

# YEA-HUNG CHEN

## Education

BA, **Psychology** and **Statistics** (double major), University of California, Berkeley, 2003

MS, **Biostatistics**, University of Washington, 2006

PhD, **Epidemiology and Translational Science**, University of California, San Francisco, 2016

## Positions

**Research Assistant**, Department of Biostatistics, University of Washington, 2003–2004

**Teaching Assistant**, Department of Biostatistics, University of Washington, 2004–2006

**Research Associate**, Osher Center for Integrative Medicine, University of California, San Francisco, 2006–2008

**Epidemiologist**, Center for Public Health Research, San Francisco Department of Public Health, 2008–2019

**Research Data Specialist**, Institute for Global Health Sciences, University of California, San Francisco, 2019–2021

**Research Data Specialist**, Department of Epidemiology and Biostatistics, University of California, San Francisco, 2021–present

## Teaching

### *Instructor*

*Introduction to Biostatistics*, Institute for Global Health Sciences, University of California, San Francisco, Fall 2017, Fall 2018, Fall 2019, Fall 2020, and Fall 2021

*Introduction to Computing in the R Software Environment*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Winter 2019 and Fall 2019

### *Guest lectures*

Mediation, *Advanced Approaches to the Analysis of Observational Data*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Spring 2016

Nested new-user cohorts, *Advanced Approaches to the Analysis of Observational Data*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Spring 2016 and Spring 2017

Sampling, *Epidemiological Methods III*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Spring 2017

Sampling hard-to-reach populations, *Doctoral Seminar*, Institute for Global Health Sciences, University of California, San Francisco, Winter 2018

Introduction to R, *Designing and Conducting Research*, Medical Education, University of California, San Francisco, Winter 2020 and Winter 2021.

Excess mortality by occupation, *Seminar*, Data Science Training to Advance Behavioral and Social Science Expertise for Health Disparities Research, University of California, San Francisco, Fall 2021.

## ***Discussions***

Class discussion, *The Coronavirus Pandemic: The Fight to Save the World*, Harvard Summer School, Harvard University; July 7, 2021.

## ***Short courses and workshops***

Respondent-driven sampling, Bill and Melinda Gates Foundation, June–July 2008

Respondent-driven sampling, Centers for Disease Control and Prevention, September 2008

Respondent-driven sampling, Institute for Global Health Sciences, University of California, San Francisco, January 2012

Respondent-driven sampling and time-location sampling, Institute for Global Health Sciences, University of California, San Francisco, December 2013–April 2014

Introduction to R, Department of Epidemiology and Biostatistics, University of California, San Francisco, Winter 2015, Fall 2015, Fall 2016, Fall 2017, and Fall 2018

## ***Teaching assistant***

*Medical Biometry I*, Department of Biostatistics, University of Washington, Autumn 2004

*Medical Biometry II*, Department of Biostatistics, University of Washington, Winter 2005

*Medical Biometry III*, Department of Biostatistics, University of Washington, Spring 2005

*Categorical Data Analysis in Epidemiology*, Department of Biostatistics, University of Washington, Autumn 2005

*Survival Data Analysis in Epidemiology*, Department of Biostatistics, University of Washington, Winter 2006

*Systematic Reviews*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Spring 2007

*Advanced Approaches to the Analysis of Observational Data*, Department of Epidemiology and Biostatistics, University of California, San Francisco, Spring 2014

## **Publications**

### ***Peer-reviewed publications***

1. **Chen Y-H**, Zhou X-H. Interval estimates for the ratio and difference of two lognormal means. *Stat Med.* 2006;25(23):4099–4113.
2. Daniels NA, **Chen Y-H**, Bent S. Antibiotic and anti-inflammatory use and the risk of prostate cancer. *BMC Res Notes.* 2009;2:57.
3. Simon JA, **Chen Y-H**, Bent S. The relation of  $\alpha$ -linolenic acid to the risk of prostate cancer: A systematic review and meta-analysis. *Am J Clin Nutr.* 2009;89(5):1558S–1564S.
4. Nguyen SP, Bent S, **Chen Y-H**, Terdiman JP. Gender as a risk factor for advanced neoplasia and colorectal cancer: A systematic review and meta-analysis. *Clin Gastroenterol Hepatol.* 2009;7(6):676–681.
5. Barton JL, Criswell LA, Kaiser R, **Chen Y-H**, Schillinger D. Systematic review and metaanalysis of patient self-report versus trained assessor joint counts in rheumatoid arthritis. *J Rheumatol.* 2009;36(12):2635–2641.
6. **Chen Y-H**, Raymond HF, McFarland W, Truong H-HM. HIV risk behaviors in heterosexual partnerships: Female knowledge and male behavior. *AIDS Behav.* 2010;14(1):87–91.

