Judith J. Lok, PhD.

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Place of Birth: Utrecht, The Netherlands
Citizenship: American and Dutch

Education

1995–2001 PhD in Mathematics. Specialization area: Statistics.
Free University of Amsterdam.
Thesis title: "Statistical modelling of causal effects in time". My dissertation studies the mathematical foundation behind continuous-time Structural Nested Distribution Models, and proves that, if there is no censoring, the resulting estimators are consistent and asymptotically normal. It also includes a general introduction to these models. Advisors: Prof. R.D. Gill (Utrecht University) and Prof. A.W. van der Vaart (Free University of Amsterdam).

1992–1993 Certificate in Probability and Statistics, an international Master's program.
Universities of Groningen, Nijmegen, and Utrecht.
For advanced masters students and masters graduates.

1989–1994 Doctoral examination (equivalent to MSc) in Mathematics with minors in Physics and Econometrics (cum laude). Specialization area: Statistics. Utrecht University.
Master's thesis title: "The NPMLE of the orientation distribution and a comparison of estimators of the length distribution in the line segment problem." Distribution functions are estimated on the basis of doubly-censored data. This method can be applied, for example, to waiting times in hospitals.

1988–1989 Undergraduate qualifying examination in Mathematics with minor in Physics (cum laude). Utrecht University.

Awards

2025	Mosteller Statistician of the Year, award given out yearly to one statistician by the Boston Chapter of the American Statistical Association (ASA) to "a distinguished statistician who has made exceptional contributions to the field of statistics and has shown outstanding service to the statistical community".
2024	R01 NIH, MPI with Prof. Donna Spiegelman, Yale. "Learn-As-you-GO (LAGO): An innovative adaptive design for multi-component intervention studies in cardiology and public health". 4-year award.
2023	Radcliffe Fellowship, to spend the 2023-2024 sabbatical at Harvard University's Radcliffe Institute for Advanced Study, to write the book "Causal Inference: A Statistics Playground".
2018	NSF, "Causal inference methods for mediation and comparisons of confidence regions". 3-year award.
2012	R01 from the NIH, Division of AIDS, "Methods to find and model predictors of the causal effect of HAART". 4-year award. 2 no-cost extensions.
2011	Career Incubator Fund Award from the Harvard School of Public Health.
2010	ANed Biometry Award from the Dutch branch of the International Biometrics Society, granted every two years to a Dutch author whose publication has contributed significantly to the development or application of biometry.
2010	Milton Fund Award for Harvard University faculty.
2005	"Talent"-fellowship of the Netherlands Organization for Scientific Research (Dutch National Science Foundation) for a stay of fifteen months starting August 2005 at the Departments of Epidemiology and Biostatistics, Harvard School of Public Health, Boston.
2001,03,05	Invited and received travel grants from Oslo University to present in the workshops "Event History Analysis", "Causality" and "Statistical analysis of complex event history data" in Oslo, Norway.
1995–2001	Graduate studies fellowship. Free University of Amsterdam, The Netherlands.
2001	Invited and received travel grant to present at the multidisciplinary workshop "Causal Inference" in Gent, Belgium.
2001	Invited and received travel grant to present at the multidisciplinary workshop "Causal Inference" in Snowbird, Utah.
1997	Travel grant of the Netherlands Organization for Scientific Research to visit the University of California at Berkeley.
1997	Invited and received travel grant from the Santa Fe Institute to attend the multidisciplinary workshop "Inferential problems in the analysis of treatment effects" in Santa Fe, New Mexico.

Professional Experience

2025–	Associate Director of Statistics, Boston University, Boston.
2024–	Professor of Mathematics and Statistics, Boston University, Boston.
2018–2024	Associate Professor of Mathematics and Statistics, Boston University, Boston.
2023–2024	Radcliffe Fellow, Harvard University's Radcliffe Institute for Advanced Study, Cambridge MA.
2018–2019	Adjunct Associate Professor of Biostatistics, Harvard TH Chan School of Public Health, Boston.
2013–2018	Associate Professor of Biostatistics, Harvard TH Chan School of Public Health, Boston.
2006–2013	Assistant Professor of Biostatistics, Harvard School of Public Health, Boston.
2005–2006	Visiting Scholar, Departments of Epidemiology and Biostatistics, Harvard School of Public Health, Boston, on a "Talent"-scholarship from the Netherlands Organization for Scientific Research (Dutch National Science Foundation).
2004–2005	Visiting Scholar at the Department of Mathematics, Utrecht University, The Netherlands (part-time).
2001–2003	Postdoctoral fellow in Medical Statistics, Leiden University Medical Center, The Netherlands. Primary responsibility: statistics consultation for physicians in medical studies. E.g., a project to compare 2 palliative radiotherapy treatments in patients with disseminated cancer; a project to compare physiotherapy once-daily versus twice-daily after CABG-surgery, etc. Secondary responsibility: teaching; course instructor for second-year Biomedical Science undergraduates and various computer lab sessions.
1995–2001	Teaching Assistant, Free University of Amsterdam. Held review sessions and office hours for undergraduate students for: Introduction to Statistics, Mathematical Statistics, Probability Theory, and Mathematics for Chemistry.
1998–1999	Mentor for the first-year mathematics college students, Free University of Amsterdam.
1997–1998	Member of the Employee's Committee of the Department of Mathematics and Computer Science, Free University of Amsterdam.

1994–1995 Full-time Researcher, Academic Medical Center (AMC) in Amsterdam. Primary responsibilities: (i) writing the analysis plan and statistical report of a multi-center clinical trial for FDA-registration of Fraxiparine, a medicine for thrombosis; (ii) writing the associated computer programs and leading their validation.
Secondary responsibilities: teaching, writing Standard Operating Procedures (ISO 9000) and statistical consultation for clinicians.

1993 Research Assistant, Academic Computer Center Utrecht. Implementation in Fortran of a standard set of basic routines for Fourier transforms on a supercomputer.

1991–1993 Teaching Assistant, Utrecht University. Held review sessions and office hours for Differential Equations and Analysis C for second year college students and for Linear Algebra for first year college students.

1990–1993 Student-member of the Mathematics Program Committee, consultative body for Utrecht University's mathematics education program.

1989–1990 Student representative at the Faculty Meetings of Mathematics and Computer Science (general consultative body), Utrecht University.

Journal Publications

1 Xiang Q.*, P. Sebastiani, T. Perls, S. Anderson, M. Barker, S. Ukraintseva, M. Thinggaard, **J.J. Lok** (2026). Estimating the cognitive side effects of statins using the survival-incorporated median: a summary measure for clinical outcomes in the presence of death. Accepted and selected as a discussion paper by *Biometrics*.

2 Kung K.*, N. Martin, J.J. Lok. Regression Not-to-the-Mean: An oddity of regression, illustrated with the risk of overdose deaths. Accepted by *Statistics In Medicine*.

3 Herrera V.L.M, K. Mahdaviani, J. Choi, S-H. Chen, E. Gunn, K. Stadnicki, A. Mortazavi-Zadeh, **J.J. Lok**, U. Tapan, N. Ruiz-Opazo. High pre-treatment levels of DEspR+ Neutrophil Extracellular Trap/NET-forming neutrophil subtype mark poor survival risk in patients with metastatic NSCLC on firstline combination chemo-immunotherapy. Accepted by *Frontiers in Immunology*.

4 Bing A.*, D. Spiegelman, D. Nevo, **J.J. Lok** (2025). Learn-As-you-GO (LAGO) trials: optimizing treatments and preventing trial failure through ongoing learning. *Biometrics* 81(2): ujaf061.

5 Chernofsky A.* and **J.J. Lok** (2025). Causal mediation analysis for time-to-event outcomes on the Restricted Mean Survival Time scale: A pseudo-value approach. *PloS ONE* 20(4): e0319074.

6 Xiang Q.*, **J.J. Lok**, N. Roth, S.L. Andersen, T.T. Perls, Z. Song, A.I. Yashin, J. Mengel-From, G.J. Patti, P. Sebastiani (2025). Causal mediation analysis of the neuroprotection of APOE2 through lipid pathways. *European Journal of Epidemiology* 40: 1469–1480.

7 **Lok J.J.** (2025). Invited Commentary: Influence of Incomplete Death Information on Cumulative Risk Estimates. *American Journal of Epidemiology* 194(2): 336-339.

8 **Lok J.J.** (2024). Optimal precision of coarse structural nested mean models to estimate the effect of initiating ART in early and acute HIV infection. *Journal of Causal Inference* 13: 20230078.

9 **Lok J.J**. (2024). How estimating nuisance parameters often reduces the variance (with consistent variance estimation). *Statistics In Medicine* 43(23): 4456-4480.

10 Chernofsky A.[1*], R.J. Bosch, **J.J. Lok** (2024). Causal mediation analysis with mediator values below an assay limit. *Statistics In Medicine* 43(12): 2299-2313.

11 Buchanan A., R.U. Hernández-Ramírez, **J.J. Lok**, S.H. Vermund, S.R. Friedman, L. Forastiere, D. Spiegelman (2024). Assessing Direct and Spillover Effects of Intervention Packages in Network-Randomized Studies. *Epidemiology* 35(4): 481-488.

12 Hernández-Ramírez R.U., D. Spiegelman, **J.J. Lok**, L. Forastiere, S.R. Friedman, C.A. Latkin, S.H. Vermund, A.L. Buchanan (2024). Overall, direct, spillover, and composite effects of components of a peer-driven intervention package on injection risk behavior

[1] *BU PhD student advisee.

among people who inject drugs in the HPTN 037 study. *AIDS and Behavior* 28(1): 225-237.

13 Xiang Q.*, R.J. Bosch, **J.J. Lok** (2023). The survival-incorporated median versus the median in the survivors or in the always-survivors: What are we measuring? And why? *Statistics In Medicine* 42: 5479–5490.

14 Herrera V., N. Bosch (co-first-author), **J.J. Lok** (co-first-author), M. Nguyen, K. Lenae, J. deKay, S. Ryzhov, D. Seder, N. Ruiz-Opazo, A. Walkey (2023). Circulating neutrophil extracellular trap (NET)-forming 'rogue'neutrophil subset, immunotype [DEspR+ CD11b+], mediate multi-organ failure in COVID-19—an observational study. *Translational Medicine Communications*, 8(1): 1-12.

