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RESEARCH INTERESTS

Causal inference from complex longitudinal data; target trial emulation; transportability and generalizability; reproductive epidemiology; nutritional epidemiology.

ACADEMIC APPOINTMENTS

Jul 2025–Present	Assistant Professor (Tenure-Track) Department of Epidemiology, Brown University School of Public Health
Jul 2025–Present	Adjunct Assistant Professor Department of Public Health Sciences, Penn State College of Medicine
Jul 2023–Jun 2025	Assistant Professor (Tenure-Track) Department of Public Health Sciences, Penn State College of Medicine
2022–2023	Research Scientist CAUSALab and Department of Epidemiology, Harvard T.H. Chan School of Public Health
2017–2022	Postdoctoral Fellow and Research Associate Department of Epidemiology, Harvard T.H. Chan School of Public Health

CURRENT AFFILIATIONS

- Research Collaborator, CAUSALab, Harvard T.H. Chan School of Public Health
- Member, Center for Gerontology and Health Care Research (CGHCR), Brown University School of Public Health
- Affiliated Faculty, Data Science Institute, Brown University

EDUCATION

2013–2017	Doctor of Science (ScD) Departments of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health
2012–2013	Master of Public Health (MPH) Quantitative Methods, Harvard T.H. Chan School of Public Health
2004–2011	Doctor of Medicine (MD) National Taiwan University, Taiwan

HONORS & AWARDS

2026	Rising Star Award , Society for Pediatric and Perinatal Epidemiologic Research
2024–2029	Maximizing Investigators' Research Award , National Institutes of Health (NIH)
2021–2023	American Heart Association (AHA) Fellowship
2022	HSPH Postdoctoral Association Travel Award
2019	NVIDIA Computational Hardware Grant
2018	Emerging Leader Award in Nutrition Science , Nutrition Conference
2016	Harvard Chan National Institute of Environmental Health Sciences Center Pilot Grant

2016	American Society for Reproductive Medicine (ASRM) Travel Award
2014–2017	James Souverine Gallo '27 Memorial Scholarship , Irene M. & Fredrick J. Stare Nutrition Education Fund, Harvard University
2014	ASRM Society for Male Reproduction and Urology Traveling Scholar Award
2012–2014	Taiwanese Physician Scholarship , Harvard University

FUNDED GRANTS

2026–2028	Real-World Effectiveness of GLP-1/GIP Agonists on Cardiovascular and Renal Outcomes in Type 2 Diabetes American Heart Association Data Science Grant 26GLPCKMD1647188 Role: PI
2024–2029	Uncovering Heterogeneity in Individual Treatment Responses via Causal Machine Learning NIH/NIGMS 1R35GM154888 Role: PI
2025–2029	Prehospital Pediatric Ventilation Trial (PEDI-VENT) NIH/NHLBI R01HL181356 PI: Matthew Hansen Role: Co-I
2021–2023	Identifying effective dietary strategies for the prevention of preeclampsia and post-pregnancy high blood pressure American Heart Association grant #834106 Role: PI

PEER-REVIEWED PUBLICATIONS

First & Senior-Authored Publications

1. Dahabreh IJ, Ung L, Hernán MA, **Chiu Y-H**. The role of assignment in defining and identifying causal effects in randomized trials. *Epidemiology*. 2026 Aug 10. PMID: 42573193.
2. Li Y, Stern D, Martínez-González MA, Yang S, Chavarro JE, Manson JE, Rimm EB, Platt RW, **Chiu Y-H**. Cardiovascular disease risk under low-fat, Mediterranean, and American Heart Association diets: a target trial emulation in United States adults. *Am J Clin Nutr*. 2026 Aug;124(2):101404. doi: 10.1016/j.ajcnut.2026.101404. PMID: 42323165.
3. Stern D, Aguilar-López MA, Gomez-Flores-Ramos L, Rodriguez-Ramirez S, Chávez-Cárdenas M, Tobias DK, Lajous M & **Chiu Y-H**. Evaluating the 2023 Mexican dietary guidelines for type 2 diabetes prevention: a target trial emulation in Mexican women. *Am J Epidemiol*. 2026 Jun 3;195(6):1698-1706. doi: 10.1093/aje/kwag037. PMID: 41730256.
4. **Chiu Y-H** & Wen L. What are we estimating? Revisiting standard nutritional models through the target trial framework. *Am J Epidemiol*. 2026 Mar 10;kwag053. doi: 10.1093/aje/kwag053. PMID: 41804804.
5. Ahlqvist VH, Lee BK & **Chiu Y-H**. Sibling comparisons to account for confounding in observational studies. *JAMA*. 2026;335(7):626-627. doi: 10.1001/jama.2025.22234. PMID: 41499111.
6. **Chiu Y-H** & Wen L. Identification and estimation of the average causal effects under dietary substitution strategies. *Stat Med*. 2025 Feb 28;44(5):e70007. doi: 10.1002/sim.70007. PMID: 39976288.
7. **Chiu Y-H**, Huybrechts KF, Zhu Y, Straub L, Bateman BT, Logan R & Hernández-Díaz S. Internal validation of gestational age estimation algorithms in health-care databases using pregnancies conceived through fertility procedures. *Am J Epidemiol*. 2024 Aug 5;193(8):1168-1175. doi: 10.1093/aje/kwae045. PMID: 38583933.
8. **Chiu Y-H**, Huybrechts KF, Paterno E, Yland JJ, Cesta CE, Bateman BT, Seely EW, Hernán MA & Hernández-Díaz S. Metformin use in the first trimester of pregnancy and risk for nonlive birth and congenital malformations: emulating a target trial using real-world data. *Ann Intern Med*. 2024 Jul;177(7):862-870. doi: 10.7326/M23-2038. PMID: 38885505.
9. **Chiu Y-H**, Wen L, McGrath S, Logan R, Dahabreh IJ & Hernán MA. Evaluating model specification when using the parametric g-formula in the presence of censoring. *Am J Epidemiol*. 2023 Nov 3;192(11):1887-1895. PMID: 37338985.
10. **Chiu Y-H**, Yland JJ, Rinaudo P, Hsu J, McGrath S, Hernández-Díaz S & Hernán MA. Effectiveness and safety of intrauterine insemination vs. assisted reproductive technology: emulating a target trial using an observational

