

**UNIVERSITY OF WASHINGTON
CURRICULUM VITAE**

12/21/2020

1. Biographical Information

Marco Carone, PhD

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Department of Biostatistics
School of Public Health, University of Washington
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2. Education

Marianopolis College, Diploma of College Studies, Pure and Applied Sciences, 2000-2002

McGill University, Bachelor of Science, Probability and Statistics, First Class Honors, 2002-2005

Johns Hopkins University, Doctor of Philosophy, Biostatistics, 2005-2010

Title: Statistical analysis of cross-sectional survival data with applications to the study of dementia
Advisor: Professor Daniel Scharfstein

3. Licensure

4. Professional Positions

Postdoctoral fellow, Div. of Biostatistics, University of California, Berkeley, 03/2011-12/2013

Lecturer, Div. of Biostatistics, University of California, Berkeley, 08/2011-12/2013

Assistant Professor, Dept. of Biostatistics, University of Washington, 01/2014-06/2020

Adjunct Assistant Professor, Dept. of Statistics, University of Washington, 12/2019-06/2020

Associate Professor, Dept. of Biostatistics, University of Washington, 07/2020-present

Adjunct Associate Professor, Dept. of Statistics, University of Washington, 07/2020-present

Norman Breslow Endowed Faculty Fellow, University of Washington, 01/2019-present

Affiliate Investigator, Vaccine and Infectious Disease Division, Fred Hutch, 11/2016-present

Affiliate, Center for Studies in Demography and Ecology, University of Washington, 03/2016-present

5. Honors, Awards, Scholarships

Graduate Fellowships:

FQRNT Master's Research Scholarship, (national competition), 2005-2007

NSERC Postgraduate Master's Scholarship, (national competition), 2005-2007

Sommer Scholarship, Johns Hopkins University, (institutional competition) 2005-2010

FQRNT Doctoral Research Scholarship, (national competition), 2007-2010

NSERC Postgraduate Doctoral Scholarship, (national competition), 2007-2010

FQRNT Postdoctoral Research Scholarship, (national competition), 2011-2013

Honors and Awards:

Marianopolis College Ernest Fox Award, Marianopolis College, June 2002
Birks Bronze Medal, Marianopolis College, June 2002
McGill University Certificate of Merit, McGill University, June 2002
John B. Mahon Scholarship, McGill University, 2002-2005
Herbert J. Brennen Scholarship, McGill University, 2003-2005
Canada Millennium Foundation In-Course Excellence Award, (national competition), 2003-2005
NSERC Undergraduate Research Award, (national competition), May 2004
NSERC Undergraduate Research Award, (national competition), May 2005
Sigma Xi Award for Excellence in Undergraduate Research, McGill University, May 2005
Anne Molson Gold Medal, McGill University, May 2005
Governor-General of Canada's Academic Medal, McGill University, May 2005
Glaxo SmithKline Award, Johns Hopkins University, May 2006
Louis I. Dublin and Thomas A. Dublin Award, Johns Hopkins University, March 2007
Peer nomination for Teaching Assistant Recognition Award, Johns Hopkins University, May 2007
June B. Culley Award, Johns Hopkins University, May 2008
Peer nomination for Student Recognition Award, Johns Hopkins University, May 2010
Induction into Delta Omega, Alpha Chapter, Johns Hopkins University, May 2011
Induction into Phi Beta Kappa, Alpha Chapter, Johns Hopkins University, May 2011
WWAMI Pro Award for Outstanding Professionalism (for teaching), University of Washington, May 2017
School of Public Health Outstanding Faculty Teaching Award, University of Washington, May 2018
Norman Breslow Endowed Faculty Fellowship in Biostatistics, University of Washington, January 2019
Invitation to causal inference workshop at the Oberwolfach Research Institute for Mathematics, May 2019

6. External Professional Activities

Committees:

Member, Data and Sample Access Committee, Canadian Longitudinal Study of Aging, 05/2016-12/2018

Mentorship roles:

Mentor, National Institute of Statistical Sciences Writing Workshop, 08/2018

Service in professional associations:

Representative-at-large, Advisory Board of the Western North American Region (WNAR) of the International Biometric Society, 01/2017-01/2019

Associate editor:

Journal of the American Statistical Association - Theory and Methods, 01/2014-01/2018
International Journal of Biostatistics, 12/2012-present
Biometrics, 07/2017-present
Journal of Causal Inference, 06/2019-present

Manuscript reviewer:

Anaesthesia, Critical Care & Pain Medicine
Annals of Applied Statistics
Annals of Statistics
Annals of the Institute of Statistical Mathematics
Bernoulli
Biometrical Journal
Biometrics

Biometrika
Biostatistics
Communications in Statistics - Theory & Methods
International Journal of Biostatistics
Journal of the American Statistical Association
Journal of Clinical Oncology
Journal of the National Cancer Institute
Journal of Nonparametric Statistics
Journal of the Royal Statistical Society - Series B
Lifetime Data Analysis
Nature Communications
Nature Medicine
Statistics in Medicine
Proceedings of the Royal Society - Series B

