Katherine L. Hoffman

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Education

University of Washington Sep 2023 – Present
Ph.D., Biostatistics

University of Michigan Sep 2016 – May 2018
M.S., Biostatistics

University of Detroit Mercy Sep 2011 – May 2015
B.S., Biochemistry

Professional Experience

University of Washington, Division of Allergy and Infectious Disease Sep 2023 – Present
Graduate Student Research Assistant

Targeted ML Solutions Jun 2025 – Present
Statistical Consultant

Columbia University Medical Center, Department of Epidemiology Oct 2022 – Sep 2023
Senior Data Analyst

Weill Cornell Medicine, Department of Biostatistics Aug 2018 – Oct 2022
Research Biostatistician III Nov 2021 – Oct 2022
Research Biostatistician II Jul 2020 – Sep 2021
Research Biostatistician I Aug 2018 – Jun 2020

University of Michigan Feb 2017 – May 2018
Graduate Student Research Assistant (Song, Kidd, and Dus Labs)

Publications

*Indicates co-first authorship.

First and Co-First Author

[F7] **KL Hoffman**, AA Weil, EA Wetzler, BO Akinola, A Beauge, C Andy, A Adams, C Frivold, SN Cox, B Ehmen, T Hatchie, EL Clark, M Drummond, JA Englund, PD Han, JL Kuntz, NC Lo, CM Lockwood, L Starita, RA Mularski, AL Naleway, M Carone, and HY Chu. "Interactions between respiratory viruses in US adults and children: a prospective cohort study". *medRxiv* (Oct. 2026). Preprint, p. 2026.10.15.26365672. DOI: 10.64898/2026.10.15.26365672.

[F6] **KL Hoffman**, G Marshall, C Frivold, Z Acker, IS Arnould, TM Babu, SR Barnes, M Briggs-Hagen, A Casto, E Clark, SN Cox, M Drummond, B Ehmen, JA Englund, L Gamboa, AL Greninger, S Grindstaff, H Grioni, P Han, T Hatchie, M Hollcroft, JL Kuntz, NK Lo, CM Lockwood, KD McAllister, CJ McCormick, MP MacMillan, CM Midgley, D Nguyen, ID Plumb, JC Reed, S Reich, P Roychoudhury, M Schmidt, LM Starita, J Stone, A Varga, AA Weil, CJ Wolock, N Yetz, PB Gilbert, AL Naleway, HY Chu, and M Carone. "Immune correlates of risk for SARS-CoV-2 infection in children: a prospective, community-based cohort study". *Nature Communications* 17.1 (2026), p. 8779. DOI: 10.1038/s41467-026-74684-8.

[F5] **KL Hoffman**, D Salazar-Barreto, NT Williams, KE Rudolph, and I Díaz. "Studying continuous, time-varying, and/or complex exposures using longitudinal modified treatment policies". *Epidemiology* 35.5 (2024), pp. 667–675.

[F4] **KL Hoffman**, F Milazzo, NT Williams, H Samples, M Olfson, I Díaz, L Doan, M Cerda, S Crystal, and KE Rudolph. "Independent and joint contributions of physical disability and chronic pain to incident opioid use disorder and opioid overdose among Medicaid patients". *Psychological Medicine* (2023), pp. 1–12.

[F3] **KL Hoffman**, EJ Schenck, MJ Satlin, W Whalen, D Pan, N Williams, and I Díaz. "Comparison of a target trial emulation framework vs Cox regression to estimate the association of corticosteroids with COVID-19 mortality". *JAMA Network Open* 5.10 (2022).

[F2] LG Gómez-Escobar*, **KL Hoffman***, JJ Choi, A Borczuk, S Salvatore, SL Alvarez-Mulett, MD Galvan, Z Zhao, SE Racine-Brzostek, HS Yang, HW Stout-Delgado, ME Choi, AMK Choi, SJ Cho, and EJ Schenck. "Cytokine signatures of end organ injury in COVID-19". *Scientific Reports* 11.1 (2021), p. 12606. DOI: 10.1038/s41598-021-91859-z.

[F1] EJ Schenck*, **KL Hoffman***, C Oromendia, E Sanchez, EJ Finkelsztein, KS Hong, J Kabariti, LK Torres, JS Harrington, II Siempos, AMK Choi, and J Campion Thomas R. "A comparative analysis of the respiratory subscore of the sequential organ failure assessment scoring system". *Annals of the American Thoracic Society* 18.11 (2021), pp. 1849–1860. DOI: 10.1513/AnnalsATS.202004-399OC.