15 Serrano-Villar S., K. Wu, P.W.Hunt, **J.J. Lok**, R. Ron, T. Sainz, S. Moreno, S.G. Deeks, R.J. Bosch. Predictive Value of CD8+ T cell and CD4/CD8 Ratio at Two Years of Successful ART (2022). *EBioMedicine* 80: 104072.

16 Nevo D.***, **J.J. Lok**, D. Spiegelman (2021). Analysis of "Learn-As-you-GO" (LAGO) Studies. *The Annals of Statistics* 49(2): 793-819.

17 **Lok J.J.** and R.J. Bosch (2021). Causal organic direct and indirect effects: closer to the original approach to mediation analysis, with a product method for binary mediators. *Epidemiology* 32(3): 412-420.

18 Banerjee R., L. Komarow, A. Virk, N. Rajapakse, A. Schuetz, B. Dylla, M. Earley, **J.J. Lok**, P. Kohner, S. Ihde, N. Cole, L. Hines, K. Reed, O. Garner, S. Chandrasekaran, A. de St. Maurice, M. Kanatani, J. Curello, R. Arias, W. Swearingen, S. B. Doernberg, R. Patel, for the Antibacterial Resistance Leadership Group (2021). Randomized Trial Evaluating Clinical Impact of RAPid IDentification and Susceptibility Testing for Gram Negative Bacteremia (RAPIDS-GN). *Clinical Infectious Diseases* 73(1): e39-e46.

19 Samartsidis P., N. Martin, V. De Gruttola, F. De Vocht, S. Hutchinson, **J.J. Lok**, A. Puenpatom, R. Wang, M. Hickman, D. De Angelis (2021). Evaluating the power of the causal impact method in observational studies of HCV treatment as prevention. *Statistical Communications in Infectious Diseases* 31(1).

20 Van Duin, D., C. Arias, …, **J.J. Lok**, …, R. Bonomo (2020). Molecular and Clinical Epidemiology of Carbapenem-Resistant Enterobacteriaceae in the United States: a Prospective Cohort Study. *Lancet Infectious Diseases* 20(6): 731-741.

21 Evans, S.R., Follmann, D., Liu, Y., Holland, T., Doernberg, S.B., Rouphael, N., Hamasaki, T., Jiang, Y., **Lok, J.J.**, Tran, T.T.T., Harris, A.D. (2019). Sequential, Multiple-Assignment, Randomized Trials for COMparing Personalized Antibiotic StrategieS (SMART-COMPASS). *Clinical Infectious Diseases*, *68*(11): 1961-1967.

22 **Lok J.J.**, S. Yang**, B. Sharkey*, M.D. Hughes (2018). Estimation of the Cumulative Incidence Function under multiple dependent and independent censoring mechanisms. *Lifetime Data Analysis* 24(2): 201–223.

23 Yang, S.** and **J.J. Lok** (2018). Sensitivity analysis for unmeasured confounding in coarse Structural Nested Mean Models. *Statistica Sinica* 28: 1703–1723.

24 Van Duin, D., **J.J. Lok**, M. Earley, E. Cober, S.S. Richter, F. Perez, R.A. Salata, R.C. Kalayjian, R.R. Watkins, Y. Doi, K.S. Kaye, V.G. Fowler, D.L. Paterson, R.A. Bonomo, S. Evans, for the Antibacterial Resistance Leadership Group (2017). Colistin vs. Ceftazidime-avibactam in the treatment of infections due to Carbapenem-resistant enterobacteriaceae infections. *Clinical Infectious Diseases* 66(2): 163-171.

25 Erlandson, K.M., D. Kitch, C.W. Wester, R. Kalayjian, E.T. Overton, J. Castillo-Mancilla, S.L. Koletar, C. Benson, T.B. Campbell, K. Robertson, **J.J. Lok** (2017). The impact of statin and ACE-inhibitor/Angiotensin Receptor Blocker therapy on cognitive function in adults with HIV infection. *Clinical Infectious Diseases* 65(12): 2042-2049.

26 Huvane, J., L. Komarow, C. Hill, T.T.T. Tran, C. Pereira, S.L. Rosenkranz, M. Finnemeyer, M. Early, H. Jiang, R. Wang, **J.J. Lok**, S.R. Evans for the Statistical and Data Management Center of the Antibacterial Resistance Leadership Group (ARLG) (2017). Fundamentals and catalytic innovation: the Statistical and Data Management Center of the Antibacterial Resistance Leadership Group. *Clinical Infectious Diseases* 64 (supplement 1): S18-S23. DOI: https://doi.org/10.1093/cid/ciw827.

27 **Lok, J.J.** (2017). Mimicking counterfactual outcomes to estimate causal effects. *The Annals of Statistics* 45(2): 461-499.

28 **Lok J.J**. (2016). Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible. *Statistics in Medicine* 35(22): 4008-4020.

29 **Lok J.J.** and M.D. Hughes (2016). Evaluating predictors of competing risk outcomes when censoring depends on time-dependent covariates, with application to safety and efficacy of HIV treatment. *Statistics in Medicine* 35(13): 2183-2194.

30 Yang, S.** and **J.J. Lok** (2016). A goodness-of-fit test for Structural Nested Mean Models. *Biometrika* 103 (3), 734-741.

31 Schnitzer M.E.**, **J.J. Lok******, R.J. Bosch (2016). Double robust and efficient estimation of a prognostic model for events in the presence of informative censoring. *Biostatistics* 17(1): 165-177.

32 Schnitzer M.E.**, **J.J. Lok******, S. Gruber (2016). Variable selection for confounder control, flexible modeling and collaborative Targeted Minimum Loss-based Estimation in causal inference. *The International Journal of Biostatistics* 12 (1): 97-115.

33 Kiragga A.N., **J.J. Lok**, B.S. Mesick, R.J. Bosch, A. Mwangi, K.K. Wools-Kaloustian, C.T. Yiannoutsos, for the East Africa IeDEA Regional Consortium (2014). CD4 trajectory adjusting for dropout among HIV-positive patients receiving combination antiretroviral therapy in an East African HIV care centre. *Jounal of the International AIDS Society* 17(1): 18957.

[2]*: HSPH PhD student advisee. **: postdoc on my R01. ***postdoc at HSPH.
[3]**: postdoc on my R01. **** I had been told that second author is better than last author on papers with 3 authors.

34 **Lok J.J.**, P.W. Hunt, A.C. Collier, C.A. Benson, M.D. Witt, A.E. Luque, S.G. Deeks, R.J. Bosch (2013). The impact of age on the prognostic capacity of CD8+ T-cell activation during suppressive antiretroviral therapy. *AIDS* 27(13): 2101–2110.

35 Smurzynski, M., K. Wu, J.T. Schouten, **J.J. Lok**, R.J. Bosch, B. Taiwo, V.A. Johnson, A.C. Collier (2013). Factors associated with remaining on initial randomized Efavirenz-containing regimens in the AIDS Clinical Trials Group. *AIDS* 27(12): 1887–1897.

36 **Lok J.J.** and V. DeGruttola (2012). Impact of time to start treatment following infection with application to initiating HAART in HIV-positive patients. *Biometrics* 68 (3): 745–754.

37 Ribaudo H.J., C.A. Benson, Y. Zheng, S.L. Koletar, A.C. Collier, **J.J. Lok**, M. Smurzynski, R.J. Bosch, B. Bastow, J.T. Schouten, for the ACTG A5001/ALLRT Protocol Team (2011). No risk of Myocardial Infarction associated with initial antiretroviral treatment containing Abacavir: short and long-term results from ACTG A5001/ALLRT. *Clinical Infectious Diseases* 52(7): 929–940.

38 **Lok J.J**., R.J. Bosch, C.A. Benson, A.C. Collier, G.K. Robbins, R.W. Shafer, M.D. Hughes (2010). Long-term increase in CD4+ T-cell counts during combination antiretroviral therapy for HIV-1 infection. *AIDS* 24 (12): 1867– 1876.

39 **Lok J.J.** (2008). Statistical modeling of causal effects in continuous time. *The Annals of Statistics* 36 (3): 1464–1507.

40 **Lok J.J.** (2007). Structural Nested Models and standard software: a mathematical foundation through partial likelihood. *Scandinavian Journal of Statistics* 34 (1): 186–206.

41 **Lok J.J.**, M.A. Hernán, J.M. Robins (2007). Optimal start of treatment based on time-dependent covariates. *Proceedings of the JSM*: 1149–1160.

42 **Lok J.J.**, R.D. Gill, A.W. van der Vaart, J.M. Robins (2004). Estimating the causal effect of a time-varying treatment on time-to-event using Structural Nested Failure Time Models. *Statistica Neerlandica* 58 (3): 271–295.

43 Van der Linden Y.M., **J.J. Lok**, E. Steenland, H. Martijn, H. van Houwelingen, C.A.M. Marijnen, J.W.H. Leer, Dutch Bone Metastasis Study Group (2004). Single fraction radiotherapy is efficacious: A further analysis of the Dutch Bone Metastasis Study controlling for the influence of retreatment. *International Journal of Radiation Oncology Biology Physics* 59 (2): 528–537.

44 Van der Linden Y.M., P.D.S. Dijkstra, H.M. Kroon, **J.J. Lok**, E.M. Noordijk, J.W.H. Leer, C.A.M. Marijnen (2004). Comparative analysis of risk factors for pathological fracture with femoral metastases - Results based on a randomised trial of radiotherapy. *Journal of Bone and Joint Surgery* (Br) 86B (4): 566–573.

45 Van der Peijl I.D., T.P.M. Vlieland, M.I.M. Versteegh, **J.J. Lok**, M. Munneke, R.A.E. Dion, (2004). Exercise therapy after coronary artery bypass graft surgery: A randomized

comparison of a high and low frequency exercise therapy program. *Annals of Thoracic Surgery* 77 (5): 1535–1541.

46 Van der Linden Y.M., H.M. Kroon, S.P.D.S. Dijkstra, **J.J. Lok**, E.M. Noordijk, J.W.H. Leer, C.A.M. Marijnen, Dutch Bone Metastasis Study Group (2003). Simple radiographic parameter predicts fracturing in metastatic femoral bone lesions: results from a randomised trial. *Radiotherapy and Oncology* 69 (1): 21–31.

