722 W 168th Street, 6th floor New York, NY 10032 212-305-1696 cm3825@cumc.columbia.edu

Date of Preparation

September 29, 2023

Personal Data

Name: Caleb H. Miles

Date of Birth: March 5, 1987 Birthplace: Greensboro, NC Citizenship: United States

Academic Appointments

08/2018–Present Department of Biostatistics

Mailman School of Public Health, Columbia University

Assistant Professor

Education

08/2010–07/2015 Harvard University

PhD in Biostatistics, November 2015

Thesis title: Semiparametric Methods for Causal Mediation Analysis and

Measurement Error

Miles, C.H. 2015. Semiparametric Methods for Causal Mediation Analysis and Measurement Error. Doctoral dissertation, Harvard University, Gradu-

ate School of Arts & Sciences. Adviser: Eric J. Tchetgen Tchetgen

Minor field of study: Epidemiology of HIV

08/2005-12/2009 University of Alabama

B.S. with honors in Mathematics, magna cum laude, December 2009

Minor field of study: Engineering

Training

08/2015–06/2018 Division of Biostatistics

University of California, Berkeley

 ${\bf Postdoctoral\ Fellow}$

Adviser: Mark J. van der Laan

Honors & Awards

2022	Calderone Junior Faculty Award, Columbia Mailman School of Public
	Health
2016	The Biometrics Section of the American Statistical Association's travel
	award
2015	The Health Policy Statistics Section of the American Statistical Association's
	student paper award
2014	Travel scholarship, Summer Institute in Statistics and Modeling in Infectious
	Diseases. University of Washington, Seattle.
2009	Phi Beta Kappa
2005 - 2009	Presidential Scholarship, University of Alabama
2005	National Merit Scholar

Academic Service

09/2021-present	MS Advising Oversight Committee
	• Chair 09/2021–present
09/2021-present	Diversity Committee
	• Co-chair 09/2021-present
04/2020-present	Master's of Public Health Core Review Working Group Subgroup for the
	Research Methods and Applications Studio, Columbia Mailman School of
	Public Health
09/2018-present	Inference Qualifying Exam Committee, Department of Biostatistics,
	Columbia Mailman School of Public Health
	• Chair 09/2020–present
	• Co-chair 09/2019-08/2020
09/2018-present	Communications Committee, Department of Biostatistics, Columbia Mail-
·	man School of Public Health
09/2018-present	Student Recruitment Committee, Department of Biostatistics, Columbia
, -	Mailman School of Public Health
06/2020-05/2021,	Organizer, Levin Lecture Series, Department of Biostatistics
04/2022 - 05/2022	•
09/2018-08/2020	Master's Program Admissions Committee, Department of Biostatistics,
, ,	Columbia Mailman School of Public Health

Professional Organizations, Societies, and Service

Grant Review Service

12/2021 Ad hoc reviewer, NINDS ZNS1 SRB-G(46) Special Emphasis Panel

Editorial Board

05/2023-Present Associate Editor, Journal of the Royal Statistical Society, Series C (Applied

Statistics)

11/2018-Present Associate Editor, International Journal of Biostatistics

JOURNAL AND CONFERENCE PROCEEDINGS REVIEWER

American Journal of Epidemiology

The American Statistician

Annals of Applied Statistics

Biometrical Journal

Biometrics

Biometrika

Biostatistics

Causal Learning and Reasoning

Computational Learning Theory

Conference on Neural Information Processing Systems

Depression and Anxiety

Epidemiology

International Conference on Machine Learning

International Journal of Biostatistics

Journal of Business and Economic Statistics

Journal of Causal Inference

Journal of Educational and Behavioral Statistics

Journal of the American Statistical Association

Journal of the Royal Statistical Society: Series B

Journal of the Royal Statistical Society: Series C

Lifetime Data Analysis

Observational Studies

Proceedings of the National Academy of Sciences

Psychiatric Services

 $Statistica\ Sinica$

Statistical Methods in Medical Research

Statistical Science

Statistics in Biosciences

Statistics in Medicine

Uncertainty in Artificial Intelligence

Memberships

04/2021–Present Society for Causal Inference

03/2021–Present Association for Clinical and Translational Science

01/2015–Present Eastern North American Region (ENAR) of the International Biometrics

