

Tao Liu, Ph.D.

Professor of Biostatistics
Academic Director, Online Master's in Biostatistics/Health Data Science
Director, ARCH Research Methods Core
Brown University

Department of Biostatistics
Center for Statistical Sciences (CSS)
Brown Data Science Institute (DSI)
ECOG-ACRIN (EA) Cancer Research Group
Advance-Clinical and Translational Research (CTR)

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PROFESSIONAL APPOINTMENTS**A. Current Academic Positions****Professor of Biostatistics**

Department of Biostatistics, Brown University.

Academic Director

Brown Online Biostatistics/Health Data Science Master's Program (2024 – Present)

Director

Brown ARCH Research Methods Core (2020 – Present)

Faculty Member

Brown Center for Statistical Sciences
Brown Data Science Institute (DSI)
Brown Alcohol Research Center on HIV
Providence/Boston Center for AIDS Research
Advance-Clinical and Translational Research (Advance-CTR)
ECOG-ACRIN (EA) Cancer Research Group

Affiliated Faculty Member

AMPATH Biostatistics and Data Program (AMPATH), Kenya-USA

B. Former Academic Appointments

Director, Brown ARCH Data and Statistics Core (2016 – 2020)

Acting Director of the CFAR Data & Biostatistics Core (Jan – Jun 2010).

Assistant Professor of Community Health (2009 – 2012)

Biostatistics Division, Department of Community Health, Alpert Medical School of Brown University.

Postdoctoral Research Associate (2006 – 2008)

Biostatistics Division, Alpert Medical School of Brown University.

Graduate Teaching Assistant (2003 – 2006)

Department of Biostatistics, Center for Clinical Epidemiology and Biostatistics (CCEB), University of Pennsylvania.

Graduate Research Assistant / Consultant (2004 – 2005)

Department of Biostatistics, Center for Clinical Epidemiology and Biostatistics (CCEB), University of Pennsylvania.

Research Assistant / Graduate Instructor (2001 – 2003)

Department of Statistics, Iowa State University.

Graduate Research Assistant (1999 – 2001)

Department of Civil Engineering, Iowa State University.

C. Other Appointments

Scientific Expert / Consultant (2022-2023)

Novartis Pharmaceuticals Corp, NJ.

Research Fellow & Consultant (2005 – 2006)

Research Statistics Unit, GlaxoSmithKline (GSK) Corp, Collegeville, PA

Summer Intern, 2003

Department of Biostatistics, Amgen Incorporation, Thousand Oaks, CA

EDUCATION

2006	Ph.D. Biostatistics	<u>University of Pennsylvania</u> , PA, USA Dissertation: <i>Measuring sensitivity to non-ignorable censoring in nonparametric and semi-parametric survival modeling.</i> Advisor: Daniel F Heitjan
2002	M.S. Statistics	<u>Iowa State University</u> , IA, USA Thesis: <i>Improved confidence interval estimation for parameters in nonlinear models</i>
2001	M.S. Civil Engineering	<u>Iowa State University</u> , IA, USA
1999	B.Eng. Environmental Engineering	<u>Tsinghua University</u> , Beijing, China

PUBLICATIONS

A. Journals Publications (Peer-reviewed)

[*Co-first authors; #Corresponding author(s); †Senior authors; Student advisee]

~~~under review or revision ~~~

1. Singh M, Nyandiko W, DeLong A, Ashimosi C, Munyoro D, Lidweye J, Nyagaya J, Biegon W, Aluoch J, Chory A, Sang E, Jepkemboi E, Orido M, Novitsky V, Hogan J, Liu T, Vreeman R, Kantor R (2026+). “Longitudinal Challenges Faced by Perinatally-Infected Young People Living with HIV in Kenya During the COVID-19 Pandemic: A 12-Month Prospective Cohort Study.” Invited revision.
2. Ky B, **Liu T**, Margulies K, Mitchell J, Haas N, Gareen I, Thangarajah M, Sicks J, Domenico C, Narayan V, Smith A, Wilcox N, Mittal K, Rhee J, Armenian S, Saphner T, Paul A, Gartrell B, Zaha V, Anari F, Wong R, Townsend R, Wagner L (2026+). “A Cluster Randomized Trial of Intensive BP Control in VEGFR TKI-Induced HTN”. *Hypertension*, invited revision.
3. Orang’o O, Mehta N#, Mwangi A, Omodi V, **Liu T**, Sang E, Tonui P, Itsura P, Loehrer P, Cu-Uvin S#(2026+). “Loop electrosurgical excision procedure is more effective than cryotherapy as treatment for cervical intraepithelial neoplasia in women with HIV in Western Kenya.” *International Journal of Gynecological Cancer*, submitted.

~~~accepted~~~

4. Sung VV, Richter HE, Lukacz ES, Sanses TVD, Baker M, Lavender M, **Liu T†**, Jeppson PC† (2025+). “Methods for a patient and community-engaged randomized trial for urgency urinary incontinence.” *Urogynecology*, accepted.
5. Kuo C, Stein D, Bekker LG, Chen M, Gill K, Atujuna M, Brown L, Whiteley L, Beardslee W, Akande M, Adrian H, **Liu T†** (2025+). “Characterizing sexual violence among adolescents in South Africa and associations with HIV and STI risk behaviors.” *Psychology of Violence*, accepted.

~~~published~~~

6. Kuo C, Wasswa J, Orchowski L, Harrison A, **Liu T**, Sikweyiya Y, Berkowitz A, Adrian H, Rasmeni A, Mathews C (2025). “Rationale and design of a randomized controlled trial testing the efficacy of Safe South Africa, an intervention to prevent HIV risk behavior and sexual violence among adolescent boys.” *Trials*. 2025 Dec 8; 27:28
7. Qu K, Schmid CH, **Liu T#** (2025). “Instrumental variable approach to estimating individual causal effects in N-of-1 trials: Application to ISTOP study.” *Biostatistics*, 26(1), kxaf042.
8. Zhu Z, Du J, Zhang H, **Liu T**, Sun S, Yang C, Zaller N, Zha H, Zhao X, Hu X, Gao P, Wang J, Sun Y, Zhang Z#, Operario D# (2025). “Application of Bayesian networks to explore prevalence and associated factors of HIV self-testing among high-risk men who have sex with men in China.” *Archives of Sexual Behavior*. 2025 Jul 24:1-3.
9. AlGhosain H, Nie J, **Liu T†**, Lee J† (2025). “Systemic toxicity of intravitreally injected gold nanorods in mice: Effects of size, surface conjugation, and post-injection period.” *Toxicology Research*. 2025/ May 16:1-4.
10. Nie J, Eom K, AlGhosain H, Neifert A, Cherian A, Gerbaka G, Ma K, **Liu T†**, Lee J† (2025). “Intravitreally injected plasmonic nanorods activate bipolar cells with patterned near-infrared laser projection.” *ACS Nano*, 19(12):11823-11840.
11. Du J, Wang S, Zhang H, **Liu T**, Sun S, Yang C, Zaller N, Dai Z, Zha H, Zhao Y, Zhao Y (2025). “Pre-exposure prophylaxis (PrEP) awareness and engagement among MSM at high risk of HIV infection in China: A multi-city cross-sectional survey.” *AIDS and Behavior*. 29(5):1629-39.
12. Liufu R, Teng Y, Wu J, **Liu T**, Liu X, Wen S, Chen J, Zhuang J# (2025). “Association of preoperative oxygen saturation and McGoon ratio with early prognosis of tetralogy of fallot.” *Heart, Lung & Circulation*. In press. doi.org/10.1016/j.hlc.2024.10.008.

~~~before 2025~~~

13. Kahler CW, Surace A, **Liu T**, Pantalone DW, Mastroleo NR, Yang Y, Wray TB, Miguez MJ, Mayer KH, Monti PM (2024). “Motivational intervention, text messaging, and extended intervention to address alcohol misuse in sexual minority men with HIV: A factorial randomized clinical trial.” *AIDS and Behavior*, 28(12): 3970-3983.
14. Merchant RC, Beaudoin FL, Clark MA, Carey MP, **Liu T**, Loo G, Cowan EA (2024). “Three pilot randomized controlled trials evaluating a persuasive health communication intervention for adult emergency department patients declining HIV/HCV testing.” *Journal of Scientific Innovation in Medicine*, 7(1)3:1–14. DOI:10.29024/jsim.206
15. Zhu Z, Lu X, Gao P, Wang X, Hu X, Zhao Y, Dai Z, Zhang H, Wang J, Sun Y, **Liu T**, Sun S, Yang C, Zaller N, Zhang Z, Don O# (2024). “Feasibility of a mobile health intervention for providing a continuum of HIV services for MSM: Pilot study of the WeTest program in 3 cities in China.” *Current HIV Research*. 22(3): 158–169.
16. Merchant RC, Harrington N, Clark MA, **Liu T**, Morgan J, Cowan E, Solnick R, Wyler B (2024). “Testing a persuasive health communication intervention (PHCI) for emergency department patients who

- declined rapid HIV/HCV screening: A randomised controlled trial study protocol.” *BMJ open*, 14(8): p.e089265.
17. Ren Q, Yu J, Chen T, Qiu H, **Liu T**, Cen J, Wen S, Zhuang J, Liu X (2024). “Surgical aortic valvuloplasty is a better primary intervention for isolated congenital aortic stenosis in children with bicuspid aortic valve than balloon aortic valvuloplasty.” *Hellenic Journal of Cardiology*, 77:54-62.
 18. Carabano M*, **Liu T***, Liu A, Lee JC, Cheng L, Wang LJ, Huang CK, Lu S# (2023). “Association of HLA-A, B, and C Alleles and Cancer Susceptibility in 179 Solid Malignancies.” *American Journal of Translational Research*. 15(9):5642-52.
 19. Narayan V, **Liu T**, Song Y, Mitchell J, Sicks J, Gareen I, Sun L, Denduluri S, Fisher C, Manikowski J, Wojtowicz M, Vadakara J, Haas N, Margulies KB, Ky B # (2023). “Early Increases in Blood Pressure and Major Adverse Cardiovascular Events in Patients Treated with VEGFR Tyrosine Kinase Inhibitors.” *Journal of the National Comprehensive Cancer Network*. 21(10):1039-1049.
 20. Wray TB#, Chan PA, Klausner JD, Liu A, Carr DJ, Phelan C, **Liu T†** (2023). “Using web analytics data to identify platforms and content that best engages high-priority HIV populations in online and social media marketing advertisements.” *Digital Health*. 9:1-15..
 21. Lin MY, **Liu T**, Gatsonis C, Sicks JD, Shih S, Carlos RC, Gareen IF# (2023). “Utilization of diagnostic procedures following lung cancer screening in the national lung screening trial.” *Journal of the American College of Radiology (JACR)*. 20(10): 1022-1030.
 22. **Liu T#** (2023). “Potential Benefits and Risks of Interim Analyses in Clinical Studies.” *New England Journal of Medicine (NEJM): Evidence*, 2(7): EVIDe2300124. [[Link](#)][DOI: 10.1056/EVIDe2300124] - *Invited editorial on interim analyses*.
 23. **Liu T**, Chambers L, Hansen B, Bazerman L, Drainoni M, Gillani F, Cachay E, Chrisopoulos K, Crane H, Kitihata M, Mayer K, Moore R, Napravnik S, Rana A, Rodriguez B, Beckwith CG# (2023). “Risk of HIV viral rebound in the era of universal treatment in a multi-center sample of persons with HIV in primary care.” *Open Forum Infectious Disease*, 10(6): ofad257. [[Link](#)][PMID: 37351454][PMCID: PMC10284343]
 24. Narayan V, **Liu T**, Song Y, Mitchell J, Sicks J, Gareen I, Sun L, Denduluri S, Fisher C, Manikowski J, Wojtowicz M, Vadakara J, Haas N, Margulies KB, Ky B # (2023). “Hypertension, cardiovascular events and survival in renal cell carcinoma and thyroid cancer patients treated with VEGFR tyrosine kinase inhibitors.” *Journal of the American College of Cardiology*. 81(8):2378.
 25. Mehta N, Orang'o O, Mwangi A, Omodi V, **Liu T**, Sang E, Tonui P, Itsura P, Loehrer P, Cu-Uvin S (2023). “LEEP more effective than cryotherapy as effective treatment for CIN lesions in women living with HIV and without HIV in western Kenya.” *Gynecologic Oncology*. 176:S215.
 26. Walek KW, Stefan S, Lee JH, Puttigampala P, Kim AH, Park SW, Marchand PJ, Lesage F, **Liu T**, Huang A, Boas DA, Moore C, Lee JW# (2023). “Near-lifespan longitudinal tracking of microvascular morphology, topology, and flow.” *Nature Communications*, 14(1): 2982. [[Link](#)][PMID: 37221202][PMCID: PMC10205707]
 27. Aluisio A# [K-award mentee], Bergam SJ, Sugut J, Kinuthia J, Bosire R; Ochola E, Ngila B, Guthrie KM, **Liu T**, Mugambi M, Katz DA, Farquhar C, Mello MJ (2023). “HIV self-testing acceptability among injured persons seeking emergency care in Nairobi, Kenya.” *Global Health Action*, 16(1): 2157540. [[Link](#)][PMID: 36628574][PMCID: PMC9848354]
 28. Giovenco D#, Pettifor A, Bekker LG, Filiatreau LM, **Liu T**, Akande M, Gill K, Atujuna M, Stein DC, Kuo C (2023). “Understanding oral PREP interest among South African adolescents: The role of perceived parental support and PREP stigma.” *AIDS and Behavior*, 27(6):1906-1913. [[Link](#)][PMID: 36383273] [PMCID: PMC10149574]

