

**CURRICULUM VITAE**  
**Rebecca Yates Coley**

Updated: January 2, 2019

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**1. Biographical Information**

Rebecca Yates Coley, PhD  
Assistant Investigator  
Biostatistics Unit,  
Kaiser Permanente Washington Health Research Institute (KPWHRI),  
Kaiser Foundation Health Plan of Washington\* •  
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**2. Education**

A.B., Environmental Science and Policy, Duke University, Durham, NC, 2006  
M.S., Biostatistics, University of Washington, Seattle, WA, 2010  
Ph.D., Biostatistics, University of Washington, Seattle, WA, 2014  
Dissertation: *Bayesian Hierarchical Frailty Models for Heterogeneity in Risk*  
Advisor: Dr. Elizabeth R. Brown

**3. Licensure**

Not applicable

**4. Professional Positions**

2006-2008	Associate in Research Children's Environmental Health Initiative, Nicholas School of the Environment Duke University, Durham, NC
2008-2012	Research Assistant Northwest Practice-Based Research Collaborative in Evidence-Based Dentistry, School of Dentistry, University of Washington, Seattle, WA
2012-2014	Research Assistant Microbicide Trials Network Fred Hutchinson Cancer Research Center, Seattle, WA
2014-2016	Postdoctoral Research Fellow Department of Biostatistics Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
2016-present	Assistant Investigator Biostatistics Unit, KPWHRI, Kaiser Foundation Health Plan of Washington,* Seattle, Washington

*\*Kaiser Permanente acquired Group Health in February 2017, at which point Group Health Research Institute became Kaiser Permanente Washington Health Research Institute (KPWHRI).*

2018-present    Affiliate Assistant Professor  
Department of Biostatistics, University of Washington Seattle, Washington

## 5. Honors, Awards, and Scholarships

2003, 2005    Dean's List, Duke University, Durham, NC  
2008-2012    National Institutes of Health Predoctoral Trainee in Oral Health and  
Epidemiology  
University of Washington, Seattle, WA  
2013    Runner-up, Written Paper, Student Paper Competition  
International Biometrics Society (WNAR) Annual Meeting, Los Angeles, CA  
2013    Winner, Oral Presentation, Student Paper Competition  
International Biometrics Society (WNAR) Annual Meeting, Los Angeles, CA  
2013    Best Student Poster, Faculty Selection  
Department of Biostatistics, University of Washington, Seattle, WA  
2013    Junior Researcher Travel Award  
Objective Bayes Workshop, Durham, NC  
2014    Travel Award  
Women in Statistics, Cary, NC  
2015    Honorable Mention, Poster Competition  
Patrick C. Walsh Prostate Research Day, Baltimore, MD  
2015    Top performing team  
Prostate Cancer DREAM Challenge  
2017    Extraordinary Scientific Contributor, KPWHRI

## 6. Other Professional Activities

### Statistical Consultancies

2012    Maternal-Fetal Medicine, University of Washington Medical Center, Seattle WA  
2013    Lawry Research Associates International, Washington, DC  
2014    School of Dentistry, University of Washington, Seattle, WA  
2017    Clinical Pharmacy Services, Kaiser Permanente Washington, Seattle, WA

### Memberships

2012-present    The American Statistical Association (ASA)  
2013-present    The International Biometric Society (WNAR)  
2013-present    International Society of Bayesian Analysis (ISBA)  
2013-2014    Educational Policy and Teaching Evaluation/Curriculum Committee  
Department of Biostatistics, University of Washington  
2017    Society of Epidemiological Research (SER)  
2017-present    Data and Informatics Strategy Committee, KPWHRI  
2017    Collaborative Biostatistician Search Committee, Biostatistics Unit, KPWHRI  
2017    Mentoring Award Selection Committee, KPWHRI  
2017-2018    Faculty Investigator Search Committee, KPWHRI