47 Hettiarachi R.J.K., **J.J. Lok**, M.H. Prins, H.R. Büller, P. Prandoni (1998). Undiagnosed malignancy in patients with deep vein thrombosis – Incidence, risk indicators, and diagnosis. *Cancer* 83 (1): 180–185.

48 Mol B.W.J., **J.J. Lok**, W. Voorn, E. Pajkrt, J. van Lith, J. van der Meulen (1996). The diagnostic value of the triple test in the diagnosis of Down's syndrome. *Early human development* 45: Suppl S, S55–S58.

Submitted manuscripts

Lok J.J. and M. Schnitzer. Sex at birth could well be a biological coin toss.... Beware of conditioning on post-baseline information. http://arxiv.org/abs/2508.10240. Tentatively accepted by and resubmitted to *The American Statistician*.

Iberico L.* and **J.J. Lok**. Assessing the Effects of Credit Card Reward Programs in Peru via Regression Discontinuity. Revise and resubmit from *JRSS-A*.

Bui M.*, C. Longenecker, A. Bing*, D. Spiegelman, A.R. Webel, H.B. Bosworth, **J.J. Lok**. Addressing Confounding by Indication Through (Un)measured Center Characteristics in Learn-As-you-GO (LAGO) trials. http://arxiv.org/abs/2604.13276. Submitted to *Statistics In Medicine*. 2026 RISW Student Travel Award.

Herath V.*, R.J. Bosch, **J.J. Lok**. Indirect effect on viral suppression of an HIV curative treatment that reduces viral persistence: mediators subject to an essay limit and measurement error. http://arxiv.org/abs/2507.10984. Submitted to the *American Journal of Epidemiology*.

Spiegelman D., D. Xu, A. Bing*, G. Tong, M. Abdo, J. Cui, C. Goss, J. Baptist Kiggundu, C. Longenecker, L.E. Nelson, F. Semitala, X. Zhou, **J.J. Lok**. Optimizing Complex Health Intervention Packages through the Learn-As-you-GO (LAGO) Design. Submitted to the *British Medical Journal* (BMJ). arXiv 2026. arXiv:2603.06283v1.

Bing A.[4*], D. Spiegelman, **J.J. Lok**. Advances in Learn-As-you-GO (LAGO) Trials: Incorporating Both Outcome Goal and Power Constraints for Optimal Interventions. http://arxiv.org/abs/2509.11479. Submitted to *Biostatistics*.

[4]*: BU PhD student advisee.

Coverage in the media

Mentioned in *The National Geographic* August 2025, by Rachel Fairbank. “Are you destined to be a boy mom? Here's what the science says.”

National AIDS Treatment Advocacy Project 2016, by Mark Mascolini, “Each delayed month in starting ART could trim CD4 tallies substantially”.

http://www.natap.org/2016/CROI/croi_71.htm

AIDS Beacon 2010, by Caitlin McHugh and Courtney McQueen, “Study finds that CD4 counts are less likely to recover when antiretroviral therapy is started late”.

http://www.aidsbeacon.com/news/2010/11/03/study-finds-that-cd4-counts-are-less-likely-to-recover-when-hiv-aids-antiretroviral-therapy-is-started-late/

Work in Progress

Textbook: *Causal Inference: a Statistics Playground*. **Lok J.J.** 274 pages drafted as of 1/21/2026, and first 12 chapters plus 6 additional chapters ready.

Ansari S.*, M. Lavalley, S. Lodi, B. Hayward, G. Mottla, M. Mahony, and **J.J. Lok**. The causal effect of dynamic fertility treatment strategies on the probability of pregnancy: a novel application of marginal structural models (MSMs).

Lok J.J., A. Buchanan, D. Spiegelman. Marginal Structural Models for network-level interventions: the limiting variance is smaller with estimated weights.

Lok J.J. Demystified: double robustness with nuisance parameters estimated at rate n-to-the-1/4. https://arxiv.org/abs/2409.02320.

Bing A.*, D. Spiegelman, **J.J. Lok**. An R Package for Intervention Optimizations in Learn-As-you-GO (LAGO) Trials.

Lok, J.J. Asymptotic equivalence of confidence regions with application to Structural Nested Models.

Lok, J.J. Organic direct and indirect effects with post-treatment common causes of mediator and outcome. arXiv: http://arxiv.org/abs/1510.02753.

Lok, J.J., D. Ribadeau*, R.J. Bosch, C.T. Yiannoutsos. Inverse Probability of Censoring Weights under Missing Not At Random with application to CD4 outcomes and adherence in HIV positive patients in sub-Saharan Africa.

Syriopoulou, E., **J.J. Lok**, B.S. Musick, J.N. Martin, K.K. Wools-Kaloustian, C.T. Yiannoutsos. Adherence to combination antiretroviral therapy in sub-Saharan Africa: Estimation adjusted for non-random loss to program.

Yang, S. and **J.J. Lok**. Semiparametric efficient estimation of coarse Structural Nested Mean Models in the presence of informative censoring.

Lok, J.J. Parameterizing continuous-time Structural Nested Models.

Lok, J.J. Statistical modelling of causal effects with a time-dependent Cox model for treatment changes.

Lok, J.J., E.J. Tchetgen Tchetgen, R. Rebolledo. Causal mediation in survival analysis.

Lok, J.J., M.A. Hernán, J.M. Robins. Optimal start of ART treatment in HIV positive patients.

Other Writings

2025 eLetter in *Science Advances*. **Lok J.J.** and M. Schnitzer. Sex at birth could well be a biological coin toss.... Beware of conditioning on post-baseline information. https://www.science.org/doi/10.1126/sciadv.adu7402#elettersSection

2024 Reviewer report for Nature published (Reviewer 4, see supplementary, peer review) and name mentioned in article: Turner, Adrianna M., et al. "Rifaximin prophylaxis causes resistance to the last-resort antibiotic daptomycin." *Nature* 635.8040 (2024): 969-977.

2019 Contributed to overview paper on martingale-based methods of Gill, Aalen, Borgan …..

2002 Report on National study for the palliative effect of radiation with different radiation schemes for non-small-cell bronchus carcinoma. With J.C. van Houwelingen, G.W.P.M. Kramer, J.W.H. Leer et al.

2002 Obstetrical Mutual Quality Mirroring in primary care. Final report of the feasibility study methodology development (in Dutch). M.P. Amelink, **J.J. Lok**, P.M. Elferink-Stinkens, R. Brand. TNO-Report PG/JGD 2002.038.

2001 PhD-thesis: Statistical modelling of causal effects in time.

Membership of NIH study sections

Ad hoc member of special emphasis panel for the review of P01 cancer research grant proposals. Reviewed grant proposals, 1-day online meeting. January 2026.

Ad hoc member of the Analytics and Statistics for Population Research panel B (ASPB) study section. Reviewed 7 grant proposals, 2-day online meeting. November 2024.

Member of a special panel for NIH review. ICP1. March 2019.

Member of a special panel for the NIAID/NIH review of HIV P01 applications. December 2016.

Member of special panel for the NIAID/NIH review of the career development awards. 3 times.

Member of the NIH study section for the Fogarty international center. March 2016.

Reviewer for the NSF

Reviewed CAREER proposal for the Methodology, Measurement, and Statistics Program. November 2023.

Reviewed proposal for the Division of Civil, Mechanical and Manufacturing Innovation. November 2018.

Application review for Harvard University's Radcliffe Institute for Advanced Study. December 2024, December 2025.

Grants awarded

R01 NIH, MPI with Prof. Donna Spiegelman, Yale. "Learn-As-you-GO (LAGO): An innovative adaptive design for multi-component intervention studies in cardiology and public health". 4 years, ~10 months/year of BU PhD student support, ~2.5 months/year of my effort. NOA from the NIH to Yale 2/15/2024. 2/15/2024-1/30/2028.

R61/R33 NIH, co-I, PI: Prof. Victoria Herrera, Boston University Medical Center, Cardiovascular WCVI. Advancing a Prognostic and Monitoring Biomarker of Neutrophil-driven Secondary Brain Injury in Spontaneous Intracerebral Hemorrhage for Neurotherapeutics Development. 5 years, 0.6 months/year in years 1 and 2, 2.4 months/year in years 3, 4, 5. 12/1/2024-11/30/2029.

Supplement to 3 UH3 HL154501-03 PULESA, Co-I, PI Donna Spiegelman, Yale**. "Learn-As-we-GO (LAGO) in the HLB-Simple alliance to optimize implementation strategies for integrated HIV-cardiometabolic prevention, screening and treatment".** 1 year, 6.0 months of PhD student support, 1.9 months of my effort. 9/8/2023-8/31/2024, extended -8/31/2025.

Radcliffe fellowship, Harvard University. To spend my 2023-2024 sabbatical at Harvard University's Radcliffe Institute for Advanced Study, to write the Statistics textbook *Causal Inference: A Statistics Playground*.

NSF grant, PI: "Causal inference methods for mediation and comparisons of confidence regions". 3 years plus 1 year extension: June 2018-May 2022. 1.15 months/year of my effort.

Sub-contract NIH grant Donna Spiegelman, Yale. "**New methods for the design and evaluation of large HIV prevention interventions".** For course buy-out spring 2019.

Grant from Merck, PI subcontract JJ Lok. Project PI: Natasha Martin, Infectious Disease Modeller, University of California in San Diego. "**Testing and comparing study designs for evaluating HCV treatment as prevention (TasP) impact in a real-world setting"**. 1 year. 100% of a postdoc, 10% of my effort, 5% of Victor DeGruttola's effort. Contract was signed by Merck and UCSD 11/02/2017.

R01, PI: "Methods to find and model predictors of the causal effect of HAART". 50% of my effort, 5% of Victor De Gruttola, 5% of James Robins, 10% of Andrea Rotnizky, 20% of a programmer, and 40−50% of a postdoc (Shu Yang, 2 years full-time, and Mireille Schnitzer, 1 year full-time). Granted April 2012, for 4 years.

Input to DACS (project proposal for the Aids Clinical Trials Group (ACTG)), Co-I, for 0.75 calendar months of my time in 2014: "Statins and cognitive function in persons with HIV-infection". Granted Summer 2013.