Grant reviewer:

Belgium Research Foundation - Flanders
Israel Science Fund

Memberships in Professional Organizations:

American Statistical Association
International Biometric Society

7. Bibliography

a) Refereed research articles

(the symbol ★ indicates that the lead author is a student-advisee)

(the symbol ❖ denotes equal contribution and authorship in alphabetical order)

(the symbol + denotes equal contribution of the first two authors listed)

(Published or in press)

1. Mohajer, A., Trémier, A., Barrington, S., Martinez, J., Teglia, C., **Carone, M.**, 2009. Microbial oxygen uptake in sludge as influenced by compost physical parameters. *Waste Management*, **29**(8):2257-2264. [PMID: 19398320]
2. Zan, E., Yousem, D.M., **Carone, M.**, Lewin, J.S., 2010. Second opinion consultations in neuroradiology: assessment of value. *Radiology*, **255**(1):135-141. [PMID: 20308451]
3. Leibler, J.H., **Carone, M.**, Silbergeld, E.K., 2010. Contribution of company affiliation and social contacts to risk estimates of between-farm transmission of avian influenza. *PLoS ONE*, **5**(3):e9888. [PMID: 20360859]
4. Mateen, F.J., **Carone, M.**, Sorenson, M., 2010. Patients who survive five years or more with ALS in Olmsted County, 1925-2004. *Journal of Neurology, Neurosurgery and Psychiatry*, **81**:1144-1146. [20627966]
5. Lo, S.S., Atceken, Z., **Carone, M.**, Yousem, D.M., 2011. Vacuum phenomenon in sacroiliac joints – underreported finding. *Clinical Imaging*, **35**(6):465-469. [PMID: 22040792]
6. Mateen F.J., Josephs, K.A., Trenerry, M.R., Devine, M.D.F., Weaver, A., **Carone, M.**, White, R.D., 2011. Long-term cognitive outcomes following out-of-hospital cardiac arrest: a population-based study. *Neurology*, **77**(15):1438-1445. [PMID: 21917772]

7. Mateen, F.J., Muralidharan, R., **Carone, M.**, van de Beek, D., Harrison, D., Clifford, D., Aksamit, A.J., Nath, A., 2011. Progressive multifocal leukoencephalopathy in transplant recipients. *Annals of Neurology*, **70**(2):305-322. [PMID: 21823157]
8. Wyse, J.M., **Carone, M.**, Usatii, M., Paquin, S.C., Sahai, A., 2011. A randomized, double-blind, controlled trial of prophylactic endoscopic ultrasound-guided celiac plexus neurolysis (EUS-CPN) to prevent pain progression in patients with newly diagnosed, inoperable pancreatic cancer. *Journal of Clinical Oncology*, **29**(26):3541-3546. [PMID: 21844506]
9. Anwar, Z., Zan, E., **Carone, M.**, Ozturk, A., Sozio, S., Yousem, D.M., 2011. Superficial temporal artery calcification in patients with end-stage renal disease: association with vascular risk factors and ischemic cerebrovascular disease. *Indian Journal of Radiology and Imaging*, **21**(3):215-220. [PMID: 22013298]
10. Mateen, F.J., **Carone, M.**, Nyce, S., Ghosn, J., Mutureandu, T., Al-Saedy, H., Lowenstein, D.S., Burnham, G., 2012. Neurological disorders in Iraqi refugees in Jordan: data from the United Nations Refugee Assistance Information System. *Journal of Neurology*, **259**(4):694-701. [PMID: 21952870]
11. Passerini, L.D., Casey, G.J., Tran Cong, D., Luong Ba, P., Tran Quang, P., **Carone, M.**, Biggs, B.A., Montresor, A., 2012. Increased birth weight associated with regular pre-pregnancy deworming and weekly iron-folic acid supplementation for Vietnamese women. *PLoS Neglected Tropical Diseases*, **6**(4):e1608. [PMID: 22509421]
12. Khalid, L., **Carone, M.**, Dumrongpisutikul, N., Intrapiromkul, J., Yousem, D.M., 2012. Imaging characteristics of oligodendrogliomas that predict grade. *American Journal of Neuroradiology*, **33**(5):852-857. [PMID: 22268087]
13. Viertel, V.G., Babiarz, L.S., **Carone, M.**, Lewin, J.S., Yousem, D.M., 2012. Quality control in neuroradiology: impact of trainees on discrepancy rates. *American Journal of Neuroradiology*, **33**(6):1032-1036. [PMID: 22300933]
14. Mateen, F.J., **Carone, M.**, Alam, N., Streatfield, P.K., Black, R., 2012. A population-based case-control study of 1250 stroke deaths in rural Bangladesh. *European Journal of Neurology*, **19**(7):999-1006. [PMID: 22340663]
15. Mateen, F.J., **Carone, M.**, Al-Saedy, H., Nyce, S., Ghosn, J., Mutuerandu, T., Black, R.E., 2012. Medical conditions among Iraqi refugees in Jordan: data from the United Nations Refugee Assistance Information System. *Bulletin of the World Health Organization*, **90**(6):444-451. [PMID: 22690034]
16. Mateen, F.J., **Carone, M.**, Al-Saedy, H., Nyce, S., Mutuerandu, T., Ghosn, J., Jatoi, A., 2012. Cancer diagnoses in Iraqi refugees. *Acta Oncologica*, **51**(7):950-951. [PMID: 22404173]
17. Mateen, F.J., **Carone, M.**, Haskew, C., Spiegel, P., 2012. Reportable neurological diseases in refugee camps in 19 countries: a retrospective study. *Neurology*, **79**(9):937-940. [PMID: 22927678]
18. Mateen, F.J., Shinohara, R., **Carone, M.**, Jacobson, L., Sacktor, N., 2012. Neurological disorders incidence in HIV+ and HIV- men: Multicenter AIDS Cohort Study, 1996-2011. *Neurology*, **79**(18):1873-1880. [PMID: 23077015]
19. Intrapiromkul, J., Aygun, N., Tunkel, D.E., **Carone, M.**, Yousem, D.M., 2012 Inner ear anomalies seen on CT images in patients with Down syndrome. *Pediatric Radiology*, **42**(12):1449-1455. [PMID: 22936282]
20. ❖ Asgharian, M., **Carone, M.**, Fakoor, V., 2012. Large-sample study of the kernel density estimators under multiplicative censoring. *Annals of Statistics*, **40**(1):159-187.
21. **Carone, M.**, Asgharian, M., Wang, M.C., 2012. Nonparametric incidence estimation from prevalent cohort survival data. *Biometrika*, **99**(3):599-613. [PMID: 26139951]
22. Mateen, F.J., Niu, J.W., Gao, S., Li, S.W., **Carone, M.**, Wijdicks, E.F.M., Xu, W.H., 2013. Causes and outcomes of persistent vegetative state in a Chinese versus American referral hospital. *Neurocritical Care*, **18**(2):266-270. [PMID: 23099847]
23. Pirracchio, R., **Carone, M.**, Resche Rigon, M., Caruana, E., Mebazaa, A., Chevret, S., 2013. Propensity score estimators for the average treatment effect and the average treatment effect on the