## Leadership

2014	Organizer, WNAR-invited session on “Statistical Challenges in HIV Prevention”
2015	Team Leader, BMORE Dream Team, Prostate Cancer DREAM Challenge
2016	Organizer, ISBA-invited session on “Innovative Bayesian Methods for Missing Data”
2016	Roundtable Leader, JSM discussion “Learning Health Systems: From Ideas to Reality”
2017-2018	Coordinator, KPWHRI Scientific Seminars
2017	Organizer, New Investigators Lunch Meetings, KPWHRI
2017	Organizer, International Society for Business and Industrial Statistics (ISBIS)-invited session on “Statistical Methods in Medicine”
2017	Organizer, ASA Health Policy Section- invited session “Towards a Learning Health System: Methods and Strategies for Data-Driven Healthcare”
2017	Organizer, Women in Statistics and Data and Science (WSDS)-invited sessions “Networking among junior statisticians: Peer mentoring and strategies to promote one another” and “Playing in everyone’s backyard: Stories of success, lessons learned, and advice for productive and enjoyable collaborations”
2017-2018	Co-chair, Faculty Investigator Search Committee, KPWHRI
2018	Co-organizer, 3 <sup>rd</sup> Seattle Symposium in Health Care Data Analytics

## Journal referee

Biostatistics, Biometrics, Journal of the American Statistical Association, Statistics in Medicine, American Journal of Epidemiology, BJU International, Nature: Scientific Reports, Environmetrics

## Proceedings reviewer

Proceedings of the Fourth Seattle Symposium in Biostatistics: Clinical Trials, 2010

## 7. Bibliography

\*Denotes mentored work of student

†Denotes mentored work of junior scientist

### a) Peer-reviewed research articles

1. Delaney S, **Coley RY**, Brown Z. (2015) 5- Anhydroglucitol: A new predictor of neonatal birth weight in diabetic pregnancies. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 189: 55-58. DOI: 10.1016/j.ejogrb.2015.03.021.
2. Farjo N, Turpin D, **Coley RY**, Feng J. (2015) Characteristics and fate of orthodontic articles submitted for publication: An exploratory study of the American Journal of Orthodontics and Dentofacial Orthopedics. *American Journal of Orthodontics and Dentofacial Orthopedics*. 147: 680-690. DOI: 10.1016/j.ajodo.2015.01.020.
3. Murnane PM, Brown ER, Donnell D, **Coley RY**, Mugo N, Mujugira A, Celum C, Baeten JM. (2015) Estimating efficacy in a randomized trial with product non-adherence: application of multiple methods to a trial of pre-exposure prophylaxis for HIV prevention. *American Journal of Epidemiology*. 82: 848-856. DOI:10.1093/aje/kwv202.
4. **Coley RY**, Brown ER. (2016) Estimating effectiveness in HIV prevention trials with a Bayesian hierarchical compound Poisson frailty model. *Statistics in Medicine*. 35: 2609-2634. DOI: 10.1002/sim.6884.
5. Deng D\*, Du Y, Zhicheng J, Rao K, Wu Z, Zhu Y, **Coley RY**. Predicting prostate cancer survival: A multiple imputation-assisted super learning approach. *F1000 Research*. 5:2672. DOI:10.12688/f1000research.8268.
6. **Coley RY**, Fisher AJ, Mamawala M, Carter HB, Pienta KJ, Zeger SL. (2017). A Bayesian Hierarchical Model for Prediction of Latent Health States from Multiple Data Sources with Application to Active Surveillance of Prostate Cancer. *Biometrics*. 73(2): 625-634. DOI: 10.1111/biom.12577.
7. **Coley RY**, Zeger SL, Mamawala M, Fisher AJ, Pienta KJ, Carter HB. (2017) Prediction of the pathological Gleason Score (PGS) to inform a personalized management program for prostate cancer. *European Urology*. 72(1): 135-141. DOI: 10.1016/j.eururo.2016.08.005.
8. Toh S, Rasmussen-Torvik LK, Harmata EE, Pardee R, Saizan R, Malanga E, Sturtevant JL, Horgan CE, Anau J, Janning CD, Wellman RD, **Coley RY**, Cook AH, Courcoulas AP, Coleman KJ, Williams NA, McTigue KM, Arterburn D, McClay J, PCORnet Bariatric Surgery Collaborative. (2017) The National Patient-Centered Clinical Research Network (PCORnet) Bariatric Study cohort: Rationale, methods, and baseline characteristics. *JMIR Research Protocols*. 6(12):e222. DOI: 10.2196/resprot.8323.
9. Inge TH, **Coley RY**, Bazzano LA, Xanthakos SA, McTigue K, Arterburn D, Williams N, Wellman R, Coleman KJ, Courcoulas A, Desai NK, Anau, J, Pardee R, Toh SD, Hanning C, Cook A, Sturtevant SM, Horgan C, Zebrick A, Michalsky M, PCORnet Bariatric Study. (2018) Comparative effectiveness of bariatric procedures among adolescents: the PCORnet bariatric study. *Surgery for Obesity and Related Diseases*. 4(9): 1374-1386. DOI: 10.1016/j.soard.2018.04.002.
10. Arterburn D, Wellman R, Emiliano A, Smith SR, Odegaard AO, Murali S, Williams N, Coleman KJ, Courcoulas A, **Coley RY**, Anau J, Pardee R, Toh S, Janning C, Cook A, Sturtevant J, Horgan C, McTigue K, PCORnet Bariatric Study Collaborative. (2018) Comparative effectiveness of bariatric procedures for weight loss: A retrospective cohort study. *Annals of Internal Medicine*. 169(11): 741-750. DOI: 10.7236/M17-2786.
11. Toh S, Wellman RD, **Coley RY**, Horgan C, Sturtevant J, Moyneur E, Janning C, Pardee R, Coleman KJ, Arterburn D, McTigue K, Anau J, Cook AJ. (2018) Combining distributed