Statistical Methodology

[M5] B Gilbert, **KL Hoffman**, NT Williams, KE Rudolph, EJ Schenck, and I Díaz. "Identification and estimation of mediational effects of longitudinal modified treatment policies". *Biostatistics* 26.1 (2025), kxaf031. DOI: 10.1093/biostatistics/kxaf031.

[M4] NT Williams, R Liu, **KL Hoffman**, S Forrest, KE Rudolph, and I Díaz. "Two-stage targeted minimum-loss based estimation for non-negative two-part outcomes". *Statistical Methods in Medical Research* 34.7 (2025), pp. 1431–1441. DOI: 10.1177/09622802251340245.

[M3] I Díaz, NT Williams, **KL Hoffman**, and NS Hejazi. "Causal survival analysis under competing risks using longitudinal modified treatment policies". *Lifetime Data Analysis* 30.1 (2024), pp. 213–236. DOI: 10.1007/s10985-023-09606-7.

[M2] NT Williams, **KL Hoffman**, I Díaz, and KE Rudolph. "Learning optimal dynamic treatment regimes from longitudinal data". *American Journal of Epidemiology* 193.12 (2024), pp. 1768–1775. DOI: 10.1093/aje/kwae122.

[M1] I Díaz, N Williams, **KL Hoffman**, and EJ Schenck. "Nonparametric causal effects based on longitudinal modified treatment policies". *Journal of the American Statistical Association* (2021), pp. 1–16.

Clinical Applications

[A45] TM Babu, A Casto, M Hollcroft, **KL Hoffman**, SN Cox, Z Acker, JC Bennett, CL Boisvert, M Briggs-Hagen, E Clark, M Drummond, B Ehmen, A Elias-Warren, LR Feldstein, SP Fortmann, C Frivold, L Gamboa, HC Groom, P Han, CD Iwu, JL Kuntz, CM Lockwood, M MacMillan, JF Mernaugh, RA Mularski, ID Plumb, T Hatchie, S Reich, MA Schmidt, N Smith, L Starita, A Varga, N Yetz, JA Englund, AA Weil, CM Midgley, M Carone, AL Naleway, and HY Chu. "Household Transmission of SARS-CoV-2 in Washington and Oregon, United States, 2022-2024". *Journal of the Pediatric Infectious Diseases Society* (July 2026), piag061. DOI: 10.1093/jpids/piag061.

[A44] M Cerdá, AM Hung, P Shah, **KL Hoffman**, NT Williams, SS Martins, LV Doan, and KE Rudolph. "Racial/ethnic differences in prevalence of opioid and non-opioid treatments for pain in Medicaid". *AJE Advances: Research in Epidemiology* (Aug. 2026), uuag031. DOI: 10.1093/ajeadv/uuag031.

[A43] P Roychoudhury, A Elias-Warren, E Wetzler, HG Kim, K Kong, H Xie, C Spring, MG Mills, A Harteloo, C Frivold, M Hollcroft, M Drummond, T Hatchie, E Clark, B Ehmen, PD Han, L Gamboa, S Grindstaff, J Stone, **KL Hoffman**, AL Greninger, LM Starita, C Lockwood, JA Englund, AA Weil, SL Reich, RA Mularski, MA Schmidt, JL Kuntz, AL Naleway, and HY Chu. "Household Transmission of Human Metapneumovirus and Human Parainfluenza Viruses 1-4 in the United States, 2022-2024". *medRxiv* (Aug. 2026). Preprint, p. 2026.08.02.26359491. DOI: 10.64898/2026.08.02.26359491.

[A42] KE Rudolph, S Inose, NT Williams, **KL Hoffman**, SE Forrest, RK Ross, F Milazzo, I Díaz, L Doan, H Samples, M Olfson, S Crystal, M Cerdá, and YN Gao. "Mediation of chronic pain and disability on opioid use disorder risk by pain management practices among adult Medicaid patients, 2016–2019". *American Journal of Epidemiology* 195.5 (2026), pp. 1447–1457. DOI: 10.1093/aje/kwaf093.

[A41] SN Cox, P Roychoudhury, C Frivold, Z Acker, TM Babu, CL Boisvert, M Carone, B Ehmen, JA Englund, LR Feldstein, L Gamboa, S Grindstaff, HM Grioni, PD Han, **KL Hoffman**, HG Kim, JL Kuntz, NK Lo, CM Lockwood, K McCaffrey, RA Mularski, TL Hatchie, SL Reich, MA Schmidt, N Smith, LM Starita, A Varga, N Yetz, AL Naleway, AA Weil, and HY Chu. "Household transmission and genomic diversity

of respiratory syncytial virus (RSV) in the United States, 2022–2023". *Clinical Infectious Diseases* 81.6 (2025), pp. 1159–1169. DOI: 10.1093/cid/ciaf048.