7. Gonzalez T, Sabino E, Sales N, **Chen Y-H**, Chamone D, Busch M, Murphy E, Custer B, McFarland W. Human immunodeficiency virus test-seeking blood donors in a large blood bank in São Paulo, Brazil. *Transfusion*. 2010;50(8):1806–1814.
8. **Chen Y-H**, McFarland W, Raymond HF. Behavioral surveillance of heterosexual exchange-sex partnerships in San Francisco: Context, predictors, and implications. *AIDS Behav*. 2011;15(1):236–242.
9. Madhivanan P, **Chen Y-H**, Krupp K, Arun A, Klausner JD, Reingold AL. Incidence of herpes simplex virus type 2 in young reproductive age women in Mysore, India. *Indian J Pathol Microbiol*. 2011;54(1):96–99.
10. McFarland W, **Chen Y-H**, Raymond HF, Nguyen B, Colfax G, Mehrrens J, Robertson T, Stall R, Levine L, Truong H-HM. HIV seroadaptation among individuals, within sexual dyads, and by sexual episodes, men who have sex with men, San Francisco, 2008. *AIDS Care*. 2011;23(3):261–268.
11. Raymond HF, **Chen Y-H**, Stall RD, McFarland W. Adolescent experiences of discrimination, harassment, connectedness to community and comfort with sexual orientation reported by adult men who have sex with men as a predictor of adult HIV status. *AIDS Behav*. 2011;15(3):550–556.
12. McFarland W, **Chen Y-H**, Nguyen B, Grasso M, Levine D, Stall R, Colfax G, Robertson T, Truong HH, Raymond HF. Behavior, intention or chance? A longitudinal study of HIV seroadaptive behaviors, abstinence and condom use. *AIDS Behav*. 2012;16(1):121–131.
13. Fuqua V, **Chen Y-H**, Packer T, Dowling T, Ick TO, Nguyen B, Colfax GN, Raymond HF. Using social networks to reach Black MSM for HIV testing and linkage to care. *AIDS Behav*. 2012;16(2):256–265.
14. **Chen Y-H**, Vallabhaneni S, Raymond HF, McFarland W. Predictors of serosorting and intention to serosort among men who have sex with men, San Francisco. *AIDS Educ Prev*. 2012;24(6):564–573.
15. Schwarcz SK, **Chen Y-H**, Murphy JL, Paul JP, Skinta MD, Scheer S, Vittinghoff E, Dille JW. A randomized control trial of personalized cognitive counseling to reduce sexual risk among HIV-infected men who have sex with men. *AIDS Care*. 2013;25(1):1–10.
16. Raymond HF, **Chen Y-H**, Ick T, Scheer S, Bernstein K, Liska S, Louie B, Pandori M, McFarland W. A new trend in the HIV epidemic among men who have sex with men, San Francisco, 2004–2011. *J Acquir Immune Defic Syndr*. 2013;62(5):584–589.
17. **Chen Y-H**, Raymond HF, Grasso M, Nguyen B, Robertson T, McFarland W. Prevalence and predictors of conscious risk behavior among San Franciscan men who have sex with men. *AIDS Behav*. 2013;17(4):1338–1343.
18. Johnston LG, **Chen Y-H**, Silva-Santisteban A, Raymond HF. An empirical examination of respondent driven sampling design effects among HIV risk groups from studies conducted around the world. *AIDS Behav*. 2013;17(6):2202–2210.
19. Truong H-HM, Grasso M, **Chen Y-H**, Kellogg TA, Robertson T, Curotto A, Steward WT, McFarland W. Balancing theory and practice in respondent-driven sampling: A case study of innovations developed to overcome recruitment challenges. *PLoS ONE*. 2013;8(8):e70344.
20. Raymond HF, **Chen Y-H**, Syme SL, Catalano R, Hutson MA, McFarland W. The role of individual and neighborhood factors: HIV acquisition risk among high-risk populations in San Francisco. *AIDS Behav*. 2014;18(2):346–356.
21. **Chen Y-H**, McFarland W, Raymond HF. Risk behaviors for HIV in sexual partnerships of San Francisco injection drug users. *AIDS Care*. 2014;26(5):554–558.
22. Wilson EC, **Chen Y-H**, Raad N, Raymond HF, Dowling T, McFarland W. Who are the sexual partners of transgender individuals? Differences in demographic characteristics and risk behaviours of San Francisco HIV testing clients with transgender sexual partners compared with overall testers. *Sex Health*. 2014;11(4):319–323.

