

# CURRICULUM VITAE

**Jon Arni Steingrimsson**

## PERSONAL INFORMATION

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## EDUCATION

2015-2017 Postdoctoral Fellow, Department of Biostatistics, Johns Hopkins University

Advised By: Michael Rosenblum

2015 Ph.D. Statistics, Cornell University

Advised By: Robert Strawderman

Thesis: Information Recovery with Missing Data When Outcomes Are Right Censored.

2010 MS. Statistics, University of Copenhagen

2008 B.S. Mathematics, University of Iceland

## ACADEMIC APPOINTMENTS

2024-present Associate Professor, Department of Biostatistics, Brown University

2017 – 2024 Assistant Professor, Department of Biostatistics, Brown University

## PROFESSIONAL POSITIONS

2023 - Present Associate Group Statistician, ECOG-ACRIN Cancer Research Group

## PUBLICATIONS IN PEER-REVIEWED JOURNALS

A student advised by me is denoted by<sup>+</sup>, \* denotes senior author, and \*\* denotes joint first author.

### Statistical Methodology

1. Oganisian, A, Girard, A, **Steingrimsson, J.A.**, Moyo, P. A Bayesian framework for causal analysis of recurrent events with timing misalignment. *Biometrics*. (In Press).
2. Hu, P., Steingrimsson, J.A., Cole E., Cormack, J., Dunn, B., Gatsonis, C., Lee, C., Li, N., Pisano E.D., He, J., Kramer B.S. *Design Considerations and challenges in the CHinA National CancEr Screening (CHANCES) Trial and Tomosynthesis Mammographic Imaging Screening Trial (TMIST)*. *Journal of the National Cancer Institute*. (In Press).
3. Robertson, S.E., Rysavy, M.A., Blakely, M.L., **Steingrimsson, J.A.**, Dahabreh, I.J. *Generalizability analyses with a partially nested trial design: the Necrotizing Enterocolitis Surgery Trial*. *Epidemiology*. (In Press).

4. Bandos H., Torres-Saavedra P., Culakova E., Gunn H., Lee M.K., Duan F., Cecchini R., Unger J., Dueck A.C., **Steingrimsson, J.A.** Best practices and pragmatic approaches for measuring patient-reported outcomes and quality of life in cancer clinical trials. *Journal of the National Cancer Institute*. (In Press).
5. Nuño M.M., Pugh S.L., Ji L., Piao J., Dignam J.J, **Steingrimsson J\***. On the Use of External Controls in Clinical Trials. *Journal of the National Cancer Institute*. (In Press)
6. **Steingrimsson, J.A.**, Robertson, S.E., Voter, S.<sup>+</sup>, Dahabreh, I.J. *Sensitivity analysis for studies transporting prediction models*. *Biometrics*. (In Press).
7. Morrison, S.<sup>+</sup>, Gatsonis, C., Dahabreh, I., Li, B., **Steingrimsson, J.A.\***. *Robust Estimation of Loss-Based Measures of Model Performance under Covariate Shift*. *Canadian Journal of Statistics*. (In Press).
8. Yang, J., Mwangi, A.W., Kantor, R., Dahabreh, I.J., Nyambura, M., DeLong, A., Hogan, J.W. and **Steingrimsson, J.A.\***, 2024. Tree-based subgroup discovery using electronic health record data: heterogeneity of treatment effects for DTG-containing therapies. *Biostatistics*, 25(2), pp.323-335.
9. Robertson, S.E., **Steingrimsson, J. A.**, and Dahabreh, I.J. (2023). *Learning about treatment effects in a new target population under transportability assumptions for relative effect measures*. *European Journal of Epidemiology*. (In Press).
10. **Steingrimsson, J.A.**, Barker, D.H., Bie, R. and Dahabreh, I.J., 2024. Systematically missing data in causally interpretable meta-analysis. *Biostatistics*, 25(2), pp.289-305.
11. Morrison, S.<sup>+</sup>, Gatsonis, C., Eloyan, A. and **Steingrimsson, J.A., 2024**. Survival analysis using deep learning with medical imaging. *The international journal of biostatistics*, 20(1), pp.1-12.
12. Zhang, R.<sup>+</sup>, Gatsonis, C. and Steingrimsson, J.A., (2023). Role of calibration in uncertainty-based referral for deep learning. *Statistical methods in medical research*, 32(5), pp.927-943.
13. Robertson, S.E., **Steingrimsson, J. A.**, and Dahabreh, I.J. *Analyzing cluster randomized trials designed to support generalizable inferences*. *Evaluation Review*. (In Press).
14. Robertson, S., **Steingrimsson, J.A.**, and Dahabreh, I.J. (2023). *Regression-based estimation of heterogeneous treatment effects when extending inferences from a randomized trial to a target population*. *European Journal of Epidemiology*. 38(2), 123-133.
15. Dahabreh, I.J., Matthews, A., **Steingrimsson, J.A.**, Scharfstein, D.O. and Stuart, E.A., 2023. Using trial and observational data to assess effectiveness: Trial emulation, transportability, benchmarking, and joint analysis. *Epidemiologic Reviews*, p.mxac011
16. Dahabreh, I.J., Robertson, S.E., Petito, L.C., Hernán, M.A. and **Steingrimsson, J.A.**, 2023. Efficient and robust methods for causally interpretable meta-analysis: Transporting inferences from multiple randomized trials to a target population. *Biometrics*, 79(2), pp.1057-1072.
17. **Steingrimsson, A. J.** (2023). *Extending prediction models for use in a new target population with failure time outcomes*. *Biostatistics*. 24(3), 728-742.
18. **Steingrimsson, J.A.**, Gatsonis, C, Li, B.<sup>+</sup>, Dahabreh, I.J. (2023). *Transporting a prediction model for use in a new target population*. *American Journal of Epidemiology*. 192(2), 296-304.
19. Robertson, S.E., **Steingrimsson, J.A.**, Joyce, N.R., Stuart, E.A. and Dahabreh, I.J., 2024. Estimating subgroup effects in generalizability and transportability analyses. *American journal of epidemiology*, 193(1), pp.149-158.
20. Robertson, S. E., **Steingrimsson, J.A.**, Dahabreh, I.J. Re: Using numerical methods to design

