

## Curriculum Vitae Tao Liu, Ph.D.

Assistant Professor of Biostatistics  
Brown University

Department of Biostatistics  
Center for Statistical Sciences  
Center for AIDS Research (CFAR)  
Alcohol Research Center on HIV (ARCH)  
American College of Radiology Imaging Network (ACRIN)

Tel: (401) 863-6480  
Fax: (401) 863-9182  
Email: tliu@stat.brown.edu  
Campus Addr: Box GS121-7

### PROFESSIONAL APPOINTMENTS

#### A. Academic Appointments

1. **Assistant Professor of Biostatistics** **Sep. 2012 – Present**  
Department of Biostatistics, Brown University School of Public Health, Providence, RI.
2. **Assistant Professor of Community Health** **Sep. 2008 – Sep. 2012**  
Biostatistics Program, Department of Community Health, the Alpert Medical School of Brown University, Providence, RI.
3. **Faculty Member**  
Brown Center for Statistical Sciences (CSS) **Oct. 2006 – Present**  
The Lifespan/Tufts/Brown Center for AIDS Research (CFAR) **Oct. 2006 – Present**  
The American College of Radiology Imaging Network (ACRIN) **Sep. 2010 – Present**  
Brown Alcohol Research Center on HIV (ARCH) **Sep. 2011 – Present**
4. **Acting Co-Director of the CFAR Outcomes & Biostatistics Core** **Jan. – Jun. 2010**  
The Lifespan/Tufts/Brown Center for AIDS Research (CFAR), Providence, RI.
5. **Postdoctoral Research Associate** **Oct. 2006 – Aug. 2008**  
Biostatistics Program, Department of Community Health, the Alpert Medical School of Brown University, Providence, RI.
6. **Graduate Teaching Assistant** **Sep. 2003 – Oct. 2006**  
Department of Biostatistics, Center for Clinical Epidemiology and Biostatistics (CCEB), the University of Pennsylvania, Philadelphia, PA.
7. **Graduate Research Assistant / Consultant** **May 2004 – May 2005**  
Department of Biostatistics, Center for Clinical Epidemiology and Biostatistics (CCEB), the University of Pennsylvania, Philadelphia, PA.
8. **Research Assistant / Graduate Instructor** **Aug. 2001 – Jun. 2003**  
Department of Statistics, Iowa State University, Ames, IA.
9. **Graduate Research Assistant** **Aug. 1999 – Aug. 2001**  
Department of Civil Engineering, Iowa State University, Ames, IA.
10. **Undergraduate Research Assistant** **Aug. 1998 – May 1999**  
Department of Environmental Science and Engineering, State Key Center of Environmental Stimulation and Pollution Control, Tsinghua University, Beijing

## B. Other Appointments

11. **Research Fellow & Consultant** **Jan. 2005 – Sep. 2006**  
Research Statistics Unit, GlaxoSmithKline (GSK), Collegeville, PA
12. **Summer Intern** **Summer, 2003**  
Department of Biostatistics, Amgen Incorporation, Thousand Oaks, CA

## EDUCATION

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|------|---------------------------------------|---|
| 2006 | <b>Ph.D. Biostatistics</b>            | <u>The University of Pennsylvania</u> , PA, US<br><i>PhD Dissertation: Measuring sensitivity to nonignorable censoring in nonparametric and semiparametric survival modeling.</i> |
| 2002 | <b>M.S. Statistics</b>                | <u>Iowa State University</u> , IA, US<br><i>Improved Confidence Interval Estimation for Parameters in Nonlinear Models</i>  |
| 2002 | <b>M.S. Civil Engineering</b>         | <u>Iowa State University</u> , IA, US<br><i>Ammonia Inhibition in Thermophilic Anaerobic Process</i>  |
| 1999 | <b>B.E. Environmental Engineering</b> | <u>Tsinghua University</u> , Beijing, China   |

## PUBLICATIONS

### A. Book Chapter

1. Fedorov, V.V. and Liu, T.<sup>1</sup> (2007). "Enrichment Design." *Encyclopedia of Clinical Trials*. John Wiley & Son Press.

### B. Journals Articles (Refereed)

1. Merchant, R., Baird, J., Liu, T., Taylor, L., Montague, B., and Nirenberg, T. (2014) "Brief intervention to increase emergency department uptake of combined rapid HIV and hepatitis C screening among a drug misusing population." *Academic Emergency Medicine*. (Accepted on March 4, 2014)
2. Federov, V. and Liu, T.<sup>1</sup> (2014). "Randomized discontinuation trials with binary outcomes." *The Journal of Statistical Theory and Practice*, 8:30–45. [PMID: 23721108] [PMCID: PMC3686630]
3. Liu, T., Hogan J.W., Wang, L., Zhang, S. and Kantor, R. (2013). "Optimizing diagnosis of HIV treatment failure in resource limited settings with selective gold standard viral load testing." *Journal of the American Statistical Association (JASA)*, 108 (504): 1173–1188. [DOI: 10.1080/01621459.2013.810149]
4. Trillo, A., Merchant, R., Baird, J., Ladd, G., Liu, T., and Nirenberg, T. (2013). "Interrelationship of alcohol misuse, HIV sexual risk and HIV screening uptake among emergency de-

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<sup>1</sup> Authorship listed in Hardy-Littlewood (alphabetical) order .