23. Wilson EC, **Chen Y-H**, Arayasirikul S, Wenzel C, Raymond HF. Connecting the dots: Examining transgender women’s utilization of transition-related medical care and associations with mental health, substance use, and HIV. *J Urban Health*. 2015;92(1):182–192.
24. Truong HM, Fatch R, Grasso M, Robertson T, Tao L, **Chen Y-H**, Curotto A, McFarland W, Grant RM, Reznick O, Raymond HF, Steward WT. Gay and bisexual men engage in fewer risky sexual behaviors while traveling internationally: A cross-sectional study in San Francisco. *Sex Transm Infect*. 2015;91(3):220–225.
25. Wilson EC, **Chen Y-H**, Arayasirikul S, Fisher M, Pomart WA, Le V, Raymond HF, McFarland W. Differential HIV risk for racial/ethnic minority trans\*female youths and socioeconomic disparities in housing, residential stability, and education. *Am J Public Health*. 2015;105(S3):e41–e47.
26. Raymond HF, **Chen Y-H**, McFarland W. Estimating incidence of HIV infection among men who have sex with men, San Francisco, 2004–2014. *AIDS Behav*. 2016;20(1):17–21.
27. Raymond HF, Ick TO, **Chen Y-H**. A comparison of men who have sex with men, people who inject drugs and high-risk heterosexuals’ risk for HIV infection, San Francisco. *AIDS Behav*. 2016;20(2):417–422.
28. Wilson E, **Chen Y-H**, Pomart WA, Arayasirikul S. Awareness, interest, and HIV pre-exposure prophylaxis candidacy among young transwomen. *AIDS Patient Care STDS*. 2016;30(4):147–150.
29. Arayasirikul S, **Chen Y-H**, Jin H, Wilson E. A Web 2.0 and epidemiology mash-up: Using respondent-driven sampling in combination with social network site recruitment to reach young transwomen. *AIDS Behav*. 2016;20(6):1265–1274
30. Truong HM, **Chen Y-H**, Grasso M, Robertson T, Tao L, Fatch R, Curotto A, McFarland W, Grant RM, Reznick O, Raymond HF, Steward WT. HIV serodisclosure and sexual behavior during international travel. *Sex Transm Dis*. 2016;43(7):459–464.
31. Le V, Arayasirikul S, **Chen Y-H**, Jin H, Wilson EC. Types of social support and parental acceptance among transfemale youth and their impact on mental health, sexual debut, history of sex work and condomless anal intercourse. *J Int AIDS Soc*. 2016;19(3 Suppl 2):20781.
32. Wilson EC, **Chen Y-H**, Arayasirikul S, Raymond HF, McFarland W. The impact of discrimination on the mental health of trans\*female youth and the protective effect of parental support. *AIDS Behav*. 2016;20(10):2203–2211.
33. **Chen Y-H**, McFarland W, Raymond HF. Estimated number of people who inject drugs in San Francisco, 2005, 2009, and 2012. *AIDS Behav*. 2016;20(12):2914–2921.
34. **Chen Y-H**, Snowden JM, McFarland W, Raymond HF. Pre-exposure prophylaxis (PrEP) use, seroadaptation, and sexual behavior among men who have sex with men, San Francisco, 2004–2014. *AIDS Behav*. 2016;20(12):2791–2797.
35. Snowden JM, **Chen Y-H**, McFarland W, Raymond HF. Prevalence and characteristics of users of pre-exposure prophylaxis (PrEP) among men who have sex with men, San Francisco, 2014 in a cross-sectional survey: Implications for disparities. *Sex Transm Infect*. 2017;93:52–55.
36. Hughes AJ, **Chen Y-H**, Scheer S, Raymond HF. A novel modeling approach for estimating patterns of migration into and out of San Francisco by HIV status and race among men who have sex with men. *J Urban Health*. 2017;94(3):350–363.
37. Guigayoma J, **Chen Y-H**, Snowden JM, Santos GM, Hecht J, Raymond HF. Self-Perceived viral load and sexual risk behavior among known HIV-positive MSM in San Francisco, 2014. *J Acquir Immune Defic Syndr*. 2017;75(Suppl 3):S309–S315.
38. **Chen Y-H**, McFarland W, Raymond HF, Scott HM, Vittinghoff E, Porco TC. Distribution of behavioral patterns prior to infection among San Francisco men who have sex with men newly infected with HIV in 2014. *J Acquir Immune Defic Syndr*. 2017;75(5):528–534.