database of administrative claims. *Fertil Steril*. 2022 May;117(5):981-991. doi: 10.1016/j.fertnstert.2022.02.003. PMID: 35305813.

11. **Chiu Y-H**, Chavarro JE, Dickerman BA, Manson JE, Mukamal KJ, Rexrode KM, Rimm EB & Hernán MA. Estimating the effect of nutritional interventions using observational data: the American Heart Association's 2020 Dietary Goals and mortality. *Am J Clin Nutr*. 2021 Aug 2;114(2):690-703. PMID: 34041538.
12. **Chiu Y-H**, Fadadu RP, Gaskins AJ, Rifas-Shiman SL, Laue HE, Moley KH, Hivert MF, Baccarelli A, Oken E, Chavarro JE & Cardenas A. Dietary fat intake during early pregnancy is associated with cord blood DNA methylation at IGF2 and H19 genes in newborns. *Environ Mol Mutagen*. 2021 Aug; 62 (7): 388-398. PMID: 34288135.
13. **Chiu Y-H**, Rifas-Shiman SL, Kleinman K, Oken E & Young JG. Effects of intergenerational exposure interventions on adolescent outcomes: an application of inverse probability weighting to longitudinal pre-birth cohort data. *Paediatr Perinat Epidemiol*. 2020 May;34(3):366-375. PMID: 32162715.
14. **Chiu Y-H**, Stensrud MJ, Dahabreh IJ, Rinaudo P, Diamond MP, Hsu J, Hernández-Díaz S & Hernán MA. The effect of prenatal treatments on offspring events in the presence of competing events: application to a randomized trial of fertility therapies. *Epidemiology*. 2020. Sep;31(5):636-643. PMID: 32501812.
15. Li MC, Mínguez-Alarcón L, Bellavia A, Williams PL, James-Todd T, Hauser R, Chavarro JE & **Chiu Y-H**. Serum beta-carotene modifies the association between phthalate mixtures and insulin resistance: the National Health and Nutrition Examination Survey 2003-2006. *Environ Res*. 2019 Nov;178:108729. PMID: 31521963.
16. **Chiu Y-H**, Sandoval-Insausti H, Ley SH, Bhupathiraju SN, Hauser R, Rimm EB, Manson JE, Sun Q & Chavarro JE. Association between intake of fruits and vegetables by pesticide residue status and coronary heart disease risk. *Environ Int*. 2019 Aug 29; 132:105113. PMID: 31473415.
17. **Chiu Y-H**, Bertrand KA, Zhang S, Laden F, Epstein MM, Rosner BA, Chiuvé S, Campos H, Giovannucci EL, Chavarro JE & Birmann BM. A prospective analysis of circulating saturated and monounsaturated fatty acids and risk of non-Hodgkin lymphoma. *Int J Cancer*. 2018 Oct 15;143(8):1914-1922. PMID: 29756258.
18. **Chiu Y-H**, Chavarro JE & Souter I. Diet and female fertility: doctor, what should I eat? *Fertil Steril*. 2018 Sep;110(4):560-569. PMID: 30196938. (Review)
19. Chang SH, Kang YN, Chiu HY & **Chiu Y-H**. A systematic review and meta-analysis comparing pigtail catheter and chest tube as the initial treatment for pneumothorax. *Chest*. 2018 May;153(5):1201-1212. PMID: 29452099.
20. **Chiu Y-H**, Williams PL, Gillman MW, Gaskins AJ, Mínguez-Alarcón L, Souter I, Toth TL, Ford JB, Hauser R & Chavarro JE. Association between pesticide residue intake from consumption of fruits and vegetables and pregnancy outcomes among women undergoing infertility treatment with assisted reproductive technology. *JAMA Intern Med*. 2018;178(1):17-26. PMID: 29084307
21. **Chiu Y-H**, Williams PL, Gillman MW, Hauser R, Rifas-Shiman SL, Bellavia A, Fleisch AF, Oken E & Chavarro JE. Maternal intake of pesticide residues from fruits and vegetables in relation to fetal growth. *Environ Int*. 2018;119:421-428. PMID: 30029096.
22. **Chiu Y-H**, Karmon AE, Gaskins AJ, Arvizu M, Williams PL, Souter I, Rueda BR, Hauser R & Chavarro JE. Serum omega-3 fatty acids and treatment outcomes among women undergoing assisted reproduction. *Hum Reprod*. 2018;33(1):156-165. PMID: 29136189.
23. **Chiu Y-H**, Bellavia A, James-Todd T, Correia KF, Valeri L, Messerlian C, Ford JB, Mínguez-Alarcón L, Calafat AM, Hauser R & Williams PL. Evaluating effects of prenatal exposure to phthalate mixtures on birth weight: a comparison of three statistical approaches. *Environ Int*. 2018;113:231-239. PMID: 29453090.
24. **Chiu Y-H**, Williams PL, Mínguez-Alarcon L, Gillman MW, Sun Q, Ospina M, Calafat AM, Hauser R & Chavarro JE. Comparison of questionnaire-based estimation of pesticide residue intake from fruits and vegetables with urinary concentrations of pesticide biomarkers. *J Expo Sci Environ Epidemiol*. 2018;28(1):31-39. PMID: 28930298. (Featured in the Collection of the best of Journal of Exposure Science & Environmental Epidemiology 2018-2019)
25. **Chiu Y-H**, Edifor R, Rosner B, Nassan F, Gaskins AJ, Mínguez-Alarcón L, Williams PL, Tanrikut C, Hauser R & Chavarro JE. What does a single semen sample tell you? Implications for male factor infertility research. *Am J Epidemiol*. 2017;186(8):918-926. PMID: 28541378.
26. **Chiu Y-H**, Mínguez-Alarcón L, Ford JB, Keller M, Seely EW, Messerlian C, Petrozza J, Williams PL, Ye X, Calafat AM, Hauser R & James-Todd T; EARTH Study Team. Trimester-specific urinary bisphenol A concentrations and blood glucose levels among women from a fertility clinic. *J Clin Endocrinol Metab*. 2017; 102(4): 1350-1357. PMID: 28323984.
27. Souter I*, **Chiu Y-H***, Batsis M, Afeiche MC, Williams PL, Hauser R & Chavarro JE. The association of protein intake (amount and type) with ovarian antral follicle counts among infertile women: results from the EARTH prospective study cohort. *BJOG*. 2017; 124(10):1547-1555. PMID: 28278351. *co-first author.