- simulations: revisiting the balancing intercept. (2022) *American Journal of Epidemiology*. 191(10), 1834-1835
21. Li, B.<sup>+</sup>, Gatsonis, C., Dahabreh, I.J. and **Steingrimsson, J.A.**, 2023. Estimating the area under the ROC curve when transporting a prediction model to a target population. *Biometrics*, 79(3), pp.2382-2393.  
-An earlier version won an *ICSA Applied Statistics Symposium Student Paper Award in 2021*.
  22. Robertson, S. E., **Steingrimsson, J.A.**, Dahabreh, I.J. (2023). *Using numerical methods to design simulations: revisiting the balancing intercept*. *American Journal of Epidemiology*. 191(7), 1283-1289.
  23. Scharfstein, D., **Steingrimsson, J.A.**, McDermott, A., Wang, C., Ray, S., Campbell, A., Nunes, E., Matthews, A. (2021). Global Sensitivity Analysis of Randomized Trials with Non-Monotone Missing Binary Outcomes: Application to Studies of Substance Use Disorders. *Biometrics*. 78(2), 649-659.
  24. Yang, J. <sup>+</sup>, Dahabreh, I., **Steingrimsson, J.A.\***. (2021). *Causal Interaction Trees: Finding Subgroups with Heterogeneous Treatment Effects in Observational Data*. *Biometrics*. 78(2), 624-635.
  25. **Steingrimsson, J. A.**, Morrison, S<sup>+</sup>. *Deep Learning for Survival Outcomes*. (2020). *Statistics in Medicine*, 39(17), 2339-2349.
  26. Dahabreh, I., Petite, L., Robertson, S. E., Hernán, M. A., and **Steingrimsson, J. A.\*** (2020). *Towards causally interpretable meta-analysis: transporting inferences from multiple studies to a target population*. *Epidemiology*, 31 (3), 334-344.  
- Won the Rothman Epidemiology Prize for the best paper published in *Epidemiology* in 2020.
  27. Dahabreh, I.J., Robertson, S.E., **Steingrimsson, J. A.**, Stuart, E. A., and Hernán, M. A. (2020). *Extending inferences from a randomized trial to a new target population*. *Statistics in Medicine*, 39 (14), 1999-2014.
  28. **Steingrimsson, J. A.**, Betz, J., Qian, T., & Rosenblum, M. (2021). Optimized adaptive enrichment designs for three-arm trials: learning which subpopulations benefit from different treatments. *Biostatistics*, 22(2), 283-297.
  29. **Steingrimsson, J.A.**, and Yang, J<sup>+</sup>. *Subgroup Identification using Covariate Adjusted Interaction Trees*. (2019). *Statistics in Medicine*. 38 (21), 3974-3984.
  30. **Steingrimsson, J.A.**, Diao, L., and Strawderman, R. (2019). *Censoring Unbiased Regression Trees and Ensembles*. *Journal of the American Statistical Association*. Volume 525. 370-383.
  31. Hu, C., and **Steingrimsson, J.A.\*** (2018). *Personalized Risk Prediction in Clinical Oncology Research: Applications and Practical Issues Using Survival Trees and Random Forests*. *Journal of Biopharmaceutical Statistics*. Volume 28. 333-349.
  32. **Steingrimsson, J.A.**, and Strawderman, R. (2017). Estimation in the Semiparametric Accelerated Failure Time Model with Missing Covariates: Improving Efficiency through Augmentation. *Journal of the American Statistical Association*. Volume 519. 1221-1235.
  33. **Steingrimsson, J.A.**, Hanley, D., and Rosenblum, M. (2017). *Improving Precision by Adjusting for Prognostic Baseline Variables in Randomized Trials with Binary Outcomes, without Regression Model Assumptions*. *Contemporary Clinical Trials*. Volume 54. 18-24.
  34. **Steingrimsson, J.A.**, Diao, L., Molinaro, A., and Strawderman, R. (2016). *Doubly Robust Survival Trees*. *Statistics in Medicine*. Volume 35. Issue 20. 3595 - 3612.

