jiang Y**, Mzayek F, Arshad H, Karmaus W. Maternal Birth Weight and BMI Mediate the Transgenerational Effect of Grandmaternal BMI on Grandchild's Birth Weight. Obesity (Silver Spring). 2020 Mar;28(3):647-654.
47. Mahmood A, Wyant DK, Kedia S, Ahn S, Powell MP, Jiang Y, Bhuyan SS. Self-Check-In Kiosks Utilization and Their Association With Wait Times in Emergency Departments in the United States. J Emerg Med. 2020 Jan 7.
48. **Jiang Y**, Wei J, Zhang H, ..., Karmaus W, Epigenome wide comparison of DNA methylation profile between paired umbilical cord blood and neonatal blood on Guthrie cards. Epigenetics, 2019 Dec 9:1-8. doi: 10.1080/15592294.2019.
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50. Nigg CR, Harmon B, **Jiang Y**, Ginis KA, Motl RW, Dishman RK. Temporal sequencing of physical activity change constructs within the transtheoretical model. Psychology of Sport and Exercise. 2019 Nov 1;45:101557.
51. Gruzieva O, Merid SK, Chen S, Mukherjee N, Hedman AM, Almqvist C, Andolf E, **Jiang Y**, ... , Pershagen G. DNA Methylation Trajectories During Pregnancy. Epigenet Insights. 2019 doi: 10.1177/2516865719867090.

52. Ward KD, Kumar J, Khan Z, **Jiang Y**. Characteristics of Waterpipe Health Warning Labels in the United States. *Am J Health Behav*. 2019, 43(4):858-865
53. Imboden M, Wielscher M, Rezwan FI, ..., **Jiang Y**, ..., Jarvis D, Probst-Hensch NM. Epigenome-wide association study of lung function level and its change. *Eur Respir J*. 2019, 54(1).
54. Fu X, Zhu X, **Jiang Y**, Zhang J, Wang T, Jia C.. Centralized outdoor measurements of fine particulate matter as a surrogate of personal exposure for homogeneous populations. *Atmospheric Environment*. 2019; 204:110-117.
55. Molnar MZ, Joglekar K, **Jiang Y**, Cholankeril G, Abdul MKM, Kedia S, Gonzalez HC, Ahmed A, Singal A, Bhamidimarri KR, Aithal GP, Duseja A, Wong VW, Gulnare A, Puri P, Nair S, Eason JD, Satapathy SK; Global NAFLD Consortium. Association of re-Transplant Renal Function with Liver Graft and Patient Survival after Liver Transplantation in Patients with Nonalcoholic Steatohepatitis. *Liver Transpl*. 2019 Mar; 25(3): 399–410.
56. Agbim U, **Jiang Y**, Kedia SK, Singal AK, Ahmed A, Bhamidimarri KR, Bernstein DE, Harrison SA, Younossi ZM, Satapathy SK. Impact of Nonmalignant Portal Vein Thrombosis in Transplant Recipients With Nonalcoholic Steatohepatitis. *Liver Transpl*. 2019, 25(3):399-410.
57. Yang Y, **Jiang Y**, Xu Y, Mzayek F, Levy M. A cross-sectional study of the influence of neighborhood environment on childhood overweight and obesity: Variation by age, gender, and environment characteristics. *Prev Med*. 2017 Dec 28;108:23-28. doi: 10.1016/j.ypmed.2017.12.021. PMID: 29289640.
58. Jeyakumar A, Bégué RE, **Jiang Y**, McKinnon BJ. Cochlear implant provider awareness of vaccination guidelines. *Laryngoscope*. 2018 Mar 9. doi:10.1002/lary.27117.
59. Mørkve Knudsen T, Rezwan FI, **Jiang Y**, Karmaus W, Svanes C, Holloway JW. Trans-and inter-generational epigenetic inheritance in allergic diseases. *J Allergy Clin Immunol*. 2018; 142(3):765-772.
60. Isehunwa OO, Carlton EL, Wang Y, **Jiang Y**, Kedia SK, Chang CF, Fijabi D, Bhuyan SS. Access to employee wellness programs and use of preventive care services among U.S. adults. *Am J Prev Med*. 2017 Oct 16. pii: S0749-3797(17)30435-X.
61. Satapathy SK, Jones OD, Vanatta JM, Kamal F, Kedia SK, **Jiang Y**, Nair SP, Eason JD. Outcomes of Liver Transplant Recipients With Autoimmune Liver Disease Using Long-Term Dual Immunosuppression Regimen Without Corticosteroid. *Transplant Direct*. 2017 Jun 23;3(7):e178.
62. Satapathy SK, **Jiang Y**, Eason JD, Kedia SK, Wong E, Singal AK, Tolley EA, Hathaway D, Nair S, Vanatta JM. Cardiovascular Mortality among Liver Transplant Recipients with Nonalcoholic Steatohepatitis (NASH) in the United States. *Transpl Int*. 2017; 30(10):1051-1060.
63. Satapathy SK, Vanatta JM, Helmick R, Flowers A, Kedia SK, **Jiang Y**, Ali B, Eason J, Nair SP, Ibebuogu UN. Outcome of Liver Transplant Recipients With Revascularized Coronary Artery Disease: A Comparative Analysis With and Without Cardiovascular Risk Factors. *Transplantation*. 2017; 101(4):793-803.