regression and propensity scores. *Clinical Epidemiology*. 10: 1773-1786. DOI: 10.2147/clep.s178163.

12. Huntley JH, **Coley RY**, Carter HB, Radhakrishnan A, Krakow M, Pollack CE. (2018) *Oncology*. 121:118-124. DOI: 10.1016/j.urology.2018.08.021.
13. Simon GE, Shortreed SM, **Coley RY**, Penfold RB, Rossom RC, Waitzfelder B, Sanchez K, Lynch FL. Assessing and minimizing re-identification risk in research data derived from healthcare records. (In press). *eGEMS*.
14. Shortreed SM, Cook AJ, **Coley RY**, Bobb JF, Nelson JC. Challenges and opportunities for using big clinical data to advance medical science. (In press). *American Journal of Epidemiology*.

#### **b) Other peer-reviewed scholarly publications**

1. Murnane PM, **Coley RY**, Baeten JM. (2015) Response to: Every good randomization deserves observation. *American Journal of Epidemiology*. 182: 861-862. DOI: 10.1093/aje/kwv201.

#### **c) Books and book chapters**

Not applicable

#### **d) Other non-peer-reviewed scholarly publications**

1. \*Fisher AJ, **Coley RY**, Zeger SL. (2015) Fast Out-of-Sample Predictions from Bayesian Hierarchical Models of Latent Health States. arxiv: 1510.08802. Available at: <https://arxiv.org/abs/1510.08802>.

#### **e) Submitted manuscripts**

1. McTigue K, Wellman R, Nauman E, Anau J, **Coley RY**, Odo A, Tice J, Coleman K, Courcoulas A, Pardee R, Sengwee T, Janning C, Williams N, Cook A, Sturtevant J, Horgan C, Arterburn D, PCORnet Bariatric Study Collaborative. Five-year diabetes outcomes of sleeve gastrectomy, gastric bypass, and adjustable gastric banding: the PCORnet Bariatric Study.
2. Courcoulas A, **Coley RY**, McTigue K, Tavakkoli A, Wellman R, Williams N, Coleman KJ, Anau J, Pardee R, Toh S, Janning C, Cook A, Arterburn D, PCORnet Bariatric Study Collaborative Longterm safety outcomes after bariatric surgery in a national cohort: the PCORnet Bariatric Study.

