

MING WANG, Ph.D.

Associate Professor

Department of Population and Quantitative Health Sciences
Case Western Reserve University School of Medicine
Cleveland, OH, 44105
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RESEARCH INTEREST

My methodology research interest include longitudinal data analysis, survival analysis, Bayesian statistics, missing data, data integration, spatial statistics, risk prediction, model selection and other (bio)statistical and epidemiological aspects related to population health, biomedical and environmental research. My clinical interest focus on (prostate) cancer, kidney disease, cardiovascular disease, neurodegenerative disease (e.g., Alzheimer's and Parkinson's disease) and child abuse. Please refer to <https://case.edu/medicine/pqhs/node/2731> and <https://sites.google.com/view/mingwang-cwru/home> for more details.

EDUCATION

Emory University, Department of Biostatistics & Bioinformatics, Atlanta, GA

Ph.D., Biostatistics

May 2013

- Dissertation Topic: "Spatial and spatial-temporal point process analysis"
- Advisor: Dr. Lance A. Waller (<https://sph.emory.edu/faculty/profile/index.php?FID=345>)

University of Louisville, Department of Biostatistics & Bioinformatics, Louisville, KY

M. S., Biostatistics

Aug 2008

- Thesis Topic: "Clustered longitudinal data analysis"
- Advisors: Dr. Maiying Kong (<https://louisville.edu/sphis/directory/maiying-kong-phd>) and Dr. Somnath Datta (<http://biostat.ufl.edu/profile/datta-somnath/>)

Peking University, Department of Mathematics, Beijing, P.R.China

B. S., Applied Mathematics

Jun 2006

PROFESSIONAL EXPERIENCE

Visiting (tenured-track) Associate Professor, Case Western Reserve University, OH
Aug 2022 - Now

Tenured Associate Professor, Penn State College of Medicine, PA **July 2019 - Aug 2022**

Assistant Professor, Penn State College of Medicine, PA **Aug 2013 - July 2019**

Member, Penn State Cancer Institute, PA **Aug 2016- Now**

Adjunct Scholar, Center for Clinical Epidemiology and Biostatistics (CCEB), University of Pennsylvania Perelman School of Medicine, PA **Aug 2017 - Now**

Research Adjunct Scholar, Massachusetts General Hospital/Harvard Medical School
June 2021 - June 2022 Summer Intern, Eli Lilly and Company, IN **May 2012 - Aug 2012**

- Hypoglycemia event data analysis in diabetes clinical trials; protocols and statistical analysis review as well as training related to drug development in pharmaceutical industry.

Survey Data Analyst, the Center of Disease Control, GA **May 2011 - May 2012**

- Program on SAS callable SUDAAN to estimate children Asthma prevalence of all USA states using the Behavioral Risk Factor Surveillance System.

Research Assistant, Emory University, GA **Aug 2010 - May 2013**

- Modification on robust covariance estimation of Generalized Estimating Equations (GEE); predictive accuracy metrics of survival regressions for cancer endpoints adjust for dependent censoring; consulting projects on biomarkers and cancer genetics data.

PUBLICATIONS

†: Graduate students supervised. *: Corresponding author

Peer-reviewed Published/Accepted Papers:

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| Methodology Papers: |
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- 1 Chen, C.†, Chen, S., Long, Q., Sudeshna, D. and **Wang, M.*** Information borrow-based efficiency improvement with multiple robustness in causal inference. *American Statistician*, 2023. Invited for revision.
- 2 Liang, M.†, Li, Z.†, Li, L., Chinchilli, V.M. and **Wang, M.*** Tackling dynamic prediction of death in patients with recurrent cardiovascular events. *Statistics in Medicine*, 2023. Invited for revision.
- 3 Shen, B. †, Chen, C.† and **Wang, M.*** ELCIC: An R package for model selection via the empirical-likelihood-based information criterion. *Communications for Statistical Applications and Methods*, 2023. Invited for revision.
- 4 Chen, C.†, **Wang, M.** and Chen, S. An efficient data integration scheme to synthesize information from multiple secondary outcomes to the main data analysis. *Biometrics*, 2023. In press.
- 5 Chen, C.†, Shen, B., Zhang, L., Yu, T., **Wang, M.*** and Wu, R*. A cartographic tool to predict Disease Risk-associated pseudo-Dynamic Networks from tissue-specific gene expression. *Bio-Protocol*, 2022+; 13(0): e4583.
- 6 **Wang, M.** and Long, Q. P values and how they are used and misused in Scientific Research. *Cancer Research*, 2022;82(15): 2674-2677.
- 7 Yang, Y., McDonald, A., Wang, X., Pan, Y. and **Wang, M*** Arsenic exposure and prostate cancer risk: a multilevel meta-analysis. *International Journal of Hygiene and Environmental Health*, 2022; 72: 126992. <https://doi.org/10.1016/j.jtemb.2022.126992>.
- 8 Chen, C.†, Yu, T., Shen, B.†, **Wang, M** Synthesizing secondary data into survival analysis to improve estimation efficiency. *Biometrical Journal*, 2022. <https://doi.org/10.1002/bimj.202100326>.
- 9 McDonald, A.*, Gernand, J., Wu, H., Geyer, N. and **Wang, M*** Ambient Air Exposures to Arsenic and Cadmium and Overall and Prostate Cancer-Specific Survival among Prostate Cancer Cases in Pennsylvania, 2004-2014. *Cancer*, 2022;128(9):1832-1839. doi: 10.1002/ncr.34128. (Co-corresponding author)

- 10 Chen, C.[†], Shen, B., Ma, T., **Wang, M.*** and Wu, R.* A statistical framework for recovering dynamic networks from static data with applications to tissue-specific gene network reconstruction from GTEx data. *Bioinformatics*, 2022;btac038. doi: 10.1093/bioinformatics/btac038.
- 11 Shen, B.[†], Chen, C., Ghahramani, N., Chinchilli, V.M., Zhang, L. and **Wang, M.*** Semiparametric marginal methods for longitudinal data adjusting for informative cluster size with non-ignorable zeros. *Biometrical Journal*, 2022. doi: 10.1002/bimj.202100161.
- 12 Chen, C.[†], Jiang, L., Shen, B., **Wang, M.**, Griffin, C.H. Chinchilli, V. A and Wu, R. Computational Atlas of Tissue-specific Regulatory Networks. *Frontiers in Systems Biology*, 2021. doi:10.3389/fsysb.2021.764161
- 13 Shen, B.[†], Chen, C., Liu, D., Datta, S., Ghahramani, N., Chinchilli, V.M. and **Wang, M.*** A joint modeling of longitudinal data with informative cluster size adjusted for zero-inflation and a dependent terminal event. *Statistics in Medicine*, 2021. doi: 10.1002/sim.9081.
- 14 Chen, C.[†], Wu, R., Li, R., Shen, B.[†] and **Wang, M.*** A Robust Consistent Information Criterion for Model Selection Based on Empirical Likelihood. *Statistical Sinica*, 2021. doi:10.5705/ss.202020.0254.
[** *The early version won the 2019 American Statistical Association (ASA) Nonparametric Section's Student Paper Award ***]
- 15 Chen, C.[†], Shen, B., Liu, A., Wu, R. and **Wang, M.*** A Multiple Robust Propensity Score Method for Longitudinal Analysis with Intermittent Missing Data. *Biometrics*, 2020. <https://doi.org/10.1111/biom.13330>.
- 16 **Wang, M.***, McDonald, A., Wasserman, E., Hohl, R., Gyer, N., Lengerich, E., Chinchilli, V., Carroll, R. Zhao, S. and McDonald, A. Spatial Patterns in Survival from Prostate Cancer in Pennsylvania and Its Catchment Area Using Pennsylvania Registry Data, 2004-2014. *BMC Cancer*, 2020 May 6;20(1):394. doi: 10.1186/s12885-020-06902-5.
- 17 McDonald, A., Wasserman, E., Lengerich, E.J., Raman, J., Geyer, N., Hohl, R. and **Wang, M.*** Prostate cancer incidence and aggressiveness in Appalachia versus Non-Appalachia population in Pennsylvania by urban-rural regions, 2004-2014. *Journal of Cancer Epidemiology and Prevention*, 2020. DOI: 10.1158/1055-9965.EPI-19-1232.
- 18 **Wang, M.***, Long, Q., Chen, C. and Zhang, L. Assessing prediction accuracy of survival regression models subject to non-independent censoring. *Statistics in Medicine*, 2020; 39(4):469-480.
- 19 Chen, C., Jiang, L., Fu, G., **Wang, M.**, Wang, Y., Shen, B., Liu, Z. Wang, Z., Hou, W., Berceci, S.A. and Wu, R. An omnidirectional visualization model of personalized gene regulatory networks. *npj Systems Biology and Applications*, 2019; 5:38. <https://doi.org/10.1038/s41540-019-0116-1>.
- 20 Li, Z. [†], Chinchilli, VM. and **Wang, M.*** A time-varying joint frailty-copula model for analyzing recurrent events and a terminal event: an application to the Cardiovascular Health Study. *Journal of the Royal Statistical Society, Series C*, 2019; 69 (1): 151-166.
- 21 **Wang, M.**, Chi, G., Bodovaki, Y., Holder, S., Lengerich, E. and McDonald, A. Temporal and spatial trends and determinants of aggressive prostate cancer among

- Black and White men with prostate cancer. *Journal of Cancer Causes and Control*, 2019. <https://doi.org/10.1007/s10552-019-01249-0>.
- 22 Li, H.[†], Mukherjee, D., Krishnamurthy, V., Millett, C., Ryan, KA., Sauders, E., and **Wang, M.***. Use of ecological momentary assessment to detect variability in mood, sleep and stress in bipolar disorder. *BMC Medical Research Methodology*, 2019. DOI: 10.1186/s13104-019-4834-7.
- 23 Ye, M., Jiang, L., Chen, C.[†], Zhu, X., **Wang, M.** and Wu, R. np 2QTL: Networking phenotypic plasticity QTLs across heterogeneous environments. *The Plant Journal*, 2019; 99(4):796-806.
- 24 Chen, C.[†], Xue, Y., Zhang, L., Shen, B.[†] and **Wang, M.*** Empirical-likelihood-based criteria for model selection on weighted generalized estimating equation for longitudinal data with dropout missingness. *Biometrics*, 2019. <https://doi.org/10.1111/biom.13060>.
 [** *The early version won the 2018 International Chinese Statistical Association Applied Statistics Symposiums student paper award* **]
- 25 Li, Y., **Wang, M.** and Cheung K. Treatment Prioritization in Phase I Umbrella Protocol for Targeted Cancer Therapies. *Journal of the Royal Statistical Society, Series C*, 2018. DOI: 10.1111/rssc.12324.
- 26 Li, Z. [†], Chinchilli, V.M. and **Wang, M.*** A Bayesian Joint Frailty-copula Approach for Modeling of Recurrent Events and a Terminal Event. *Biometrical Journal*, 2018. DOI: 10.1002/bimj.201700326. PMID: 30479030.
- 27 Xu, C. [†], Li, Z. [†], Xue, Y., Zhang, L. and **Wang, M.*** An R package for model fitting, model selection and the simulation for longitudinal data with dropout missingness. *Communications in statistics- simulation and computation*, 2018. DOI: 10.1080/03610918.2018.1468457.
- 28 Xu, C.[†], Chinchilli, V.M. and **Wang, M.*** Joint modeling of recurrent events and a terminal event adjusted for zero-inflation and a matched design. *Statistics in Medicine*, 2018 Apr 22. DOI: 10.1002/sim.7682. PMID: 29682772.
- 29 **Wang, M.***, Matthews, S.A., Iskandarani, K.[†], Li, Y., Chinchilli, V.M. and Zhang, L. Spatial-temporal analysis of prostate cancer incidence in Pennsylvania for years 2000-2011. *Geospatial Health*, 2017; 12(2). DOI: 10.4081/gh.2017.611. PMID: 29239571.
- 30 **Wang, M.***, Li, Z.[†], Lee, EY., Zhang, L., Sterling N., Wagner, D., Eslinger, P., Lewis, M., Du, G., and Huang, X. Predicting multi-domain Parkinson's disease progression based on a multivariate generalized linear mixed model. *BMC Medical Research Methodology*, 2017; 17(1):147. PMID: 28946857.
- 31 **Wang, M.***, Li, Z.[†] and Reeves, B. RE: Receiver Operating Characteristic Curve Inference from a Sample with a Limit of Detection. *American Journal of Epidemiology*, 2016 10 01; 184(7):552-553. DOI: 10.1093/aje/kww090. PMID: 27620450.
- 32 **Wang, M.***, Kong, L., Li, Z.[†] and Zhang, L. RE: Covariance estimators for Generalized Estimating Equations (GEE) in longitudinal analysis with small samples. *Statistics in Medicine*, 2016; 35(28): 5318-5319. DOI: 10.1002/sim.7131.
- 33 **Wang, M.*** and Long, Q. Addressing issues associated with evaluating prediction models for survival endpoints based on concordant statistic. *Biometrics*, 2016 Sep; 72(3):897-906. PMID: 26756274; PMCID: PMC4940324.

- 34 Zhang, L.[†], **Wang, M.**[†], Sterling, N., Lee, E., Du, G., Lewis, M. and Huang, X. Cortical thickness thinning and cognitive impairment in Parkinson's Disease without dementia. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2016; 15(2):570-580. DOI: 10.1109/TCBB.2015.2465951. PMID: 29610105. [†]: Co-first author.
- 35 **Wang, M.**^{*}, Kong, L., Li, Z. and Zhang, L. Covariance estimators for Generalized Estimating Equations (GEE) in longitudinal analysis with small samples. *Statistics in Medicine*, 2016 May 10; 35(10):1706-21. DOI: 10.1002/sim.6817. PMID: 26585756.
- 36 Peng, L., Manatunga, A.K., **Wang, M.**, Guo, Y. and Rahman, A.F. A general approach to categorizing a continuous scale according to an ordinal outcome. *Journal of Statistical Planning and Inference*, 2016 May 1; 172:23-25. DOI:10.1016/j.jspi.2015.12.006. PMID: 26941475.
- 37 **Wang, M.**^{*}, Luo, J., Fu, H., and Qu, Y. Piece-wise negative binomial regression in analyzing recurrent hypoglycemic events with missing observations. *Journal of Biometrics and Biostatistics*, 2014; 5: 195. DOI: 10.4172/2155-6180.1000195.
- 38 **Wang, M.**^{*} Generalized Estimating Equations in longitudinal data analysis: a review and recent development. *Advances in Statistics*, 2014; DOI:10.1155/2014/303728.
- 39 **Wang, M.**^{*} and Zhang, L. A Bayesian quantile regression analysis of potential risk factors for violent crimes in USA. *Open Journal of Statistics*, 2012; 2(5), 526-533. DOI: 10.4236/ojs.2012.25068.
- 40 **Wang, M.**^{*}, Flanders, W.D., Bostick, R. and Long, Q. A conditional likelihood approach for analysis of biomarkers measured with batch specific errors. *Statistics in Medicine*, 2012;31(29):3896-906. DOI: 10.1002/sim.5473.
[** *Winner of the 2012 ASA Statistics in Epidemiology Young Investigator Award* **]
- 41 **Wang, M.**^{*} and Long, Q. Modified robust covariance estimator for generalized estimating equations with improved small-sample properties. *Statistics in Medicine*, 2011;11,1278-1291. PMID: 21538453.
- 42 **Wang, M.**, Kong, M. and Datta, S. Inference for marginal linear models with clustered longitudinal data with potentially informative cluster sizes. *Statistical Methods in Medical Research*, 2010; 20: 347-367. DOI:10.1177/0962280209347043. PMID: 20223781.
- 43 **Wang, M.**^{*} "Clustered longitudinal data analysis", *LAP Lambert Academic Publishing*, 2010. ISBN: 3838311132, ISBN-13: 9783838311135.