**Interdisciplinary work**

35. Slavkova K.P., Kang,R.+, Kazerouni A.S., Biswas D., Belenky V., Chitalia R., Horng H., Hirano M., Xiao J., Corsetti R.L., Javid S.H., Spell D., Wolff A.C., Sparano J.A, Khan S., Comstock C., Romanoff J., Gatsonis C., Lehman C., Partridge S., **Steingrimsson J.**, Kontos D., Rahbar H. *MRI-based radiomic features for risk stratification of Ductal Carcinoma in Situ in a Multicenter Trial (ECOG-ACRIN E4112 Trial)*. Radiology. (In Press).
36. Kantor, R.\*\*, **Steingrimsson J.A.\*\***, Fulton, J., Novitsky V., Howison, M., Gillani, F., Bhattarai, L., MacAskill, M., Hague J., Guang A., Khanna A., Dunn C., Hogan J., Bertrand, T., Bandy, U. *Prospective Evaluation of Routine Statewide Integration of Molecular Epidemiology and Contact Tracing to Disrupt HIV Transmission*. Open Forum Infectious Diseases. (In Press).
37. Novitsky, V., Beckwith, C.G., Carpenter-Azevedo, K., Shin, J., Hague, J., Sam, S., **Steingrimsson, J.A.**, Huard, R.C., Lethbridge. K., Sahu, S., Rapoza, K., Chandran, K., Bazerman, L., Hipolito, E., Diaz, I., Carnevale, D., Guang, A., Gillani, F., Caliendo, A.M., Kantor, R. Limited Short-Term Evolution of SARS-CoV-2 RNA-Dependent RNA Polymerase Under Remdesivir Exposure in Upper Respiratory Compartments. Viruses (In Press).
38. Aung S., Novitsky V., **Steingrimsson J.A.**, Gillani F.S., Howison M, Nagel K. , Solomon M., Bertrand T., Bhattarai L., Fulton J., Bandy U., Kantor R.. *Acquired HIV-1 Drug Resistance in Rhode Island, USA from 2004-2021*. Journal of Infectious Diseases (In Press).
39. Wilson-Barthes M, **Steingrimsson J**, Lee Y, Tran DN, Wachira J., Kafu C., Pastakia SD., Vedanthan, R., Said JA., Genberg BL., Galárraga O. *Economic Outcomes Among Microfinance Group Members Receiving Community-based Chronic Disease Care: Cluster Randomized Trial Evidence From Kenya*. Social Science & Medicine (In Press).
40. Fulton, J., Novitsky, V., Gillani, F.G., Guang, A., **Steingrimsson, J.A.**, Khanna, A., Hague, J., Dunn C., Hogan, J., Howe, K., MacAskill, M., Bhattarai, L., Bertrand, T., Bandy, U., Kantor, R. *Integrating HIV Cluster Analysis in Everyday Public Health Practice: Lessons Learned from a Statewide Public Health – Academic Partnership*. Journal of Acquired Immune Deficiency Syndromes. (In Press).
41. Li, W., Partridge, S., Newitt, D., **Steingrimsson, J.A.**, Marques, H.M., Bolan B., Hirano M., Bearce B.A., Kalpathy-Cramer J., Boss M., Teng, X., Zhang J., Cai J., Kontos D., Cohen E.A., Mankowski W, Liu M., Ha R., Pellicer-Valero O.J., Maier-Hein K., Rabinovici-Cohen R., Tlusty T., Ozery-Flato M., Parekh V, Jacobs, M., Yan R., Sung K., Kazerouni A., DiCarlo J., Yankeelov T., Chenevert T., Hylton N.M. *Breast Multiparametric MRI for Prediction of Neoadjuvant Chemotherapy Response in Breast Cancer: the BMMR2 Challenge*. Radiology: Imaging Cancer. (In Press).
42. Robertson, S. E., Joyce, N.R., **Steingrimsson, J.A.**, Stuart, E. A., Aberle, D.A., Gatsonis, C.A., Dahabreh, I.J. *What does the National Lung Screening Trial imply for the effectiveness of computerized tomography screening in the U.S. population?* JAMA Network Open. (In Press).
43. Barker, D. H., Bie, R., & **Steingrimsson, J. A.** (2023). Addressing systematic missing data in the context of causally interpretable meta-analysis. *Prevention Science*, 24(8), 1648-1658.
44. Howison M., Gillani F.G., Novitsky V., **Steingrimsson J.A.** (2023) Fulton J., Bertrand T., Howe K., Civitarese A., Bhattarai L., MacAskill M., Ronquillo G., Hague J., Dunn C., Bandy U, Hogan J.W., Kantor R. *An Automated Bioinformatics Pipeline Informing Near-Real-Time*

- Public Health Responses to New HIV Diagnoses in a Statewide HIV Epidemic Viruses.* 15(3), 737.
45. Novitsky, V., **Steingrimsson, J.A.**, Howison, M., Dunn C., Gillani, F., Fulton, J., Bertrand, T., Howe K., Lafazia, B., Ronquillo, G., MacAskill, M., Bandy B., Hogan, J., Kantor R. (2023). *Not All Clusters Are Equal: Dynamics of Molecular HIV-1 Clusters in a Statewide Rhode Island Epidemic.* AIDS. 37(3), 389-399.
  46. Ellison, J.E., Kumar, S., **Steingrimsson, J.A.**, Adhikari, D., Charlesworth, C. J., McConnell, J., Trivedi, A.N., Trikalinos, T.A., Forbes, S.P., Panagiotou, O.A. (2023). *Comparative utilization of low-value care services among commercial and Medicaid enrollees.* Journal of General Internal Medicine. 38(4), 954-960.
  47. Gantenberg, J., McConeghy, K., Howe, C., **Steingrimsson, J.A.**, Aalst, R., Chit, A., Zullo, A. (2023). *Predicting seasonal influenza hospitalization using an ensemble super learner: a simulation study.* American Journal of Epidemiology.
  48. Sigurðardóttir, Á, **Steingrimsson, A. J**, Kristófersson, G. (2022). *Resilience among Older Adults Living at Home: Urban–Rural Difference in a Population-Based Study Resilience among Older Adults Living at Home.* Journal of Gerontology and Geriatrics.
  49. **Steingrimsson, A. J**, Fulton J., Howison, M., Novitsky, V., Gillani, F., Bertrand, T., Civitarese, A., Howe, K., Ronquillo, G., Lafazia, B., Parillo, Z., Marak, T., Chan, P.A., Bhattarai, L., Dunn, C., Bandy. U., Scott, N., Hogan, J., Kantor, R. (2022). *Beyond HIV outbreaks: rationale, study design, and implementation of a prospective study quantifying the benefit of incorporating viral sequence clustering analysis into routine public health interventions.* BMJ Open. 12(4), e060184.
  50. Ruth C. Carlos, Samilia Obeng-Gyasi, Steven W. Cole, Bradley J. Zebrack, Etta D. Pisano, Melissa A. Troester, Lava Timsina, Lynne I. Wagner, **Jon A. Steingrimsson**, Christoph I. Lee, Alyce Adams, Consuelo H. Wilkins. (2022). *Linking Structural Racism and Discrimination and Breast Cancer Outcomes: A Social Genomics Approach.* Journal of Clinical Oncology 40(13), 1407-1413.
  51. Partridge, S.C., **Steingrimsson, J.A.** , Newitt, D.C., Gibbs, J.E , Marques, H.S, Bolan, P.J., Chenevert, T.L., Rosen, M.A., and Hylton, N.M., (2022). *Impact of Alternate b-Value Combinations and Metrics on Predictive Performance and Repeatability of Diffusion-Weighted MRI in Breast Cancer Treatment: Results from the ECOG-ACRIN A6698 Trial.* Tomography, 8(2), 701-717.
  52. Vlad Novitsky, **Jon A. Steingrimsson**, Fizza S. Gillani, Mark Howison, Su Aung, Matthew Solomon, Cindy Y. Won, Amy Brotherton, Rajeev Shah, Casey Dunn, John Fulton, Thomas Bertrand, Anna Civitarese, Katharine Howe, Theodore Marak, Philip Chan, Utpala Bandy, Nicole-Alexander-Scott, Joe Hogan, Rami Kantor. (2022). *Statewide Longitudinal Trends in Transmitted HIV-1 Drug Resistance in Rhode Island, USA.* Open Forum Infectious Diseases. (Vol. 9, No. 1, p. ofab587). US: Oxford University Press.
  53. Barker, D. H., Dahabreh, I. J., **Steingrimsson, J. A.**, Houck, C., Donenberg, G., DiClemente, R., & Brown, L. K. (2022). Causally interpretable meta-analysis: Application in adolescent HIV prevention. *Prevention Science*, 23(3), 403-414.
  54. Genberg, B., Wilson-Barthes, M., Omodi, V., Hogan, J., **Steingrimsson, J.A.** Wachira, J., Pastakia, S., Tran, D., Kiragu, Z., Ruhl, L., Rosenberg, M., Kimaiyo, S., Galarraga, O. (2021). *Microfinance, Retention in Care, and Mortality Among Patients Enrolled in HIV Care in Western Kenya.* AIDS. 5(12), pp.1997-2005.
  55. Novitsky, V., **Steingrimsson, J.A**, Howison, M., Dunn, C., Gillani, F., Manne, A., Li, Y.,