- partment patients.” *BMC Emergency Medicine*, 13:9-22. [PMID: 23721108] [PMCID: PMC3686630]
5. Xu, H., Short, S.E., and Liu, T. (2013). “Dynamic relations between fast-food restaurant and body weight status: A longitudinal and multilevel analysis of Chinese adults.” *Journal of Epidemiology & Community Health*, 67:271-279. [PMID: 22923769].
  6. Liu, T. and Heitjan, D.F. (2012). “Sensitivity of the discrete-time Kaplan-Meier estimate to non-ignorable censoring: Application in a clinical trial”. *Statistics in Medicine*, 31: 2998-3010. [PMID: 22806989].
  7. Trillo, A., Merchant, R.C., Baird, J.R., Liu, T., and Nirenberg, T.D. (2012). “Sex differences in alcohol misuse and estimated blood alcohol concentrations among emergency department patients: Implications for brief interventions.” *Academic Emergency Medicine*, 19(8): 924-33. [PMID: 22849748] [PMCID: PMC3424395].
  8. Wei, F., Zhou, J., Wei, X., Zhang, J., Fleming, B.C., Terek, R., Pei, M., Chen, Q., Liu, T., and Wei, L. (2012). “Activation of Indian Hedgehog promotes chondrocyte hypertrophy and upregulation of MMP-13 in human osteoarthritic cartilage.” *Osteoarthritis and Cartilage*, 20(7):755-63. [PMID: 22469853] [PMCID: PMC3374008].
  9. Anderson, A., Cindy, F., Liu, T., Swarts, A., Siminya, M. and Cu-Uvin, S. (2012). “Effect of trichomoniasis therapy on genital HIV viral burden among African women.” *Sexually Transmitted Diseases*. 39(8):638-642. [PMID: 22797689] [PMCID: PMC3398383].
  10. Loucks, E.B., Gilman, S.E., Rogers, M., Liu, T., Kawachi, I., Martins, L., Kubzansky, L., Buka, S.L. (2012). “Education and coronary heart disease risk associations may be affected by early life common prior causes: A propensity matching analysis.” *Annals of Epidemiology*, 22(4):221-232. [PMID: 22463841] [PMCID: PMC3327475].
  11. Merchant, R.C., Waxman, M.J., Maher, J.G., Clark, M.A., Celada, M.T., Liu, T., Simmons, E.M., Beckwith, C.G. and Mayer, K.H. (2012). “Patient and clinician ethical perspectives on the 2006 Centers for Disease Control and Prevention HIV testing methods.” *Public Health Reports*, 127(3):318- 329. [PMID: 22547863] [PMCID: PMC3314076].
  12. Rosen (Asnis)<sup>2</sup>, L.M., Liu, T. and Merchant, R.C. (2012). “Efficiency of ICD-9 billing code searches to identify blood or body fluid exposure emergency department visits through a state-wide multi-center database.” *Infection Control and Hospital Epidemiology*. 33(6): 581-588. [PMID: 22561713 ]
  13. Saffarini, C.M., Heger, N.E., Yamasaki, H., Liu, T., Hall, S.J., and Boekelheide, K. (2012). “Induction and persistence of abnormal testicular cells following gestational exposure to di-(n-butyl) phthalate in p53-null mice.” *The Journal of Andrology*, 33(3):505-13. [PMID: 21868749].
  14. Mabeya, H., Khozaim, K., Liu, T., Orango, O., Chumba, D., Pisharodi, L., and Cu-Uvin, S. (2011). “Comparison of conventional cervical cytology versus visual inspection with acetic acid (VIA) among HIV-infected women in western Kenya.” *Journal of Lower Genital Tract Disease*. 16(2): 92. [PMID: 22126834] [PMCID: PMC3289722].
  15. Merchant, R.C., DePalo D.M., Liu, T., Rich J.D., and Stein M.D. (2010). “Developing a system to predict laboratory-confirmed chlamydial and/or gonococcal urethritis in adult male emergency department patients.” *Postgraduate Medicine*. 22(1): 52–60. [PMID: 20107289] [PMCID: PMC3021915].

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<sup>2</sup> Advised student.

16. Beckwith, C.G., Liu, T., Bazerman, L.B., DeLong, A.K., Desjardins, S.F., Poshkus, M., Flanigan, T.P. (2010). "HIV risk behavior pre- and post-HIV testing in jail: A pilot study." *Journal of Acquired Immune Deficiency Syndromes*, 53(4): 485–90. [PMID: 20035232] [PMCID: PMC2837107].
17. Merchant R.C., Lau T.S., Liu, T., Mayer K.H., and Becker B.M. (2009). "Adult sexual assault evaluations at Rhode Island emergency departments, 1995-2001." *Journal of Urban Health*, 86(1): 43–53. [PMID: 18797994] [PMCID: PMC2629515].
18. Phelan, S., Liu, T., Gorin, A., Lowe, M., Hogan, J., Fava, J., Wing, R. (2009). "What distinguishes long-term weight loss maintainers from the treatment-seeking obese? Analysis of environmental, behavioral, and psychosocial variables in diverse patient populations." *Annals of Behavioral Medicine*, 38: 94–104. [PMID: 19847584]
19. Moreira C., Venkatesh, K.K., DeLong A.K., Liu, T., Kurpewski J., Ingersoll J., Caliendo A.M., Cu-Uvin S. (2009). "Effect of treatment of asymptomatic bacterial vaginosis on HIV-1 shedding in the genital tract among women on antiretroviral therapy: Pilot study." *Clinical Infectious Diseases*, 49: 991–992. [PMID: 19694541] [PMCID: PMC2730467].
20. Hogan, J.W. and Liu, T. (2008). "Mediation analysis for intervention trial: Objectives, models and inference." *Health Services and Outcomes Research Method*, 8: 77-79.
21. Anderson B.L., Wang C.C., Liu, T., DeLong A.K., Kojic E.M., Kurpewski J., Ingersoll J., Mayer K., Caliendo A., and Cu-Uvin S. (2008). "Genital tract leukocytes and shedding of genital HIV-1 RNA." *Clinical Infectious Diseases*, 47(9): 1216–1221. [PMID: 18808359] [PMCID: PMC2714169].
22. Merchant, R.C., Chee, K.J., Liu, T., Mayer, K.H., and Becker, B.M. (2008). "Incidence of visits for health care worker blood and body fluid exposures and HIV post-exposure prophylaxis provision at Rhode Island Emergency Departments." *Journal of AIDS*, 47: 358–368. [PMID: 18176321] [PMCID: PMC3180865].
23. Sung, S. and Liu, T. (2003). "Ammonia inhibition on thermophilic methanogens." *Chemosphere*, 53(1):43-52. [PMID: 12892665].
24. Liu, T. and Sung, S. (2002). "Ammonia inhibition on thermophilic aceticlastic methanogens." *Water Science and Technology*, 45(10):113–120. [PMID: 12188530].
25. Liu, T. and Sung, S. (2001). "Effect of ammonia inhibition in thermophilic anaerobic process." *Proceedings of the Water Environment Federation*, 2001(1): 1292-1306.