28. **Chiu Y-H**, Gaskins AJ, Williams PL, Mendiola J, Jorgensen N, Levine H, Swan SH & Chavarro JE. Intake of fruits and vegetables with low-to-moderate pesticide residues is positively associated with semen quality parameters among young healthy men. *J Nutr.* 2016;146(5):1084-1092. PMID: 27075904.
29. Hu Y*, **Chiu Y-H***, Hauser R, Chavarro J & Sun Q. Overall and class-specific scores of pesticide residues from fruits and vegetables as a tool to rank intake of pesticide residues in United States: a validation study. *Environ Int.* 2016;92:294-300. PMID: 27128714. *co-first author.
30. **Chiu Y-H**, Afeiche MC, Gaskins AJ, Williams PL, Petrozza JC, Tanrikut C, Hauser R & Chavarro JE. Fruit and vegetable intake and their pesticide residues in relation to semen quality among men from a fertility clinic. *Hum Reprod.* 2015;30: 1342-1351. PMID: 25824023.
31. **Chiu Y-H**, Afeiche MC, Gaskins AJ, Williams PL, Mendiola J, Jorgensen N, Swan SH & Chavarro JE. Sugar-sweetened beverage intake in relation to semen quality and reproductive hormone levels in young men. *Hum Reprod.* 2014;29: 1575-1584. PMID: 24812311.

CO-AUTHORED PUBLICATIONS

32. Fridén M, MacDonald CJ, Tobias DK, Stern D, **Chiu Y-H**, Ibsen DB. Best (but oft forgotten) practices: applying the target trial framework in nutrition research. *Am J Clin Nutr.* 2026 Jul;124(1):101362. PMID: 42176956.
33. Shang Y, **Chiu Y-H**, Kong L. A latent variable approach for causal effect estimation under misclassified treatment assignment. *Stat Med.* 2026 Apr;45(8-9):e70528. PMID: 41956974.
34. Kazemi M, Salas-Huetos A, Mitsunami M, **Chiu Y-H**, Hauser R, Souter I, Mínguez-Alarcón L, Chavarro JE; EARTH Study Team. Male partner pesticide residue exposure from fruit and vegetable intake in relation to outcomes of infertility treatment: a prospective cohort study. *Am J Clin Nutr.* 2025 Dec;122(6):1701-1712. PMID: 41338693.
35. Elahy V, **Chiu Y-H**, Patel AV, Rees-Punia E, McCullough ML, Peoples AR, Wang Y. Effectiveness of sustained leisure-time physical activity strategies for obesity-related cancer prevention: an emulated target trial in a prospective US cohort. *BMC Med.* 2025 Oct 27;23(1):580. PMID: 41139777.
36. McGee EE, Hernán MA, Giovannucci E, Mucci LA, **Chiu Y-H**, Eliassen AH, Dickerman BA. Estimating the effects of lifestyle interventions on mortality among cancer survivors: a methodologic framework. *Epidemiology.* 2025 Sep 1;36(5):705-718. PMID: 40459173.
37. Shang Y, **Chiu Y-H** & Kong L. Robust propensity score estimation via loss function calibration. *Stat Methods Med Res.* 2025 Mar;34(3):457-472. doi: 10.1177/09622802241308709. PMID: 39943776.
38. Kazemi M, **Chiu Y-H**, Mitsunami M, Mínguez-Alarcón L, Hauser R, Souter I, Chavarro JE; EARTH Study Team. Associations of pesticide residue exposure from fruit and vegetable intake with ovarian reserve. *J Nutr.* 2025 Mar;155(3):957-967. doi: 10.1016/j.tjnut.2024.12.028. Epub 2024 Dec 31. PMID: 39742971; PMCID: PMC11934237.
39. Guo F, McGee EE, **Chiu Y-H**, Giovannucci E, Mucci LA & Dickerman BA. Evaluating recommendation-based dietary and physical activity strategies for prostate cancer prevention: a target trial emulation in the Health Professionals Follow-up Study. *Am J Epidemiol.* 2025 Feb 5;194(2):449-459. doi: 10.1093/aje/kwae184. PMID: 38973750.
40. Stern D, Ibsen DB, MacDonald CJ, **Chiu Y-H**, Lajous M & Tobias DK. Improving nutrition science begins with asking better questions. *Am J Epidemiol.* 2024 Nov;193(11):1507-1510. doi: 10.1093/aje/kwae110. PMID: 38992167.
41. Yland JJ, Huybrechts KF, Wesselink AK, Straub L, **Chiu Y-H**, Seely EW, Patorno E, Bateman BT, Mogun H, Wise LA & Hernández-Díaz S. Perinatal outcomes associated with metformin use during pregnancy in women with pregestational type 2 diabetes mellitus. *Diabetes Care.* 2024 Sep 1;47(9):1688-1695. PMID: 39042587.
42. Ibsen DB, **Chiu Y-H**, Gémes K & Wolk A. Hypothetical 22-year intervention with the Dietary Approaches to Stop Hypertension and risk of heart failure in a general population. *Am J Epidemiol.* 2024 Jan 8;193(1):96-106. doi: 10.1093/aje/kwad181. PMID: 37656615.
43. Laugesen K, Veres K, Hernandez-Diaz S, **Chiu Y-H**, Oberg AS, Hsu J, Rinaudo P, Spaan M, van Leeuwen F & Sørensen HT. Overweight or obesity in children born after assisted reproductive technologies in Denmark: a population-based cohort study. *PLoS Med.* 2023 Dec 19;20(12):e1004324. doi: 10.1371/journal.pmed.1004324. PMID: 38113196.
44. Davis CP, Garzia NA, Cushing-Haugen K, Terry KL, **Chiu Y-H**, Sandoval-Insausti H, Chavarro JE, Missmer SA & Harris HR. Fruit and vegetable consumption, pesticide residue intake from consumption of fruits and vegetables, and risk of uterine fibroids. *F S Sci.* 2023 Feb;4(1):90-99. doi: 10.1016/j.xfss.2022.12.001. PMID: 36549440.