#### **f) Manuscripts in preparation**

1. Sprague BL, **Coley RY**, Kerlikowske K, Rauscher GH, Henderson LM, Onega T, Lee CI, Herschorn SD, Tosteson ANA, Miglioretti DL. Breast cancer screening recall rate on 2D and 3D mammography after the adoption of digital breast tomosynthesis in a national sample of radiologists.
2. **Coley RY**, Mamawala M, Carter HB. Annual percent change in prostate-specific antigen predicts pathological prognostic grade group of men on surveillance.
3. **Coley RY**, Simon GE, Boggs JM, Pabaniak C, Powers JD, Gray MT, Operskalaski B, Beck A. How do different measures of depression treatment success compare?

4. **Coley RY**, Walker R, Simon G, Shorteed S. Predicting suicide risk in the presence of informative cluster size.

## 8. Patents and Other Intellectual Property

Not applicable

## 9. Funding History

### a) Funded projects

1. K12 Fellow (0.75 FTE): Consortium for Applied Training to Advance the Learning Health System with Scholars/Trainees, 1/1/2019-12/31/2020. Funded by the Agency for Healthcare Research and Quality. (Principal Investigators Paula Lozano, MD and Diana Buist, PhD; KPWHRI).
2. Co-Investigator (0.20 FTE): Mental Health Research Network: Computation Modeling to Predict Suicide Behavior, 2017-2019. Funded by the National Institute of Mental Health (Principal Investigator Greg Simon, MD MPH; KPWHRI).
3. Co-Investigator (0.30 FTE): Learning Health Systems, 9/28/2017-9/27/2020. Funded by Kaiser Permanente Washington (Principal Investigator Paula Lozano, MD MPH; KPWHRI).
4. Co-Investigator (0.20 FTE): A Targeted Approach to a Safer Use of Antipsychotics in Youth, 4/25/16-6/24/21. Funded by National Institute of Mental Health (Principal Investigator, Penfold, Robert, PhD; KPWHRI).
5. Co-Investigator (0.20 FTE): Comparative Effectiveness of Breast Cancer Screening and Diagnostic Evaluation by Extent of Breast Density, 9/1/16-1/31/21. Funded by the Patient-Centered Outcomes Research Institute (Principal Investigator, Diana Miglioretti, PhD; University of California- Davis).

### b) Completed projects

1. Co-Investigator (0.10 FTE): Risk-based Breast Cancer Screening and Surveillance in Community Practice- Statistical Coordinating Center, 7/1/17-5/31/22. Funded by the National Cancer Institute (Principal Investigator Diana Miglioretti, PhD; University of California-Davis).
2. Co-Investigator (0.20 FTE): Feedback-Informed Care. Funded by the Garfield Foundation, 2017-2018, (Principal Investigator Greg Simon, MD MPH; KPWHRI).
3. Co-Investigator (0.14 FTE): Bayesian Hierarchical Models for the Design and Analysis of Studies to Individualize Healthcare, 6/1/15-5/31/18. Funded by the Patient-Centered Outcomes Research Institute (Principal Investigator, Scott Zeger, PhD; Johns Hopkins University).
4. Co-Investigator (0.20 FTE): PCORnet Bariatric Study, 2/1/16-4/31/18. Funded by the Patient-Centered Outcomes Research Institute (Principal Investigator David Arterburn, MD, MPH; KPWHRI).
5. Postdoctoral Research Fellow. Stochastic Models of Prostate Cancer Screening and Treatment Decisions, 8/18/14-6/30/16. Funded by the Patrick C. Walsh Prostate Cancer Research Fund (Principal Investigator, Scott Zeger, PhD; Johns Hopkins University).
6. Co-Investigator. Data Analysis and Visualization Practicum for Individualized Health, 8/1/15-5/13/16. Funded by the Center for Educational Resources (Principal Investigator, Scott Zeger, PhD; Johns Hopkins University).