### C. Non-Refereed Articles

26. 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 ([http://www.ilads.org/lyme\\_disease/written\\_testimony/12%20Liu%20DeLong%20Blossom%20-%20Statistical%20Review.pdf](http://www.ilads.org/lyme_disease/written_testimony/12%20Liu%20DeLong%20Blossom%20-%20Statistical%20Review.pdf))
27. Liu, T. (2006). "Measuring sensitivity to nonignorable censoring in nonparametric and semiparametric survival modeling." *Doctoral Dissertation*. The University of Pennsylvania. (<http://repository.upenn.edu/dissertations/AAI3246193/>)

28. Fedorov, V. V. and Liu, T.<sup>3</sup> (2005). "Randomized discontinuation trials: design and efficiency." GlaxoSmithKline Biomedical Data Science Technical Report, 3.
29. Liu, T. (2001). "Ammonia inhibition in thermophilic anaerobic process." Master thesis, Iowa State Univ. ([http://books.google.com/books?id=\\_XZfNwAACAAJ](http://books.google.com/books?id=_XZfNwAACAAJ))

#### **D. Manuscript Submitted / in Progress**

30. Kahler, C., Liu, T., Cioe, P., Bryant, V., Pinkston, M., Kojic, E., Onen, N., Baker, J., Hammer, J., Brook, J. and Patel, P. (2014). "Direct and Indirect Effects of Heavy Alcohol Use on HIV and non-HIV Outcomes in a Longitudinal Study of HIV Patients Receiving ART." Under review in *JAIDS*.
31. Rana, A.I., Liu, T., Gillani, F.S., Reece, R., Kojic, E.M., Zlotnick, C., and Wilson, I.B. (2014) "Multiple gaps in care common among newly diagnosed HIV patients." Under review in *JAIDS*.
32. Tai, M.<sup>4</sup>, Liu, T., and Merchant, R.C. (2014). "HIV/AIDS-related hospitalizations in the United States short-stay hospitals, 1982-2010." Under review in *JAMA*.
33. Merchant R.C., Clark, M.A., Santelices, C.A., Liu, T., and Cortes, D. (2014). "Effectiveness of an HIV/AIDS and HIV testing informational video for Spanish-speaking Latinos in healthcare and non-healthcare settings". Under review in *AIDS and Behavior*.
34. Liu, T. and Hogan, J. (2014). "Inference about ATE from observational studies with continuous outcome and unmeasured confounding." Under revision. <http://arxiv.org/abs/1303.6165>.
35. Jones, M.M, Liu, T. and Shenassa, E. (2014). "Differential secular trends in BMI in relation to region of childhood residence: A 25 year follow-up of a nationally representative sample". Under revision.
36. Liu, T., Bazerman, L., Pinkston, M., Nunn, A., Rana, A. and Beckwith, C. (2014). "Co-occurring HIV risk behaviors among males entering jail." Under revision. <http://arxiv.org/abs/1303.6169>.

#### **E. Abstracts / Conference Presentations**

37. Shao, W., Merchant, R., Clark, M., Liu, T., Guan, Y., 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).
38. Shao, W., Merchant, R., Clark, M., Liu, T., Guan, Y., 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?" The 2014 CDC National Conference on Health Communication, Marketing, and Media. (August 19-21).
39. Omenge, 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. (To be presented).

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<sup>3</sup> Authorship listed in Hardy-Littlewood (alphabetical) order .

<sup>4</sup> Advised student.

40. 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.
41. Itsura, P., Pisharodi, L., Oguda, J., Omenge, E., Macharia, B., Were, C., Liu, T., Mabeya, H., Christofferson-deb, A., Washington, S., and Cu-Uvin, S. (2013) "Comparison of pap smear and cervical biopsy results of HIV-infected women between Kenyan and Brown University pathologists: Quality Assurance Program." The 2014 Conference on Retroviruses and Opportunistic Infections. March 3-6, 2014, Boston, MA. (Submitted).
42. Liu, T., Hogan, J.W., Wang, L., Zhang, S. and Kantor, R. (2013) "Optimizing diagnostic accuracy of HIV treatment failure in resource-limited settings with selective use of viral load testing." The 17th International Workshop on HIV Observational Databases. Cavtat, Croatia. March 2013. (Reference #17-185).
43. Jones, M.M, Liu, T. and Shenassa, E.D. (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.
44. Thakore, R.<sup>5</sup>, 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.
45. Tai, M.<sup>5</sup>, Merchant, R.C., and Liu, T. (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.
46. Omenge, 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). March 3-6, 2013; Poster. (Peer-reviewed).
47. 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. (Peer-reviewed).
48. Merchant R.C., Clark M.A., 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. (Peer-reviewed).
49. 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.