- treated may yield very different estimates. *Statistical Methods in Medical Research*, **25**(5):1938-1954. [PMID: 24201469]
24. **Carone, M.**, Asgharian, M., Jewell, N.P., 2014. Estimating the lifetime risk of dementia in the Canadian population using cross-sectional survival data. *Journal of the American Statistical Association*, **109**(505):23-35. [PMID: 26139951]
 25. Mateen, F.J., Geer, J.P., Frick, K., **Carone, M.**, 2014. Neurological disorders in Medicaid- versus privately-insured children and working age adults. *Neurology: Clinical Practice*, **4**(2):136-145. [PMID: 24790798]
 26. Pirracchio, R., Petersen, M.L., **Carone, M.**, Resche Rigon, M., Chevret, S., van der Laan, M.J., 2015. Mortality prediction in the ICU: can we do better? Results from the Super ICU Learner Algorithm (SICULA) project, a population-based study. *The Lancet Respiratory Medicine*, **3**(1):42-52. [PMID: 25466337]
 27. Wahlster, S., Wijdicks, E.F.M., Patel, P.V., Greer, D.M., Hemphill, J.C., **Carone, M.**, Mateen, F.J. 2015 Brain death declaration practices and perceptions worldwide. *Neurology*, **85**(18):1870-1879. [PMID: 25854866]
 28. Azab, M., **Carone, M.**, Ying, S.H., Yousem, D.M. 2015 Mesial temporal sclerosis: accuracy of NeuroQuant versus neuroradiologist? *American Journal of Neuroradiology*, **36**(8):1400-1406. [PMID: 25907519]
 29. Huntley, J.M., **Carone, M.**, Yousem, D.M., Babiarz, L.S. 2015 Opportunities for targeted education: critical neuroradiological findings missed or misinterpreted by residents and fellows. *American Journal of Roentgenology*, **205**(6):1155-1159. [PMID: 26587919]
 30. + Luedtke, A.R., **Carone, M.**, van der Laan, M.J. 2015 Discussion of "Deductive derivation and Turing-computerization of semi parametric efficient estimation" by Frangakis et al. *Biometrics*, **71**(4):875-879. [PMID: 26243187]
 31. Diaz, I.M., **Carone, M.**, van der Laan, M.J. 2016 Second-order inference for the mean of a variable missing at random. *The International Journal of Biostatistics*, **12**(1):333-349. [PMID: 27227727]
 32. Koelman, D.L.H., Chahin, S., Mar, S.S., Venkatesan, A., Hoganson, G.M., Yeshokumar, A.K., Barreras, P., Majmudar, B., Klein, J.P., Chitnis, T., Benkeser, D.C., **Carone, M.**, Mateen, F.J. 2016 Acute disseminated encephalomyelitis in 228 patients: a retrospective, multicenter U.S. study. *Neurology*, **86**(22):2085-2093. [PMID: 27164698]
 33. Stankiewicz, K., Cohen, M., **Carone, M.**, Sevinc, G., Nagy, P.G., Lewin, J.S., Yousem, D.Y., Babiarz, L.S. 2016 Comparing preliminary and final neuroradiology reports: what are the factors that determine the differences? *American Journal of Neuroradiology*, **37**(11):1977-1982. [PMID: 27469208]
 34. Koelman, D.L.H., Benkeser, D.C., Xu, Y., Neo, X., Tan, K., Katsuno, M., Sobue, G., Natsume, J., Chahin, S., Mar, S.S., Venkatesan, W., Chitnis, T., Hoganson, G.M., Yeshokumar, A.K., Barreras, P., Majmudar, B., **Carone, M.**, Mateen, F.J. 2016 Acute disseminated encephalomyelitis in China, Singapore and Japan: comparison with the USA. *European Journal of Neurology*, **24**(2):391-396. [PMID: 28009079]
 35. Mateen, F.J., **Carone, M.**, Tshering, L., Dorji, C., Dema, U., Grundy, S.J., Ram, D., Nirola, D.K. 2017 Area catechu and seizures among people with epilepsy in Bhutan: an observational study. *Epilepsy & Behavior*, **74**:76-80. [PMID: 28732258]
 36. ★ Benkeser, D.C., **Carone, M.**, Gilbert, P. 2018 Improved estimation of cumulative incidence of rare outcomes. *Statistics in Medicine*, **37**(2):280-293. [PMID: 28670687]
 37. Pirracchio, R., **Carone, M.** 2018 The Balance Super Learner: a robust adaptation of the Super Learner to improve average treatment effect estimation based on propensity score matching. *Statistical Methods in Medical Research*, **27**(8):2504-2518. [PMID: 28339317]
 38. Jang, M., Sakadi, F., Tassiou, N.R., Abass, C.F., Grundy, S.J., Woga, A., Kenda, B.A., Lamine, C.M., Talibé, B.A., Qiu, H., Cohen, J.M., **Carone, M.**, Mateen, F.J. 2018 Impact of poorly controlled epilepsy in the Republic of Guinea. *Seizure: European Journal of Epilepsy*, **61**:71-77. [PMID: 30114675]