DACS (project proposal for the ACTG), PI: "Predictors of clinical events and long-term immune reconstitution after one year of successful ART in HIV positive patients", Judith Lok, Ron Bosch, Peter Hunt, Steven Deeks, Ann Collier, Constance Benson. For 30% of my effort, for 6 months. Granted by the AIDS Clinical Trials Group (ACTG) Summer 2011.

Grants awarded, continued:

Career Incubator Fund, PI: "Impact of timing of starting treatment following infection with application to initiating HAART in HIV positive patients". For 26% of my effort and 6% of programmer's effort, for 1 year. Granted April 2011.

Milton Fund, PI. For programmer for 1 year 25% effort. Granted for calendar year 2010.

Input to Steve Lagakos' (now Michael Hughes's) NIH R01 grant, 5 years, 2011-2016, Co-I. Granted.

Pending grants:

UG NIH, co-I, PI: Prof. Victoria Herrera, Boston University Medical Center, "Targeted inhibition of 'rogue' neutrophil-mediated secondary brain injury using a humanized anti-DEspR antibody as novel therapy in spontaneous intracerebral hemorrhage (sICH)". 5 years, 0.6 months/year. 4/1/2025-3/31/2030. Pending, provided Other Support upon request.

Presentations

Aug 2026 Joint Statistical Meetings (JSM), Boston MA. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (topic contributed).

Aug 2026 93rd Department of Research and Innovation (DRI) Seminar, Kamuzu University of Health Sciences, Blantyre Malawi. "Causal Inference: a Statistics Playground".

May 2026 Society for Clinical Trials Annual Meeting, Phoenix AZ. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Feb 2026 Brown University Causal Inference Working Group, Providence RI. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Jan 2026 Icahn School of Medicine at Mount Sinai, New York NY (online). "Causal mediation analysis and the promise of α-DEspR$_2$, a preclinical potential COVID-19 treatment in the ICU" (invited).

Dec 2025 Princeton University Quantitative Social Science Colloquium, Princeton NJ. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Nov 2025 11th Annual Meeting on Current Developments in Cluster Randomised Trials and Stepped Wedge Designs, Birmingham, UK (online). "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure".

Oct 2025 Yale University Center for Implementation Science Seminar, New Haven CT. "Causal mediation analysis and the promise of α-DEspR$_2$, a preclinical potential COVID-19 treatment in the ICU" (invited).

Oct 2025 International Biometrics Society (IBS) Journal Club (online). "Learn-As-you-GO (LAGO) optimizing treatments and preventing trial failure through ongoing learning" (invited).

Oct 2025 University of Alabama in Birmingham Department of Biostatistics Seminar (online). "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Oct 2025 Conference in honor of the 70th birthday of Prof. Spiegelman, New Haven CT. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Sep 2025 Yale University Mediation Working Group (online). "A comparison of natural, pure, separable, randomized, and organic direct and indirect effects, and the approach by Baron and Kenny" (invited).

Aug 2025 Joint Statistical Meetings (JSM), Nashville TN. "Causal mediation analysis and the promise of α-DEspR, a preclinical potential COVID-19 treatment in the ICU" (invited).

Aug 2025 Joint Statistical Meetings (JSM), Nashville TN. Herath V. [5], R.J. Bosch, J.J. Lok. "Indirect effect on viral suppression of an HIV curative treatment that reduces viral persistence: mediators subject to an essay limit and measurement error" (speed presentation and poster).

Jul 2025 Centre for Infectious Disease Research in Zambia, Lusaka, Zambia. "Learn-As-you-GO (LAGO) and the TASKPEN LAGO Stage 1 Optimization".

Jul 2025 University of Zambia, Lusaka, Zambia. "Causal Inference: A Statistics Playground".

Jun 2025 New England Statistics Symposium (NESS), New Haven CT. "Causal mediation analysis and the promise of α-DEspR, a preclinical potential COVID-19 treatment in the ICU" (invited).

May 2025 Lifetime Data Science Conference (LIDS), New York City. "The promise of curative HIV treatments based on their indirect effects over time, without on-treatment outcome data" (invited).

Mar 2025 Statistics Seminar, Vanderbilt University (online). "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Mar 2025 Statistics Seminar, University of Massachusetts Amherst, Amherst MA. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Nov 2024 Statistics Seminar, University of Rhode Island, Providence RI. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Nov 2024 Yale University, New Haven CT. "Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial to prevent trial failure" (invited).

Aug 2024 Joint Statistical Meetings (JSM), Portland, OR. "The adaptive Learn-As-you-GO (LAGO) design for multi-stage intervention studies" (topic contributed).

Feb 2024 Radcliffe Institute for Advanced Study, Harvard University, public in-person lecture, Cambridge MA. "Causal Inference: A Statistics Playground". Link to recording: https://www.radcliffe.harvard.edu/event/2024-judith-lok-fellow-presentation-virtual

Dec 2023 Harvard Technology Assessment Seminar, Harvard University. "The survival-incorporated median versus the median in the survivors or in the always-survivors: What are we measuring? And why?" (invited).

[5] BU PhD student advisee.

Dec 2023 Interactive Causal Learning Conference, Boca Raton, FL. "Marginal Structural Models for network-level interventions: the limiting variance is smaller with estimated weights" (invited).

Nov 2023 Research On Tap, Health Data Science, Boston University. "Causal mediation analysis and the promise of a potential COVID-19 treatment" (invited).

Oct 2023 Levin Lecture Series Colloquium Seminars, Department of Biostatistics, Columbia University, New York NY. "Causal organic indirect and direct effects: closer to Baron and Kenny and enabling estimation of indirect effects without on-treatment outcome data" (invited).

Aug 2023 Joint Statistical Meetings (JSM), Toronto, Canada. "A comparison of natural, pure, separable, randomized, and organic direct and indirect effects, and the approach by Baron and Kenny" (invited).

Jul 2023 International Chinese Statistical Association (ICSA), Chengdu, Sichuan, China, hybrid. "Marginal Structural Models for network-level interventions: the limiting variance is smaller with estimated weights" (invited).

Jun 2023 New England Statistics Symposium (NESS), Boston MA. "How estimating nuisance parameters such as the propensity score in causal inference can reduce the variance (with consistent variance estimation)" (invited).

May 2023 Lifetime Data Science Conference (LIDS), Raleigh NC. "The survival-adjusted median versus the median in the survivors or in the always-survivors: What are we measuring? And why?" (invited).

Oct 2022 Fall Eastern Sectional Meeting of the American Mathematical Society, UMass Amherst, Amherst, MA. "Causal organic indirect and direct effects: closer to Baron and Kenny, and enabling estimation of indirect effects without on-treatment outcome data" (invited).

Aug 2022 Joint Statistical Meetings (JSM), Washington DC. "How estimating nuisance parameters often reduces the variance (with variance correction)" (invited).

Jun 2022 First International Workshop on Interactive Causal Learning, Washington DC. "Causal Organic Indirect and Direct Effects: Closer to Baron and Kenny, and Related to Surrogate Outcomes" (invited).

Mar 2022 Easter North American Region (ENAR). Qingyan Xiang[6] and Judith Lok. "Estimation and regression of the survival-incorporated median: a summary measure for outcomes in the presence of death".

Nov 2021 Career panel for the BU Data Science Organization. Panel member.

Oct 2021 HIV Working Group, Harvard TH Chan School of Public Health. "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators," Judith Lok and Ron Bosch (invited).

[6] BU PhD student advisee.

Oct 2021 New England Statistics Symposium (NESS). Qingyan Xiang[7], Ron Bosch and Judith Lok. "From truncation by death to the survival-incorporated median: a summary measure for outcomes in the presence of death".

Sep 2021 Boston University Department of Economics, Boston MA. "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators" (invited).

Aug 2021 Joint Statistical Meetings (JSM), Seattle (online). "Organic indirect effects: a product method for binary mediators, with application to selection of potential HIV cures into clinical trials" (invited).

Mar 2021 Easter North American Region (ENAR). Ari Chernofsky* and Judith Lok. "Causal mediation analysis with an interval censored outcome".

Mar 2021 Easter North American Region (ENAR). Qingyan Xiang*, Ron Bosch and Judith Lok. "From truncation by death to the survival-incorporated median: a summary measure for outcomes in the presence of death".

Feb 2021 Boston University Statistics and Probability Seminar. "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators."

Feb 2021 University of Florida Department of Statistics. "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators" (invited).

Jan 2021 Center for Causal Inference Seminar, University of Pennsylvania. "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators" (invited).

Dec 2020 Symposium Adjusting non-COVID-19 clinical trials in the era of the pandemic: statistical design and analysis, Hariri Institute of Computing, Boston University (150 attendees). "Adaptive design and causal methods– ready-made solutions?" (invited).

Oct 2020 Boston University Statistics and Probability Seminar. Kelly Kung*, Leo Beletsky, Natasha Martin and Judith Lok. "The Causal Effect of Drug-Induced Homicide Prosecutions Reported in Media on Drug Overdose Deaths".

Sep 2020 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, online (COVID). "Estimation of the Cumulative Incidence Function Under Multiple Dependent and Independent Censoring Mechanisms, with application to safety and efficacy of HIV treatment" (invited).

[7] BU PhD student advisee.

Sep 2020 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, online (COVID). Ari Chernofsky*, Judith Lok, Ron Bosch. "Evaluating the Promise of a Hypothetical HIV Curative Treatment using Organic Indirect Effects with Mediator Values Below an Assay Limit" (poster).

Aug 2020 Online causal inference seminar (150 attendees). "Causal organic indirect and direct effects: closer to Baron and Kenny, with a product method for binary mediators" (invited).

Aug 2020 Joint Statistical Meetings (JSM), Philadelphia, online (COVID). "Truncation by death and the survival-adjusted median: from missing data to useful summary measures" (topic contributed).

Aug 2020 Joint Statistical Meetings (JSM), Philadelphia, online (COVID). Ari Chernofsky*, Judith Lok, Ron Bosch. "Organic Direct and Indirect Effects with Mediator Values Below an Assay Limit".

Aug 2020 Joint Statistical Meetings (JSM), Philadelphia, online (COVID). Kelly Kung*, Leo Beletsky, Natasha Martin and Judith Lok. "The Causal Effect of Drug-Induced Homicide Prosecution Media Reports on Drug Overdose Deaths Using a Difference-in-differences-like Approach" (poster).