45. Hernández-Díaz S, Huybrechts KF, **Chiu Y-H**, Yland JJ, Bateman BT & Hernán MA. Emulating a target trial of interventions initiated during pregnancy with healthcare databases: the example of COVID-19 vaccination. *Epidemiology*. 2023;34(2):238-246. PMID: 36722806.
46. Ardisson Korat AV, **Chiu Y-H**, Bertrand KA, Zhang S, Epstein MM, Rosner BA, Chiuve S, Campos H, Giovannucci EL, Chavarro JE & Birmann BM. A prospective analysis of red blood cell membrane polyunsaturated fatty acid levels and risk of non-Hodgkin lymphoma. *Leuk Lymphoma*. 2022 Dec;63(14):3351-3361. PMID: 36255154.
47. Garzia NA, Cushing-Haugen K, **Chiu Y-H**, Sandoval-Insausti H, Chavarro JE, Missmer SA & Harris HR. Pesticide residue intake from fruit and vegetable consumption and risk of laparoscopically confirmed endometriosis. *F S Sci*. 2022 Nov;3(4):376-382. PMID: 35598776
48. Yland JJ, **Chiu Y-H**, Rinaudo P, Hsu J, Hernán MA & Hernández-Díaz S. Emulating a target trial of the comparative effectiveness of clomiphene citrate and letrozole for ovulation induction. *Hum Reprod*. 2022 April 1;37(4): 793-805. PMID: 35048945.
49. Cote DJ, Bever AM, **Chiu Y-H**, Sandoval-Insausti H, Smith-Warner SA, Chavarro JE & Stampfer MJ. Pesticide residue intake from fruit and vegetable consumption and risk of glioma. *Am J Epidemiol*. 2022 March 24; 191(5): 825-833. PMID: 35029641.
50. Hood RB, Liang D, **Chiu Y-H**, Sandoval-Insausti H, Chavarro JE, Jones D, Hauser R & Gaskins AJ. Pesticide residue intake from fruits and vegetables and alterations in the serum metabolome of women undergoing infertility treatment. *Environ Int*. 2022 Feb;160:107061. doi: 10.1016/j.envint.2021.107061. PMID: 34959198.
51. Sandoval-Insausti H, **Chiu Y-H**, Wang Y-X, Hart JE, Bhupathiraju SN, Mínguez-Alarcón L, Ding M, Willett WC, Laden F & Chavarro JE. Intake of fruits and vegetables according to pesticide residue status in relation to all-cause and disease-specific mortality: results from three prospective cohort studies. *Environ Int*. 2022 Jan 15;159:107024. doi: 10.1016/j.envint.2021.107024. PMID: 34894487.
52. Sandoval-Insausti H, **Chiu Y-H**, Lee DH, Wang S, Hart JE, Mínguez-Alarcón L, Laden F, Ardisson Korat AV, Birmann B, Eliassen AH, Willett WC & Chavarro JE. Intake of fruits and vegetables by pesticide residue status in relation to cancer risk. *Environ Int*. 2021 Nov;156:106744. PMID: 34256297.
53. Ardisson Korat AV, **Chiu Y-H**, Bertrand KA, Zhang S, Epstein MM, Rosner BA, Chiuve S, Campos H, Giovannucci EL, Chavarro JE & Birmann BM. Red blood cell membrane trans fatty acid levels and risk of non-Hodgkin lymphoma: a prospective nested case-control study. *Am J Clin Nutr*. 2020 Dec 10;112(6):1576-1583. PMID: 33022699.
54. Li MC, **Chiu Y-H**, Gaskins AJ, Mínguez-Alarcón L, Nassan FL, Williams PL, Petrozza J, Hauser R & Chavarro JE. Men's intake of vitamin C and β -carotene is positively related to fertilization rate but not to live birth rate in couples undergoing infertility treatment. *J Nutr*. 2019 Nov 1;149(11):1977-1984. PMID: 31287143.
55. Li MC, Mínguez-Alarcón L, Arvizu M, **Chiu Y-H**, Ford JB, Williams PL, Attaman J, Hauser R & Chavarro JE. Waist circumference in relation to outcomes of infertility treatment with assisted reproductive technologies. *Am J Obstet Gynecol*. 2019 Jun;220(6):578.e1-578.e13. PMID: 30763543.
56. Gaskins AJ, Nassan FL, **Chiu Y-H**, Arvizu M, Williams PL, Keller MG, Souter I, Hauser R & Chavarro JE. Dietary patterns and outcomes of assisted reproduction. *Am J Obstet Gynecol*. 2019 Jun;220(6):567.e1-567.e18. PMID: 30742825.
57. Mínguez-Alarcón L, **Chiu Y-H**, Nassan FL, Williams PL, Petrozza J, Ford JB, Calafat AM, Hauser R & Chavarro JE. Urinary concentrations of benzophenone-3 and reproductive outcomes among women undergoing infertility treatment with assisted reproductive technologies. *Sci Total Environ*. 2019 May 2;678:390-398. PMID: 31077917.
58. Li MC, Nassan FL, **Chiu Y-H**, Mínguez-Alarcón L, Williams PL, Souter I, Hauser R & Chavarro JE. Intake of antioxidants in relation to infertility treatment outcomes with assisted reproductive technologies. *Epidemiology*. 2019 May;30(3):427-434. PMID: 30789428.
59. Mínguez-Alarcón L, Messerlian C, Bellavia A, Gaskins AJ, **Chiu Y-H**, Ford JB, Azevedo AR, Petrozza JC, Calafat AM, Hauser R & Williams PL. Urinary concentrations of bisphenol A, parabens and phthalate metabolite mixtures in relation to reproductive success among women undergoing in vitro fertilization. *Environ Int*. 2019 May;126:355-362. PMID: 30826614.
60. Bellavia A, **Chiu Y-H**, Brown FM, Mínguez-Alarcón L, Ford JB, Keller M, Petrozza J, Williams PL, Ye X, Calafat AM, Hauser R & James-Todd T. Urinary concentrations of parabens mixture and pregnancy glucose levels among women from a fertility clinic. *Environ Res*. 2019 Jan;168:389-396. PMID: 30384233.
61. Mínguez-Alarcón L, Williams PL, **Chiu Y-H**, Gaskins AJ, Nassan FL, Dadd R, Petrozza J, Hauser R & Chavarro JE. Secular trends in semen parameters among men attending a fertility center between 2000 and 2017: identifying potential predictors. *Environ Int*. 2018 Dec;121(Pt 2):1297-1303. PMID: 30389382.