Society

06/2012–Present American Statistical Association

Fellowship and Grant Support

SUBMITTED GRANT PROPOSALS

03/2023 RFA-DA-22-037, R01 NIH / NIMH (Miles, Rudolph)

Leveraging harmonized data to improve external validity and efficiency of

clinical trials for treating opioid use disorder

Contact Principal Investigator

10/2022 RFA-MH-22-180, R34 NIH / NIMH (Greene)

Risk and protective factors for common mental disorders among populations during migration. A pilot cohort study among migrants and asylum seekers

in Mexico

Co-investigator

PRESENT SUPPORT

10/2022–09/2025 David Lynch Foundation (Neria)

A Phase 3 Clinical Trial on Transcendental Meditation and Posttraumatic

Stress Disorder, Suicide, and Substance Use in Veterans

Co-Investigator

06/2022-05/2024 1R21 MH130217-01, NIH / NIMH (Sandfort)

In-depth Understanding of HIV Risk Behavior among Men Who Have Sex With Men in Sub-Saharan Africa: Secondary Analysis of HPTN 075 Data

Co-Investigator

06/2022-04/2024 R21 MH126096-01A1, NIH / NIMH (Guglielminotti)

Obstetric Anesthesia and Postpartum Depression

Co-Investigator

08/2021–05/2026 R01 DA054553-01, NIH / NIDA (Duncan, Knox)

Cannabis use, PrEP and HIV transmission risk Among Black MSM in

Chicago

Co-Investigator

09/2018-07/2023 R01 HS026493-02, NIH / AHRQ (Ing)

Prenatal Exposure to Anesthesia and Subsequent Neurodevelopmental Dis-

orders

Co-Investigator

09/2018-04/2024 3R01 MD013554-05S1, NIH / NIMHHD (Duncan)

Medical Mistrust as a Barrier to COVID-19 and HIV Services Among Trans-

gender Women of Color

Co-Investigator

07/2016-05/2026 UL1 TR001873, NIH / NCATS (Reilly)

Clinical and Translational Science Award - Biostatistics Resource Biostatistician

Past Support

03/2020-02/2023 TRANSFORM KL2 Mentored Career Development Award, Irving Institute

for Clinical and Translational Research (Shimbo, Genkinger)

Personalizing Treatment Decisions and Understanding Causal Mechanisms for Functional and Occupational Outcomes Among Patients With

Schizophrenia

Award recipient

09/2018-05/2022 R01 MH11719, NIH / NIMH (Compton)

A Trial of a Police-Mental Health Linkage System for Jail Diversion and

Reconnection to Care

Co-Investigator

01/2020–12/2021 Columbia Public Health Innovation Fund (Miles, Rudolph, Valeri)

New York Causality Network

Principal Investigator

06/2014–06/2021 Bill & Melinda Gates Foundation (Walker)

Preterm Birth Initiative

Lead Statistician

Responsibilities: Oversee impact evaluation of two large facility-level implementation projects to improve preterm birth outcomes in East Africa.

Supervise doctoral student.

Educational Contributions

DIRECT TEACHING

Specific Courses

Fall 2023	Theory of Statistical Inference 1 (9 enrolled students)
Fall 2022	Theory of Statistical Inference 1 (9 enrolled students)
Fall 2021	Theory of Statistical Inference 1 (8 enrolled students)
Fall 2020	Theory of Statistical Inference 1 (6 enrolled students)
Fall 2019	Theory of Statistical Inference 1 (6 enrolled students)

Workshops

March 2023 Spring School on Causality (co-instructor, 80 students, 4-day workshop of

seminars and exercises), Sorbonne Center for Artificial Intelligence (SCAI),

Paris, France

Summer 2022 Causal Mediation Analysis Training: Methods and Applications Using

Health Data (co-instructor, 49 students, 3-day intensive boot camp of seminars and hands-on analytical sessions), Skills for Health And Research Professionals (SHARP) Training, Columbia Mailman School of Public Health,

New York, NY

Summer 2021 Causal Mediation Analysis Training: Methods and Applications Using

Health Data (co-instructor, 45 students, 3-day intensive boot camp of seminars and hands-on analytical sessions), Skills for Health And Research Professionals (SHARP) Training, Columbia Mailman School of Public Health,