[A40] C Frivold, SN Cox, L Starita, TM Babu, **KL Hoffman**, M Carone, CM Lockwood, JL Kuntz, RA Mularski, A Varga, PD Han, J Reed, EA Piliper, SAK Mohamed Bakhash, AL Greninger, E Clark, J Stone, S Grindstaff, CL Boisvert, N Yetz, NK Lo, TL Hatchie, G Marshall, CJ Wolock, LR Feldstein, AA Weil, JA Englund, AL Naleway, and HY Chu. "Correlates of risk of respiratory syncytial virus disease: a prospective cohort study". *Nature Communications* 16 (2025). DOI: 10.1038/s41467-025-63434-x.

[A39] C Healy, C Campbell, **K Hoffman**, JJ Butler, K Opron, JR Erb-Downward, WZ Zhang, I Barjaktarevic, MK Han, RJ Kaner, JL Curtis, CM Freeman, RG Barr, AP Comellas, C Doerschuk, N Putcha, W Moore, JM Wells, R Keane, S O'Beirne, CB Cooper, S Raman, A Hastie, I Paine Robert, NN Hansel, P Woodruff, RP Bowler, KV Ballman, FJ Martinez, YJ Huang, I Sulaiman, and SM Cloonan. "Extracellular iron and the lung microbiome in smoking and COPD". *ERJ Open Research* 11.6 (2025), pp. 00019–2025. DOI: 10.1183/23120541.00019-2025.

[A38] S Inose, NT Williams, **KL Hoffman**, A Perry, I Díaz, and KE Rudolph. "Reducing prescription opioid dose and duration to reduce risk of opioid use disorder among patients with musculoskeletal pain". *Epidemiology* 36.6 (2025), pp. 811–819. DOI: 10.1097/EDE.0000000000001899.

[A37] KE Rudolph, NT Williams, I Díaz, S Forrest, **KL Hoffman**, H Samples, M Olfson, L Doan, M Cerda, and RK Ross. "Pain management treatments and opioid use disorder risk in Medicaid patients". *American Journal of Preventive Medicine* 67.6 (2024), pp. 878–886. DOI: 10.1016/j.amepre.2024.07.006.

[A36] K Ackerman, **KL Hoffman**, I Díaz, W Simmons, KV Ballman, RP Kodiyanplakkal, and EJ Schenck. "Effect of sepsis on death as modified by solid organ transplantation". *Open Forum Infectious Diseases* 10.4 (2023), ofad148.

[A35] J Aizer, EL Abramson, JR Berman, SA Paget, MB Frey, V Cooley, Y Li, **KL Hoffman**, JA Schell, MD Tiongson, MA Lin, and LA Mandl. "An instrument for measuring critical appraisal self-efficacy in rheumatology trainees". *ACR Open Rheumatology* 5.1 (2023), pp. 4–9. DOI: 10.1002/acr2.11505.

[A34] R Batra, R Uni, OM Akchurin, S Alvarez-Mulett, LG Gómez-Escobar, E Patino, **KL Hoffman**, W Simmons, W Whalen, K Chetnik, M Buyukozkan, E Benedetti, K Suhre, E Schenck, SJ Cho, AMK Choi, F Schmidt, ME Choi, and J Krumsiek. "Urine-based multi-omic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS". *Molecular Medicine* 29.1 (2023), p. 13. DOI: 10.1186/s10020-023-00609-6.

[A33] LE Dang, S Gruber, H Lee, IJ Dahabreh, EA Stuart, BD Williamson, R Wyss, I Díaz, D Ghosh, E Kıcıman, D Alemayehu, **KL Hoffman**, CY Vossen, RA Huml, H Ravn, K Kvist, R Pratley, M.-C Shih, G Pennello, D Martin, SP Waddy, CE Barr, M Akacha, JB Buse, M van der Laan, and M Petersen. "A causal roadmap for generating high-quality real-world evidence". *Journal of Clinical and Translational Science* 7.1 (2023), e212. DOI: 10.1017/cts.2023.635.

[A32] N Dusaj, E Popoutsi, **KL Hoffman**, I Siempos, and E Schenck. "Lost in a number: concealed heterogeneity within the sequential organ failure assessment (SOFA) score". *Critical Care* (2023).

[A31] JI Basem*, AF Roth*, RS White, VE Tangel, SY Jiang, JM Choi, **KL Hoffman**, EJ Schenck, ZA Turnbull, KO Pryor, NS Ivascu, SG Memtsoudis, and PA Goldstein. "Patient care in rapid-expansion intensive care units during the COVID-19 pandemic crisis". *BMC Anesthesiology* 22.1 (2022), p. 209. DOI: 10.1186/s12871-022-01752-z.