62. Nassan FL, **Chiu Y-H**, Vanegas JC, Gaskins AJ, Williams PL, Ford JB, Attaman J, Hauser R & Chavarro JE. Intake of protein-rich foods in relation to outcomes of infertility treatment with assisted reproductive technologies. *Am J Clin Nutr*. 2018 Nov 1;108(5):1104-1112. PMID: 30475972.
63. Mínguez-Alarcón L, Gaskins AJ, **Chiu Y-H**, Messerlian C, Williams PL, Ford JB, Souter I, Hauser R & Chavarro JE. Type of underwear worn and markers of testicular function among men attending a fertility center. *Hum Reprod*. 2018 Sep 1;33(9):1749-1756. PMID: 30102388.
64. James-Todd TM, **Chiu Y-H**, Messerlian C, Mínguez-Alarcón L, Ford JB, Keller M, Petrozza J, Williams PL, Ye X, Calafat AM & Hauser R. Trimester-specific phthalate concentrations and glucose levels among women from a fertility clinic. *Environ Health*. 2018 Jun 14;17(1):55. PMID: 29898728.
65. Messerlian C, Williams PL, Ford JB, Chavarro JE, Mínguez-Alarcón L, Dadd R, Braun JM, Gaskins AJ, Meeker JD, James-Todd T, **Chiu Y-H**, Nassan FL, Souter I, Petrozza J, Keller M, Toth TL, Calafat AM & Hauser R. The Environment and Reproductive Health (EARTH) Study: a prospective preconception cohort. *Hum Reprod Open*. 2018 Feb;2018(2). PMID: 29888739.
66. Segal TR, Mínguez-Alarcón L, **Chiu Y-H**, Williams PL, Nassan FL, Dadd R, Ospina M, Calafat AM & Hauser R. Urinary concentrations of 3-(diethylcarbamoyl)benzoic acid (DCBA), a major metabolite of N,N-diethyl-m-toluamide (DEET) and semen parameters among men attending a fertility center. *Hum Reprod*. 2017 Dec 1;32(12):2532-2539. PMID: 29077936.
67. Abadia L, **Chiu Y-H**, Williams PL, Toth TL, Souter I, Hauser R, Chavarro JE & Gaskins AJ. The association between pre-treatment maternal alcohol and caffeine intake and outcomes of assisted reproduction in a prospectively followed cohort. *Hum Reprod*. 2017 Sep 1;32(9):1846-1854. PMID: 28854726.
68. Mínguez-Alarcón L, Souter I, **Chiu Y-H**, Williams PL, Ford JB, Ye X, Calafat AM & Hauser R. Urinary concentrations of cyclohexane-1,2-dicarboxylic acid monohydroxy isononyl ester, a metabolite of the non-phthalate plasticizer di(isononyl)cyclohexane-1,2-dicarboxylate (DINCH), and markers of ovarian response among women attending a fertility center. *Environ Res*. 2016 Nov;151:595-600. PMID: 27591839.
69. Mínguez-Alarcón L, Gaskins AJ, **Chiu Y-H**, Souter I, Williams PL, Calafat AM, Hauser R & Chavarro JE. Dietary folate intake and modification of the association of urinary bisphenol A concentrations with in vitro fertilization outcomes among women from a fertility clinic. *Reprod Toxicol*. 2016 Oct;65:104-112. PMID: 27423903.
70. Abadia L, Gaskins AJ, **Chiu Y-H**, Williams PL, Keller M, Wright DL, Souter I, Hauser R & Chavarro JE. Serum 25-hydroxyvitamin D concentrations and treatment outcomes of women undergoing assisted reproduction. *Am J Clin Nutr*. 2016 Sep;104(3):729-35. PMID: 27465382.
71. Gaskins AJ, **Chiu Y-H**, Williams PL, Keller MG, Toth TL, Hauser R & Chavarro JE. Maternal whole grain intake and outcomes of in vitro fertilization. *Fertil Steril*. 2016 Jun;105(6):1503-1510.e4. PMID: 26926253.
72. James-Todd TM, **Chiu Y-H** & Zota AR. Racial/ethnic disparities in environmental endocrine disrupting chemicals and women's reproductive health outcomes: epidemiological examples across the life course. *Curr Epidemiol Rep*. 2016 Jun;3(2):161-180. PMID: 28497013.
73. Xia W, **Chiu Y-H**, Afeiche MC, Williams PL, Ford JB, Tanrikut C, Souter I, Hauser R & Chavarro JE. Impact of men's dairy intake on assisted reproductive technology outcomes among couples attending a fertility clinic. *Andrology*. 2016 Mar;4(2):277-83. PMID: 26825777.
74. Afeiche MC, **Chiu Y-H**, Gaskins AJ, Williams PL, Souter I, Wright DL, Hauser R & Chavarro JE. Dairy intake in relation to in vitro fertilization outcomes among women from a fertility clinic. *Hum Reprod*. 2016 Mar;31(3):563-71. PMID: 26787645.
75. Chavarro JE, Mínguez-Alarcón L, **Chiu Y-H**, Gaskins AJ, Souter I, Williams PL, Calafat AM & Hauser R. Soy intake modifies the relation between urinary bisphenol A concentrations and pregnancy outcomes among women undergoing assisted reproduction. *J Clin Endocrinol Metab*. 2016 Mar;101(3):1082-90. PMID: 26815879.
76. Mínguez-Alarcón L, **Chiu Y-H**, Messerlian C, Williams PL, Sabatini ME, Toth TL, Ford JB, Calafat AM & Hauser R. Urinary paraben concentrations and in vitro fertilization outcomes among women from a fertility clinic. *Fertil Steril*. 2016 Mar;105(3):714-721. PMID: 26654974.
77. Messerlian C, Souter I, Gaskins AJ, Williams PL, Ford JB, **Chiu Y-H**, Calafat AM & Hauser R. Urinary phthalate metabolites and ovarian reserve among women seeking infertility care. *Hum Reprod*. 2016 Jan;31(1):75-83. PMID: 26573529.
78. Xia W, **Chiu Y-H**, Williams PL, Gaskins AJ, Toth TL, Tanrikut C, Hauser R & Chavarro JE. Men's meat intake and treatment outcomes among couples undergoing assisted reproduction. *Fertil Steril*. 2015 Oct;104(4):972-979. PMID: 26206344.