39. Scharfstein, D.O., McDermott, A., Diaz, I.M., **Carone, M.**, Lunardon, N., Turkoz, I. 2018 Global sensitivity analysis for repeated measures studies with informative drop-out: a semiparametric approach. *Biometrics*, **74**(1):207-219. [PMID: 28542799]
40. ★ Benkeser, D.C., **Carone, M.**, van der Laan, M.J., Gilbert, P. 2018 Nonparametric doubly-robust inference on the average treatment effect. *Biometrika*, **104**(4):863-880. [PMID: 29430041]
41. ★ Feng, J., Williamson, B., **Carone, M.**, Simon, N. 2018 Nonparametric variable importance using an augmented neural network with multi-task learning. *Proceedings of ICML 2018*, 80:1496-1505.
42. **Carone, M.**, Luedtke, A.R., van der Laan, M.J. 2019 Toward computerized efficient estimation in infinite-dimensional models. *Journal of the American Statistical Association*, **114**(527):1174-1190.
43. Luedtke, A.R., **Carone, M.**, van der Laan, M.J. 2019 An omnibus nonparametric test of equality in distribution for unknown functions. *Journal of the Royal Statistical Society, Series B*, **81**(1):75-99. [PMID: 31024219]
44. Magaret, C.A., Benkeser, D.C., Williamson, B.D., Borate, B.R., Carpp, L.N., Georgiev, I.S., Setliff, I., Dingens, A.S., Simon, N., **Carone, M.**, Simpkins, C., Montefiori, D., Alter, G., Yu, W.H., Juraska, M., Edlfssem, P.T., Karuna, S., Mgodl, N.M., Edugupanti, S., Gilbert, P.B. 2019 Prediction of VRC01 neutralization sensitivity by HIV-1 gp160 sequence features. *PLOS Computational Biology*, **15**(4):e1006952. [PMID: 30933973]
45. ★ Benkeser, D.C., Gilbert, P.B., **Carone, M.** 2019 Estimating and testing vaccine sieve effects using machine learning. *Journal of the American Statistical Association*, **114**(527):1038-1049. [PMID: 31649413]
46. Camargo, A., Youssef, K., Westling, T., **Carone, M.**, Youssef, D.M. 2019 Ethical dilemmas in radiology. *American Journal of Roentgenology*, **213**(6):1274-1283. [PMID: 31557053]
47. **Carone, M.**, Dominici, F., Sheppard, L. 2019 In pursuit of evidence in air pollution epidemiology: the role of causally-guided data science. *Epidemiology*, **31**(1):1-6. [PMID: 31430263]
48. ★ Lyons, V., Kernic, M., Rowhani-Rahbar, A., Holt, V., **Carone, M.** 2019 The association between arrest and intimate partner violence recidivism in Seattle, WA. *Injury Epidemiology*, **6**:36. [PMID: 31417842]
49. Harbison, R.A., Gray, A.J., Westling, T., **Carone, M.**, Rodriguez, C.P., Futran, N., Canon, R., Houlton, J.J. 2019 The role of elective neck dissection in high-grade parotid malignancy: a hospital-based cohort study. *The Laryngoscope*, **130**(6):1487-1495. [PMID: 31468551]
50. ★ Whitney, D., Shojaie, A., **Carone, M.** 2019 Models as (deliberate) approximations. *Statistical Science*, **34**(4):591-598.
51. Shinohara, R.T., Shou, H., **Carone, M.**, Schultz, R., Parker, D., Verma, R. 2020 Distance-based analysis of variance for brain connectomics. *Biometrics*, **76**(1):257-269.
52. ★ Westling, T., **Carone, M.** 2020 A unified theory of nonparametric inference for monotone functions. *Annals of Statistics*, **48**(2):1001-1024.
53. Luedtke, A.R., **Carone, M.**, Simon, N., Sofrygin, O. 2020 Learning to learn from data: using deep adversarial learning to construct optimal statistical procedures. *Science Advances*, **6**(9).
54. ★ Williamson, B., Gilbert, P.B., Simon, N., **Carone, M.** Nonparametric variable importance assessment using machine learning techniques (with discussion). *Biometrics*, accepted.
55. ★ Williamson, B., Gilbert, P.B., Simon, N., **Carone, M.** Rejoinder to “Nonparametric variable importance assessment using machine learning techniques”. *Biometrics*, accepted.
56. ★ Westling, T., Gilbert, P.B., **Carone, M.** Causal isotonic regression. *Journal of the Royal Statistical Society, Series B*, accepted.
57. ★ Qiu, H., **Carone, M.**, Sadikova, E., Petukhova, M., Kessler, R., Luedtke, A.R. Optimal individualized decision rules using instrumental variable methods (with discussion). *Journal of the American Statistical Association*, accepted.