Jun 2020 The College on Problems of Drug Dependence (CPDD). Kelly Kung*, Leo Beletsky, Natasha Martin and Judith Lok. "Analysis of Drug Induced Homicide Prosecutions as a Drug Overdose Prevention Measure".

Jul 2019 Joint Statistical Meetings (JSM), Denver. "Marginal Structural Models for a continuous outcome when the risk of death depends on treatment" (invited).

Jun 2019 Statistics conference in honor of Aad van der Vaart, Leiden, The Netherlands. "Causal organic direct and indirect effects: closer to Baron and Kenny" (invited).

May 2019 Applied Quantitative Methods Workshop, Department of Health Law, Policy & Management Statistics, Boston University. "Causal organic direct and indirect effects: closer to Baron and Kenny" (invited).

May 2019 Biostatistics Lunchtime Seminar, Boston University. "Causal organic direct and indirect effects: closer to Baron and Kenny" (invited).

May 2019 ASRM (conference of the American Society for Reproductive Medicine), Philadelphia. "The causal effect of dynamic fertility treatment strategies on the probability of pregnancy: a novel application of marginal structural models (MSMs)". Soudeh Ansari[8], Michael Lavalley, Sara Lodi, Brooke Hayward, Gilbert Mottla, Mary Mahony, and fiJudith Lok (poster).

April 2019 Causal Inference Seminar, Johns Hopkins University. "Causal organic direct and indirect effects: closer to Baron and Kenny" (invited).

[8] BU PhD student advisee.

Feb 2019 HIV Working Group, Harvard TH Chan School of Public Health. "Assessing Individual and Disseminated Causal Package Effects in Network HIV Treatment and Prevention Trials". Joint with Ashley Buchanan (invited).

Oct 2018 Department of Epidemiology, Boston University School of Public Health. "The G-computation Formula" (invited).

Jul 2018 "Synthetic controls to estimate the effect of HCV treatment on HCV prevalence in people who inject drugs". Group meeting, University of Cambridge, MRC Biostatistics Unit, Cambridge, UK.

Jul 2018 Joint Statistical Meetings (JSM), Vancouver, Canada. "Causal Organic Direct and Indirect Effects: Closer to Baron and Kenny" (invited).

Mar 2018 ENAR Spring Meeting, Atlanta, GA. "The adaptive "Learn-As-you-GO" design for multi-stage intervention studies" (invited).

Mar 2018 Conference on Retroviruses and Opportunistic Infections (CROI), Boston, MA. "Adherence to combination antiretroviral therapy (ART) in Sub-Saharan Africa" (poster).

Dec 2017 Center for Biostatistics in AIDS Research, Harvard TH Chan School of Public Health. "Inverse Probability Weighting methods in observational studies: What are they?" Joint with Ron Bosch (invited).

Sep 2017 Workshop "Statistical Theory and the Real World", Lorentz Center, Leiden University, The Netherlands. "Estimation of coarse Structural Nested Mean Models with application to initiating ART in HIV positive patients" (invited).

Jul 2017 Joint Statistical Meetings, Baltimore, MD. "Organic direct and indirect effects with post-treatment common causes of the mediator and the outcome" (invited).

Apr 2017 HIV Working Group, Harvard TH Chan School of Public Health. "Estimation of coarse Structural Nested Mean Models with application to initiating ART in HIV positive patients".

Mar 2017 Department of Mathematics and Statistics, Boston University. "Estimation of coarse Structural Nested Mean Models with application to initiating ART in HIV positive patients".

Mar 2017 ENAR Spring Meeting, Washington, DC. "Mimicking counterfactual outcomes to estimate causal effects" (invited).

Nov 2016 Q-GRID Working Group, Harvard TH Chan School of Public Health. "RAPIDS-GN: relative impact of rapid identification and susceptibility testing for Gram negative bacteremia and bacteremia-focused antimicrobial stewardship on antibiotic use and clinical outcomes".

Nov 2016 Design Review for Center for Biostatistics in AIDS Research, Harvard TH Chan School of Public Health. "RAPIDS-GN: relative impact of rapid identification and susceptibility testing for Gram negative bacteremia and bacteremia-focused antimicrobial stewardship on antibiotic use and clinical outcomes".

Nov 2016 Adaptive Designs Working Group, Harvard TH Chan School of Public Health. "Learn-as-you-go" (3 presentations).

Oct 2016 Women in Statistics and Data Science Conference, Charlotte, NC. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible". And, member of a panel on mentoring (invited).

June 2016 Frontiers in Applied and Computational Mathematics Conference, New Jersey Institute of Technology. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible" (invited).

Apr 2016 Faculty Meeting, Department of Biostatistics, Harvard TH Chan School of Public Health. "Evaluating predictors of competing risk outcomes when censoring depends on time-dependent covariates, with application to safety and efficacy of HIV treatment".

Apr 2016 HIV Working Group, Harvard TH Chan School of Public Health. "Evaluating predictors of competing risk outcomes when censoring depends on time-dependent covariates, with application to safety and efficacy of HIV treatment".

Mar 2016 ENAR Spring Meeting, Austin, TX. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible".

Mar 2016 Conference on Retroviruses and Opportunistic Infections (CROI), Boston, MA. "The impact of each month of delay in HAART initiation on CD4 count after 1 year of treatment: new causal methods increase the usefulness of observational data". S. Yang* , S Little, D Smith, V DeGruttola, and JJ Lok (poster).

Mar 2016 Conference on Retroviruses and Opportunistic Infections (CROI), Boston, MA. "Statin or ACE/ARB effects on neurocognitive function of HIV-infected adults". KM Erlandson, D Kitch, CW Wester, R Kalajian, ET Overton, J Castillo-Mancilla, SL Koletar, C Benson, K Robertson, and JJ Lok (poster).

Nov 2015 NIH workshop "Infectious Diseases Research: Quantitative Methods and Models in the Era of Big Data", Bethesda, MD. "Estimation of coarse Structural Nested Mean Models (SNMMs) with application to initiating HAART in HIV positive patients" (poster).

Oct 2015 Applied Statistics Seminar, Institute for Quantitative Social Sciences, Harvard University. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible" (invited).

[9]* Postdoc on my R01.

May 2015 Atlantic Causal Inference Conference, Philadelphia. "Choice of optimal estimators in Structural Nested Mean Models with application to initiating HAART in HIV positive patients after varying duration of infection" (invited).

Apr 2015 Johns Hopkins School of Public Health, Biostatistics Seminar. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible" (invited).

Apr 2015 Faculty Meeting, Department of Biostatistics, Harvard School of Public Health. "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya".

Apr 2015 HIV Working Group, Harvard School of Public Health. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible".

Oct 2014 Epi Resources Working Group, Center for Biostatistics in AIDS Research, Harvard School of Public Health. "Inverse Probability of Censoring Weighting for a prediction model when a baseline covariate is not always measured", Tassiopoulos, K and JJ Lok (joint presentation).

Mar 2015 ENAR Spring Meeting, Miami. "Inverse Probability of Censoring Weights under Missing Not At Random with application to CD4 outcomes in HIV positive patients in Kenya" (invited).

Aug 2014 Joint Statistical Meetings, Boston. "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya" (invited).

Jul 2014 Visiting Faculty Workshop, Department of Biostatistics, Harvard School of Public Health. "Inverse Probability of Censoring Weights under Missing Not At Random with application to HIV positive patients in Kenya".

May 2014 Atlantic Causal Inference Conference, Providence, RI. "Defining and estimating causal direct and indirect effects when setting the mediator to specific values is not feasible" (poster and oral presentation).

May 2014 HIV Working Group, Department of Biostatistics, Harvard School of Public Health. "Statins and cognitive function in persons with HIV infection", JJ Lok, K Erlandson, C Benson, S Koletar, T Overton, T Campbell, K Robertson, K Wu, and D Kitch.

Apr 2014 Université de Montréal, Faculty of Pharmacy, Medication in Public Health. "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya" (invited).

Mar 2014 ENAR, Baltimore. "Predicting probabilities of competing risk outcomes under informative censoring, with application to safety and efficacy of initial ART in HIV positive patients".

Feb 2014 Faculty Meeting, Department of Biostatistics, Harvard School of Public Health. ""Organic" direct and indirect effects".

Nov 2013 Causal Inference Working Group, Departments of Epidemiology and Biostatistics, Harvard School of Public Health. "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya".

Aug 2013 Joint Statistical Meetings, Montreal, Canada. "Defining and estimating causal direct and indirect effects: an intervention based approach".

Apr 2013 HIV Working Group, Department of Biostatistics, Harvard School of Public Health. "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya".

Mar 2013 Conference on Retroviruses and Opportunistic Infections (CROI), Atlanta. "The prognostic capacity of CD8 T cell activation during effective antiretroviral therapy (ART) is attenuated by age" (poster).

Feb 2013 Statistical Methods in Epidemiology Working Group, Department of Biostatistics, Harvard School of Public Health. "Defining and estimating causal direct and indirect effects: an intervention based approach".

Dec 2012 Causal Inference Working Group, Departments of Epidemiology and Biostatistics, Harvard School of Public Health. "Defining and estimating causal direct and indirect effects: an intervention based approach".

Oct 2012 McGill Department of Biostatistics and Epidemiology, Montreal, Canada. "Defining and estimating causal direct and indirect effects: an intervention based approach" (invited).

June 2012 ICSA, Boston. "Careful selection of surrogate outcomes with application to predictors of clinical events in HIV positive patients" (invited).

Apr 2012 ENAR Spring Meeting, Washington DC. "Choice of optimal estimators in Structural Nested Mean Models with application to initiating HAART in HIV positive patients after varying duration of infection".

Apr 2012 ENAR Spring Meeting, Washington DC. "An AIPCW estimator of the Cumulative Incidence Function under multiple competing censoring mechanisms" (poster). Sharkey, B* , MD Hughes and JJ Lok.

Jan 2012 University of Rochester, Department of Biostatistics. "Choice of optimal estimators in Structural Nested Mean Models with application to initiating HAART in HIV positive patients after varying duration of infection" (invited).

[10]* HSPH PhD student advisee.

Apr 2011 HIV Working Group, Department of Biostatistics, Harvard School of Public Health. "Choice of optimal estimators in Structural Nested Mean Models with application to initiating HAART in HIV positive patients after varying duration of infection".