New York, NY

Summer 2020 Causal Mediation Analysis Training: Methods and Applications Using

Health Data (co-instructor, 25 students, 3-day intensive boot camp of seminars and hands-on analytical sessions), Skills for Health And Research Professionals (SHARP) Training, Columbia Mailman School of Public Health,

New York, NY

Summer 2019 Causal Mediation Analysis Training: Methods and Applications Using

Health Data (co-instructor, 21 students, 3-day intensive boot camp of seminars and hands-on analytical sessions), Skills for Health And Research Professionals (SHARP) Training, Columbia Mailman School of Public Health,

New York, NY

Teaching Assistant

Fall 2014 Department of Biostatistics, Harvard School of Public Health

Course: Methods I

Professor: Eric J. Tchetgen Tchetgen

Fall 2013 Department of Biostatistics, Harvard School of Public Health

Course: Methods I

Professor: Eric J. Tchetgen Tchetgen

Fall 2012 Department of Biostatistics, Harvard School of Public Health

Course: Introduction to Statistical Methods

Professor: Bernard Rosner

Note: Head teaching assistant & responsible for two recitation sections

Fall 2011 Department of Biostatistics, Harvard School of Public Health

Course: Introduction to Statistical Methods

Professor: Kimberlee Gauvreau

Guest Lectures

03/2022 "A Primer on Causal Inference", P8586: Applied Methods in Health Se	rvices
and Outcomes Research, Columbia University, New York, NY	
02/2022 "Introduction to Causal Inference: Causal Diagrams & Marginal Stru	ctural
Models", Neurology Training Seminar, Columbia University, New Yor	k, NY
02/2022 "Introduction to Causal Inference: Potential Outcomes & Confoun	ding",
Neurology Training Seminar, Columbia University, New York, NY	
01/2020 "Prediction/Machine Learning and Causality", Substance Abuse Ep	idemi-
ology Training Program Seminar, Columbia University, New York, N	Y
11/2019 "Prediction/Machine Learning and Causality", Biostatistics, Epidem	ology,
and Research Design's Biostatistics in Action Series, Columbia Univ	ersity,
New York, NY	
10/2019 "Prediction/Machine Learning and Causality", Clinical Translation	al Sci-
ence Awards' Patient-Oriented Research Colloquium, Columbia Univ	ersity,
New York, NY	
03/2019 "Introduction to Causal Inference: Causal Diagrams & Marginal Stru	ctural
Models", Neurology Training Seminar, Columbia University, New Yor	k, NY
02/2019 "Introduction to Causal Inference: Potential Outcomes & Confoun	ding",
Neurology Training Seminar, Columbia University, New York, NY	
11/2017 Causal Inference With Interference. Advanced Topics in Causal Infe	rence,
University of California, Berkeley	
03/2016 Estimation and Inference for a Causal Effect With i.i.d. and Non-i.i.d.	Data.
Introduction to Modern Biostatistical Theory and Practice, University	sity of
California, Berkeley	

Doctoral Advisees		
2023 (Expected)	Soohyun Kim (PhD; Co-adviser)	
2025 (Expected)	Amy Pitts (PhD)	

DOCTORAL COMMITTEES

2022	Denise Shieh (Dissertation Defense)
2022	Craig Heck, Epidemiology, Columbia University (Dissertation Defense)
2022	Melanie Mayer (Oral Qualifying Exam Committee, Chair)
2021	Jiaxi Yang, Teacher's College, Columbia University (Dissertation Defense)
2020	Xiaoqi Lu (Dissertation Defense)
2020	Eun-Jeong Oh (Dissertation Defense)
2019 – 2020	Rui Lu, Teacher's College, Columbia University (Dissertation Proposal, Dis-
	sertation Defense)

