

Curriculum Vitae Noorie Hyun

A. Educational and Biographical Information

Noorie Hyun, PhD
Associate Biostatistics Investigator
Division of Biostatistics
Kaiser Permanente Washington Health Research Institute (KPWHRI)
1730 Minor Avenue, Suite 1360
Seattle, WA 98101-1448
e-mail: noorie.hyun@kp.org

University of North Carolina (UNC) at Chapel Hill, NC, USA	
Ph.D. in Biostatistics	2014
Catholic University, Seoul, South Korea	
M.S. in Biostatistics	2001
Sogang University, Seoul, South Korea	
M.S. in Mathematics	1999
Hongik University, Seoul, South Korea	
B.S. in Mathematics Education	1996

B. Professional Positions (research/academic employment history)

Division of Biostatistics, Kaiser Permanente Washington Health Research Institute	
Associate Biostatistics Investigator	2023-present
Assistant Biostatistics Investigator	2021-2023
Department of Biostatistics, University of Washington	
Affiliate Associate Professor	2025-present
Affiliate Assistant Professor	2023-2025
Division of Biostatistics, Institute for Health and Equity at the Medical College of Wisconsin (MCS)	
Tenure-track Assistant Professor	2017-2021
Division of Cancer Epidemiology and Genetics (DCEG) at the National Cancer Institute (NCI)	
Post-doctoral fellow	2014-2017
Collaborative Studies Coordinating Center, UNC at Chapel Hill	
Research Assistant	2012-2014
Department of Biostatistics, UNC at Chapel Hill	
Research Assistant	2009-2012
Biostatistics and Data Management team, Medical Department, Sanofi-Aventis Korea	
Senior Biostatistician/Manager	2006-2008
Senior Biostatistician	2006
Junior Biostatistician and Data Manager (formerly, Handok-Aventis Korea)	2002-2005

C. Professional Honors (e.g., professional society awards and acknowledgements)

- NCI/DCEG Fellows Awards for Research Excellence: “Effective pooling methods for sample weighted data”
2016
- NCI/DCEG Fellowship Achievement Award
2016

- American Statistical Association (ASA)-Statistics in Epidemiology Section Student Paper Competition: the early version of “Flexible risk prediction models for left or interval-censored data from electronic health records” 2016
- ASA-Biometrics Section Student Paper Competition: the early version of “Gumbel regression models for a monotone increasing continuous biomarker subject to measurement error” 2013

D. Memberships (e.g., professional society memberships)

- ASA section: Biometrics, Statistics in Epidemiology, Lifetime Data Science
- International Biometric Society
- Eastern North American Region (ENAR)
- Western North America Region (WNAR)

E. Organizational Service (e.g., significant intramural committee memberships, task forces, and other notable service activities for Kaiser Permanente [KP] Washington, KPWHRI, or KP School of Medicine)

- Organizer of Biostatistics Journal Club 2023 - present
- Space and Facility Committee 2023 – 2025
- Culture club 2024
- Collaborative Biostatistician Search Committee 2022

F. Other Professional Service (e.g., significant extramural service including task forces, committee memberships, etc. Include university service. Please be selective.)

- Organizing topic-contributed session entitled “Smarter data integration: statistical methods for multi-phase and multi-source data.” at JSM, Boston 2026
- ASA Lifetime Data Science Students Paper Award Committee 2026
- ASA Lifetime Data Science Students Paper Award Committee 2025
- ASA Biometrics Section Byar Award Committee 2024
- Organizing invited session entitled “Recent advances in optimal sampling design and estimation using validated and error-prone data.” at ENAR, Nashville 2023
- ASA Biometrics Section Byar Award Committee 2022
- Organizing invited session entitled “Survival analysis methods for complex survey data” at Lifetime Data Science Conference, Pittsburgh 2019
- International Chinese Statistical Association-Students Paper Award Committee 2021
- Poster Competition Judge for the Survey Research and Methods Section at JSM 2015
- DCEG/NCI Fellows Symposium Committee 2015

University Service

- Graduate Studies Council (GSC) Standing Committee (the Awards Committee for Graduate School of Biomedical Sciences) at MCW 2018-2021
- Graduate School Student Travel Award Committee at MCW 2018-2021

G. Special National Responsibilities (e.g., NIH study section membership; ad hoc study section participation; serving on committees or expert panels for national organizations)

- Patient-centered outcomes research institute (PCORI)
Subject-matter expert peer reviewer for PCORI-funded draft final research report 2025
- Grant proposal review for Breast Cancer Now 2019

H. Editorial Responsibilities (e.g., editorial board memberships, guest editorships, journals reviewed for)a. Editorial activities

- Associate Editor, Statistics in Medicine 2025-present
- Editorial Board, Statistical Reviewer, LANCET Primary Care 2025-present
- Editorial Board, Statistical Reviewer, LANCET Haematology 2021-present
- Editorial Board, Statistical Reviewer, Journal of General Internal Medicine, 2018-2020

b. Referee for Journals, including

Journal of American Statistical Association, Biometrics, Biostatistics, Statistics in Medicine, Statistics and Public Policy, Communications for Statistical Applications and Methods, Australian & New Zealand Journal of Statistics. PLOS ONE, Lifetime Data Analysis, Journal of Applied Statistics, Journal of Statistical Computation and Simulation, Journal of Statistics in Biopharmaceutical Research, LANCET (oncology, haematology, and primary care).

