

Tao Liu, Ph.D.

Associate Professor of Biostatistics
Director, ARCH Research Methods Core
Brown University

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Brown Data Science Initiative (DSI)
Center for AIDS Research (CFAR)
Advance-Clinical and Translational Research (CTR)

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PROFESSIONAL APPOINTMENTS

A. Current Academic Positions

Associate Professor of Biostatistics

Department of Biostatistics, Brown University.

Director

Brown ARCH Research Methods Core

Faculty Member

Brown Center for Statistical Sciences.

Brown Data Science Initiative (DSI).

Brown Alcohol Research Center on HIV.

Providence/Boston Center for AIDS Research

Advance-Clinical and Translational Research (Advance-CTR)

ECOG-ACRIN Cancer Research Group.

Affiliated Faculty Member

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

B. Former Academic Appointments

Assistant Professor of Biostatistics (2012 – 2015)

Department of Biostatistics, Brown University.

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

Providence/Boston Center for AIDS Research (CFAR).

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

Research Fellow & Consultant

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

Summer Intern

Department of Biostatistics, Amgen Incorporation, Thousand Oaks, CA

EDUCATION

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|------|---------------------------------------|---|
| 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
Thesis: <i>Ammonia inhibition in thermophilic anaerobic process</i> |
| 1999 | B.E. Environmental Engineering | <u>Tsinghua University</u> , Beijing, China |

PUBLICATIONS

A. Journals Articles (Peer-reviewed)

1. Walek KW, Stefan S, Lee JH, Puttigampala P, Kim AH, Park SW, Marchand PJ, Lesage F, **Liu T**, Huang A, Boas DA, Moore C (2021). “Near-lifespan longitudinal tracking of cortical vascular structure and function in age-related disease model mice”. Submitted.
2. Carabano M, **Liu T** (Co first-author), Liu A, Lee JC, Cheng L, Wang LJ, Huang CK, Lu S (2022). “Association of HLA-A, B, and C Alleles and Cancer Susceptibility in 179 Solid Malignancies.” Submitted.
3. Wray TB, Chan PA, Klausner JD, Liu A, Carr DJ, Phelan C, **Liu T** (2022). “Using web analytics data to identify platforms and content that best engages high-priority HIV populations in online and social media marketing advertisements”. Submitted.
4. Liufu R, Teng Y, Wu J, **Liu T**, Liu X, Wen S, Chen J, Jiang Z (2022). “Preoperative Oxygen Saturation Affects the Early Prognosis of Tetralogy of Fallot Indirectly: A propensity score-matched analysis.” Submitted.
5. Narayan V, **Liu T**, Song Y, Mitchell J, Sicks J, Gareen I, et al. (2022). “Hypertension, cardiovascular events and survival in renal cell carcinoma and thyroid cancer patients treated with VEGFR tyrosine kinase inhibitors.” Submitted.
6. Lin MY, **Liu T**, Gatsonis C, Sicks JD, Shih S, Carlos RC, and Gareen IF (2022). “Utilization of diagnostic procedures following lung cancer screening in the national lung screening trial.” Submitted.