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<sup>5</sup> *Advised student.*

50. 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).
51. 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 Mariah Hospital, Providence, RI. (Invited).
52. 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.
53. Baird J.R., Merchant R.C., Nirenberg T.D., Liu, T., and Ladd G.T. (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. (Peer-reviewed).
54. Trillo A., Merchant R.C., Baird J.R., Liu, T., and Nirenberg, T.D. (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. (Peer-reviewed).
55. Merchant R.C., Baird J.R., Nirenberg T.D., Liu, T., and Ladd G.T. (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. (Peer-reviewed).
56. Merchant R.C., Baird J.R., Nirenberg T.D., Liu, T., and Ladd G.T. (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. (Peer-reviewed).
57. 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.
58. 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. (Invited).
59. 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.
60. 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).
61. 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. (Peer-reviewed).
62. Guzman H., Merchant, R.C., Baird, J.R., Nirenberg, T.D., Liu, T., Ladd, G.T. (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].
63. Guzman, H., Merchant, R.C., Baird, J.R., Nirenberg, T.D., Liu, T., and Ladd, G.T. (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).
  64. Xu, H, and 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).
  65. 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).
  66. 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. (Invited).
  67. Merchant R.C., Waxman M.J., Clark M.A., Maher J.C., Celada M.T., Beckwith C.G., Liu, T., Simmons E.A., and Mayer K.H. (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).
  68. Waxman M.J., Merchant R.C., Clark M.A., Maher J.G., Celada M.T., Beckwith C.G., Liu, T., Simmons E.A., and Mayer K.H. (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).
  69. Nijhawan A., McManus J., Liu T., DeLong A.K., Chapman S., Rapoza K., Kurpewski J., Caliendo A. and 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.
  70. McManus J., Nijhawan A., Liu T., DeLong A., Chapman S., Rapoza K., Kurpewski J., Caliendo A. and 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.
  71. Waxman, M.J., 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).
  72. Beckwith, C.G., Liu, T., Bazerman, L.B., DeLong, A.K., Pinkston, M., Nunn, A., and Flanagan, T.P. (2009). "Identification of multiple HIV risk factors among jail detainees." The 2009 CDC National HIV Prevention Conference, Atlanta, GA. (Peer-reviewed).
  73. Waxman, M.J., Merchant, R.C., Maher, J.G., Clark, M.A., Simmons, E.A., Celada, M.T., Beckwith, C.G., Liu, T., Mayer, K.H. (2008). "Do clinicians prefer the 2006 or 2001 CDC HIV testing recommendations?" The 2008 Forum for Collaborative HIV Research. Poster # 151. (Peer-reviewed).



74. Waxman, M.J., Clark, M.A., Maher, J.C., Simmons, E.A., Celada, M.T., Beckwith, C.G., Liu, T., and Mayer, K.H. (2008). "Do patients and clinicians have ethical concerns about the 2006 CDC HIV testing recommendations?" The CDC National HIV Prevention Conference. (Peer-reviewed).
75. Beckwith, C., Liu, T., Bazerman, L., DeLong, A.K., Desjardins, S., and 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).
76. Phelan, S., Gorin, A., Liu, T., Hogan, J.W., 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).
77. Moreira C., DeLong A.K., Liu, T., Kurpewski J., Ingersoll J., Caliendo A., and Cu-Uvin S.C. (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).
78. Merchant R.C., DePalo D.M., Liu, T., Rich J.D., and Stein M.D. (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).
79. Anderson B.L., Liu, T., DeLong A.K., Ingersoll J., Wang C.C., Kurpewski J., Caliendo A., and Cu-Uvin S.C. (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).
80. Wang C.C., Liu, T., Anderson B.L., DeLong A.K., Chapman S., Kurpewski J., Ingersoll J., Caliendo A.M., Cu-Uvin S.C. (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.
81. Anderson B.L., DeLong A.K., Liu, T., Wang C.C., Kurpewski J., and Cu-Uvin S.C. (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).
82. Liu, T., Hogan, J.W., and DeLong, A.K. (2008). "Bounds of ATE and unmeasured confounding bias in observational studies with continuous outcome." The 2008 International Biometric Society (IBS) ENAR meeting, Arlington, VA.
83. Liu, T. and Heitjan, D.F. (2007). "Sensitivity of Cox regression to nonignorable censoring." The 2007 American Statistical Association (ASA) Joint Statistical meeting, Salt Lake City, UT.
84. Liu, T. and Heitjan, D.F. (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 American Statistical Association (ASA) Joint Statistical Meeting, Seattle, WA.
85. Liu, T. and Gao, L. (2006). "Relationship assessment between PK and PD." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.

86. Liu, T. and Heitjan, D.F. (2006). "Sensitivity and Kaplan-Meier estimate to nonignorable censoring." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.
87. Liu, T. and Fedorov, V.V. (2006). "Randomized discontinuation trials." The 2006 International Biometric Society (IBS) ENAR Meeting, Tampa, FL.