I. Research Funding (Include current, pending review, and past funded projects. For each, list: funding source, grant #/mechanism, project title, total amount of DIRECT funding to KPWA for the entire project period (e.g., full directs if PI and subcontract if co-I), your role on the project (e.g., PI, co-PI, etc.), your % effort. Include the name of the project PI following the award number. If there are multiple PI's, please note who is the contact PI.

a. Past Research-Funding

1. DCEG/NCI internal grant, 2016, \$20,000, Title: *A web tool for estimating absolute and relative risk for cohorts assembled from electronic health records within health care systems*, role: Principal Investigator (PI)
2. ACS pilot grant, IRG #16-183-31, 07/2019-06/2021, \$30,000, Title: *Prediction models for HPV-clearance and progression-to-pre-/cancer of type-specific HPV infections using the EHRs from the KPNC cervical cancer screening cohort*, role: PI
3. NIAID R21, 04/2019-03/2021, \$275,000, PI: Jenifer Coburn, Title: *Investigation of the Porin Function of B. Burgdorferi P66* Specific aim: *To understand how B. burgdorferi establishes infection of multiple sites in mice*, role: co-I (5% FTE)
4. NHLBI, 01/2020-12/2020, \$302,000, PI: Rebekah Walker, Title: *Prediction Model for Hospital Admissions, ED Visits and Cost in the Froedtert/MCW Health System* Specific aim: *To improve the health of Wisconsin communities through more tailored and targeted management of high-risk patients*, role: co-I (5% FTE)
5. AHW, 10/2017-09/2022, \$2,800,000, PI: Leonard Egede, Title: *community empowerment and lifestyle intervention for ethnic minorities –COME ALIVE MILWAUKEE*, Specific aim: *To reduce the burden of chronic disease and eliminate health disparities in high risk minority communities, create necessary infrastructure to combat health disparities, and grow the next generation of change agents in health disparities*, Role: co-investigator (co-I) (50% FTE)
6. NHLBI 1R01HL139557-01A1, \$2,261,695, 07/2019-06/2024, PI: Nicole Lohr, Title: *Small molecule NO precursors as a bioactive source of NO in red light vasodilation*, Role: co-I (15% FTE)

7. NIAID, 1R21AI147573, 07/2019 – 06/2022, PI: Jenifer Coburn, Title: *Mechanisms of Leptospira interrogans interactions with the vascular endothelium in vivo*, Role: co-I (5% FTE)
8. NIAID, R01AI131771, 06/2021 - 01/2024, PIs: Bryan Shepherd and Pamela A. Shaw, Title: Statistical Methods for Correlated Outcome and Covariate Errors in Studies of HIV/AIDS, Role: co-I (15% FTE)
9. NCI, UM1CA221940, 04/2018 - 02/2024, PIs: Jasmin A Tiro, Aruna Kamineni, Jennifer Haas, Title: Multilevel Optimization of the Cervical Cancer Screening Process in Diverse Settings & Populations (METRICS), Role: co-I (10% FTE)
10. NIA, 5R01AG055527, 09/2017-09/2024, PIs: Yasmin Mossavar-Rahmani, Title: Multicultural Healthy Diet to Reduce Cognitive Decline and Alzheimer's Disease Risk (MHD), Role: co-I (15% FTE)
11. FDA, 75F40119D10037, 11/2023-12/2024, PI: Susan Shortreed: Title: Use Case Package 2 (UC2)- Empirical Application of the Sentinel EHR and Claims Development Network to Enhance ARIA Sufficient Inferential Requests and Atypical Descriptive Requests, Role: co-I (20% FTE)