7. **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 (2022). "Risk for HIV viral rebound in the era of U=U: A national multi-center study". Submitted.
~~~~~ [ published papers in 2022] ~~~~~
8. 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 (2022). "Feasibility of WeTest-Plus for providing a continuum of HIV services for MSM at risk: Pilot study of a mobile health program in 3 cities in China". *Journal of Medical Internet Research*. Conditional **Accepted**.
9. Aluisio A; Bergam SJ, Sugut J, Kinuthia J, Bosire R; Ochola E, Ngila B, Guthrie KM, **Liu T**, Mugambi M, Katz DA, Farquhar C, Mello MJ (2022). "HIV self-testing acceptability among injured persons seeking emergency care in Nairobi, Kenya". *Global Health Action*. **Accepted**.
10. Liu X, Liufu R, **Liu T**, Cen J, Yu J, Wen S, Ou Y, Chen J, Zhuang J (2022) "Supracardiac total anomalous pulmonary venous connection Type Ib: Morphology and outcomes." *Journal of Thoracic and Cardiovascular Surgery*. **Accepted**.
11. Aluisio AR, 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 (In press).
12. 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*. **Accepted**.
13. Giovenco D, Pettifor A, Bekker LG, Filiatreau LM, **Liu T**, Akande M, Gill K, Atujuna M, Stein DC, Kuo C (2022). "Understanding oral PREP interest among South African adolescents: The role of perceived parental support and PREP stigma". *AIDS and Behavior*. **Accepted**.
14. 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.
15. 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.
16. 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.
17. 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.
18. Abel L, Perera SM, Yam D, Garbern S, Kennedy SB, Massaquoi M, Sahr Foday, Woldemichael, D, **Liu T**, Levein A, and 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.
19. 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.

20. Merchant RC, Marks SJ, Clark MA, Carey MP, and **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.
21. Khalife S, Jenkins HE, Dolynska M, Terleieva I, **Liu T**, Rybak NR, Carter J, Horsburgh CR, Chiang SS (2022). "Incidence and mortality of extrapulmonary tuberculosis in Ukraine: Analysis of national surveillance data". *Clinical Infectious Diseases*, 75(4): 604-612.
22. 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.
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23. 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.
24. 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. (\*Co-first authors)
25. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TM, Lu S, **Liu T**, Chang K (2021). "Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging." *European radiology*, 31(7):4960-4971.
26. 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, Yang L, Bai HX (2021). "Encephalopathy at admission predicts adverse outcomes in patients with SARS-CoV-2 infection". *CNS Neuroscience & Therapeutics*, 27(10):1127–1135.
27. 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.
28. 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.
29. Marks SJ, Merchant RC, Clark MA, **Liu T**, Rosenberger JG, Bauermeister JA, and 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.
30. **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.
31. **Liu T**, Bazerman L, Pinkston M, Nunn A, Rana A, Beckwith CG (2021). "Co-occurring HIV risk behaviors among males entering jail." *Preventive Medicine, Epidemiology and Public Health*, 2(1):1–6.
32. 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.
33. Liufu 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.

34. Papas R, Gakinya B, Mwaniki M, Lee H, Keter A, Martino S, Klein D, **Liu T**, Loxley M, Sidle J, Schlaudt 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.
35. 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 4 geographically and demographically diverse emergency departments." *Journal of the International Association of Providers of AIDS Care (JIAPAC)*. Nov 3;19:2325958220970827.
36. Stillman AE, Gatsonis C, Lima J, **Liu T**, Snyder B, Cormack JA, Malholtra V, Schnall MD, Udelson JE, Hoffmann U, Woodard PK (2020). "Coronary CT Angiography Compared with SPECT MPI as a Guide to Optimal Medical Therapy in Patients Presenting with Symptoms of Stable Angina Pectoris: The RESCUE Trial A Randomized Clinical Trial". *JAMA*. 9(24), e017993.
37. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TM, Lu S, **Liu T**, Chang K, Raymong YH, Bai H (2020). "Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging." *European Radiology*. 31(7):4960—4971.
38. 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
39. Orang'o EO, Ermel A, **Liu T**, Omodi V, Emont JP, Tong Y, Itsura PM, Tonui PK, Maine T, Ong'echa JM, Muthoka K, Kiptoo S, 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.
40. Wentz AE, Wang RC, Marshall BL, Shireman TI, **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.
41. 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.
42. 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.
43. Wentz AE, Wang RC, Marshall BL, Shireman TI, **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.
44. 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.
45. Merchant RC, Marks SJ, Clark MA, Carey MP, and **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.
46. Bacic J, **Liu T**, Thompson H, Boorjian SA, Leibovich BC, Golijanin D and Gershman B (2020). "Emulating target clinical trials of radical nephrectomy with or without lymph node dissection for renal cell carcinoma". *Urology*, 140:98-106.
47. Mehta N, Orang'o O, Itsura1 P, Tonui1 P, Bussmann H, Bogers JP, **Liu T**, Cu-Uvin S# (2020). "Loop electrosurgical excision procedure treats CIN II/III among HIV- and HIV+ women in Kenya". *Journal of Lower Genital Tract Disease*. 24(1):21-26. PMID: 31860571.

48. Aluisio AR, Perera SM, Yam D, Garbern SC, Peters JL, Abel L, Cho DK, Woldemichael D, Kennedy SB, Massaquoi M, Sahr F, **Liu T**, Levine AC (2020). "Association between treatment with oral third-generation cephalosporin antibiotics and mortality outcomes in Ebola virus disease: A multinational retrospective cohort study". *Tropical Medicine & International Health*, 25(4): 443-441.
49. Merchant RC, Marks SJ, Clark MA, Carey MP, and **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.
50. 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.
51. Yam D, Aluisio AR, Perera SM, Peters JL, Cho DK, Kennedy SB, Massaquoi M, Sahr F, Smit MA, Locks L, **Liu T**, Levine AC (2020). "Association Between Multivitamin Supplementation and Mortality Among Patients with Ebola Virus Disease: An International Multisite Cohort Study." *African Journal of Emergency Medicine*. 10(1): 23-29.
52. Kahler CW, Surace A, Durst A, Pantalone DW, Mastroleo NR, Miguez MJ, Bueno D, **Liu T**, Monti PM, & Mayer KH (2020). "Telehealth interventions to reduce alcohol use in men with HIV who have sex with men: Protocol for a factorial randomized controlled trial." *Contemporary Clinical Communications*. 16: e100475.
53. 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.
54. 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-amodioquine distribution on mortality of patients with Ebola virus disease during west African outbreak". *Open Forum Infectious Diseases*. 6(7), PMID: 31281856 PMID: PMC6602760.
55. 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. PMID: PMC6768816.
56. 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*. Oct, 6(2): S868-S868).
57. 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.
58. Wray TB, Chan PA, Kahler CW, **Liu T**, and 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.
59. Tovar A, Vaughn A, Fisher JO, Benjamin-Neelon S, Burney R, Webster K, **Liu T**, Ostbye T, and Ward D (2019). "Modifying the environmental policy assessment and observation tool to better capture feeding practices of family child care home providers". *Public Health Nutrition*, 22(2):223-234.

60. Kuo I, **Liu T**, Patrick R, Trezza C, Bazerman L, Castonguay B, Kurth A, and 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.
61. 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. (**American Statistical Association: Best Paper Award on "Risk Modeling"**).
62. Merchant RC, **Liu T**, Clark MA, and Carey MP (2018). "Facilitating HIV/AIDS and HIV testing literacy for emergency department patients: a randomized, controlled, trial". *BMC Emergency Medicine*. 18:21. PMID: 29986662; PubMedPMCID: PMC6038177.
63. Yellin H, Beckwith C, Kurth A, **Liu T**, Castonguay B, Patrick R, Trezza C, Bazerman L, and 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. [PMID: 29607658]
64. Merchant RC, Zhang Z\*, 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. [PMID: 29437758]
65. Kahler CW, Pantalone, DW, Mastroleo, NR, **Liu T**, Bove G, Ramratnam B, Monti P, and 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.
66. Merchant RC, Clark MA, **Liu T**, Romanoff J, Rosenberger JG, Bauermeister J, and Mayer KH (2018). "Comparison of home-based oral fluid rapid HIV self-testing vs 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.
67. Alexovitz KA, Merchant RC, Clark M, **Liu T**, Rosenberger JG, Bauermeister J, and 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.
68. **Liu T**, Hogan JW, Daniels, MJ, Coetzer M, Xu Y, Bove J, DeLong AK, Ledingham L, Orido M, Diero L, and Kantor R. (2017). "Improved HIV-1 Viral Load Monitoring Capacity using Pooled Testing with Marker-Assisted Deconvolution." *Journal of AIDS*. 75(5): 580–587. PMID: 28489730; PMCID: PMC5503773.
69. Mark SJ, Merchant RC, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, and 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.