29. Liu X*, Liufu R*, **Liu T**, Cen J, Yu J, Wen S, Ou Y, Chen J, Zhuang J# (2023). "Supracardiac total anomalous pulmonary venous connection Type Ib: Morphology and outcomes." *Journal of Thoracic and Cardiovascular Surgery*, 166(1):193-200. [[Link](#)][PMID: 36732145]
30. Aluisio AR# [K-award mentee], Hermans SM, Sugut J, Kinuthia J, Bosire R, Ochola E, Ngila B, Ojuka DK, Lee JA, Maingi A, Guthrie KM, **Liu T**, Mugambi M, Katz DA, Farquhar C, Mello MJ (2022). "Assessment of standard HIV testing services delivery to injured persons seeking emergency care in Nairobi, Kenya: a prospective observational study." *PLOS Global Public Health*. 2(10): e0000526. [[Link](#)][PMID: 36962519][PMCID: PMC10021732]
- Advised on and contributed to statistical analysis and interpretation of study findings.
31. Ren Q*, Yu J*, Chen T*, Qiu H, Ji E, **Liu T**, Xu X, Cen J, Wen S, Zhuang J#, Liu X# (2022). "Long-term outcomes of primary aortic valve repair in children with congenital aortic stenosis: 15-year experience at a single center." *Frontiers in Cardiovascular Medicine*, 9: 1029245. [[Link](#)][PMID: 36312277][PMCID: PMC9613358]
- Advised on and contributed to statistical analysis and interpretation of study findings.
32. Kim CK, Choi JW, Jiao Z, Wang D, Wu J, Yi TY, Halsey KC, Eweje F, Tran TM, Liu C, Wang R, **Liu T**, Liao WH, Wang J, Bai HX# (2022). "An automated pipeline for rapid triage of COVID-19 patients using artificial intelligence based on chest radiographs and clinical data." *Nature: NPJ Digital Medicine*, 5 (1):1-9. [[Link](#)][PMID: 35031687][PMCID: PMC8760275]
- Advised on statistical analysis for this CTR collaboration; contributed my expertise in statistical learning and clinical decision-making.
33. Gao M, Roy A, Deluty A, Sharkey KM, Hoge EA, **Liu T**†, Brewer JA†# (2022). "Targeting anxiety to improve sleep disturbance: a randomized clinical trial of app-based mindfulness training." *Psychosomatic Medicine*, 84(5): 632-642. [[Link](#)][PMID: 35420589][PMCID: PMC9167766]
- Collaborated with Dr Brewer and supervised student; contributed to statistical analyses and interpretation of study findings.
34. Bocage A#, Orang'o O, **Liu T**, Itsura P, Tonui P, Muthoka K, Stephen K, Sam SS, Caliendo A, Cu-Uvin S (2022). "HIV-1 RNA genital tract shedding after cryotherapy for visual inspection with acetic acid-positive cervical lesions in western Kenya." *American Journal of Obstetrics and Gynecology*, 226 (2): 291-292. [[Link](#)][DOI:10.1016/j.ajog.2021.11.1278]
- Conceived study design; developed analysis plan; conducted statistical analyses; and contributed to interpretation of study findings.
35. Orang'o O, Mehta N, Mwangi A, Omodi V, **Liu T**, Sang E, Tonui P, Itsura P, Muthoka K, Kiptoo S, Loehrer P#. (2022). "Cryotherapy and LEEP are effective treatments for CIN lesions in HIV+ and HIV- women in western Kenya." *American Journal of Obstetrics and Gynecology*, 226 (2): 316-317. [[Link](#)][DOI:10.1016/j.ajog.2021.11.1325]
- Advised on statistical analyses and contributed to the interpretation of study findings.
36. Abel L, Perera SM, Yam D, Garbern S, Kennedy SB, Massaquoi M, Sahr Foday, Woldemichael D, **Liu T**†, Levein A†, Aluisio A# (2022). "Association between oral antimalarial medication administration and mortality among patients with Ebola virus disease: A multisite cohort study." *BMC Infectious Diseases*, 22 (1):1-9. [[Link](#)][PMID: 35057753][PMCID: PMC8772178]
- Developed analysis plan; supervised student (Yam)/clinical fellow (Abel) on all statistical analyses; contributed to interpretation of study findings.
37. Wang R, Jiao Z, Yang L, Choi JW, Xiong Z, Halsey K, Tran TM, Pan I, Collins SA, Feng X, Wu J, Chang K, Shi LB, Yang S, Yu QZ, Liu J, Fu FX, Jiang XL, Wang DC, Zhu LP, Yi XP, Healey T, Zeng QH, **Liu T**, Hu PF, Huang RY, Li YH, Sebro RA, Zhang PL, Wang J, Atalay MK, Liao WH#, Fan Y, Bai H# (2022). "Artificial intelligence for prediction of COVID-19 progression using CT imaging and clinical data". *European radiology*, 32 (1): 205–212. [[Link](#)][PMID: 34223954][PMCID: PMC8256200]
- Advised on statistical analysis in this CTR collaboration; contributed my expertise in statistical learning and clinical decision-making.

38. Merchant RC#, Marks SJ, Clark MA, Carey MP, **Liu T†** (2022). “Abbreviated versions of the Shortened Assessment of Health Literacy for adult emergency department patients: Derivation and testing.” *Cogent Public Health*, 9(1):2024698. [[Link](#)][DOI:10.1080/2331205X.2021.2024698]
- Collaborated with Dr. Merchant; supervised student on all statistical analyses; contributed to interpretation of study findings.
39. Khalife S, Jenkins HE, Dolynska M, Terleieva I, **Liu T**, Rybak NR, Carter J, Horsburgh CR, Chiang SS# [K-award mentee] (2022). “Incidence and mortality of extrapulmonary tuberculosis in Ukraine: Analysis of national surveillance data.” *Clinical Infectious Diseases*, 75(4): 604-612. [[Link](#)][PMID: 34929028][PMCID: PMC9464074]
- Advised on statistical analyses and contributed to interpretation of study findings.
40. Wentz AE#, Wang RC, Marshall BDL, Shireman TI, **Liu T†**, Merchant RC† (2022). “Opioid analgesics and persistent pain after an acute pain emergency department visit: Evidence from a cohort of suspected urolithiasis patients.” *Journal of Emergency Medicine*, 61(6):637–648. [[Link](#)][PMID: 34690022][PMCID: PMC8691537]
- Co-advised Epi PhD student (Wentz); advised on and contributed to study design and analyses.
41. Lu X, Pan G, Wang X, Xia W, Zhao X, He Q, Zhang H, Wang J, Sun Y, **Liu T**, Sun S, Yang C, Zaller N, Zhang Z#, Don O# (2021). “User preferences for a mHealth approach to support HIV self-testing and linkage to HIV prevention or care services for MSM in China.” *AIDS Education and Prevention*, 33(6):534–550. [[Link](#)][PMID: 34874759]
- Advised on study design; contributed to developing data collection process and analysis plan.
42. Noksa A*#, **Liu T*#**, Kuo I, Bazerman L, Kurth A, Kantor R, Beckwith C (2021). “Validity of self-reported HCV status among justice-involved persons living with HIV.” *Journal of Correctional Health Care* 27(3):167-171. [[Link](#)][PMID: 34407381][PMCID: PMC8903044]
- Conceived study concept and study; developed analysis plan; conducted all statistical analyses; led interpretation of study findings.
43. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TM, Lu S, **Liu T**, Chang K, Huang RY, Zhang PJ, Zhang Z, Xiao E, Wu J#, Bai HX# (2021). “Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging.” *European radiology*, 31(7):4960-4971. [[Link](#)][PMID: 33052463]
- Advised on statistical analysis; contributed my expertise in statistical learning and clinical decision-making.
44. Tang L, Liu S, Xiao Y, Tran TML, Choi JW, Wu J, Halsey K, Huang RY, Boxerman J, Patel SH, Kung D, Liu R, Feldman MD, Danoski DD, Liao W, Kasner SE, **Liu T**, Xiao B, Zhang PJ, Reznik M, Bai HX,# Yang L# (2021). "Encephalopathy at admission predicts adverse outcomes in patients with SARS-CoV-2 infection". *CNS Neuroscience & Therapeutics*, 27(10):1127–1135. [[Link](#)][PMID: 34132473][PMCID: PMC8444722]
- Advised on statistical analysis; contributed my expertise in statistical learning.
45. Beckwith CG#, Min S, Manne A, Novitsky V, Howison M, **Liu T**, Kuo I, Kurth A, Bazerman L, Agopian A, Kantor R (2021). "HIV drug resistance and transmission networks among a justice-involved population at the time of community re-entry in Washington D.C." *AIDS Research and Human Retroviruses*, 37(12):903–912. [[Link](#)][PMID: 33896212][PMCID: PMC8716515]
- Advised on study design and statistical analyses; contributed to interpretation of study findings.
46. Jiao Z*, Choi JW*, Halsey K, My T, Hsieh B, Wang D, Eweje F, Wang R, Chang K, Wu, Scott J, Yi TY, Delworth AT, **Liu T**, Healey TT, Lu S, Wang J, Feng X, Atalay MK, Feldman LY, J P, Liao W#, Fan Y#, Bai HX# (2021). “Prognostication of patients with COVID-19 using artificial intelligence based on chest x-rays and clinical data: a retrospective study.” *The Lancet: Digital Health*, 3(5): 286–294. [[Link](#)][PMID: 33773969][PMCID: PMC7990487]
- Advised on statistical analysis in this CTR collaboration; contributed my expertise in statistical learning and clinical decision-making.

47. Marks SJ, Merchant RC#, Clark MA, **Liu T**, Rosenberger JG, Bauermeister JA, Mayer KH (2021). "Barriers to HIV testing and opportunities for expansion using home-based HIV self-testing: results of a national study of high-risk young men who have sex with men." *SAGE Open*, 11(2): 21582440211016835. [[Link](#)][DOI:10.1177/21582440211016835]
- *Advised on statistical analyses and contributed to interpretation of study findings.*
48. **Liu T**#, Hogan JW (2021). "Unifying IV and IPW approaches for inference of causal treatment effect and unmeasured confounding in observational studies." *Statistical Methods in Medical Research*. 30(3): 671-686. [[Link](#)][PMID: 33213292]
- *Conceived study design; developed statistical methods; designed and conducted all analyses; led interpretation of study findings.*
49. Roy A, Hoge EA, Abrante P, Druker S, **Liu T**†, Brewer J#† (2021). "Clinical efficacy and psychological mechanisms of an app-based digital therapeutic for generalized anxiety disorder: a randomized controlled trial." *Journal of Medical Internet Research*, 23(12):e26987. [[Link](#)][PMID: 34860673][PMCID: PMC8686411]
- *Advised on statistical methods and analyses; contributed to interpretation of study findings.*
50. Liu R*, Liu X*#, **Liu T**, Chen J, Wen S, Cen J, Zhuang J# (2021). "Primary sutureless repair for infracardiac total anomalous pulmonary venous connection." *European Journal of Cardio-Thoracic Surgery*, 59(5): 959-66. [[Link](#)][PMID: 33491045]
- *Conceived study design; designed the analysis plan; contributed to all statistical analyses and interpretation of study findings.*
51. Papas R#, Gakinya B, Mwaniki M, Lee H, Keter A, Martino S, Klein D, **Liu T**, Loxley M, Sidle J, Schmidt K, Nafula T, Omodi V, Baliddawa J, Kinyanjui D, Maisto S (2021). "A randomized clinical trial of a group cognitive-behavioral therapy to reduce alcohol use among human immunodeficiency virus-infected outpatients in western Kenya." *Addiction*, 116(2):305-18. [[Link](#)][PMID: 32422685][PMCID: PMC7671944]
- *Advised on all statistical analyses; contributed to interpretation of study findings.*
52. Bennett CL, Marks SJ, **Liu T**, Clark MA, Carey MP, Merchant RC# (2020). "Factors associated with lack of HIV testing among Latino immigrant and black patients at four geographically and demographically diverse emergency departments." *Journal of the International Association of Providers of AIDS Care (JIAPAC)*. Nov 3;19:2325958220970827. [[Link](#)][PMID: 33143525][PMCID: PMC7675889]
- *Advised on all statistical analyses; contributed to interpretation of study findings.*
53. Stillman AE#, Gatsonis C, Lima J, **Liu T**, Snyder B, Cormack JA, Malhotra V, Schnall MD, Udelson JE, Hoffmann U, Woodard PK, the RESCUE Investigators (2020). "Coronary computed tomography angiography compared with single photon emission computed tomography myocardial perfusion imaging as a guide to optimal medical therapy in patients presenting with stable angina: The RESCUE trial." *JAMA*. 9(24), e017993. [[Link](#)][PMID: 33283579][PMCID: PMC7955393]
- *Developed analysis plan; supervised statistical analyses; contributed to interpretation of study findings.*
54. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TM, Lu S, **Liu T**, Chang K, Huang RY, Zhang J, Zhang Z, Xiao E, Wu J#, Bai HX# (2020). "Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging." *European Radiology*. 31(7):4960—4971. [[Link](#)] [PMID: 33052463]
- *Advised on statistical analysis in this CTR collaboration; contributed my expertise in statistical learning and clinical decision-making.*
55. Hansen B*, **Liu T***, Bazerman L, Drainoni ML, Gillani FS, Cachay E, Christopoulos K, Crane H, Kitahata M, Mayer KH, Moore R, Beckwith C#. (2020). "Risk for viral rebound in the era of U=U; A CNICS analysis." *Open Forum Infectious Diseases*. 7(S1): S525-S526 [[Link](#)][DOI:10.1093/ofid/ofaa439.1180]
- *Conceived study concept; developed analysis plan; advised student on analyses; led interpretation of study findings.*