b. Current Research-Funding

1. NIMH
R01 MH133566 (PIs: Joseph E Glass, Edwin S Wong, **Noorie Hyun**)
Title: SUD Care Transitions
Role: PI (40% FTE)
04/2025 - 03/2030
\$4,079,744 (including indirect)
2. NIMH
R01 MH133566 (PI: Gwen Lapham)
Title: Effectiveness of Teen Suicide Prevention with Confidential Care: An Implementation Study Across 30 Primary Care Clinics
Role: co-I (20% FTE)
07/2024 - 06/2027
\$1,938,672 (including indirect)
3. NIDA
DA040314 (PI: Cynthia Campbell)
Title: Health Systems Node of the NIDA Clinical Trials Network (CTN) - Supplement (CTN-0074) Primary Care Opioid Use Disorders Treatment (PROUD) Trial
Role: co-I (10% FTE)
06/2017 - 02/2026
\$14,545,741 (including indirect)
4. NIAID
R01AI131771 renewal (PIs: Bryan Shepherd, Pamela A. Shaw)
Title: Statistical Methods for Correlated Outcome and Covariate Errors in Studies of HIV/AIDS
Role: co-I (15% FTE)
02/2023 - 01/2028
\$1,528,710 (including indirect)
5. NIMH
UF1 MH121949 (PIs: Lynn DeBar and Katherine Bradley)
Title: Patient-centered Team-based Primary Care to Treat Opioid Use Disorder, Depression, and Other Conditions
Role: co-I (13% FTE)
10/2023 - 04/2025
09/2024 - 02/2026
\$1,095,519 (including indirect)

c. Pending Research-Funding

NIDA 12/01/2025 - 11/30/2027
 R21DA059010 (PI: Gwen Lapham) \$285,685.00 (total direct)
 Title: Understanding Trajectories of Cannabis Use Frequency Based on Routine Screening in a Large Outpatient Population
 Role: co-I (5% FTE)

NIDA 04/01/2026 - 03/31/2031
 R01 (PI: Jennifer Bobb) \$2,019,290.00 (total direct)
 Title: Improving Statistical Practice for Pragmatic Trials Addressing Substance Use Disorders
 Role: co-I

NCCIH
 R01 (PIs: Andrea Cook and Lynn Debar) 12/2025 - 11/2030
 Title: Developing Frameworks and Prediction Models to Harness Secondary Data to Elucidate Nonpharmacological Intervention Engagement and Responsiveness Among Individuals with Pain
 Role: co-I (15%)

J. Teaching and Mentoring Responsibilities**a. Instructor**

University of Washington/ Department of Biostatistics

1. Student Seminar Spring 2026
Fall 2022

MCW

2. Statistical Models and Methods II in PhD program Spring 2021

Catholic University in Korea

3. Introduction to Statistics with SAS programming in MS program 2001-2002

b. Short Course

4. Introduction to R (co-instructor) at DCEG/NCI Spring 2015

c. Teaching Assistant

University of North Carolina

5. Advanced Survey Sampling Methods, PhD program Spring 2013
6. Principles of Experimental Analysis, MS program Spring 2012
7. Advanced Probability Theory, PhD program Fall 2011

Sogang University in Korea

8. Applied Mathematics, undergraduate program Spring 1998
9. Advanced Differential and Integration Calculus, undergraduate program Fall 1997
10. Differential and Integration Calculus, undergraduate program Spring 1997

d. Thesis Committee

1. Lu Bai, MS in UW Biostatistics: "Modeling the Effects of Personal Characteristics on Longitudinal Cognitive Performance and Its Variability: An application to Multicultural Healthy Diet Study"
03/2024-06/2025

2. Snihya Nagavally, PhD in Biomedical and Health Informatics, University of Wisconsin at Milwaukee, dissertation title: "Assess the value of social determinants of health in predicting diagnostic biomarkers such as hemoglobin A1c, blood pressure and low density lipoprotein using machine learning models and electronic medical records" 01/2023-06/2024
3. Xiao Li, PhD in Biostatistics, MCW, dissertation title: "Contributions to Bayesian machine learning for complex models" 01/2020-09/2022
4. Courtney Smith, MS in Clinical Translational Science Institute (CTSI), MCW, dissertation title: "The Influence of Language Concordant Care on Medication Adherence in a Nationally Representative Sample of Spanish-Speaking Latinos with Heart Disease or Hypertension: Trends from the US MEPS, 2013-2017" 09/2020-05/2021
5. Larisa A. Broglie, MD, MS in CTSI, MCW, dissertation title: "Outcome of patients over 70 years after allogeneic hematopoietic cell translation" 01/2018-04/2018
6. Ravi Kishore Narra, MD, MS in CTSI, MCW, dissertation title: "The hematopoietic cell transplantation-comorbidity index (HCT-CI) in recipients of allogeneic transplantation for Non-Malignant Diseases" 01/2018-12/2018

e. Mentoring

Primary mentoring

1. Yucheng Zhao, UW Statistics MS Student: Statistical inferences for heterogeneous treatment effect in cluster randomized trials 03/2025-present
2. Bailey Sarka, Department of Pharmacology and Toxicology/MCW
F31-grant proposal "Drug seeking ensembles involved in Oxycodone self-administration within a chronic pain model" 08/2020-09/2021