58. ★ Westling, T., van der Laan, M.J., **Carone, M.** Correcting an estimator of a multivariate monotone function using isotonic regression. *Electronic Journal of Statistics*, accepted.
59. Mehrotra, D.V., Janes, H.E., Fleming, T.R., Annunziato, P.W., Neuzil, K.M., Carpp, L.N., Benkeser, D., Brown, E.R., **Carone, M.**, Cho, I., Donnell, D., Fay, M.P., Fong, Y., Han, S., Hirsch, I., Huang, Y., Hyrien, O., Juraska, M., Luedtke, A., Nason, M., Vandebosch, A., Zhou, H., Cohen, M.S., Corey, L., Hartzel, J., Follmann, D. Gilbert, P.B. Clinical endpoints for evaluating efficacy in COVID-19 vaccine trials. *Annals of Internal Medicine*, accepted.
60. Lyons, V.H., Floyd, A.S., Griffin, E., Wang, J., Hajat, A., **Carone, M.**, Benkeser, D., Whiteside, L, Haggerty, K.P., Rivara, F.P., Rowhani-Rahbar, A. Helping individuals with firearm injuries: a cluster randomized trial. *The Journal of Trauma*, accepted.
61. Shaffer, R.M., Li, G., Adar, S.D., Keened, C.D., Latimer, C., Crane, P.K., Larson, E.B., **Carone, M.**, Sheppard, L. Fine particulate matter and markers of Alzheimer's Disease neuropathology at autopsy in a Puget Sound cohort. *The Journal of Alzheimer's Disease*, accepted.
62. ★ Qiu, H., Luedtke, A.R., **Carone, M.** Universal sieve-based strategies for efficient estimation using machine learning tools. *Bernoulli*, accepted.

(Submitted or under revision)

1. ★ Williamson, B.D., Gilbert, P.B., Simon, N.R., **Carone, M.** A unified approach for inference on algorithm-agnostic variable importance.
2. Meisner, A., **Carone, M.**, Pepe, M.S., Kerr, K.F. Combining biomarkers by maximizing the true positive rate for a fixed false positive rate.
3. Shaffer, R.M., Blanco, M., Li, G., Adar, S.D., **Carone, M.**, Szpiro, A., Kaufman, J., Larson, T., Larson, E.B., Crane, P.K., Sheppard, L. Fine particulate matter and dementia incidence in a Puget Sound cohort.
4. Hwang, P.H., Longstreth, W.T., Thielke, S.M., Francis, C.E., **Carone, M.**, Kuller, L.H., Fitzpatrick, A.L. Association between dual sensory impairment and risk of dementia in older adults: the Cardiovascular Health Study.
5. Hwang, P.H., Longstreth, W.T., Thielke, S.M., Francis, C.E., **Carone, M.**, Kuller, L.H., Fitzpatrick, A.L. Ophthalmic conditions associated with dementia risk: the Cardiovascular Health Study.
6. Follmann, D., Fintzi, J., Fay, M.P., Janes, H.E., Baden, L., El Sahly, H., Fleming, T.R., Mehrotra, D.V., Carpp, L.N., Juraska, M., Benkeser, D., Donnell, D., Fong, Y., Han, S., Hirsch, I., Huang, Y., Huang, Y., Hyrien, O., Luedtke, A., **Carone, M.**, Nason, M., Vandebosch, A., Zhou, H., Cho, I., Gabriel, E., Kublin, J., Cohen, M.S., Corey, L., Gilbert, P.B., Neuzil, K.M. Assessing durability of vaccine effect following blinded crossover in COVID-19 vaccine efficacy trials.