Jan 2011 Symposium "Causal Inference", Dutch IBS, Amsterdam. "Impact of timing of starting treatment following infection with application to initiating HAART in HIV positive patients" (invited).

Apr 2010 Causal Inference Working Group Meeting, Harvard School of Public Health. "Impact of timing of starting treatment following infection with application to initiating HAART in HIV positive patients".

Dec 2009 HIV Working Group, Department of Biostatistics, Harvard School of Public Health. "Impact of timing of starting treatment following infection with application to initiating HAART in HIV positive patients".

Jun 2009 AIDS Clinical Trials Group meeting (ACTG), Washington DC. "Inverse Probability Weighting methods in observational studies: What are they?" Lok, JJ and RJ Bosch (plenary session).

Apr 2009 HIV working group, Department of Biostatistics, Harvard School of Public Health. "Long-term CD4 responses to potent antiretroviral treatment (ART): an ALLRT (ACTG Longitudinally Linked Randomized Trial) database analysis". Lok, JJ and RJ Bosch.

Apr 2009 Freeman Symposium of the Harvard School of Public Health. "Long-term CD4 responses to potent antiretroviral treatment (ART): an ALLRT (ACTG Longitudinal Linked Randomized Trial) database analysis". Lok, JJ, RJ Bosch, CA Benson and MD Hughes (poster).

Apr 2009 Poster and Exhibit Day of the Harvard School of Public Health. "Longterm CD4 responses to potent antiretroviral treatment (ART): an ALLRT (ACTG Longitudinal Linked Randomized Trial) database analysis". Lok, JJ, RJ Bosch, CA Benson and MD Hughes (poster).

Mar 2009 13th International Workshop on HIV Observational Databases. "Long-term CD4 responses to potent antiretroviral treatment (ART): an ALLRT (ACTG Longitudinal Linked Randomized Trial) database analysis". Lok, JJ, RJ Bosch, CA Benson and MD Hughes (poster).

Feb 2009 Johns Hopkins, Department of Biostatistics. "Optimal start of treatment based on time–dependent covariates" (invited).

Apr 2008 Harvard Applied Statistics Workshop. "Optimal start of treatment based on time-dependent covariates" (invited).

Apr 2008 HIV working group, Department of Biostatistics, Harvard School of Public Health. "Optimal Start of HAART based on time-dependent covariates like CD4 count".

Mar 2008 ENAR Spring Meeting, Arlington, Virginia. “Mimicking counterfactual outcomes to avoid deterministic treatment effects” (invited).

Mar 2008 University of Washington, Seattle, Statistics seminar. “Optimal start of treatment based on time-dependent covariates”.

Mar 2008 Portland State University, Statistics Colloquium. “Optimal start of treatment based on time-dependent covariates” (invited).

Feb 2008 Boston University, Biostatistics Seminar. “Long-term CD4 responses to combination HIV therapy: handling loss-to-followup via Inverse Probability Weighting”. Lok, JJ and RJ Bosch (invited).

Feb 2008 ALLRT scientific meeting, Harvard University. “Long-term CD4 responses to combination HIV therapy: handling loss-to-followup via Inverse Probability Weighting”. Lok, JJ and RJ Bosch.

Jul 2007 Joint Statistical Meetings, Salt Lake City. “Optimal start of treatment based on time-dependent covariates”. Lok, JJ, MA Hernán and JM Robins (invited).

Jun 2007 Workshop “Challenges in Dynamic Treatment Regimes and Multistage Decision-Making”, SAMSI, North Carolina. “Statistical modelling of causal effects in continuous time” (invited poster).

Jul 2006 International Biometrics Conference, Montreal. “Statistical modelling of causal effects in continuous time” (poster).

Apr 2006 Department of Ambulatory Care and Prevention, Harvard University. “Statistical modeling of causal effects in continuous time” (invited).

Mar 2006 Channing Laboratory, Harvard University. “Statistical modeling of causal effects in continuous time” (invited).

Jan 2006 Biostatistics Colloquium, Harvard School of Public Health. “Statistical modeling of causal effects in continuous time” (invited).

Jan 2006 Mathematics Colloquium, Northeastern University, Boston. “Statistical modeling and estimation of causal effects in continuous time” (invited).

Sept 2005 Workshop “Statistical Analysis of Complex Event History Data”, Oslo, Norway. “Structural Nested Models and standard software: a mathematical foundation through partial likelihood” (invited).

Nov 2003 Research Kitchen “Causality”, Oslo, Norway. “Counterfactual models and counting processes” (invited).

Nov 2002 Conference of the Dutch Organization for Medical Education. Dekker, FW, JJ Lok, H Putter and F Sman-de Beer. “Individual biostatistical computer exercises for large groups of students” (poster).

Jul 2002 International Biometrics Conference, Freiburg, Germany. “Statistical modelling of causal effects in time” (invited).

Apr 2002	The Netherlands Mathematics Conference. “Does treatment affect the outcome or did the physicians know more than we?” (invited).
Apr 2002	Medical Statistics, Leiden University. “Inverse Probability Weighting”.
Feb 2002	Stochastics colloquium, Utrecht University. “Statistical modelling of causal effects in time” (invited).
Oct 2002	Medical Statistics, Leiden University. “Equivalence studies”.
Nov 2001	Workshop “Event History Analysis”, Oslo, Norway. “Event history analysis: causal effects in time” (invited).
Mar 2001	Medical Statistics, Leiden University. “Statistical modelling of causal effects in time”.
Aug 2001	Workshop “Causal Inference”, Snowbird, Utah. “Statistical modelling of causal effects in time” (invited).
Jun 2001	Workshop “Causal Inference”, Gent, Belgium. “Statistical modelling of causal effects in time” (invited).
May 2001	Stochastics colloquium, University of Amsterdam. “Statistical modelling of causal effects in time” (invited).
Aug 1999	European Young Statisticians Meeting, Paris, France. “Treatment effect in the presence of time-varying covariates which predict treatment” (invited).
Aug 1998	22nd European Meeting of Statisticians, Vilnius, Lithuania. “Estimation of treatment effect in the presence of time-varying covariates which predict treatment”.
Apr 1998	Stochastics Colloquium, Technical University Delft. “Estimation of treatment effect in the presence of time-varying covariates which predict treatment” (invited).
1995–2001	Statistics Colloquium, Free University of Amsterdam; yearly presentations.
1995–2001	PhD-Colloquium, Free University of Amsterdam; yearly presentations.
Mar 1995	AMC hospital, Amsterdam. “Analysis of the Tasman Study”.
Sept 1994	Reading seminar at the AMC hospital, Amsterdam on Medical Epidemiology.
Dec 1994	Reading seminar at the AMC hospital, Amsterdam on Analysis of Repeated Measures.

Involvement in conference organization

Organized invited session for the Society for Clinical Trials 2026 Annual Meeting. Phoenix AZ. Title: "Statistical and Practical Issues in Implementation Trials". Speakers: Judith Lok: "Learn-As-you-GO (LAGO) to adapt the intervention in ongoing trials to optimize intervention packages and avoid failed trials". Erinn Hade (Columbia University): "Connecting the Estimand Framework to Implementation Science Trials". Donna Spiegelman, (Yale University): "Statistical design methodologies for Hybrid Type-2 studies". Discussant: Eve Nagler (Harvard University).

Organized topic contributed session for JSM 2026. Title: "Statistical Issues and Methods in Implementation Science". Speakers: Judith Lok, Erinn Hade (Columbia University), Donna Spiegelman, (Yale University), Laura Balzer (University of California Berkeley), Joseph Hogan (Brown University).

Co-organized conference in honor of Donna Spiegelman's 70th birthday. Yale University, October 3 & 4, 2025. Organized session on implementation science, co-organized conference.

Organized invited session for JSM 2025. Title: "What's new in causal mediation analysis?" Speakers and titles: Caleb Miles (Columbia University): "The central role of the mediator process in mediation analysis". Donna Spiegelman (Yale University): "Mediation analysis in the presence of spillover in pragmatic cluster randomized trials". Judith Lok: "Causal mediation analysis and the promise of a preclinical potential COVID-19 treatment in the ICU". Discussant: Ilya Shpitser (Johns Hopkins University).

Co-organized invited session for NESS 2025, New Haven Connecticut, together with Statistics PhD student advisee Vindyani Herath. Speakers: Judith Lok, Linda Valeri (Columbia University), Donna Spiegelman (Yale University), and Vindyani Herath.

Co-main organizer (with Shannon Stock, Holy Cross) of the New England Student Research Symposium on Statistics and Data Science. April 20 2024 (in person, at Boston University, CDS 1750 filled to capacity (100 people); keynote, 4 parallel sessions, lunch, career panel, 4 parallel sessions, poster session, social); November 7, 2020 (online, COVID); April 2, 2022 (online, COVID). The Boston Chapter of the ASA, in collaboration with the Boston University, Bentley College, and Tufts Student Chapters of the ASA, organizes a Student Research Symposium in Statistics and Data Science for the Greater Boston Area. The goal of these symposia is to create an opportunity for students to meet peers from other institutions, and to share research interests and career plans. BU PhD student advisees presented here: Vindyani Herath in 2024, Qingyan Xiang in 2020 and 2022, Ante Bing in 2020 and 2022, Kelly Kung in 2020.

Organized topic-contributed session for JSM 2024. Title: “Novel statistical methods to avoid failed trials”. Speakers: Melody Owen (Yale): “Statistical Design Methodologies for Hybrid Type 2 Studies”. Chris Harshaw (MIT & UC Berkeley): “Adaptive Neyman Allocation in Sequential Trials: An Online Optimization Perspective”. Bingkai Wang (University of Pennsylvania): “Model-robust inference for clinical trials that improve precision by stratified randomization and covariate adjustment”. Ambarish Chattopadhyay (Stanford University): “Balanced and robust randomized treatment assignments: the Finite Selection Model”. Judith Lok: “Learn-As-you-GO (LAGO) to adapt the intervention in an ongoing trial in the presence of center effects”.