70. Merchant RC, Romanoff J, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, Bauermeister J, and 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.
71. Merchant RC, Romanoff J, Zhang Z, **Liu T**, and 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.
72. Beckwith C, Castonguay B, Trezza C, Bazerman, L, Patrick R, Cates A, Kurth A, **Liu T**, Peterson J, and 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. [PMID: 28081178][PMCID: PMC5231337]

73. Kahler, C, **Liu T**, Cioe, P, Bryant, V, Pinkston, M, Kojic, E, Onen, N, Baker, J, Hammer, J, Brook, J, and 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. [PMID: 27392417][PMCID: PMC5219952]
74. Merchant RC, Clark MA, **Liu T**, Rosenberger J, Romanoff J, Bauermeister J, and 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. [PMID: 28359394][PMCID: PMC5380143].
75. Orango O, **Liu T**, Christoffersen-Deb A, Itsura P, Mabeya H, Washington S, Cu-Uvin S, and 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. [PMID: 27831951]
76. Shao W\*, Guan W\*, Clark MA, **Liu T**, Santelices, C, Cortes, DE, and 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. [PMID: 26518589][PMCID: PMC5012116]
77. Orango O, Chau D, **Liu T**, Itsura P, Tonui P, Cu-Uvin S (2016). "Post-LEEP surveillance in HIV-positive and HIV-negative women in western Kenya". *International Journal of Gynecological Cancer*. 26:309-309.
78. Merchant RC, Baird JR, and **Liu T** (2016). "How do one-question screening strategies compare to a more comprehensive substance use assessment in identifying adult emergency department patients who might need an intervention?" *Academic Emergency Medicine*. 23:201.
79. Merchant RC, Zhang Z, **Liu T**, and Baird JR (2016). "Does a brief intervention reduce drug use and increase drug treatment utilization among adult emergency department patients over a one-year period?" *Academic Emergency Medicine*. 23:42-42. [PMID: 26375468][PMCID: PMC4876812]
80. Stillman AE, Gatsonis C, Lima JA, Black WC, Cormack J, Gareen I, Hoffmann U, **Liu T**, Mavromatic K, Schnall MD, Udelson JE, and 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.
81. Merchant RC, **Liu T**, and 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.
82. Merchant RC, Baird JR, and **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. [PMID: 26375468].
83. Merchant RC, DeLong AK, **Liu T**, and 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. [PMID: 26036465] [PMCID: PMC4600425]
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87. Shao W\*, Guan W\*, Clark MA, **Liu T**, Santelices C, Cortes DE, and Merchant RC (2015). "Variations in recruitment yield, costs, and speed and participant diversity across internet platforms in a global study of English- or Spanish-speaking Internet users." *Digital Culture & Education*, 7(1), 40-86. (\*students advised)
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#### Under revision

117. **Liu T**, Hogan JW, Su W, Xu Y, Daniels MJ, and Kantor R (2022+). "Informed pooled testing with quantitative assays." <https://arxiv.org/abs/2011.00404>
118. Xu Y, Hogan J, Su W, and **Liu T** (2022+). "Optimal allocation of gold-standard test under constrained availability using GST package".
119. Holland SD, DeLong AK, **Liu T**, Makaretz A, Coetzer M, Ledingham L, Xu Y, Sam S, Sagoe S, Caliendo A, Daniels M, Hogan J, and Kantor R (2022). "HIV-1 viral load monitoring using pooled testing with marker-assisted deconvolution".
120. **Liu T**, Wang Y (2022). "Local sensitivity assessment of discrete-time Cox regression to nonignorable censoring".

#### **B. Book**

121. Eitorai A, **Liu T**, Kalva SP, and Chant R (2022+). *Designing and Conducting Research in Translational Medicine: Interventional Radiology*. Elsevier.

#### **C. Book Chapters**

122. **Liu T**, Liu A, and Ovanez C (2022). "Regression Analysis: Applications to Radiological Research and Classic Examples". *Designing and Conducting Research in Translational Medicine: Interventional Radiology*. Elsevier.
123. Boumezrag M and **Liu T** (2022). "Surveys and questionnaires: Design, measures, classic examples". *Designing and Conducting Research in Translational Medicine: Interventional Radiology*. Elsevier.
124. Fedorov VV and **Liu T** (2007). "Enrichment Design." *Encyclopedia of Clinical Trials*. John Wiley & Son Press.
125. Shao W, Guan W, Clark MA, **Liu T**, Santelices C, Cortés DE, and 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 marginalised populations: Using information and communication technologies (ICTs) in community-based and led approaches*. Walsh CS, editor. Creative Commons Attribution.

#### **D. Non-Refereed Articles**

126. **Liu T**, DeLong A, and 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.
127. Fedorov, V. V. and **Liu T\*** (2005). "Randomized discontinuation trials: design and efficiency." Glaxo-SmithKline Biomedical Data Science Technical Report, 3. (\*Authorship in Alphabetical order).

#### **E. Conference Presentations / Invited Lectures.**

128. Carabano M, **Liu T**, Lee J, Yang D, Cheng L, Lu S (2023). "Over- and under-represented HLA-A, -B, and -C alleles in 182 solid tumors." 2023 USCAP Annual Meeting. New Orleans, LA.

129. "LEEP more effective than cryotherapy as effective treatment for CIN lesions in women living with HIV and without HIV in western Kenya", with CuUvin. The SGO 2023 Annual Meeting.
130. Loong H, **Liu T**, Pattipaka T, Hong T, Smith TW, Knoll S, Pretre V, Caparica R, Ye F, Farago A (2022) "Heterogeneity and prognostic diagnosis of KRAS-mutated population and KRAS G12C subtype among patients (pts) with advanced NSCLC (aNSCLC): A real-world study aided by machine learning approaches". ESMO Congress. France. September 9-13.
131. Bove J, Albright M, Stewart K, **Liu T** (2022). "Two Long-Term Monitoring Studies: Citizen Scientists Track Lake Ice and the Long Term Study of Four of the Western Finger Lakes." The 2022 Annual Conference of the New York Federation of Lake Association: "Maximizing your lake data". April 2022.
132. Su W and **Liu T** (2022). "Modified Bootstrap for Causal Inference." Brown Public Health Research Day. Brown University. April 5, 2022.
133. Qu K, Schmid C, and **Liu T** (2022). "Instrumental Variable Approach to Estimating Individual Causal Effects in N-of-1 Trials: Application to I-STOP-AFib Study." Brown Public Health Research Day. Brown University. April 5, 2022.
134. 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, 2022.
135. **Liu T** (2021). "LASSO methods for analyzing rare diseases". (Invited Presentation). The 22nd South China International Congress of Cardiology (Virtual Meeting). August 7-14, 2021
136. 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, 2021.
137. Orang'o EO, Bocage AE, **Liu T**, Itsura PM, NA, Tonui PK, Muthoka K, Stephen K, Caliendo A, Soya S, Feller E, Cu-Uvin S (2021). "HIV-1 RNA Genital Tract Shedding After Cryotherapy For Visual Inspection With Acetic Acid-Positive Cervical Lesions in Western Kenya was accepted as an oral presentation." IDSOG 2021.
138. Orang'o O, Mehta N, Mwangi A, Omodi V, **Liu T**, Sang E, Tonui P, Itsura P, Loehrer P, Cu-Uvin S (2021). "Cryotherapy and LEEP are Effective Treatment for CIN lesions in HIV+ and HIV- Women in Western Kenya." CROI 2021.
139. **Liu T**. (2020). "Big data analytics in congenital heart diseases: Observational data and causality." Guangdong Academy of Medical Science. (Virtual lecture). November 23, 2020.
140. Merchant RC, Marks SJ, Clark MA, Carey MP and **Liu T**. Retention of knowledge about HIV/AIDS and HIV testing among adult emergency department patients: implications for HIV testing and prevention. American College of Emergency Physicians Research Forum. Dallas, TX, October 26-29, 2020.
141. Christopher B, **Liu T**, et al. (2020). "Who's Not Being Tested for HIV and Why among Adult Patients in US Emergency Departments". The 23rd International AIDS Conference (virtual). July 6-10 2020.
142. Bai H, **Liu T**, et al (2020). "Evaluation of an Artificial Intelligence System for Ovarian Tumor Differentiation Based on Routine Magnetic Resonance Imaging". RSNA 2020.
143. Sun C and **Liu T** (2020). "Mediation Analysis for Assessing Mechanism of Alcohol Motivational Intervention on Reducing HIV Risk Behaviors". Brown Public Health Research Day. April 2020.
144. Bo M and **Liu T** (2020). "Factors Associated with Readmission of Pancreatic Cancer Patients Following Surgical Treatment". Brown Public Health Research Day. April 2020.
145. Tu C and **Liu T** (2020). "Ankle fracture prediction and visualization". Brown Public Health Research Day. April 2020.

146. Hansen B and **Liu T** (2020). "Understanding HIV viral rebound in ART patients using EHR data". Brown Public Health Research Day. April 2020.  
**Brown SPH Research Day Best ScM Presentation Award**
147. Bennett CL, Marks SJ, **Liu T**, Clark MA, Carey MP, Merchant RC (2020). "Historia de dos ciudades - HIV Testing Need Among Hispanic Patients in Two Geographically and Demographically Diverse Emergency Departments." IAS. 2020,
148. Bennett CL, Marks SJ, **Liu T**, Clark MA, Carey MP, Merchant RC (2020). "Who's Not Being Tested for HIV and Why among Adult Patients in US Emergency Departments". IAS
149. Merchant RC, Marks SJ, Clark MA, Carey MP, **Liu T** (2020). "Can a video or pictorial brochure about HIV/AIDS and HIV testing increase HIV testing over a one-year period?" IAS.
150. Merchant RC, Marks SJ, Clark MA, Carey MP, **Liu T** (2020). "Retention of knowledge about HIV/AIDS and HIV testing: implications for HIV testing and prevention." IAS.
151. Bennett GL Marks SJ, **Liu T**, Clark MA, Carey MP, Merchant RC (2020). "Who still needs to be tested for HIV in US emergency departments?" SAEM.