OTHER MENTORSHIP

2023	Mentor, Summer Training Institute in Biostatistics and Data Science, Department of Biostatistics, Columbia Mailman School of Public Health
2022	Mentor, Summer Training Institute in Biostatistics and Data Science, Department of Biostatistics, Columbia Mailman School of Public Health
2022–present	Research supervisor, James Kelliher (M.S. student, recipient of Chair's Award for Outstanding Master's Student), Department of Biostatistics, Columbia University Mailman School of Public Health
2021	Research supervisor (M.S. student), Minhyuk Choi, Department of Biostatistics, Columbia University Mailman School of Public Health
2021–present	Research supervisor (M.S. Theory and Methods track), Bin Yang, Department of Biostatistics, Columbia University Mailman School of Public Health
2021	Mentor, Biostatistics Epidemiology Summer Training Diversity Program, Department of Biostatistics, Columbia Mailman School of Public Health
2021–present	Research adviser, Ngoc Duong (M.S. graduate), Columbia University Irving Medical Center
2021	Master's practicum adviser (M.S. Theory and Methods track), Ngoc Duong, Department of Biostatistics, Columbia University Mailman School of Public Health
2019	Mentor, Biostatistics Epidemiology Summer Training Diversity Program, Department of Biostatistics, Columbia Mailman School of Public Health
2019–2020	Research supervisor, Bingyu Sun (M.S. student), Department of Biostatistics, Columbia University Mailman School of Public Health
2019–2020	Research supervisor, Youn Kyeong Chang (M.S. student), Department of Biostatistics, Columbia University Mailman School of Public Health
2014	Graduate mentor, Summer Program in Biostatistics & Computational Biology, Department of Biostatistics, Harvard School of Public Health

Publications

ORIGINAL, PEER REVIEWED ARTICLES

Refereed Journal Articles

- Knox, J.R., Dolotina, B., Moline, T., Matthews, I., Durrell, M., Hanson, H., Almirol, E., Hotton, A., Pagkas-Bather, J., Chen, Y.-T., English, D., Manuzak, J., Rower, J., Miles, C.H., Millar, B., Jean-Louis, G., Rendina, H.J., Martins, S.S., Grov, C., Hasin, D.S., Carrico, A.W., Shoptaw, S., Schneider, J.A., Duncan, D.T. (2023). HIV prevention and care among Black cisgender sexual minority men and transgender women in Chicago: Protocol for an HIV status neutral cohort study using an observational-implementation hybrid approach. JMIR Research Protocols (In press)
- 2. Rudolph, K.E., Williams, N., **Miles, C.H.**, Antonelli, J., Díaz, I. (2023). All models are wrong, but which are useful? Comparing parametric and nonparametric estimation of causal effects in finite samples. preprint arXiv:2211.10310 *Journal of Causal Inference* (In press)
- 3. Miles, C.H. (2023). On the Causal Interpretation of Randomised Interventional Indirect Effects. preprint arXiv:2203.00245. *Journal of the Royal Statistical Society: Series B* (In

press)

4. Margolin, E.J., Schoenfeld, D., **Miles, C.H.**, Merrill, S.B., Raman, J.D., Thompson, R.H., Reese, A.C., Parekh, D.J., Brown, E.T., Klausner, A., Williams, D.H., Lee, R.K., Zaslau, S., Guzzo, T.J., Shenot, P.J., Anderson, C.B., Badalato, G.M. (2023). Longitudinal Changes in the Operative Experience for Junior Urology Residents. *Urology* (In press)