[A30] R Batra, W Whalen, S Alvarez-Mulett, LG Gómez-Escobar, **KL Hoffman**, W Simmons, J Harrington, K Chetnik, M Buyukozkan, E Benedetti, ME Choi, K Suhre, E Schenck, AMK Choi, F Schmidt, SJ Cho, and J Krumsiek. "Multi-omic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS". *PLOS Pathogens* 18.9 (2022), e1010819. DOI: 10.1371/journal.ppat.1010819.

[A29] M Buyukozkan, S Alvarez-Mulett, AC Racanelli, F Schmidt, R Batra, **KL Hoffman**, H Sarwath, R Engelke, L Gomez-Escobar, W Simmons, E Benedetti, K Chetnik, G Zhang, E Schenck, K Suhre, JJ Choi, Z Zhao, S Racine-Brzostek, HS Yang, ME Choi, AMK Choi, SJ Cho, and J Krumsiek. "Integrative metabolomic and proteomic signatures define clinical outcomes in severe COVID-19". *iScience* 25.7 (2022), p. 104612. DOI: 10.1016/j.isci.2022.104612.

[A28] E Coskun, R Kalil, A Yin, G Wehmeyer, **KL Hoffman**, R Kopparam, P Goyal, R Kaner, and E Siegler. "Outcomes of the oldest old admitted with COVID-19". *Journal of Palliative Care* (2022).

[A27] JK Krishnan*, KM Ancy*, C Oromendia, **KL Hoffman**, I Easthausen, NK Leidy, MK Han, RP Bowler, SA Christenson, DJ Couper, GJ Criner, JL Curtis, MT Dransfield, NN Hansel, AS Iyer, I Paine Robert, SP Peters, JA Wedzicha, PG Woodruff, KV Ballman, FJ Martinez, and SPIROMICS Investigators. "Characterizing COPD symptom variability in the stable state utilizing the Evaluating Respiratory Symptoms in COPD instrument". *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation* 9.2 (2022), pp. 195–208. DOI: 10.15326/jcopdf.2021.0263.

[A26] JK Krishnan, M Rajan, BR Baer, **KL Hoffman**, MN Alshak, KI Aronson, P Goyal, C Ezeomah, SS Hill, FJ Martinez, ML Turetz, MT Wells, MM Safford, and EJ Schenck. "Assessing mortality differences across acute respiratory failure management strategies in COVID-19". *Journal of Critical Care* 70 (2022), p. 154045. DOI: 10.1016/j.jcrc.2022.154045.

[A25] DR Price*, E Benedetti*, **KL Hoffman**, L Gomez-Escobar, S Alvarez-Mulett, A Capili, H Sarwath, CN Parkhurst, E Lafond, K Weidman, A Ravishankar, JG Cheong, R Batra, M Büyükozkan, K Chetnik, I Easthausen, EJ Schenck, AC Racanelli, H Outtz Reed, J Laurence, SZ Josefowicz, L Lief, ME Choi, F Schmidt, AC Borczuk, AMK Choi, J Krumsiek, and S Rafii. "Angiopoietin 2 is associated with vascular necroptosis induction in coronavirus disease 2019 acute respiratory distress syndrome". *The American Journal of Pathology* 192.7 (2022), pp. 1001–1015. DOI: 10.1016/j.ajpath.2022.04.002.

[A24] MJ Satlin, L Chen, A Gomez-Simmonds, J Marino, G Weston, T Bhowmick, SK Seo, SJ Sperber, AC Kim, B Eilertson, S Derti, SG Jenkins, MH Levi, MP Weinstein, Y.-W Tang, T Hong, S Juretschko, **KL Hoffman**, TJ Walsh, LF Westblade, A.-C Uhlemann, and BN Kreiswirth. "Impact of a rapid molecular test for *Klebsiella pneumoniae* carbapenemase and ceftazidime-avibactam use on outcomes after bacteremia caused by carbapenem-resistant Enterobacterales". *Clinical Infectious Diseases* 75.12 (2022), pp. 2066–2075. DOI: 10.1093/cid/ciac354.

[A23] G Waldrop*, SA Safavynia*, ME Barra*, S Agarwal, DA Berlin, AK Boehme, D Brodie, JM Choi, K Doyle, JJ Fins, W Ganglberger, **KL Hoffman**, AM Mittel, D Roh, SS Mukerji, C Der Nigoghossian, S Park, EJ Schenck, J Salazar-Schicchi, Q Shen, E Sholle, AG Velazquez, MC Walline, MB Westover, EN Brown, J Victor, BL Edlow, ND Schiff, and J Claassen. "Prolonged unconsciousness is common in COVID-19 and associated with hypoxemia". *Annals of Neurology* 91.6 (2022), pp. 740–755. DOI: 10.1002/ana.26342.