79. Gaskins AJ, **Chiu Y-H**, Williams PL, Ford JB, Toth TL, Hauser R & Chavarro JE. Association between serum folate and vitamin B-12 and outcomes of assisted reproductive technologies. *Am J Clin Nutr*. 2015 Oct;102(4):943-50. PMID: 26354529.
80. Mínguez-Alarcón L, Gaskins AJ, **Chiu Y-H**, Williams PL, Ehrlich S, Chavarro JE, Petrozza JC, Ford JB, Calafat AM & Hauser R. Urinary bisphenol A concentrations and association with in vitro fertilization outcomes among women from a fertility clinic. *Hum Reprod*. 2015 Sep;30(9):2120-8. PMID: 26209788.
81. Mínguez-Alarcón L, Afeiche MC, **Chiu Y-H**, Vanegas JC, Williams PL, Tanrikut C, Toth TL, Hauser R & Chavarro JE. Male soy food intake was not associated with in vitro fertilization outcomes among couples attending a fertility center. *Andrology*. 2015 Jul;3(4):702-8. PMID: 26097060.

COMMENTARIES, EDITORIALS, AND CORRESPONDENCE

- **Chiu Y-H**, Dahabreh IJ. Comparing randomized trials. *Am J Epidemiol*. Accepted. (Invited Commentary)
- Ahlqvist VH, Lee BK & **Chiu Y-H**. Sibling comparisons to account for confounding—reply. *JAMA*. 2026 Jun 2;335(21):1904. doi: 10.1001/jama.2026.2879. PMID: 42054049. (Reply)
- **Chiu Y-H**. Well-defined interventions for nutritional studies: from target trials to nutritional modeling. *Am J Clin Nutr*. 2022 Jan 11;115(1):3-5. PMID: 34849525. (Editorial)

PREPRINTS

- Wen L, Dahabreh IJ & **Chiu Y-H**. Generalizing conditional average treatment effects from nested randomized trials to all trial-eligible individuals. arXiv:2605.14952. 2026.
- **Chiu Y-H** & Dahabreh IJ. Selection on treatment in the target population of generalizability and transportability analyses. arXiv:2209.08758. 2022.

INVITED TALKS AND PRESENTATIONS

Upcoming

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| 2026 | Causal Inference Begins Before Analysis: Target Trial Emulation for Complex Clinical Questions
<i>Laboratory of Epidemiology and Population Sciences (LEPS) Monthly Laboratory Meeting, National Institute on Aging, National Institutes of Health. Sep 9, 2026.</i> |
| 2026 | Revisiting Wine and Cardiovascular Health: Insights from Target Trial Emulation
<i>ICPH/ICoFF2026. Yokohama, Japan. Oct 16, 2026.</i> |
| 2026 | Causal Inference by Design: Target Trial Emulation for Pregnancy and Cardiovascular Health
<i>Department of Epidemiology Seminar Series. Erasmus MC. Rotterdam, the Netherlands. Nov 16, 2026.</i> |

Selected Talks and Presentations

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| 2026 | Keynote: Improving Causal Inference by Design: Target Trial Emulation for Complex Public Health Questions
<i>NordicEpi & NorPEN conference 2026, Tromsø, Norway. Jun 3, 2026.</i> |
| 2026 | Extending inferences from randomized trials to target populations: Why this is a causal problem
<i>The Society for Clinical Trials Annual Meeting. Phoenix, AZ. May 19, 2026.</i> |
| 2026 | Evaluating Prenatal Treatments: Improving Clinical Decisions Using Target Trial Emulation
<i>Women's Health Research Lecture Series, Brown University Health. Mar 6, 2026.</i> |
| 2025 | Target Trial Emulation and Methodological Considerations for Prenatal Treatments and Offspring Outcomes
<i>Kaiser Permanente Research & Evaluation Biostatistics Seminar. Kaiser Permanente Southern California. Nov 5, 2025.</i> |
| 2025 | Challenges and Future Directions of Real-World Evidence Emulated Trial Design in Cardiovascular Research
<i>The 17th Asian Pacific Society of Atherosclerosis and Vascular Disease Congress (2025 APSAVD Congress). Taipei, Taiwan. Sept 21, 2025.</i> |

- 2025 Identification and estimation of the average causal effects under dietary substitution strategies**
The Society for Epidemiologic Research Annual Meeting. Boston, MA. Jun 2025.