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| Collaborative Papers: |
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- 44 Ssentongo, P., Fronterre, C., Ericson, J., Murray-Kolb, L., **Wang, M.**, Al-Shaar, L., Greybush, S., Greatrex, H., Diggle, P., Chinchilli, V.M. and Schiff, S.J. Association of climate change and child growth failure. *JAMA Network*, 2023. Accepted and to appear.
- 45 Potiaumpai, M., Schleicher, E., **Wang, M.**, Campbell, K. Sturgeon, K. and Schmitz, K. Exercise during chemotherapy: friend or foe? *Cancer Medicine*, 2023. Accepted and to appear.

- 46 Gordon, B.R., Abdulla, S., Doerksen, S.E., Kanski, B., Lorenzo, A., Qui, L., Truica, C., Vasekar, M., **Wang, M.**, Winkels, R. and Schmitz, K.H. Addressing Metastatic Individuals Everyday: Protocol for Nurse AMIE for Alexa Echo Show Trial among Metastatic Breast Cancer Patients. *Contemporary Clinical Trials*, 2023. <https://doi.org/10.1016/j.conctc.2023.101058>.
- 47 Isaac, R., Greeley, C., Marinello, M., Herman, B.E., Frazier, T.N., Carroll, C.L., Armijo-Garcia, V., Musick, M., Weeks, K., Haney, S.B., **Wang, M.**, Hymel, K.P., on behalf of the Pediatric Brain Injury Research Network (PediBIRN) Investigators (2023) Skeletal survey yields in low vs. high risk pediatric patients with skull fractures. Invited revision by *Child Abuse & Neglect*.
- 48 Hart, PA., Papachristou, GI., Park, WG., Dyer, AM., Chinchilli, V., . . . , **Wang, M.**, et al. Rationale and Design for the Diabetes Related to Acute Pancreatitis and its Mechanisms (DREAM) Study: a Prospective Cohort Study from the Type 1 Diabetes in Acute Pancreatitis Consortium (T1DAPC). *Pancreas*, 2022. DOI: 10.1097/MPA.0000000000002079.
- 49 Katelyn, E., Hymel, K.P., Armijo-Garcia, V., Musick, M., Weeks, K., Haney, S.B., Marinello, M., Herman, B.E., Frazier, T.N., Carroll, C.L., **Wang, M.**, Liang, M., on behalf of the Pediatric Brain Injury Research Network (PediBIRN) Investigators. Head Injury Depth Helps Predict Abuse: Expanding the Centripetal Theory of Traumatic Brain Injury. *Pediatrics*, 2022+. Accepted and to appear.
- 50 Wilson, R.T, Safford, S., Ostrom, Q.T., **Wang, M.**, McDonald, A.C., Salzberg, A.C., Barnholtz-Sloan, J.S., Richie, J.P. and Wallace, R.B. Genetic factors associated with absolute and relative plasma concentrations of calcitriol. *Cancer Epidemiology, Biomarker and Prevention*, 2022+. Accepted and to appear.
- 51 Lehrer, E.J., **Wang, M.**, Sun, Y. and Zaorsky, N.G. An introduction to meta-analysis in cancer research. *International Journal of Radiation Oncology, Biology, Physics*, 2022+; 115(3): 564-571. DOI:<https://doi.org/10.1016/j.ijrobp.2022.07.1831>.
- 52 Gosalia, J., Montgomery, P.S., Zhang, Wilson S., Pomilla, W.A., **Wang, M.**, Liang, M., Csiszar, A., Ungvari, Z., Yabluchanskiy, A., Proctor, D.N. and Gardner, A. Increased pulse wave velocity is related to impaired working memory and executive function in older adults with metabolic syndrome. *GeroScience*, 2022. DOI: 10.1007/s11357-022-00640-1.
- 53 Gardner, A., Montgomery, P.S., Zhang, S., Pomilla, W.A., **Wang, M.**, Shen, B. and Liang, M. Diabetes is negatively associated with meeting physical activity time-intensity guidelines in patients with claudication. *Journal of Cardiopulmonary Rehabilitation and Prevention*, 2022. DOI: 10.1249/01.mss.0000875880.02906.31.
- 54 Ryckman, J.M., Thomas, T., Siva, S., Spratt, D.E., **Wang, M.**, Wu, X., Chapin, B., Lehrer, E.J. and Zaorsky, N. Local Treatment of the Primary Tumor for Patients with Metastatic Cancer (PRIME-TX): A Meta-analysis. *International Journal of Radiation, Oncology, Biology and Physics*, 2022; S0360-3016(22)00710-6. doi: 10.1016/j.ijrobp.2022.06.095.
- 55 Hymel, K., Boos, S.C., Armijo-Garcia, V., Musick, M., Weeks, K., Haney, S.B., Marinello, M., Herman, B.E., Frazier, T.N., Carroll, C. L. and **Wang, M.**, or the Pediatric Brain Injury Research Network (PediBIRN) Investigators. An analysis of physicians' diagnostic reasoning regarding pediatric abusive head trauma. *Child Abuse & Neglect*, 2022;129:105666. doi: 10.1016/j.chiabu.2022.105666.

- 56 Tchelebi, L., Shen, B., **Wang, M.**, Boffa, D., Park, H., Segel, J. and Zaorsky, N. Non-adherence to guideline concordant paradigms in the treatment of cancer. *Advances in Radiation Oncology*, 2022; 7 (5):100938.
- 57 Labe, S., Wang, X., Lehrer, E., Kishan, A., Spratt, D., Lin, C., Morgans, A., Ponsky, L., Garcia, J., Garrett, S., **Wang, M.** and Zaorsky, N.G. (2022) Identification and validation of the prognostic impact of metastatic prostate cancer phenotypes. *Clinical Genitourinary Cancer*, 2022. <https://doi.org/10.1016/j.clgc.2022.02.008>.
- 58 Shenk, C., Allen, B., Dreschel, N.E., **Wang, M.**, Felt, J.M., Desir, M.P., Bucher, A. and Chen, M.J. Respiratory Sinus Arrhythmia Change during Trauma-Focused Cognitive-Behavioral Therapy: Results from a Pilot Randomized Controlled Trial. *Journal of Traumatic Stress*, 2022; 1–13. doi: 10.1007/s10802-022-00946-w.
- 59 Truica, C.I., Schmitz, K., Doerksen, S., Calo, W., Stout, N.L. **Wang, M.**, Lengerich, E., Moss, J. and Vanness, D.J. Nurse AMIE: Addressing symptoms in rural patients with advanced cancer. *Journal of Clinical Oncology*, 2022; 40, TPS12148. DOI: 10.1200/JCO.2022.40.16_suppl.TPS12148
- 60 Sznajder, K., Kjerulff, K., **Wang, M.**, Hwang, W., Ramirez, S. and Gandhi, C. Willingness to received COVID-19 vaccine among pregnant women from May-December in United States. *Preventive Medicine Reports*, 2022; 26: 101713. doi: 10.1016/j.pmedr.2022.101713.
- 61 Agha, A., Wang, X.[†], **Wang, M.**, Lehrer, E.J., Horn, S.R., Rosenberg, J.C., Trifiletti, D.M., Diaz, R., Louie, A. and Zaorsky, N.G. Long-term risk of death from heart disease among breast cancer patients. *Frontiers in Cardiovascular Medicine*, 2022;9: 784409. doi: 10.3389/fcvm.2022.784409.
- 62 Hymel, K., Marinello, M., Herman, B.E., Frazier, T.N. Carroll, C.L., Armijo-Garcia, V., Musick, M., Weeks, K. Haney, S.B., and **Wang, M.**, or the Pediatric Brain Injury Research Network (PediBIRN) Investigators. Screening for pediatric abusive head trauma: Are three variables enough? *Child Abuse & Neglect*, 2022;125:105518. doi: 10.1016/j.chiabu.2022.105518.
- 63 Chinniah, S., Chiam, M., Liang, M.[†], Trifiletti, D.M., Spratt, D.E., Prasad, V.K., **Wang, M.** and Zaorsky, N.G. Unknown Causes of Death in Cancer Patients. *Cancer Epidemiology*, 2022. <http://dx.doi.org/10.2139/ssrn.3988669>.
- 64 Even, K., Hymel, K., Armijo-Garcia, V., Musick, M., Weeks, K. Haney, S.B., Marinello, M., Herman, B., Frazier, T., Carroll, C. and **Wang, M.**, or the Pediatric Brain Injury Research Network (PediBIRN) Investigators. The association of subcortical brain injury and abusive head trauma. *Child Abuse Neglect*, 2022. <https://doi.org/10.1016/j.chiabu.2022.105917>.
- 65 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B. Minimal clinically important differences in daily step counts following supervised and home-based exercise in peripheral artery disease. *Vascular Medicine*, 2022;27(2):142-149. doi: 10.1177/1358863X211072913.
- 66 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B., Afaq, A. and Khurana, A. Light and moderate intensity physical activity are associated with better ambulation, quality of life, and vascular measurements in patients with claudication. *Journal of Vascular Surgery*, 2022;75(5):1739-1749. doi: 10.1016/j.jvs.2021.12.071.

- 67 Ma, T., Kishan, A.U., Wu, X.[†], **Wang, M.** and Zaorsky, N. Working Towards Refining the Definition of Biochemical Failure in the Era of Stereotactic Body Radiation Therapy for Prostate Cancer: Phoenix Definition and Beyond. *Radiotherapy and Oncology*, 2022;166:1-7. doi: 10.1016/j.radonc.2021.11.005.
- 68 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B.[†], Zhang, S. and Pomila, W.A. Association Between Meeting Physical Activity Time-Intensity Guidelines with Ambulation, Quality of Life, and Inflammation in Claudication. *The J Cardiopulmonary Rehabil Prev*, 2022. doi: 10.1097/HCR.0000000000000686.
- 69 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B.[†] Association between daily steps at moderate cadence and vascular outcomes in patients with claudication. *Journal of Cardiopulmonary Rehabilitation and Prevention*, 2022. doi: 10.1097/HCR.0000000000000606.
- 70 Boos, S.C., **Wang, M.**, Karstc, W.A. and Hymel K.P. Cluster Analysis of Traumatic Head Injury in Young Children: Relationship to Diagnosis of Abuse. *Pediatrics*, 2022;149(1):e2021051742. doi: 10.1542/peds.2021-051742.
- 71 Zaorsky, N.G., Wang, X.[†], Lehrer, E., Zhang, Y., Degraff, D., Walter, V., Chinchilli, V.M. and **Wang, M.** Pan-cancer analysis of prognostic metastatic phenotypes. *International Journal of Cancer*, 2022 Jan 1;150(1):132-141. doi: 10.1002/ijc.33744.
- 72 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B., Casanegra, A.I., Silva-Palacios, F., Zhang, S., Pomilla, W., Esponda, O.L. and Kuroki, M. Daily step counts in participants with and without symptomatic Peripheral artery disease. *Journal of Vascular Surgery*, 2021 May 1;41(3):182-187. doi: 10.1097/HCR.0000000000000554.
- 73 Moss, J.L., **Wang, M.**, Liang, M.[†], Kameni, A., Stoltzfus, K. and Onega, T. Geographic characteristics associated with incidence, late-stage incidence, and mortality from screenable cancers. *Cancer Epidemiology*, 2021;75:102033. doi: 10.1016/j.canep.2021.102033.
- 74 Lehrer, E.J., Stoltzfus, K.C., Jones, B.M., Gusani, N.J., Walter, V., **Wang, M.**, Trifiletti, D.M., Siva, S., Louie, A.V., and Zaorsky N.G. Trends in diagnosis and treatment of metastatic cancer in the United States. *The American Journal of Clinical Oncology*, 2021;44(11):572-579. doi: 10.1097/COC.0000000000000866.
- 75 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B.[†], Casanegra, A.I., Silva-Palacios, F., Ungvari, Z., Yabluchanskiy, A., Csiszar, A. and Waldsteine, S.R. Cognitive Decrement in Older Adults with Symptomatic Peripheral Artery Disease. *GeroScience*, 2021;43(5):2455-2465. doi: 10.1007/s11357-021-00437-8.
- 76 Hymel, K., Fingarson, A.K., Pierce, M.C., Kaczor, K., Makoroff, K.L. and **Wang, M.** External validation of the PediBIRN screening tool for abusive head trauma in pediatric emergency department settings. *Pediatric Emergency Care*, 2021;38(6):269-272. doi: 10.1097/PEC.0000000000002670.
- 77 Singh, R., Lehrer, E., **Wang, M.**, Perlow, H., Zaorsky, N., Trifiletti, D., Bovi, J., Navarria, P., Scoccianti, S., Gondi, V., Brown, P. and Palmer, J. Dose Escalated Radiotherapy for Glioblastoma Multiforme: An International Systematic Review and Meta-Analysis of 22 trials. *The International Journal of Radiation Oncology, Biology, Physics*, 2021 Oct 1;111(2):371-384. doi: 10.1016/j.ijrobp.2021.05.001.
- 78 Abedi, V., Avula, V., Razavi, SM., Shreya, B., Chaudhary, D., Shahjouei, S., **Wang, M.**, Li, J., Zand, R. Predicting short and long-Term mortality after acute ischemic