[A22] K Weidman, E LaFond, **KL Hoffman**, P Goyal, CN Parkhurst, H Derry-Vick, E Schenck, and L Lief. "Post-intensive care unit syndrome in a cohort of COVID-19 survivors in New York City". *Annals of the American Thoracic Society* (2022), pp. 1158–1168.

[A21] X Wu*, Y Jeong*, S Poli de Frias, I Easthausen, **KL Hoffman**, C Oromendia, S Taheri, AJ Esposito, L Quesada Arias, EA Ayaub, R Maurer, RR Gill, H Hatabu, M Nishino, ML Frits, CK Iannaccone, ME Weinblatt, NA Shadick, PF Dellaripa, AMK Choi, EY Kim, IO Rosas, FJ Martinez, and TJ Doyle. "Serum proteomic profiling of rheumatoid arthritis-interstitial lung disease with a comparison to idiopathic pulmonary fibrosis". *Thorax* 77.10 (2022), pp. 1041–1044. DOI: 10.1136/thorax-2021-217822.

[A20] E Mauer, J Lee, J Choi, H Zhang, **KL Hoffman**, IJ Easthausen, M Rajan, MG Weiner, R Kaushal, MM Safford, PAD Steel, and S Banerjee. "A predictive model of clinical deterioration among hospitalized COVID-19 patients by harnessing hospital course trajectories". *Journal of Biomedical Informatics* 118 (2021), p. 103794. DOI: 10.1016/j.jbi.2021.103794.

[A19] M Plataki, D Pan, P Goyal, **KL Hoffman**, JMK Choi, H Huang, MM Safford, and EJ Schenck. "Association of body mass index with morbidity in patients hospitalised with COVID-19". *BMJ Open Respiratory Research* 8.1 (2021), e000970.

[A18] DR Price, **KL Hoffman**, C Oromendia, LK Torres, EJ Schenck, ME Choi, AMK Choi, RM Baron, J.-W Huh, and II Siempos. "Effect of neutropenic critical illness on development and prognosis of acute respiratory distress syndrome". *American Journal of Respiratory and Critical Care Medicine* 203.4 (2021), pp. 504–508.

[A17] DR Price, **KL Hoffman**, E Sanchez, AMK Choi, and II Siempos. "Temporal trends of outcomes of neutropenic patients with ARDS enrolled in therapeutic clinical trials". *Intensive Care Medicine* 47.1 (2021), pp. 122–123.

[A16] M Reiterer, M Rajan, N Gómez-Banoy, JD Lau, LG Gomez-Escobar, L Ma, A Gilani, S Alvarez-Mulett, ET Sholle, V Chandar, Y Bram, **KL Hoffman**, P Bhardwaj, P Piloco, A Rubio-Navarro, S Uhl, L Carrau, S Houhgton, D Redmond, AP Shukla, P Goyal, KA Brown, BR tenOever, LC Alonso, RE Schwartz, EJ Schenck, MM Safford, and JC Lo. "Hyperglycemia in acute COVID-19 is characterized by insulin

resistance and adipose tissue infectivity by SARS-CoV-2". *Cell Metabolism* 33.11 (2021), 2174–2188.e5. DOI: 10.1016/j.cmet.2021.09.009.

[A15] EJ Schenck, **KL Hoffman**, M Cusick, J Kabariti, ET Sholle, and TR Campion Jr. "Critical care database for advanced research (CEDAR): an automated method to support intensive care units with electronic health record data". *Journal of Biomedical Informatics* 118 (2021), p. 103789.

[A14] C Su, **KL Hoffman**, Z Xu, E Sanchez, I Siempos, JS Harrington, A Racanelli, M Plataki, F Wang, and EJ Schenck. "Evaluation of albumin kinetics in critically ill patients with coronavirus disease 2019 compared to those with sepsis-induced acute respiratory distress syndrome". *Critical Care Explorations* 3.12 (2021), e0589.

[A13] C Su, Z Xu, **KL Hoffman**, P Goyal, MM Safford, J Lee, S Alvarez-Mulett, L Gomez-Escobar, DR Price, JS Harrington, LK Torres, FJ Martinez, J Campion Thomas R., F Wang, and EJ Schenck. "Identifying organ dysfunction trajectory-based subphenotypes in critically ill patients with COVID-19". *Scientific Reports* 11.1 (2021), p. 15872. DOI: 10.1038/s41598-021-95431-7.