56. Orang'o EO, Ermel A, **Liu T**, Omodi V, Emont JP, Tong Y, Itsura PM, Tonui PK, Maine T, Ong'echa JM, Muthoka K, Moormann A, Hogan J, Loehrer PJ, Brown D, Cu-Uvin S# (2020). "Detection of HPV types among HIV-infected and HIV-uninfected women undergoing cryotherapy or loop electrosurgical excision procedure." *International Journal of Gynecology and Obstetrics*. 151(2): 279-286. [[Link](#)] [PMID: 32715467][PMCID: PMC7541596]
- *Developed statistical analysis plan; supervised data management and statistical analyses; led the interpretation of study findings.*
57. Wentz AE, Wang RC, Marshall BL, Shireman T, **Liu T**†, Merchant RC#† (2020). "Variation in opioid analgesia administration and discharge prescribing for emergency department patients with suspected urolithiasis." *The American Journal of Emergency Medicine*. 38 (10): 2119-2124. [[Link](#)][PMID: 33071098][PMCID: PMC7704692]
- *Co-advised Epi PhD student (Wentz); advised on and contributed to study design and analyses.*
58. Merchant RC#, Marks SJ, Clark MA, Carey MP, **Liu T** (2020). "Retention of knowledge about HIV/AIDS and HIV testing among adult emergency department patients: Implications for HIV testing and prevention." *Annals of Emergency Medicine*. Oct 1;76(4):S9. [[Link](#)][DOI:10.1016/j.annemergmed.2020.09.032]
- *Conceived study concept; advised on and contributed to all statistical analyses and interpretation of study findings.*
59. Brewer JA, Roy A, Deluty A, **Liu T**†, Hoge EA† (2020). "Can mindfulness mechanistically target worry to improve sleep disturbances? Theory and study protocol for app-based anxiety program." *Health Psychology*, 39(9): 776-784. [[Link](#)][PMID: 32833479][PMCID: PMC8345003]
- *Conceived study concept; advised on and contributed to statistical analyses and interpretation of study findings.*
60. Wentz AE, Wang RC, Marshall BL, Shireman T, **Liu T**†, Merchant RC†# (2020). "Variation in opioid analgesia administration and discharge prescribing for emergency department patients with suspected urolithiasis." *The American Journal of Emergency Medicine*. 38 (10): 2119-2124. [[Link](#)][PMCID: PMC7704692][PMID: 33071098]
- *Co-advised Epi PhD student (Wentz); developed study design; advised on and contributed to analyses and interpretation of study findings.*
61. Liu Z, Wu Q, Zou Z, Yao Y, Cai J **Liu T**, Yang Z#, Liu Q# (2020). "Investigation of a family cluster outbreak of COVID-19 indicates the necessity of CT screening for asymptomatic family members in close contact with confirmed patients". *Journal of Thoracic Disease*, 12(7): 3673–3681. [[Link](#)][PMID: 32802446][PMCID: PMC7399436]
- *Advised on all statistical analyses; contributed to interpretation of study findings.*
62. Merchant RC#, Marks SJ, Clark MA, Carey MP, **Liu T** (2020). "Limited ability of three health literacy screening items to identify adult English- and Spanish-speaking emergency department patients with lower health literacy." *Ann Emerg Med* 5(6):691-703. [[Link](#)][PMID: 32200999]
- *Conceived study concept; conducted all statistical analyses; contributed to interpretation of study findings.*
63. Bacic J, **Liu T**, Thompson H, Boorjian SA, Leibovich BC, Golijanin D, Gershman B# (2020). "Emulating target clinical trials of radical nephrectomy with or without lymph node dissection for renal cell carcinoma." *Oncology*, 140:98-106. [[Link](#)][PMID: 32142726][PMCID: PMC7255934]
- *Conceived study design; designed emulation trials; developed statistical methods; supervised all analyses; contributed to interpretation of study findings.*
64. Mehta N, Orang'o O, Itsura P, Tonui P, Bussmann H, Bogers JP, **Liu T**†, Cu-Uvin S† (2020). "Loop electrosurgical excision procedure treats cervical intraepithelial neoplasia 2/3 among HIV- and HIV+ women in Kenya." *Journal of Lower Genital Tract Disease*. 24(1):21-26. [[Link](#)][PMID: 31860571]
- *Conceived study concept; designed the study; developed analysis plan; advised on and contributed to statistical analyses and interpretation of study findings.*

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- *Conceived study design; developed analysis plan; advised student on all statistical analyses; contributed to interpretation of study findings.*
66. Merchant RC#, Marks SJ, Clark MA, Carey MP, **Liu T†** (2020). "Comparison of a video to a pictorial brochure in improving HIV/AIDS and HIV testing knowledge and increasing HIV testing motivation and behavioral skills among adult emergency department patients." *Journal of American College of Emergency Physicians*, 1(3): 202-213. [[Link](#)][PMID: 33000035][PMCID: PMC7493585]
- *Conceived study concept; advised on and contributed to statistical analyses and interpretation.*
67. Bennett CL, Marks SJ, Rosenberger JG, Bauermeister JA, Clark MA, **Liu T**, Mayer KH, Merchant RC#. (2020). "Factors associated with the discordance between perception of being HIV infected and HIV sexual risk-taking among social media-using black, Hispanic, and white young men who have sex with men." *Journal of the International Association of Providers of AIDS Care (JIAPAC)* 19 (2020): 2325958220919260. [[Link](#)][PMID: 32314651][PMCID: PMC7175048]
- *Advised on all statistical analyses; contributed to the interpretation of study findings*
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- *Conceived study design; developed analysis plan; supervised student on all statistical analyses; contributed to the interpretation of study findings*
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- *Developed analysis plan; advised on and contributed to statistical analyses and interpretation.*
70. Aluisio AR#, Yam D, Peters JL, Cho DK, Perera SM, Kennedy SB, Massaquoi M, Sahr F, Smit MA, Locks L, **Liu T†**, Levine AC† (2020). "Impact of Intravenous Fluid Therapy on Survival Among Patients with Ebola Virus Disease: An International Multisite Retrospective Cohort Study." *Clinical Infectious Diseases*, 70(6):1038-1047. PMID: 31050703. [[Link](#)][PMID: 31050703][PMCID: PMC7390355]
- *Conceived study design; developed analysis plan; advised student (Yam) on all statistical analyses; contributed to interpretation of study findings*
71. Garbern SC#, Yam D, Aluisio AR, Cho DK, Kennedy SB, Massaquoi M, Sahr F, Perera SM, Levine AC†, **Liu T†** (2019). "Effect of mass artesunate-amodiaquine distribution on mortality of patients with Ebola virus disease during West African outbreak." *Open Forum Infectious Diseases*. 6(7). [[Link](#)][PMID: 31281856][PMCID: PMC6602760]
- *Conceived study design; developed analysis plan; advised student on all statistical analyses; contributed to interpretation of study findings*
72. Aluisio AR#, Perera SM, Yam D, Garbern S, Peters JL, Abel L, Cho DK, Kennedy SB, Massaquoi M, Sahr F, Brinkmann S, Locks L, **Liu T†**, Levine AC† (2019). "Vitamin A supplementation was associated with reduced mortality in patients with Ebola virus disease during the West Africa outbreak." *The Journal of Nutrition*. 149(10): 1757-1765. [[Link](#)][PMID: 31268140][PMCID: PMC6768816]
- *Conceived study design; developed analysis plan; advised student on all statistical analyses; contributed to interpretation of study findings*
73. Holland S, DeLong A, **Liu T**, Makaretz A, Coetzer M, Ledingham L, Xu Y, Sam S, Sagoe K, Caliendo A, Daniels M, Hogan JW, Kantor R#. (2019) "Laboratory evaluation of HIV-1 viral load pooling with

- marker-assisted deconvolution." *Open Forum Infectious Diseases*, 6(2): S868. [[Link](#)][DOI: 10.1093/ofid/ofz360.2182]
- *Conceived study design; advised on statistical analyses; contributed to interpretation of study findings.*
74. [Wentz AE](#), [Merchant RC#](#), [Clark MA](#), [Liu T](#), [Rosenberger JG](#), [Bauermeister J](#), [Mayer KH](#) (2019). "Blood donation, sexual practices, and self-perceived risk for HIV in the United States among young adult men who have sex with men." *Public Health Reports*. 134(1):36-46. [[Link](#)][PMID: 30526313][PMCID: PMC6304728]
- *Co-advised PhD student on statistical analyses; contributed to interpretation of study findings.*
75. [Wray TB#](#), [Chan PA](#), [Kahler CW](#), [Liu T](#), [Mayer KH](#) (2019). "Vulnerable periods: characterizing patterns of sexual risk and substance use during lapses in adherence to HIV pre-exposure prophylaxis among men who have sex with men." *Journal of AIDS*. 80(3):276-283. [[Link](#)][PMID: 30531302][PMCID: PMC6534124]
- *Advised on statistical methods and analyses; contributed to the interpretation of study findings.*
76. [Tovar A#](#), [Vaughn A](#), [Fisher JO](#), [Benjamin-Neelon S](#), [Burney R](#), [Webster K](#), [Liu T](#), [Ostbye T](#), [Ward D](#) (2019). "Modifying the environmental policy assessment and observation (EPAO) to better capture feeding practices of family child care home providers." *Public Health Nutrition*, 22(2):223-234. [[Link](#)][PMID: 30378521][PMCID: PMC6365011]
- *Conducted statistical regression analyses; contributed to interpretation of study findings.*
77. [Kuo I#](#), [Liu T](#), [Patrick R](#), [Trezza C](#), [Bazerman L](#), [Castonguay B](#), [Kurth A](#), [Beckwith C](#) (2019). "Use of an mHealth intervention on engagement in HIV community-based care among recently released incarcerated persons in Washington, DC." *AIDS and Behavior*, 23(4):1016-1031. [[Link](#)][PMID: 30627850][PMCID: PMC6459706]
- *Conceived study design; developed statistical plan; conducted all analyses; led interpretation of study findings.*
78. [Xu Y#](#), [Liu T](#), [Daniels MJ](#), [Kantor R](#), [Mwangi A](#), [Hogan JW](#) (2019). "Classification using ensemble learning under weighted misclassification loss." *Statistics in Medicine*. 38(11):2002–2012. [[Link](#)][PMID: 30609090][PMCID: PMC7045125] >> ***American Statistical Association: Best Paper Award on "Risk Modeling"***
- *Conceived study design; co-advised student; advised on the development of statistical methods and analyses; contributed to interpretation of study findings.*
79. [Merchant RC#](#), [Liu T](#), [Clark MA](#), [Carey MP](#) (2018). "Facilitating HIV/AIDS and HIV testing literacy for emergency department patients: a randomized, controlled, trial." *BMC Emergency Medicine*. 18:21. [[Link](#)][PMID: 29986662][PubMedPMCID: PMC6038177]
- *Conceived study design; developed analysis plan; conducted all statistical analyses; contributed to interpretation of study findings.*
80. [Yellin H](#), [Beckwith C](#), [Kurth A](#), [Liu T](#), [Castonguay B](#), [Patrick R](#), [Trezza C](#), [Bazerman L](#), [Kuo I#](#) (2018). "Syndemic effect of mental illness and substance use on viral suppression among recently-incarcerated, HIV-infected individuals in the CARE+ Corrections study." *AIDS Care*, 1-5. [[Link](#)][PMID: 29607658][PMCID: PMC6376872]
- *Advised on statistical analyses; contributed to interpretation of study findings.*
81. [Merchant RC#](#), [Zhang Z](#), [Liu T†](#), [Baird JR†](#). (2018). "Lack of efficacy in a randomized trial of a brief intervention to reduce drug use and increase drug treatment services utilization among adult emergency department patients over a twelve-month period." *Emergency Medicine Journal*. 35(5):282-288. [[Link](#)][PMID: 29437758]
- *Developed analysis plan; supervised student on all statistical analyses; contributed to interpretation of study findings.*
82. [Kahler CW#](#), [Pantalone DW](#), [Mastroleo NR](#), [Liu T](#), [Bove G](#), [Ramratnam B](#), [Monti P](#), [Mayer KH](#) (2018). "Motivational interviewing with personalized feedback to reduce alcohol use in HIV-infected men who