Organized invited session for LIDS 2023. Title: “Estimands and survival analysis: what if more than one outcome is of interest?” Speakers and titles: Mireille Schnitzer (Université de Montreal): “Defining and estimating exposure effects on continuous or binary outcomes when the outcome is only measured at the failure time: an application of target trials in perinatal epidemiology”. Shu Yang (North Carolina State University): “Generalizable survival analysis of randomized clinical trials with observational studies”. Dean Follmann (NIH, Biostatistics Research Branch): “Semi-parametric approaches to ordered composite endpoints subject to censoring”. Judith Lok: “The survival-adjusted median versus the median in the survivors or in the always-survivors: What are we measuring? And why?”

Co-organized invited session for NESS 2023, Boston MA, together with my Statistics PhD student advisee Ante Bing. Title: “Innovative Statistical Methods in Implementation Science: Advancing Healthcare through Study Design, Analytical Approaches, and Real-World Applications”. Speakers: Donna Spiegelman (Yale), Natallia Katenka (University of Rhode Island). Jillian Strayhorn (New York University), Ante Bing (my Statistics PhD student advisee).

Co-organized invited session for NESS 2023, Boston MA, together with my Biostatistics PhD student advisee Qingyan Xiang. Title: “Estimands for Clinical Outcomes in the Presence of Truncation by Death: Challenges and Solutions”. Speakers: Daniel Scharfstein (University of Utah), Takuya Kawahara (Harvard Medical School), Marie-Abèle Bind (Harvard Medical School), Qingyan Xiang (my Biostatistics PhD student advisee).

Organized invited session for JSM 2022, Washington DC. Title: “Causal inference in the presence of nuisance parameters: latest developments”. Speakers and titles: Whitney Newey (MIT): “Automatic Debiased Machine Learning via Neural Nets for Generalized Linear Regression”, Andrea Rotnitzky (University of Washington): “Sequentially debiased estimation of identified total effects in causal graphical models with hidden variables”, Judith Lok: “How estimating nuisance parameters often reduces the variance (with variance correction)”. Discussant: Oliver Dukes.

Organized invited session for JSM 2021. Title: “Novel interventional approaches to causal mediation analysis: Theory and Practice”. Speakers and titles: Thomas Richardson (University of Washington): “An Interventionist Approach to Mediation Analysis”, Vanessa Didelez (University of Bremen): “Causal mediation and separable effects in survival analyses”, Judith Lok: “Organic indirect effects: A product method for binary mediators, with application to selection of potential HIV cures into clinical trials”. Discussant: Linda Valeri.

Organized invited session for ENAR 2018, Atlanta, GA. Title: "Novel clinical trial designs". Speakers and titles: Michael Rosenblum (Johns Hopkins): "Comparison of optimized, adaptive randomized trial designs that expand versus restrict enrollment criteria", John Kairalla (University of Florida): "Novel response adaptive allocations in factorial designs: a case study", Judith Lok: "The adaptive "learn-as-you-go" design for multi-stage intervention studies." Discussant: Susan Murphy.

IMS Chair for the 2017 ENAR Spring Meeting. Invited session organizers and titles: Rebecca Betensky (Harvard University; Analysis of time-to-event data subject to length-bias sampling or truncation), Lurdes Inoue (Washington University; EHR data and Bayesian analysis: The tail wagging the dog?), John Kairalla (University of Florida; Bringing Adaptive Trials into the Real World), Mireille Schnitzer (Université de Montréal; Data-adaptive modeling in causal inference), Jun Shao (University of Wisconsin; Integrative analysis of data from different sources), Donna Spiegelman (Harvard University; Advances in measurement error methods), Ana-Marie Staicu (North Carolina State University; Functional data with applications in biostatistics), Kean Ming Tan (Princeton University; Machine Learning and Massive Biological Data), Annie Qu (University of Illinois at Urbana Champaign; Heterogeneous modeling and individual learning in longitudinal data). Invited poster: Shu Yang (North Carolina State University; co-organizer sessions).

Organized invited session for JSM 2017, Baltimore, MD, together with Tyler VanderWeele. Title: "Mediation in the presence of post-treatment common causes of the mediator and the outcome". Speakers and titles: Caleb Miles: "Partial identification bounds and path-specific effects: two (more) options when faced with exposure-induced confounding", Stijn Vansteelandt: "Interventional effects for mediation analysis with multiple mediators", Sheng-Hsuan Lin: "Parametric mediational g-formula approach to mediation analysis with time-varying exposures, mediators, and confounders: an application for smoking, weight, and blood pressure", Judith Lok: "Organic direct and indirect effects with post-treatment common causes of the mediator and the outcome". Discussant: Linda Valeri.

Organized invited session for the Atlantic Causal Inference Conference 2015, University of Pennsylvania, Philadelphia, PA, together with my postdoc Shu Yang. Title: "New developments in Structural Nested Models, with medical applications". Speakers: Edward Kennedy, Judith Lok, Shu Yang, and Michael Wallace.

Organized invited session for JSM 2014, Boston, MA. Title: "Analyzing data that are Missing Not At Random, with medical applications". Speakers and titles: Aidan McDermoth: "Global sensitivity analysis for repeated measures studies with informative drop-out", Constantin Yiannoutsos and Constantine Frangakis: "Choosing profile doublesampling designs for survival estimation with application to PEPFAR evaluation", Judith Lok: "Inverse Probability of Censoring Weights under Missing Not At Random with application to long-term CD4 outcomes in HIV positive patients in Kenya". Discussant: James Robins.

Organized panel on "Where Causal Inference has Made a Difference" for the Atlantic Causal Inference Conference 2013, Cambridge, MA, together with James Robins. Panel discussed studies that have had (or should have had) an impact on policy; treatment policies, public policies, economic policies, education policies, business policies, etc. Speakers: Raj Chetty, Jasheet Sekhon, Alberto Abadie, and Miguel Hernán.

Organized symposium IBS-NL 2011, Amsterdam, The Netherlands. Organized symposium on Causal Inference together with Marianne Jonker, local organizer. On occasion of my winning the Dutch Biometry Award, for the Dutch branch of the International Biometrics Society, for my paper "Statistical modeling of causal effects in continuous time". Speakers: Saskia Le Cessie, Els Goetghebeur, Aad van der Vaart, Willem van der Wal, and Judith Lok.

Postdoc advising

Co-advising Jingyu Cui, postdoc at Yale University on LAGO R01 with MPIs Judith Lok and Donna Spiegelman (Yale University). 2025-

Supervised Daniel Nevo, postdoc on Donna Spiegelman's grant, jointly with Donna Spiegelman, at the Department of Biostatistics, Harvard University, Oct 2016–Jun 2018. Daniel is now Associate Professor of Statistics at Tel Aviv University, Israel.

Supervised Shu Yang, postdoc on my R01 at the Department of Biostatistics, Harvard University, Jul 2014–Jun 2016. Shu is now Professor of Statistics at North Carolina State University.

Supervised Mireille Schnitzer, postdoc on my R01 at the Department of Biostatistics, Harvard University, Jan 2013–Dec 2014. Mireille is now Professor of Biostatistics at the Université de Montréal.

PhD Student advising

Primary advisor of Vindyani Herath, PhD student Department of Mathematics and Statistics, Boston University, Jul 2022–

Primary advisor of Luis Iberico, PhD student Department of Mathematics and Statistics, Boston University, Aug 2022–

Primary advisor of Minh Bui, PhD student Department of Mathematics and Statistics, Boston University, Feb 2024–

Committee member Alick Sixpence, PhD student Department of Epidemiology, Boston University, Oct 2024–

Primary advisor of Ante Bing, PhD student Department of Mathematics and Statistics, Boston University, Sep 2019– graduation May 2025.

Primary advisor of Qingyan Xiang, PhD student Department of Biostatistics, Boston University, Jul 2019– graduation Aug 2023. Qingyan is now Assistant Professor of Biostatistics at Vanderbilt University.

PhD Student advising, continued

Third reader for Adrienne O'Donnell, PhD student Department of Biostatistics, Boston University, primary advisor Sara Lodi, Jul 2020– graduation Apr 2023.

Committee chair and fourth reader for Zihuan Qiao, PhD student Department of Mathematics and Statistics, Boston University, primary advisor Dan Sussman, graduation Jun 2022.

Primary advisor of Ari Chernofsky, PhD student Department of Biostatistics, Boston University, Apr 2019–graduation May 2022. Ari is now working for Novartis.

Co-primary-advisor (together with Dan Sussman) of Kelly Kung, PhD student Department of Mathematics and Statistics, Boston University, Dec 2018–graduation Jun 2022. Kelly is now working for Hewlett Packard.

Third reader for David Reynolds, PhD student Department of Mathematics and Statistics, Boston University, primary advisor Luis Carvalho, 2020–graduation Aug 2021.

Committee chair for Wenrui Li, PhD student Department of Mathematics and Statistics, Boston University, primary advisor Eric Kolaczyk, graduation May 2021.

Second reader of thesis and functioned as primary advisor on 2 of her 3 thesis papers: Soudeh Ansari Chaharsoughi, PhD student Department of Biostatistics, Boston University, primary advisor Mike Lavalley, Aug 2017–graduation May 2019. Soudeh is now working for Novartis.

PhD committee Dustin Ribadeau, Department of Biostatistics, Harvard TH Chan School of Public Health, primary advisor Rui Wang, 2018–graduation May 2020.

Independent study project with Dustin Ribadeau, PhD student Department of Biostatistics, Harvard University, spring 2018.

Primary advisor Brian Sharkey, PhD student Department of Biostatistics, Harvard University; secondary advisor Michael Hughes, graduation May 2013. Brian is now Associate Vice President, Head of Biostatistics at Loxo@Lilly.

Oral exam committee Abhishek Chakrabortty, Department of Biostatistics, Harvard University, primary advisor Tianxi Cai, 2014.

PhD committee Linda Valeri, primary advisor Tyler VanderWeele, Department of Biostatistics, Harvard University, graduation Jan 2013. Linda is now Assistant Professor of Biostatistics at Columbia University.

MS Student advising

Supervised Ante Bing, MS student Department of Biostatistics, Harvard TH Chan School of Public Health, May 2018– graduation Aug 2019.

Supervised thesis Yi Zhou (Zoe), MS 80 student Department of Biostatistics, Harvard University, graduation December 2015. Zoe went on to work as a biostatistician at Biostatistical Consulting Inc in Boston.