[A12] LK Torres, **KL Hoffman**, C Oromendia, I Díaz, JS Harrington, EJ Schenck, DR Price, L Gomez-Escobar, A Higuera, M Pinilla Vera, RM Baron, LE Fredenburgh, J.-W Huh, AMK Choi, and II Siempos. "Attributable mortality of acute respiratory distress syndrome: a systematic review, meta-analysis and survival analysis using targeted minimum loss-based estimation". *Thorax* 76.12 (2021), pp. 1176–1185. DOI: 10.1136/thoraxjnl-2020-215950.

[A11] WZ Zhang, **KL Hoffman**, KT Schiffer, C Oromendia, MC Rice, I Barjaktarevic, SP Peters, N Putcha, RP Bowler, JM Wells, DJ Couper, WW Labaki, JL Curtis, MK Han, I Paine Robert, PG Woodruff, GJ Criner, NN Hansel, I Diaz, KV Ballman, K Nakahira, ME Choi, FJ Martinez, AMK Choi, and SM Cloonan. "Association of plasma mitochondrial DNA with COPD severity and progression in the SPIROMICS cohort". *Respiratory Research* 22.1 (2021), p. 126. DOI: 10.1186/s12931-021-01707-x.

[A10] K Andreadis, **KL Hoffman**, D D'Angelo, and L Sulica. "Sulcus vocalis: results of excision without reconstruction". *The Laryngoscope* 130.9 (2020), pp. 2208–2212.

[A9] T Chukir, Y Liu, **KL Hoffman**, JP Bilezikian, and A Farooki. "Calcitriol elevation is associated with a higher risk of refractory hypercalcemia of malignancy in solid tumors". *The Journal of Clinical Endocrinology & Metabolism* 105.4 (2020), e1115–e1123.

[A8] P Goyal, JJ Choi, LC Pinheiro, EJ Schenck, R Chen, A Jabri, MJ Satlin, J Campion Thomas R., M Nahid, JB Ringel, **KL Hoffman**, MN Alshak, HA Li, GT Wehmeyer, M Rajan, E Reshetnyak, N Hupert, EM Horn, FJ Martinez, RM Gulick, and MM Safford. "Clinical characteristics of COVID-19 in New York City". *New England Journal of Medicine* 382.24 (2020), pp. 2372–2374. DOI: 10.1056/NEJMc2010419.

[A7] P Goyal, JB Ringel, M Rajan, JJ Choi, LC Pinheiro, HA Li, GT Wehmeyer, MN Alshak, A Jabri, EJ Schenck, R Chen, MJ Satlin, J Campion Thomas R., M Nahid, M Plataki, **KL Hoffman**, E Reshetnyak, N Hupert, EM Horn, FJ Martinez, RM Gulick, and MM Safford. "Obesity and COVID-19 in New York City: a retrospective cohort study". *Annals of Internal Medicine* 173.10 (2020), pp. 855–858. DOI: 10.7326/M20-2730.

[A6] A Pinsino, GM Mondellini, EA Royzman, **KL Hoffman**, D D'Angelo, M Mabasa, A Gaudig, AM Zuver, A Masoumi, AR Garan, S Mohan, SA Husain, K Toma, RT Faillace, JT Giles, K Takeda, H Takayama, Y Naka, VK Topkara, RT Demmer, J Radhakrishnan, PC Colombo, and M Yuzefpolskaya. "Cystatin C- versus creatinine-based assessment of renal function and prediction of early outcomes among patients with a left ventricular assist device". *Circulation: Heart Failure* 13.1 (2020), e006326. DOI: 10.1161/CIRCHEARTFAILURE.119.006326.

[A5] A Rahman, E Schelbaum, **KL Hoffman**, I Díaz, H Hristov, R Andrews, S Jett, H Jackson, A Lee, H Sarva, S Pahlajani, D Matthews, J Dyke, MJ de Leon, RS Isaacson, RD Brinton, and L Mosconi. "Sex-driven modifiers of Alzheimer risk: a multimodality brain imaging study". *Neurology* 95.2 (2020), e166–e178. DOI: 10.1212/WNL.0000000000009781.

[A4] EJ Schenck, **KL Hoffman**, P Goyal, J Choi, L Torres, K Rajwani, CW Tam, N Ivascu, FJ Martinez, and DA Berlin. "Respiratory mechanics and gas exchange in COVID-19–associated respiratory failure". *Annals of the American Thoracic Society* 17.9 (2020), pp. 1158–1161.