Co-mentoring

3. Lu Bai, UW Biostatistics MS student: Modeling the Effects of Personal Characteristics on Longitudinal Cognitive Performance and Its Variability: An application to Multicultural Healthy Diet Study 09/2024-06/2025
4. Niyah Thurman, UW undergraduate student: Seattle Stat Grow Internship Program organized by Fred Hutch Cancer Center 06/2024-08/2024
5. Maria Demarco, PhD Epidemiology student in Epidemiology and Biostatistics, School of Public Health, University of Maryland – dissertation title: "Applied epidemiology studies of high-risk human papillomavirus infections and risk of cervical precancer" 03/ 2016-03/2017
6. Li Cheung, PhD student in Statistics Department, George Washington University, thesis paper: "Mixture models for left- and interval-censored data and concordance indices for composite survival outcomes" 03/2015-12/2015

K. Publications (Include all authors and highlight your name. Include complete citation. Note papers on which you served as the primary mentor with an "*" and annotation. Note papers on which you were the senior author (if not the first author) with "**.")

a. Published papers in refereed (peer-reviewed) journals (¹: co-first authorship; ²: lead or sole biostatistician role)

1. **Hyun N**, Idu AE, Cook AJ, and Bobb JF (2026). Increased risk of type I errors for detecting heterogeneity of treatment effects in cluster-randomized trials using mixed-effect models. *BMC Medical Research Methods*, 2026 Jan 12, doi: 10.1186/s12874-025-02744-6. PMID: 41526818.

2. **Hyun N**, Boe LA, and Shaw PA (2025). An augmented likelihood approach incorporating error-prone auxiliary data into a survival analysis. *Statistics in Medicine*. 44(28-30): e70321. <https://doi.org/10.1002/sim.70321>. PMID: 41326964.
3. Bradley KA, **Hyun N**, Idu A, Yu O, Bobb JF, Wartko PD, Weinstein Z, Matthews AG, McCormack J, Lee AK, Samet JH; PROUD Trial collaborators on sex, race and ethnicity (2025). Differences in benefits of office based opioid treatment: Secondary analyses across sub-groups in the PROUD randomized controlled implementation trial. *Addiction*, 2025 Nov 24;10.1111/add.70221. doi: 10.1111/add.70221. PMID: 41287180; PMCID: PMC12829311.
4. Katz M, Johns J, Martin MM, Burgess A, Claris V, Volda GS, Roque N, Shaw PA, **Hyun N**, Hakun JG, Pavlovic JM, Wylie-Rosett J, Sliwinski MJ, and Mossavar-Rahmani Y (2025). Recruitment of mid-life adults to a randomized clinical trial: The multicultural healthy diet study to reduce cognitive decline and Alzheimer's disease risk. *Alzheimer's Dement*. 11:e70174. <https://doi.org/10.1002/trc2.70174>
5. Pocobelli G, Lykken J, Haas JS, Tiro J, Doria-Rose VP, **Hyun N**², Silver MI, Kamineni A and Chubak J (2025). Positive predictive value of cervical cancer screening results recommended for colposcopy by human papillomavirus vaccination status at 3 U.S. healthcare systems. *Cancer Causes & Control*: Accepted. <https://doi.org/10.1007/s10552-025-02039-7>.
6. Mossavar-Rahmani Y, **Hyun N**, Hakun JG, Katz MJ, Pavlovic JM, Zetterberg H, Wang Z, Yang JB, Wylie-Rosett J, Hebert JR, Sliwinski MJ, Shaw PA (2025). The effects of the Multicultural Healthy Diet on cognitive decline & Alzheimer's disease risk: A randomized controlled trial in middle-aged adults. *American Journal of Clinical Nutrition*, 122 (1), 48-59.
7. Lapham GT, Bobb JF, Luce C, Oliver MM, Hamilton LK, **Hyun N**, Hallgren KA, Matson TE (2025). Prevalence of cannabis use disorder by varying frequency of past-year cannabis use reported by primary care patients. *JGIM*, 40, 1039–1047.
8. Lapham GT, **Hyun N**², Bobb JF, Wartko PD, Matthews AG, Yu O, McCormack J, Lee AK, Liu DS, Samet JH, Zare-Mehrjerdi M, Braciszewski JM, Murphy MT, Arnsten JH, Horigian V, Caldeiro RM, Addis M, Bradley KA (2024). Nurse Care Management of Opioid Use Disorder Treatment After 3 Years: A Secondary Analysis of the PROUD Cluster Randomized Clinical Trial. *JAMA Network Open*, 7(11), e2447447-e2447447.
9. Bobb JF, Idu AE, Qiu H, Yu O, Boudreau DM, Wartko PD, Matthews AG, McCormack J, Lee AK, Campbell CI, Saxon AJ, Liu DS, Altschuler A, Samet JH, Northrup TF, Braciszewski JM, Murphy MT, Arnsten JH, Cunningham CO, Horigian VE, Szapocznik J, Glass JE, Caldeiro RM, Tsui JI, Burganowski RP, Weinstein ZM, Murphy SM, **Hyun N**, Bradley KA (2024). Offering nurse care management for opioid use disorder in primary care: impact on emergency and hospital utilization in a cluster-randomized implementation trial. *Drug and Alcohol Dependence*, 201, 111350.
10. Sung H, **Hyun N**², Ohman RE, Yang EH, Siegel RL, Jemal A (2024). Mediators of Black–White inequities in cardiovascular mortality among survivors of 18 cancers in the USA, *International Journal of Epidemiology*, 53 (1), dyad097.
11. Wartko PD, Bobb JF, Boudreau DM, Matthews AG, McCormack J, Lee AK, Qiu H, Yu O, **Hyun N**, Idu AE, Campbell CI, Saxon AJ, Liu DS, Altschuler A, Samet JH, Labelle CT, Zare-Mahrjerdi A, Stotts AL, Braciszewski JM, Murphy MT, Dryden D, Arnsten JH, Cunningham CO, Horigian VE, Szapocznik J, Glass JE, Caldeiro RM, Phillips RC, Shea M, Bart G, Schwartz RP, McNeely J, Liebschutz JM, Tsui JI, Merrill JO, Lapham GT, Addis M, Bradley KA, PROUD Trial Collaborators (2023). Nurse Care Management for Opioid Use Disorder Treatment: The PROUD Cluster Randomized Clinical Trial. *JAMA Intern Med*, 183(12), 1343–1354. <https://doi.org/10.1001/jamainternmed.2023.5701>