- stroke using electronic health record data. *Journal of the Neurological Sciences*, 2021 Aug 15; 427:117560. doi: 10.1016/j.jns.2021.117560.
- 79 Ladwig, M.A., Sciamanna, C.N., Rutt, K., Blaker, J., Kearcher, K., Auer, B.J., Rovniak, L.S., Conroy, D.E., Gottschall, J.S., Silvis, M.L., Smyth, J.M., and **Wang, M.** Adult outdoor group sport play during a pandemic: Feasibility, acceptability, and program adherence results from a study of modifications to mitigate COVID-19 risk. *Preventive Medicine Reports*, 2021 Sep;23:101476. doi: 10.1016/j.pmedr.2021.101476.
- 80 Zaorsky, N.G., Wang, X.[†], Lehrer, E., Tchelebi, L., Yeich, A., Prasad, V., Chinchilli, V.M. and **Wang, M.** Use of retrospective data for comparative effectiveness research yields mixed outcomes and should be avoided. *International Journal of Cancer*, 2021 Oct 1;111(3):e357. <https://doi.org/10.1016/j.ijrobp.2021.07.1066>.
- 81 Cuffee, Y., **Wang, M.**, Geyer, N.R., Saxena, S., Akuley, S., Jones, L. and Wilson, R.T. Vitamin D and Family History of Hypertension in Relation to Hypertension Status among College Students. *Journal of Human Hypertension*, 2021. <https://doi.org/10.1038/s41371-021-00577-6>.
- 82 Tchelebi, L., Batchelder, E., **Wang, M.**, Lehrer, E.J., Drabick, J., Sharma, N., Mach-tay, M., Trifiletti, D.M. and Zaorsky, N. Radiotherapy and receptor tyrosine kinase inhibition for solid cancers (ROCKIT): a meta-analysis of 13 studies. *Journal of the National Cancer Institute*, 2021 Oct 1;111(2):371-384. doi: 10.1016/j.ijrobp.2021.05.001.
- 83 Hymel, K.P., Armijo-Garcia, V., Musick, M., Marinello, M., Herman, B., Weeks, K., Haney, S., Frazier, T., Carroll, C., Krissoon, N., Issac, R., Foster, R., Capbell, K., Tieves, K., Livingston, N., Bucher, A., Woosley, m., Escamilla-Padilla, D., Jaimon, N., Kustka, L., **Wang, M.**, Chinchilli, V.M., Dias, M.S., Noll, J. and Pediatric Brain Injury Research Network (PediBIRN) Investigators. Cluster randomized trial of a clinical decision rule to reduce missed abusive head trauma in pediatric intensive care settings. *Journal of Pediatrics*, 2021, Mar 31;S0022-3476(21)00304-8. doi: 10.1016/j.jpeds.2021.03.055.
- 84 Tchelebi, L.T., Shen, B.[†], **Wang, M.**, Gusani, N.J., Walter, V., Verma, V. and Zaorsky, N.G. Impact of radiation therapy facility volume on survival in patients with cancer. *Cancer*, 2021 Aug 16. doi: 10.1002/cncr.33777.
- 85 Ssentongo, P., Hehnly, C., Birungi, P., Roach, M.A., Spady, J., Fronterre, C., **Wang, M.**, Murray-Kolb, L.E., Al-Shaar, L., Chinchilli, V.M., Broach, J.R., Ericson, J.E., Schiff, S.J. Congenital cytomegalovirus infection epidemiologic factors and burden in countries with universal screening: a systematic review and meta-analysis. *JAMA Network Open*, 2021;4(8):e2120736. doi:10.1001/jamanetworkopen.2021.20736.
- 86 Ladwig, M.A., Sciamanna, C.N., Rovniak, L.S., Conroy, D., Auer, B.J., Gottschall, J., Silvis, M., Smyth, J. and **Wang, M.** Comparative effectiveness of an adult social physical play versus traditional group exercise program for adherence and fitness: Protocol for a randomized-controlled trial. *Journal of Contemporary Clinical Trials Communications*, 2021 Feb 6;21:100736. doi: 10.1016/j.conctc.2021.100736.
- 87 Wu, H.[†], **Wang, M.**, Raman, J.D. and McDonal, A.C. Association between serum prostate-specific antigen and urinary arsenic, blood cadmium, blood lead, and blood mercury levels in a population-based cohort of men in the United States. *Plos One*, 2021 Apr 23;16(4):e0250744. doi: 10.1371/journal.pone.0250744.

- 88 Ha, G.L., Lehrer, E.J., **Wang, M.**, Holliday, E., Jagsi, R. and Zaorsky, N.G. Sex differences in academic productivity across academic ranks and specialties in academic medicine: a systematic review and meta-analysis. *JAMA Network Open*, 2021 Jun; 4(6): e2112404. doi: 10.1001/jamanetworkopen.2021.12404.
- 89 Saunders, E., Mukherjee, D., Myers, T., Wasserman, E., MacIntosh, B., Hameed, A., Krishnamurthy, V., Rapoport, S., Ramsden, C. and **Wang, M.** An Adjunctive Nutritional Intervention for Bipolar Disorder: a randomized, controlled, parallel-design double-blinded clinical trial of a low omega-6 plus high omega-3 nutrition intervention. *Bipolar Disorders*, 2021 Jul 4. doi: 10.1111/bdi.13112.
- 90 Allen, B., Shenk, C., Dreschel, N., **Wang, M.**, Bucher, A., Desir, M., Chen, M. and Grabowski, S. Integrating Animal-Assisted Therapy into TF-CBT for Abused Youth with PTSD: A Randomized Controlled Feasibility Trial. *Child Maltreat*, 2021 Jan 27;1077559520988790. doi: 10.1177/1077559520988790.
- 91 Dias, M.S., **Wang, M.**, Rizk, E., Bowman, R., Partington, M.D., Blount, J.P., Rocque, B.G., Hopson, B., Ettinger, D. and Neufeld, J. Tethered Spinal Cord among People with Myelomeningocele: An Analysis of the National Spina Bifida Patient Registry. *The Journal of Neurosurgery: Pediatrics*, 2021;1-7. doi: 10.3171/2020.12.PEDS20868.
- 92 Zaorsky, N.G., Liang, M.[†], Patel, R., Lin, C., Tchelebi, L.T., Walter, V. and **Wang, M.** Survival after palliative radiation therapy for cancer: the METSSS model. *Radiotherapy & Oncology*, 2021; 158:104-111.
- 93 Lehrer, E.J., Singh, R., **Wang, M.**, Chinchilli, V.M., Trifiletti, D.M., Ost, P., Siva, S., Meng, M., Tchelebi, L. and Zaorsky, N.G. Safety and survival rates associated with ablative stereotactic radiotherapy for patients with oligometastatic cancer. *JAMA Oncology*, 2021 Jan 1;7(1):92-106. doi: 10.1001/jamaoncol.2020.6146.
- 94 Dias, M.S., Cappos, K.M., Rottmund, C.M., Reed, M.E., Smith, K., deGuehery, K. and **Wang, M.** Preventing Abusive Head Trauma: Can Educating Parents Reduce the Incidence? *Pediatric Radiology Journal*, 2021 May;51(6):1093-1096. doi: 10.1007/s00247-020-04819-6.
- 95 Tchelebi, L.T., Shen, B.[†], **Wang, M.**, Gusani, N.J., Walter, V., Verma, V. and Zaorsky, N.G. Impact of facility surgical volume on survival in patients with cancer. *Journal of the National Comprehensive Cancer Network*, 2021 Feb 9;1-9.
- 96 Hartman, H.E., Sun, Y., Devasia, T., Chase, E., Jairath, N., Dess, R.T., Jackson, W.C., Morris, E., Li, P., Hochstedler, K., Abbott, M., Kidwell, K., Walter, V., **Wang, M.**, Wang, X.[†], Zaorsky, N.G., Schipper, M.J. and Spratt, D. E. Integrated Survival Estimates for Cancer Treatment Delay Among Adults With Cancer During the COVID-19 Pandemic. *The JAMA Oncology*, 2020 Dec 1;6(12):1881-1889. doi: 10.1001/jamaoncol.2020.5403.
- 97 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B.[†] Association between meeting daily step count recommendations with ambulatory function and quality of life in patients with claudication. *Journal of Vascular Surgery*, 2020. <https://doi.org/10.1016/j.jvs.2020.10.073>.
- 98 Geyer, N., Moss, J., **Wang, M.** and Lengerich, E.J. Spatial Relationship between Ambulatory Surgery Centers and Colorectal Cancer Mortality in Pennsylvania, United States. *Public Health*, 2020; 189: 126-128. <https://doi.org/10.1016/j.puhe.2020.09.018>.

- 99 McKeone, D.J., Mathewson, M., Dalal, P.G., Spear, D., Umstead, T.M., Hicks, S.D., Chronos, Z.C., **Wang, M.**, Thomas, N.J and Halstead, E.S. Cytokine panels and pediatric acute respiratory disease syndrome severity: a translational investigation. *Pediatric Critical Care Medicine*, 2020. doi: 10.1097/PCC.0000000000002531.
- 100 Kuroki, M., Montgomery, P.S., **Wang, M.**, Shen, B.[†], Kim, D.J. and Gardner, A. Patients with Peripheral Arterial Disease Patients with Exaggerated Pressor Response have Greater Ambulatory Dysfunction than Patients with Lower Pressor Response. *Angiology*, 2020 Sep;71(8):747-753. doi: 10.1177/0003319720925970.
- 101 Ssentongo, P., Ba, D.M., Ssentongo, A.E., Ericson, J.E., **Wang, M.**, Liao, D. and Chinchilli, V.M. Associations of Malaria, HIV, and Coinfection, with Anemia in Pregnancy in sub-Saharan Africa: A Population-based Cross-sectional Study. *BMC Pregnancy and Childbirth*, 2020; 20: 379. doi: 10.1186/s12884-020-03064-x.
- 102 Bezinover, D., Nahouraii, L., Sviatchenko, A., **Wang, M.**, Kimatian, S., Saner, F.H. and Stine, J.G. Hyponatremia is Associated with Increased Mortality in Children on the Waiting list for Liver Transplantation. *Transplantation Direct*, 2020; 6(10):e604. doi: 10.1097/TXD.0000000000001050.
- 103 Bluethmann, SM., **Wang, M.**, Wasserman, E., Chen, C.[†], Zaorsky, N., Hohl, R. and McDonald, A. Prostate Cancer Survivorship: The Impact of Older Age at Diagnosis, Disease Aggressiveness and Behavioral Risk Factors on Treatment and Mortality. *Cancer Medicine*, 2020; 9(10), 3623-3633. <https://doi.org/10.1002/cam4.3003>.
- 104 Kjerulff, K.H., Paul, I.M., Weisman, C.S., Hillemeier, M., **Wang, M.**, Legro, R. and Repke, J. Association between Cesarean Delivery at First Childbirth and Subsequent Subfertility. *JAMA Open Access*, 2020 Apr; 3(4): e203076.
- 105 Hymel, K., Lee, G., Boos, S., Karst, W., Sirotiak, A., Haney, S., Lakey, A. and **Wang, M.** Estimating the diagnostic utility of historical red flags of abusive head trauma. *Pediatrics*, 2020 Mar; 218: 178-183.e2. doi: 10.1016/j.jpeds.2019.11.010.
- 106 Gardner, A., Montgomery, P.S., **Wang, M.**, Shen, B.[†] Association between calf muscle oxygen saturation with ambulatory function and quality of life in symptomatic patients with peripheral artery disease. *Journal of Vascular Surgery*, 2020 Aug;72(2):632-642.
- 107 Gaballa, D., Bezinover, D., Kadry, Z., Eyster, E., **Wang, M.**, Northup, P. and Stine, J. Development of a model to predict Portal Vein Thrombosis in liver transplant candidates: The Portal Vein Thrombosis risk index. *Liver Transplantation*, 2019. <https://doi.org/10.1002/lt.25630>.
- 108 Shahjouei, S., Tsivgoulis, G., Goyal, N., Sadighi, A., Seiffge, D., Mowla, A., **Wang, M.** and Zand, R. Safety of Intravenous Thrombolysis Among Patients Taking Direct Oral Anticoagulants: A Systematic Review and Meta-analysis. *Stroke*, 2019. <https://doi.org/10.1161/STROKEAHA.119.026426>.
- 109 White, M.C., Miller, A.J., Loloi, J., Bingaman, S.S., Shen, B.[†], **Wang, M.**, Silberman, Y., Lindsey, S.H. and Arnold, A.C. Sex differences in response to Chronic Angiotensin-(1-7) treatment in obese mice. *Biology of Sex Differences*, 2019; 10 (1): 36. DOI: 10.1186/s13293-019-0251-9.
- 110 Bezinover, D., Navabi, S., **Wang, M.**, Li, Z.[†], William, M. and Stine, J. Hyponatremia is Protective Against the Development of Portal Vein Thrombosis in Patients

- Undergoing Liver Transplantation. *Transplantation Proceedings*, 2019; 51(6): 1880-1886. <https://doi.org/10.1016/j.transproceed.2019.05.014>.
- 111 Zhao, C., Jia, B., **Wang, M.**, Schell, T.D., Claxton, D.F., Ehmann, W.C., Rybka, W.B., Mineishi, S., Naik, S., Songdej, N., Sivik, J.M., Hohl, R.J. Zeng, H. and Zheng, H. Multi-dimensional analysis identifies an immune signature predicting response to decitabine treatment in elderly patients with AML. *British Journal of Hematology*, 2019. <https://doi.org/10.1111/bjh.16228>.
- 112 Gardner, A., Montgomery, P.S., **Wang, M.**, Chen, C.[†], Kuroki, M. and Kim, D.J. Vascular inflammation and calf muscle oxygen saturation are associated with exercise pressor response in symptomatic peripheral artery disease. *Angiology*, 2019; 70 (3): 220-228.
- 113 Jia, B., Zhao, C., Rakszawski, K., Claxton, D.F., Ehmann, W.C., Rybka, W.B., Mineishi, S., **Wang, M.**, Shike, H., Bayerl, M., Sivik, J., Schell, T.D., Drabick, J., Hohl, R.J. and Zheng, H. Eomes+T-betlow CD8 T cells are functionally impaired and associate with poor clinical outcome in patients with Acute myeloid Leukemia (AML). *Cancer Research*, 2019. doi: 10.1158/0008-5472.CAN-18-3107. PMID: 30709927.
- 114 Zhang, L., Chen, Y., Zhang, L., **Wang, M.**, Chang, D., Wan, W., Zhang, B., Zhang, W. and Chen, X. HBV induces different responses of the hepatocytes and oval cells during HBV-related hepatic cirrhosis. *Cancer Letters*, 2019; 443: 47-55.
- 115 Hymel, K.P., **Wang, M.**, Chinchilli, V.M., Dias, M.S., Herman, B.E., Carroll, C.L., Haney, S.B., Willson, D.F., Issac, R. and the Pediatric Brain Injury Research Network Investigators. Estimating the Probability of Abusive Head Trauma Before and After Abuse Evaluation. *Child Abuse and Neglect*, 2018; 88:266-274. PMID: 30551063.
- 116 Gardner, A., Montgomery, P.S., **Wang, M.**, Chen, C.[†], Kuroki, M. and Kim, D.J. Greater exercise pressor response is associated with impaired claudication outcomes in symptomatic peripheral artery disease. *Angiology*, 2018 Aug 06: 3319718790876. PMID: 30081644.
- 117 Bezinover, D., **Wang, M.**, Deacutis, M., Dalal, P., Moore, R.P., Reeder, E., Hollenbeak, C., Saner, F., Riley, T., Janicki, P. Perioperative Thrombotic Complications Associated with Pediatric Liver Transplantation: A UNOS Database Evaluation. *HPB*, 2018. <https://doi.org/10.1016/j.hpb.2018.08.014>.
- 118 Lokhandwala, P., Shike, H., **Wang, M.**, Domen, R.E. and George, M.R. Optimizing donor scheduling: an effective approach to increasing apheresis platelet collections. *Plus One*, 2018; 13(5):e0198062. PMID: 29847596.
- 119 Hymel, K.P., Laskey, A.L., Crowell, K.R., **Wang, M.**, Armijo-Garcia, V., Frazier, T.N., Tieves, K.S., Foster, R., Weeks, K. and the Pediatric Brain Injury Research Network Investigators. Racial/Ethnic Disparities and Bias in the Evaluation and Reporting of Abusive Head Trauma. *Journal of Pediatrics*, 2018 Mar 29. DOI: 10.1016/j.jpeds.2018.01.048. PMID: 29606408.
- 120 Gardner, A., Montgomery, P.S., **Wang, M.** and Xu, C.[†] Predictors of health-related quality of live in patients with symptomatic Peripheral Artery Disease. *Journal of Vascular Surgery*, 2018. DOI: 10.1016/j.jvs.2017.12.074. PMID: 29615353.