- 5. Ha, A.S., Wang, C., Haas, C.R., **Miles, C.H.**, Katz, M.J., Shah, O. (2022). Differences in Management of Pregnant Women with Obstructing Infected Ureteral Stones: A Population-Based Analysis. *International Journal of Urology* (In press)
- 6. Ing, C., DeStephano, D., Hu, T., Reighard, C., Lackraj, D., Geneslaw, A., Miles, C.H., Kim, M. (2022). Intraoperative blood pressure and long-term neurodevelopmental function in children undergoing ambulatory surgery. *Anesthesia & Analgesia*, 135(4):787–797.
- 7. Wallace, B.K., **Miles, C.H.**, Anderson, C.B. (2022). Effects of Race and Socioeconomic Status on Treatment for Localized Renal Masses in New York City. *Urologic Oncology: Seminars and Original Investigations*, 40(2), 65.e19-65.e26.
- 8. Margolin, E.J., Wallace, B.K., Movassaghi, M., **Miles, C.H.**, Shaish, H., Golan, R., Katz, M.J., Anderson, C.B., Shah, O. (2022) Predicting Sepsis in Patients with Ureteral Stones in the Emergency Department. *Journal of Endourology* (In press)
- 9. Alukal, J., Ha, A., Han, D., Wallace, B., Miles, C.H., Raup, V., Punjani, N., Badalato, G. (2022) A Population-based Analysis of Predictors of Penile Surgical Intervention among Inpatients with Acute Priapism. *International Journal of Impotence Research*, 1–7.
- 10. Margolin, E.J., Wallace, B.K., Ha, A.S., Katz, M.J., Mikkilineni, N., **Miles, C.H.**, Healy, K.A., Weiner, D.M., Shah, O. (2021). Impact of an Acute Care Urology Service on Timeliness and Quality of Care in the Management of Nephrolithiasis. *Journal of Endourology* (In press)
- 11. Ha, A.S., Pak, J., Haas, C.R., **Miles, C.H.**, Weiner, D.M., Anderson, C.B., Badalato, G.M. (2021). A Novel Risk Prediction Model to Triage Difficult Urethral Catheterizations. *Urology*, 157, 35–40.
- 12. Margolin, E.J., Pina Martina, L.A., **Miles, C.H.**, Wenske, S., McKiernan, J.M., DeCastro, G.J., Hyams, E.S., Drake, C.G., Lim, E., Stein, M.N., Deutsch, I., Anderson, C.B. (2021). Telemedicine in Management of Genitourinary Malignancies: Patient and Physician Perspectives. *Urologic Oncology*, 39(8), 480–486.
- 13. Geneslaw, A.S., Lu, Y., **Miles, C.H.**, Hua, M., Cappell, J., Smerling, A.J., Olfson, M., Edwards, J.D., Ing, C. (2021). Long-Term Increases in Mental Disorder Diagnoses After Invasive Mechanical Ventilation for Severe Childhood Respiratory Disease. *Pediatric Critical Care Medicine*, 22(12), 1013–1025.
- Ha, A., Wallace, B.K., Miles, C.H., Raup, V., Punjani, N., Badalato, G.M., Alukal, J.P. (2021). Exploring the Use of Exchange Transfusion in the Surgical Management of Priapism in Sickle Cell Disease: A Population-Based Analysis. *Journal of Sexual Medicine*, 18(10), 1788–1796.
- 15. Duncan, D.T., Ransome, Y., Park, S.H., Jackson, S.D., Kawachi, I., Branas, C.C., Knox, J., Al-Ajlouni, Y.A., Mountcastle, H.D., Miles, C.H., Hickson, D.A. (2021). Neighborhood

- Social Cohesion, Religious Participation and Sexual Risk Behaviors Among Cisgender Black Sexual Minority Men in the Southern United States. Social Science & Medicine, 279, 113913.
- 16. Ing, C., Landau, R., DeStephano, D., **Miles, C.H.**, von Ungern-Sternberg, B.S., Li, G., and Whitehouse, A.J.O. (2021). Prenatal Exposure to General Anesthesia and Childhood Behavioral Deficit. *Anesthesia & Analgesia*, 10–1213.
- 17. **Miles, C.H.**, Shpitser, I., Kanki, P., Meloni, S., and Tchetgen Tchetgen, E. J. (2020). On semiparametric estimation of a path-specific effect in the presence of mediator-outcome confounding. *Biometrika*, 107(1), 159–172.
- 18. Miles, C.H., Petersen, M., and van der Laan, M.J. (2019). Causal inference when counterfactuals depend on the proportion of all subjects exposed. *Biometrics*, 75(3), 768–777.
- 19. Miles, C.H., Schwartz, J., and Tchetgen Tchetgen, E.J. (2018). A class of semiparametric tests of treatment effect robust to confounder measurement error. *Statistics in Medicine*, 37(24), 3403–3416.
- 20. Miles, C.H., Shpitser, I., Kanki, P., Meloni, S., and Tchetgen Tchetgen, E.J. (2017). Quantifying an adherence path-specific effect of antiretroviral therapy in the Nigeria PEPFAR program. *Journal of the American Statistical Association*, 112(520), 1443–1452.
- 21. **Miles, C.H.**, Kanki, P., Meloni, S., and Tchetgen Tchetgen, E.J. (2017). On partial identification of the natural indirect effect. *Journal of Causal Inference*, 5(2).