39. Hughes AJ, **Chen Y-H**, Scheer S. Condomless anal sex among HIV-positive men who have sex with men: Biomedical context matters. *AIDS Behav.* 2017;21(10):2886–2894.
40. **Chen Y-H**, Raymond HF. Associations between depressive syndromes and HIV risk behaviors among San Francisco men who have sex with men. *AIDS Care.* 2017;29(12):1538–1542.
41. Lippman SA, Lane T, Rabede O, Gilmore H, **Chen Y-H**, Mlotshwa N, Maleke K, Marr A, McIntyre JA. High acceptability and increased HIV testing frequency following introduction of HIV self-testing and network distribution among South African MSM. *J Acquir Immune Defic Syndr.* 2018;77(3):279–287.
42. Lippman SA, Gilmore HJ, Lane T, Radebe O, **Chen Y-H**, Mlotshwa N, Maleke K, Manyuchi AE, McIntyre J. Ability to use oral fluid and fingerstick HIV self-testing (HIVST) among South African MSM. *PLoS One.* 2018;13(11):e0206849.
43. Raymond HF, **Chen Y-H**, McFarland W. “Starfish Sampling”: A novel, hybrid approach to recruiting hidden populations. *J Urban Health.* 2019;6(1):55–62.
44. **Chen Y-H**, Guigayoma J, McFarland W, Snowden JM, Raymond HF. Increases in pre-exposure prophylaxis use and decreases in condom use: Behavioral patterns among HIV-negative San Francisco men who have sex with men, 2004–2017. *AIDS Behav.* 2019;23(7):1841–1845.
45. Havlir DV, Balzer LB, Charlebois ED, Clark TD, Kwarisiima D, Ayieko J, Kabami J, Sang N, Liegler T, Chamie G, Camlin CS, Jain V, Kadde K, Atukunda M, Ruel T, Shade SB, Ssemmondo E, Byonanebye DM, Mwangwa F, Owaraganise A, Olilo W, Black D, Snyman K, Burger R, Getahun M, Achando J, Awuonda B, Nakato H, Kironde J, Okiror S, Thirumurthy H, Koss C, Brown L, Marquez C, Schwab J, Lavoy G, Plenty A, Wafula EM, Omany P, **Chen Y-H**, Rooney JF, Bacon M, van der Laan M, Cohen CR, Bukusi E, Kamya MR, Petersen M. HIV testing and treatment with the use of a community health approach in rural Africa. *New Engl J Med.* 2019;381(3):219–229.
46. Raymond HF, Snowden JM, Guigayoma J, McFarland W, **Chen Y-H**. Community levels of PrEP use among men who have sex with men by race/ethnicity, San Francisco, 2017. *AIDS Behav.* 2019;23(10):2687–2693.
47. Beltran S, **Chen Y-H**, Miller D, Ick T, Lin J, Packer T, McFarland W, Raymond HF. Will we get to zero HIV stigma in San Francisco? *AIDS Behav.* 2020;24(1):5–7.
48. **Chen Y-H**, Gilmore HJ, Maleke K, Lane T, Zuma N, Radebe O, Manyuchi AE, McIntyre JA, Lippman SA. Increases in HIV status disclosure and sexual communication between South African men who have sex with men and their partners following use of HIV self-testing kits. *AIDS Care.* 2020.
49. Williams P, Santos N, Azman-Firdaus H, Musange S, Walker D, Sayinzoga F, **Chen Y-H**. Predictors of postpartum family planning in Rwanda: The influence of male involvement and healthcare experience. *BMC Womens Health.* 2021;21(1):112.
50. Kamya MR, Petersen ML, Kabami J, Ayieko J, Kwariisima D, Sang N, Clark TD, Schwab J, Charlebois ED, Cohen CR, Bukusi EA, Peng J, Jain V, **Chen Y-H**, Chamie G, Balzer LB, Havlir DV. SEARCH Human Immunodeficiency Virus (HIV) streamlined treatment intervention reduces mortality at a population level in men with low CD4 counts. *Clin Infect Dis.* 2021.
51. Mirzazadeh A, **Chen Y-H**, Lin J, Burk K, Wilson EC, Miller D, Veloso D, McFarland W, Morris MD. Progress toward closing gaps in the hepatitis C virus cascade of care for people who inject drugs in San Francisco. *PLoS One.* 2021;16(4):e0249585.
52. **Chen Y-H**, Glymour MM, Catalano R, Fernandez A, Nguyen T, Kushel M, Bibbins-Domingo K. Excess mortality in California during the coronavirus disease 2019 pandemic, March to August 2020. *JAMA Intern Med.* 2021;181(5):705–707.
53. Catalano R, Glymour MM, **Chen Y-H**, Bibbins-Domingo K. Sheltering in place and the likelihood of nonnatural death. *Am J Epidemiol.* 2021;190(6):1075–1080.