- 2025 Antidiabetics in the First Trimester and Risk of Congenital Anomalies**
Start, stop, switch or continue? Target trials for periconception treatment decisions among individuals taking medications to treat chronic conditions Symposium. The Society for Epidemiologic Research Annual Meeting. Boston, MA. Jun 11, 2025.
- 2025 Target trial emulation to study long-term effects of dietary intervention**
Penn State Department of Nutritional Sciences 2024-2025 Nutritional Sciences research colloquium. The Pennsylvania State University, University Park, PA. Mar 31, 2025.
- 2024 Using the parametric g-formula to estimate survival under time-varying dietary strategies**
Biostatistics, Epidemiology and Research Design seminar. Penn State Clinical and Translational Science Institute. Hershey, PA. Oct 21, 2024.
- 2024 Per-protocol analysis of COSMOS trial**
Novel Approaches to the Analysis of the COSMOS Trial: Beyond Intention-to-Treat Session. 11th International Conference on Polyphenols and Health. Boston, MA. Oct 17, 2024.
- 2024 Evaluating the effectiveness and safety of treatment strategies: a causal inference approach**
Special Seminar. Center for Advanced Computing and Imaging in Biomedicine, National Taiwan University. Taipei, Taiwan. Jul 23, 2024.
- 2024 Beyond the intention-to-treat: estimating the per-protocol effect of cocoa flavanol supplementation on cardiovascular events in the COSMOS trial**
The Society for Clinical Trials Annual Meeting. Boston, MA. May 21, 2024.
- 2024 Estimating causal effect of food substitution**
Causal Inference & Nutritional Epidemiology Symposium. Boston, MA. Mar 2024.
- 2024 Estimating causal effect of food substitution**
Society for Epidemiologic Research Mid-Year Meeting. Toronto, Canada. Mar 8, 2024.
- 2023 Causal inference for observational studies: emulating a target trial when randomized trials are not available**
Biostatistics, Epidemiology and Research Design seminar. Penn State Clinical and Translational Science Institute. Hershey, PA. Sep 27, 2023.
- 2023 Introduction to causal inference**
Study Design to Inform Causal Inference in Nutrition Research Session. Nutrition 2023 Meeting. Boston, MA. Jul 24, 2023.
- 2023 Metformin use in the first trimester and congenital malformation: emulating a target trial using real-world data**
Advancing Perinatal Epidemiology: Approaches to Addressing Causality, Confounding, and Bias Session. The 36th Society for Pediatric and Perinatal Epidemiologic Research Meeting. Portland, OR. Jun 2023.
- 2023 Estimating the cardiovascular effects under dietary strategies using the parametric g-formula**
Smith Center for Outcomes Research in Cardiology Seminar, Beth Israel Deaconess Medical Center. Boston, MA. Jan 4, 2023.
- 2022 Causal inference approaches to evaluate health effects of dynamic treatment strategies for cardiovascular health**
Department of Epidemiology seminar, University of Iowa College of Public Health. Iowa City, IA. Dec 15, 2022.
- 2022 Methods to handle the competing events: the effects of prenatal treatment on offspring events**
Drug Safety and Causal Inference in Pregnancy Journal Club. University of North Carolina, Chapel Hill, NC. Dec 7, 2022.
- 2022 Causal inference approaches to estimating the effects of dynamic strategies on cardiovascular health**
Division of Intramural Research Seminar, National Institutes of Health. Bethesda, MD. Nov 3, 2022.
- 2022 Estimating the health effects of interventions: the target trial approach**
Institute of Statistical Science Special Seminar, Academia Sinica. Taipei, Taiwan. Oct 12, 2022.
- 2022 Estimating the effect of nutritional interventions: the target trial approach**
Massachusetts General Hospital, Clinical and Translational Epidemiology Unit (CTEU) Seminar. Boston, MA. Sept 7, 2022.