152. Abel L, Garbern SC, **Liu T**, Perera SM, Kennedy SB, Massaquoi M, Sahr F, Levine AC, Aluisio AR (2020). "Impact of Oral Antimalarial Treatment on Mortality Among Patients with Ebola Virus Disease: A Multisite Cohort Study". SAEM.
153. **Liu T** (2019). "Data-driven strategies in prevention, diagnosis and treatment of global major infectious diseases: Case studies of HIV and Ebola virus diseases". 2nd International Symposium on One Health Research in China. Nov 23-24th, Guangzhou China.
154. Bennett CL, Marks SJ, Bauermeister JA, Clark MA, **Liu T**, Mayer KH, and Merchant RC (2019). "Discordance of perceived undiagnosed HIV infection risk with HIV sexual risk-taking behaviors among YMSM". [abstract] 37th GLMA Annual Conference on LGBTQ Health. New Orleans, LA. September 11-14.
155. Holland S, DeLong AK, **Liu T**, Makaretz A, Coetzer M, Ledingham L, Xu Y, Sam S, Sagoe K, Caliendo AM, Daniels M, Hogan JW, and Kantor R (2019). "Laboratory evaluation of HIV-1 viral load pooling with marker-assisted deconvolution". IDSA IDWeek. October 2-6, 2019. Washington DC.
156. Marks SJ, Merchant RC, Clark MA, Carey MP, and **Liu T** (2019). "Providing information according to patients' preferred method, video or pictorial brochure, does increase the knowledge gained from an HIV/AIDS and HIV testing information intervention". The CDC National HIV Prevention Conference, March 18-21, GA.
157. Marks SJ, Merchant RC, Clark MA, Carey MP, and **Liu T** (2019). "Patient preferences do not increase the knowledge gained from an HIV/AIDS and HIV testing information intervention delivered by video or pictorial brochure". CDC Conference. Submitted.
158. Sturm ES, **Liu T**, Hardaway JCH, Espat NJ, Somasundar P (2019). "Comprehensive Geriatric Assessments in Elderly Patients Undergoing Complex Oncologic Surgery". ACS, submitted.
159. Elkanah Omenge, Yan Tong, Philip Tonui, John M. Ong'echa, Kapten Muthoka, Stephen Kiptoo, Titus Maina, Peter Itsura, Ann Moormann, YeungChing Wong, Aaron Ermel, **Tao Liu**, Joseph Hogan, Patrick J. Loehrer Sr, Darron Brown, Susan Cu-Uvin (2019). "Comparison of HPV detection in HIV-infected and HIV-uninfected Kenyan women with or without cervical dysplasia." The 2019 ASCO Annual Meeting; May 31 - June 4, 2019
160. Xu Y, **Liu T**, Kantor R, Mwangi A, Daniels MJ, Hogan JW (2019). "Bayesian Framework for Predictive and Causal Modeling using BART". JSM, 2019.
161. S. Min, C. Beckwith, A. Manne, V. Novitsky, M. Coetzer, **T Liu**, I. Kuo, A. Kurth, L. Bazerman, A. Agopian, R. Kantor (2019). "HIV drug resistance and transmission networks among a criminal justice population." HIV Drug Resistance Mutations Adherence.

162. Mehta N, **Liu T**, CuUvin S (2018). "Loop electrosurgical excision procedure (LEEP) is effective treatment among HIV-positive and HIV-negative women in western Kenya". CUGH.
163. Merchant RC, Marks SJ, Carey MP, Clark MA, and Liu T (2018). "Utility of three screening items in identifying adult English- and Spanish-speaking emergency department patients with lower health literacy skills". [abstract] American Public Health Association 2018 Annual Meeting & Expo. San Diego, CA. November 11, 2018.
164. Marks SJ, Merchant RC, Carey MP, Clark MA, and Liu T (2019). "Can a pictorial brochure improve HIV/AIDS and HIV testing knowledge among adult emergency department patients with lower health literacy as well as a video?" The CDC National HIV Prevention Conference. March 18-21, 2019; Atlanta, GA.
165. Marks SJ, Merchant RC, Carey MP, Clark MA, and Liu T (2018). "High levels of injection-drug use and sexual risk-taking among adult Latino immigrants at two urban emergency departments in Los Angeles and Providence" CDC 2019 National HIV Prevention Conference (not accepted).
166. Merchant RC, Liu T (2019). "Previous HIV testing is not associated with greater knowledge about HIV/AIDS and HIV testing". The CDC National HIV Prevention Conference. March 18-21, 2019; Atlanta, GA.
167. Marks SJ, Merchant RC, Carey MP, Clark MA, and **Liu T** (2019). "Changes in perceived risk of HIV infection among at-risk emergency department patients after a brief educational intervention" The CDC National HIV Prevention Conference. March 18-21, 2019; Atlanta, GA.
168. Marks SJ, Merchant RC, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J and Mayer KH (2018). "Increasing HIV testing among non-urban YMSM: Can home-based rapid HIV self-testing help?" The 6th Annual Rural HIV Research and Training Conference. Coastal Georgia Center, Savannah, GA. July 15, 2018. <https://digitalcommons.georgiasouthern.edu/ruralhiv/2018/2018/35>
169. Xu Y, Liu T, Kantor R, Mwangi A, Daniels MJ, Hogan JW (2018). "Bayesian Framework for Predictive and Causal Modeling with Application to HIV care Cascade". IWHOD
170. Sturm EC, Hardaway JC, **Liu T**, Espat NJ, Somasundar P (2018). "Maintaining functional status in elderly cancer patients using comprehensive geriatric assessments to guide interventions". Society of Surgical Oncology's (SSO) 72nd Annual Cancer Symposium, March 27-30, in San Diego, CA.
171. Wray T, **Liu T**, Mayer K. (2018). "patterns of sexual risk and substance use during lapses in prep adherence in MSM". CROI, submitted.
172. Noksa A, **Liu T**, Kuo I, Bazerman L, Kurth A, Kantor R & Beckwith C (2018). "Validity of self-reported HCV status among justice-involved persons living with HIV". IDSA IDWeek. Oct 3rd-7th. San Francisco, CA. USA.
173. (*Invited Presentation*) **Liu T**, Yam D, Aluisio A, Peters S, Averill S, Kennedy S, Sahr F, Peters J, Cho D and 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.
174. Aluisio AR, Yam D, Peters JL, Cho DK, Perera SM, Kennedy SB, Massaquoi M, Sahr F, Garbern S, **Liu T**, Levine AC (2018). "Treatment with Intravenous Fluid Therapy Was Not Associated with Improved Survival Among Patients with Ebola Virus Disease: An International Multisite Cohort Study." The Annual Meeting of American College of Emergency Physicians Research Forum, October 2018, San Diego, USA.
175. Garbern S, Yam D, Cho D K, Aluisio A R, Perera SM, Levine AC, and **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.

176. Aluisio AR, Yam D, Peters JL, Cho DK, Perera SM, Kennedy S B, **Liu T**, and Levine AC (2018). "Early Intravenous Fluid Therapy and Mortality Outcomes Among Patients with Ebola Virus Disease: A Multisite Retrospective Propensity-Matched Cohort Study" American Society of Tropical Medicine and Hygiene, 67th Annual Meeting, November 2018, New Orleans, USA.
177. Cu-Uvin S, Orang'o O, Tong Y, Ermel A, **Liu T**, Titus M, Ong'echa J, Muthoka K, Kiptoo S, Moormann A, Itsura P, Hogan J, Loehrer P, and Brown D. (2018). "Detection of high-risk HPV among HIV-infected and HIV-uninfected women undergoing cryotherapy or loop electrosurgical excision procedure (LEEP)". The 32th International Papilloma Virus Conference (IPVC). Oct 2-6, 2018. Sydney, Australia.
178. Xu Y\*, **Liu T**, and Hogan J (2018). "Causal effect estimation of HIV treatment initiation on patient retention." National Public Health Week, April 2-6, 2018. Providence, RI.
179. Yam D\*, **Liu T**, Levine A, Aluisio A, Peters S, Averill S, Kennedy S, Sahr F, Peters J and Cho D (2018). "Intravenous fluid treatments for Ebola patients: The risk and the reward." The Joint Statistical Meeting. Jul 28-Aug2, 2018. Vancouver, BC. Canada.
180. Xu Y\*, **Liu T**, Kantor R and Hogan JW (2018). "Comparison of Treatment Policies using Bayesian Nonparametric G- Formula". The Joint Statistical Meeting. Jul 28-Aug2, 2018. Vancouver, BC. Canada.
181. Castonguay BJ, Cressman A, Patrick R, Bazerman L, Trezza C, Beckwith C, Olsen H, **Liu T**, Peterson J, Kurth A and Kuo I (2018). "The implementation of a text messaging intervention to improve HIV continuum of care outcomes among persons recently released from correctional facilities: CARE+ Corrections." The 11th Academic and Health Policy Conference on Correctional Health. Houston, Texas. March 22-23.
182. Merchant RC, Marks SJ, Clark MA, Carey MP, and **Liu T** (2018). "Correlates of lower health literacy among adult Spanish-speaking US emergency department patients". APHA's 2018 Annual Meeting & Expo. Nov, 2018, San Diego, CA.
183. Merchant RC, Marks SJ, Carey MP, Clark MA, and **Liu T** (2018). "Can a shortened, self-administered version of the Short Assessment of Health Literacy identify English- or Spanish-speaking adult emergency department patients with lower health literacy?". APHA's 2018 Annual Meeting & Expo. Nov, 2018, San Diego, CA.
184. Merchant RC, Marks SJ, Clark MA, **Liu T**, Rosenberger JG, Bauermeister JA, and Mayer KH (2018). "Is home HIV self-testing a potential solution to overcome HIV testing barriers among US YMSM at higher risk for HIV infection yet have never been tested for HIV?". Submitted to the 2018 International AIDS Society Meeting. July, 2018. Amsterdam, Netherland.
185. Merchant RC, Marks SJ, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, and Mayer KH. "Are US black, Hispanic and white YMSM at risk for HIV acquisition being tested in accordance with national HIV testing recommendations? Results from a national study". The 2018 International AIDS Society Meeting. July, 2018. Amsterdam, Netherland.
186. Bacic J, **Liu T**, Thompson H, Boorjian SA, Leibovich BC, Golijanin D and Gershman B (2018). "The Association of Lymph Node Dissection with Overall Survival In High-Risk Non-Metastatic Renal Cell Carcinoma: An Analysis of the National Cancer Database". The American Urological Association (AUA) 2018 Conference. Boston MA, May 12-16.
187. Xu Y, **Liu T**, Kantor R, Mwangi A, Daniels, MJ and 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**