b) Other refereed scholarly publications

c) Books and book chapters

1. **Carone, M.**, Petersen, M., van der Laan, M.J., 2012. Targeted minimum loss-based estimation of a causal effect using interval-censored time-to-event data. In: *Interval-censored time-to-event data: methods and applications*. Chapman & Hall/CRC.
2. **Carone, M.**, Diaz, I.M., van der Laan, M.J., 2018. Higher-order targeted minimum loss-based estimation. In: *Targeted Learning in Data Science*. Springer.
3. ★ Benkeser, D.C., **Carone, M.**, Gilbert, P.B., 2018. Targeted estimation of cumulative incidence in settings with competing risks. In: *Targeted Learning in Data Science*. Springer.

d) Other non-refereed published scholarly publications

1. **Carone, M.**, 2010. Statistical analysis of cross-sectional survival data with application to the study of dementia. PhD thesis, Johns Hopkins University.

8. Patents and Intellectual Property

9. Funding History

a) Current funded projects

1. **Statistical methods for incorporating machine learning tools in inference and large-scale surveillance using electronic medical records data**
NIH NHLBI R01 — primary PI: Dr. M. Carone
Active funding period: 2019—2024
Role: principal investigator
2. **Statistical and data management center: HIV Vaccine Trials Network**
NIH NIAID U01 — primary PI: Dr. P. Gilbert
Active funding period: 2020—2025
Role: subaward principal investigator
3. **Statistical issues in AIDS research**
NIH NIA R01 — primary PI: Dr. J.P. Hughes
Active funding period: 2019—2024
Role: co-investigator
4. **Quantifying residual time acceleration among Japanese atomic bomb survivors**
Radiation Effect Research Foundation — institutional collaborative grant (Epi and Biostatistics)
Active funding period: 2018—2021
Role: co-investigator
5. **Air pollution, the aging brain and Alzheimer's disease**
NIH NIEHS R01 — primary PI: Drs. E.A. Sheppard and G. Li
Active funding period: 2017—2022
Role: co-investigator
6. **The role of precarious work in the production of health disparities in older ages**
NIH NIA R01 — primary PI: Dr. A. Hajat
Active funding period: 2018—2023
Role: co-investigator

10. Public Health Practice Activities

11. Conference and Symposiums

Conference organization:

1. Member of the local organizing committee, International Biometric Conference (Victoria, BC), 07/2016
2. Lead organizer, WNAR sessions, International Biometric Conference (Victoria, Canada), 07/2016
3. Member of selection committee, Young Statisticians Competition, International Biometric Conference (Victoria, Canada), 07/2016
4. Co-chair of the organizing committee, Sixth Seattle Symposium in Biostatistics (Seattle, WA), 11/2020

Session organization:

1. Session on *Advances in the Theory and Applications of Targeted Maximum Likelihood Estimation*, WNAR (Los Angeles, CA), 06/2013

2. Session on *Advances in methodology for causal inference and Statistical inference in complex sampling designs*, International Biometric Conference (Victoria, Canada), 07/2016
3. Session on *Statistical inference in complex sampling designs*, International Biometric Conference (Victoria, Canada), 07/2016

Oral presentations: (the symbol [I] denotes an invited presentation)