12. Wamuo O, **Hyun N²**, Holt JM, Somai MM, Crotty BH (2023). Patient and Provider Factors Associated With Successfully Addressing Medical Needs Using Telehealth: A Cross-Sectional Survey, *Managed care*, 8, 51
13. Jackson SS, Marks MA, Katki HA, Cook MB, **Hyun N**, Freedman ND, Kahle LL, Castle PE, Graubard BI (2022). Chaturvedi AK. Sex disparities in the incidence of 21 cancer types: quantification of the contribution of risk factors. *Cancer*, 128(19), 3531–3540.
<https://doi.org/10.1002/cncr.34390>
14. Holt JM, Cusatis R, Mortensen N, Wolfrath N, **Hyun N²**, Wine AN, Brown SA, Somai MM, Crotty BH. (2022). 21st Century House Calls: A Survey of Ambulatory Care Providers to Inform Organizational Telehealth Strategy. *BMJ Health and Care Informatics*, 29, e100626.
<http://doi: 10.1136/bmjhci-2022-100626>
15. Sung H, Siegel RL, **Hyun N²**, Miller KD, Yabroff RB, Jemal A. (2022). Subsequent primary cancer risk among five-year survivors of adolescent and young adult cancers. *Journal of National Cancer Institute*, 114(8), 1095–1108. <https://doi.org/10.1093/jnci/djac091>
16. Demarco M, Egemen D, **Hyun N²**, Chen X, Moscicki AB, Cheung L, Carter-Pokras O, Hammer A, Gage JC, Clarke MA, Castle PE, Befano B, Chen J, Dallal C, He X, Desai K, Lorey T, Poitras N, Raine-Bennett TR, Perkins RB, Wentzensen N, Schiffman M (2022). Contribution of Etiologic Cofactors to CIN3+ Risk Among Women with Human Papillomavirus-Positive Screening Test Results. *Journal of lower genital tract disease*, 26(2), 127–134.
<https://doi.org/10.1097/LGT.0000000000000667>, PMID: 35249974.
17. Zhao J, Han X, Nogueira L, **Hyun N²**, Jemal A, Yabroff R (2022). Association of State Medicaid Income Eligibility Limits and Long-term Survival after Cancer Diagnosis in the United States. *JCO oncology practice*, 18(6), e988–e999. <https://doi.org/10.1200/OP.21.00631>
18. **Hyun N**, Couper DJ, Zeng D (2022). A semiparametric Gumbel regression model for analyzing longitudinal biomarker with non-normal tails. *Statistics in Medicine*, 41(4), 736-750.
<https://doi.org/10.1002/sim.9248>, PMID: 34816477
19. Crotty BH, **Hyun N²**, Polovneff A, Dong Y, Decker MC, Mortensen N, Holt J, Winn A, Laud P, Somai MM (2021). Analysis of Clinician and Patient Factors and Completion of Telemedicine Appointments Using Video. *JAMA Network Open*, 4(11), e2132917.
<doi:10.1001/jamanetworkopen.2021.32917>
20. Jackson JL, Balk EM, **Hyun N²**, Kuriyama A. (2022). Approaches to Assessing and Adjusting for Selective Outcome Reporting in Meta-analysis. *Journal of General Internal Medicine* 2022, 37(5), 1247–1253. <https://doi.org/10.1007/s11606-021-07135-3>
21. Sung H, Freedman RA, Siegel RL, **Hyun N²**, DeSantis C, Ruddy KJ, Jemal A. (2021). Risks of subsequent primary cancers among breast cancer survivors according to hormone receptor status. *Cancer*, 127(18), 3310–3324. <https://doi.org/10.1002/cncr.33602>
22. Sung H, **Hyun N²**, Leach C, Yabroff R, Jemal A (2020). Patterns of the risk for subsequent primary cancer among survivors of adult-onset cancers in the United States. *Journal of the American Medical Association*, 324(24), 2521-35. <https://doi:10.1001/jama.2020.23130>
23. Hahn B, Anderson P, Lu Z, Danner R, Zhou Z, **Hyun N²**, Gao L, Lin T, Norris SJ, Coburn J. (2020). BBB07 Contributes to, but is not essential for, *Borrelia burgdorferi* infection in mice. *Microbiology Sociology*, 166(10), 988-994.