- Spence, M., Parillo Z., Fulton, J., Marak T., Chan, P., Bertrand, T., Utpala, B., Alexander-Scott, N., Hogan, J., Kantor, R. (2021). *Longitudinal typing of molecular HIV clusters in a statewide epidemic. AIDS*, 35(11), 1711-1722
56. Jones, R., Douglas T., **Steingrimsson, J.A.**, Racine, A., Fong, T., Gou, Y., Hshieh T., Metzger, D., Schmitt, E., Tabloski, P., Travison, T., Vasunilashorn, S., Abdeen A., Earp B., Kunze, L., Lange, J., Vlassakov, K., Dickerson, B., Marcantonio, E., Inouye, S. (2021). *Development and internal validation of a predictive model of cognitive decline 36 months following elective surgery. Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*. 13(1), e12201
57. Genberg BL, Wachira J, **Steingrimsson J.A.**, Pastakia SD, Tran DN, Said JAK, Braitstein P, Hogan JW, Vedanthan R, Goodrich S, Kafu C, Wilson-Barthes M, Galárraga O. (2021). *Integrated Community-Based HIV and Non-Communicable Disease Care within Microfinance Groups in Kenya: Study Protocol for the Harambee Cluster Randomized Trial. BMJ Open*. 11(5), e042662.
58. Gunn, R.L., **Steingrimsson, J.A.**, Merrill, J., Souza1, T., Barnett, N.P. (2021). *Characterizing Patterns of Alcohol Use Among Heavy Drinkers: A Cluster Analysis Utilizing Alcohol Biosensor Data. Drug and Alcohol review*. 40(7), 1155-1164.
59. Racine, A, Tommet, D., D'Aquila, M., Fong, T, Gou, Y., Tabloski, P., Metzger, E., Hshieh, T, Schmitt, E., Vasunilashorn, S., Kunze, L., Vlassakov, K, Abdeen, A., Lange, J., Earp, B., Dickerson, B., Marcantonio, E, **Steingrimsson, J.A.**, Travison, T., Inouye, S., Jones, R., and the RISE Study Group. (2021). *Machine learning to predict post-operative delirium in a prospective, observational clinical cohort study of older surgical patients. Journal of General Internal Medicine*. 36(2), 265-273.
60. Kantor, R., Fulton, J., **Steingrimsson, J.A.**, Novitsky, V., Howison, M., Gillani, F., Li, Y., Manne, A., Parillo, Z., Spence, M., Marak, T., Chan, P., Dunn, C., Bertrand, T., Bandy, U., Alexander-Scott, N., Hogan, J. (2020). *Challenges in Evaluating the Use of Viral Sequence Data to Identify HIV Transmission Networks for Public Health. Statistical Communications in Infectious Diseases*. 12(s1).
61. Novitsky, V., **Steingrimsson, J.A.**, et al. (2020). *Empirical Comparison of Analytical Approaches for Identifying Molecular HIV-1 Clusters. Scientific Reports*. 10(1), 1-11.
62. Pricolo, V., **Steingrimsson, J.A.**, McDuffie, T., McHale, J., McMillen, B., and Shparber, M. (2020). *Tumor deposits in stage III colon cancer: correlation with other histopathologic variables, prognostic value and risk stratification – time to consider “N2c”?* American Journal of Clinical Oncology, 43 (2), 133.
63. Sigurdardottir, A.K, Kristófersson, G.K, Gústafsdóttir, S.S, Sigurðsson, S.B, Arnadottir, S.A, **Steingrimsson, J. A**, Gunnarsdóttir, A.G. (2020). *Self-Rated Health and Socioeconomic Status among Older Adults in Northern Iceland. International Journal of Circumpolar Health*, 78 (1), 1697476.
64. Vangay, P., **Steingrimsson, J.A.**, Wiedmann, M., and Stasiewicz, MJ. (2014). *Classification of Listeria Monocytogenes Persistence in Retail Delicatessen Environments Using Expert Elicitation and Machine Learning. Risk Analysis*. Volume 34. Issue 10. 1830 - 1845.