SELECTED WORKS IN PROGRESS

- 1. **Miles, C.H.** and Chambaz, A. (2023). Optimal tests of the composite null hypothesis arising in mediation analysis. preprint arXiv:2107.07575 (Under review)
- 2. Duong, N.Q., Pitts, A.J., Kim, S., Miles, C.H. (2023). Sensitivity analysis for transportability in multi-study, multi-outcome settings. preprint arXiv:2301.02904
- 3. Singh, T., Pitts, A.J., Miles, C.H., Ing, C.H. (2023). Anesthetic Exposure During Early Childhood and Neurodevelopmental Outcomes: Our Current Understanding. (Under review)
- 4. Isik, O.G., Junaid, S., Guo, L., Landau, R., Miles, C.H., Pennell, C., von Ungern Sternberg, B.S., Whitehouse, A.J.O., Li, G., Ing, C. (2023). Behavioral and neuropsychological outcomes in children after exposure to labor epidural analgesia. (Under review)
- 5. Ing, C., Silber, J., Lackraj, D., Olfson, M., Miles, C.H., Reiter, J.G., Jain, S., Chihuri, S., Guo, L., Gyamfi-Bannerman, C., Wall, M., Li, G. (2022). Prenatal Exposure to Anesthesia and Subsequent Behavioral Disorders
- 6. Knox, J.R., Dolotina, B., Moline, T., Matthews, I., Durrell, M., Hanson, H., Almirol, E., Hotton, A., Pagkas-Bather, J., Chen, Y.T., English, D., Manuzak, J., Rower, J., Miles, C.H., Millar, B., Jean-Louis, G., Rendina, H.J., Martins, S.S., Grov, C., Hasin, D.S., Carrico, A.W., Safren, S.A., Shoptaw, S., Schneider, J.A., Duncan, D.T. (2023). Understanding HIV prevention and care among an HIV-status neutral cohort of Black cisgender sexual minority men and transgender women using an observational-implementation hybrid approach: the Neighborhoods and Networks Part 2 (N2P2) Study in Chicago. (Under review)

7. Chung, R., Vila-Reyes, H., Miles, C.H., Decastro, G.J., Anderson, C.B., Drake, C.G., McKiernan, J.M. (2021). Long Term Oncologic Outcomes in Patients with Muscle Invasive Bladder Cancer Who Are Misclassified as Achieving a Complete Clinical Response to Neoadjuvant Chemotherapy: How Costly are Mistakes? (Under review)

- 8. Margolin, E.J., Wallace, B.K., Movassaghi, M., **Miles, C.H.**, Shaish, H., Golan, R., Katz, M.J., Anderson, C.B., Shah, O. (2021). Predicting Unrecognized Infection in Patients with Ureteral Stones in the Emergency Department. (Under review)
- 9. Stillman, M.D., Li, G., **Miles, C.H.**, McKiernan, J.M., Anderson, C.B. (2022). Increased Utilization of Intravesical Chemotherapy Following the Introduction of Gemcitabine. (Under review)

Software

1. Chambaz, A. and Miles, C.H. (2021). mediation.test: This packages proposes more powerful tests of the composite null hypothesis arising in mediation analysis. R package version 1.0.0.