- 121 Gardner, A., Montgomery, P.S., **Wang, M.** Clinically meaningful changes in treadmill, 6-minute walk, and patient-based outcomes following supervised and home-based exercise in peripheral artery disease. *Vascular Medicine*, 2018 Apr 01; 1358863X18762599. PMID: 29671381.
- 122 Park, K., Trout, L.C., Xu, C.[†], **Wang, M.**, Tamburro, R.F. and Halstead, E.S. No Requirement for Loading Doses or Targeted Theophylline Levels for Diuretic Effect of Aminophylline in Critically Ill Children. *Pediatric Critical Care Medicine*, 2018; 19(8): e425-e432. DOI: 10.1097/PCC.0000000000001608.
- 123 Sciamanna, C., Moven, A.J., Kraschnewski, J.L., Smyth, J.M., Rovniak, L.S., Conroy, D.E., Kearcher, K., Redman, C., Silvis, M., Auer, B., **Wang, M.**, and Lehman E.B. Why just exercise if you can play? Interest in a modified sports program to enhance physical activity among primary care patients. *Preventive Medicine Reports*, 2017 Dec; 8:273-278. PMID: 29255662.
- 124 Zhang, L., Wang, X., **Wang, M.**, Sterling N., Du, G., Lewis, M., Yao, T., Coffman, D., Mailman, R.B., Li, R. and Huang, X. Circulating cholesterol levels maybe causally linked to Parkinson's disease. *Frontier in Neuroscience*, 2017; 8:501. PMID: 29021777.
- 125 Kurundu Hewage, K., Spear, D., Umstead, T., Hu, S., **Wang, M.**, Wong, P., Chronos, Z., Halstead, E. and Thomas, N. An Electrochemical Biosensor for Rapid Detection of Pediatric Blood Stream Infections. *SLAS Technology*, 2017; 22(6): 616-625. PMID: 28850805.
[** Selected as one of the *SLAS Technology Ten by the Journal* **]
- 126 Zhu, L., Kong, Y., Zhang, J., Claxton, D.F., Ehmann, W.C., Rybka, W.B., Palmisiano, N., **Wang, M.**, Schell, T.D., Hohl, R.J., Zeng, H., Zheng, H. Blimp-1 Impairs T cell Function via Upregulation of TIGIT and PD-1 in Patients with Acute Myeloid Leukemia. *Journal of Hematology and Oncology*, 2017; 10(1):124. PMID: 28629373.
- 127 Hicks, S.D., **Wang, M.**, Fry, K., Doraiswamy, V., Wohlford, E.M. Neurodevelopmental delay diagnosis rates are increased in a region with aerial pesticide application. *Frontiers Pediatrics*, 2017; 5:116. PMID: 28596952.
- 128 Chow, P., Leaver, L.A., **Wang, M.** and Lea, S. Colour reversal learning in grey squirrels: the role of attention and inhibitory control depend on learning stage. *Animal Cognition*, 2017; 20(3):459-471. PMID: 28130606.
- 129 Dias, M.S., Rottmund, C., Cappos, K., Reed M., **Wang, M.**, Stetter, C., Schaffer, M., Hollenbeak C., Paul, I., Christian, C. Berger, R. and Klevens, J. Association of a postnatal parent education program for abusive head trauma with subsequent pediatric abusive head trauma hospitalization rates. *JAMA Pediatrics*, 2017; 171(3):223-229. PMID: 28135348.
- 130 Tandon, A., **Wang, M.**, Roe, K.C., Patel, S. and Ghahramani, N. Nephrologists' likelihood of referring patients for kidney transplant based on hypothetical patient scenarios. *Clinical Kidney Journal*, 2016; 9 (4): 611-615. DOI: 10.1093/ckj/sfw031. PMID: 27478607; PMCID: PMC4957715.
- 131 Hymel, K.P., Herman, B.E., Narang, S.K., Graf, J.M., Frazier, T.N., Stoiko, M., Christie, L.M., Harper, N.S., Carroll, C.L., Boos, S.C., Dias, M., Pullin, D.A. and **Wang, M.** Reply. *Journal of Pediatrics*, 2016 Apr;171:321-2. PMID: 26852180.

- 132 Dalal, P.G., Porath, J., Parekh, U., Dhar, P., **Wang, M.**, Mujsces, D., McQuillan, P. Hypothermia in infants undergoing MRI scanning: Identification of associated variables and effect of implemented changes. *Pediatric Radiology*, 2016; 46(8):1187-98. PMID: 27026025.
- 133 Sterling, N.W., **Wang, M.**, Zhang, L., Lee, E.Y., Du, G., Lewis, M.M., Styner, M. and Huang, X. Loss of cortical gyrification as Parkinson's disease "unfolds". *Neurology*, 2015; 22; 86(12):1143-51. PMID: 26888982; PMCID: PMC4820131.
- 134 Naik, R., Patel, N., **Wang, M.** and Shah, N. Infective Endocarditis Prophylaxis - Current Practice Trend Amongst Pediatric Cardiologists: Are We Following 2007 Guidelines? *Cardiology in the Young*, 2015. DOI:10.1017/S1047951115002176. PMID: 26715655.
- 135 Hymel, K.P., Herman, B.E., Narang, S.K., Graf, J.M., Frazier, T.N., Stoiko, M., Christie, L.M., Harper, N.S., Carroll, C.L., Boos, S.C., Dias, M., Pullin, D.A. and **Wang, M.** Potential impact of a 4-variable clinical prediction rule for pediatric abusive head trauma. *J Pediatr*, 2015; 167(6):1375-81.e1. DOI: 10.1016/j.jpeds.2015.09.018. PMID: 26477871.
- 136 Chow, P., Leaver, L.A., **Wang, M.** and Lea, S. Serial reversal learning in grey squirrels: learning efficiency as a function of learning and tactics change. *Journal of Experimental Psychology: Animal Learning and Cognition*, 2015 Oct;41(4):343-53. PMID: 26147602.
- 137 Voss, S.M., Riley, M.P., Lokhandwala, P., Gusani, N.J., **Wang, M.**, Yang, Z. Mitotic count by phosphohistone H3 immunohistochemical staining predicts survival and improves interobserver reproducibility in well-differentiated neuroendocrine tumors of the pancreas. *American Journal of Surgical Pathology*, 2015 Jan; 39(1):13-24. PMID: 25353284.
- 138 Lokhandwala, P., Abendroth, C., **Wang, M.**, Williams, N., Mani, H., Walls, M. and Zander D. Assessment of cytotechnologist-cytopathologist interpretative agreement using the Bethesda System for reporting thyroid cytopathology. *Diagnostic Cytopathology*, 2015 Feb; 44(2):113-8. PMID: 26663577.
- 139 Hymel, K.P., Garcia, V.A., Foster, R., Frazier, T.N., Stoiko, M., Christie, L.M., Harper, N.S., Weeks, K., Carroll, C.L., Hyden, P., Sirotiak, A., Truemper, E., Ornstein, A.E. and **Wang, M.** Validation of a clinical prediction rule for pediatric abusive head trauma. *Pediatrics*, 2014 Dec; 134(6):1537-1544. PMID: 25404722.
- 140 Musselman, D.L., Royster, E.B., **Wang, M.**, Long, Q., Trimble, L.M., Mann, T.K., Graciaa, D.S., McNutt, M.D., Lawson, D.H. and Miller, A.H. (2013) The impact of Escitalopram on IL-2-induced Neuroendocrine, Immune, and Behavioral changes in patients with malignant melanoma: Preliminary Findings. *Neuropsychopharmacology*, 2013; 38(10):1921-1928. DOI: 10.1038/npp.2013.85. PMID: 23575741; PMCID: PMC3746697.

Conference Abstract or arXiv Paper:

- 141 Tyagi, R., Tyagi, T., **Wang, M.** and Zhang, L. Machine Learning for Real-Time, Automatic, and Early Diagnosis of Parkinson's Disease by Extracting Signs of Micrographia from Handwriting Images. DOI: <https://arxiv.org/pdf/2111.14781.pdf>.

- 142 Velazquez, Y., Daur, D. **Wang, M.** and Kothari, M. Usefulness of combined median F wave parameters in the diagnosis of median neuropathy at the wrist. *61st Annual Meeting of the Muscle and Nerve*, 2014. Volume: 50.
- 143 Navabi, S., **Wang, M.**, Li, Z., William, M. Bezinover, D. and Stine, J.G. Hyponatremia is Associated with Lower Risk of Portal Vein Thrombosis in Liver Transplant Candidates Independent of Liver Disease Severity. *Gastroenterology*, 2018;154(6):S-1144-S-1145. DOI: 10.1016/S0016-5085(18)33796-X.

Papers Under Review:

- 144 Deng, D.[†], Chinchilli, V.M., Feng, H., Chen, C. and **Wang, M.***(2023) Robust integration of secondary data information into main outcome analysis in the presence of missing data. Under review by *Biometrics*.
- 145 Wu, X.[†], Tian, Z.[†], Li, Z.[†], Chen, C., Zhang, L. and **Wang, M.***(2023) A novel three-stage approach to identify prognostic biomarkers for cancer genetic data with survival endpoints. Under review by *Communications for Statistical Applications and Methods*.
- 146 Li, Z. [†], Zhang, L. Li, Y., Liang, M., Chinchilli, V. M. and **Wang, M.*** (2023) Spatial-Temporal Bayesian Accelerated Failure Time Models for Survival Endpoints with Applications to Prostate Cancer Registry Data. Under review by *BMC Medical Research Methodology*.
- 147 Han, Y., **Wang, M.** and Liu, D. (2023) A conditional modeling approach for dynamic risk prediction of a survival outcome using longitudinal biomarkers. Under review by *Annals of Applied Statistics*.
 [** *Early version won Yongli the 2020 NCI Director's Career Development Innovation Award* **]
- 148 Wu, H.[†], **Wang, M.*** and McDonald, A.* (2023) Association between levels of urinary caffeine and caffeine metabolites and elevated serum prostatic specific antigen (PSA) among men at risk for prostate cancer. Under review by *The Journal of Nutrition*.
- 149 Jia, B., Zhao, C., Minagawa, K., Shike, H., Claxton, D.F., Ehmann, W.C., Rybka, W.B., Mineishi, S., **Wang, M.**, Schell, T.D., Zhang, Y., Shultz, L.D. and Zheng, H. (2023) Acute Myeloid Leukemia Cause T Cell Exhaustion and Depletion in a Novel Humanized Graft-vs-Leukemia Model. Under review by *Nature Communication*.
- 150 Sznajder, K., Eshak, T., Biney, A., Dodoo, N., **Wang, M.**, Toprah, T., Blanford, J., Jensen, L. and Dodoo, F. (2023) Adverse childhood experiences increase HIV risk factors in Agbogbloshie, Ghana. Under review by *AIDS and Behavior*.
- 151 Gardner, A., Montgomery, P.S., **Wang, M.**, Liang, M. and Proctor, D. (2023) Maximal calf conductance is associated with 6-minute walk distance in participants with and without peripheral artery. Under review by *Circulation*.
- 152 Khunsriraksakul, C., Diana, L., Kishan, A.U., Bleyer, A., **Wang, M.**, Liu, D., Zatorsky, N.G. (2023) Epidemiologic signatures of cancer incidence and mortality in the United States, 1975-2016 and Projections to 2039. Under review by *International Journal of Cancer*.