188. (Invited presentation) Liu T, D Yam, and A Levine (2018). "Modeling Causal Effect of the Timing of Intravenous Fluid Treatment on Survival of Ebola patients". The 5th International Biostatistics Symposium, Guangzhou, China. July 5-7.

189. **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. (*Invited presentation*).
190. **Liu T**, Hogan JW, Daniels MJ, Coetzer M, Xu Y, Bove G, DeLong AK, Orido M, Diero L, and Kantor R (2017). “Marker-Assisted HIV-1 Viral Load Pooling Deconvolution Improves Monitoring Capacity”. IAS Conference on HIV Science (IAS 2017). Paris, France, July 23-26, 2017.
191. Geng H, Cho E, Drucker A, **Liu T**, Parker I, Qureshi A, Li W. (2017). “Let me know whether it fits with the scientific scope of the journal.” Public Health Day. Brown University. Providence RI, April 13, 2017.
192. Merchant RC, Marks SJ, Clark MA, **Liu T**, Rosenberger JG, Bauermeister J, and Mayer KH. “Potential healthcare insurance and provider barriers to PrEP utilization among YMSM.” The 9<sup>th</sup> IAS Conference on HIV Science. Paris, France, July 23-26, 2017.
193. Xu Y, **Liu T** and 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, 2017.
194. 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, 2017.
195. Mwangi A, Hogan JW, Keter A, Tu W, **Liu T**, Sang E, Kiptoo S, Tong Y, and Denski C (2017). “The AMPATH-Biostatistics and Data Management U54 Core”. The AMPATH U54 Consortium Meeting. Eldoret, Kenya. March 22-24, 2017.
196. Orango O, **Liu T**, Itsura P, CuUvin S (2017). “The impact of VIA screen and treatment with cryotherapy or LEEP in patients with HIV-infected and HIV-uninfected Kenyan women with cervical intraepithelial neoplasia (CIN)”. The AMPATH U54 Consortium Meeting. Eldoret, Kenya. March 22-24, 2017.
197. Xu Y, **Liu T**, and Hogan JW (2017). “Classification using ensemble learning under weighted misclassification loss”. The ENAR 2017 Spring Meeting. Washington DC, March 12-15, 2017.
198. Wentz A, Merchant RC, Clark MA, **Liu T**, Romanoff J, Rosenberger JG, Bauermeister JA, and Mayer KH (2017). “Ignoring the ban: Blood donation among young adult MSM at risk for HIV”. IAS Conference on HIV Science (IAS 2017). Paris, France, July 23-26, 2017.
199. Kuo I, **Liu T**, Patrick R, Bazerman L, Trezza C, Castonguay BU, Kurth A, Beckwith C. (2017) “Use of a mHealth intervention to improve HIV treatment and engagement in HIV care among recently incarcerated persons in Washington, DC.” The 12th International Conference on HIV Treatment and Prevention Adherence. June 2017, Miami, FL.
200. Merchant RC, Romanoff J, Clark MA, **Liu T**, Rosenberger JG, Bauermeister JA, and Mayer KH (2017). “Comparison of home-based oral fluid rapid HIV self-testing vs. mail-in blood sample collection or medical/community HIV testing by young adult black, Hispanic, and white MSM: results from a randomized trial”. IAS Conference on HIV Science (IAS 2017). Paris, France, July 23-26, 2017.
201. Merchant RC, Alexovitz KA, Clark MA, **Liu T**, Rosenberger JG, Bauermeister JA, and Mayer KH (2017). “Discordance of voluntary HIV testing with HIV sexual risk-taking and perceived HIV infection risk among social media-using black, Hispanic, and white young-men-who-have-sex-with-men (YMSM)”. IAS Conference on HIV Science (IAS 2017). Paris, France, July 23-26, 2017.
202. Orango O, **Liu T**, Cu-Uvin S (2017). “VIA, Pap smear, and HR-HPV testing in women with HIV/AIDS for post-treatment cervical cancer screening: Same tests, different priorities”. The 31st International Papillomavirus Conference. February 28-March 4, 2017. Cape Town, South Africa.
203. **Liu T** (2016). “Date-driven method for optimal allocation of gold standard testing under constrained availability”. The 5th International Conference on Biometrics & Biostatistics, Oct 20-21, 2016. Houston, TX, USA. (*Invited presentation*)



204. Orango O, Chau D, **Liu T**, Itsura P, Tonui, Cu-Uvin S (2016). "Post-LEEP surveillance in HIV-positive and HIV-negative women in western Kenya" The 16th Biennial Meeting of the International Gynecologic Cancer Society. Oct 29-31, 2016, Lisbon, Portugal.
205. 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" [#29] The 2016 Brown University School of Public Health Research Day. April 13, 2016, Providence RI.  
**The Brown School of Public Health Best PhD Poster Presentation Award**
206. Merchant RC, Zhang Z, **Liu T**, and Baird JR (2016). "Does a brief intervention reduce drug use and increase drug treatment utilization among adult emergency department patients over a one-year period?" [#1169] The 2016 Society for Academic Emergency Medicine Meeting, May 10-13, 2016, New Orleans.
207. Merchant RC, Baird J and **Liu T** (2016). "How do one-question screening strategies compare to a more comprehensive substance use assessment in identifying adult emergency department patients who might need an intervention?" [#1170] The 2016 Society for Academic Emergency Medicine Meeting, May 10-13, 2016, New Orleans.
208. Kuo I, Trezza C, Castonguay B, Olsen H, Rawls A, Patrick R, Banerman L, **Liu T**, Kurth A and Beckwith C (2016). "Study retention among HIV-infected persons in Washington, DC recently released from correctional facilities." Panel: "An In-depth Examination of the Seek, Test, Treat and Retain (STTR) Framework in Four Criminal Justice Population Research Studies" The 9th Academic & Health Policy Conference on Correctional Health, March 17-18, Baltimore, MD.
209. **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. (*Invited presentation*)
210. **Liu T**, Hogan JW and 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. (*Invited presentation*)
211. **Liu T** and 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, China. (*Invited presentation*)
212. Merchant RC, **Liu T**, Clark M, Rosenberger J, Bauermeister J and Mayer K (2015). "How do young adult social media-using black, Hispanic and white MSM differ in their interest in using fingerstick rapid HIV self-testing? Implications for encouraging testing among hard to reach populations." The 2015 International AIDS Society Meeting. Vancouver, Canada. July 20-22.
213. Kuo I, Kurth A, **Liu T**, Trezza C, Bazerman L, Castonguay B, Olsen H, Patrick R, Abbott S, Cates A, Peterson J, Beckwith C. (2015) "Gender Disparities Among HIV-Positive Individuals Involved in the Criminal Justice System: The CARE+ Corrections Study in Washington, DC". (ID 2252). The 2015 National HIV Prevention Conference. Atlanta, GA, December 6-9, 2015.
214. Merchant RC, **Liu T**, Melissa C, Bauermeister, J, Mayer K. (2015). "Incongruence between self-perceived HIV risk and reported sexual risk among social media-using Black, Hispanic and white MSM." (ID 1714). The 2015 National HIV Prevention Conference. Atlanta, GA, December 6-9, 2015.
215. Merchant RC, **Liu T**, Melissa C, Bauermeister, J, Mayer K. (2015). "Low PrEP utilization among social media-using young adult Black, Hispanic and white MSM at higher risk for HIV acquisition." (ID1829). The 2015 National HIV Prevention Conference. Atlanta, GA, December 6-9, 2015.
216. **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, 2015. (*Invited presentation*)

217. Merchant RC, DeLong AK, **Liu T** and Baird JR (2015) “Does a brief intervention among drug misusing adult emergency department patients increase uptake of rapid HIV/HCV screening?” The 2015 National Summit on HCV and HIV Diagnosis, Prevention and Access to Care, June 4-6, Arlington VA.
218. Kuo I, Kurth A, Cates A, Trezza C, Bazerman L, Castonguay B, Olsen H, Patrick R, **Liu T**, Peterson J, Abbott S, Beckwith C (2015). “HIV Risk and Clinical Characteristics Among HIV-Positive Individuals Involved in the Criminal Justice System: The CARE+ Corrections Trial in Washington, DC” The 2015 International AIDS Society Meeting. Vancouver, Canada. July 20-22.
219. Merchant RC, Baird JR, **Liu T**, and Nirenberg TD. “Does A Brief Intervention For Adult Emergency Department Patients Decrease Drug Misuse And Increase Drug Treatment Services Utilization?” [abstract] 2015 Society for Academic Emergency Medicine Annual Meeting, San Diego, CA, May 12-15, 2015.
220. Merchant RC, Shao W, Guan W\*, Clark MA, **Liu T**, Santelices C and Cortes DE (2015). “Variations in recruitment yield, costs, and speed and participant diversity across internet or social media platforms in a global study of HIV/AIDS and HIV testing knowledge”. The 2015 International AIDS Society Meeting. Vancouver, Canada. July 20-22.
221. Merchant R., Baird J., **Liu T**, and Nirenberge T. (2015). “Short-term efficacy of a brief intervention to reduce drug misuse and increase drug treatment utilization among adult emergency department patients”. The 2015 Society for Academic Emergency Medicine (SAEM) Meeting. San Diego, CA. May 12-16, 2015.
222. Guan W\*, **Liu T**, Baird JR, and Merchant RC (2015) “Evaluation of a brief intervention to reduce negative consequences of drug misuse among adult emergency department patients.” Brown Public Health Research Day (Poster Presentation). April 16 2015, Brown University, Providence, RI. (\*Advised student).
223. **Liu T** (2015) “Optimal allocation of gold standard testing under constrained availability.” Dalian Medical University School of Public Health. March 10, Dalian, China. (*Invited presentation*)
224. Stillman AE, Gatsonis CG, Lima J, Cormack J, Gareen I, Hoffmann U, **Liu T**, Mavromatis K, Schnall M, Udelson J, Woodward P, and RESCUE Investigators ACRIN. (2015). “Randomized evaluation of patients with stable angina comparing utilization of noninvasive examinations (RESCUE) trial.” The 64th Annual Scientific Session & Expo of American College of Cardiology (ACC). San Diego, CA. March 14-16, 2015.
225. **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. (*Invited lecture*)