## INVITED PRESENTATIONS

1. "Use of AI and Machine Learning in Clinical Trials". A Symposium celebrating 30 Years of Biostatistics at Brown University. RI, 2024.
2. "Generalizability of measures of model performance". University of North Carolina Chapel Hill Departmental Seminar. NC, 2024.
3. "Generalizability of machine learning algorithms for health data." 2024 Annual Meeting of the Statistical Society of Canada (SSC). St. John's. Canada. 2024.
4. "Short-Term Image-Based Assessment of Breast Cancer Risk for Screening Mammography Project". ECOG-ACRIN spring meeting, Baltimore, MD, 2024.
5. Panelist at "Extending Inferences to a New Target Population" conference. Providence, RI, 2023.
6. "Generalizability of Study Results". Brown University Departmental Seminar. Providence, RI, 2023.
7. "Systematically Missing Data in Causally Interpretable Meta-Analysis". Invited E-poster session Joint Statistical Meeting, Toronto, Canada, 2023.
8. "Causal Interaction Trees: Finding Subgroups with Heterogeneous Treatment Effects in Observational Data". CFAR Symposium on Statistics and Data Science in HIV, Providence, RI, 2023.
9. "Short-Term Image-Based Assessment of Breast Cancer Risk for Screening Mammography Project". ECOG-ACRIN spring meeting, Chicago, IL, 2023.
10. "Deep Learning with Time-to-event Outcomes". ENAR, Nashville, TN, 2023.
11. "Deep Learning with Time-to-event Outcomes". Lifetime and Data Science, Raleigh, NC, 2023.
12. "Transportability of Prediction Models. Departmental Seminar at the Department of Biostatistics University of Rochester. 2023.
13. "Transportability of Prediction Models. Causal Inference Seminar at Boston University. 2022.
14. "Transportability of Prediction Models. Departmental Seminar at the Department of Biostatistics Johns Hopkins University. 2022
15. "Transportability of Risk Prediction Models. SLAM working group Department of Biostatistics Johns Hopkins University. 2022
16. "Transportability of Risk Prediction Models". RI IDEa Symposium (Poster presentation). Providence. 2022.
17. "Transportability of Risk Prediction Models". CAUSALab meeting. Harvard University. 2022
18. "Transportability of Risk Prediction Models". Joint Statistical Meeting, Online, 2021.
19. "Deep Learning with Time-to-event Outcomes". Statistics 2021 Canada conference, Online, 2021,
20. "Transportability of Risk Prediction Models". Advanced CTR Translational Research Seminar, Online, 2021.
21. "Evidence Extension". Love Data Week, Brown University, Online, 2021.
22. "Is This It? AI for Differential Diagnosis" (Panel Member). CDH Seminar Series, Online, 2020.
23. "Deep Learning with Time-to-event Outcomes". ICSA, Online, 2020.
24. "Deep Learning with Time-to-event Outcomes". ENAR, 2020.
25. "Deep Learning with Time-to-event Outcomes". Boston University Department of Biostatistics, Departmental Seminar, 2020.

26. "Machine Learning for Health Data". Population Science Group. Providence, RI, 2020.
27. "Using Deep Learning to Build Risk Prediction Models for Time-to-event Outcomes". Joint Statistical Meetings. Denver, CO, 2019.
28. "Subgroup Identification using Covariate Adjusted Interaction Trees". ICSA Applied Statistics Symposium. Raleigh, NC, 2019.
29. "Deep Learning with Time-to-event Outcomes". New England Statistics Symposium. Hartford, CT, 2019.
30. "Deep Learning with Time-to-event Outcomes". Lifetime Data Science Conference. Pittsburgh, PA, 2019.
31. "Subgroup Identification using Covariate Adjusted Interaction Trees" Models and Machine Learning for Causal Inference and Decision Making in Health Research. Providence, RI, 2019.
32. "Optimizing Adaptive Clinical Trial Designs". Brown Data Science Initiative. Providence, RI, 2018.
33. "Improving Efficiency Through Augmentation in the Semiparametric Accelerated Failure Time Model With Missing Covariates". International Indian Statistical Association. Gainesville FL, 2018.
34. "Group Sequential Design Comparing Multiple Treatments to a Common Control". International Chinese Statistical Association Conference. Chicago IL, 2017.
35. "Censoring Unbiased Survival Forests". Lifetime Data Science Conference. Storrs CT, 2017.
36. "Doubly Robust Survival Trees and Forests". Department of Biostatistics University of Rochester, Departmental Seminar 2017.
37. "Doubly Robust Survival Trees and Forests". Department of Statistics and Actuarial Science University of Waterloo, Departmental Seminar 2017.
38. "Doubly Robust Survival Trees and Forests". Department of Biostatistics and Medical Informatics University of Wisconsin Madison, Departmental Seminar 2017.
39. "Doubly Robust Survival Trees and Forests". Department of Biostatistics and Bioinformatics Emory University, Departmental Seminar 2017.
40. "Doubly Robust Survival Trees and Forests". Department of Biostatistics Brown University, Departmental Seminar 2017.
41. "Doubly Robust Survival Trees and Forests". Department of Statistics Notre Dame University, Departmental Seminar 2017.
42. "Doubly Robust Survival Trees and Forests". Department of Biostatistics McGill University, Departmental Seminar 2017.
43. "Doubly Robust Survival Trees and Forests". National Institute of Allergy and Infectious Diseases, 2017.
44. "Doubly Robust Survival Trees and Forests". Department of Statistics Notre Dame University, Rand Corporation, 2017.
45. "Doubly Robust Survival Trees and Forests". Department of Statistics University of Connecticut, Departmental Seminar 2017.
46. "Analysis of Longitudinal Adherence Measures from HIV Pre-Exposure Prophylaxis Studies". International Chinese Statistical Association Conference. Shanghai, China, 2016.