- 153 Stanford, R., Yang, Q., Spreen, L., **Wang, M.**, Mullen, B., Venkiteswaran, K., Subramanian, T. and Wang, J. (2023) Olfactory Dysfunction in Early-stage Early-onset Parkinson's Disease. Under review by *Movement Disorders*.
- 154 Chiam, M., Wang, X., **Wang, M.**, Trifiletti, D.M., Parent, L., Spratt, D.E. and Zaorsky, N.G. (2023) Death from infection among cancer patients. Under review by *Cancer Epidemiology, Biomarkers & Prevention*.
- 155 Gross, A.J., Pisano, C.E., Khunsriraksakul, C., Spratt, D.E., Petkov, V., Park, H., Sun, Y., **Wang, M.** and Zaorsky, N.G. (2023) Real-World Data: Applications and Relevance to Cancer Clinical Trials. Under review by *Seminars in Radiation Oncology*.
- 156 Lehrer, E., Khunsriraksakul, C., Garrett, S., Trifiletti, D., Sheehan, J., Guckenberger, M., Louie, A., Siva, S., Ost, P., Goodman, K., Dawson, L., Tchelebi, L., Yang, T.J., Showalter, T., Park, H., Spratt, D., Kishan, A., Gupta, G., Shah, C., Fanti, S., Calais, J., **Wang, M.**, Schmitz, K., Liu, D., Abraham, J., Dess, R., Buvat, I., and Zaorsky, N. (2023) Future directions in the evaluation and management of newly-diagnosed metastatic cancer. Under review by *The Lancet Oncology*.
- 157 Chen, M.J., **Wang, M.** and Allen, B.(2023) Initial Validation of the Child Stress Disorders Checklist-Short Form as a Brief Tool for Monitoring Posttraumatic Stress Outcomes among Youth. Under review by *Journal of Child Adolescent Trauma*.
- 158 Hackett, G., Munir, F., Halstead, S., Imundo, J.R., **Wang, M.** and Chin, T. (2023) Higher frontal QRS-T angle is associated with increased incidence of dysrhythmia and left ventricular dysfunction in patients with left ventricular non-comaction. Under review by *TBD*.
- 159 Hudock, N.L., Mani, K., Khunsriraksakul, C., Walter, V., Nekhlyudov, L., **Wang, M.**, Lehrer, E.J., Hudock, M.R., Liu, D., Spratt, D.E. and Zaorsky, N. (2023) Future trends in incidence and mortality of metastatic cancer in the United States. Under review by *JAMA Oncology*.
- 160 Appert, A., Mani, K., Walter, V., Braunstein, S.E., Salloum, R., Palmer, J. **Wang, M.** and Zaorsky, N. (2023) Incidence, mortality, and long-term survivorship of pediatric cancer in the United States, 1975-2018. Under review by *Cancer*.
- 161 Ledford, S., Moss, J.L., Alles, S., Segel, J., **Wang, M.**, Kessler, F., Marks, B. and Lengerich, E.J. (2023) Preventative Health Behaviors and Advocacy Related to COVID-19 among Cancer Patients in Pennsylvania. Under review by *Journal of Cancer Education*.
- 162 Mani, K., Deng, D., **Wang, M.** and Zaorsky, N. (2023) Causes of death among metastatic cancer patients. Under review by *Cancer*.
- 163 Baydoun, A., Rappenecker, T., Liang, M., Lin, C., Lehrer, E.J., Biswas, T., Choi, S., Vempati, P., Ost, P., Trifiletti, Siva, S., Guckenberger, M., Louie, A.V., Tchelebi, L., Spratt, D.E., **Wang, M.** and Zaorsky, N. (2023) A survival prediction tool for cancer patients treated with stereotactic radiation therapy. Under review by *Journal of Radiotherapy and Oncology*.
- 164 Miccio, J.A., Tian, Z., Mahase, S.S., Lin, C., Choi, S., Zacharia, Sheehan, J.P., Brown, P.D., Trifiletti, D.M., Palmer, J.D., **Wang, M.** and Zaorsky, N. (2023) Estimating the Risk of Brain Metastasis for Patients Newly Diagnosed with Cancer. Under review by *Cancer*.

- 165 D’Afflisio, G., **Wang, M.**, PhD, Wang, X., Spratt, D.E. Zuhour, R., Khorana, A., Bilimoria, K.Y. and Zaorsky, N. (2023) Time to Treatment Initiation for the Thirty Most Prevalent Cancer Types: Trends and Predictors of Change. Under review by *JAMA Oncology*.
- 166 Dias, M., **Wang, M.**, Liang, M., Rizk, E.B., Bowman, R., Partington, M.D., Blount, J.P., Rocque, B.G., Hopson, B., Lee, A. and Walker, W.O. On behalf of the National Spina Bifida Patient Registry Group (2023) First-Time Tethered Cord Release Among Adults with Myelomeningocele: An Analysis of People in the National Spina Bifida Patient Registry. Under review by *JNS:Spine*.
- 167 Gross, A.J., Pisano, C.E., Khunsriraksakul, C., Spratt, D.E., Park, H., Sun, Y., **Wang, M.** and Zaorsky, N. (2023) Real-World Data: Applications and Relevance to Cancer Clinical Trials. Under review by *Seminars in Radiation Oncology*.
- 168 Gardner, A.W., Montgomery, P.S., **Wang, M.**, Liang, M., Zhang, S., Pomilla, W.A. and Cherin, N. (2023) Prevalence of Meeting Daily Step Count Goals in Older Adults with and without Metabolic Syndrome . Under review by *Circulation*.

Papers in preparation:

- 169 Shen, B.[†], Chen, C.[†], Zhang, L. and **Wang, M.*** (2023) Clustering analysis based on trajectories of time-varying effects in intensive longitudinal data. Plan to submit to *Statistics in Medicine*.
- 170 McDonald, A.* , Wasserman, E., Geyer, N. and **Wang, M*** (2023) Prostate cancer incidence and aggressiveness in Appalachia versus Non-Appalachia population using the SEER data. Plan to submit to *Cancer*.
- 171 Liang, M.[†], Li, L., Chinchilli, V.M. and **Wang, M.*** (2023) Joint multivariate copula-frailty modeling of multiple-type recurrent events and the terminal event. Plan to submit to *Biometrics*.

PRESENTATIONS

Invited Presentations:

- 1 The 2023 ICSA International Conference in Chengdu, China, June 2023. 20-minute talk “Multiple robust estimation and information integration for marginal causal inference under binary outcomes”.
- 2 Western North American Region meetings (WNAR) , June (18-21) 2023, 30-minute talk “Multiple robust estimation and information integration for marginal causal inference under binary outcomes”.
- 3 The 2023 International Indian Statistical Association, June 2023, 30-minute talk “Multiple robust estimation and information integration for marginal causal inference under binary outcomes”.
- 4 Mini Retreat at the Case Comprehensive Cancer Center at Case Western Reserve University, Jan 2023, 30-minute talk “Heavy metal exposures and prostate cancer risk, aggressiveness and mortality”.

- 5 Peking University Department of Biostatistics, Dec 2022. 60-minute talk "Recent method development for joint modeling of recurrent events and a terminal event".
- 6 University of Illinois Cancer Center (Virtual), Sep 2022. 60-minute talk "Leveraging advanced statistical models to advance clinical and health services research".
- 7 The 2022 ICSA Applied Statistics Symposium, June 2022. 20-minute talk "Joint multivariate copula-frailty modeling of multiple-type recurrent events and the terminal event".
- 8 Joint Statistical Meetings (JSM) in Seattle, August 2021. 20-minute talk "A Multiple Robust Propensity Score Method for Longitudinal Analysis with Intermittent Missing Data".
- 9 University of Massachusetts Amherst Biostatistics Department Seminar (Virtual), Apr 2021. 60-minute talk "A Multiple Robust Propensity Score Method for Longitudinal Analysis with Intermittent Missing Data".
- 10 The Chinese Academy of Sciences seminar (Virtual), Dec 2020. 60-minute talk "Recent development on hierarchical joint frailty models for joint modeling of recurrent events and a terminal event".
- 11 The 2020 ICSA Applied Statistics Symposium (Virtual), December 2020. 20-minute talk "Recent development on hierarchical joint frailty models for joint modeling of recurrent events and a terminal event".
- 12 Joint Statistical Meetings (JSM) in Philadelphia, August 2020. 20-minute talk "A joint modeling of longitudinal data with informative cluster size adjusted for zero-inflation and a dependent terminal event".
- 13 The 2019 ICSA International Conference in Hangzhou, China, Dec 2019. 20-minute talk "A unified framework of personalized network recovery and detection".
- 14 The 2019 Lifetime Data Science Conference in Pittsburgh, May 2019. 20-minute talk "A Time-varying Joint Frailty-copula Model for Analyzing Recurrent Events and a Terminal Event: an Application to the Cardiovascular Health Study".
- 15 Eastern North American Region meetings (ENAR) in Philadelphia, March 2019. 25-minute talk "Assessing prediction accuracy of survival regression models subject to non-independent censoring".
- 16 Thomas Jefferson University in Philadelphia, Jan 2019. 60-minute talk "A Time-varying Joint Frailty-copula Model for Analyzing Recurrent Events and a Terminal Event: an Application to the Cardiovascular Health Study".
- 17 The 11th International Conferences on Computational and Methodological Statistics (CMStatistics) at University of Pisa, Italy, Dec 2018. 20-minute talk "A Time-varying Bayesian Joint Frailty-copula Approach for Modeling of Recurrent Events and a Terminal Event".
- 18 The 2018 International Chinese Statistical Association (ICSA) China Conference in Qingdao, July 2018. 20-minute talk "A Novel Joint Frailty-copula Approach for Modeling Recurrent Events and a Terminal Event".
- 19 The 8th International Forum on Statistics at Renmin University of China, June 2018. 20-minute talk "A Bayesian Joint Frailty-copula Approach for Modeling of Recurrent Events and a Terminal Event".

- 20 The International Chinese Statistical Association (ICSA) Symposium in New Jersey, June 2018. 20-minute talk "A Bayesian Joint Frailty-copula Approach for Modeling of Recurrent Events and a Terminal Event".
- 21 University of Pennsylvania Center for Clinical Epidemiology and Biostatistics (CCEB) seminar, Apr 2018. 60-minute talk "Model fitting and selection on marginal modeling of longitudinal data with dropout missingness".
- 22 The 1st International Conference on Econometrics and Statistics (EcoSta), June 2017. 25-minute talk "Joint modeling of a longitudinal biomarker, zero-inflated recurrent events and a terminal event in a matched cohort study".
- 23 Geisinger Health System, June 2017. 60-minute talk "Joint modeling of a longitudinal biomarker, zero-inflated recurrent events and a terminal event in a matched cohort study".
- 24 NIH/NICHD, June 2017. 60-minute talk "Joint modeling of a longitudinal biomarker, zero-inflated recurrent events and a terminal event in a matched cohort study".
- 25 Penn State University Department of Statistics, Dec 2016. 60-minute talk "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 26 Research Penn State, Oct 2016. poster presentation "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 27 2016 conference on Geospatial Approaches to Cancer Control and Population Sciences, Sep 2016. 15-minute talk "Spatial-temporal survival analysis on Prostate Cancer in Pennsylvania".
- 28 The Association for Clinical and Translational Statisticians (ACTStat) annual meeting, July 2016. 30-minute talk "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 29 The 18th Meeting of New Researchers in Statistics and Probability, July 2016. 20-minute talk "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 30 The International Chinese Statistical Association (ICSA) Symposium in Atlanta, June 2016. 20-minute talk "Joint modeling of a longitudinal biomarker and recurrent events in presence of terminal events".
- 31 Joint Statistical Meetings (JSM) in Seattle, August 2015. 15-minute talk "Model Selection of Generalized Estimating Equations with Multiple Imputation and High-dimensional Covariates for Missing Longitudinal Data".
- 32 The International Chinese Statistical Association (ICSA) China Statistical Meeting in Shanghai, July 2015. 20-minute talk "A novel strategy for identifying biomarker signatures from cancer genetic data with survival endpoints".
- 33 The 2015 IMS-China International Conference on Statistics and Probability in Kunming, July 2015. 20-minute talk "Addressing issues associated with evaluating prediction models for survival endpoints based on the concordance statistic".
- 34 University of International Business and Economics, July 2015. 60-minute talk "A general approach to categorizing a continuous scale according to an ordinal outcome".

- 35 Pennsylvania State University, Hershey BAR Lab Seminar, Apr 2015. 60-minute talk "Overview of R01 database".
- 36 University of Pennsylvania, Sep 2014. 60-minute talk "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 37 Joint Applied Statistics Symposium by the International Chinese Statistical Association (ICSA) and the Korean International Statistical Society (KISS) in Portland, June 2014. 15-minute talk "Addressing issues associated with evaluating prediction models for survival endpoint based on the concordance statistic".
- 38 Joint Statistical Meetings (JSM) in Montreal, August 2013. 15-minute talk "Non-parametric Bayesian modeling for density estimation of sea turtle nesting locations along Juno Beach in Florida".

Contributed Presentations:

- 1 Eastern North American Region meetings (ENAR) in Nashville, March 2020. 25-minute talk "Spatial-Temporal Bayesian Accelerated Failure Time Models for Survival Data with Applications to Prostate Cancer Registries".
- 2 Workshop on Statistical Analyses of Multi-Outcome Data (SAM) in St Louis, June 2018. Poster presentation "Empirical-likelihood-based criteria for model selection on longitudinal data with dropout missingness".
- 3 Joint Statistical Meetings (JSM) in Vancouver, August 2018. Poster presentation "An innovative approach to identify biomarker signatures for cancer genetic data with survival endpoints".
- 4 ACTS in Washington DC, Apr 2018. Poster presentation "Empirical-likelihood-based criteria for model selection on longitudinal data with dropout missingness".
- 5 Pennsylvania State University, Department of Public Health Seminar, March 2018. 60-minute talk "Model fitting and selection on marginal modeling of longitudinal data with dropout missingness".
- 6 Penn State University, Junior Faculty Development Program, 2015. Poster presentation "Assessing Parkinson's Disease progression based on multimodal scales".
- 7 Pennsylvania State University, Department of Public Health Seminar, March 2015. 60-minute talk "A general approach to categorizing a continuous scale according to an ordinal outcome".
- 8 Pennsylvania State University, BIRCH Seminar, Feb 2015. 15-minute talk "Methodology development for biomarker identification and generalization of Acute Kidney Injury (BIG-AKI)".
- 9 Pennsylvania State University, Department of Public Health Seminar, May 2014. 60-minute talk "Estimation of predictive accuracy of survival regression models adjusting for dependent censoring and/or high-dimensional data".
- 10 Eastern North American Region meetings (ENAR) in Washington, March 2014. 15-minute talk "Model Selection of Generalized Estimating Equations with Multiple Imputation and High-dimensional Covariates for Missing Longitudinal Data".

- 11 Pennsylvania State University, May 2013. 45-minute talk "Small-sample modification and application of robust techniques (S.M.A.R.T) for variance estimator in Generalized Estimating Equations".
- 12 University of Arkansas for Medical Sciences, March 2013. 45-minute talk "Small-sample modification and application of robust techniques (S.M.A.R.T) for variance estimator in Generalized Estimating Equations".
- 13 University of Illinois at Chicago, March 2013. 45-minute talk "Spatio-temporal point pattern analysis with application to sea turtle nesting along Juno Beach".
- 14 Eli Lilly and Company, January 2013. 45-minute talk "Small-sample modification and application of robust techniques (S.M.A.R.T) for variance estimator in Generalized Estimating Equations".
- 15 University of Miami Spatial Statistics Conference, December 2012. Poster presentation "Evaluation of non-parametric pair correlation estimation for Log-Gaussian Cox Processes under infill asymptotic".
- 16 Abbott Company, September 2012. 45-minute talk "Small-sample modification and application of robust techniques (S.M.A.R.T) for variance estimator in Generalized Estimating Equations".
- 17 Food and Drug Administration (FDA), September 2012. 45-minute talk "A conditional likelihood approach for regression analysis using biomarkers measured with batch-specific error".
- 18 The EMMES Corporation, September 2012. 45-minute talk "A conditional likelihood approach for regression analysis using biomarkers measured with batch-specific error".
- 19 Novartis Company, May 2012. 45-minute talk "Modified robust covariance estimator for Generalized Estimating Equations with improved small-sample properties".
- 20 Eli Lilly and Company, August 2012. Poster presentation and 30-minute talk "Comparison of methods for analyzing of recurrent hypoglycemia events with missing data".
- 21 Joint Statistical Meetings (JSM) in San Diego, August 2012. Poster presentation "An extended GEE model with latent variables for brain fMRI connectivity".
- 22 Joint Statistical Meetings (JSM) in San Diego, August 2012. 15-minute talk "A conditional likelihood approach for analysis of biomarkers measured with batch specific errors".
- 23 Southern Regional Council on Statistics (SRCOS) Summer Research Conference in South Carolina, June 2012. Poster presentation "Consistency properties of the estimated pair correlation functions for Log-Gaussian Cox Processes under an infilled asymptotic framework".
- 24 Society of Biological Psychiatry 67th Annual Scientific Convention & Program in Philadelphia, May 2012. Poster session "The Impact of Escitalopram on IL-2-induced Behavioral, Neuroendocrine and Immune Changes in Patients with Malignant Melanoma: Preliminary Findings".
- 25 Eastern North American Region meetings (ENAR) in Washington, March 2012. Poster presentation "Space-time heterogeneities in one-dimensional point process data: modeling sea turtle nesting patterns via Log-Gaussian Cox Processes".