226. **Liu T**, Hogan J., 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, 2015. (\*Advised student). (*Poster Presentation*)
227. **Liu T**, Hogan JW, and Kantor R (2014). “Optimal Allocation of Viral Load Testing Under Resource Constraints”. The 2014 CFAR National Meeting. Providence, RI. November 5-6, 2014. (*Invited Presentation*)
228. Merchant R., Baird J., **Liu T**, Beaudoin F, and Nirenberg T (2014). “Severity of substance misuse and need for substance misuse interventions among adult emergency department patients.” [abstract 189] American College of Emergency Physicians Scientific Assembly. Chicago, IL, October 27.
229. Shao W, Merchant R, Clark M, **LiuTT**, Guan W, Santelices C, Cortes D (2014). “Does a Video Improve HIV/AIDS and HIV Testing Knowledge Among a Global Sample of Internet and Social Media Users?” [abstract 35819] National Conference on Health Communication, Marketing, and Media. Atlanta, GA, August 20.

230. **Liu T**, Hogan J., and 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. (*Invited Presentation*)
231. Shao W, Merchant R, Clark M, **Liu T**, Guan W, Santelices C, Cortes D. (2014). "How Do Internet and Social Media Sites Compare in Achieving Optimal Completion Rates and Costs for an Internet-Based Research Study?" The 2014 CDC National Conference on Health Communication, Marketing, and Media. (August 19-21).
232. Orango E, **Liu T**, Itsura P, Mabeya H, Christofferson-deb A, Washington S, and Cu-Uvin S. (2014) "Visual inspection with acetic acid is good for follow-up after cryotherapy in HIV-infected women." The 2014 Conference on Retroviruses and Opportunistic Infections. March 3-6, 2014, Boston, MA.
233. Merchant RC, Baird JR, **Liu T**, Taylor L, Montague B, and Nirenberg T. (2014). "Does a Brief Intervention Increase HIV/HCV Screening among Drug-using Emergency Department Patients?" [abstract #743] 2014 Society for Academic Emergency Medicine Annual Meeting, Dallas, TX, May 14, 2014.
234. **Liu T**, Hogan JW, Wang L, Zhang S and Kantor R (2014) "Optimizing diagnostic accuracy of HIV treatment failure in resource-limited settings with selective use of of viral load testing." The 17th International Workshop on HIV Observational Databases. Cavtat, Croatia. March 2014. (Reference #17-185).
235. Jones MM, **Liu T**, and Shenassa E. (2013) "Differential secular trends in BMI in relation to region of childhood residence: A 25 years follow-up of a nationally representative sample." (Poster, Session 4362). The American Public Health Association (APHA) 141st Annual Meeting. Nov 2-6, 2013, Boston, MA.
236. Thakore R\*, Pinkson M, and **Liu T** (2013). "The effect of cocaine Use on the diet and metabolic status of HIV-infected individuals." Brown Public Health Research Day (Poster Presentation). April 18, Brown University, Providence, RI. (\*Advised student).
237. Tai M\*, **Liu T**, and Merchant RC. (2013). "HIV/AIDS-related hospitalization rates in US short-stay hospitals, 1982-2010." Brown Public Health Research Day (Poster Presentation). April 18, Brown University, Providence, RI. (\*Advised student)
238. Orango E, Itsura P, **Liu T**, Mabeya H, Christoffersen-Deb A, Washington S, and Cu-Uvin S. (2013). "Six Months Follow-up of HIV-infected Women After Visual Inspection with Acetic Acid (VIA) and Immediate Cryotherapy in Western, Kenya." The 2013 Conference on Retroviruses and Opportunistic Infections (CROI). Atlanta GA. March 3-6, 2013; Poster.
239. Merchant RC, Clark MA, **Liu T**, Santelices C, and Cortes D. (2012). "Can a video substitute for an in-person discussion in delivering HIV pre-test information to Spanish-speaking Latinos and better serve those with lower health literacy?" [Paper #31945] 2012 National Conference on Health Communication, Marketing, and Media. Atlanta, GA, August 7-9, 2012.
240. Merchant RC, Clark MA, **Liu T**, Santelices C, and Cortes D. (2012) "Can a video substitute for an in-person discussion in delivering HIV pre-test information to Spanish-speaking Latinos?" The 2012 National Summit on HIV and Viral Hepatitis Diagnosis, Prevention and Access To Care. Poster #116. Washington DC. November 26-28, 2012.
241. Tai M\*, **Liu T**, and 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. (Peer-reviewed).
242. Kuo I, Kurth A, Bazerman L, Peterson J, Cates A, Azikiwe N, Wong J, **Liu T**, and Beckwith C. (2012). "CARE+ Corrections—Innovative use of technology in jails to support linkage and adherence to HIV care." The 2nd International Treatment as Prevention Workshop 2012, April, Vancouver, BC, Canada.

243. **Liu T**, Hogan, J.W, 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. (*Invited Presentation*)
244. **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. (*Invited Presentation*)
245. **Liu T** (2011). "Instrumental variable method and principal stratification: An application to a CFAR study." ACRIN Working Group Meeting, Brown University, Oct 18, 2011, Providence, RI. (*Invited Lecture*)
246. Baird JR, Merchant RC, Nirenberg T.D, **Liu T**, and Ladd GT. (2011). "Increasing the uptake of testing for chlamydia and gonorrhea among young female Emergency Department patients." [Abstract: 244972] 139th American Public Health Association Annual Meeting, Nov 1, Washington, DC.
247. Trillo A, Merchant RC, Baird JR, **Liu T**, and Nirenberg TD. (2011). "Gender differences in alcohol misuse and estimated blood alcohol levels among emergency department patients: implications for brief interventions." [Abstract: 16] 8th Annual International Network on Brief Interventions for Alcohol & Other Drugs (INEBRIA) Conference, Sept 22, Boston, MA.
248. Merchant RC, Baird JR, Nirenberg TD, **Liu T**, and Ladd GT (2011). "Does self-report of alcohol misuse and sexual risk-taking behavior motivate patients to be tested for HIV?" [Abstract: 1399] CDC 2011 National HIV Prevention Conference, Aug 14-17, Atlanta, GA.
249. Merchant RC, Baird JR, Nirenberg TD, **Liu T**, and Ladd G. (2011). "Increasing HIV sexual risk-taking as a function of alcohol misuse among emergency department patients." [Abstract: 1408] CDC 2011 National HIV Prevention Conference, Aug 14-17, Atlanta, GA.
250. **Liu T** (2011). "Optimizing diagnosis of HIV treatment failure with selective use of gold standard test." ACRIN Working Group Meeting, Brown University, July 27, 2011, Providence, RI. (*Invited Presentation*)
251. **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. (*Invited Presentation*)
252. Hogan J, **Liu T**, Kantor R, Wang L, and Zhang S. (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. (By Invitation).
253. **Liu T**, Hogan J and 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.
254. Anderson A, Firnhaber C, **Liu T**, Swarts A, Siminya M. and Cu-Uvin, S. (2011). " " The International Conference on Retroviruses and Opportunistic Infections. Feb 27-Mar 2, Boston, MA. (Peer-reviewed).
255. Anderson B, Firnhaber C, Swarts A, Siminya M, **Liu T**, and Cu-Uvin S (2010). "Self-Collected Vaginal Swabs for Trichomoniasis Testing in HIV-infected Women in South Africa." The 34th Annual Scientific Meeting of Infectious Diseases Society for Obstetrics and Gynecology (IDSOG). Aug. 5-7. Santa Fe, NM.
256. Guzman H, Merchant RC, Baird JR, Nirenberg TD, **Liu T**, Ladd GT (2010) "How does hazardous and heavy episodic alcohol drinking relate to HIV sexual risk among emergency department patients?" *Annals of Emergency Medicine*, 56 (3), S22-S22. [PII: S0196-0644(10)00690-6; doi:10.1016].
257. Guzman H, Merchant RC, Baird JR, Nirenberg TD, **Liu T**, and Ladd GT (2010). "How does hazardous and heavy episodic alcohol drinking relate to HIV sexual risk among emergency department

- patients?" 2010 American College of Emergency Physicians Scientific Assembly Research Forum, Las Vegas, NV. (Peer-reviewed).
258. 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. (Peer-reviewed) (\*Advised student).
259. Mabeya H, Khozaim K, **Liu T**, Orango O, Chumba D, Pisharodi L, and Cu-Uvin S. (2010). "Comparison of Conventional Pap Smear and Visual Inspection with Acetic Acid (VIA) in HIV Infected Women in Western Kenya." The International Conference on Retroviruses and Opportunistic Infections (CROI) 2010, San Francisco, CA. (Peer-reviewed).
260. **Liu T**, DeLong A, and 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. 2010. (By invitation).
261. Merchant RC, Waxman MJ, Clark MA, Maher JC, Celada MT, Beckwith CG, **Liu T**, Simmons EA, and Mayer K. (2009). "Do patients and clinicians have ethical concerns about the 2006 CDC HIV testing recommendations?" The 2009 CDC National HIV Prevention Conference, Atlanta, GA. (Peer-reviewed).
262. Waxman MJ, Merchant RC, Clark MA, Maher JG, Celada MT, Beckwith CG, **Liu T**, Simmons EA, and Mayer KH (2009). "Will the 2006 CDC HIV testing recommendations reduce stigma and increase HIV testing?" The 2009 CDC National HIV Prevention Conference, Atlanta, GA. (Peer-reviewed).
263. Nijhawan A, McManus J, **Liu T**, DeLong A.K, Chapman S, Rapoza K, Kurpewski J, Caliendo A, Cu-Uvin S. (2009). "The effect of Acyclovir on CD4 count and CD4 percent slope in HIV-1/HSV-2 co-infected women taking highly active antiretroviral therapy (HAART)." The 47th IDSA Annual Meeting; Oct. 29-Nov. 1, 2009, Philadelphia, PA.
264. McManus J, Nijhawan A, **Liu T**, DeLong A, Chapman S, Rapoza K, Kurpewski J, Caliendo A, Cu-Uvin S. (2009). "The effect of Acyclovir on the prevalence of bacterial vaginosis on HIV-1/HSV-2 co-infected women taking highly active antiretroviral therapy (HAART)." 47th IDSA Annual Meeting; Oct. 29-Nov. 1, 2009, Philadelphia, PA.
265. Waxman MJ, Merchant R, Maher J, Clark M, Simmons E, Celada T, Beckwith C, **Liu T** (2009). "Who prefers CDC-recommended streamlined methods for HIV testing?" The 2009 Society for Academic Emergency Medicine (SAEM) Annual Meeting, New Orleans, LA. (Peer-reviewed).