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65. King BS, Lu L, Yu M, **Jiang Y**, Standard J, Su X, Zhao Z, Wang W, Detailed lipidomic profiling of di- and tri-glyceride species in weight-controlled mice. *PLoS One.* 2015; 10(2): e0116398.
66. Standard J, **Jiang Y**, Yu M, Su X, Zhao Z, Xu J, Chen J, King B, Lu L, Tomich J, Baybutt R, Wang W, Reduced signaling of PI3K-Akt and RAS-MAPK are the key targets for weight loss-induced cancer prevention by dietary calorie restriction and/or physical activity. *Journal of Nutritional Biochemistry, J Nutr Biochem.* 2014, 25(12):1317-23.
67. Lin D, He H, Ji H, Willis J, Willard L, **Jiang Y**, Medeiros DM, Wark L, Han J, Liu Y, Lu B. Wolfberries potentiate mitophagy and enhance mitochondrial biogenesis leading to prevention of biogenesis leading to prevention of hepatic steatosis in obese mice: The role of AMP-activated protein kinase $\alpha 2$ subunit. *Mol Nutr Food Res.* 2014, 58(5):1005-15.
68. Hunt JJ, Cupertino AP, Gajewski BJ, **Jiang Y**, Ronzani TM, Richter KP. Staff commitment to providing tobacco dependence in drug treatment: reliability, validity, and results of a national survey. *Psychol Addict Behav.* 2014, 28(2):389-95
69. Hunt JJ, Gajewski BJ, **Jiang Y**, Cupertino AP, Richter KP. Capacity of US drug treatment facilities to provide evidence-based tobacco treatment. *Am J Public Health.* 2013; 103(10):1799-801.
70. Cupertino AP, Hunt JJ, Gajewski BJ, **Jiang Y**, Marquis J, Friedmann PD, Engelman KK, Richter K, The index of tobacco treatment quality: development of a tool to assess evidence-based treatment in a national sample of drug treatment facilities. *Substance Abuse Treatment, Prevention, and Policy* 2013, 8:13.
71. King B, **Jiang Y**, Su X, Xu J, Xie L, Standard J, Wang W, Weight Control, Endocrine Hormones and Cancer Prevention. *Experimental Biology and Medicine. Exp Biol Med (Maywood).* 2013, 238(5):502-8.
72. Yu, H, Wark, L, Ji, H, Willard, L, **Jiang Y**, Han, J, He, H, Ortiz, E, Zhang, Y, Medeiros, D, Lin, D. Dietary wolfberry up-regulates carotenoid metabolic genes and enhances mitochondrial biogenesis in the retina of db/db diabetic mice. *Mol Nutr Food Res.* 2013 Jul; 57(7):1158-69.
73. Tang L, Zhang Y, **Jiang Y**, Willard L, Ortiz E, Wark L, Medeiros D, Lin D. Dietary wolfberry ameliorates retinal structure abnormalities in db/db mice at the early stage of diabetes. *Exp Biol Med (Maywood).* 2011 Sep 1;236(9):1051-63.
74. **Jiang Y**, Ma H, Su X, Chen J, Xu J, Standard J, Lin D, Wang W, IGF-1 mediates exercise-induced phospholipid alteration in the murine skin tissues. *J Nutr Food Sci* 2012. S2:1-6.
75. **Jiang Y**, Zhang Y, Wark L, Ortiz E, Lim S, et al. Wolfberry water soluble phytochemicals down-regulate ER stress biomarkers and modulate multiple signaling pathways leading to inhibition of proliferation and induction of apoptosis in Jurkat cells. *J Nutr Food Sci* 2011,S2:001.
76. Ayella A, Lim S, **Jiang Y**, Iwamoto T, Lin D, Tomich J, Wang W. Cytostatic inhibition of cancer cell growth by lignan secoisolariciresinol diglycoside. *Nutrition Research* 2010; 30(11):762-9.