- 26 Southern Regional Council on Statistics (SRCOS) Summer Research Conference in South Carolina, June 2011. Poster presentation "A conditional likelihood approach for analysis of biomarkers measured with batch specific errors".
- 27 Eastern North American Region meetings (ENAR) in Miami, March 2011. Poster presentation "Comparison and summary of criteria for working correlation structure in GEE".
- 28 Joint Statistical Meetings (JSM) in Vancouver, August 2010. 15-minute talk "Modified robust covariance estimator for generalized estimating equations with improved small-sample properties".
- 29 Eastern North American Region meetings (ENAR) in New Orleans, March 2010. 15-minute talk "Estimation of cut-points on a continuous scale according to a categorical scale".
- 30 Eastern North American Region meetings (ENAR) in San Antonio, March 2009. 15-minute talk "Inference for marginal linear models with clustered longitudinal data with potentially informative cluster sizes".

COLLABORATIVE PRESENTATIONS

- 1 The GSA 2021 Annual Scientific Meeting, Phoenix, November 10-14, 2021. Poster presentation "Association Between Meeting Physical Activity Guidelines with Ambulation and Quality of Life in Claudication" by Gardner, A.W., Montgomery, P.S., **Wang, M.**, Shen, B., Zhang, S. and Pomilla, W.
- 2 The virtual 2021 American College of Sports Medicine Annual Meeting, June 1-5, 2021. ePoster presentation "Association Between Daily Steps At Moderate Cadence And Vascular Outcomes In Patients With Claudication" by Gardner, A.W., Montgomery, P.S., **Wang, M.** and Shen, B.
- 3 The AHA annual meeting, Dallas, Texas, November 13, 2020. Poster presentation "Association between meeting daily step count goals with ambulatory function and quality of life in patients with claudication" by Gardner, A.W., Montgomery, P.S., **Wang, M.** and Shen, B.
- 4 The Vascular Discovery annual meeting, Chicago, Illinois, May 5-7, 2020. Poster presentation "A comparison of cognitive function in participants with and without peripheral artery disease" by Gardner, A.W., Montgomery, P.S., **Wang, M.**, Shen, B., Casanegra, A.I., Silva-Palacios, F. and Waldstein, S.R.
- 5 The ACSM annual meeting, San Francisco, California, May 30, 2020. Poster presentation "Dietary intake is associated with ankle-brachial index, inflammation, and ambulation in patients with peripheral artery disease and claudication" by Montgomery, P.S., **Wang, M.**, Shen, B., Casanegra, A.I., Silva-Palacios, F., Knehans, A.W. and Gardner, A.W.
- 6 The AACVPR virtual annual meeting, West Palm Beach, Florida, October 1, 2020. Poster presentation "Daily step counts in participants with and without peripheral artery disease" by Montgomery, P.S., **Wang, M.**, Shen, B., Casanegra, A.I., Silva-Palacios, F., Zhang, S., Pomilla, W.A., Esponda, O.L., Kuroki, M. and Gardner, A.W.

- 7 The American Heart Association meeting in Philadelphia, 2020. Poster presentation "Association between calf muscle oxygen saturation with ambulatory function and quality of life in symptomatic patients with peripheral artery disease" by Gardner, A.W., Montgomery, P.S., **Wang, M.** and Shen, B.
- 8 The 2019 American College of Sports Medicine (ACSM), 2019. Poster presentation "Inflammation and Muscle Oxygen Saturation are Associated with Exercise Pressor Response in Peripheral Artery Disease" by Gardner, A.W., Montgomery, P.S., **Wang, M.** and Shen, B.
- 9 The United States and Canadian Academy of Pathology's 108th Annual Meeting, 2019. Poster presentation "Using a minimum set of prognostic parameters to predict survival of patients with well-differentiated Pancreatic neuroendocrine tumor" by Yang, Z., **Wang, M.** and Shen, B.
- 10 The Mid-Atlantic Regional Chapter (MARC) of the American College of Sports Medicine annual meeting, 2018. Poster presentation "Vascular inflammation, Calf muscle oxygen saturation, and blood glucose are associated with exercise pressor response in symptomatic peripheral artery disease" by Gardner, A., Montgomery, P., **Wang, M.**, Chen, C., Kuroki, M. and Kim, D.
- 11 The Digestive Disease Week (DDW), 2018. Poster presentation "Esophageal striated muscle responses during swallowing of liquids and solids-Additional pieces for solving the puzzle of non-achalasia Dysphagia" by Gottshall, L., Chintanabonia, J., Patel, A., **Wang, M.** and Ouyang, A.
- 12 The Digestive Disease Week (DDW), 2018. Poster presentation "Hyponatremia is Associated with Lower risk of PVT in Liver Transplant Candidates Independent of Liver Disease Severity" by Bezinover, D., Navabi, S., **Wang, M.**, Li, Z., William, M. and Stine, J.G.
- 13 The American Society of Preventive Oncology Conference, 2018. Poster presentation "Elderly prostate cancer patients are less likely to receive curative therapy for prostate cancer" by Bluethman, S.M., **Wang, M.**, McDonald, A., Chen, C. and Zaorsky, N.G.
- 14 The American College of Sports Medicine Annual Meeting, 2018. Oral presentation "Predictors of health-related quality of life in patients with symptomatic Peripheral Artery Disease" by Gardner, A., Montgomery, P.S., **Wang, M.** and Xu, C.
- 15 The Society of Critical Care Medicine National Congress, 2017. Poster presentation "Estimating the Probability of Abusive Head Trauma (AHT) Before and After a Workup for Abuse" by Hymel, K. and the Pediatric Brain Injury Research Network (PediBIRN) investigators.
- 16 The Society of Critical Care Medicine National Congress, 2017. Poster presentation "Racial and Ethnic Disparities in the Reporting and Evaluation of Suspected Abusive Head Trauma" by Hymel, K. and the Pediatric Brain Injury Research Network (PediBIRN) investigators.
- 17 The Society of Critical Care Medicine National Congress, 2017. Poster presentation "Head Injury Depth as an Indicator of Head Injury Causes and Mechanisms" by Hymel, K. and the Pediatric Brain Injury Research Network (PediBIRN) investigators.

- 18 The Society of Critical Care Medicine National Congress, 2017. Oral presentation "Efficacy of healing touch in decreasing stress and anxiety in the pediatric critical care provider" by Peregrino, E. **Wang, M.**, Ge, L. and Zurca, A.
- 19 ENAR Meeting, 2017. Poster presentation "A Joint model for a left-censored longitudinal biomarker and zero-inflated recurrent events in the presence of a terminal event in a matched study" by Xu, Cong, **Wang, M.** and Chinchilli, Vernon M.
- 20 ENAR Meeting, 2017. Poster presentation "A Bayesian joint frailty-copula approach for clustered bivariate time to event processes with marked data" by Li, Zheng, **Wang, M.** and Chinchilli, Vernon M.
- 21 The Pediatric Research Day, May 2016. Oral presentation "Childhood Asthma Incidence and Medicaid Insurance: Findings from the National Longitudinal Survey (NLSY) 79 Child/Young Adult 1986-2012" by Iskandarani, K., Leslie, D. and **Wang, M.**
- 22 The annual STFM Conference, April 2016. Oral presentation "What are the effects of formative feedback on resident self-evaluation of their patient care skills?" by Nasir, M, Adams, N. and **Wang, M.**
- 23 ENAR Meeting, 2016. Oral presentation "A joint frailty model for zero-inflated recurrent events and a terminal event in a matched study" by Xu, Cong, **Wang, M.** and Chinchilli, Vernon M.
- 24 ENAR Meeting, 2016. Oral presentation "Spatial-temporal survival analysis on Prostate Cancer in Pennsylvania using Bayesian Accelerated Failure time models" by Li, Z., **Wang, M.**, Matthews, S.A., Iskandarani, K., Li, Y., and Chinchilli, Vernon M.
- 25 SBI/ACR Breast Imaging Symposium, 2016. Poster presentation "Patient Centered Communication: Teaching Radiology Residents Using a Learner- Centered Approach how to Break Bad News in the Breast Imaging Setting" by Watts, M., Shapiro, D., Kass, R., Farnan, M., **Wang, M.**, Chetlen, A.L., Kasales, C., Mack, J., Schetter, S., Peterson, C.
- 26 The 22nd American Academy of Emergency Medicine (AAEM) national conference, 2016. Poster presentation "The Utilization of Narcotic Analgesia in the Treatment of Migraine Headaches in an Academic Emergency Department" by Patel, R., Berberian, J., Fischer, M., and **Wang, M.**
- 27 Joint statistical meeting (JSM), 2015. Oral presentation "Treatment Prioritization in Phase I Umbrella Protocol for Targeted Cancer Therapies" by Yimei Li, **Wang, M.** and Ken Cheung.
- 28 Pennsylvania Society of Oncology and Hematology Meeting, 2015. Poster presentation "Clinical trajectory of tumor apparent diffusion coefficient in a patient having diffuse pontine glioma" by Sterling, N., Wagner, H., Ferenci, M., Zacharia, T., Wang, K., **Wang, M.** and Mackley, H.
- 29 The Pennsylvania Society of Gastroenterology (PSG) Annual Meeting, 2015. Poster presentation "Questioning the significance of large and small breaks on high resolution esophageal manometry with liquids and solids in patients with dysphagia" by Welch, A.R., Budhraja, V., Shahnnavaz, N., **Wang, M.** and Ouyang, A.
- 30 The American Society of Nephrology Kidney Annual Meeting in San Diego, 2015. Oral presentation "Factors Influencing Decision about Kidney Transplant: A Survey

- of Dialysis Patients" by Khalil, F., **Wang, M.**, Trivedi, N., Chang, E., Ghahramani, N.
- 31 The American Society of Nephrology Kidney Annual Meeting in San Diego, 2015. Poster presentation "Knowledge about Benefits of Kidney Transplant: A Survey of Dialysis Patients" by Trivedi, N., Khalil, F., **Wang, M.**, Chang, E., Ghahramani, N.
 - 32 The American Society of Nephrology Kidney Annual Meeting in San Diego, 2015. Poster presentation "Factors Associated with Referral, Evaluation and Listing for Kidney Transplant: A Survey of Dialysis Patients" by Chang, E., **Wang, M.**, Khalil, F., Trivedi, N., Ghahramani, N.
 - 33 The Joint Statistical Meeting (JSM), 2015. Oral presentation "Treatment Prioritization in Phase I Umbrella Protocol for Targeted Cancer Therapies" by Li, Y., **Wang, M.** and Cheung, K.
 - 34 The Joint Statistical Meeting (JSM), 2015. Poster presentation "A novel two-stage approach to identify prognostic biomarkers for cancer genetic data with survival endpoints" by Li, Z. and **Wang, M.**
 - 35 The Department of Medicine and Pathology Research Day, 2015. Poster presentation "Effects of TNF-alpha Antagonists in Diabetic Nephropathy" by Kim, A., **Wang, M.**, Reeves, B. and Award, A.S.
 - 36 EdVenture in Hershey, 2015. Poster presentation "Breaking bad news (BBN) in the breast imaging setting: training radiology residents on patient centered communication of a new breast cancer diagnosis" by Watts, M., Shapiro, D., Faran, M., Schetter S., Peterson C., **Wang, M.**, Chetlen, A., Mack, J. and Kasales, C.
 - 37 Alzheimer's & Parkinson's Disease Congress, 2015. Oral presentation "Loss of cortical gyrification as Parkinson's disease" by Sterling N.W., **Wang, M.**, Zhang L., Lee E.Y., Du G., Lewis M.M., Styner, M., Huang X.
 - 38 The 22nd International Conference On Comparative Cognition in Florida, 2015. Poster presentation "Serial reversal learning in grey squirrels (*Sciurus carolinensis*): learning efficiency as a function of learning, flexible tactic use, and memory retention" by Chow, P., Leaver, L.A., **Wang, M.**, Lea, S.
 - 39 The Alzheimer's & Parkinson's Diseases Congress in France, 2015. Poster presentation "Longitudinal cortical thinning in Parkinson's disease" by Sterling N.W., **Wang, M.**, Zhang L., Lee E.Y., Du G., Lewis M.M., Huang X.
 - 40 The American Transplant Congress in Philadelphia, 2015. Poster presentation "Repeat donor HLA mismatch antigens and kidney transplant outcome" by Lokhandwala, P.M., **Wang, M.**, Kadry, Z., Shah, R.A., Jain, A., Gaspari, J.L., Ghahramani, N., Abendroth, C.S., and Shike, H.
 - 41 The Digestive Disease Week (DDW) in Washington, 2015. Poster presentation "High resolution esophageal manometry: Does the addition of solid swallows add to the diagnosis of motility disorders?" by Welch, A.R., Budhraj, V., Shahnavaz, N., **Wang, M.** and Ouyang, A. (**AGA Council Poster Judging Winner**)
 - 42 The American Society of Nephrology Kidney Annual Meeting in Philadelphia, 2014. Poster presentation "Using Hypothetical Patient Scenarios to Assess Nephrologists Perceptions Regarding Choice of Treatment for End Stage Renal Disease" by Patel, S., **Wang, M.**, Roe, K., Tandon, A., Ghahramani, N.