## RESEARCH GRANTS

### A. Active Grants

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

My Role: Brown Principal Investigator  
 Funding Agency: NIDA/Rhode Island Hospital subcontract  
 Type: R01 DA026066  
 Period: 03/15/09-02/28/14  
 Cost: \$27,705

The primary goal involves providing biostatistical expertise and collaboration in a project related to a new intervention to reduce drug misuse in the Emergency Department.

#### 2. Alcohol and HIV: Biobehavioral Interactions and Intervention

My Role: Investigator  
 Funding Agency: NIAAA  
 Type: P01 AA019072  
 Period: 09/30/10-08/31/15  
 Cost: \$148,924

The goals of this alcohol research center are to study the effects of alcohol use on HIV disease progression and the effects of interventions to reduce alcohol use in HIV-infected populations. The center also fosters multidisciplinary collaborations and training in research on alcohol and HIV and dissemination of research findings to clinicians treating addictions and HIV.

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

My Role: Lead Statistician  
 Funding Agency: AHRQ  
 Type: R01 HS019403  
 Period: 09/30/10-09/29/14  
 Cost: \$401,721

This research project involves organizing and operating the Biostatistics Center and the Outcomes and Economics Core Laboratory components of the RESCUE trial - a randomized, multi-center study designed to compare CCTA and SPECT for patients with symptoms of stable angina.

#### 4. CARE Corrections: A technology-based HIV and HCV tool

My Role: Co-Investigator; Brown Principal Investigator  
 Funding Agency: NIDA/The Miriam Hospital subcontract  
 Type: R01DA030747-01  
 Period: 07/01/10-06/30/15  
 Cost: \$18,806

It involves providing biostatistical expertise and collaboration in a project related to a new intervention to reduce substance abuse and hence reduce risks of HIV and HCV infections.

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

My Role: Co-Investigator  
 Funding Agency: NIAAA/Brown  
 Type: R01 AA020805-01  
 Period: 09/15/11 – 08/31/16  
 Cost: \$429, 932

The major objectives of this stage 2 randomized clinical trial are to determine whether a para-professionally led group cognitive-behavioral therapy intervention is effective in reducing alcohol use among 336 HIV-infected Kenyan outpatients who report hazardous or binge drinking when compared against a group health education intervention

6. Evaluating the impact of patient-centric home health quality reports

My Role: Investigator  
 Funding Agency: Healthcentric Advisors/AHRQ  
 Type: R21 HS021879-01  
 Period: 09/30/12-08/31/15  
 Cost: \$69,111

The specific aims are to: (1) determine how home health consumers (patients and care-givers) use the current reporting content and format, and what changes they recommend to increase its frequency of use and decision-making utility; (2) determine how hospital discharge planners use the current reporting content and format, and what changes do they recommend to increase its frequency of use and decision-making utility; (3) evaluate whether or not home health consumers and hospital discharge planners who view a revised, consumer-centric, web-based public report understand the information and how to use it; and (4) evaluate the extent to which home health consumers offered a new consumer-centric report prior to hospital discharge use the information to inform their home health choices, and how their use, satisfaction and outcomes compare to consumers offered the old format.

7. Center for AIDS Research (CFAR) Biostatistics Core

My Role: Investigator  
 Funding Agency: NIH/The Miriam Hospital contract  
 Type: P30 A1 42853  
 Period: 09/01/12 - 06/30/16  
 Cost: \$100,966

The primary goal involves providing biostatistical expertise for the design and analysis of individual projects within CFAR; the core will also be responsible for implementation of data analyses and will participate in the preparation of reports and manuscripts.

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

8. Mindfulness RCT for CVD Risk

My Role: Statistician  
 Funding Agency: NIH  
 Type: RO1 GRANT11597822

Cost: \$535,497 (Project Total)

Period: 9/1/2014 - 8/31/2019

The research objective is to conduct a methodologically rigorous randomized controlled trial that will provide information on whether mindfulness-based stress reduction has sustained one-year impacts on CVD risk factors, with systolic blood pressure and smoking as the primary outcomes.

9. Chronic pain, prescription opioids, and HIV/HCV: a BI with older ED patients

My Role: Co-Investigator

Funding Agency: NIH/DHHS

Type: R21

Cost: \$199,863 (Project Total)

This project proposes to adapt, refine and evaluate a brief intervention (BI) appropriate for older adults with chronic pain syndromes misusing prescription opioids, to increase HIV and HCV screening uptake. The BI will be designed also to decrease HIV/HCV risk-taking behaviors. This study will provide an invaluable opportunity to obtain initial effect estimates, demonstrate feasibility and acceptance of the BI, and prepare for a future longitudinal, randomized, controlled clinical trial on this topic.

10. Sub-Saharan Cancer Collaborative

My Role: Co-investigator and Lead Statistician in Project 1

Funding Agency: NCI

Type: U54

Cost: \$626,964

This project aims to assess the results of cryotherapy and LEEP among VIA positive HIV- and HIV+ women in western Kenya. Modifiable risk factors that lead to treatment failure and HPV types (persistence and alterations) also will be assessed.

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

My Role: Co-Investigator

Funding Agency: NIH

Type: RO1

This project aims to address HIV/AIDS and HIV testing literacy deficits among emergency department patients. The video from the prior R21 study will be tested for efficacy as compared to a pictorial brochure in a multi-site, randomized, controlled, longitudinal study.

12. Computerized Intervention to Improve HIV Medication Adherence

My Role: Co-Investigator/Brown PI

Funding Agency: NIMH

Type: RO1

This project aims to promote HIV medication adherence using an innovative computerized intervention. A revised computerized medication adherence intervention (MAI) will be tested for effectiveness as compared to a general health control intervention (GHC) in a randomized, controlled, longitudinal study.