77. **Jiang Y**, Ouyang P, Doan H, Xie L, Vasquez D, Welti R, Su X, Lu N, Herndon B, Yang S, Jeannotte R, Wang W, Weight loss via Exercise with controlled dietary intake may impact phospholipid profile for cancer prevention in murine skin tissues. *Cancer Prevention Research*, 2010, 3: 466-477. (The first two authors contributed equally)
78. Medeiros DM, **Jiang Y**, Klaahsen D, Lin D. Mitochondrial and sarcoplasmic protein changes in hearts from copper deficient rats: Upregulation of PGC1- α transcript and protein as a cause for mitochondrial biogenesis in copper deficiency. *J Nutr Biochem*. 2009, 20(10):823-30.
79. **Jiang Y**, Wang W. Potential mechanisms of cancer prevention by weight control, *Biophysical Reviews and Letters*. 2008, 3(3):421-437.
80. Chung CS, **Jiang Y**, Cheng D, Birt DF, Impact of adenomatous polyposis coli (APC) tumor suppressor gene in human colon cancer cell lines on cell cycle arrest by apigenin. *Mol. Carcinog*. 2007, 46(9): 773-82.
81. Xie L, **Jiang Y**, Ouyang P, Chen J, Doan H, Herndon B, Sylvester JE, Zhang K, Molteni A, Reichle M, Zhang R, Haub MD, Baybutt RC, Wang W. Effects of dietary calorie restriction or exercise on the PI3K and Ras signaling pathways in the skin of mice. *J Biol Chem*. 2007, 282(38):28025-35.
82. Shi XY, Wang XL, Han XR, **Jiang Y**, Zhu MY, Chen S, Koshikawa H, Relationship between petroleum hydrocarbon and plankton in a mesocosm experiment, *Acta Oceanologica Sinica* (English edition), 2001, 20(2): 231-240.

Publication in Chinese

83. Ma LY, L L **Jiang Y**, Shi LY, Feng BM, Wang YQ, Tang L, Study on Youshasaponin-induced apoptosis of HepG2 cells through the endoplasmic reticulum stress, *Chinese Pharmacological Bulletin*, 2011, 27 (11): 1523-1527.
84. **Jiang Y**, Wu ZH, Han XR, Zhang, L, Wang XL. Toxicity of polycyclic aromatic hydrocarbons (PAHs) to marine algae, *Marine Science*. 2002, 26(1): 46-50.
85. **Jiang Y**, Han XR, Zhang J, Zhu CJ, Jiang FH, Wang XL, Study on bioconcentration of methylnaphthalene by marine phytoplankton cells. *Journal of Ocean University of Qingdao*. 2002, 32(1): 86-101.
86. **Jiang Y**, Wang XL, Jin H, Yu WJ, Xie SN, Ma YJ, Wang L, The Improved acid-base titration method for determining surface areas of mineral particulates, *Journal of Ocean University of Qingdao*. 1998, 28(3): 465-470.