- 43 The American Society of Nephrology Kidney Annual Meeting in Philadelphia, 2014. Poster presentation "Referral of dialysis patients for transplant based on hypothetical patient scenarios" by Roe, K., **Wang, M.**, Patel, S., Tandon, A., Ghahramani, N.
- 44 The American Society of Nephrology Kidney Annual Meeting in Philadelphia, 2014. Poster presentation "ESRD treatment choice based on hypothetical patient scenarios" by Tandon, A., **Wang, M.**, Roe, K., Patel, S., Milani, P., Ghahramani, N.
- 45 Human Brain meeting in Boston, 2014. Poster presentation "Resting state functional connectivity in non-demented Parkinson's disease" by Zhang, L., Lee, E.Y., Truong, Y., **Wang, M.**, Du, G., Lewis, M., Huang, X.
- 46 The American Association of Blood Banks (AABB) annual meeting in Philadelphia, 2014. Poster presentation "Establishing an Human Leukocyte Antigen (HLA)-Compatible platelet donor program" by Lokhandwala, P., Shike, H., Domen, R., Potochny, E., **Wang, M.**, Davis, J., Morrow, C., and George, M.
- 47 The AANEM 61st Annual Meeting in Savannah, Georgia, 2014. Poster presentation "Usefulness of combined median F-wave parameters in the diagnosis of median neuropathy at the wrist." Velazquez-Rodriguez, Y., Kaur, D., **Wang, M.** and Kothari, M.
- 48 Organization of Human Brain Mapping (OHBM) in Hamburg, June 2014. Poster presentation "Cortical thickness thinning and cognitive impairment in Parkinson's disease without dementia" by Zhang, L., Sterling, N., **Wang, M.**, Lee, E.Y., Eslinger, P.J., Wagner, D., Du, G., Lewis, M., Huang, X.
- 49 The Association for Research in Vision and Ophthalmology (ARVO) in Orlando, May 2014. Poster presentation "Characteristics of inpatient ophthalmology consults associated with ocular pathology and need for ophthalmologic intervention" by Mayer, J., Landis, Z., **Wang, M.** and Scott, I.U.
- 50 The Seventh Biennial Pediatric Research Day in Hershey, 2014. Poster presentation "Patient satisfaction with pain management in pediatric intravenous catheterizations" by Boushra, M., **Wang, M.**, Rudnitsky, G.

RESEARCH/GRANT SUPPORT

Ongoing Grants

R01 (PI: Wilson, Stephen Jeffrey)

09/01/2022-08/31/2027

NIH

Title: Linking brain network dynamics to imminent smoking lapse risk and behavior

Role: Subcontract-PI

R01 (PI: Andrew Gardner)

09/01/2022-08/31/2027

NIH

Title: The effects of diet and exercise interventions in Peripheral Artery Disease

Role: Subcontract-PI (Paperwork Ongoing)

R01 (PI: Andrew Gardner)

04/01/2023-03/31/2028

NIH

Title: The effects of a novel, non-ischemic and pain-free exercise intervention

in peripheral artery disease

Role: Subcontract-PI (JIT request)

R01 (PI: Vida Abedi)

04/01/2023-03/31/2028

NIH

Title: Machine Learning Prediction of 1-Year Mortality and Recurrence after Ischemic Stroke Using Enriched EHR data

Role: Subcontract-PI (JIT request)

R01 (PI: Valerie Annette Toly)

12/01/2017-11/30/2023

NIH

Title: Resourcefulness Intervention to Promote Self-Management in Parents of Technology-Dependent Children

Role: Co-investigator

R01 (PI: Michael Rothberg)

04/01/2023-Now

NIH

Randomized Trial of Assisted Ambulation to Improve Health Outcomes for Older Medical Inpatients

Role: Co-investigator (paperwork ongoing)

Pending Grants**R01 (PI: Ming Wang and Chixiang Chen)**

07/01/2023-06/30/2028

NIH

Title: Method development for synthesizing information within and between studies to improve efficiency and robustness of the primary model estimation with application to Alzheimer's disease and dementia

Role: Co-PI

R21 (PI: Nicholas Zaorsky and Ming Wang)

7/01/2023 – 06/30/2025

NIH

Title: Development of a novel staging system for metastatic cancer using STARS phenotypes

Role: Co-PI

Completed GrantsGrants as a (Co-)PI**The Human Health and the Environment Seed Grant (PI: Ming Wang and Alicia McDonald)**

7/1/2018-3/31/2022

Pennsylvania State University

Title: Heavy Metal Exposures and Aggressive Prostate Cancer

Role: Co-PI

Penn State Clinical and Translational Science Institute (CTSI) Innovation and impact pilot grant (PI: Ming Wang)

6/1/2018-6/31/2020

Pennsylvania Department of Health

Title: Innovative approach to longitudinal missing data in clinical trials

Role: PI

Clinical and Translational Science Institute (CTSI) P3 Stage I (PI: Ming Wang and Alicia McDonald) 9/1/2016-8/31/2018

Penn State Clinical and Translational Science Institute (CTSI)

Title: Aggressive Prostate Cancer in Pennsylvania: Health Disparities and Environmental Risk Factors

Role: Co-PI

5 KL2 TR 126 (PI: Ming Wang) 1/1/2015-12/31/2017

Penn State Clinical and Translational Science Institute (CTSI)

Title: Methodology development for biomarker identification and generalization of Acute Kidney Injury (BIG-AKI)

Role: PI

5 UL1 RR0330184 (PI: Ming Wang) 3/1/2014-10/31/2015

Penn State Clinical and Translational Science Institute (CTSI)

Title: Novel Spatial-temporal Survival Analysis on Prostate Cancer for Pennsylvania

Role: PI

Grants as a co-investigator

P50 (PI: Jennie G. Noll and Kent Hymel) 4/20/2017-8/1/2022

National Institute of Health (NIH)

Title: Penn State University's Translational Center for Child Maltreatment Studies-TCCMS

Role: Co-Investigator

Data Coordinating Center for the Natural History of AKI Consortium (PI: Vernon M. Chinchilli) 7/31/2018-6/30/2019

National Institute of Health (NIH) NIDDK

DCC for the ASSESS-AKI Study

Role: Co-Investigator

R21 (PI: Brian Allen) 5/1/2017-4/30/2019

National Institute of Health (NIH)

Title: Integrating AAT into TF-CBT for Maltreated Youth: A Randomized Feasibility Trial

Role: Co-Investigator

R61 (PI: Chris Sciamanna) 09/01/2018-8/31/2022

National Institute of Health (NIH)

Title: Comparative effectiveness of social physical play and traditional exercise programming

Role: Co-Investigator

R01 (PI: Jianli Wang) 6/1/2017-2/28/2022

National Institute of Health (NIH)

Title: Asymmetric neurodegeneration of central olfactory system in early-stage Parkinson's disease

Role: Co-Investigator

R21 (PI: Dara Babinski)

7/1/2020-6/30/2022

National Institute of Health (NIH)

Title: Social Processing in Girls with and without Attention-Deficit/Hyperactivity Disorder (ADHD)

Role: Co-Investigator

R01 (PI: Brian Allen)

9/1/2019-8/31/2024

NIH

Title: Pennsylvania Adoptees Longitudinal Study (PALS)

Role: Co-Investigator (Stop due to leaving PSU)

U01 DK127384-01 (PI: Vern M. Chinchilli)

09/17/2020-7/31/2025

NIH

Title: Data Coordinating Center for the Type 1 Diabetes in Acute Pancreatitis Consortium

Role: Co-investigator (Stop due to leaving PSU)

Supplement to 5R01NS108407 Grant (PI: Kim Yongsoo)

7/01/2021-6/30/2022

NIH

Title: Mapping changes of the cerebrovasculature and pericytes in the 5xFAD mouse model of Alzheimer's disease

Role: Co-investigator

R01 (PI: Kathryn Schmitz)

08/01/2021-11/30/2026

NIH

Title: Increasing Physical Activity in Rural Pennsylvanians: The PA Moves Trial

Role: Co-Investigator (Stop due to leaving PSU)

CURE Grant (PI: Sznajder, Kristin)

06/01/2021-05/31/2025

COP: Department of Health

Title: COVID-19: maternal and child health outcomes in diverse Pennsylvania Communities

Role: Co-Investigator (Stop due to leaving PSU)

R01 (PI: Schmitz, Kathryn)

09/01/2022-08/31/2027

NIH

Title: The ENACT Trial: Exercise in All ChemoTherapy

Role: Co-Investigator (Stop due to leaving PSU)

5 T32 ES 12160-7 (PI: Lance Waller)

07/01/2012- 05/31/2013

Biostatistics in Genetics, Immunology, and Neuroimaging (BEGIN), National Institute of Health (NIH)

Medical Genetics: Clinical Genetics

Role: Training Fellowship

TEACHING EXPERIENCE

Penn State Hershey Medical Center, Hershey, PA

- PHS 597A Asymptotic Tools, Spring 2014 (Role: Co-instructor)
- PHS 597A Asymptotic Tools, Spring 2015 (Role: Director and instructor)
- PHS 597A Asymptotic Tools, Spring 2016 (Role: Director and instructor)
- PHS 583 Asymptotic Tools, Spring 2017 (Role: Director and instructor)
- One lecture for PHS 525 Biostatistics for Lab Scientists, Spring 2017 (Role: contributed talk)
- One lecture for PHS 556 Cancer Epidemiology, Fall 2017/2018 (Role: contributed talk)
- PHS 583 Asymptotic Tools, Spring 2018 (Role: Director and instructor)
- One lecture for PHS 556 Cancer Epidemiology, Fall 2018/2019 (Role: contributed talk)
- PHS 583 Asymptotic Tools, Spring 2019 (Role: Director and instructor)
- One lecture for PHS 556 Cancer Epidemiology, Fall 2019/2020 (Role: contributed talk)
- PHS 583 Asymptotic Tools, Spring 2020 (Role: Director and instructor)
- One lecture for PHS 556 Cancer Epidemiology, Fall 2020/2021 (Role: contributed talk)
- PHS 583 Asymptotic Tools, Spring 2021 (Role: Director and instructor)
- PHS 583 Asymptotic Tools, Spring 2022 (Role: Director and instructor)

Emory University Atlanta, GA

- BIOS 500 Statistical Methods I (Role: Lab Instructor), 2021 Fall
- BIOS 500 Statistical Methods I (Role: Teaching Assistant and Lab Assistant)
- BIOS 506 Biostatistical Methods I (Role: Teaching Assistant and Lab Assistant)
- BIOS 508 Categorical data analysis (Role: Teaching Assistant)
- BIOS 708 Advanced Categorical data analysis (Role: Teaching Assistant)
- INFO 530 Geographic Information Systems (GIS) for Public Health (Role: Teaching Assistant and Lab Assistant)
- BIOS 560 Applied Clinical Trials (Role: Teaching Assistant)

MENTORING AND ADVISING

Doctoral Committee Chaired as the Dissertation (Co-)Advisor

- Zhengxi Chen, 2023-present, PhD student in Epidemiology & Biostatistics Program at CWRU (Rotation)
- Sarhan Hossam, 2023-present, PhD student in Biomedical & Health Informatics Program at CWRU (Rotation)
- Noel Moore, 2023-Now, PhD student in System Biology and Bioinformatics Program at CWRU (Rotation)
- Daxuan Deng, 2022-present, PhD student in Biostatistics (Co-advisor with Dr. Vernon M. Chinchilli upon leaving PSU)
- Xue Wu, 2020-present, PhD student in Biostatistics (Co-advisor with Dr. Vernon M. Chinchilli upon leaving PSU)
- Menglu Liang, 2020-present, PhD Candidate in Biostatistics (Co-advisor with Dr. Vernon M. Chinchilli upon leaving PSU)
- **[** *The 2022 International Chinese Statistical Association Applied Statistics Symposiums student travel support (NSF)* **]**
- Biyi Shen, 2018-2021, PhD in Biostatistics
- **[** *The 2022 Dean's Award for Scholarly Achievement* **]**
- **[** *The 2022 ASA Philadelphia Chapter Exceptional Achievement Award for***

Graduate Students **]

[** The 2021 Graduate Alumni Society award in the 8th Penn State Annual Faculty and Student Research Retreat **]

- Chixiang Chen, 2017-2020, PhD in Biostatistics (Co-advisor with Dr. Rongling Wu)
[** The 2018 International Chinese Statistical Association Applied Statistics Symposiums student paper award **]
[** The 2018 Biopharm-Deming Student Scholar Award with invitation to present at the 2018 Deming conference **]
[** The 2019 ASA Nonparametric Section's student paper award with invitation to present at the 2019 JSM conference **]
[** The 2019 Graduate Alumni Society award in the 6th Penn State Annual Faculty and Student Research Retreat **]
[**The 2021 Dean's Award For Scholarly Achievement**]
- Zheng Li, 2015-2018, PhD in Biostatistics (Co-advisor with Dr. Vernon M. Chinchilli)
[**Scholarship from University of Washington Summer Institute in Statistics for Big Data (SISBID), 2015**]
- Cong Xu, 2015-2017, PhD in Biostatistics (Co-advisor with Dr. Vernon M. Chinchilli)
[**The 2018 Dean's Award For Scholarly Achievement**]

Doctoral Dissertation Committee Served as a Member

- Zhe Zhang, 2022-present, PhD in Statistics (Penn State University Park)
- Savanna Ledford, 2021-present, Doctor of Public Health (DrPH) (Penn State College of Medicine)
- Zhaoxue Tong, 2021-present, PhD in Statistics (Penn State University Park)
- Zhanrui Cai, 2018-2021, PhD in Statistics (Penn State University Park)
- Paddy Ssentongo, 2020-2021, PhD in Epidemiology (Penn State College of Medicine)
- Xi Wang, 2020-now, PhD in Biostatistics (Penn State College of Medicine)
[**Award: Karl H. Beyer Jr., MD, PHD, Scholarship, 2021**]
- Natasha Burse, 2020-now, Doctor of Public Health (DrPH) (Penn State College of Medicine)
- Hui Zeng, 2019-2021, PhD in Biostatistics (Penn State College of Medicine)
- Elahe Tashakor, 2016-2019, PhD in Biostatistics (Penn State College of Medicine)
- Sterling, Nicholas, 2014-2016, MD/PhD in Department of Neurology (Penn State College of Medicine)
[**Award: Bernard Brodie Pharmacology Graduate Award for Outstanding Scholarly and Research Achievement, 2018**]

Thesis Advisor for Master Students

- Xishan Ye, 2017-2018, Master of Public Health at PSU
- Han Li, 2016-2017, Master of Public Health at PSU

Academic Advisor for Master Students

- Xinyi Shen, 2016-2017, Master of Science in Public Health Sciences at PSU
- Chen Xue, May 2017-August 2017, Master of Statistics (Summer Intern) at PSU
- Lizhao Ge, May 2016-August 2016, Master of Statistics (Summer Intern) at PSU

Mentor for Training Grant Application

- Rachel S. Stanford, Ph.D. candidate in Neuroscience at PSU, F31 grant application, 2019

- Sterling, Nicholas, MD/PhD in Department of Neurology at PSU, F30 grant application, 2014