[A3] WZ Zhang*, MC Rice*, **KL Hoffman**, C Oromendia, IZ Barjaktarevic, JM Wells, AT Hastie, WW Labaki, CB Cooper, AP Comellas, GJ Criner, JA Krishnan, I Paine Robert, NN Hansel, RP Bowler,

RG Barr, SP Peters, PG Woodruff, JL Curtis, MK Han, KV Ballman, FJ Martinez, AMK Choi, K Nakahira, SM Cloonan, ME Choi, and SPIROMICS Investigators. "Association of urine mitochondrial DNA with clinical measures of COPD in the SPIROMICS cohort". *JCI Insight* 5.3 (2020), e133984. DOI: 10.1172/jci.insight.133984.

[A2] HS Bhatia, J Bailey, O Unlu, **KL Hoffman**, and RJ Kim. "Efficacy and safety of direct oral anticoagulants in patients with atrial fibrillation and chronic kidney disease". *Pacing and Clinical Electrophysiology* 42.11 (2019), pp. 1463–1470.

[A1] CP Soneru, CA Riley, **KL Hoffman**, A Tabaee, and TH Schwartz. "Intra-operative MRI vs endoscopy in achieving gross total resection of pituitary adenomas: a systematic review". *Acta Neurochirurgica* 161.8 (2019), pp. 1683–1698.

Non-Peer-Reviewed Work

[N2] **KL Hoffman**. "COVID-19: a view from the sidelines". *Significance* 18.1 (2021), pp. 40–43.

[N1] **KL Hoffman**. "A beautiful affliction: tracing the role of mentally ill artists in reducing the negative stigma of mental illness". Undergraduate honors thesis. University of Detroit Mercy, 2015.

Talks

Invited

Viral Interference in the CASCADIA Study. Center for Emerging and Re-emerging Infectious Diseases, Seattle, WA.	Feb 2026
StatsPhD Panelist (remote).	Nov 2023
Corticosteroids for COVID-19 in a Longitudinal Target Trial Emulation Framework. Inria Causal Inference Learning Group, Paris, France (remote).	Jan 2023
Comparison of a Target Trial Emulation Framework to Cox Regression to Estimate the Effect of Corticosteroids on COVID-19 Mortality. Dr. Fei Wang's Laboratory Meeting, New York, NY (remote).	Sep 2022
Swimmer Plots using ggplot2. R/Medicine Conference (remote).	Aug 2022
Communicating with a Statistician. Weill Cornell Medicine.	Jul 2022
Big Data and Statistical Learning for Pulmonary and Critical Care. Weill Cornell Medicine.	Apr 2022
Introduction to Longitudinal Data Analysis I and II. Weill Cornell Medicine.	Mar 2020, 2021, 2022
Learning Impact of Air Pollution on Kidney Disease Epidemiology in US and East China Using Big Public Health Data. Shanghai Jiao Tong University, Shanghai, China.	Mar 2018

Contributed

Viral Interference in the CASCADIA Study. IDWeek, Washington, D.C.	Oct 2026
An Introduction to Longitudinal Modified Treatment Policies. TGIF Lab Group, Seattle, WA.	Nov 2024
Using Longitudinal Modified Treatment Policies for Complex, Continuous, and/or Time-Varying Exposures. UW Biostatistics Student-led Causal Reading Group, Seattle, WA.	Feb 2024
Swimmer Plots using ggplot2. Weill Cornell Medicine Biostatistics Computing Club, New York, NY.	Sep 2022
Tips and Tricks for Table 1's. Weill Cornell Medicine Biostatistics Computing Club, New York, NY.	Jul 2022
Corticosteroids in COVID-19: Optimizing Observational Research through Target Trial Emulations. American Causal Inference Conference, Berkeley, CA.	May 2022

Introduction to Ensemble Learning. Weill Cornell Medicine Biostatistics Computing Club, New York, NY. — Jan 2021

Power Calculations in R. Weill Cornell Medicine Biostatistics Computing Club, New York, NY. — Jan 2020

Become a Super Learner! Introduction to Super Learning and the sl3 Package. NYC R-Ladies, New York, NY. — Sep 2019

R Projects, the here Package, and Other Tips from the NYC R Conference. Weill Cornell Medicine Biostatistics Computing Club, New York, NY. — Jun 2019

Fireproof Your Computer from Jenny Bryan! Learn the here Package. NYC R-Ladies Lightning Talks, New York, NY. — Jun 2019

Overview of dplyr. Weill Cornell Medicine Biostatistics Computing Club, New York, NY. — Mar 2019

Posters

Viral Interference in the CASCADIA Study. IDWeek, Washington, D.C. — Oct 2026

Correlates of Protection for SARS-CoV-2 in U.S. Children: A Prospective Cohort Study. UW Biostatistics Student-Invited Seminar, Seattle, WA. — Apr 2026