13. "See and LEEP" Training for Kenyan Non-gynecologists

My Role: Co-Investigator/Brown PI

Funding Agency: CFAR/PepFAR Supplement

Type: P30

This project proposes to evaluate the feasibility of training Kenyan nurses to perform cervical cancer screening and LEEP treatment for HIV+ women in Western Kenya and to assess its safety. Findings of the study will provide important information to improve health outcomes among HIV-infected women needing treatment for cervical neoplasia.

14. Facilitating HIV Testing Among Young Adult MSM Through Social Networking

My Role: CSS Principal Investigator  
 Funding Agency: NIH/Rhode Island Hospital subcontract  
 Type: R21  
 Cost: \$91,042

This project assesses acceptance of a new rapid HIV self-test, as compared to current HIV testing approaches, as well as usage of a MSM social-networking website to facilitate HIV testing and dissemination. The entire study will be internet-based, in regards to recruitment, enrollment, follow-up, and acquisition of HIV tests, which is appropriate given the high level of familiarity, use and comfort with the internet among young adult MSM.

15. Optimal HIV Treatment Monitoring Strategies under Resource Constraints

My Role: Co-Investigator  
 Funding Agency: NIH  
 Type: R01  
 Cost: \$2,882,699 (Project total)

We propose to develop the statistical framework, theory and methods required to discover optimal diagnostic algorithms for monitoring treatment failure with limited or no VL availability; to use cohort data from both the US and Kenya to derive, calibrate and cross-validate the algorithms; to use extant blood samples from patients in a PEPFAR-funded HIV care program to design and cross-validate a new diagnostic algorithm that includes implementation of pooled assays; and to develop usable software that will enable programs to design their own protocols based on the characteristics of their patient population and local capacity for viral load testing.

16. The influence of fetal growth on infant growth and obesity among Samoans

My Role: Investigator  
 Funding Agency: NIMHD  
 Type: RO1  
 Period: 9/9/2014 — 8/31/2019

The research objective is to document the relationships between maternal obesity and related pregnancy conditions to fetal growth and directly relate temporal patterns of fetal growth to childhood obesity.

17. Behavioral Intervention to Prevent Child Overweight and Obesity in American Samoa

My Role: Investigator  
 Funding Agency: NIMHD  
 Type: R01  
 Cost: \$1,250,000 (Project total)  
 Period: 7/1/2014 — 6/30/2019

The research objective is to conduct a randomized trial of family-based lifestyle intervention with conditional incentives on parents in order to prevent excessive weight gain among American Samoan children 7-12 years of age.

### C. Completed Grants

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

My Role: Co-Investigator  
 Funding Agency: NIAID/The Miriam Hospital subcontract  
 Type: P30 A142853  
 Period: 07/01/11 – 06/30/13  
 Cost: \$51,488

This proposal involves providing biostatistical expertise and collaboration in a project related to comparing three methods, visual inspection with acetic acid (VIA), pap smear and HPV typing, for diagnosing cervical neoplasia/cancer.

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

My Role: Principal Investigator  
 Funding Agency: Center for AIDS Research  
 Type: 5P30 AI042853-12  
 Period: 1/01/10-12/31/11  
 Cost: \$40,000

This project involves developing a clinical algorithm that will make optimal use of viral load assays when they are available on a limited basis.

#### 20. Increasing Viral Testing in the Emergency Department (InvITED)

My Role: Brown Principal Investigator  
 Funding Agency: NIDA/Rhode Island Hospital subcontract  
 Type: R21 DA028645  
 Period: 3/04/10 – 2/28/2012  
 Cost: \$15,000

This project involves providing biostatistical expertise and collaboration in a project related to a new intervention to reduce substance abuse.

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

My Role: Investigator  
 Funding Agency: DHHS/ Rhode Island Hospital subcontract  
 Type: R21 NR011997  
 Period: 03/04/11-02/29/12  
 Cost: \$18,806

This research project involves comparing the effects of video delivery of HIV testing information for Spanish-Speaking Latinos.

#### 22. New Approaches to Mediation Analysis using Causal Inference Methods

My Role: Co-Principal Investigator  
 Funding Agency: NIAAA (stimulus)  
 Type: 1RC1AA019186-01  
 Period: 10/01/09-09/30/11  
 Cost: \$327,201 (Project total)

The proposed research will develop statistical approaches for discovering pathways and mechanisms of behavioral interventions targeted at alcohol abuse. Knowledge of mecha-

nistic pathways allows deeper understanding of how and why certain interventions work, and opens the door to customizing interventions based on person-specific characteristics.

### 23. Shaping Long-Term Care in America

My Role: Statistician  
 Funding Agency: NIH/NIA  
 Type: P01 AG027296  
 Cost: \$1,390,110 (Project total)  
 Period: 09/01/08-06/30/10

The overall objectives of the program project are to (1) Build a long term care data and policy repository and analysis infrastructure as the basis for currently proposed and future examining the nations long term care" system;" (2) Implement a survey of states policies and a national sample of nursing homes, integrating them with secondary data to serve the proposed research projects within an overall administrative structure; (3) integrate economic and organizational theory to develop measures and to propose testable hypothesis in the proposed projects focusing on provides responses to market and policy changes; and (4) systematically catalogue and broadly disseminate to numerous audiences project findings.