Invited Talks

- "Some fundamental problems in causal mediation analysis", Thematic Quarter on Causality
 Opening Session, Institute Henri Poincaré, Paris, France (04/2023)
- "Two fundamental problems in causal mediation analysis", Center for Data Analysis and Statistical Science - Adolphe Quetelet Seminar Series, Ghent University, Ghent, Belgium (04/2023)
- 3. "Optimal tests of the composite null hypothesis arising in mediation analysis", Biostatistics Seminar, Purdue University, West Lafayette, IN, Virtual (10/2022)
- 4. "Optimal tests of the composite null hypothesis arising in mediation analysis", Biostatistics Seminar, Northwestern University, Chicago, IL, Virtual (03/2022)
- 5. "Optimal tests of the composite null hypothesis arising in mediation analysis", IMS workshop on "Causal Inference with Big Data", National University of Singapore, Virtual (12/2021)
- 6. "On the Causal Interpretation of Randomized Interventional Indirect Effects", Computational and Methodological Statistics, London, United Kingdom, Hybrid (12/2021)
- 7. "Optimal tests of the composite null hypothesis arising in mediation analysis", Practice and Research at the Intersection of Information, Society, and Methodology (PRIISM) Virtual Seminar, New York University, Virtual (10/2021)
- 8. "Optimal tests of the composite null hypothesis arising in mediation analysis", Biostatistics Seminar Series, University of Colorado Denver, Virtual (10/2021)
- 9. "More Powerful Tests of the Composite Null Hypothesis Arising in Mediation Analysis", International Chinese Statistical Association 2021 Applied Statistics Symposium, Virtual (09/2021)
- 10. "More Powerful Tests of the Composite Null Hypothesis Arising in Mediation Analysis", Computational and Methodological Statistics, Virtual (12/2020)

11. "Measurement Error-Robust Causal Inference via Synthetic Instrumental Variables", Computational and Methodological Statistics, London, United Kingdom (12/2019)

- 12. "Causal Inference When Counterfactuals Depend on the Proportion of All Subjects Exposed", Technology, Operations, and Statistics, New York University, New York, NY (12/2019)
- 13. "Causal Inference When Counterfactuals Depend on the Proportion of All Subjects Exposed", Operations Research and Information Engineering, Cornell Tech, New York, NY (10/2019)
- 14. "Causal Inference When Counterfactuals Depend on the Proportion of All Subjects Exposed", Biostatistics Seminar, Johns Hopkins University, Baltimore, MD (10/2019)
- 15. "Measurement Error-Robust Causal Inference via Synthetic Instrumental Variables", Joint Statistical Meetings, Denver, CO (07/2019)
- 16. "Causal Inference When Counterfactuals Depend on the Proportion of All Subjects Exposed", Séminaire de Statistiques, Université Paris-Descartes, Paris, France (05/2019)
- 17. "Causal Inference When Counterfactuals Depend on the Proportion of All Subjects Exposed", Séminaire de Biostatisique, Université de Bordeaux, Bordeaux, France (05/2019)
- 18. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Levin Lecture Series, Columbia University, New York, NY (01/2018)
- 19. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Biostatistics Seminar, Vanderbilt University, Nashville, TN (01/2018)
- 20. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Statistics Seminar, Colorado State University, Fort Collins, CO (01/2018)
- 21. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Biostatistics Seminar, MD Anderson Cancer Center, Houston, TX (01/2018)
- 22. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Biostatistics Seminar, University of Pennsylvania, Philadelphia, PA (01/2018)
- "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Biostatistics Seminar, Kaiser Permanente Washington Health Research Institute, Seattle, WA (01/2018)
- "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Biostatistics Seminar, New York University Division of Biostatistics, New York, NY (12/2017)
- 25. "Partial Identification Bounds and Path-Specific Effects: Two (More) Options When Faced with Exposure-Induced Confounding", Joint Statistical Meetings, Baltimore, MD (07/2017)
- 26. "A Class of Semiparametric Tests of Treatment Effect Robust to Confounder Classical Measurement Error", Eastern North American Region of the International Biometric Society Spring Meeting, Washington, DC (03/2017)
- "A Class of Semiparametric Tests of Treatment Effect Robust to Confounder Classical Measurement Error", Joint Statistical Meetings, Chicago, IL (08/2016)

28. "A Class of Semiparametric Tests of Treatment Effect Robust to Confounder Classical Measurement Error", Biostatistics Seminar, University of Washington Department of Biostatistics, Seattle, WA (04/2016)