Book Chapters

87. **Jiang Y**, Huser V, Ma S. Big data statistical methods for radiation oncology. *Big Data in Radiation Oncology*. 2019, pp79.
88. Wang W, Ayella A, **Jiang Y**, Ouyang P, Qu H. Wheat lignans: promising cancer preventive agents. In: *Wheat Antioxidants* (Ed. Liu L). John Wiley & Sons, Ltd., Hoboken, New Jersey, 2008, p264-272.
89. Birt DF, Wang W, Pavia N, Au A, Chung C, Schmitt L, **Jiang Y**. Cancer prevention by phytochemicals, modulation of cell cycle. *Phytochemicals: Mechanisms of Action*, Meskin MS, Bidlack WR, Davies AJ, Lewis DS, Randolph RK, Eds. CRC Press, Washington, D.C., 2004; p61-67.

90. Shi XY, Wang XL, **Jiang Y**, Han XR. Petroleum hydrocarbon associated with oil on and by plankton in a mesocosm experiment of East China Sea. Proceedings of the Japan–China Joint Workshop on the Cooperative Study of the Marine Environment-Environmental Capacity and Effects of Pollutants on Marine Ecosystem in the East China Sea (Ed. Watanabe, M. & Zhu MY). National Institute for Environments, Tsukuba (Japan), 1999, JSSN 13413643, p89–96.

ORAL PRESENTATIONS

1. **Jiang Y**, SMScreening for genome wide study of mediation analysis Dec 13th, 2020, University of Kansas Medical Center, KS (Invited).
2. **Jiang Y**, Epigenome Wide DNA Methylation Profile, Michael Johnson Seminar, Nov 21, 2019, University of Maryville, St Louis, MO (Invited).
3. **Jiang Y**, Dissecting the Gene-environment Interactions via Bayesian Hierarchical models. March 29th, Memphis DATA conference, Memphis, TN. (Contributed)
4. **Jiang Y**, Dissecting the Gene-environment Interactions via Bayesian Hierarchical models. April 10th, EBE Colloquium, Memphis, TN.
5. **Jiang Y**, Wu C, Dissecting the Gene-Environment Interactions: a Bayesian Approach Accounting for Hierarchical Structures. ICSA Applied Statistics symposium, June 14-17, 2018, New Brunswick, NJ (Invited).
6. **Jiang Y**, Wu C, Zhang H, Chen S and Karmaus W, Bayesian integrative model to understand joint genetic epigenetic effects in development of eczema. ISCA Applied Statistics symposium, Jun 12-5th, 2017, Chicago, IL (Invited).
7. **Jiang Y**, Wu C, Wei, J, Zhang H, Ma, S, Dissecting the Gene-Environment Interactions: a Bayesian Approach Accounting for Hierarchical Structures, University of Kansas Department of Biostatistics Symposium June 21-23, 2017, Kansas City, KS (Invited).
8. **Jiang Y**, Shi X, Zhao Q, Wu C, and Ma S, Pathway based integrative study of multidimensional genomic measurements for predicting cancer prognosis in TCGA melanoma. ISCA Applied Statistics symposium, Jun 12-5th, 2016, Atlanta FL (Invited).
9. **Jiang Y**, Shi X, Zhao Q, and Ma S. Integrated Analysis of Multidimensional (Epi) Genetic Data on Cutaneous Melanoma Prognosis. ENAR, Mar 8th, 2016, Austin, TX.
10. **Jiang Y**, Wu C, Gajewski B, Ma S, Guarino P, Adaptive Bayesian Prediction of Patient Accrual in Multicenter Clinical Trials Seattle, WA, August 8 - 13, 2015.
11. **Jiang Y**, Boyle DK, Bott MJ, Wick JA, Yu Q, Gajewski BJ. Expediting Clinical and Translational Research via Bayesian Instrument Development, 2013 Joint Statistical Meeting, Montreal, Montreal, QC, Canada, August 3 - 8, 2013.
12. **Jiang Y**, Gajewski BJ, Yeh H-W, Engelman K, Teel C, Choi W, Greiner K, Daley MC, Teaching Confirmatory Factor Analysis to Non-Statisticians: A Case Study for Estimating Composite Reliability of Psychometric Instruments. 2012 Joint Statistical Meeting, San Diego, July 28-Aug2, 2012.
13. **Jiang Y**, Application of proteomics in weight control studies, Functional Genomics Consortium Spring Symposium, Manhattan, KS, April 4-5, 2007.

