MICHAEL JETSUPPHASUK

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RESEARCH INTERESTS

My research interests center around developing methods to estimate causal effects in complex public policy and public health settings, with an emphasis on constructing flexible machine learning estimators with desirable large sample properties.

EDUCATION

University of North Carolina at Chapel Hill *Aug. 2020 - Present*
PhD student in Biostatistics
Dissertation advisors: Michael G. Hudgens and Didong Li
Committee: Michael G. Hudgens, Didong Li, Ivana Malenica, Julia Rager, Ye Wang
Expected completion date: August 2026

University of California, Berkeley *Aug. 2014 - Aug. 2018*
B.A. in Statistics
B.A. in Economics

PEER-REVIEWED PUBLICATIONS

Ranney LM, Jebai R, **Jetsupphasuk M**, Clark SA, Jarman KL, Kowitt SD, Thrasher JF, Goldstein AO, Cornacchione Ross J. Perceived effectiveness of cigar warnings among young people in the United States: An experiment to assess warning size and format. 2025. Accepted at *American Journal of Preventative Medicine*.

Kowitt SD, Clark SA, **Jetsupphasuk M**, Jarman KL, Jebai R, Goldstein AO, Cornacchione Ross J, Ranney LM. Examining the influence of unflavored descriptors on cigar packages: An experiment with a sample of youth and young adults from the United States. 2025. Accepted in *Tobacco Control*.

Kowitt SD, Clark SA, Glaser O, **Jetsupphasuk M**, Jarman KL, Goldstein AO, Thrasher JF, Ranney LM, Cornacchione Ross J. Examining the influence of cigar and cannabis co-marketing on packaging perceptions: An experiment with a sample of US youth. *Addictive Behaviors*. 2024 Nov;158:108126. doi: 10.1016/j.addbeh.2024.108126.

Kowitt SD, **Jetsupphasuk M**, Clark SA, Jarman KL, Goldstein AO, Thrasher JF, Jebai R, Ranney LM, Cornacchione Ross J. Knowledge and beliefs about blunts among youth in the United States. *Preventive Medicine Reports*. 2024 Nov;47:102884. doi: 10.1016/j.pmedr.2024.102884.

Jetsupphasuk M, Hudgens MG, Lu H, Cole SR, Edwards JK, Adimora AA, Althoff KN, Silverberg MJ, Rebeiro PF, Lima VD, Marconi VC, Sterling TR, Horberg MA, Gill MJ, Kitahata MM, Moore RD, Lang R, Gebo K, Rabkin C, Eron JJ. Optimizing Treatment for Human Immunodeficiency Virus to Improve Clinical Outcomes Using Precision Medicine. *American Journal of Epidemiology*. 2023 Aug 4;192(8):1341-1349. doi: 10.1093/aje/kwad057.

PREPRINTS AND UNDER REVIEW

Jetsupphasuk M, Fang C, Li D, Hudgens MG. Difference-in-differences with stochastic policy shifts of continuous treatments. 2025. *arXiv*. `http://arxiv.org/abs/2512.00296`.

Jetsupphasuk M, Li D, Hudgens MG. Efficient nonparametric estimation with difference-in-differences in the presence of network dependence and interference. 2025. *arXiv*. `https://arxiv.org/abs/2502.03414`.

Wang Y, **Jetsupphasuk M**. Causal Inference in Longitudinal Data under Unknown Interference. 2025. Under review at *Journal of the American Statistical Association: Theory and Methods*. https://arxiv.org/abs/2106.15074.

Jebai R, Kowitt SD, Jarman KL, Clark SA, **Jetsupphasuk M**, Thrasher JF, Goldstein AO, Ranney LM, Cornacchione Ross J. The effect of FDA text warnings with and without images on young people's perceptions of cigar smoking risks. 2025. Under review at *Addictive Behaviors Reports*.

Jetsupphasuk M, Hudgens MG, Edwards JK, Cole SR. Finite sample performance of optimal treatment rule estimators with right-censored outcomes. 2024. *arXiv*. https://arxiv.org/abs/2401.03084.

RESEARCH IN PROGRESS

Jetsupphasuk M, (alphabetical order) Fan X, Hudgens MG, Li D, Miller S, Rager J, Spring A. Health effects of exposure to wildfire smoke using difference-in-differences. 2025. *In progress*.