Longitudinal Modified Treatment Policies for Complex, Continuous, and/or Time-Varying Exposures. American Causal Inference Conference, Seattle, WA. — May 2024

Longitudinal Modified Treatment Policies for Complex, Continuous, and/or Time-Varying Exposures. UW Biostatistics Student-Invited Seminar, Seattle, WA. — Feb 2024

Estimating the Causal Effect of Sepsis on Mortality in ICU Patients with and without a Solid Organ Transplant. Joint Statistical Meetings (remote). — Aug 2020

Estimating the Causal Effect of Digoxin using Marginal Structural Models. Joint Statistical Meetings, Denver, CO. — Aug 2019

Learning Impact of Air Pollution on Kidney Disease Epidemiology in US and East China Using Big Public Health Data. Michigan Institute for Data Science Symposium, Ann Arbor, MI. — Nov 2017

Teaching

Teaching Assistant

Applied Biostatistics I. University of Washington. — Fall 2026

Modern Methods for Causal Inference. Weill Cornell Medicine. — Summer 2019–2021; Spring 2022

Introduction to Health Services Research. Weill Cornell Medicine. — Fall 2021

Data Science I. Weill Cornell Medicine. — Fall 2019

Biostatistics II. Weill Cornell Medicine. — Winter 2019

Educational Writing

Selected blog posts (khstats.com)

An Illustrated Guide to Targeted Maximum Likelihood Estimation (3-part series) — Dec 2020

An Illustrated Guide to Superlearning — Oct 2020

Annotated Forest Plots using ggplot2 — Dec 2022

Statistical Intuition for Optimal Treatment Regimes — Jul 2022

Customizable Correlation Plots in R — Jun 2022

Swimmer Plots for Multiple Variables using ggplot2	Jun 2022
An Illustrated Introduction to Modified Treatment Policies	Apr 2022
Conditional and Iterated Expectations as Linear Regression Models	Jul 2020
Stats on Drugs: Interview with a Pharma-CRO Biostatistician	Nov 2019
A Day in the Life of a Biostatistician	Apr 2019

Visual guides for causal inference: G-computation; Inverse Probability Weighting; Targeted Maximum Likelihood Estimation; Superlearning.

Honors & Awards

IDWeek Trainee Travel Award ($800)	Oct 2026
Visiting Scholar, Isaac Newton Institute for Mathematical Sciences	Feb 2026
Gertrude Cox Scholarship, American Statistical Association	Aug 2024
NSF Early Career Researchers Travel Scholarship, American Causal Inference Conference	May 2022, 2023
University of Michigan GSRA Tuition Scholarship	2017–2018
University of Detroit Mercy Division I Softball and Academic Merit Full Tuition Scholarship	2011–2015
University of Detroit Mercy Leadership Pin; Honors Program Graduate; *Magna Cum Laude*	Apr 2015

Leadership

University of Washington Biostatistics Admission Committee, Seattle, WA	2025–2026
Student Representative, UW Biostatistics Curriculum Committee, Seattle, WA	2025–2026
Co-host, Weill Cornell Medicine Biostatistics Computing Club, New York, NY	2020–2022
Host, Weill Cornell Medicine Causal Inference Reading Group, New York, NY	2019–2020
Co-president, Michigan Biostatistics Student Association, Ann Arbor, MI	2017–2018
Head Coach, Milan Junior Varsity Softball, Milan, MI	2016
Co-captain, NCAA Division I Softball, Detroit, MI	2014–2015
Team Representative, NCAA Student-Athlete Advisory Committee, Detroit, MI	2013–2015

Service

Project Mentor, Weill Cornell Medicine Biostatistics Internship Program	Summer 2026
Member, UW Biostatistics Equity, Diversity, and Inclusion Committee	2023–present
Peer Reviewer, *BMJ* and *American Journal of Respiratory and Critical Care Medicine*	2022–present
Volunteer, University of Michigan Statistics in the Community (STATCOM); primary project: data analytics for Ozone House's emergency call center for at-risk teenagers	2016–2018
Volunteer Analyst, data visualizations for St. Joseph Mercy Hospital line infections, Ann Arbor, MI	2017–2018
Fastpitch Pitching Coach for girls aged 10–16, Milan, MI	2013–2018
Community Health Volunteer, Limón, Nicaragua	2015
Volunteer, Gleaners Food Bank, Boys and Girls Club, and Henry Ford Hospital (250 hours), Detroit, MI	2011–2015

Software

Active: R, R Markdown/Quarto, LaTeX, git/GitHub, UNIX, SAS, Adobe InDesign/Fresco/Illustrator
Previous: Python, SQL, MATLAB, Java, Maple