47. "Estimation in the Semiparametric Accelerated Failure Time Model with Missing Covariates: Improving Efficiency through Augmentation". Survival, Longitudinal, and Multivariate Data Seminar, Johns Hopkins University. Baltimore, MD, 2016.
48. "Censoring Unbiased Survival Ensembles". Causal Inference Seminar Johns Hopkins University. Baltimore MD, 2016.
49. "Censoring Unbiased Survival Trees and Forests". Survival, Longitudinal, and Multivariate Data. Seminar Johns Hopkins University. Baltimore MD, 2016.
50. "Information Recovery for the Semiparametric Accelerated Failure Time Model for Case-Cohort Studies". Causal Inference Seminar Johns Hopkins University. Baltimore MD, 2015.

## CONTRIBUTED PRESENTATIONS

1. "Deep Learning with Time-to-event Outcomes". Joint Statistical Meeting, Toronto, Canada, 2023
2. "Estimation in the Semiparametric Accelerated Failure Time Model with Missing Covariates: Improving Efficiency through Augmentation. Joint Statistical Meeting, Online, 2020.
3. "Improving Precision by Adjusting for Prognostic Baseline Variables in Randomized Trials with Binary Outcomes, without Regression Model Assumptions". World Intracranial Hemorrhage Conference. Baltimore, MD, 2017
4. "Improving Precision by Adjusting for Prognostic Baseline Variables in Randomized Trials with Binary Outcomes, without Regression Model Assumptions". Annual Meeting of the Society for Clinical Trials. Liverpool, England, 2017. (Poster Presentation)
5. "Augmented Estimators for Censored Linear Regression for Case-Cohort Studies". Joint Statistical Meeting. Boston, MA, 2014.
6. "Information Bounds for Censored Linear Regression with Covariates Missing by Design". Student Seminar, Cornell University. Ithaca, NY, 2012.

## HONORS AND AWARDS

2024	Dean's Award for Excellence in Mentoring, School of Public Health, Brown University
2021,2022,2023	Exceptional Reviewer for Journal of the American College of Radiology
2017	Best paper award at LIDA 2017 conference
2015	Outstanding Graduate Teaching Assistant in the Department of Biological Statistics and Computational Biology at Cornell University
2012	A.P. Moller Fonden: Student grant at University of Copenhagen

## MEMBERSHIP IN SOCIETIES

2012-Present	American Statistical Association
2016-Present	Lifetime Data Science Section of the American Statistical Association
2017-Present	Eastern North American Region International Biometric Society
2019-present	International Chinese Statistical Association

**GRANTS****Current Grants**

R01 AI136058 Kantor (PI) NIAID/The Miriam Hospital Subcontract Real Time Phylogeny and Contact Tracing to Disrupt HIV Transmission Role: Co-Investigator	09/01/18-02/29/24	8.44%
R01 MH118075 Galarraga (PI) NIMH Harambee: Integrated Community-Based HIV/NCD Care & Microfinance Groups in Kenya Role: Co-Investigator	07/05/19-04/30/24	8.39%
U10 CA180794 Gray and Gatsonis (MPI) NCI/Dana Farber Cancer Institute ECOG-ACRIN Network Group Statistics and Data Management Center Role: Co-Investigator	08/01/19-02/28/25	19.7%
2UG1 CA189828-06-BRWN3 EA Wagner (PI) (Sub PI Gatsonis) NCI/EAMRF Tomosynthesis Mammographic Imaging Screen Trial (TMIST) Role: Co-Investigator	08/01/21-07/31/25	9.2%
UG1 CA189828-06-BRWN2 (Sub PI Gatsonis) NCI/EAMRF MRI Radiomic Signatures of DCIS to Optimize Treatment Role: Co-Investigator	03/01/23-07/31/25	4.17%
R01 CA2686341-01A1 Raybar (PI) NCI/University of Washington Subcontract ECOG-ACRIN NCORP Research Base-CCDR Role: Sub PI Amount: \$738,607	09/01/22-06/30/27	9.94%
ME-2019C3-17875 Steingrimsso (PI) Patient-Center Outcomes Research Institute Missing Data when Transporting Treatment Effects from Clinical Trials to a Target Population Amount: \$1,00,803	01/01/21-03/15/25	15.35%
R01 MH128595-01A1 Barker and Benito (MPI) NIMH/Bradley Hospital Subcontract What works for Whom in Pediatric OCD Role: Sub PI Amount: \$28,531	07/01/22-06/30/25	3%

R01 LM013616 Dahabreh (PI) (Sub PI Joyce) 02/04/22–12/31/25 5%  
 NLM/Harvard Chan School of Public Health Subcontract  
 Methods for generalizing inferences from cluster randomized controlled trials to target populations  
 Role: Co- Investigator

ME-2021C2-22365 Dahabreh (PI) 07/01/22–06/30/25 9.72%  
 PCORI/ Harvard Chan School of Public Health Subcontract  
 Randomized Trials and Their Observational Emulations – Benchmarking and Joint Analysis  
 Role: Sub PI  
 Amount: \$83,737

R01 CA262164-01A1 Robbins (PI) 05/12/23–08/31/27 6.67%  
 NIH/International Agency for Research Cancer  
 The Lung Early Proteins project: A LEAP toward implementing biomarkers in lung cancer screening  
 Role: Sub PI  
 Amount: \$218,618

### **Completed Grants**

HHSF223201400113C (PI Rosenblum) 07/01/17-09/30/17 45%  
 New Design and Analysis Tools for Randomized Trials, With Clinical Applications in Stroke, Cardiac Resynchronization Therapy, Alzheimer's Disease, and HIV Prevention  
 Funding Agency: FDA  
 Role: Co-investigator (subcontract PI)  
 Amount: \$31,890