- have sex with men: A randomized controlled trial.” *Journal of Consulting and Clinical Psychology*. 86(6):645-656. [[Link](#)][PMID: 30035581][PMCID: PMC6061969]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
83. Merchant RC#, Clark MA, **Liu T**, Romanoff J, Rosenberger JG, Bauermeister J, Mayer KH (2018). “Comparison of home-based oral fluid rapid HIV self-testing versus mail-in blood sample collection or medical/community HIV testing by young adult black, Hispanic, and white MSM: results from a randomized trial.” *AIDS and Behavior*. 22(1): 337-346. [[Link](#)][PMID: 28540562][PMCID: PMC5701881]
 - *Developed study analysis plan; supervised student on all statistical analyses; contributed to interpretation of study findings.*
84. Alexovitz KA, Merchant RC#, Clark M, **Liu T**, Rosenberger JG, Bauermeister J, Mayer KH (2018). “Discordancy of voluntary HIV testing with HIV sexual risk-taking and self-perceived HIV infection risk among social-media using black, Hispanic, and white young-men-who-have-sex-with-men (YMSM).” *AIDS and Care*. 30(1): 81-85. [[Link](#)][PMID: 28959902][PMCID: PMC6476417]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
85. **Liu T**#, Hogan JW, Daniels, MJ, Coetzer M, Xu Y, Bove J, Delong AK, Ledingham L, Orido M, Diero L, Kantor R. (2017). “Improved HIV-1 Viral Load Monitoring Capacity using Pooled Testing with Marker-Assisted Deconvolution.” *Journal of AIDS*. 75(5): 580–587. [[Link](#)][PMID: 28489730][PMCID: PMC5503773]
 - *Conceived study design; developed statistical methods; planned and conducted all analyses; led interpretation of study findings.*
86. Mark SJ, Merchant RC#, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, Mayer KH (2017). “Potential healthcare insurance and provider barriers to PrEP utilization among black, Hispanic and white YMSM.” *AIDS Patient Care and STDs*, 31(11):470-478. [[Link](#)][PMID: 29087744][PMCID: PMC5665093]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
87. Merchant RC#, Romanoff J, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, Bauermeister J, Mayer KH (2017). “Variations in recruitment yield and characteristics of participants recruited across diverse Internet platforms in an HIV testing study of young adult men-who-have-sex-with-men (YMSM).” *American Journal of Men’s Health*. 11(5):1342–1357. [[Link](#)][PMID: 28691552][PMCID: PMC5675213]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
88. Merchant RC#, Romanoff J, Zhang Z, **Liu T**†, Baird JR† (2017). “Impact of a brief intervention on reducing alcohol use and increasing alcohol treatment services utilization among alcohol- and drug-using adult emergency department patients.” *Alcohol*. 65:71-80. [[Link](#)][PMID: 29084632][PMCID: PMC5681406]
 - *Developed analysis plan; supervised students on all statistical analyses; contributed to interpretation of study findings.*
89. Beckwith C#, Castonguay B, Trezza C, Bazerman L, Patrick R, Cates A, Kurth A, **Liu T**, Peterson J, Kuo I (2017). “Gender differences in HIV care among criminal justice-involved persons: Baseline data from the CARE+ Corrections randomized study.” *PLoS One*,12(1): e0169078. [[Link](#)][PMID: 28081178] [PMCID: PMC5231337]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
90. Kahler C#, **Liu T**, Cioe P, Bryant V, Pinkston M, Kojic E, Onen N, Baker J, Hammer J, Patel P (2017). “Direct and indirect effects of heavy alcohol use on HIV and non-HIV outcomes in a longitudinal study of HIV patients receiving ART.” *AIDS and Behavior*. 21(7): 1825-1835. [[Link](#)][PMID: 27392417][PMCID: PMC5219952]
 - *Conceived study design for ARCH collaboration; developed analysis plan; conducted all statistical analyses; led interpretation of study findings.*

91. Merchant RC#, Clark MA, **Liu T**, Rosenberger J, Romanoff J, Bauermerister J, Mayer K (2017). “Preferences for home-based oral fluid rapid HIV self-testing among social media-using young black, Hispanic, and white men-who-have-sex-with-men (YMSM): Implications for future interventions.” *Public Health*. 145:7–19. [[Link](#)][PMID: 28359394][PMCID: PMC5380143].
- *Advised on statistical analyses; contributed to interpretation of study findings.*
92. Orang’o O, **Liu T**, Christoffersen-Deb A, Itsura P, Mabeya H, Washington S, Cu-Uvin S, Rositch AF# (2016). “Use of VIA, Pap smear, or HR-HPV testing in women living with HIV/AIDS for post-treatment screening: Same tests, different priorities.” *AIDS*. 31(2):233–240. [[Link](#)][PMID: 27831951][PMCID: PMC5420497]
- *Conceived study design for this US-Kenya collaboration; developed analysis plan; conducted all statistical analyses; led interpretation of study findings.*
93. Shao W, Guan W, Clark MA, **Liu T**, Santelices, C, Cortes, DE, Merchant, RC# (2016). “Does a video improve knowledge of HIV/AIDS and HIV testing among a global internet audience?” *Journal of the International Association of Providers of AIDS Care*. 15(5): 392–399. [[Link](#)][PMID: 26518589][PMCID: PMC5012116]
- *Developed analysis plan; supervised students on all statistical analyses; contributed to interpretation of study findings.*
94. Stillman AE#, Gatsonis C, Lima JA, Black WC, Cormack J, Gareen I, Hoffmann U, **Liu T**, Mavromatic K, Schnall MD, Udelson JE, Wood P (2016). “Rationale and design of the RESCUE (Randomized Evaluation of Patients with Stable Angina Comparing Utilization of Noninvasive Examinations) trial.” *The American Heart Journal*. 179:19–28. [[Link](#)][PMID: 27595676][PMCID: PMC5443342]
- *Designed the study; developed statistical analysis plan.*
95. Merchant RC#, **Liu T**, Baird JR (2016). “Variations in the estimates of substance use and need for interventions among adult emergency department patients based on different screening strategies using the ASSIST.” *Western Journal of Emergency Medicine*; 17(3):302–314. [[Link](#)][PMID: 27330663] [PMCID: PMC4899062]
- *Developed analysis plan; conducted all statistical analyses; led interpretation of study findings.*
96. Merchant RC#, Baird JR, **Liu T**† (2015). “Short-term efficacy of a brief intervention to reduce drug misuse and increase drug treatment utilization among adult emergency department patients.” *Academic Emergency Medicine*. 22(10): 1172–1180. [[Link](#)][PMID: 26375468][PMCID: PMC4876812]
- *Advised on all statistical analyses; contributed to interpretation of study findings.*
97. Merchant RC#, DeLong AK, **Liu T**†, Baird JB† (2015). “Factors influencing uptake of rapid HIV and Hepatitis C screening among drug misusing adult emergency department patients: implications for future HIV/HCV screening interventions.” *AIDS and Behavior*. 19(11): 2025–2035. [[Link](#)][PMID: 26036465] [PMCID: PMC4600425]
- *Supervised all statistical analyses; contributed to interpretation of study findings.*
98. Guan W, **Liu T**, Baird JR, Merchant RC# (2015). “Evaluation of a brief intervention to reduce the negative consequences of drug misuse among adult emergency department patients.” *Drug and Alcohol Dependence*, 157:44–53. [[Link](#)][PMID: 26482090][PMCID: PMC4663151]
- *Developed analysis plan; supervised student on data management and statistical analyses; contributed to interpretation of study findings.*
99. Bernardino VL, Baird JR, **Liu T**†, Merchant RC† (2015). “Comparison of substance use prevalence among Rhode Island and The Miriam Hospital Emergency Department patients to state and national general population prevalence estimates.” *Rhode Island Medical Journal*, 98(4): 30–34. [[Link](#)][PMID: 25830171][PMCID: PMC4932856]
- *Conceived study design; advised on all statistical analyses; contributed to interpretation of study findings.*
100. Beaudoin F, Baird JR, **Liu T**, Merchant RC# (2015). “Sex differences in substance use among adult emergency department patients: prevalence, severity, and need for intervention.” *Academic Emer-*

- gency *Medicine*. 22(11):1307-15. [[Link](#)][PMID: 26473942][PMCID: PMC4932859]
 - *Advised on study plan and all statistical analyses; contributed to interpretation of study findings.*
101. [Shao W](#), [Guan W](#), Clark MA, **Liu T**, Santelices C, Cortes DE, Merchant RC# (2015). "Variations in recruitment yield, costs, speed and participant diversity across internet platforms in a global study examining the efficacy of an HIV/AIDS and HIV testing animated and live-action video among English- or Spanish-speaking internet or social media users." *Digital Culture & Education*, 7(1), 40-86. [[Link](#)][PMID: 27330570][PMCID: PMC4912013]
 - *Conceived study design; developed analysis plan; supervised students on all statistical analyses; contributed to interpretation of study findings.*
102. Merchant RC#, Clark MA, Santelices CA, **Liu T**†, Cortes D†. (2015). "Efficacy of an HIV/AIDS and HIV testing video for Spanish-speaking Latinos in healthcare and non-healthcare settings." *AIDS and Behavior*. 19(3): 523–535. [[Link](#)][PMID: 25179540][PMCID: PMC4346556]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*
103. [Rana A](#)#, **Liu T**, Gillani FS, Reece R, Kojic E., Zlotnick C, Wilson I. (2015) "Multiple gaps in care common among newly diagnosed HIV patients." *AIDS Care*. 27(6): 679–687. [[Link](#)][PMCID: PMC25634492] [PMCID: PMC4366312]. (*mentored junior investigator*).
 - *Conceived study design; advised on analysis plan; contributed to analyses and interpretation of study findings.*
104. [Tai M](#), **Liu T**, Merchant RC#. (2015). "Hospitalizations in the United States among HIV-infected individuals in short-stay hospitals, 1982-2010." *Journal of the International Association of Providers of AIDS Care*. 14(5):408-414. [[Link](#)][PMID: 25656860]
 - *Conceived study design; advised on analysis plan; supervised student; contributed to interpretation of study findings.*
105. Merchant R#, Baird J, **Liu T**, Taylor L, Montague B, Nirenberg T. (2014) "Brief intervention to increase emergency department uptake of combined rapid HIV and Hepatitis C screening among a drug misusing population." *Academic Emergency Medicine*. 21:752–767. [[Link](#)][PMID: 25125271] [PMCID: PMC4135533]
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
106. Merchant RC#, Baird JR, **Liu T**, Taylor LE (2014). "HCV among the Miriam Hospital and Rhode Island Hospital adult emergency department patients." *Rhode Island Medical Journal*, 97(4): 35–39. [[Link](#)][PMID: 24983020][PMCID: PMC4349365]
 - *Conceived study design; conducted all statistical analyses; contributed to interpretation of study findings.*
107. Federov V#, **Liu T** (2014). "Randomized discontinuation trials with binary outcomes." *The Journal of Statistical Theory and Practice*, 8:30–45. [[Link](#)][DOI:10.1080/15598608.2014.840492]
 - *Conceived study design; designed and implemented statistical analyses; contributed to interpretation of study findings.*
108. **Liu T**#, Hogan J, Wang L, Zhang S, Kantor R (2013). "Optimal allocation of gold standard testing under constrained availability: application to assessment of HIV treatment failure." *Journal of the American Statistical Association (JASA)*, 108 (504): 1173–1188. [[Link](#)][PMID: 24672142][PMCID: PMC3963362].
 - *Conceived study design; designed and conducted all statistical analyses; led interpretation of study findings.*
109. Trillo A, Merchant RC#, Baird J, Ladd G, **Liu T**, Nirenberg T. (2013). "Interrelationship of alcohol misuse, HIV sexual risk and HIV screening uptake among emergency department patients." *BMC Emergency Medicine*, 13:9-22. [[Link](#)][PMID: 23721108] [PMCID: PMC3686630]
 - *Advised on statistical analyses; contributed to interpretation of study findings.*