Mentor for Medical Students and Others

- Nikhila Yerabandi, 2023-present, MD student at CWRU (Part-time and 12-week Summer Project)
- Bhoomika Navandar, 2023-present, Cumberland Valley High School, PA
- Zizhong Tian, 2021-2022, PhD student in Biostatistics at PSU (Rotation)
- Yanxu Yang, 2020-2022, Doctor of Public Health at PSU (DrPH)
- Hongke Wu, 2019-2022, Doctor of Public Health (DrPH) and then transferred to PhD in Epidemiology at PSU
- Ajay Macherla, 2021-2022, High school at the Downingtown STEM Academy, PA
- Tanish Tyagi, 2021-2022, 11th grader at Phillips Exeter Academy, NH
- Riya Tyagi, 2021-2022, 10th grader at Phillips Exeter Academy, NH
 [** News Report: <https://blogs.nvidia.com/blog/2022/03/29/handwriting-recognition-ai-parkinsons-disease/> **]

HONORS & AWARDS

- *The Elected member of International Statistical Institute for significant contributions to the statistical profession*, 2022-present
- The Research Education Component (REC) Affiliation at the Mass Alzheimer's Disease Research Center (MADRC), 2021-2023
- The Penn State College of Medicine sabbatical leave award, 2021 Fall (cancelled due to the pandemic)
- *The Award for Dean's Excellence in Teaching*, 2019
- Travel award from the National Institute of Statistical Sciences (NISS)/American Statistical Association (ASA) Writing Workshop for the Junior Researchers, 2016, 2018
- *The Junior Faculty Presentation Award from the Association for Clinical and Translational Statisticians (ACTStat) annual meeting*, 2016
- Travel funds from NIH for the 18th Meeting of New Researchers in Statistics and Probability, 2016
- Travel funds from the National Science Foundation for Joint Statistical Meeting, 2015
- *Penn State University Junior Faculty Development Award*, 2015
- *Penn State CTSI KL2 career development award*, 2015-2017
- Travel Award by the Eastern North American Region (ENAR) Diversity Workshop, 2014
- *ASA Statistics in Epidemiology Young Investigator Award*, JSM, 2012
- *NIH Biostatistics in Genetics, Immunology, and Neuroimaging (BGIN) training fellowship* at Emory University, 2012-2013
- The Eastern North American Region (ENAR) RAB Graduate Student and Recent Graduate Council (GSRGC) board membership, 2012-2013
- Travel Award by the University of Miami Spatial Statistics Conference, 2012
- Travel Award by the Statistical and Applied Mathematical Sciences Institute (SAMSI) for the Simulation of Rare Events Workshop, 2012
- Travel Award by the Eastern North American Region (ENAR) Diversity Workshop, 2012
- The R. L. Anderson Runner-Up Poster Award (3/28) by Southern Regional Council on Statistics (SRCOS) Summer Research Conference, 2011
- The Boyd Harshbarger student Travel Award by Southern Regional Council on Statistics

(SRCOS) Summer Research Conference, 2011, 2012

- Travel Award by the Eastern North American Region (ENAR) Diversity Workshop, 2010
- Travel Award by the Eastern North American Region (ENAR) Diversity Workshop, 2009
- Graduate Fellowship and conference Travel Awards, Emory University, 2008-2011
- Conference Travel Awards for graduate students, Emory University, 2008-2012
- Graduate Fellowship, University of Louisville, 2006-2008

EDITORIAL AND REFEREE ACTIVITIES

Editorial Service:

- Associate Editor, *Biometrics*, July 2021-June 2023
- Associate Editor, *Statistics in Medicine*, 2021-2024
- Associate Editor, *Journal of Biopharmaceutical Statistics*, 2021-present
- Co-chair of CDC Preventing Chronic Disease (PCD) Journal Statistical Advisory Committee, 2019-2023
- Statistical consultant/editor, the *Journal of the American Society of Nephrology (JASN)*, 2017-present
- Associate Editor, *Journal of Advanced Statistics*, 2016-present
- Editor board member, the *Journal of Austin Cardiology*, 2016-present
- Associate Editor, *Journal of Applied Mathematical Modeling and Computing*, 2016-present
- Associate Editor for *BMC Medical Research Methodology*, 2015-present
- Associate editor for *Biometrics & Biostatistics International Journal*, 2015-present
- Member Editor, *Scientific Online Publishing Transactions on Statistics and Analysis (STSA)*, 2014-present
- Editorial board member, *Frontiers in Internal Medicine*, 2014-present

Grant Review:

- Reviewer for the NSF Graduate Research Fellowships Program (GRFP), 2023
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (one panel), Jan 2023
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (one panel), Dec 2022
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (one panel), Nov 2022
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (two panels), Sep 2022
- Grant reviewer for Prostate Cancer Research (pccr.org.uk), Feb 2022
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (two panels), Feb 2022
- Reviewer for the NSF Graduate Research Fellowships Program (GRFP), 2022
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Jan 2022
- The 2021 U.S. Army Army Medical Research & Development Command Broad Agency Announcement, Nov 2021
- Reviewer for the NSF Graduate Research Fellowships Program (GRFP), 2021
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Oct 2020

- The industryXchange Multi-disciplinary Research Seed Grants: Artificial Intelligence/Machine Learning at Penn State, June 2020
- The Special Emphasis Panel/Scientific Review Group ZDK1 GRB-K (M1) on NIDDK Clinical study consortium, March 2020
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Feb 2020
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Oct 2019
- Grant reviewer, Penn State CTSI's TL1 grant application, Mar 2018
- Natural Sciences and Engineering Research Council of Canada (NSERC), Jan 2018
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (Two Panels), Jan 2018
- The University at Buffalo pilot grants for the Penn State Clinical & Translational Science Institute (CTSI), Dec 2016-Jan 2017
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Oct 2016
- The Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Feb 2016

Referee for Journal Review:

Journal of the Royal Statistical Society Series C; Journal of Applied Statistics; Biometrics; Annals of Applied Statistics; Biostatistics; Statistics in Medicine; Pharmaceutical Statistics; Journal of Statistical Computation and Simulation; Statistical Method in Medical Research; BMC Medical Research Methodology; Computational Statistics and Data Analysis; Geospatial Health; Plos One; Journal of the American Society of Nephrology; Clinical Journal of the American Society of Nephrology; Kidney International; Journal of the American Veterinary Medical Association; Ophthalmic Epidemiology; Econometrics and Statistics; Applied Geography; journal of Biopharmaceutical Statistics; Biometrical Journal; Frontier in Neurology

PROFESSIONAL SERVICE

Department/College Service:

- Faculty Interviewer for the PhD student candidates in EPI/BIOS in the Department of Population and Quantitative Health Sciences at Case Western Reserve University School of Medicine, 2023 Spring
- Member of a "MD Thesis Review Team" to review and grade the MD theses, Spring 2023
- Faculty feedback service for CWRU PQHS 501 student seminar, Fall 2022
- Trainer in Systems Biology & Bioinformatics PhD Program at Case Western Reserve University School of Medicine, 2022-now
- Mentor for Two Junior Faculties (Dr. Hao Feng; Dr. Liangliang Zhang) in Department of Population and Quantitative Health Sciences at Case Western Reserve University School of Medicine, 2022-now
- Director of the Master program in Biostatistics in Department of Population and Quantitative Health Sciences at Case Western Reserve University School of Medicine, 2022-now (In transition)
- MS Biostatistics Committee Member of 2022 Department of Population and Quantitative Health Sciences at Case Western Reserve University, 2022-now

- Judge of the Outstanding Postdoc Award and Outstanding Poster Awards for the 20th annual "Data and Dine" Postdoctoral Research Symposium at Penn State, 2022
- Member, Faculty Search Committee for Division of Biostatistics and Bioinformatics at Penn State, 2018
- Judge, the student posters for National Public Health Week at Penn State, 2017
- Member, ASSESS-AKI Steering committee at Penn State, 2016-2022
- Member, PhD Candidacy Exam Committee in Biostatistics at Dept of Public Health Sciences at Penn State, 2016-2022
- Member, PhD Admission Committee in Biostatistics at Dept of Public Health Sciences at Penn State, 2015, 2017, 2018
- Member, MPH Admissions Committee at Penn State, 2015-2018
- Member, Public Health Day Symposium Abstract Review Committee at Penn State, 2015
- Volunteer, Walkin requests for consulting projects at Division of Biostatistics and Bioinformatics at Penn State, 2013-present

University Service:

- DSMB member (Biostatistician) for Pilot studies at Case Western Reserve University (PI: Dr. Molly McVoy; Dr. Keming Gao), 2023-now
- DSMB member for Penn State pilot study on Feasibility and Acceptability of a Brief Digital Exercise Program to Improve Physical Function among Older Adults With Mild-to-Moderate Walking Issues (AMRAP) (PI: Matthew Silvis, MD and Christopher Sciamanna, MD, MPH), 2021-2022
- Member, Committee of Graduate Council at Penn State, 2018-2021
- Grant reviewer, Penn State CTSI's TL1 grant application, Mar 2018
- Panelist member, Emergence Medicine (EM) Shark Tank session, Feb 2018
- Member, the Penn State University Faculty Senate, 2017-2021
- Committee member, Group on Women in Medicine and Science (GWIMS), 2017-present
- Associate member, Penn State Cancer Institute, 2016-present
- Grant reviewer, Penn State CTSI's Bridges to Translation RFA, Oct 2016
- Organizer, the BIRCWH seminar and invite Dr. Michael J. Pencina for talk, Oct 2016
- Member, Committee for Commission for Women 3C award, Mar 2016
- Chair-elect, the Nominations and Awards Committee of Penn State Hershey Commission for Women, 2015-2016
- Board member, Committee on the Organization of Advancements for Women Assessment and Issues Committee, Penn State Hershey Medical Center, 2014-present

National Service:

- Judge for Poster competition at Eastern North American Region meetings (ENAR), 2023
- Judge for Student Paper Award for at American Statistical Association (ASA), 2023
- Co-Organizer with Dr. Chixiang Chen (University of Maryland), invited session on "Frontiers and Challenges in Data Integration Analysis with Multiple Outcomes", the JSM, 2023
- Organizer, invited session on "New advancements in analytical methods using multi-source or multi-trial data", the ICSA International Conference in Chengdu, 2023
- Scientific Program Committee member for the ICSA 2022 Applied Statistics conference, University of Florida, Gainesville, 2022

- Eastern North American Region meetings (ENAR) Regional Advisory Board Member, 2021-2024
- The American Statistical Association Philadelphia (ASA-PHL) Chapter board member as Publication officer, 2021-2022
- Research proposal reviewer for NWO, the Dutch Research Council, 2021
- Tenure and Promotion Review for professors at the City University of New York (School of Public Health), 2021
- The International Chinese Statistical Association (ICSA) Bulletin Editor, 2020-2022
- Organizer, invited session on “Advanced development in joint modeling and risk prediction”, Eastern North American Region meetings (ENAR), 2019
- Member in the ASA/Biopharmaceutical Section Alzheimer’s Disease Working Group, 2018-present
- DSMB member for University of Pennsylvania CMU Roybal P30 Center (Grant Number: P30AG034546-10; PI: Kevin Volpp, MD, PhD), 2018-present
- Judge, the student paper competition for Health Policy Statistics Section (HPSS) student award at JSM 2018
- Organizer, an invited session on “Recent advances in Joint Modeling”, the 1st International Conference on Econometrics and Statistics (EcoSta), 2017
- Serving a biostatistician for the ANOIX company on their Bedrail Cover HAI Reduction Study, 2016-2017
- Organizer and Chair, invited session on “Recent develops on high dimensional statistics in theory and application”, the International Chinese Statistical Association (ICSA) China statistics meeting, 2015.
- Organizer and Chair, invited session on “Recent developments in assessing predictive models in survival analysis”, Joint Applied Statistics Symposium by the International Chinese Statistical Association (ICSA) and the Korean International Statistical Society (KISS), 2014.
- Session Chair “Statistical methods in epidemiology”, the Eastern North American Region (ENAR), 2014
- ENAR RAB Graduate Student and Recent Graduate Council board member, 2012-2014
- Session Chair “New Developments in Neuroscience and Neuroepidemiology Statistics”, Joint Statistical Meeting (JSM), 2012

SOFTWARE PACKAGE DEVELOPMENT

1. R package “geesmv”: <http://cran.r-project.org/web/packages/geesmv/>
Description: The package includes the original sandwich variance estimator proposed by Liang and Zeger (1986), and eight types of more recent modified variance estimators for improving the finite small-sample performance.
2. R package “wgeesel”: <http://cran.r-project.org/web/packages/wgeesel/>
Description: The package includes the functions for weighted GEE model fitting as well as the existing information criteria for GEE model selection in the presence of missing data under the assumption of missing at random (MAR).
3. R package “ELCIC”: <https://cran.r-project.org/web/packages/ELCIC/index.html> and <https://chencxy28.github.io/ELCIC/articles/ELCIC.html>
Description: The package includes the functions for our proposed robust and consistent model selection criterion, named ELCIC, based upon the empirical likelihood function which is data-driven. This information criterion adopts plug-in estimators

that can be achieved by solving external estimating equations, not limited to the empirical likelihood, which avoids potential computational convergence issues and allows versatile applications, such as generalized linear models, generalized estimating equations, penalized regressions, and so on.

PROFESSIONAL MEMBERSHIP

International Statistical Institute (Elective Member)
 The Bernoulli Society
 Association of Clinical and Translational Statisticians
 Institute of Mathematical Sciences (IMS)
 American Statistical Association (ASA)
 Mental Health Statistics (MHS)
 The International Biometric Society (IBS): Eastern North American Region (ENAR)
 International Chinese Statistical Association (ICSA)
 Graduate Faculty Membership in Penn State

TECHNICAL KNOWLEDGE AND SKILLS

Computer Skills

- Statistical Packages: R, SAS, SPSS, WinBUGS and SUDAAN
- Applications: Geographic Information Systems (GIS), EPI INFO, L^AT_EX, MathType and EXP, RedCAP, common Windows database and software
- Algorithms: Experience programming of MCMC

Language Skills: Chinese and English

Certificates: SAS Base and Advanced Programmer Certificates

NEWS/MEDIA REPORT

- <https://pennstatehealthnews.org/topics/geyer-colorectal-cancer-mortality-center-locations/>
- <https://clic-ctsa.org/news/cases-highly-aggressive-prostate-cancer-time-diagnosis-increase-pa>
- <https://www.eurekalert.org/news-releases/645434>
- <https://pennstatehealthnews.org/topics/aggressive-prostate-cancer-study/>
- <https://pennstatehealthnews.org/topics/chixiang-chen-nonparametric-statistics-award/>
- <https://news.psu.edu/story/410221/2016/05/11/academics/wang-receives-award-actstat>
- <https://news.psu.edu/story/351275/2015/04/02/research/junior-faculty-members-get-support-enhance-careers-translational>
- <https://blogs.nvidia.com/blog/2022/03/29/handwriting-recognition-ai-parkinsons-disease/>