POSTER PRESENTATIONS

1. San Diego, ERN., Ward, KD., Harmon, BE., Berlin, KS., **Jiang, Y**, Wirth, MD, Hurley, TG, Armstead, CA., & Hébert, JR. Fatalism, social support, self-management behaviors and

- clinical outcomes in African-American adults with Type 2 Diabetes. Poster presentation at the 2022 Society of Behavioral Medicine Annual Meeting in Baltimore, MD.
2. Kedia S, Dillon P, **Jiang Y**, Ahuja N, Racial disparities in Repeated Lifetime Use of Heroin Trends among high school students in the United States. the American Public Health Association 147th Annual Meeting, Philadelphia, PA, Nov 09-13th, 2019.
 3. Kedia S, Dillon P, **Jiang Y**, Mahmood A, Violence and opioid use among high school students in the United States: Results of the 2017 National YRBSS Data. the American Public Health Association 147th Annual Meeting, Philadelphia, PA, Nov 09-13th, 2019.
 4. Ahuja N, Kedia S, **Jiang Y**, Dillon P, Cigarette harm perception and beliefs about cigarette health claims: Findings from HINTS-FDA 2017. the American Public Health Association 147th Annual Meeting, Philadelphia, PA, Nov 09-13th, 2019.
 5. Dillon P, Kedia S, **Jiang Y**, Dekka P, Bhuyan SS, Associations of academic achievement and opioid use among high school students in the United States. the American Public Health Association 147th Annual Meeting, Philadelphia, PA, Nov 09-13th, 2019.
 6. Mahmood, A, Ahn S, Kedia S, Bhuyan SS, Powell P, Jiang Y, Self-registration kiosks utilization and their association with wait times in emergency departments in the United States. the American Public Health Association 146th Annual Meeting, San Diego, CA. Nov 10-14th, 2018.
 7. Satapathy SK, Tran QT, Kovalic A, Karri S, Kedia S, **Jiang Y**, Agbim U, Gonzalez HC, Maliakkal BJ, Nair S, Eason JD, Kleiner D. Recurrent Non-Alcoholic Fatty Liver Disease after Liver Transplantation: A Single Center Experience Based on Protocol Liver Biopsy. 2018 American Association for the Study of Liver Disease Meeting, San Francisco, CA November 9-13, 2018. HEPATOLOGY 68, 714A-714A.
 8. Satapathy SK, Dyer A, Angel W, Gonzalez HC, Jones AV, Kedia S, **Jiang Y**, Nezakatgoo N, Helmick R, Horton P, Vanatta JM et al., Ex Vivo Magnetic Resonance Imaging (MRI) Proton Density Fat Fraction (PDFF) of Human Donor Livers Accurately Quantifies Steatosis: A Proof of Concept Study. 2018 American Association for the Study of Liver Disease Meeting, San Francisco, CA November 9-13, 2018. HEPATOLOGY 68, 660A-661A.
 9. Satapathy SK, **Jiang Y**, Cholankeril G, Parsa L, Abdul MK, Kedia S, Kamal F, Nair S, Vanatta JM, Karri S, Khan MA. Severe renal dysfunction at liver transplant in patients with NASH: Is the current approach for selection for kidney transplant optimal?. HEPATOLOGY 2017 Oct 1 (Vol. 66, pp. 923A-923A). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY.
 10. Satapathy SK, Cholankeril G, Abdul MM, Nair S, Gonzalez HC, **Jiang Y**, Kedia S, Parsa L, Khan M, Kamal F, Karri S. Severe renal dysfunction at liver transplant in patients with NASH: Is the current approach for selection for kidney transplant optimal? Hepatology 66, 923A-923A. [Presented at the 2017 American Association for the Study of Liver Disease Meeting in Washington, D.C. October 20-24, 2017.
 11. Liu J, **Jiang Y**, Wick J and Gajewski BJ. Adaptive Bayesian Modeling and Prediction of Patient Accrual with Varying Activation Time in Multicenter Clinical Trials, 2017 Joint Statistical Meeting, Baltimore, MD, July 29 - August 3, 2017.
 12. Ren J, Du Y, Molenda D, **Jiang Y**, and Wu C. Robust Network-Based Regularization and Variable Selection for High-Dimensional Genomic Data in Cancer Prognosis, 2017 Joint Statistical Meeting, Baltimore, MD, July 29 - August 3, 2017.