Course development at Boston University

MA 792: Causal Methods. Proposed PhD level course December 2025, approval in progress.

MA 592: Introduction to Causal Inference. I proposed, created, and am teaching this course for MS students and advanced undergraduates (PhD students welcome). MA 592 had 20 students in 2025, 14 students in 2023 (last-minute timing conflict with MSSP) and was full in 2021.

Teaching at Boston University

MA 592: Introduction to Causal Inference. Fall 2019, Fall 2021, Spring 2023, Spring 2025.

MA 575 Lab: Linear Models. Spring 2023, Spring 2026.

MA 214: Applied Statistics. Spring 2020, Spring 2021, Spring 2022, Fall 2022.

MA 581: Probability. Spring 2022.

MA 781: Estimation Theory. Fall 2020, Fall 2024. Core course for Statistics and Biostatistics PhD students.

MA 884: Introduction to Causal Inference. Seminar course for PhD students. Fall 2018.

Teaching at the Harvard TH Chan School of Public Health

BIO 244: Analysis of Failure Time Data, 8 times, since 2007. Elective for Biostatistics PhD students.

BIO 231: Inference 1, 4 times, 2015-2018. Core course for Biostatistics PhD students.

Summer courses proposed, organized and (co-) taught

July 2025: University of Zambia, Lusaka, Zambia. “Causal Inference: A Statistics Playground”. 2-day short course. Mornings: lectures. Afternoons: hands-on. ~50 students, from the Centre for Infectious Disease Research in Zambia (CIDRZ) and the University of Zambia.

June 2018: Organized Summer Short Course on Causal Inference at the Harvard TH Chan School of Public Health. All 134 paid spots were filled. Instructors: Miguel Hernán, Tyler VanderWeele, **Judith Lok** (Structural Nested Models), Eric Tchetgen Tchetgen, James Robins.

June 12-16, 2017: Initiated and organized Summer Short Course on Causal Inference at the Harvard TH Chan School of Public Health. All 73 paid spots and 2 spots for developing countries were filled. Instructors: Miguel Hernán, Tyler VanderWeele, **Judith Lok** (Structural Nested Models), Eric Tchetgen Tchetgen, James Robins.

Short courses at conferences:

Causal Mediation Analysis: The Old and the New. Together with Ilya Shpitser (Johns Hopkins University). NESS, Boston MA, June 2023.

Causal Inference: Structural Nested Mean Models. ENAR, Atlanta, GA, March 2018.

Other short courses:

June 8-12 2026, June 16-20 2025, June 3-7 2024: Summer Short Course on Causal Inference at the Harvard TH Chan School of Public Health. Instructors: Miguel Hernán, **Judith Lok** (Inverse Probability Weighting and Structural Nested Models), Tyler VanderWeele, Eric Tchetgen Tchetgen, James Robins. https://causalab.hsph.harvard.edu/courses/

June 20-23 2023 and June 21-24 2022: Summer Short Course on Causal Inference at the Harvard TH Chan School of Public Health. Instructors: Miguel Hernán, **Judith Lok** (Inverse Probability Weighting of Marginal Structural Models), Tyler VanderWeele, Eric Tchetgen Tchetgen, James Robins.

June 3-7 2019: Summer Short Course on Causal Inference at the Harvard TH Chan School of Public Health. All 156 spots were filled. Instructors: Miguel Hernán, Tyler VanderWeele, **Judith Lok** (Marginal Structural Models and Structural Nested Models), Eric Tchetgen Tchetgen, James Robins. https://www.hsph.harvard.edu/causal/shortcourse/.

November 22, 2019: Catalyst short course at the Harvard Medical School,
"Causal Inference with Structural Nested Models". **Judith Lok**. Fully subscribed, with 75 attendees. Lab developed jointly with Nathan Josephs, PhD student in Statistics, Boston University.
https://catalyst.harvard.edu/calendar/event/short-course-causal-inference-with-structural-nested-models-november-22/.

Guest lectures at Yale: Nov 11 2025, Nov 19 2024, Nov 14 2023, Nov 8 2022, and Oct 26 2021, invited by Donna Spiegelman: "Learn-As-you-GO (LAGO) Studies".

Guest lecture at MIT: Nov 16 2018, invited by Leo Anthony Celi: "Introduction to Causal Inference. Structural Nested Models or: SNMs".

Editorial responsibilities

Co-Editor of *Statistical Communications in Infectious Diseases (SCID)*. Jul 2015–.

Associate Editor of *Epidemiologic Methods.* Feb 2014–2020.

Committees at Boston University, Department of Mathematics and Statistics

Associate Director of Statistics (2025-2028)

Search Committee Senior Statistics Opening (2025-2026)

Statistics PhD Admissions Committee (2020-2021, 2025-2026)

MA 782 Course Focus Group Committee (Chair, 2026)

Focus Group on Applied Statistics Qualifying Exam (2026)

Mid-tenure Review Committee (2026)

Associate Director of Statistics, together with Dan Sussman (2024-2025)

Theory Qualifying Exam Committee (2021, 2025; created and graded the MA 781 questions)

500-599 level Statistics Courses Committee (Chair, 2025)

700-899 level Statistics Courses Committee (2025)

Search committee senior and junior statistics openings (2024-2025)

MA213/214 revamp steering committee (May 2024-)

2023-2024: full-year sabbatical

Assistant Professor of Statistics Search Committee (2021-2022 and 2022-2023)

Postdoc in Probability/Statistics Search Committee (2022-2023)

Mid-tenure Review Committee (2019, Chair 2023)

Webpage Committee Department of Mathematics and Statistics (2019–2023, chair, since 2021 co-chair with Tasso Kaper, constructing the new department webpage, since Sep 2022 active member)

Professor of the Practice of Statistics Search Committee (2021)

Statistics Postdoctoral Search Committee (2018–2019)

Statistics Assistant Professor Search Committee (2018–2019)

PhD Theory and Methods subcommittee (Chair, 2018–2019)

Other Committees at Boston University

Causal Inference Seminar organizer (with Sara Lodi and Fatema Shafie Khorassani, Biostatistics); monthly seminar (Jan 2019–May 2023, restarted after sabbatical Sep 2024–)

Faculty Advisor BUSCASA, the BU Student Chapter of the American Statistical Association, with statistics and biostatistics PhD students leading (2019–2025)

Causal Inference Working Group faculty organizer; joint with Sara Lodi (Biostatistics) and Matt Fox (Epidemiology), with PhD students leading (Feb 2021–May 2022)

Biostatistics Curriculum Task Force (2020)

Committees at the Harvard TH Chan School of Public Health

Qualifying Exam Committee (Chair, three times)
Professional Development Committee
Reviewed admissions for Summer Program in Biostatistics & Computational Biology 2016
Curriculum Committee
Degree Program Committee
PhD Admissions Committee
Student Advising Committee
Search Committee for a new junior faculty member in Biostatistics/HIV, 2008-2009
Webpage Committee
Library Committee
Faculty Development Committee
Faculty Development Website Committee

Other service to Harvard University

Member of the Board of Directors of Peabody Terrace Children's Center, Sep 2011 – Sep 2013.

Refereeing

Nature
JASA Theory and Methods
The Annals of Statistics
Biometrics
Biometrika
Journal of the Royal Statistical Society-B
Journal of the Royal Statistical Society-A
Statistics in Medicine
Biostatistics
Bernouilli
Annals of Applied Statistics
Scandinavian Journal of Statistics
UAI 2021 (Association for Uncertainty in Artificial Intelligence)
Epidemiology
American Journal of Epidemiology

Journal of Causal Inference
Journal of Acquired Immune Deficiency Syndroms (JAIDS)
Statistica Sinica
Clinical Infectious Diseases
Lifetime Data Analysis
Biometrical Journal
Plos One
Epidemiology
Social and Personality Psychology Compass
Journal of Antimicrobial Chemotherapy
Statistical Methods in Medical Research
Center for Biostatistics in AIDS (CBAR) review

Computer Skills

Statistics	SAS, R, SPSS.
Mathematics	Mathematica, Mathcad, Maple, Matlab.
Text	Latex, Overleaf, Word, Emacs, Winedt.
Languages	Pascal and Fortran 77.

Membership of Professional Organizations

Institute of Mathematical Statistics.
American Statistical Association.
International Biometrics Society.
Caucus for Women in Statistics.

Offices at Professional Organizations

Co-main organizer (with Shannon Stock) of the Student Research Symposium on Statistics and Data Science. April 20 2024, November 7 2020, and April 2 2022. More info under conference organization.

Member of the Dutch Network for Academics in the US (DNA-US), spearheaded by the Dutch Ministry of Foreign Affairs and Nobel Laureate Guido Imbens. Co-organized their lunch meeting for Dutch teachers in Boston in October 2024 at Boston University, CDS. 2024-

IMS Chair for the 2017 ENAR Spring Meeting. More info under conference organization.

Languages

Dutch (native)
English (fluent)
Spanish (fluent)
German (conversational)
French (conversational)

Non-degree Courses Taken

2005	PhD course Advanced Epidemiologic Methods (Epi 207, James Robins).
1995–1999	Various PhD courses in Statistics and Probability. Topics included Nonparametric Kernel Curve Estimation, Semiparametrics, Optimal Stopping, Large Deviations, Time Series Analysis, Medical Statistics, Marked Point Processes and Applications, Inverse Problems in Statistics, and Ergodic Theory.
May 1999	Workshop on Graphical Markov Models: their Role in Statistics, by Sir Prof. David Cox and Prof. Nanny Wermuth.
Jun 1998	Workshop on Monte Carlo Markov Chains.
Jun 1996	Workshop on Wavelets and Approximation of Statistical Experiments.
1994–1995	Reading seminars at the AMC hospital on Clinical Decision Analysis, Medical Epidemiology and Analysis of Repeated Measures.
May 1995	Design and Analysis of Follow-up Studies: Structural Nested Failure Time Models. Three-day course for epidemiologists by James Robins.
Nov 1994	Generalised Linear Models and GLIM4, three-day course.
Aug 1994	Multiple, Logistic and Cox Regression, three-day course.

Hobbies

Spending time with my kids Diego and Jone and my husband.
Biking while watching birds, turtles, and other wildlife.
Skiing.
Brisk walking and hiking.
Practicing Spanish.
Learning French.

Today: 2/16/2026