R01 DA046534 (PI Scharfstein) 08/15/18–04/30/20 20.4%  
 Missing Data Matters: Substance Use Disorder Clinical Trials  
 Funding Agency: NIDA  
 Role: Co-Investigator (subcontract PI)  
 Amount: \$95,286

Brown Salomon Award (PI Steingrimsson) 04/01/18–06/30/20 0%  
 Deep Learning for Incomplete Data: Individualized Treatment Decisions for Breast Cancer Patients.  
 Amount: \$12,719

Steingrimsson & Dahabreh (MPI) 08/28/20-04/30/21 4.38%  
 Advance CTR  
 Transportability of risk prediction models.  
 Amount: \$59,119

P01 AG031720 Jones (PI) 09/15/18-05/31/23 9.75%  
 NIA

Dementia and the Vulnerable Brain: An integrated Approach (Project 4: Defining Phenotype of Complicated Delirium

Role: Co-Investigator (subcontract PI)

Amount: \$85,670

ME-1502-27794 Dahabreh (PI) 08/01/20-01/31/21 4.17%

Patient-Center Outcomes Research Institute

Role: Co-Investigator

U01 CA190254 (PI Schnall Sub PI Gatsonis) 03/01/15-02/28/21 8.75%

NCI/American College of Radiology

ECOG-ACRIN-Based QIN Resource for Advancing Quantitative Cancer imaging in Clinical Trials

Role: Co-Investigator

U10 CA180794 Gray (PI) 03/01/20-02/28/21 0.83%

ECOG-ACRIN Network Group Statistics and Data Management Center – CDISC

NCI/Dana Farber Cancer Institute

Role: Co-Investigator

U10 CA180794 Gray (PI) 03/01/20-02/28/21 0.83%

NCI/Dana Farber Cancer Institute

ECOG-ACRIN Network Group Statistics and Data Management Center – RAVE

Role: Co-Investigator

U10 CA180794 Gray (PI) 03/01/20-02/28/21 4.67%

NCI/Dana Farber Cancer Institute

ECOG-ACRIN Network Group Statistics and Data Management Center – Trial to Data

Role: Co-Investigator

2UG1CA189828-06-BRWN-EA2185-PCyst (Sub PI Gatsonis) 08/01/19-07/31/22 13.17%

NCI/Dana Farber Cancer Institute

EA2185 Pancreatic Cysts – Main Surveillance

Role: Co-Investigator

2UG1CA189828-06-BRWN-EA2185-PRO (Sub PI Gareen) 11/01/19-07/31/22 4.17%

NCI/EAMRF Subcontract

EA2185 Pancreatic Cysts – Patient Reported Outcomes

Role: Co-Investigator

5P03 AI042853-22 Cu-Uvin (PI) 07/01/20-06/30/22 3.29%

NIAID/The Miriam Hospital Subcontract

Subgroup Identification for Therapeutic and Side Effect Response for Dolutegravir using Large Scale HIV Electronic Health Records Data

Role: Sub PI

Amount: \$140,385

## TEACHING

Spring 2024	Instructor	Analysis of Lifetime Data. PHP 2602
Fall 2023	Instructor	Linear Models PHP 2601 (co-taught with Ani Elyoan)
Spring 2023	Instructor	Reading course on counterfactual prediction models
Spring 2023	Instructor	Analysis of Lifetime Data. PHP 2602
Spring 2022	Instructor	Analysis of Lifetime Data. PHP 2602
Fall 2021	Guest Lectures	Responsible Conduct of Research
Fall 2021	Instructor	Reading course on semi-parametric theory and estimation
Fall 2020	Instructor	Analysis of Lifetime Data. PHP 2602.
Spring 2020	Instructor	Analysis of Lifetime Data. PHP 2602.
Fall 2019	Instructor	Reading course on semi-parametric theory and estimation
Spring 2019	Instructor	Probability, Statistics, and Machine Learning: Advanced Methods. DATA 2020.
Fall 2018	Instructor	Analysis of Lifetime Data. PHP 2602.
Fall 2017	Instructor	Linear Models PHP 2601.
Fall 2018 2021, 2022, And 2024	Guest Lecturer	Guest lecture in Clinical Trials Methodology at Brown University. Topic: Survival Analysis.
Spring 2016	Short Course	Short course in Survival, Longitudinal, and Multivariate Data Group Johns Hopkins University. Topic: Survival Trees and Forests.
Fall 2016	Guest Lecturer	Guest lecturer in Advanced Inference Class Johns Hopkins University Department of Biostatistics. Topic: Introduction to Empirical Processes for Biostatisticians.

## ADVISING

PhD Students Thesis Supervisor

- Jiabei Yang (Graduated 2022): Brown University (Co-advised with Dr. Schmid)  
- Best Doctoral or Post-Doctoral Trainee Poster – 2019 Public Health Research Day
- Samantha Morrison (Graduated 2021): Brown University (Co-advised with Dr. Gatsonis). Graduated 2021.
- Bing Li (Graduated 2022): Brown University (Co-Advised with Dr. Gatsonis)  
- Best Doctoral or Post-Doctoral Trainee Poster – 2020 Public Health Research Day
- Ruotao Zhang (Graduated 2022) : Brown University (Co-Advised with Dr. Gatsonis)  
- Runner up for Best Doctoral or Post-Doctoral Trainee Poster – 2020 Public Health Research Day
- Ruofan Bie: Brown University
- Ryua Kang: Brown University (Co-advised with Dr. Gatsonis).
- Sarah Voter (Co-advised with Dr. Hogan)

#### Master's Students Thesis or Capstone Supervisor

- Ashley Lockwood: Brown University. Expected Graduation 2026.
- Dwight Ross: Brown University. Expected Graduation 2026.
- Dingxuan Zhang: Brown University. Expected Graduation 2025.
- Alitzel Serrano Laguna: Brown University. Graduated 2024.
- Rophence Ojiambo: Brown University. Graduated 2023.
- Yanyu Tao: Brown University. Graduated 2022.
- Yimo Zhang: Brown University Biostatistics, Graduated 2019.
- Carol Shum: Brown University Biostatistics, Graduated 2019.
- Dhananjay Bhaskar: Data Science Initiative Capstone Project, 2019.
- Yue You: Data Science Initiative Capstone Project, 2019.
- Shiyun Zou: Data Science Initiative Capstone Project, 2019.
- Zhen Zheng: Data Science Initiative Capstone Project, 2019.