13. **Jiang Y**, Gajewski BJ, Simon S, Mayo MS. Performance of Constant Accrual Model and Alternatives on Clinical Data and Simulation. 2015 Joint Statistical Meeting, Boston, August 2 - 7, 2014.
14. Lin D, **Jiang Y**, Wark L, He H, Willard L, Medeiros DM, Dietary wolfberry increases hepatic insulin sensitivity in obese mice, Experimental Biology meeting, San Diego, CA, April 21-25, 2012.
15. Standard J, **Jiang Y**, Chen J, Lu L, Tomich J, Welti R, Wang W, Bioinformatics Approaches for Weight Loss-induced Cancer Preventive Mechanisms, Experimental Biology meeting, San Diego, CA, April 21-25, 2012.
16. Han J, **Jiang Y**, Tang L, Ortiz E, Medeiros DM, Lin D, Quercetin induces cell apoptosis via activation of AMP-activated protein kinase and inhibition of protein elongation in leukemia jurkat cells, Experimental Biology meeting, Washington, DC, April 9-13, 2011.
17. Tang L, Ma L, Fu X, **Jiang Y**, Wang Y, Medeiros DM, Lin D, Sasanquasaponin Triggers Tumor Cell Apoptosis via Distinct Pathways that Involve the Cell surface, Mitochondria, and Endoplasmic Reticulum, Experimental Biology meeting, Washington, DC, April 9-13, 2011.
18. Lin D, Tang L, **Jiang Y**, Willard L, Ortiz E, Medeiros DM, Dietary wolfberry ameliorates retinal structure abnormality through activation of AMP activated protein kinase signaling in the db/db type 2 diabetic mouse, Experimental Biology meeting, Washington, DC, April 9-13, 2011.
19. Lin D, **Jiang Y**, Zhang Y, Ortiz E, Medeiros DM, Wolfberry supplements prevent the development of hepatic steatosis Experimental Biology meeting, Anaheim, CA, April 24-28, 2010
20. **Jiang Y**, Lin D, Water Soluble Wolfberry Phytochemicals Induce Cell Cycle Arrest and Apoptosis in Cancer Cells, 49th American Society for Cell Biology Annual Meeting, December 5-9, San Diego, CA, 2009.
21. **Jiang Y**, Chen J, Dong L, Ouyang P, and Wang W, Effect of IGF-1 restoration on phospholipid profile in skin tissues of weight controlled mice by exercise, Experimental Biology, Experimental Biology meeting, Washington, DC, April 28-May 2, 2007.
22. Chen J, **Jiang Y**, Dong L, and Wang W, Effect of IGF-1 restoration on TPA-induced protein expression of IGF-1-dependent signaling in the skin samples of weight controlled mice by exercise and calorie restriction, Experimental Biology meeting, Washington, DC, April 28-May 2, 2007.
23. Herndon B, **Jiang Y**, Wasson N, Xie L, Ouyang P, Quinn T, and Wang W, Proliferation/inhibition markers following TPA in skin of exercised, calorie-restricted mice, Experimental Biology, Experimental Biology meeting, Washington, DC, April 28-May 2, 2007.
24. Ouyang P, **Jiang Y**, Radke G, and Wang W, Phospholipid profiling and related protein expression in skin tissues of body weight controlled mice, Experimental Biology meeting, Washington, DC, April 28-May 2, 2007.
25. **Jiang Y**, Kineman B, Przybyszewski J, Birt D, Differential sensitivity of human colorectal cells to resveratrol. Targeting Carcinogenesis-Transduction-Transcription-Tranlation Symposium, Rochester, MN, October 6-7, 2005
26. **Jiang Y**, Przybyszewski J, Diane DF, Resveratrol Inhibits Cell Growth and Induces Cell Cycle Arrest in Human Colon Cancer Cells independently of Tumor Suppressor Genes p53 and APC. American Association of Cancer Research's Conference on Frontiers in Cancer Prevention Research, Seattle, WA, October 16-20, 2004.