- 29. "A Class of Semiparametric Tests of Treatment Effect Robust to Measurement Error of a Confounder", Biostatistics Seminar Series, University of California, Davis Graduate Group in Biostatistics, Davis, CA (02/2016)
- 30. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEPFAR Program", Joint Statistical Meetings, Seattle, WA (08/2015)
- 31. "Partial Identification of the Pure Direct Effect Under Exposure-Induced Confounding", Eastern North American Region of the International Biometric Society Spring Meeting, Miami, FL (03/2015)
- 32. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEPFAR Program", McGill University Biostatistics Seminar, Montreal, Canada (03/2015)
- 33. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEPFAR Program", University of North Carolina Causal Inference Research Group, Chapel Hill, NC (02/2015)
- 34. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEPFAR Program", Biostatistics Seminar Series, University of California, Berkeley Division of Biostatistics, Berkeley, CA (02/2015)
- 35. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEP-FAR Program", Johns Hopkins University Causal Inference Group, Baltimore, MD (01/2015)
- 36. "Identification of the Natural Indirect Effect Under Various Models", Joint Statistical Meetings, Boston, MA (08/2014)
- 37. "Background and Recent Developments in Causal Mediation Analysis", Joint Statistical Meetings, San Diego, CA (07/2012)

Conference Activity

SESSIONS ORGANIZED

- 1. Invited to organize: "Causal mediation analysis and principal stratification", International Conference on Econometrics and Statistics, Tokyo, Japan (07/2023)
- 2. Invited to organize: "External Validity and Data Fusion in Causal Inference", International Conference on Econometrics and Statistics, Kyoto, Japan (06/2022)
- 3. "Identifying and Addressing Sources of Bias in Causal Inference", Joint Statistical Meetings, Denver, CO (07/2019)

Contributed Talks

1. "On the Causal Interpretation of Randomized Interventional Indirect Effects", European Causal Inference Meeting, Oslo, Norway (04/2023)

- 2. "On the Causal Interpretation of Randomized Interventional Indirect Effects", American Causal Inference Conference, Berkeley, CA (05/2022)
- 3. "Optimal tests of the composite null hypothesis arising in mediation analysis", European Causal Inference Meeting, Virtual (09/2021)
- 4. "When Randomized Interventional Indirect Effects Tell Stories About Mediated Effects (and When They Don't)", Joint Statistical Meetings, Virtual (08/2021)
- 5. "A More Powerful Test of the Composite Null Hypothesis Arising in Mediation Analysis", Joint Statistical Meetings, Virtual (08/2020)
- 6. "A Class of Semiparametric Tests of Treatment Effect Robust to Confounder Classical Measurement Error", International Biometric Conference, Victoria, Canada (07/2016)
- "Semiparametric Estimation of Path-Specific Effects in the Presence of Unmeasured Confounding and Exposure-Induced Confounding", Joint Statistical Meetings, Montreal, Canada (08/2013)

Posters

- 1. "The Central Role of the Mediator Process in Mediation Analysis", American Causal Inference Conference, Austin, TX (05/2023)
- 2. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", IMS New Researchers Conference, Baltimore, MD (07/2017)
- 3. "Causal Inference for a Single Group of Causally-Connected Units Under Stratified Interference", Atlantic Causal Inference Conference, Chapel Hill, NC (05/2017)
- "Semiparametric Estimation of Path-Specific Effects in the Presence of Unmeasured Confounding and Exposure-Induced Confounding", Atlantic Causal Inference Conference, Boston, MA (05/2013)

Campus Talks

- 1. "The central role of the mediator process in mediation analysis", Functional Data Analysis Working Group, Columbia University Department of Biostatistics, New York, NY (05/2023)
- 2. Panelist on "An (Un)Holy Union: Causal Inference, Semiparametric Statistics and Machine Learning in the Age of Data Science" by E.J. Tchetgen Tchetgen, Centennial Distinguished Speakers Seminar, Columbia University, New York, NY (02/2022)
- "Accounting for Measurement Error in a Study of the Total and Mediated Effects of Maternal Protein Intake and Lead Exposure on Birth Length", Levin Lecture Series, Columbia University, New York, NY (04/2020)

4. "Causal Inference in Partially-Observed Networks", Mailman School of Public Health School Assembly, Columbia University, New York, NY (10/2018)

- 5. "On Partial Identification of the Pure Direct Effect", Biostatistics Seminar Series, University of California, Berkeley Division of Biostatistics, Berkeley, CA (09/2015)
- 6. "Quantifying an Adherence Path-Specific Effect of Antiretroviral Therapy in the Nigeria PEPFAR Program", Harvard University Department of Biostatistics HIV Working Group Seminar, Boston, MA (02/2015)