110. Xu H#, Short SE, **Liu T** (2013). "Dynamic relations between fast-food restaurant and body weight status: A longitudinal and multilevel analysis of Chinese adults." *Journal of Epidemiology & Community Health*, 67:271-279. [[Link](#)][PMID: 22923769][PMCID: PMC3574174] >>> **The 2009 Brown Global Health Award**.
- *Advised student (awardee); designed the study; contributed to analyses and interpretation of study findings*
111. **Liu T**, Heitjan DF# (2012). "Sensitivity of the discrete-time Kaplan-Meier estimate to non-ignorable censoring: Application in a clinical trial." *Statistics in Medicine*, 31: 2998-3010. [[Link](#)][PMID: 22806989][PMCID: PMC3876928]. >>> **ENAR Best Student Paper Award**
- *Conceived study design; designed and conducted all statistical analyses; led interpretation of study findings.*
112. Trillo A, Merchant R#, Baird J, **Liu T**, Nirenberg T (2012). "Sex differences in alcohol misuse and estimated blood alcohol concentrations among emergency department patients: Implications for brief interventions." *Academic Emergency Medicine*, 19(8):924-33. [[Link](#)][PMID: 22849748] [PMCID: PMC3424395].
- *Conducted all statistical analyses; contributed to interpretation of study findings.*
113. Wei F, Zhou J, Wei X, Zhang J, Fleming B, Terek R, Pei M, Chen Q, **Liu T**†, Wei L#† (2012). "Activation of Indian Hedgehog promotes chondrocyte hypertrophy and upregulation of MMP-13 in human osteoarthritic cartilage." *Osteoarthritis and Cartilage*, 20(7):755-63. [[Link](#)][PMID: 22469853] [PMCID: PMC3374008].
- *Advised on statistical analyses; contributed to interpretation of study findings.*
114. Anderson A, Firnhaber C, **Liu T**, Swarts A, Siminya M, Cu-Uvin S# (2012). "Effect of trichomoniasis therapy on genital HIV viral burden among African women." *Sexually Transmitted Diseases*. 39(8):638-642. [[Link](#)][PMID: 22797689] [PMCID: PMC3398383].
- *Conducted all statistical analyses; contributed to interpretation of study findings.*
115. Loucks E#, Gilman S, Rogers M, **Liu T**, Kawachi I, Martins L, Kubzansky L, Buka S (2012). "Education and coronary heart disease risk associations may be affected by early life common prior causes: A propensity matching analysis." *Annals of Epidemiology*, 22(4):221-232. [[Link](#)][PMID: 22463841] [PMCID: PMC3327475].
- *Advised on statistical analyses; contributed to interpretation of study findings.*
116. Merchant R#, Waxman M, Maher J, Clark M, Celada M, **Liu T**, Simmons E, Beckwith C, Mayer KH (2012). "Patient and clinician ethical perspectives on the 2006 Centers for Disease Control and Prevention HIV testing methods." *Public Health Reports*, 127(3):318- 329. [[Link](#)][PMID: 22547863] [PMCID: PMC3314076].
- *Advised on statistical analyses; contributed to interpretation of study findings.*
117. Rosen (Asnis) LM, **Liu T**, Merchant RC# (2012). "Efficiency of ICD-9 billing code searches to identify blood or body fluid exposure emergency department visits through a state-wide multi-center database." *Infection Control and Hospital Epidemiology*. 33(6): 581-588. [[Link](#)][PMID: 22561713][PMCID: PMC5065064]
- *Developed analysis plan; supervised student on statistical analyses; contributed to interpretation of study findings.*
118. Saffarini C#, Heger N, Yamasaki H, **Liu T**, Hall SJ, Boekelheide K (2012). "Induction and persistence of abnormal testicular cells following gestational exposure to di-(n-butyl) phthalate in p53-null mice." *The Journal of Andrology*, 33(3):505-13. [[Link](#)][PMID: 21868749][PMCID: PMC3607946]
- *Advised on and contributed to the method development and modeling.*
119. Mabeya H, Khozaim K, **Liu T**, Orango O, Chumba D, Pisharodi L, Cu-Uvin S# (2011). "Comparison of conventional cervical cytology versus visual inspection with acetic acid (VIA) among HIV-infected women in western Kenya." *Journal of Lower Genital Tract Disease*. 16(2): 92. [[Link](#)][PMID: 22126834]

- [PMCID: PMC3289722].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
120. Merchant R#, DePalo D, **Liu T**, Rich J, Stein M (2010). "Developing a system to predict laboratory-confirmed chlamydial and/or gonococcal urethritis in adult male emergency department patients." *Postgraduate Medicine*. 22(1): 52–60. [[Link](#)][PMID: 20107289] [PMCID: PMC3021915].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
121. Beckwith C, # **Liu T**, Bazerman L, DeLong A, Desjardins S, Poshkus M, Flanigan T (2010). "HIV risk behavior pre- and post-HIV testing in jail: A pilot study." *Journal of Acquired Immune Deficiency Syndromes*, 53(4): 485–90. [[Link](#)][PMID: 20035232] [PMCID: PMC2837107].
 - *Designed and conducted all statistical analyses; led the interpretation of study findings.*
122. Merchant R#, Lau T, **Liu T**, Mayer K, Becker B (2009). "Adult sexual assault evaluations at Rhode Island emergency departments, 1995-2001." *Journal of Urban Health*, 86(1): 43–53. [[Link](#)] [PMID: 18797994] [PMCID: PMC2629515].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
123. Phelan S#, **Liu T**, Gorin A, Lowe M, Hogan J, Fava J, Wing R (2009). "What distinguishes long-term weight loss maintainers from the treatment-seeking obese? Analysis of environmental, behavioral, and psychosocial variables in diverse patient populations." *Annals of Behavioral Medicine*, 38: 94–104. [[Link](#)][PMID: 19847584][PMCID: PMC4861315]
 - *Conducted all statistical analyses; led interpretation of study findings.*
124. Moreira C, Venkatesh KK, DeLong AK, **Liu T**, Kurpewski J, Ingersoll J, Caliendo AM, Cu-Uvin S#. (2009). "Effect of treatment of asymptomatic bacterial vaginosis on HIV-1 shedding in the genital tract among women on antiretroviral therapy: Pilot study." *Clinical Infectious Diseases*, 49: 991–992. [[Link](#)] [PMID: 19694541] [PMCID: PMC2730467].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
125. Hogan JW#, **Liu T** (2008). "Mediation analysis for intervention trial: Objectives, models, and inference." *Health Services and Outcomes Research Method*, 8: 77-79. [[Link](#)][DOI:10.1007/s10742-008-0031-1]
 - *Contributed to study concept and statistical methodology.*
126. Anderson BL, Wang CC, **Liu T**, DeLong AK, Kojic EM, Kurpewski J, Ingersoll J, Mayer K, Caliendo A, Cu-Uvin S#. (2008). "Genital tract leukocytes and shedding of genital HIV type 1 RNA." *Clinical Infectious Diseases*, 47(9): 1216–1221. [[Link](#)][PMID: 18808359][PMCID: PMC2714169].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
127. Merchant R#, Chee K, **Liu T**, Mayer K, Becker B (2008). "Incidence of visits for health care worker blood and body fluid exposures and HIV post-exposure prophylaxis provision at Rhode Island Emergency Departments." *Journal of AIDS*, 47: 358–368. [[Link](#)][PMID: 18176321] [PMCID: PMC3180865].
 - *Conducted all statistical analyses; contributed to interpretation of study findings.*
128. Sung S#, **Liu T** (2003). "Ammonia inhibition on thermophilic methanogens." *Chemosphere*, 53(1):43-52. [[Link](#)][PMID: 12892665].
 - *Designed study and analysis plan; conducted all statistical analyses*
129. **Liu T**#, Sung S (2002). "Ammonia inhibition on thermophilic aceticlastic methanogens." *Water Science and Technology*, 45(10):113–120. [[Link](#)][PMID: 12188530].
 - *Designed study and analysis plan and conducted all statistical analyses*
130. **Liu T**, Sung S# (2001). "Effect of ammonia inhibition in thermophilic anaerobic process." *Proceedings of Water Environment Federation*, 2001(1): 1292-1306. [[Link](#)]
 - *Designed study and analysis plan and conducted all statistical analyses*

B. Books

1. Eltorai AEM, **Liu T**, Horvath K, Mehta DI (2024+). Handbook for Designing and Conducting Clinical and Translational Research: Translational Gastroenterology. Elsevier/Academic Press.
2. Eltorai A, **Liu T**, Kalva SP, Chant R (2023). *Handbook for Designing and Conducting Clinical and Translational Research: Translational Interventional Radiology*. Elsevier/Academic Press.

C. Book Chapters

1. Fedorov VV#, **Liu T** (2007). "Enrichment Design." *Encyclopedia of Clinical Trials*. John Wiley & Son Press.
2. Shao W, Guan W, Clark MA, **Liu T**, Santelices C, Cortés DE, Merchant RC#. (2015). "Variations in recruitment yield, costs, speed and participant diversity across Internet platforms in a global study examining the efficacy of an HIV/AIDS and HIV testing animated and live-action video among English- or Spanish-speaking Internet or social media users" (Chapter 11: 186-210). *Transforming HIV prevention and care for marginalized populations: Using information and communication technologies (ICTs) in community-based and led approaches*. Walsh CS, editor. Creative Commons Attribution.

D. Non-Refereed Articles

1. **Liu T**#, DeLong A, Blossom B (2009). "Challenge to IDSA recommendations for late neurologic Lyme disease treatment and post-Lyme syndrome: A statistical review of NIH-funded treatment studies." The International Lyme And Associated Diseases Society (IDSA) Lyme Panel Review Hearing.
2. Fedorov VV#, **Liu T** (2005). "Randomized discontinuation trials: design and efficiency." GlaxoSmithKline Biomedical Data Science Technical Report. (Authorship in Alphabetical order).

E. Conference Presentations / Invited Lectures & Selected Presentations by Student Advisees

1. Qu K, Schmid C, **Liu T** (2023). "Instrumental variable approach to estimating individual causal effects in N-of-1 trials." (Invited Paper Session: Advances in Causal Inference for Precision Health Using Wearable and Mobile Devices). The 2023 Joint Statistical Meeting (JSM). Toronto, Canada.
2. **Liu T** (2023). "Causal effect estimation and transportation using modified bootstrap." The 2023 Meetings of ISDSA: Applied Data Science Meeting. Shanghai, China. July 4-6.
3. **Liu T**, Qu K, Schmid C (2023). "Instrumental variable approach to estimating individual causal effects in N-of-1 trials." The 36th New England Statistics Symposium, Boston University, June 2023.
4. Yan Y, Kahler C, **Liu T** (2023). "Analysis of an alcohol use intervention (ReACH) study: Factorial design, orthogonal contrasts, incomplete data, and model selection." CFAR Symposium on Statistics and Data Science in HIV, Providence, RI.
5. Qu K, Schmid C, **Liu T** (2022). "Instrumental Variable Approach to Estimating Individual Causal Effects in N-of-1 Trials: Application to I-STOP-AFib Study". The Atlantic Causal Inference Conference at the University of California, Berkeley. May 23-25.
6. **Liu T** (2021). "LASSO methods for analyzing rare diseases." The 22nd South China International Congress of Cardiology (Virtual Meeting). August 7-14, Guangzhou.
7. Qu K, Schmid C, **Liu T** (2021). "Personalized Causal Effect Estimation of N-of-1 Trials in mHealth: An Instrumental Variable Approach." The 3rd Annual Health Data Science Symposium: Smartphones, Wearables, and Health. Harvard University, Boston, MA. November 5.
8. **Liu T** (2020). "Big data analytics in congenital heart diseases: Observational data and causality." Guangdong Academy of Medical Science. November 23.

9. Hansen B, Liu T (2020). "Understanding HIV viral rebound in ART patients using EHR data." Brown Public Health Research Day. >> ***Brown SPH Research Day Best Presentation Award***
10. Liu T (2019). "Data-driven strategies in prevention, diagnosis, and treatment of global major infectious diseases: Case studies of HIV and Ebola virus diseases." The 2nd International Symposium on One Health Research. Nov 23-24th, Guangzhou, China.
11. Xu Y, Liu T, Kantor R, Daniels MJ, Hogan JW (2019). "Bayesian Framework for Predictive and Causal Modeling using BART." The 2019 Joint Statistical Meeting (JSM), August, Denver, Colorado.
12. Liu T, Yam D, Aluisio A, Peters S, Averill S, Kennedy S, Sahr F, Peters J, Cho D, Levine A (2018). "Modeling causal effect of the timing of intravenous fluid treatment on survival of Ebola patients." The International Biometrics Society/The Fifth International Biostatistics Symposium. July 5th-7th. Guangzhou, China.
13. Xu Y, Liu T, Kantor R, Daniels MJ, Hogan JW (2018). "Bayesian Framework for Predictive and Causal Modeling with Application to HIV Care Cascade." The International Workshop on HIV and Hepatitis Observational Databases (IWHOD) Meeting. Athens, Greece.
14. Xu Y, Liu T, Hogan J (2018). "Causal effect estimation of HIV treatment initiation on patient retention." National Public Health Week, April 2-6, 2018. Providence, RI.
15. Yam D, Liu T, Levine A, Aluisio A, Peters S, Averill S, Kennedy S, Sahr F, Peters J, Cho D (2018). "Intravenous fluid treatments for Ebola patients: The risk and the reward." The Joint Statistical Meeting. Jul 28-Aug 2, 2018. Vancouver, BC. Canada.
16. Xu Y, Liu T, Kantor R, Hogan JW (2018). "Comparison of Treatment Policies using Bayesian Non-parametric G- Formula." The Joint Statistical Meeting. Jul 28-Aug 2, 2018. Vancouver, BC. Canada.
17. Xu Y, Liu T, Kantor R, Mwangi A, Daniels MJ, Hogan JW (2017). "Classification using ensemble learning under weighted misclassification loss." The 2017 Joint Statistical Meeting (JSM). Baltimore, MD, Jul 29-Aug 3, 2017. >> ***The ASA 2017 Section on Risk Analysis Student Paper Award***
18. Liu T, Yam D, Levine A (2018). "Modeling Causal Effect of the Timing of Intravenous Fluid Treatment on Survival of Ebola Patients." The 5th International Biostatistics Symposium, Guangzhou. July 5-7.
19. Garbern S, Yam D, Cho D K, Aluisio A R, Perera SM, Levine AC, Liu T (2018). "Effect of Mass Artesunate-Amodiaquine Distribution on Mortality of Patients with Ebola Virus Disease during West African Outbreak" American Society of Tropical Medicine and Hygiene, 67th Annual Meeting, November 2018, New Orleans, USA.
20. Liu T, Hogan JW, Kantor R (2017). "Analytic approaches to decision support at the policy and patient level: A case study in HIV treatment monitoring in Kenya." The 2017 Joint Statistical Meeting (JSM). Baltimore, MD, Jul 29-Aug 3, 2017.
21. Liu T, Hogan JW, Daniels MJ, Coetzer M, Xu Y, Bove G, DeLong AK, Orido M, Diero L, Kantor R (2017). "Marker-Assisted HIV-1 Viral Load Pooling Deconvolution Improves Monitoring Capacity." The IAS Conference on HIV Science (IAS 2017). Paris, France, July 23-26, 2017.
22. Xu Y, Liu T, Hogan JW (2017). "Causal effect estimation of treatment initiation at enrollment on patient retention using BART." Public Health Day. Brown University. Providence, RI, April 13.
23. Wang Y, Liu T (2017). "Local Sensitivity Assessment of Cox Regression to Informative Censoring: Application to HIV-Care Engagement Study." Brown Public Health Day. Providence, RI, April 13.
24. Xu Y, Liu T, Hogan JW (2017). "Classification using ensemble learning under weighted misclassification loss." The ENAR 2017 Spring Meeting. Washington, DC, March 12-15.
25. Liu T (2016). "Data-driven method for optimal allocation of gold standard testing under constrained availability." The 5th International Conference on Biometrics & Biostatistics, Oct 20-21. Houston, TX.