27. **Jiang Y**, Au A, Przybyszewski J, Birt DF, Cancer Preventive Effect of Resveratrol in Human Colorectal Cancer Cells. National Data Base Conference, Iowa City, IA, June 24-26, 2004.
28. **Jiang Y**, Wang W, Au AP, Bendickson L, Nilsen-Hamilton M, Birt DF, Dietary Energy Restriction Inhibits TPA-Induced Mmp-3 But Not Uterocalin Transactivation In SENCAR Mice. Proc. Ann. Meeting AACR, Washington, DC, July 11-14, 2003.
29. **Jiang Y.**, Wang, W., Lepont, P.J., Au, A., Bendickson, L., Nilsen-Hamilton,M., and Birt, D.F. Dietary energy restriction inhibits both TPA-induced MMP-3 and UVB-induced uterocalin transactivation in AP-1 luiferase transgenic mice. Signal Transduction Symposium on Tissue Remodeling, Ames, IA (scheduled for September 2001, rescheduled August 2002).

RESEARCH GRANT APPLICATIONS

Funded Projects

1. Title: The impact of stress and resilience on obesity-related complications in adolescence
PI: Thurston, Idia
Funding Source: NIH
Duration: 08/30/18-06/30/21(one year no cost extension)
Amount Funded: \$554,976
Role: Co-I (5%, 5%, 15%)
2. Title: Implementing and Evaluating Outreach, Medication-Assisted Treatment (MAT), Psychosocial Therapies, and Housing Services for Individuals with Opioid Use Disorder in Appalachian Counties in Tennessee
PI: Satish, Kedia
Funding Source: University of Baltimore
Amount Funded: \$357,500
Duration: 12/30/19-08/31/22
Role: Co-I (12.5%)
3. Title: Exploring the role of social determinants of health on sepsis readmissions among survivors of sepsis within the national readmission
PI: Reba Umberger
Funding Source: Communities of Research Scholars (CoRS) program
Amount Funded: \$2,500
Duration: 11/30/21-03/31/22
Role: Co-I

Finished Projects

1. Title: Clinical, immunological, and viral determinants of COVID-19 disease severity in adults and children
PI: Smallwood, Heather
Funding Source: CORNET
Amount Funded: \$25, 000 (UofM total subaward)
Role: PI (Memphis campus)

2. Title: Stability of DNA Methylation from Cord Blood to Guthrie Card
 PI: Jiang, Yu
 Funding Source: University of Memphis
 Amount Funded: \$3,500
 Duration: 04/01/20-06/30/20
 Role: PI

3. Title: Community-Based Outreach and Integrated Medication-Assisted Treatment (MAT) and Psychosocial Intervention for Opioid Use Disorder in Appalachian Counties in Tennessee
 PI: Kedia, Satish
 Funding Source: University of Baltimore
 Amount Funded: \$312,500
 Duration: 12/5/18-11/30/19
 Role: Co-I (12.5%)

4. Title: Antimicrobial Chemicals and Resistance Genes in Indoor Environments
 PI: Jia, Chunrong
 Funding Source: JPB Foundation-Harvard University
 Duration: 05/01/18-4/30/19
 Role: Co-I (10% summer)

