

CONTACT INFORMATION	Department of Epidemiology 677 Huntington Avenue Harvard University Boston, MA 02115 USA	+1 (937) 657-8163 cboyer@g.harvard.edu christopherbboyer.com
RESEARCH INTERESTS	Causal inference, randomized-controlled trials, statistics, machine learning, epidemiology, global health, econometrics, networks, Bayesian methods	
ACADEMIC EXPERIENCE	Harvard University , Cambridge, Massachusetts USA <i>Center for Communicable Disease Dynamics</i> Research Fellow	2023 - present
EDUCATION	Harvard University , Cambridge, Massachusetts USA Ph.D., Epidemiology Concentration: Causal Inference Dissertation: <i>New approaches to factual and counterfactual prediction.</i> Committee: Goodarz Danaei (<i>Chair</i>), James Robins, Andrew Beam M.S., Biostatistics Columbia University , New York, New York USA M.P.H., Epidemiology Wright State University , Dayton, Ohio USA B.S., Mechanical Engineering	2023 2023 2015 2010
PUBLICATIONS	Boyer, C. , Paluck, E. L., Annan, J., Nevatia, T., Cooper, J., Namubiru, J., Heise, L., & Lehrer, R. (2022) “Religious leaders can motivate men to cede power and reduce intimate partner violence: experimental evidence from Uganda”. <i>PNAS</i> . 119(31), e2200262119. DOI: 10.1073/pnas.2200262119 Boyer, C , Rumpler, E, Kissler, S, & Lipsitch, M. (2022) “Infectious disease dynamics and restrictions on social gathering size”. <i>Epidemics</i> , 40, 100620. DOI: 10.1016/j.epidem.2022.100620 NCD Risk Factor Collaboration (NCD-RisC). (2021) “Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants”. <i>The Lancet</i> . 398(10304), 957–980. DOI: 10.1016/S0140-6736(21)01330-1	
WORKING PAPERS	Boyer, C. , Chatterji, S., Cooper, J., & Heise, L. (2022). “Outcome coding choice in randomized trials of programs to reduce violence”. <i>ArXiv:2204.12385 [Stat]</i> . http://arxiv.org/abs/2204.12385 NCD Risk Factor Collaboration (NCD-RisC). (2021) “Long-term and recent trends in serum cholesterol treatment and control in 14 high-income countries: an analysis of 125 nationally representative surveys”. Boyer, C. , Bates-Jefferys, E., Fink, G. & Annan, J. (2021) “Texting with men to reduce violence: a cluster-randomized trial of the Modern Man Challenge intervention in Monrovia, Liberia”.	