24. **Hyun N**, Katki HA, Graubard BI. (2020). Sample-weighted semiparametric estimates of cause-specific cumulative incidence using left-/interval censored data from electronic health records. *Statistics in Medicine*, 39, 2387– 2402. <https://doi.org/10.1002/sim.8544>
25. Demarco M¹, **Hyun N**¹, Carter-Pokras O, Raine-Bennett TR, Cheung LC, Chen X, Hammer A, Campos NG, Kinney WK, Gage JC, Befano B, Perkins R, He, X, Dallal CM, Chen J, Poitras NE, Mayrand, MH, Coutlee F, Burk RD, Lorey T, Castle PE, Wentzensen N, Schiffman M.(2020). A study of type-specific HPV natural history and implications for contemporary cervical cancer screening programs. *EClinicalMedicine*, 22, 100293. <https://doi.org/10.1016/j.eclinm.2020.100293>
26. **Hyun N**, Couper DJ, Zeng D (2019). Gumbel regression models for a monotone increasing continuous biomarker subject to measurement error. *Journal of Statistical Planning and Inference*, 203, 160-168. <https://doi.org/10.1016/j.jspi.2019.03.008>
27. Cheung LC, Pan Q, **Hyun N**, Katki AH. (2019). Prioritized concordance index for composite survival outcomes. *Statistics in Medicine*, 38(15), 2868-2882.
28. Groh EM, **Hyun N**, Check D, Heller T, Ripley RT, Hernandez JM, Graubard BI, Davis JL. (2019). Trends in major gastrectomy for cancer: frequency and outcomes. *Journal of Gastrointestinal Surgery*, 23(9), 1748-1757. <https://doi.org/10.1007/s11605-018-4061-x>
29. Yu K, **Hyun N**, Fetterman B, Lorey T, Raine-Bennett TR, Zhang H, Stamps RE, Poitras NE, Wheeler W, Befano B, Katki HA, Gage JC, Castle PE, Wentzensen N, Schiffman M. (2018). Automated cervical screening and triage, based on HPV partial typing and computer-interpreted cytology. *Journal of the National Cancer Institute*, 110(11), 1222-1228. <https://doi.org/10.1093/jnci/djy044>
30. Demarco M, Carter-Pokras O, **Hyun N**², Castle P, He X, Dallal C, Chen J, Gage J, Befano B, Fetterman B, Lorey T, Poitras N, Raine-Bennett T, Wentzensen N, Schiffman M. (2018). Validation of a Human Papillomavirus (HPV) DNA cervical screening test that provides expanded HPV typing. *Journal of Clinical Microbiology*, 56(5), e01910-17. <http://doi.org/10.1128/JCM.01910-17>
31. **Hyun N**, Gastwirth JL and Graubard BI. (2018). Grouping methods for estimating the prevalences of rare traits from complex survey data that preserve confidentiality of respondents. *Statistics in Medicine*, 37(13), 2174-2186. <http://doi.org/10.1002/sim.7648>
32. Zeng D, **Hyun N**, Cai J. (2018). Semiparametric additive model for estimating risk difference in multicenter studies. *Biostatistics and Epidemiology*, 2(1), 84-98. <https://doi.org/10.1080/24709360.2018.1445430>.
33. Landy R, Cheung LC, Schiffman M, Gage JC, **Hyun N**, Wentzensen N, Kinney WK, Castle PE, Fetterman B, Poitras NE, Lorey T, Sasieni PD, Katki HA. (2018). Challenges in risk estimation using routinely collected clinical data: The example of estimating cervical cancer risks from electronic health-records. *Preventive Medicine*, 111, 429-435. <https://doi.org/10.1016/j.ypmed.2017.12.004>
34. Matsushita K, Kwak L, **Hyun N**, Bessel M, Agarwal SK, et al. (2017). Community burden and prognostic impact of reduced kidney function among patients hospitalized with acute decompensated heart failure: The Atherosclerosis Risk in Communities (ARIC) Study Community Surveillance. *Plos One*, 12(8), e0181373.