1. Joint Statistical Meetings (Washington, DC), 08/2009
2. Statistical Society of Canada (Quebec, QC), 05/2010
3. Joint Statistical Meetings (Miami, FL), 08/2010 [I]
4. CRM-ISM-GERAD Colloquium in Statistics (Montreal, QC), 01/2011 [I]
5. Joint Statistical Meetings (Vancouver, BC), 08/2011 [I]
6. Eastern North American Region of the International Biometric Society (Washington, DC), 04/2012 [I]
7. Statistical Society of Canada (Guelph, ON), 06/2012 [I]
8. Joint Statistical Meetings (San Diego, CA), 08/2012 [I]
9. Department of Preventive Medicine, Université Laval, 01/2013 [I]
10. Department of Biostatistics, Johns Hopkins University, 02/2013 [I]
11. Department of Biostatistics, University of Pennsylvania, 02/2013 [I]
12. Department of Statistics, University of California, Berkeley, 02/2013 [I]
13. Department of Biostatistics, University of Washington, 02/2013 [I]
14. International Society for Nonparametric Statistics (Cadiz, Spain), 06/2014 [I]
15. International Indian Statistical Association (Riverside, CA), 07/2014 [I]
16. Public Health Sciences Division, Fred Hutchinson CRC, 11/2014 [I]
17. Department of Decision Sciences, Bocconi University, 04/2015 [I]
18. Department of Econometrics, University of Geneva, 05/2015 [I]
19. Epidemiology and Biostatistics Unit, University of Bordeaux, 05/2015 [I]
20. Cardiovascular Health Research Unit, University of Washington, 06/24/2015 [I]
21. International Biometric Conference (Victoria, BC), 07/2016 [I]
22. Department of Biostatistics, University of North Carolina, Chapel Hill, 12/2016 [I]
23. Department of Biostatistics, Columbia University, 12/2016 [I]
24. Department of Biostatistics, University of Washington, 03/2017 [I]
25. Vaccine Statistics Working Group, Fred Hutchinson CRC, 05/2017 [I]
26. Center for Inference and Dynamics of Infectious Diseases, Fred Hutchinson CRC, 06/2017 [I]
27. Conference on Lifetime Data Science (Storrs, CT), 06/2017 [I]
28. Workshop on Risk Modeling, Management, and Mitigation in Health Sciences, Centre de Recherche Mathématique de Montréal (Montreal, QC), 12/2017 [I]
29. Conference of the International Society for Clinical Biostatistics (Melbourne, Australia), 08/2018 [I]
30. Department of Biostatistics and Bioinformatics, Emory University, 09/2018 [I]
31. Department of Biostatistics and Comp. Biology, University of Rochester, 10/2018 [I]
32. Joint Statistics Meetings (Denver, CO), 08/2019 [I]
33. Department of Biostatistics, Johns Hopkins University, 11/2019 [I]
34. Causal Inference Working Group, Johns Hopkins University, 11/2019 [I]
35. International Conference of the ERCIM WG on Computational and Methodological Statistics (London, United Kingdom), 11/2020 [I]

12. University Service

Committee membership:

(School of Public Health, University of Washington)

1. Magnuson Scholarship + Grayston Day Fellowship + Patrick Beresford Scholarship, 11/2018-02/2019
2. Magnuson Scholarship + Grayston Day Fellowship + Patrick Beresford Scholarship, 11/2017-02/2018
3. Magnuson Scholarship + Grayston Day Fellowship + Patrick Beresford Scholarship, 11/2016-02/2017
4. Magnuson Scholarship + Grayston Day Fellowship Selection Committee, 11/2015-02/2016
5. Magnuson Scholarship + Grayston Day Fellowship Selection Committee, 11/2014-02/2015

6. School of Public Health Building Advisory Committee, 01/2014-01/2016

(Department of Biostatistics, University of Washington)

1. Education Policy and Teaching Evaluation/Curriculum Committee, 09/2014-present
2. Faculty-Staff Relations Committee, 09/2014-present
3. Emergency Preparedness Committee, 01/2014-present
4. Joint Committee on Mathematical Statistics and Probability Courses, 07/2017-07/2018
5. PhD Theory Exam Committee, (as chair) 2016, 2020, (as member) 2015, 2017, 2019
6. Master's Theory Exam Committee, (as member) 2014
7. Biostatistics Seminar Series Organizing Committee, 2015-2020
8. Faculty Search Committee: (as chair) 2019-2020; (as member) 2016-2017, 2020-2021

13. Professionally-Related Community Service

14. Teaching History

a) Formal Courses, including Distance Learning

In the University of Washington Department of Biostatistics Summer Institutes:

1. Modern Statistical Learning Methods for Biomedical Observational Data
Summer 2017: 45 students
Summer 2018: 30 students
Summer 2019: 24 students
Summer 2020: 46 students

At the University of Washington:

1. BIOST 111: Lectures in Applied Statistics
Spring 2014: 87 students; adj. median student evaluation = 3.8 out of 5
2. BIOST 537 / EPI 537: Survival Data Analysis in Epidemiology
Winter 2016: 58 students; adj. median student evaluation = 4.9 out of 5
Winter 2017: 58 students; adj. median student evaluation = 4.9 out of 5
Winter 2018: 53 students; adj. median student evaluation = 5.1 out of 5
Winter 2019: 51 students; adj. median student evaluation = 5.1 out of 5
Winter 2020: 58 students; adj. median student evaluation = 5.0 out of 5
3. BIOST 578 (special topics): Modern Inference in Nonparametric and Semiparametric Models
Winter 2015: 15 students; adj. median student evaluation = 4.9 out of 5
Spring 2017: 22 students; adj. median student evaluation = 4.8 out of 5
4. BIOST 578 (special topics): Intermediate Survival Analysis
Winter 2020: 12 students; adj. median student evaluation = 4.5 out of 5
5. BIOST 590 / STAT 590: Biostatistical Consulting
Spring 2018: 10 students; adj. median student evaluation = 5.0 out of 5
6. STAT 583: Advanced Statistical Theory
Spring 2019: 21 students; adj. median student evaluation = 4.8 out of 5
Spring 2020: 23 students; adj. median student evaluation = 4.9 out of 5

At the University of California, Berkeley

1. Public Health 240A / Statistics C240A: Introduction to Modern Biostatistical Theory and Practice

Fall 2011: 18 students; co-taught with Professor Alan Hubbard
Fall 2013: 10 students; co-taught with Professor Sandrine Dudoit