266. Beckwith CG, **Liu T**, Bazerman LB, DeLong AK, Pinkston M, Nunn A, Flanigan TP (2009). "Identification of multiple HIV risk factors among jail detainees." The 2009 CDC National HIV Prevention Conference, Atlanta, GA. (Peer-reviewed).
267. Waxman MJ, Merchant RC, Maher JG, Clark MA, Simmons EA, Celada MT, Beckwith CG, **Liu T**, and Mayer KH (2008). "Do clinicians prefer the 2006 or 2001 CDC HIV testing recommendations?" The 2008 Forum for Collaborative HIV Research. Poster # 151. (Peer-reviewed).
268. Caliendo A, Chapman S, Cu-Uvin S, DeLong A, Kurpewski J, **Liu T**, McManus J, Nijhawan A, and Rapoza K (2009). "The Effect of Acyclovir on CD4 Count and CD4 PercentSlope in HIV-1/HSV-2 Co-infected Women Taking Highly Active Antiretroviral Therapy (HAART)." Infectious Diseases Society of America 2009 Annual Meeting, October 2009.
269. Waxman MJ, Clark, MA, Maher JC, Simmons EA, Celada MT, Beckwith CG, **Liu T**, and Mayer KH (2008). "Do patients and clinicians have ethical concerns about the 2006 CDC HIV testing recommendations?" The CDC National HIV Prevention Conference. (Peer-reviewed).
270. Beckwith C, **Liu T**, Bazerman L, DeLong AK, Desjardins S, Flanigan T (2008). "HIV risk behavior pre- and post-HIV testing and counseling in jail." The 2008 Infectious Diseases Society of America (IDSA) Annual Meeting, Washington DC. (Peer-reviewed).

271. Phelan S, Gorin A, **Liu T**, Hogan JW, Lowe M, Fava F, and Wing R (2008). "What distinguishes long-term weight loss maintainers from the treatment-seeking obese? Analysis of environmental, behavioral, and psychosocial variables." The 2008 Annual Scientific Meeting of the North American Association for the Study of Obesity (NAASO), Phoenix, AZ. (Peer-reviewed).
272. Moreira C, DeLong AK, **Liu T**, Kurpewski J, Ingersoll J, Caliendo A, and Cu-Uvin SC (2008). "HIV-infected women on highly active antiretroviral therapy with asymptomatic bacterial vaginosis have low rates of genital tract HIV-1 RNA shedding." The 17th International AIDS Conference (IAS), Mexico. (Peer-reviewed).
273. Merchant RC, DePalo DM, **Liu T**, Rich JD, and Stein MD (2008). "Predictors of a chlamydia and/or gonorrhea infection among adult male emergency department patients." The 2008 National Sexually Transmitted Diseases (STD) Prevention Conference, Chicago, IL. (Peer-reviewed).
274. Anderson BL, **Liu T**, DeLong AK, Ingersoll J, Wang CC, Kurpewski J, Caliendo A, and Cu-Uvin SC (2007). "Genital tract shedding of HIV-1 RNA and lower genital tract infections may be linked by inflammation." The 45th Annual Meeting of the Infectious Diseases Society of America (IDSA), San Diego, CA. 2008 (Peer-reviewed).
275. Wang CC, **Liu T**, Anderson BL, DeLong AK, Chapman S, Kurpewski J, Ingersoll J, Caliendo AM, Cu-Uvin SC (2008) "Association between genital tract HIV-1 RNA shedding and mucosal inflammation among women on effective ART with undetectable plasma viral load." Poster presentation. The 15th Annual Conference on Retroviruses and Opportunistic Infections (CROI), February, 2008, Boston, MA.
276. Anderson BL, DeLong AK, **Liu T**, Wang CC, Kurpewski J, and Cu-Uvin SC (2007). "Association between genital tract white blood cells and viral shedding among HIV-infected women in the absence of genital infections." The 34th Annual Scientific Meeting of Infectious Diseases Society for Obstetrics and Gynecology (IDSOG), Boston, MA. (Peer-reviewed).
277. **Liu T**, Hogan J., and 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.
278. **Liu T** and Heitjan DF (2007). "Sensitivity of Cox regression to nonignorable censoring." The 2007 American Statistical Association (ASA) Joint Statistical Meeting, Salt Lake City, UT.
279. **Liu T** and Heitjan D. (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." Dana-Farber Cancer Institute (Harvard University), Department of Biostatistics and Computation Biology, Cambridge, MA. (*Invited Presentation*)
280. **Liu T** and Heitjan DF (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." Brown University, Center for Statistical Sciences, Department of Community Health, Providence, RI. (*Invited Presentation*)
281. **Liu T** and Heitjan DF (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 American Statistical Association (ASA) Joint Statistical Meeting, Seattle, WA.
282. **Liu T** and Gao L (2006). "Relationship assessment between PK and PD." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.
283. **Liu T** and Heitjan D. (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL. (*Invited Presentation; Distinguished Paper Award*)
284. **Liu T** and 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  
 Funding Agency: PCORI (to be funded)  
 Period: 8/01/2022 –10/31/2027

Brown Alcohol Research Center on HIV: Research Methods Core

My Role: Co-PI (with Tyler Wray)  
 Funding Agency: NIAAA  
 Type: P01  
 Period: 7/1/2020-5/31/2025

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

My Role: Co-I/Lead Statistician  
 Funding Agency: NIH  
 Type: R01  
 Period: 04/01/0220-02/28/2025

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

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

Advance Clinical and Translational Research (Advance-CTR)

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

ECOG-ACRIN NCORP Research Base - CCDR

My Role: Co-I  
 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  
 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  
 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: Co-Investigator  
 Funding Agency: NIH  
 Type: R01

Period: 08/11/2017-07/31/2022

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

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

Center for AIDS Research (CFAR) Biostatistics Core

My Role: Investigator  
 Funding Agency: NIH/The Miriam Hospital contract  
 PI: Hogan  
 Type: P30 A1 42853  
 Period: 09/01/98 - 06/30/2024

**B. Grant Submitted (Disposition Pending)**

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

My Role: Brown PI/Lead Statistician  
 Funding Agency: PCORI (to be funded)

Akwaaba: In-clinic peer groups with enhanced SMS support and economic incentives to improve adherence to HIV care for adolescents with HIV in Ghana

My Role: Co-I  
 Funding Agency: NIH  
 Type: R01

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

My Role: Co-I  
 Funding Agency: ISMSSM/NIH  
 Type: R01

Seasonal variation of alopecia areata flares and related nutritional and epigenetic factors

My Role: Co-I  
 Funding Agency: NIH  
 Type: R01

Randomized controlled trial of FoRtitude: Targeted eHealth intervention to reduce fear of recurrence among breast cancer survivors in community oncology settings

My Role: Co-I/Lead Statistician  
 Funding Agency: NIH  
 Type: R01

**C. Completed Grants**

RI-Center for Clinical and Translational Science

My Role: Co-Investigator  
 Funding Agency: NIGMS  
 Type: U54  
 Period: 07/01/2016-04/30/2021



Optimal HIV Treatment Monitoring Strategies under Resource Constraints

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

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

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

Targeting Worry to Improve Sleep

My Role: Co-I  
 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  
 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  
 Funding Agency: NCI  
 Type: U54  
 Period: 9/19/2014-8/31/2019

“See and LEEP” Training for Kenyan Non-gynecologists

My Role: Brown PI  
 Funding Agency: CFAR/PepFAR Supplement  
 Type: P30  
 Period: 4/4/2014-3/31/2015

CARE Corrections: A technology-based HIV and HCV tool

My Role: Brown PI  
 Funding Agency: NIDA/The Miriam Hospital subcontract  
 Type: R01DA030747-01  
 Period: 07/01/10-06/30/2016

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

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

Evaluating the impact of patient-centric home health quality reports

My Role: Brown PI  
 Funding Agency: Healthcentric Advisors/AHRQ  
 Type: R21  
 Period: 09/30/12-08/31/2015

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

My Role: Brown PI  
 Funding Agency: NIDA  
 Type: R01  
 Period: 03/15/09-02/28/2014

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

My Role: Protocol Statistician  
 Funding Agency: AHRQ  
 Type: R01  
 Period: 09/30/10-09/29/2014

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

My Role: Co-Investigator  
 Funding Agency: NIAID  
 Type: P30  
 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: 5P30  
 Period: 1/01/10-12/31/2011

Increasing Viral Testing in the Emergency Department (InVITED)

My Role: Brown PI  
 Funding Agency: NIDA  
 Type: R21  
 Period: 3/04/10 – 2/28/2012

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

My Role: Lead Investigator  
 Funding Agency: DHHS  
 Type: R21  
 Period: 03/04/11-02/29/13

New Approaches to Mediation Analysis using Causal Inference Methods

My Role: Co-Investigator  
 Funding Agency: NIAAA (stimulus)

Type: 1RC1  
 Period: 10/01/09-09/30/11

#### Shaping Long-Term Care in America

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

#### Analyzing Complex Longitudinal Data in Behavior Sciences

My Role: Lead Statistician  
 Funding Agency: NIH  
 Type: RO1  
 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
2. Biostatistics ScM Students Admission Committee, 2014, 2019 ~ 2022.
3. Biostatistics PhD Students Admission Committee, 2011 ~ 2013, 2015 ~ 2018.
4. Search Committee for Assistant Professor of Biostatistics, Research Scholar, 2017.
5. The Best Biostatistics Thesis Award Committee, 2013, 2014, 2016.
6. Search Committee for Assistant or Associate Professor, Teaching Scholar, 2015.