26. **Liu T** (2016). "Optimal allocation of gold standard testing under constrained availability: application to assessment of HIV treatment failure." Drexel University. Dornsife School of Public Health, Department of Epidemiology & Biostatistics. Feb 1, Philadelphia, PA.
27. **Xu Y, Liu T, Delong AK, Bove G, Coetzer M, Diero L, Daniels MJ, Kantor R, Hogan JW** (2016) "Comparison of machine learning and rule-combining methods for clinical decision making in HIV/AIDS." The 2016 Brown University School of Public Health Research Day. April 13, Providence, RI. >> ***The Brown School of Public Health Best PhD Presentation Award***
28. **Liu T, Hogan JW, Kantor R** (2015). "Improved HIV treatment monitoring using pooled viral-load testing: A microsimulation study." CFAR/BUMC Collaborative Symposium. Boston University Medical Center. November 18, 2015, Boston, MA.
29. **Liu T, Hogan JW** (2015). "Coherence, Relevance, Transparency: The three requirements for sensitivity analysis in clinical trials." The Fourth ISBS/DIA Joint Symposium on Biopharmaceutical Statistics, June 29-July 1, Beijing.
30. **Liu T** (2015). "HIV treatment monitoring for resource-limited settings: Data-driven methods to optimize utility of viral load testing." Saint Louis University, Department of Biostatistics and Epidemiology, St Louis, MO, March 20.
31. **Liu T** (2015). "Optimal allocation of gold standard testing under constrained availability." Dalian Medical University School of Public Health. March 10, Dalian, China.
32. **Liu T** (2015) "Design of non-inferiority and equivalence clinical trials with time-to-event outcomes: The RESCUE study." North Sichuan Medical College School of Public Health, March 3-4, Sichuan, China.
33. **Liu T, Hogan JW, Huang R, Kantor R** (2015) "Improved viral load monitoring capacity with rank-based algorithms for pooled assays." The 2015 Conference on Retroviruses and Opportunistic Infections (CROI). Seattle, WA. Feb 23-26.
34. **Liu T, Hogan JW, Kantor R** (2014). "Optimal Allocation of Viral Load Testing Under Resource Constraints." The 2014 CFAR National Meeting. November 5-6.
35. **Liu T, Hogan J, Kantor R** (2014). "Optimizing Diagnosis of HIV Treatment Failure with Selective Use of Gold Standard Test." The 2014 New England Statistics Symposium. Harvard University School of Public Health, Boston, MA. April 25-26.
36. **Liu T, Hogan JW, Wang L, Kantor R** (2014). "Optimizing diagnostic accuracy of HIV treatment failure in resource-limited settings with selective use of viral load testing." The 17th International Workshop on HIV Observational Databases. Cavtat, Croatia. March 2014. (Reference #17-185).
37. **Tai M, Liu T, Merchant RC** (2013). "HIV/AIDS-related hospitalization rates in US short-stay hospitals, 1982-2010." The 2012 National Summit on HIV and Viral Hepatitis Diagnosis, Prevention and Access To Care. Abstract #80. Washington DC. November 26-28, 2012.
38. **Liu T, Hogan JW, Zhang S, Kantor R.** (2012). "Using auxiliary biomarkers to improve pooling strategies for HIV viral load testing." The 2012 International Biometrics Society (IBS) ENAR Meeting, May, Washington DC.
39. **Liu T** (2011). "Optimizing diagnosis of HIV viral failure with selective use of gold standard testing in resource-limited settings." CFAR Research-in-Progress Lectureship Series, November 18, 2011. The Mariam Hospital, Providence, RI.
40. **Liu T** (2011). "Instrumental variable method and principal stratification with applications to HIV/AIDS studies." ACRIN Working Group Meeting, Oct 18, 2011, Providence, RI.
41. **Liu T** (2011). "Optimizing diagnosis of HIV treatment failure with selective use of the gold standard test." ACRIN Working Group Meeting, July 27, Providence, RI.

42. **Liu T** (2011). "Comparison of positive predictive values in matched pairs clinical trials." Invited Lectureship Series of the 60th Anniversary of North Sichuan Medical College. June 7, 2011. Nanchong, Sichuan, China.
43. **Liu T**, Hogan J, Kantor R. (2011). "Optimizing diagnosis of HIV viral failure with selective use of gold standard testing in resource-limited settings." Workshop on Statistical Methods in HIV Research. April 14-15, 2011, Montreal, Canada.
44. **Liu T**, Hogan J Kantor R. (2011). "Optimal use of selective viral load testing for HIV treatment monitoring in resource-limited settings." The 2011 International Biometrics Society (IBS) ENAR Meeting. March, Miami, FL.
45. **Xu H**, **Liu T** (2010). "Community Context and Obesity among Chinese Adults: A Longitudinal and Multilevel Analysis." Population Association of America 2010 Annual Meeting, Dallas, TX.
46. **Liu T**, DeLong A, Blossom B. (2009). "Challenge to IDSA recommendations for late neurologic Lyme disease treatment and post-Lyme syndrome." The 2009 International Lyme and Associated Diseases Society (ILADS) Conference, Washington DC.
47. **Liu T**, Hogan J, DeLong A. (2008). "Bounds of ATE and unmeasured confounding bias in observational studies with continuous outcome." The 2008 International Biometric Society (IBS) ENAR meeting, Arlington, VA.
48. **Liu T**, Heitjan DF (2007). "Sensitivity of Cox regression to nonignorable censoring." The 2007 American Statistical Association (ASA) Joint Statistical Meeting, Salt Lake City, UT.
49. **Liu T**, Heitjan D. (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." Dana-Farber Cancer Institute, Department of Biostatistics and Computation Biology, Harvard University, Cambridge, MA.
50. **Liu T**, Heitjan DF (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." Brown University, Center for Statistical Sciences, Department of Community Health, Providence, RI.
51. **Liu T**, Heitjan DF (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 American Statistical Association (ASA) Joint Statistical Meeting, Seattle, WA.
52. **Liu T**, Gao L (2006). "Relationship assessment between PK and PD." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.
53. **Liu T**, Heitjan DF (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL. >> ***ENAR Best Student Paper Award.***
54. **Liu T**, Fedorov VV (2006). "Randomized discontinuation trials." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.

RESEARCH GRANTS

Beta-Agonist versus Botox Trial for Urgency Urinary Incontinence (BEST Trial)

| | |
|-----------------|---|
| My Role: | Brown PI/Lead Statistician (Project PI: Sung) |
| Funding Agency: | PCORI |
| Request ID: | 23622 |
| Period: | 8/01/2022 –10/31/2027 |

Brown Alcohol Research Center on HIV: Research Methods Core

| | |
|-----------------|--------------------|
| My Role: | PI |
| Funding Agency: | NIAAA |
| Type: | P01 AA019072 |
| Period: | 7/1/2020-5/31/2025 |

Providence/Boston Center for AIDS Research (CFAR)

My Role: Co-I (PI: Cu-Uvin)
 Funding Agency: NIH/The Miriam Hospital contract
 PI: Hogan
 Type: P30 A142853
 Period: 09/01/98 - 06/30/2030

Mobile Health Intervention to Increase HIV Self-Testing and Linkage to Services for High-Risk Men

My Role: Co-I/Lead Statistician (PI: Operario)
 Funding Agency: NIH
 Type: R01 MH123352
 Period: 04/01/2020-02/28/2025

Label-Free, Longitudinal, Multi-Metric Viability Imaging of 3D Tissue Spheroid Array

My Role: Co-I (PI: Lee)
 Funding Agency: NIH
 Type: R01 CA268366
 Period: 07/01/2021 – 06/30/2026

Advance Clinical and Translational Research (Advance-CTR)

My Role: Co-I (PI: Rounds)
 Funding Agency: NIGMS
 Type: U54 GM115677
 Period: 07/01/2021 – 06/30/2026

ECOG-ACRIN NCORP Research Base - CCDR

My Role: Co-I (PI: Schnall)
 Funding Agency: UG1 CA189828-06-BRWN2
 Type: U54 GM115677
 Period: 08/01/2014 – 07/31/2025

ECOG-ACRIN NCORP Research Base - CT

My Role: Co-I (PI: Schnall)
 Funding Agency: UG1 CA189828-06-BRWN1
 Type: U54 GM115677
 Period: 08/01/2014 – 07/31/2025

CARISMA - Cancer therapy Risk-reduction with Intensive Systolic BP Management

My Role: Lead Statistician (PI: Ky)
 Funding Agency: NIHLBI
 Type: R34 HL146927
 Period: 04/01/2019 – 07/31/2022

Our Family Our Future: A resilience-oriented family intervention to prevent adolescent HIV/STI infection and depression in South Africa

My Role: mPI
 Funding Agency: NIH
 Type: R01 MH114843
 Period: 08/11/2017-07/31/2024

Addressing alcohol misuse in HIV prevention and care: The Brown University Alcohol Research Center on HIV

My Role: Co-I (PI: Kahler)
 Funding Agency: NIAAA
 Type: P01 AA019072
 Period: 09/30/10-05/31/2025

Evaluation of a persuasive health communication intervention designed to increase HIV/HCV screening among emergency department patients who currently, formerly, or never injected drugs

My Role: Co-I (PI: Merchant)
 Funding Agency: NIDA
 Type: R01 DA055533
 Period: 09/01/22 - 08/31/2027

Optimal HIV Treatment Monitoring Strategies under Resource Constraints

My Role: Co-Investigator (PIs: Hogan, Kantor)
 Funding Agency: NIAID
 Type: R01 AI108441
 Period: 12/1/2014-10/31/2020

Evaluation of Strategies for Maximizing Supportive Care for Patients with Ebola Virus Disease

My Role: Brown PI (Project PI: Levine)
 Funding Agency: NIGMS
 Type: R03 AI132801
 Period: 06/08/2017-05/31/2019

Development and Pilot Testing of a Persuasive Health Communication Intervention for Emergency Department Patients Who Decline Rapid HIV/HCV Screening

My Role: Brown PI (Project PI: Merchant)
 Funding Agency: NIDA
 Type: R34 DA045544
 Period: 6/1/2018-5/31/2021

Targeting Worry to Improve Sleep

My Role: Co-I (PI: Loucks)
 Funding Agency: NIH
 Type: R21 AG062004
 Period: 9/15/2018-5/31/2020

Facilitating HIV/AIDS and HIV Testing Literacy for Emergency Department Patients

My Role: Brown PI (Project PI: Merchant)
 Funding Agency: NIH
 Type: R01 NR014782
 Period: 7/23/2014-4/30/2019

AMPATH-Oncology Institute: HPV and Cervical Cancer in Kenyan Women with HIV/AIDS

My Role: Co-investigator and Lead Statistician (PI: Loehrer)
 Funding Agency: NCI
 Type: U54 CA254518
 Period: 9/19/2014-8/31/2019

“See and LEEP” Training for Kenyan Non-gynecologists

My Role: Brown PI (Project PI: Cu-Uvin)
 Funding Agency: NIH
 Type: CFAR/PepFAR Supplement
 Period: 4/4/2014-3/31/2015

CARE Corrections: A technology-based HIV and HCV tool

My Role: Brown PI (Project PIs: Beckwith, Kuo)
 Funding Agency: NIDA/The Miriam Hospital subcontract
 Type: R01 DA030747
 Period: 07/01/10-06/30/2016

A Stage 2 Cognitive-Behavioral Trial: Reduce Alcohol First in Kenya Intervention

My Role: Co-Investigator (PI: Papas)
 Funding Agency: NIAAA/Brown
 Type: R01 AA020805
 Period: 09/15/11 – 08/31/2016

Evaluating the impact of patient-centric home health quality reports

My Role: Brown PI (Project PI: Baier)
 Funding Agency: Health Centric Advisors/AHRQ
 Type: R21 HS021879
 Period: 09/30/12-08/31/2015

Brief Intervention for Drug Misuse in the Emergency Department (BIDMED)

My Role: Brown PI (Project PI: Merchant)
 Funding Agency: NIDA
 Type: R01 DA026066
 Period: 03/15/09-02/28/2014

Randomized Evaluation of Patients with Stable Angina Comparing Utilization of Noninvasive Examinations (RESCUE)