54. **Chen Y-H**, Glymour M, Riley A, Balmes J, Duchowny K, Harrison R, Matthay E, Bibbins-Domingo K. Excess mortality associated with the COVID-19 pandemic among Californians 18-65 years of age, by occupational sector and occupation: March through November 2020. *PLoS One*. 2021;16(6):e0252454.
55. Riley AR, **Chen Y-H**, Matthay EC, Glymour MM, Torres JM, Fernandez A, Bibbins-Domingo K. Excess mortality among Latino people in California during the COVID-19 pandemic. *SSM Popul Health*. 2021;15:100860.
56. Wrigley-Field E, Kiang MV, Riley AR, Barbieri M, **Chen Y-H**, Duchowny KA, Matthay EC, Van Riper D, Jegathesan K, Bibbins-Domingo K, Leider JP. Geographically targeted COVID-19 vaccination is more equitable and averts more deaths than age-based thresholds alone. *Sci Adv*. 2021;7(40):eabj2099.
57. Kenfield SA, Van Blarigan EL, Panchal N, Bang A, Zhang L, Graff RE, **Chen Y-H**, Ryan CJ, Luke A, Newton RU, Tenggara I, Schultz B, Wang E, Lavaki E, Zuniga K, Pinto N, Borno H, Aggarwal R, Friedlander T, Koshkin VS, Harzstark A, Small E, Chan JM. Feasibility, safety, and acceptability of a remotely monitored exercise pilot CHAMP: A Clinical trial of High-intensity Aerobic and resistance exercise for Metastatic castrate-resistant Prostate cancer. *Cancer Med*. 2021.
58. Thomas MD, Matthay EC, Duchowny KA, Riley AR, Khela H, **Chen Y-H**, Bibbins-Domingo K, Glymour MM. A descriptive analysis of 2020 California Occupational Safety and Health Administration COVID-19-related complaints. *SSM Popul Health*. 2022;17:101016.

### **Government reports**

1. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2007*. San Francisco, CA: San Francisco Department of Public Health; 2008.
2. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2008*. San Francisco, CA: San Francisco Department of Public Health; 2009.
3. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2009*. San Francisco, CA: San Francisco Department of Public Health; 2010.
4. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2010*. San Francisco, CA: San Francisco Department of Public Health; 2011.
5. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2011*. San Francisco, CA: San Francisco Department of Public Health; 2012.
6. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2012*. San Francisco, CA: San Francisco Department of Public Health; 2013.
7. San Francisco Department of Public Health. *HIV/AIDS Epidemiology Annual Report 2013*. San Francisco, CA: San Francisco Department of Public Health; 2014.
8. San Francisco Department of Public Health. *San Francisco Department of Public Health National HIV Behavioral Surveillance Report 2003–2013*. San Francisco, CA: San Francisco Department of Public Health; 2016.

### **Talks**

1. **Chen Y-H**, Digitale J, Glymour M, Hoffman T, Morris M, Wesson P. The Importance of sampling: Estimating the fraction of the population who have experienced prior COVID-19 infection. Lecture presented at: Epidemiology Grand Rounds, Department of Epidemiology and Biostatistics, University of California, San Francisco; May 8, 2020; San Francisco, CA.
2. Morris M, **Chen Y-H**. Hard-to-reach populations: Session 1. Lecture presented at: Sampling Knowledge Hub, Department of Epidemiology and Biostatistics, University of California, San Francisco; January 15, 2021; San Francisco, CA.

3. **Chen Y-H.** Hard-to-reach populations: Session 4. Lecture presented at: Sampling Knowledge Hub, Department of Epidemiology and Biostatistics, University of California, San Francisco; February 12, 2021; San Francisco, CA.

## Websites

1. **Chen Y-H.** COVID-19 Interactive Data Visualizations. <https://covid-19.rbind.io>. Published March 18, 2020.

## Professional activities

### *Ad-hoc peer review*

*AIDS and Behavior*

*AIDS Care*

*American Journal of Public Health*

*BMC Infectious Diseases*

*JAMA Network Open*

*Journal of Acquired Immune Deficiency Syndromes*

*Journal of the International AIDS Society*

*Journal of Statistical Software*

*Occupational and Environmental Medicine*

*PLOS One*

*Sexually Transmitted Infections*

### *Professional associations*

American Statistical Association

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