2. Public Health 240B / Statistics C240B: Foundations of Survival Analysis
Fall 2013: 39 students; co-taught with Professor Nicholas P. Jewell

b) Other Teaching

At the University of California, Berkeley:

1. Guest lectures in Statistical Analysis of Categorical Data (PH 241), 01/2012-05/2012
2. Guest lectures in Statistical Analysis of Categorical Data (PH 241), 01/2013-05/2013

At Johns Hopkins University:

1. Guest lectures in Essentials of Probability and Statistical Inference II (140.647), 08/2009-12/2009

c) Independent Study

At the University of Washington:

1. Anand Hemmady, PhD candidate (09/2020-present)
2. Nina Galanter, PhD candidate (09/2020-present)
3. Avi Kenny, PhD candidate (06/2019-present)
4. Eric Morenz, PhD candidate (09/2017-09/2018)
5. Ernesto Ulloa, PhD candidate (09/2017-09/2018)
6. Hongxiang Qiu, PhD candidate (09/2017-09/2018)
7. Yiqun Chen, PhD candidate (09/2017-08/2018)
8. Ted Westling, PhD candidate (08/2015-08/2016)
9. David Whitney, PhD candidate (08/2015-08/2016)
10. Brian Williamson, PhD candidate (09/2014-06/2016)
11. Linbo Wang, PhD candidate (09/2014-12/2014)
12. Arjun Sondhi, PhD candidate (09/2014-12/2014)
13. Tracey Marsh, PhD candidate (02/2014-07/2014)

15. Advising and Formal Mentoring

a) PhD Dissertations, chair

Current

1. Eric Morenz
2. Ernesto Ulloa (co-chaired with A. Luedtke)
3. Hongxiang Qiu (co-chaired with A. Luedtke)
4. Adam Elder (co-chaired with A. Luedtke)

Completed

5. Brian Williamson (co-chaired with N. Simon) (completed 11/2019) (currently: Postdoctoral Fellow, Fred Hutchinson Cancer Research Center)
6. David Whitney (completed 08/2019) (currently: Teaching Fellow in Statistics, Imperial College)
7. Ted Westling (completed 06/2018) (currently: Assistant Professor of Mathematics and Statistics, University of Massachusetts Amherst)
8. Tracey Marsh (completed 08/2017) (currently: Staff Scientist, Fred Hutch)
9. David Benkeser (co-chaired with P. Gilbert) (completed 11/2015) (currently: Assistant Professor of Biostatistics, Emory University)

b) Masters Theses, chair

Current

Completed

1. Clara Oromendia (co-chaired with P. Gilbert) (completed 12/2015) (currently: Biostatistician, Project Ronin)

c) Mentored Scientists and Postdocs

d) MS and PhD committees in non-chair role

1. Margaret Lind (PhD, Epidemiology, chair: A. Phipps)
2. Stephanie Belanger (PhD, Epidemiology, chair: J. Walson)
3. Tracy Sandifer (PhD, Epidemiology, chair: G. Goldbaum)
4. Chloe Krakauer (PhD, Biostatistics, chair: M. Sadinle, K. Rice)
5. Ashenafi Cherkos (PhD, Epidemiology, chair: G. John-Stewart, S. LaCourse)
6. Quinhas Fernandes (PhD, International Health, chair: Kenneth Sherr)

7. Phillip Hwang (PhD, Epidemiology, chair: A. Fitzpatrick) (completed 11/2020)
8. Andrew Humbert (PhD, Biostatistics, chair: B. Leroux) (completed 06/2020)
9. Brenda Price (PhD, Biostatistics, chair: P. Gilbert) (completed 12/2019)
10. Vivian Lyons (PhD, Epidemiology, chair: A. Rowhani-Rahbar) (completed 11/2019)
11. Brandie Bockwoldt (MS, Epidemiology, chair: A. Phipps) (completed 08/2019)
12. Allison Meisner (PhD, Biostatistics, chair: K. Kerr) (completed 06/2017)
13. Sen Zhao (PhD, Biostatistics, chair: A. Shojaie) (completed 05/2017)
14. William Jen Hoe Koh (PhD, Biostatistics, chair: S. Emerson) (completed 05/2016)
15. Alison Eliza Kosel (PhD, Biostatistics, chair: P. Heagerty) (completed 03/2016)
16. Gloria C. Chi (PhD, Epidemiology, chair: J.D. Kaufman) (completed 03/2016)
17. Navneet Hakhu (MS, Biostatistics, chair: S. Emerson) (completed 10/2014)

e) Other Mentoring

1. Yinjuan Yin (visiting PhD student from Peking University, China) (09/2014-09/2015)

f) Academic Advising

1. Eric Morenz (06/2017-06/2019)
2. Yiqun Chen (06/2017-06/2019)
3. Ian Waudby-Smith (06/2018-03/2019)
4. Tracy Dong (06/2015-09/2017)
5. Arjun Sondhi (06/2014-11/2016)
6. Brian Williamson (06/2014-06/2016)