My Role: Protocol Statistician (PI: Stillman)
 Funding Agency: AHRQ
 Type: R01 HS019403
 Period: 09/30/10-09/29/2014

Cervical Cancer See and Treat: How Best to Follow-Up

My Role: Co-Investigator (PI: Cu-Uvin)
 Funding Agency: NIAID
 Type: P30 AI042853
 Period: 07/01/11 – 06/30/2013

Methods to Optimize Use of Limited Resources for Monitoring Treatment of HIV/AIDS in the Developing World

My Role: PI
 Funding Agency: Center for AIDS Research
 Type: Developmental Award
 Period: 1/01/10-12/31/2011

Increasing Viral Testing in the Emergency Department (InVITED)

My Role: Brown PI (Project PI: Merchant)
 Funding Agency: NIDA

Type: R21 DA028645
 Period: 3/04/10 – 2/28/2012

Video-Based Delivery of HIV Test Information for Spanish-Speaking Latinos

My Role: Brown PI (Project PI: Merchant)
 Funding Agency: DHHS
 Type: R21 NR011997
 Period: 03/04/11-02/29/13

New Approaches to Mediation Analysis Using Causal Inference Methods

My Role: Co-Investigator (PI: Hogan)
 Funding Agency: NIAAA (stimulus)
 Type: RC1 AA 019186
 Period: 10/01/09-09/30/11

Shaping Long-Term Care in America

My Role: Lead Statistician (PI: Mor)
 Funding Agency: NIH/NIA
 Type: P01 AG027296
 Period: 09/01/08-06/30/10

Analyzing Complex Longitudinal Data in Behavior Sciences

My Role: Lead Statistician
 Funding Agency: NIH
 Type: R01 HL79457
 Period: 08/01/04-07/31/08

Secondhand Tobacco Smoke Exposure, Maternal Stress, and Adverse Birth Outcomes

My Role: Lead Statistician
 Funding Agency: Flight Attendants Medical Research Institute
 Type: FAMRI
 Period: 09/01/08-12/31/08

ACADEMIC SERVICES

A. Department and University Services

1. Search Committee for Assistant Professor/Teaching Scholar of Biostatistics, 2022, 2024.
2. Biostatistics Online ScM Students Admission Committee, 2024 ~ 2025.
3. Biostatistics ScM Students Admission Committee, 2010, 2014, 2019 ~ 2023.
4. Biostatistics PhD Students Admission Committee, 2011 ~ 2013, 2015 ~ 2018.
5. Search Committee for Assistant Professor of Biostatistics, Research Scholar, 2017.
6. The Best Biostatistics Thesis Award Committee, 2013, 2014, 2016.
7. Search Committee for Assistant or Associate Professor, Teaching Scholar, 2015.
8. The 2014 Atlantic Causal Inference Conference (ACIC) Organizing Committee, 2014.
9. The Scholarship for Overseas Chinese Students Evaluation Committee, 2014.
10. Biostatistics Curriculum Committee, 2012 ~ 2014.

11. Biostatistics Graduate Program Committee, 2012 ~ 2013.
12. Search Committee for Research Assistant Professor of Biostatistics. 2013.
13. Epidemiology MPH Qualifying Exam Committee. 2010.

B. Editorial Services

Journal Reviewer

[Statistical Method & Theory]

Journal of the American Statistical Association (JASA); American Statistician; Annals of Applied Statistics; Biometrika; Biometrics; Biostatistics; Clinical Trials; Statistics in Medicine; Statistical Science; Statistics and Probability Letters; Statistical Modelling; Journal of Computational and Graphical Statistics (JCGS); Journal of Statistical Computation and Simulation; International Statistical Review.

[Epidemiology & Clinical Applications]

AIDS & Clinical Research, Annals of Epidemiology, Cogent Medicine, Circulation, Health Services and Outcomes Research Methodology (HSOR), American Journal of Epidemiology (AJE), BMC Infectious Diseases, BMJ Open, Emerging Themes in Epidemiology, Epidemiology, Clinical Infectious Diseases (CID), International Journal of Epidemiology & Infection, Journal of AIDS & Clinical Research, Journal of Clinical Epidemiology (JCE), Journal of the American Heart Association (JAHA), Nature, Nature Medicine.

Journal Editorial Board

1. 2025 — present The Innovation Nutrition.
2. 2010 – 2020 Journal of Clinical Research & Bioethics (JCRB).
3. 2012 – 2022 International Journal of Clinical Therapeutics and Diagnosis.
4. 2013 – 2023 Annals of Biometrics & Biostatistics (ABB).
5. 2010 – 2016 International Journal of Epidemiology & Infection

Statistical Editor/Reviewer

1. 2022 — present JAMA Network Open, *Statistical Reviewer*
2. 2021 – Present New England Journal of Medicine (NEJM), Evidence, *Statistical Reviewer*
3. 2018 – Present Biostatistics & Epidemiology, *Associate Editor*
4. 2017 – Present Circulation: Arrhythmia and Electrophysiology, *Statistical Editor*
5. 2019 – 2025 Chest, *Statistical Reviewer*
6. 2015 – 2017 Journal of American Heart Association (JAHA), *Statistical Reviewer*

Book Reviewer

1. Chapman & Hall/CRC Press.

C. Grant Reviewer

1. 2022-2025 Ad-Hoc Reviewer for CFAR Developmental Application. Boston/Providence Center for AIDS Research.
2. 2023 Review Panel, NIH/NIAID (National Institutes of Allergy and Infectious Diseases): Clinical Trial Implementation Cooperative Agreement (U01)
3. 2022-23 Review Panel, NIH/NICHD (National Institutes of Child Health and Human Development): Program Project Grants for HIV Research (P01).
4. 2020-21 Review Panel. NIH/NIAID: Comprehensive and Rapid Response to NIAID Research Programs
5. 2019, 2021 Grant Application Reviewer, Singapore National Medical Research Council
6. 2017 Scientific expert reviewer for the French National Research Agency (ANR): *French New Graduate Schools in Data Science and Health Informatics*.
7. 2015 Scientific expert reviewer for Beijing Natural Science Foundation & Shanyuan Joint Research Projects: *Infectious Diseases and Epidemiology*.
8. 2014 Scientific reviewer, National Science Foundation (NSF): *Panel of Methodology, Measurement, and Statistics*.
9. 2013 Scientific expert reviewer for the French National Research Agency (ANR): *Basic Research on Networks of Trials*.

D. Other Academic/Professional/Community Appointments

1. 2019-present American College of Radiology (ACR): Cardiology Imaging Research Committee.
2. 2022-present National Representative Panel of Experts for Scientist Opinion Panel Survey (Sci OPS)
3. 2025 New England Statistical Society (NESS) 2025 Student Paper Awards Committee.
4. 2025 International Program Committee of the 14th International Conference on Data Science, Technology and Application — DATA 2025
5. 2021-2025 Food and Drug Administration (FDA): Drug Safety and Risk Management Advisory Committee
6. 2024 International Program Committee of the 13th International Conference on Data Science, Technology and Application — DATA 2024
7. 2023-2024 The 2024 ENAR Student Paper Award Committee
8. 2022 Independent Monitoring Committee (IMC). “Improving quality of life for adults living with chronic pain” study
9. 2021 Scientific Program Organizing Committee of the 3rd International Conference on Public Health and Wellbeing 2021.
10. 2021 Brown SPH Appointment and Incentive Working Group Committee.
11. 2021 Selection Committee of the inaugural class of Delta Omega Honorary Society.
12. 2019 Scientific Program Organizing Committee of the International Chinese Association (ICSA) Conference 2019.
13. 2017 Data Safety and Monitoring Board (DSMB) Committee Member. The “Mindfulness-Based Blood Pressure Reduction” Study.
14. 2017 Judge of the Best Student Poster Awards, Brown Public Health Research Day, April 2017.

15. 2016 Reviewer of Public Health Research Data Poster Session, Brown Public Health Research Day, April 13th, 2016.
16. 2015 Judge of the Best Student Poster Awards, Brown Public Health Research Day, April 16th, 2015.
17. 2011-2012 Chair of the 2011-12 Starr Lectureship Series on “Comparative Effective Research and Causal Inference.” Brown University.
18. 2011-2012 Chair of the Biostatistics Seminar Series. Department of Biostatistics, Center for Statistical Sciences, Brown University.
19. August 2009. Chair of “Biometrics Section” (No.570). The American Statistical Association Joint Statistical Meeting (JSM). Washington D.C.

HONORS & AWARDS

1. 2016 Brown *ad eundum* Degree, Brown University
2. 2010 The Lifespan/Tuft/Brown CFAR Developmental Award.
3. 2006 The Biometric Society ENAR Best Paper Award.
4. 2004 Jonathan Raz Best Doctoral Award.
5. 2001 The Tau Beta Pi Honor Society.
6. 1999-2002 Iowa State University Graduate Scholarship.
7. 1994-1998 Tsinghua University Outstanding Undergraduate Scholarships.
8. 1994 Tsinghua University Top Freshmen Award.
9. 1993 Second Prize, National Science Olympiad of China (Physics).

TEACHING

A. Brown University (Instructor/Professor):

1. PHP 2650 **Statistical Learning and Big Data** (2020, 2021)
2. PHP 2950 **Journal Club in Public Health** (2022)
3. PHP 2511 **Applied Regression Analysis** (2012)
4. PHP 2510 **Principles of Biostatistics & Data Analysis** (2009)
5. PHP 2603 **Analysis of Longitudinal Data** (2008)
6. PHP 2601 **Linear and Generalized Linear Models** (2008)

B. University of Pennsylvania (Graduate Teaching Assistant/Instructor):

7. BSTA 771 **Applied Bayesian Analysis** (2005)
8. BSTA 630 **Statistical Methods and Data Analysis** (2004)
9. EPI 520 **Introductory Biostatistics** (2003)

C. Iowa State University (Graduate Instructor):

1. STAT 402 **Statistical Methods for Research Workers (summer course) (2002)**

G. Invited/Guest Lectures

1. Statistical Methods in Translational Science Symposium: “**Causal Mediation Analysis: Application for Alcohol Behavioral Research,**” Brown Advance-CTR.
2. PHP 2030: “**Clinical Trials Methodology**”; Brown School of Public Health
3. Workshop: “**Causality 101: Recent Mediation Analysis Methods**”; Brown School of Public Health
4. PHP 2030: “**Design of Research Studies with Time-to-Event Outcomes**”; Brown School of Public Health, Department of Epidemiology.
5. BIOL 0495: “**Statistical Analysis for Biological Data**”; Department of Molecular Biology

ADVISING/CONSULTING

A. Thesis Advising (advisor or committee member)

1. Aijia Zhang Sc.M. (Biostatistics) 2026 (expected)
Thesis: A GPT-Assisted Shiny Dashboard for Trial Data Analysis
Advisor
2. Depeng Wang Sc.M. (Biostatistics) 2026 (expected)
Thesis: Developing an R Package for the Design and Analysis of N-of-1 Studies
Committee member
3. Yunan Chen Sc.M. (Biostatistics) 2025
Thesis: A Comprehensive Review of Stepped Wedge and Multiple Baseline Design
Committee member
4. Miaoyan Chen Sc.M. (Biostatistics) 2025
Thesis: A Comparison of Statistical Methods for Analyzing Fractional Outcomes with Excess Zeros and Ones
Committee member
5. Hafithe AlGhosain Ph.D. (Engineering) 2025
Thesis: Delivery and safety of gold nanorods for photothermal restoration of vision in blindness
Committee member
6. Ruya Kang Ph.D. (Biostatistics) 2025
Thesis: Methodologies of evaluating and monitoring predictive models and their applications to medical imaging
Committee member
7. Ruofan Bie Ph.D. (Biostatistics) 2025
Thesis: Transportability of treatment effect estimates: missing-data in meta-analysis and statistical power.
Committee member
8. Anqi (Angel) Zheng Sc.M. (Biostatistics) 2024
Thesis: Application of item response theory in examining differential item functioning
9. Kexin Qu, Ph.D. (Biostatistics) 2023
Thesis: Bayesian Methods for Analyzing Individual-Level Data from Multiple Trials Considering Correlation, Non-compliance and N-of-1 Designs (Co-advise w/ Dr Schmid)