5. Title: Epigenetic characterization of pubertal transitions
 PI: Karmaus, Wilfried
 Funding Source: NIAID/NIH
 Amount funded: \$133,448
 Duration: 07/01/17-06/30/19
 Role: Co-I (5%)

6. Title: To Estimate the prevalence of overweight or obese children in Memphis
 PI: Yang, Yong
 Funding Source: Memphis Research Consortium
 Amount Funded: \$22,527
 Duration: 05/01/16-4/30/17
 Role: Co-I (2.5%)

TEACHING EXPERIENCE AND ADVISING

Teaching

Graduate Courses

PUBH 7150/8150 Biostatistics I

PUBH 7152/8152 Biostatistics II

PUBH 7133/8133 Categorical Data Analysis

PUBH 7309/8309 Applied Survival Analysis

PUBH 7455/8455 Clinical Trial II

Guest Lectures

Fall 2015 PUBH 8337/7337 Public Health Nutrition

Title: Power and sample size calculation

Fall 2016 HADM 7209 Quantitative Methods for Health Services

Title: Sampling, power and sample size calculation.

Fall 2017 HADM 7209 Quantitative Methods for Health Services

Title: Introduction to Statistical Analysis

Spring 2018 PUBH 7153 Biostat. in Bioinformatics

Title: Estimation of Cell Proportion Using DNA Methylation Profile

Spring 2018 PUBH 7309 Applied Survival Analysis in Public Health

Title: Survival Analysis: AFT model

Spring 2019 PUBH 7309 Applied Survival Analysis in Public Health

Title: Survival Analysis: AFT model

Spring 2020 PUBH 7153 Biostat. in Bioinformatics

Title: Estimation of Cell Proportion Using DNA Methylation Profile

RECENT MEMBERSHIPS AND PROFESSIONAL SERVICES

Memberships

2001- American Statistical Association (ASA)

Professional Services

2016- Vice president of the ASA Western Tennessee Chapter

Professional Meeting/Seminar Organizations

2017 Organizer of the ASA Western Tennessee Chapter Symposium, Memphis, TN, Dec 2nd, 2017
2016 Organizer of the ASA Western Tennessee Chapter Seminars
2015 Section Chair of the “Advances in R Software” at Joint Statistical Meeting, Seattle, WA, August 8 - 13, 2015.

Service to Division/School/University

University-level Committees

2017 Member, Search Committee for the Dean of the School of Public Health

College-level Committees

2018-2019 Member, Committee on Faculty Affairs and Development

Division-level Committees

2016-present Member, Committee for Graduate Certificate in Health Analytics
2017-present Member, Committee for PhD examination
2017-present Member, Committee for Student Award
2019-present Member, Committee for MS biostatistics admission
2019-present Member, Committee for PhD admission

Guest Editor

Mathematical Methods in Medicine

Journals Reviewed

Statistics in Medicine, Bioinformatics, Briefs in Bioinformatics, Scientific Reports, Journal of Modern Applied Statistical Methods, Statistics and Its Interface, BMC Bioinformatics, Cancer Informatics, Clinical Trial, Food Chemistry, International Journal of Clinical Trials and Case Studies, International Urogynecology Journal, Journal of Cell science and Therapy, Journal of Ecology and Toxicology, Journal of Food Science and Nutrition Journal of Oleo Science, Trials, Bioinformatics

Books Reviewed

Ad-hoc reviewer for CRC

AWARDS

- Member of Mu Sigma Rho honor society, since 2012.
- Outstanding Graduate Student Award, Department of Biostatistics, the University of Kansas Medical Center, 2010-2011.
- Postdoc Travel Award, Terry C. Johnson Center for Basic Cancer Research, Kansas State University, 2009
- Nina M. Browning Memorial Scholarship, Kansas State University, 2006, 2007, 2008
- Stewart Family Research Fund, Kansas State University, 2007
- Travel Award, Terry C. Johnson Center for Basic Cancer Research, Kansas State University, 2007
- Martin Research Award, Iowa State University, 2004
- Leadership Award for Graduate Student, Ocean University of China, 1998

CERTIFICATIONS

- Certified Base Programmer for SAS 9.