- 2022 Emulating target trials for nutritional studies: confounder-adjustment methods**
Bringing Nutritional Epidemiology into the era of Causal Inference Symposium. The 55th Society for Epidemiologic Research Meeting. Chicago, IL. Jun 2022.
- 2022 Causal inference approaches to evaluating the health effects of dynamic dietary strategies**
Department of Epidemiology Seminar. Emory University. Atlanta, GA. Apr 18, 2022.
- 2021 Evaluating health effects of dynamic dietary strategies: the target trial approach**
Department of Epidemiology Special Seminar. School of Public Health, University of Pittsburgh. Jun 4, 2021.
- 2019 Dealing with competing events in the estimation of the health effects of fertility treatment on the offspring**
The 52nd Society for Epidemiologic Research Annual Meeting. Minneapolis, MN. Jun 2019.
- 2018 Maternal Plasma Polyunsaturated Fatty Acid Concentrations during Pregnancy and Cord Blood DNA Methylation: An Epigenome-Wide Association Study**
Nutrition Annual Meeting. Boston, MA. Jun 2018.
- 2017 Statistical methods for assessing chemical mixtures in environmental studies applied to prenatal phthalate mixtures and birth weight**
The 50th Society for Epidemiologic Research Annual Meeting. Seattle, WA. Jun 2017.
- 2016 Pesticide residue in fruits and vegetables and outcomes of assisted reproductive technology**
The 72nd American Society for Reproductive Medicine Annual Meeting. Salt Lake City, UT. Oct 2016.

TEACHING

Graduate Instruction

- 2026 Methods for Nutritional Epidemiology (EPI 2220B)**
Brown University School of Public Health
 Graduate Instructor
- 2025 Causal Inference Methods in Epidemiologic Research (PHS 564)**
Penn State College of Medicine
 Graduate Instructor

Guest Lectures

- 2026 CPPS7021: Advanced Pharmacoepidemiology**
National Cheng Kung University, Tainan, Taiwan
 Topic: Extending inferences from randomized trials to target populations.
- 2024 PHPH 9741: Advanced Topics in Epidemiologic Methods**
Georgia State University
 Topic: Causal survival analysis

Short Courses & Workshops

- 2026 Target Trial Emulation**
NordicEpi & NorPEN pre-conference workshop
 Role: Instructor
- 2026 Getting Time Zero Right: A Practical Workshop on Sequential Target Trial Emulation**
National Taiwan University College of Public Health
 Role: Instructor
- 2023 Summer Courses on Causal Inference**
Harvard T.H. Chan School of Public Health
 Role: Instructor and Curriculum Fellow
- 2021 Introduction to Advanced Causal Inference Methods**
Advanced Methods Workshop, Society for Pediatric and Perinatal Epidemiologic Research
 Role: Co-Instructor

GRANT REVIEW

- Nov 2025 Scientific Reviewer**
PCORI Merit Review Panel

Jul 2025	Scientific Reviewer <i>PCORI Merit Review Panel</i>
Jul 2024	Scientific Reviewer <i>PCORI Merit Review Panel</i>
Jan 2022	Scientific Reviewer <i>The Five Senses Pilot Grant, Harvard Clinical and Translational Science Center</i>

JOURNAL REVIEW

- Designated Statistical Reviewer, *JAMA*, Apr 2024-Present.
- Ad hoc peer reviewer: *Diabetes Care*, *Epidemiology*, *American Journal of Epidemiology*, *International Journal of Epidemiology*, *Annals of Epidemiology*, *European Journal of Epidemiology*, *American Journal of Clinical Nutrition*, *Journal of Nutrition*, *Human Reproduction*, *Fertility and Sterility*, *BJOG*, *International Journal of Hygiene and Environmental Health*, 2017-Present.

LEADERSHIP & DEPARTMENTAL SERVICE

2025–Present	Epidemiology Curriculum Committee <i>Brown University School of Public Health</i>
2026	PhD Admission Committee <i>Brown University School of Public Health</i>
2024–2025	Diversity & Inclusion Committee <i>Society for Epidemiologic Research (SER)</i>
2024	Co-Organizer & Co-Chair, Causal Inference Session <i>Society for Epidemiologic Research (SER)</i>
2023	Planning Committee <i>Society for Pediatric and Perinatal Epidemiologic Research (SPER)</i>
2024–2025	Peer Review Committee for Public Health Science Courses <i>Penn State College of Medicine</i>
2024	PhD Admission Committee, Epidemiology Program <i>Penn State College of Medicine</i>