10. Talia Seshaiyah Sc.M. (Biostatistics) 2023
Thesis: Impact of sequential n-of-1 trials on self-selected atrial fibrillation triggers and the participant decision-making process
11. Zhejia Dong Sc.M. (Biostatistics) 2023
Thesis: Bias amplification due to unmeasured confounders
12. Yufei Yan, Sc.M. (Biostatistics) 2023
Thesis: Analysis of an alcohol use intervention (ReACH) study: factorial design, orthogonal contrasts, incomplete data, and model selection (Advisor)
13. Whitney Su, Sc.M. (Biostatistics) 2022
Thesis: Modified bootstrap for causal inference (Advisor)
14. Abigail Foley, Sc.M. (Biostatistics) 2021
Thesis: A comparison of prediction methods under different extrapolation schemes
15. Anna Wentz, Ph.D. (Epidemiology) 2021
Thesis: Long-term pain and opioid analgesic use in a cohort of emergency department patients with suspected urolithiasis in the STONE trial.
16. Samantha Morrison, Ph.D. (Biostatistics) 2021
Thesis: On the evaluation of detection and prediction performance of machine learning models with applications to medical imaging data.
17. Yizhen Xu, Ph.D. (Biostatistics) 2020.
Thesis: Classification using ensemble learning under weighted misclassification loss
2016 Brown Public Health Research Day Best Ph.D. Presentation Award
2017 American Statistical Association: Best Student Paper Competition Award
18. Chengzhao Tu, Sc.M. (Biostatistics) 2020
Thesis: Ankle fracture prediction and visualization. (Advisor)
19. Chengqian Sun, Sc.M. (Biostatistics) 2020
Thesis: Mediation Analysis for Assessing Mechanism of Alcohol Motivational Intervention on Reducing HIV Risk Behaviors. (Advisor)
20. Max Bo, Sc.M. (Biostatistics) 2020
Thesis: Factors Associated with Readmission of Pancreatic Cancer Patients Following Surgical Treatment. (Advisor)
21. Blake Hansen, Sc.M. (Biostatistics) 2020
Thesis: Predictive Modeling of HIV Viral Failure Among U=U Eligible Patients. (Advisor)
2020 Brown School Research Day Best ScM Presentation Award
22. Yanbing Wang, Sc.M. (Biostatistics) 2017
Thesis: Local Sensitivity Assessment of Discrete-Time Cox Regression to Informative Censoring with Application to an HIV-Care Engagement Study. (Advisor)
2017 Best Thesis Award
23. Mun Sang Yue, Ph.D. (Biostatistics) 2016
Thesis: Evaluation of predictive accuracy of tests and impact of tests on patient outcomes.
24. Zhongli Zhang, Sc.M. (Biostatistics) 2016
Thesis: Evaluation of a Brief Intervention to Reduce Negative Consequences of Drug Misuse among Adult Emergency Department Patients. (Advisor)
25. Wentao Guan, Sc.M. (Biostatistics) 2016
Thesis: Evaluation of a Brief Intervention to Reduce Negative Consequences of Drug Misuse among Adult Emergency Department Patients. (Advisor)

26. Jay Jia Xu, B.S. (Statistics) 2015
Undergrad Honor Thesis: A Comparison of INLA and JAGS When Applied To Multiple Imputation with the Penalized Spline of Propensity Prediction Method
27. Renxia Huang, Sc.M. (Biostatistics) 2014
Thesis: Combining Routine Clinical Markers and Pooled Viral Load Strategy to Monitor Antiretroviral Treatment Failure in Resource-Poor Settings.
2014 Best Thesis Award
28. Andrea Austin, Ph.D. (Biostatistics) 2013
Thesis: Methods for prediction and inference on social networks with extensions to bimolecular pathways.
29. Miao Tai, Sc.M. (Biostatistics) 2013
Thesis: HIV/AIDS-related hospitalizations in United States short-stay hospitals, 1982-2010 (Advisor)
30. Rachel Thakore, B.S. (Community Health) 2013
Undergrad Honor Thesis: The effect of cocaine use on the diet and metabolic status of HIV-infected individuals. (Advisor)
31. Xuan Deng, Sc.M. (Biostatistics) 2013
Thesis: Mediation effects of behavioral and psychological factors in maintaining weight loss.
32. Edwin Sang, Sc.M. (Biostatistics) 2013
Thesis: Causal effect of HIV serostatus disclosure on mortality and loss to follow-up after HAART initiation using propensity score.
2013 Best Thesis Award
33. Ann Mwangi, Ph.D. (Biostatistics) 2011
Thesis: Addressing selection bias in observational event history data, with application to HIV in Western Kenya.
34. Jing Zhang, Ph.D. (Biostatistics) 2011
Thesis: Causal Inference for Mediation Effects.
35. Raymond Ng, Sc.M. (Biostatistics) 2011
Thesis: Analysis of repeated FDG-PET scans in the National Oncology PET Registry (NOPR).
36. Patricia S. Fox, Sc.M. (Biostatistics) 2009
Thesis: Transition within states of lung function: A multinomial logistic approach using two-year follow-up data from bacteriologically cured tuberculosis patients.
37. Lisa Rosen (Asnis), Sc.M. (Biostatistics) 2009
Thesis: Evaluating the utilization and efficiency of ICD-9 codes to identify visits for blood or body fluid exposures in 11 Rhode Island emergency departments. (Advisor)

C. Graduate Academic Advisor

1. Thomas Liu Sc.M (Biostatistics) 2022
2. Ruofan Bie Ph.D. (Biostatistics) 2021
3. Yifan Zhao Sc.M (Biostatistics) 2021
4. Timothy Hedspeth Sc.M (Biostatistics) 2021
5. Yue Wu Sc.M (Biostatistics) 2020
6. Zheyu Chen Sc.M (Biostatistics) 2020
7. David Chen Sc.M (Biostatistics) 2019
8. Monica-Ann Mendoza Sc.M (Biostatistics) 2019

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| 9. Yimo Zhang | A.M (Biostatistics) | 2019 |
| 10. Yuanfei Chen | Sc.M. (Biostatistics) | 2017 |
| 11. Ran Wei, | M.A. (Biostatistics) | 2016 |
| 12. Jin Shi, | Sc.M. (Biostatistics) | 2016 |
| 13. Wentao Guan | Sc.M. (Biostatistics) | 2015 |
| 14. Lisa Wang, | Sc.M. (Biostatistics) | 2013 |
| 15. Nuo Xu, | M.A. (Biostatistics) | 2012 |
| 16. Junchao Shangguan, | M.A. (Biostatistics) | 2011 |
| 17. Dong-Hyun Ahn, | M.A. (Biostatistics) | 2010 |

D. Other Teaching and Advising Roles

1. C Yuan, Brown graduate student in Biostatistics. 2013 Summer Intern at Press Ganey. My role: Curriculum Practical Training Advisor.
2. J Shangguan, Brown Master student in Biostatistics. 2010 Summer Intern at Fidelity Co. My role: Curriculum Practical Training Advisor.
3. Alina Kung, Brown undergraduate student (International Relationships). **Awardee of International Scholars Program Scholarship 2010**. "Evaluating the Effectiveness of American Healthcare NGOs in China." My role: Research Advisor.
4. Hongwei Xu, Brown graduate student in Sociology. **Awardee of Brown University Global Health Scholarship 2009**. "A Longitudinal Study of the Coexistence of Underweight and Overweight Persons within Household in China: 1997-2006." My role: Research Advisor.

E. Junior Faculty Mentoring and Medical Consulting

(last updated in 2021)

1. Danielle Giovenco, PhD (2021). K-Award (K99/R00): Modeling psychosocial and structural interventions to improve HIV care outcomes in South Africa during an emerging epidemic.
2. Adam Aluisio, MD (2020). K-Award (K23): Evaluation of self-testing in African emergency care for the injured (HIV AECl).
3. Harrison Bai, MD, Ph.D. (2020). K-Award (K08): DICOM Imaging and Analytics System: Extension to Clinical AI Applications.
4. Keith Corl, MD (2019). K-Award (K23): Evaluation of the ability of angiotensin-2 and soluble receptor for advanced glycation end products to predict the acute respiratory distress syndrome among patients with sepsis.
5. Anna Wenz, M.S. (2018). NIH F31: Long-Term Pain And Opioid Analgesic Use For Urolithiasis In The STONE Trial. Role: Mentor.
6. Keith Corl, M.D. (2018). K-Award. The Restrictive Intravenous Fluid Trial for Severe Sepsis and Septic Shock 2 (RIFTS2) pilot study. Role: Mentor.
7. Adam Aluisio, M.D. Sc.M. (2017). K-Award. Evaluation of Trauma and HIV: Intersection, Engagement and Outcomes Studies. Role: Advisor.
8. Silva Chiang, M.D. (2017). The International Research Scientist Development Award (IRSDA) K01. "Teens on TB Treatment: Predicting Adherence through Clinical Decision Analysis." Role: Advisor.

9. Peter Belenky, Ph.D. (2016). CFAR Developmental Award. "Impacts of Antibiotic Treatment on the Structure and Function of the Human Microbiome in Antiretroviral Therapy HIV patients." Role: Consultant.
10. Tae Woo Park, M.D. (2015). K23 Award: "Distress Tolerance and Benzodiazepine Discontinuation in Opioid Agonist Therapy". My role: Mentor.
11. Ed Wing, M.D. and Rena Wing, Ph.D. (2014). CFAR Developmental Grant: "An Internet-based Behavioral Weight Program for HIV+ patients." My role: Consultant.
12. Elizabeth M. Goldberg, M.D. (2014). UEMF Research Development Grant: "Is Emergency Department Hypertension Predictive of Future Hypertension?" My role: Mentor.
13. Gary Wessel, Ph.D. (MCBB) (2013). CFAR Developmental Grant: "Metagenomic Analysis of the Gut Microbiome in the HIV Infected Patients: Prospects for Therapy." My role: Mentor.
14. Francesca Beaudoin, M.D. (2013). NIDA Emergency Medicine Foundation. "Prescription opioid use and misuse in older emergency department patients." My role: Mentor.
15. Francesca Beaudoin, M.D. (2013). NIH RO3: "Chronic Opioid Use, Pain Sensitivity and Acute Pain in the Emergency Department." My role: Consultant.
16. Elkanah Orango Orango, M.D. (2013). CFAR Supplement: "Cryotherapy and HIV Genital Shedding." My role: Mentor.
17. Nick Zaller, Ph.D. (2013). CFAR Supplement: "HIV treatment cascade among HIV+ person in community corrections (tentative title)." My role: Consultant.
18. Elkanah Orango, MD. (2013). International CFAR Developmental Award: "Outcome of excisional treatment for cervical neoplasia in HIV-infected and uninfected women in Western Kenya." My role: Consultant.
19. Kevin Dushay, M.D. (2012). CFAR Developmental Grant: "The prevalence of obstructive airway disease and the burden of chronic respiratory symptoms in HIV subjects enrolled in care in Kenya." My role: Consultant.
20. Rana Aadia, M.D. (2012). K-23 Award: "Improving Retention in Care Among Postpartum HIV-infected Women in Mississippi." My role: Mentor.
21. Willoughby Britton, Ph.D. (2012). K-Award (NCCAM): "Dismantling Mindfulness: Contributions of Attention vs. Acceptance." My role: Consultant.
22. Becky Genberg, Ph.D. (2012). K-Award: "Linkage to care following home-based counseling and testing for HIV in western Kenya." My role: Consultant.
23. Michelle Mellion, MD. (2011). CFAR Developmental Award: "The effect of alcohol on CSF cytokine concentrations in patients with HIV and its association with neuro-cognitive disturbances." My role: Consultant.
24. Philips Chan, MD. (2011). K-Award: "Molecular Epidemiology of HIV Transmission Networks." My role: Consultant.
25. Adrian Garder, MD. (2011). CFAR Developmental Award: "Implementation of GeneXpert® for evaluation of HIV-positive TB suspects previously treated for TB in Western Kenya." My role: Consultant.
26. Ammy Nunn, Ph.D. (2010). K-Award: "Exploring Patterns of Sexual Concurrency Among Urban African Americans." My role: Consultant.
27. Rosemarie Martin, Ph.D. (2010). Developmental Award: "Contingency Management for Drug Use in HIV+ Adults after Prison or Jail Release." My role: Consultant.
28. Philips Chan, MD. (2010). Burroughs Wellness Grant: "Association of human leukocyte antigen and the development of antiretroviral drug resistance in HIV-1 infection". My role: Consultant

29. Erna Kojic, MD (2009). K-Award: “HPV and related diseases in HIV-infected women.” My role: Consultant.
30. Michael Waxman, MD (Assistant Professor of Emergency Medicine) (2007). The Brown Department of Emergency Medicine Junior Faculty Research Award. My role: Consultant.
31. Brenna Anderson, MD (Assistant Professor of Obstetrics & Gynecology) (2007). Developmental Award: “Effect of trichomoniasis therapy on genital HIV viral burden among African women.” My role: Consultant.

SOFTWARES

1. R-package: **mMPA** (Marker-assistant mini-pooling with algorithm).
Available at: <https://cran.r-project.org/web/packages/mMPA/>
See description and example at: <https://taotliu.github.io/mMPA>
Authors: Tao Liu, Ph.D. and Yizhen Xu, ScM.
Reference: Liu T, et al. (*JAIDS*, 2017).
2. R-package: **TGST** (Targeted gold standard testing under constraints).
Available at: <https://github.com/yizhenxu/TVLT>.
Authors: Yizhen Xu, ScM and Tao Liu, Ph.D.
Reference: Liu T, et al (*JASA*, 2013)
3. R-package: **QuantPooledTesting** (Quantitative Pooled Testing).
Available at: <https://github.com/taotliu/QuantPooledTesting>
Authors: Tao Liu, Ph.D.
4. R-package: **TriCTree** (Trichotomous Classification Tree).
Available at: <https://github.com/taotliu/TriCTree>
Authors: Yan Sun, Yanke Zhu Ph.D., and Tao Liu Ph.D.

PROFESSIONAL SOCIETIES

5. The International Chinese Statistical Association (ICSA)
6. The American Association for the Advancement of *Science* (AAAS)
7. International Biometric Society (IBS)
8. The American Statistics Association (ASA)
9. The Tau Beta Pi Honor Society
10. New England Statistical Society (NESS)
11. International Society for Data Science and Analytics (ISDSA)