### 24. Analyzing Complex Longitudinal Data in Behavior Sciences

My Role: Lead Statistician  
 Funding Agency: NIH  
 Type: RO1 HL079457  
 Cost: \$249,500 (Project total)  
 Period: Aug., 1, 04 --- July, 31, 08

This project will develop innovative approaches to the analysis of longitudinal data specifically for behavioral medicine trials. The first two components of the project will develop latent class and latent variable models for classifying patterns of behavior change in smoking cessation and weight change. The third aim of the study addresses the issue of informative missing data, presenting a unifying and coherent framework for pattern-mixture modeling and associated sensitivity analyses. All of the methods will be developed on and applied to data from recently completed or ongoing trials in behavioral medicine, particularly in smoking cessation and weight change, run by recognized leaders in the field.

### 25. Secondhand Tobacco Smoke Exposure, Maternal Stress, and Adverse Birth Outcomes

My Role: Lead Statistician  
 Funding Agency: Flight Attendants Medical Research Institute  
 Type: FAMRI 032069  
 Cost: \$623,239 (Project total)  
 Period: Sept. 1, 08 --- Dec. 31, 08

This is a study to elucidate mechanisms explaining the heightened susceptibility to adverse health effects of secondhand tobacco smoke exposure observed among people of low SES by examining the exacerbating role of stress as measured by Allostatic Load.

## ACADEMIC SERVICES

### A. University Services

1. Atlantic Causal Inference Conference (ACIC) Organizing Committee. 2014.

2. Masters Thesis Award Committee - 2013-14
3. Biostatistics Master Student Admission Committee. 2014.
4. Biostatistics Curriculum Committee. 2012, 2013, 2014.
5. Biostatistics PhD Qualifying Exam Committee. 2008, 2009, 2010, 2011, 2013.
6. Biostatistics PhD Student Admission Committee. 2011, 2012, 2013.
7. Biostatistics Graduate Program Committee. 2011, 2012, 2013.
8. Epidemiology MPH Qualifying Exam Committee. 2010, 2011.
9. Search Committee for junior research faculty of biostatistics. 2013.

## **B. Editorial Services**

### **B.1 Journal Referee (# of services provided)**

1. The American Journal of Epidemiology (AJE) (2)
2. Annals of Applied Statistics (3)
3. Annals of Epidemiology (1)
4. Biometrics (1)
5. BMC Infectious Diseases (2)
6. Emerging Themes in Epidemiology (2)
7. Epidemiology (1)
8. Clinical Infectious Diseases (CID) (1 joint review with Dr R. Kantor)
9. Health Services and Outcomes Research Methodology (HSOR) (4)
10. International Journal of Epidemiology & Infection (1)
11. Journal of the American Statistical Association (JASA) (2)
12. Journal of Computational and Graphical Statistics (JCGS) (1)
13. Journal of Clinical Epidemiology (JCE) (1 joint review with Dr J.W. Hogan)
14. Statistics in Medicine (4)
15. Statistical Science (2)
16. Statistics and Probability Letters (1)
17. Statistical Modelling (1)

### **B.2 Book Review (# of services provided)**

1. Chapman & Hall/CRC Press. (2)

### **B.3 Journal Editorial Board**

1. 2010 – Present Journal of Clinical Research & Bioethics (JCRB).
2. 2012 – Present International Journal of Clinical Therapeutics and Diagnosis (IJCTD).



3. 2013 – Present    Annals of Biometrics & Biostatistics (ABB).
4. 2010 – Present    International Journal of Epidemiology & Infection

### C. Grant Reviewer for

1. 2013                Scientific expert reviewer for the French National Research Agency (ANR)
2. 2014                National Science Foundation (NSF): *Panel of Methodology, Measurement, and Statistics*.

### D. Other Academic Services

1. 2011-2012            Chair of the Starr Lectureship Series on “Comparative Effective Research and Causal Inference”. Brown University.
2. 2011-2012            Chair of Biostatistics Seminar Series. Department of Biostatistics, Center for Statistical Sciences, Brown University.
3. August 2009.        Chair of “Biometrics Section” (No.570). The American Statistical Association Joint Statistical Meeting (JSM). Washington D.C.

## HONORS & AWARDS

1. 2010                The Lifespan/Tuft/Brown CFAR Developmental Award.
2. 2006                The Biometric Society ENAR Distinguished Student Paper Award.
3. 2004                Jonathan Raz Award for Best Doctoral Qualifying Exam.
4. 1999-2002            Iowa State University Graduate Scholarship.
5. 1994-1998            Tsinghua University Undergraduate Scholarships.
5. 1994                Outstanding Freshmen Award at Tsinghua University.

## TEACHING

### A. Brown University (Instructor):

1. Spring 2012        PHP 2511    Applied Regression Analysis. (student enrollment: 18).
2. Fall 2009            PHP 2510    Principles of Biostatistics and Data Analysis. (27).
3. Spring 2008        PHP 2603    Analysis of Longitudinal Data (with Prof. Hogan). (15).
4. Fall 2008            PHP 2601    Linear and Generalized Linear Models. (11).

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

5. Spring 2006        BSTA 771    Applied Bayesian Analysis. (7).
6. Fall 2005            BSTA 630    Statistical Methods and Data Analysis. (26).