#### PhD Committee Member

- Hongseok Kim, Department of Epidemiology, Brown University. Graduated 2021
- Sarah Robertson, Department of Epidemiology, Brown University. Graduated 2021
- Bishnu Thapa, Department of Epidemiology, Brown University. Graduated 2022
- Yimo Zhang, Department of Biostatistics, Brown University. Graduated 2024
- Nicholas Lewis, Department of Biostatistics, Brown University.

#### Master's Thesis Reader

- Kira Raskina 2020
- Camilla Calmasini 2020
- Chengzhao Tu 2020
- Yanning Wu 2021
- Amos Okutse 2023

- Antonella Basso 2023
- Nelson Anangwe 2024
- Xiong Caiwei 2024
- Yu Yan 2024

#### Undergraduate Project Supervisor

- Henry Jacob (thesis) 2020
- Juan Muneton (thesis) 2021
- Samuel Rhee (capstone project) 2022
- Nathan Provost (thesis) 2023  
- Recipient of Department Best Thesis Award

#### Other Mentoring

- Tyler Hickman (Summer 2022: Undergraduate from Tougaloo collage)

#### **DEPARTMENTAL SERVICE**

- Program Director of NextGen Scholarship program (2022-present).  
- The NextGen program provides financial and academic support for graduates from HBCUs.
- Chair of Diversity and inclusion committee, 2018-present
- Member of Diversity and inclusion committee, 2017
- Senior Scholar Search Committee. Department of Biostatistics Brown University 2021.
- Master's thesis award committee 2018-2019
- Seminar Co-Organizer. Department of Biostatistics Brown University 2018-2019, 2019-2020, and 2021-2022
- PhD admission committee 2017-2020 and 2022-2024.
- Academic programs committee 2019-2020
- Deep Learning Working Group Organizer 2019-2020
- Radiomics Working Group Organizer 2020-2022
- Faculty Lightning Talk Organizer 2019

#### **UNIVERSITY SERVICE**

- Advanced CTR Machine Learning Seminar Series Organizing Committee 2021
- School of Public Health Day Abstract Reviewer 2022-2024
- Brown Salomon Awards Reviewer 2020 and 2021
- Faculty Search Committee. Data Science Initiative 2018-2019 and 2019-2020
- Member of School of Public Health Diversity and Inclusion Committee 2018-present
- Mentor at Health Hackathon 2017
- School of Public Health Day Poster Session Judge 2018

## PROFESSIONAL SERVICE

- Reviewer for UK Research and Innovation Funding Services. 2024.
- Member of an NIH review panel reviewing Investigator Initiated Clinical Trials. February 2024.
- Lead organizer of workshop Extending Inferences to a New Target Population held at Brown University, Nov 2023.
- Member of the Analytics and Statistics for Population Research Panel B ASPB Study Section, February 2023.
- Member of Native American Research Centers for Health (NARCH) Study Section, October 2020
- Organization committee of CFAR Symposium on Statistics and Data Science in HIV, 2023.
- Reviewer for Medical Research Counsel Career Development Award 2021.
- Organizing committee of Advanced CTRs Machine Learning Seminar Series 2021.
- PCORI consultation 2021-2024.
- CFAR reviewer 2021.
- Judge for 2019 Student Paper Competition for ASA Stat Computing/Graphics Sections.
- Session chair at New England Statistics Symposium. Hartford CT, 2019.
- Panelist for Statistics and Data Science Careers at Cornell University. May 2017.
- Organizer and chair of invited session at Lifetime Data Science Conference, JSM, and NESS.

## EDITORIAL BOARD ACTIVITIES

- Associate editor for the Journal of the American College of Radiology (2021-present)
- Associate editor for Biostatistics (2024-present)
- Biostatistical editor Gastroenterology (2024-present)
- Statistical reviewer for Journal of the American Medical Association (2024-present)

## REVIEWER

Journal of the Royal Statistical Society B, Journal of the American Statistical Association Theory and Methods, Journal of the American Statistical Association Application and Case Studies, Statistics in Medicine, Biostatistics, Biometrics, Computational Statistics & Data Analysis, Journal of the Korean Statistical Society, International Journal of Biostatistics, Scandinavian Journal of Statistics, Biometrika, BMJ Open, Biometrical Journal, The Canadian Journal of Statistics, Computational and Mathematical Methods in Medicine, PLOS One, BMC Medical Research Methodology, Journal of Statistical Computation and Simulation, Nature Communications, Annals of Applied Statistics, Journal of Machine Learning Research, Lifetime and Data Analysis, Bioinformatics, Circulation, BMC Medical Research Methodology, Journal of the Royal Statistical Society C, American Statistician, Breast Cancer Research, Journal of the National Comprehensive Cancer Network, American Journal of Epidemiology, Journal of the



Royal Statistical Society A, Journal of Clinical Oncology, JAMA Network Open, Nature Medicine, Statistical Methods in Medical Research, Harvard Data Science Review, Journal of Medical Artificial Intelligence, Clinical Trials, JAMA, PLOS Medicine, Journal of the National Cancer Institute.