7. The 2014 Atlantic Causal Inference Conference (ACIC) Organizing Committee, 2014.
8. The Scholarship for Overseas Chinese Students Evaluation Committee, 2014.
9. Biostatistics Curriculum Committee, 2012 ~ 2014.
10. Biostatistics Graduate Program Committee, 2012 ~ 2013.
11. Search Committee for Research Assistant Professor of Biostatistics. 2013.
12. 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 Graphi-*

*cal 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.*

#### Journal Editorial Board

1. 2010 – Present Journal of Clinical Research & Bioethics (JCRB).
2. 2012 – Present International Journal of Clinical Therapeutics and Diagnosis.
3. 2013 – Present Annals of Biometrics & Biostatistics (ABB).
4. 2010 – 2016 International Journal of Epidemiology & Infection

#### Statistical Editor/Reviewer

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

#### Book Reviewer

1. Chapman & Hall/CRC Press.

#### **C. Grant Reviewer**

1. 2022-23 Review Panel. NIH/NICHD (National Institutes of Child Health and Human Development ): Program Project Grants for HIV Research (P01).
2. 2022 Ad-Hoc Reviewer for CFAR Developmental Application. Boston/Providence Center for AIDS Research.
3. 2020-21 Review Panel. NIH/NIAID: Comprehensive and Rapid Response to NIAID Research Programs
4. 2019, 2021 Ad-Hoc Grant Application Reviewer, Singapore National Medical Research Council
5. 2017 Scientific expert reviewer for the French National Research Agency (ANR): *French New Graduate Schools in Data Science and Health Informatics.*
6. 2015 Scientific expert reviewer for Beijing Natural Science Foundation & Shanyuan Joint Research Projects: *Infectious Diseases and Epidemiology.*

7. 2014 Ad-Hoc reviewer, National Science Foundation (NSF): *Panel of Methodology, Measurement, and Statistics*.
8. 2013 Scientific expert reviewer for the French National Research Agency (ANR): *Basic Research on Networks of Trials*.

#### **D. Other Academic/Professional/Community Services**

1. 2022 Independent Monitoring Committee (IMC). “Improving quality of life for adults living with chronic pain” study (PI: Dunne).
2. 2022-present National Representative Panel of Experts for Scientist Opinion Panel Survey (Sci OPS)
3. 2021-present Food and Drug Administration (FDA): Drug Safety and Risk Management Advisory Committee
4. 2019-present American College of Radiology (ACR): Cardiology Imaging Research Committee.
5. 2021 Scientific committee of the 3rd International Conference on Public Health, Wellbeing 2021.
6. 2021 Selection committee of the inaugural class of Delta Omega Honorary Society.
7. 2019 International Chinese Statistical Association (ICSA) Conference, Scientific Program Organizing Committee.
8. 2017 Data Safety and Monitoring Board (DSMB) Committee Member. The “Mindfulness-Based Blood Pressure Reduction” Study.
9. 2017 Judge of the Best Student Poster Awards, Brown Public Health Research Day, April 2017.
10. 2016 Reviewer of Public Health Research Data Poster Session, Brown Public Health Research Day, April 13th 2016.
11. 2015 Judge of the Best Student Poster Awards, Brown Public Health Research Day, April 16th 2015.
12. 2011-2012 Chair of the 2011-12 Starr Lectureship Series on “Comparative Effective Research and Causal Inference”. Brown University.
13. 2011-2012 Chair of the Biostatistics Seminar Series. Department of Biostatistics, Center for Statistical Sciences, Brown University.
14. August 2009. Chair of “Biometrics Section” (No.570). The American Statistical Association Joint Statistical Meeting (JSM). Washington D.C.

#### **HONORS & AWARDS**

1. 2016 Brown A.M. Degree (*ad eundum*), Brown University
2. 2010 The Lifespan/Tuft/Brown CFAR 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 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**
2. PHP 2950 **Journal Club in Public Health**
3. PHP 2511 **Applied Regression Analysis.**
4. PHP 2510 **Principles of Biostatistics and Data Analysis.**
5. PHP 2603 **Analysis of Longitudinal Data.**
6. PHP 2601 **Linear and Generalized Linear Models.**

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

7. BSTA 771 **Applied Bayesian Analysis.**
8. BSTA 630 **Statistical Methods and Data Analysis.**
9. EPI 520 **Introductory Biostatistics.**

### C. Iowa State University (Graduate Instructor):

1. STAT 402 **Statistical Methods for Research Workers.**

### 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 Talia Sessaiah

### A. Thesis Advising (advisor or committee member)

1. Talia Sessaiah                      Sc.M. (Biostatistics)                      2023 (expected)  
Thesis: TBD
2. Zhejia Dong                      Sc.M. (Biostatistics)                      2023 (expected)  
Thesis: Bias amplification due to unmeasured confounders

3. Yufei Yan, Sc.M. (Biostatistics) 2023 (expected)  
Thesis: TBD (Advisor)
4. Whitney Su, Sc.M. (Biostatistics) 2022  
Thesis: Modified Bootstrap for Causal Inference (Advisor)
5. Kexin Qu, Ph.D. (Biostatistics) 2023 (expected)  
Thesis: TBD (Co-advisor with Dr Schmid)
6. Abigail Foley, Sc.M. (Biostatistics) 2021  
Thesis: A Comparison of Prediction Methods under Different Extrapolation Schemes
7. 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.
8. 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.
9. Yizhen Xu, Ph.D. (Biostatistics) 2020.  
Thesis: Classification using Ensemble Learning under Weighted Misclassification Loss  
**2016 Brown School of Public Health Best PhD Presentation Award**  
**2017 American Statistical Association: Best Student Paper Competition Award**
10. Chengzhao Tu, Sc.M. (Biostatistics) 2020  
Thesis: Ankle fracture prediction and visualization. (Advisor)
11. Chengqian Sun, Sc.M. (Biostatistics) 2020  
Thesis: Mediation Analysis for Assessing Mechanism of Alcohol Motivational Intervention on Reducing HIV Risk Behaviors. (Advisor)
12. Max Bo, Sc.M. (Biostatistics) 2020  
Thesis: Factors Associated with Readmission of Pancreatic Cancer Patients Following Surgical Treatment. (Advisor)
13. Blake Hansen, Sc.M. (Biostatistics) 2020  
Thesis: Predictive Modeling of HIV Viral Failure Among U=U Eligible Patients. (Advisor)  
**2020 Brown School of Public Health Best ScM Presentation Award**
14. 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.  
**2017 Best Thesis Award**
15. Mun Sang Yue, Ph.D. (Biostatistics) 2016  
Thesis: Evaluation of predictive accuracy of tests and impact of tests on patient outcomes.
16. 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)
17. 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)
18. 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
19. 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**

20. Andrea Austin, Ph.D. (Biostatistics) 2013  
Thesis: Methods for prediction and inference on social networks with extensions to bimolecular pathways.
21. Miao Tai, Sc.M. (Biostatistics) 2013  
Thesis: HIV/AIDS-related hospitalizations in United States short-stay hospitals, 1982-2010 (Advisor)
22. 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)
23. Xuan Deng, Sc.M. (Biostatistics) 2013  
Thesis: Mediation effects of behavioral and psychological factors in maintaining weight loss.
24. 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**
25. Ann Mwangi, Ph.D. (Biostatistics) 2011  
Thesis: Addressing selection bias in observational event history data, with application to HIV in Western Kenya.
26. Jing Zhang, Ph.D. (Biostatistics) 2011  
Thesis: Causal Inference for Mediation Effects.
27. Raymond Ng, Sc.M. (Biostatistics) 2011  
Thesis: Analysis of repeated FDG-PET scans in the National Oncology PET Registry (NOPR).
28. 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.
29. 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. Ruofan Bie         | PhD (Biostatistics)   | 2021 |
| 2. Yifan Zhao         | Sc.M (Biostatistics)  | 2021 |
| 3. Timothy Hedspeth   | Sc.M (Biostatistics)  | 2021 |
| 4. Yue Wu             | Sc.M (Biostatistics)  | 2020 |
| 5. Zheyu Chen         | Sc.M (Biostatistics)  | 2020 |
| 6. David Chen         | Sc.M (Biostatistics)  | 2019 |
| 7. Monica-Ann Mendoza | Sc.M (Biostatistics)  | 2019 |
| 8. Yimo Zhang         | A.M (Biostatistics)   | 2019 |
| 9. Yuanfei Chen       | Sc.M. (Biostatistics) | 2017 |
| 10. Ran Wei,          | M.A. (Biostatistics)  | 2016 |
| 11. Jin Shi,          | Sc.M. (Biostatistics) | 2016 |
| 12. Wentao Guan       | Sc.M. (Biostatistics) | 2015 |



|                        |                       |      |
|------------------------|-----------------------|------|
| 13. Lisa Wang,         | Sc.M. (Biostatistics) | 2013 |
| 14. Nuo Xu,            | M.A. (Biostatistics)  | 2012 |
| 15. Junchao Shangguan, | M.A. (Biostatistics)  | 2011 |
| 16. 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**

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 AECI).
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 Programs 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, PhD 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, PhD.  
Reference: Liu T, et al (*JASA*, 2013)
3. R-package: **QuantPooledTesting** (Quantitative Pooled Testing).  
Available at: <https://github.com/taotliu/QuantPooledTesting>  
Authors: Tao Liu, PhD.
4. R-package: **TriCTree** (Trichotomous Classification Tree).  
Available at: <https://github.com/taotliu/TriCTree>  
Authors: Yan Sun, Yanke Zhu PhD, and Tao Liu PhD.

## PROFESSIONAL SOCIETIES

1. The International Chinese Statistical Association (ICSA).
2. The American Association for the Advancement of *Science* (AAAS).
3. International Biometric Society (IBS).
4. The American Statistics Association (ASA).
5. The Tau Beta Pi Honor Society.

## HOBBIES

Beekeeping; carpentry; organic gardening.