7. Spring 2004      EPI 520      Introductory Biostatistics. (32).

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

8. Summer. 2002      STAT 402      Statistical Methods for Research Workers. (n=43).

**G. Invited/Guest Lectures**

1. Fall 2013      “Clinical Trials Methodology”  
Brown University, School of Public Health
2. Summer 2012      “Causality 101 Workshop: Recent Mediation Analysis Methods”  
Brown University, School of Public Health
3. Fall 2010      “Design of Clinical Trials with Survival Outcomes”  
Brown University, School of Public Health
4. Fall 2010      “Statistical Methods in Biology”  
Brown University, Department of Molecular Biology
4. Fall 2009      “Statistical Methods in Biology”  
Brown University, Department of Molecular Biology

**ADVISING/CONSULTING**

**A. Thesis Advisor/Reader**

1. Renxia Huang,      M.S. (Biostatistics)      2014 (expected).  
My role: Thesis Advisor.  
Thesis: Pooled viral load testing for monitoring HIV antiretroviral treatment (working title).
2. Andrea Austin,      PhD (Biostatistics)      2013.  
My role: Thesis committee member.  
Thesis: Methods for prediction and inference on social networks with extensions to bimolecular pathways.
2. Miao Tai,      M.S. (Biostatistics)      2013  
Thesis: HIV/AIDS-related hospitalizations in United States short-stay hospitals, 1982-2010  
My role: Thesis Advisor.
3. Rachel Thakore,      B.A. (Community Health)      2013  
Honors Thesis: The effect of cocaine use on the diet and metabolic status of HIV-infected individuals.  
My role: Thesis advisor.
4. Xuan Deng,      M.S. (Biostatistics)      2013  
Thesis: Mediation effects of behavioral and psychological factors in maintaining weight loss.  
My role: Thesis committee member.
5. Edwin Sang,      M.S. (Biostatistics)      2013  
Thesis: Causal effect of HIV serostatus disclosure on mortality and loss to follow-up after HAART initiation using propensity score.  
My role: Thesis committee member

6. Ann Mwangi, PhD (Biostatistics) 2011  
Thesis: Addressing selection bias in observational event history data, with application to HIV in Western Kenya.  
My role: Thesis committee member.
7. Jing Zhang, PhD (Biostatistics) 2011  
Thesis: Causal Inference for Mediation Effects.  
My role: Thesis committee member.
8. Raymond Ng, M.S. (Biostatistics) 2011  
Thesis: Analysis of repeated FDG-PET scans in the National Oncology PET Registry (NOPR).  
My role: Thesis committee member..
9. Patricia S. Fox, M.S. (Biostatistics) 2009  
Thesis: Transition within states of lung function: A multinomial logistic approach using two-year follow-up data from bacteriologically cured tuberculosis patients.  
My role: Thesis committee member..
10. Lisa Rosen (Asnis), M.S. (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.  
My role: Thesis advisor.

### **C. Graduate Academic Advisor**

1. Cheng Yuan, M.A. (Biostatistics) 2013
1. Lisa Wang, M.S. (Biostatistics) 2013
2. Nuo Xu, M.A. (Biostatistics) 2012
3. Junchao Shangguan, M.A. (Biostatistics) 2011
4. Dong-Hyun Ahn, M.A. (Biostatistics) 2010

### **D. Other Teaching and Advising Roles**

1. Cheng Yuan, Brown master student (Biostatistics). 2013 Summer Intern at Press Ganey.  
My role: Curriculum Practical Training Advisor.
1. Junchao Shangguan, Brown master student (Biostatistics). 2010 Summer Intern at Fidelity Co. My role: Curriculum Practical Training Advisor.
2. 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: Advisor.
3. Hongwei Xu, Brown PhD student (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: Advisor.

### **E. Junior Faculty Mentoring and Medical Consulting**

1. Elizabeth M. Goldberg, M.D. (2014). UEMF Research Development Grant: "Is Emergency Department Hypertension Predictive of Future Hypertension?" My role: Mentor.

2. 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.
3. Francesca Beaudoin, M.D. (2013). NIDA Emergency Medicine Foundation. "Prescription opioid use and misuse in older emergency department patients." My role: Mentor.
4. Francesca Beaudoin, M.D. (2013). NIH RO3: "Chronic Opioid Use, Pain Sensitivity and Acute Pain in the Emergency Department." My role: Consultant.
5. Elkanah Omenge Orango, M.D. (2013). CFAR Supplement: "Cryotherapy and HIV Genital Shedding." My role: Mentor.
6. Nick Zaller, Ph.D. (2013). CFAR Supplement: "HIV treatment cascade among HIV+ person in community corrections (tentative title)." My role: Consultant.
7. 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.
8. 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.
9. Rana Aadia, M.D. (2012). K-23 Award: "Improving Retention in Care Among Postpartum HIV-infected Women in Mississippi." My role: Mentor.
10. Willoughby Britton, Ph.D. (2012). K-Award (NCCAM): "Dismantling Mindfulness: Contributions of Attention vs. Acceptance." My role: Consultant.
11. Becky Genberg, PhD. (2012). K-Award: "Linkage to care following home-based counseling and testing for HIV in western Kenya." My role: Consultant.
12. 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.
13. Philips Chan, MD. (2011). K-Award: "Molecular Epidemiology of HIV Transmission Networks". My role: Consultant.
14. 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.
15. Ammy Nunn, PhD. (2010). K-Award: "Exploring Patterns of Sexual Concurrency Among Urban African Americans." My role: Consultant.
16. Rosemarie Martin, PhD (2010). Developmental Award: "Contingency Management for Drug Use in HIV+ Adults after Prison or Jail Release". My role: Consultant.
17. 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
18. Erna Kojic, MD (2009). K-Award: "HPV and related diseases in HIV infected women". My role: Consultant.
19. Michael Waxman, MD (Assistant Professor of Emergency Medicine) (2007). The Brown Department of Emergency Medicine Junior Faculty Research Award. My role: Consultant.

20. 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.

## **MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

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