Ranney LM, Gu B, Jebai R, **Jetsupphasuk M**, Kowitt SD, Jarman KL, Clark SA, Goldstein AO, Thrasher JF, Cornacchione Ross J. Are blunt-specific messages perceived as effective? An experimental study among US youth and young adults. 2025. *In progress*.

BOOK CHAPTERS

Maestas N, **Jetsupphasuk M**. What do older workers want?. 2019. *Live Long and Prosper? The Economics of Ageing Populations*. CEPR Press, Paris & London.

WORK EXPERIENCE

Graduate Research Assistant (UNC Chapel Hill, Family Medicine) *Aug. 2023 - Aug. 2025*

- Advisor: Dr. Leah Ranney, Department of Family Medicine. 10 hours/week.
- Performed data analysis of experiments comparing effectiveness of warnings on cigarillos and little cigars among youth and young adults using (generalized) linear (mixed) models in SAS.
- Developed a statistical analysis plan for a longitudinal randomized control trial using survey experiments.
- Prepared tables and figures for manuscript publication.
- Reviewed and contributed writing to manuscripts.

Summer Associate (Analysis Group) *Jun. 2024 - Aug. 2024*

- Contributed to statistical methods protocol for methods dealing with time-dependent confounding with right-censored outcomes.
- Performed longitudinal meta-analysis to assess real-world effectiveness of a drug.
- Wrote a protocol and a study report.
- Performed literature reviews for a meta-analysis and discrete choice experiment.

Graduate Research Assistant (UNC Chapel Hill, Biostatistics) *Aug. 2020 - Jul. 2023*

- Advisor: Dr. Michael G. Hudgens, Department of Biostatistics. 20 hours/week.
- First-authored published paper using precision medicine to estimate optimal dynamic treatment rules to optimize survival probability of clinical outcomes among patients living with HIV.
- First-authored paper in progress on comparing estimators of optimal dynamic treatment rules for right-censored outcomes using simulations.

Research Assistant (Harvard Medical School, Health Care Policy) *Sep. 2018 - Jul. 2020*

- Advisor: Dr. Nicole Maestas, Department of Health Care Policy (economics). 35 hours/week.
- Performed descriptive analyses of (1) survey data on medical conditions, work capacity, and labor outcomes; (2) hostility in the workplace and its relationship with labor and health outcomes.
- Co-wrote an article on tapping latent work capacity in the context of population ageing: "What do older workers want?" in *Live Long and Prosper? The Economics of Ageing Populations.*
- Reproduced and replicated advisor's and collaborators' previous work.

AWARDS

T32 Training Grant, National Institute of Environmental Health Sciences (T32ES007018) *2023-present*

Biostatistics Student Association Spirit of Service Award, Honorable Mention *2023-24*

UNC-CH Gillings Merit Award (Biostatistics) *2020-21*

Rose Hills Foundation Science & Engineering Scholarship (Berkeley Undergraduate Scholarship Program) *2016-18*

PRESENTATIONS

UNC BIOS / STOR student seminar 2025, oral presentation.

American causal inference conference (ACIC) 2024, oral presentation.

Eastern North American Region (ENAR) 2024, oral presentation.

TEACHING

Grader for Basic Elements of Probability and Statistical Inference I *Fall 2022-23, 2025*

- Requirement of MPH students with a concentration in Public Health Data Science.

Grader for Applied Longitudinal Data Analysis *Fall 2024*

- Requirement of MS students in Biostatistics.

Teaching assistant for Principles of Experimental Analysis *Spring 2023*

- Second course in a biostatistics sequence for MPH students on fundamentals of statistical analysis.
- Assisted students with SAS and reviewing course material.

MENTORING AND SERVICE

Co-mentor of two Biostatistics Masters students (Xiaoyang Fan and Chenwei Fang). *2025-present*

Graduate Biostatistics Student Association Co-President. *2024-2025*

Graduate Biostatistics Student Association Workshop Chair. *2023-2025*

Mentor for "Mentorship and Advice for Prospective Students"program. *2022-2023*

Reviewer for *American Journal of Epidemiology.* *2021, 2025*