35. Cheung LC, Pan Q, **Hyun N**, Schiffman M and Castle PE. (2017). Mixture models for left-censored and irregular interval-censored data: Applications to a cancer screening cohort assembled from electronic health records. *Statistics in Medicine*, 36(22), 3583-3595.
36. **Hyun N**, Cheung LC, Pan Q, Schiffman M and Katki HA. (2017). Flexible risk prediction models for left or interval-censored data from electronic health records. *Annals of Applied Statistics*, 11(2), 1063-84.
37. Schiffman M, Yu K, Zuna R, Dunn ST, Zhang H, Walker J, Gold M, **Hyun N**, Rydzak G, Katki HA, Wentzensen NH. (2017). Proof-of-principle study of a novel cervical screening and triage strategy: computer-analyzed cytology to decide which HPV-positive women are likely to have \geq CIN2. *International Journal of Cancer*, 140(3), 718-25.
38. Wilcox AN, Silverman DT, Friesen MC, Locke SJ, Russ DE, **Hyun N**², Colt JS, Figueroa JD, Rothman N, Moore LE, and Koutros S. (2016) Smoking status, usual adult occupation, and risk of recurrent urothelial bladder carcinoma: data from The Cancer Genome Atlas (TCGA) Project. *Cancer Causes Controls*, 27(12), 1429-35.
39. Schiffman M, **Hyun N**, Raine-Bennett TR, Katki HA, Fetterman B, Cage JC, Cheung LC, Befano B, Poitras N, Castle PE, Wentzensen NH. (2016). A cohort study of cervical screening using partial HPV typing and cytology triage. *International Journal of Cancer*, 139(11), 2606-15.
40. Mirabelli MC, Preisser JS, Loehr LR, Agarwal SK, Barr RG, Couper DJ, Hankinson JL, **Hyun N**, Folsom AR, London SJ. (2016). Lung function decline over 25 years of follow-up among black and white adults in the ARIC study cohort. *Respiratory medicine*, 113, 57-64.
41. Zhao J, Zhu Y, **Hyun N**, Zeng D, Uppal K, Tran VT, Yu T, Jones D, He J, Lee ET and Howard, BV. (2015). Novel metabolic markers for the risk of diabetes development in American Indians. *Diabetes Care*, 38.2, 220-227.
42. Tucker AW, Calliste J, Gidcumb EM, Wu J, Kuzmiak CM, **Hyun N**, Zeng D, Lu J, Zhou O, and Lee YZ. (2014). Comparison of a stationary digital breast tomosynthesis system to magnified 2D mammography using breast tissue specimens. *Academic Radiology*, 21(12), 1547-52.
43. **Hyun NR** and Song HH. (2009). Nonparametric multivariate test for a monotone trend among k samples. *Korean Journal of Applied Statistics*, 22(5), 1047-48.
44. Kim YM, **Hyun NR**, Shon HS, Kim HS, Park SY, Park IH, Chung YS, Jung HG, Kim DH, and Lim SK. (2018). Assessment of clinical risk factors to validate the probability of osteoporosis and subsequent fractures in Korean women. *Calcif Tissue International*, 83(6), 380-87.

b. Accepted peer-reviewed papers in press

c. Under review

1. Pocobelli G, **Hyun N**, Harrington L, Connolly J, Ramaprasan A, Desai R, Dutcher S, Lee H, Li Y, Shaw PA, Zhang M, Apata J, Toh SD, Shortreed SM. Empirical application of novel methods to address residual confounding in health insurance claims-based analyses using electronic health records available on a subset: an example from the Food and Drug Administration's Sentinel System. Under 1st revision.

d. Digital and Other Novel Forms of Scholarship

1. Prevalence-Incidence Mixture Risk Models Webtool
<https://analysistools.cancer.gov/pimixture/#home>

2. PIMixture (Prevalence Incidence Mixture Models) R-package
<https://dceg.cancer.gov/tools/analysis/pimixture>
3. Plcompete (Prevalence Incidence mixture models for competing risks) R-package
<https://github.com/xiaoli-mcw/Plcompete>