	Boyer, C. , Beam, A., Robins, J., & Danaei, G. (2022) “Factual and counterfactual risk prediction using the parametric g-formula”. <i>Dissertation paper</i> .		
	Boyer, C. , Beam, A., Robins, J., & Danaei, G. (2022) “Target trials for prediction: emulating a trial to estimate the treatment-naive risk”.. <i>Dissertation paper</i> .		
	Boyer, C. , Beam, A., Robins, J., & Danaei, G. (2022) “Validating counterfactual predictions”. <i>Dissertation paper</i> .		
CONFERENCE PRESENTATIONS	Boyer, C. & Namubiru, J. (2022). “Religious Leaders Can Motivate Men To Cede Power And Reduce Violence: Main Findings from Becoming One”. <i>SVRI Forum 2022</i>		
	Namubiru, J. & Boyer, C. . (2022). “Reduced IPV driven largely by highest quality, most progressive facilitators”. <i>SVRI Forum 2022</i>		
	Boyer, C. & Danaei, G. (2021). “New Approaches to Factual and Counterfactual Risk Prediction for Cardiovascular Disease Using the Parametric G-formula”. <i>Circulation</i> , 144(Suppl_1), A14191-A14191.		
	Boyer, C. , Jackson, E., Bawah, A., Schmitt, M., Awoonor-Williams, J., & Phillips, J. (2015). “Estimating indices of health system readiness: an example from rural northern Ghana”. <i>The Lancet Global Health</i> , 3, S14.		
HONORS AND AWARDS	Department of Epidemiology Excellence in Teaching Award		2022
	Bok Center Certificate of Distinction in Teaching (×3)		2019, 2020, 2021
	Summa Cum Laude, Columbia University		2015
	Magna Cum Laude, Wright State University		2010
	Tau Beta Pi, Wright State University		2010
	National Merit Scholarship Finalist		2006
	Salutatorian, Miamisburg High School		2006
EXTRAMURAL GRANTS	USAID Development Innovation Ventures (APS9-7414). \$200,000. Role: <i>co-PI</i>		2021
	SVRI/World Bank Development Marketplace Award. \$50,000. Role: <i>co-PI</i>		2020
	NIH T32 Training Grant (T32 HL 098048). Role: <i>Trainee</i>		2019
	Wellspring Philanthropic Fund. \$450,000. Role: <i>co-PI</i>		2017
RESEARCH PROJECTS	Annan, J., Boyer, C. , Cooper, J., Heise, L., & Paluck, E.L. (2019) “A Pair-Matched Randomized Evaluation of Faith-Based Couples Counseling in Uganda.” AEA RCT Registry. March 11. https://doi.org/10.1257/rct.3994-4.1		
	Annan, J., Fink, G., & Paluck, E.L. (2019) “Modern Man Challenge Intimate Partner Violence Study.” AEA RCT Registry. June 10. https://doi.org/10.1257/rct.4245-1.0		
	Boyer, C. & Field, E. (2022) “Hablemos entre Patas: A Randomized-Controlled Trial of a WhatsApp Intervention to Reduce Intimate Partner Violence” AEA RCT Registry. October 14. https://www.socialscisceregistry.org/trials/10043		
TEACHING EXPERIENCE	EPI207 - Advanced Epidemiologic Methods		
	<i>Lead Teaching Fellow</i>		2020, 2021
	Required course for epidemiology PhD students. Causal inference for time-varying exposures: g-formula, inverse-probability weighting, marginal structural models, static and dynamic treatment regimes. Responsible for leading 90 min lab section and grading homeworks and tests.		

Instructor: Dr. James Robins

PHS2000 - Quantitative research methods

Teaching Fellow

2019, 2020, 2021

Year-long required methods course for first-year PhD students. Regression models, sampling, longitudinal and multilevel analysis, time-varying confounding, mediation and interaction, econometric methods, missing data. Responsible for leading 90 min lab section, developing homework assignments and tests, and drafting course materials.

Instructors: Dr. Tyler Vanderweele, Dr. Jarvis Chen, Dr. Michael Hughes

PROFESSIONAL
EXPERIENCE

Innovations for Poverty Action, New York, New York USA

Technical Lead

2017 - 2018

Senior Research and Data Analyst

2016 - 2017

Research and Data Analyst

2015 - 2016

Columbia University, New York, New York USA

Research Associate

2013 - 2015

Peace Corps, Montepuez, Cabo Delgado, Mozambique

Secondary Science Teacher

2010 - 2012

CONSULTING
EXPERIENCE

StellarEmploy, New York, New York USA

Data Scientist

2017 - 2018

World Bank, Washington, DC USA

R/Python Programmer

2016

PUBLISHED
SOFTWARE

Boyer, C., Danaei, G, Hajifathalian, K, Ueda, P, & Carrillo Larco, R. M. (2021) **globorisk**, R package for Globorisk Global CVD Risk Calculator.

Boyer, C., Baako, I.A., & Sandino, R.S. (2018) **ipacheck**, Stata package for running high-frequency checks of survey data.

Boyer, C. & White, M. (2016) **bcstats**, Stata package for comparing survey and back check data.

PROGRAMMING

Statistics: R, Stata, Python, Stan, Julia (beginner)

Web: HTML, JavaScript, CSS, D3.js

GIS: ArcGIS, QGIS, ggmap, ggplot

Markup: Markdown, \LaTeX

Survey: SurveyCTO, Qualtrics

Other: C/C++, SQL, Java