L. Invited Presentations (Include invited talks at local, national, and international professional meetings and break out each of these groups separately. For each presentation, list the title, venue, location, and date of the presentation. NOTE: Invited presentations are those for which you were invited to speak about your work based on your professional reputation, such as keynotes, podium presentations, symposiums, panel discussions.)

a. Invited Seminar Presentation

1. "Semiparametric approaches for left- and interval-censored data using EHRs"
BERD (Biostatistics/Epidemiology/Research Design) Seminar, UT Health, virtual 2025
2. "Design and Analysis Considerations for Assessing Heterogeneity of Treatment Effects in Cluster-Randomized Trials" at NIH Mind the Gap Webinar Series 2025
3. "An augmented likelihood incorporating error-prone auxiliary data into survival analysis"
Division of Cancer Epidemiology and Genetics, NCI, virtual 2024
Fred Hutchinson Cancer Center, Seattle 2023
4. "Sample-weighted semiparametric estimates of cause-Specific cumulative incidence using left-/interval-censored data from electronic health records"
ASA -BI -NESS Statistics Webinar Series 2019
5. "Risk prediction models for left-/interval-censored data from electronic health records"
Department of Mathematics and Statistics, University of Nevada, Reno 2018
Department of Statistics, George Washington University, Washington DC 2017
Division of Cardiovascular Disease Science, HLBI/NIH, Washington DC 2017
Division of Biostatistics, Medical College of Wisconsin, Milwaukee 2017
Department of Biostatistics and Informatics, University of Colorado, Denver 2017
6. "Issues and modeling in survival analysis of epidemiologic cohorts constructed from electronic health records" at SLAM (Survival, Longitudinal and Multivariate data) working group seminar, Department of Biostatistics, Johns Hopkins University, Baltimore 2015
7. "Semiparametric extreme-value regression model for analyzing biomarker-defined time-to-event."
Biostatistics, Division of Cancer Epidemiology and Genetics, NCI, Rockville 2014
Department of Epidemiology, Tulane University, New Orleans 2014
Department of Biostatistics, MD Anderson Cancer Center, Houston 2014

b. Invited Presentation at International/National Meetings

8. "Increased risk of type I errors for detecting heterogeneity of treatment effects in cluster-randomized trials using mixed-effect models" at the International Conference on Health Policy Statistics, San Diego 2025
9. "An augmented likelihood incorporating error-prone auxiliary data into survival analysis" at Computational and Methodological Statistics (CMStatistics), virtual 2022
10. "Semiparametric proportional hazards model for left-truncated and interval-censored time-to-event outcome using auxiliary and validated data with application to HCHS/SOL data" at Western North American Region (WNAR), virtual 2022
11. "Sample-weighted semiparametric estimates of cause-Specific cumulative incidence using left-/interval-censored data from electronic health records"

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| Easter North American Region (ENAR), virtual | 2020 |
| Lifetime Data Science Conference, Pittsburgh | 2019 |
| 12. "Grouping methods for estimating the prevalences of rare traits from complex survey data that preserve confidentiality of respondents" at ENAR, Philadelphia | 2019 |
| 13. "Risk prediction models for left-/interval-censored data from electronic health records" | |
| ENAR, Philadelphia | 2018 |
| Lifetime Data Analysis (LIDA) Conference, University of Connecticut | 2017 |

c. Oral Presentations: (Include other presentations organized by type [oral, poster, etc.] List title, venue, location, and date of presentation. Consider organizing by oral vs. poster presentations.

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| 1. "Increased risk of type I errors for detecting heterogeneity of treatment effects in cluster-randomized trials using mixed-effect models", at Joint Statistical Meetings (JSM), Portland | 2024 |
| 2. "Gumbel regression models for longitudinal continuous biomarker outcome subject to measurement error", JSM, virtual | 2020 |
| 3. "Sample-weighted semiparametric estimates of cause-specific cumulative incidence using left-/interval censored data from electronic health records," at JSM, Vancouver | 2018 |
| 4. "Grouping methods for estimating the prevalences of rare traits from complex survey data that preserve confidentiality of respondents," at JSM, Baltimore | 2017 |
| 5. "IPW Prevalence-Incidence mixed model for interval-censored data," at JSM, Seattle | 2015 |
| 6. "Semiparametric extreme-value regression model for analyzing biomarker-defined time-to-event," at ENAR, Baltimore | 2014 |
| 7. "Threshold-dependent proportional hazards model for current status data with biomarker subject to measurement error," | |
| ENAR, Orlando | 2013 |
| JSM, Montreal | 2013 |

d. Poster Presentations:

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| 1. "Semiparametric Mixture Models for Left-Censored and Irregularly Interval-Censored Data: Application to a Cohort Assembled from Electronic Health Records", at JSM, Chicago | 2013 |
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