7. Graduate Student Research Assistant. Microbicide Trials Network- Statistical and Data Management Center, 9/16/12-9/15/214. Funded by the National Institute of Allergy and Infectious Diseases (Principal Investigator, Elizabeth Brown, PhD; Fred Hutchinson Cancer Research Center).

**c) Pending applications**

Not applicable at this time.

**10. Conferences and Symposiums**

Like presentations grouped. \*Denotes invited presentation

1. \***Coley RY** and Brown ER. Heterogeneity in risk: Effects on randomized clinical trial data analysis. Oral Health Sciences Seminar, University of Washington, Seattle, WA, May 2012.
2. **Coley RY** and Brown ER. Estimating effectiveness in HIV prevention trials with a compound Poisson frailty model. International Biometric Society (WNAR) Annual Meeting, Los Angeles, CA, June 2013.
3. \***Coley RY** and Brown ER. Estimating effectiveness in HIV prevention trials with a compound Poisson frailty model. Department of Biostatistics, Johns Hopkins University, Baltimore, MD, March 2014.
4. \***Coley RY** and Brown ER. Latent class approach to modeling frailty in HIV prevention trials. International Biometric Society (WNAR) Annual Meeting, Honolulu, HI, June 2014.
5. **Coley RY** and Brown ER. Latent class approach to survival analysis with a compound Poisson frailty model with an application to HIV prevention. Joint Statistical Meetings, Boston, MA, 2014
6. \***Coley RY**, Zeger SL, and Carter HB. Stochastic Models of Prostate Cancer Screening and Detection at Johns Hopkins. Patrick C. Walsh Prostate Cancer Research Day, Baltimore, MD, February 2015.
7. \***Coley RY**, Carter HB, and Zeger SL. Optimizing Surveillance of Low Risk Prostate Cancer. International Biometric Society (ENAR) Annual Meeting, Miami, FL, March 2015.
8. \***Coley RY**, Carter HB, and Zeger SL. Electronic Medical Records for Individualized Health: Application to Low Risk Prostate Cancer. Joint Statistical Meetings, Seattle, WA, August 2015.
9. \***Coley RY**, Carter HB, and Zeger SL. Statistical Methods for Individualized Health: Improving Surveillance of Low Risk Prostate Cancer. Grand Rounds, Department of Biostatistics, Johns Hopkins University, Baltimore, MD, September 2015.
10. **Coley RY**, Carter HB, and Zeger SL. Optimizing Surveillance of Low Risk Prostate Cancer. International Conference on Health Policy Statistics, Providence, RI, October 2015.
11. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Data Science Affinity Group, Fred Hutchinson Cancer Research Center, Seattle, WA, October 2015.
12. \***Coley RY**, Zeger SL, and Carter HB. Optimizing Surveillance of Low Risk Prostate Cancer. Pacific Northwest Specialized Program of Research Excellence (SPORE), Fred Hutchinson Cancer Research Center, Seattle, WA, October 2015.
13. \***Coley RY**, Carter HB, and Zeger SL. Optimizing Surveillance of Low Risk Prostate Cancer: An Application of Precision Medicine and Learning Health Systems at Johns Hopkins. Data Science Interest Group, Johns Hopkins Medicine, Baltimore, MD, November 2015.

14. \***Coley RY**, Zeger SL, and Carter HB. Active Surveillance Modeling and Decision-Making at Johns Hopkins. Cancer Intervention and Surveillance Monitoring Network (CISNET) Prostate Cancer Meeting, National Cancer Institute, Bethesda, MD, November 2015.
15. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Division of Biostatistics, Department of Healthcare Policy and Research, Cornell Weill School of Medicine, New York, NY, January 2016.
16. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Department of Biostatistics, Johns Hopkins University, Baltimore, MD, January 2016.
17. **Coley RY**, Zeger SL, and Carter HB. Optimizing Surveillance of Low-Risk Prostate Cancer. High-Value Research Symposium, Johns Hopkins School of Medicine, Baltimore, MD, February 2016.
18. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Biostatistics Research Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD, February 2016.
19. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. RAND Corporation, Santa Monica, CA, February 2016.
20. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Department of Biomedical Data Science, Stanford University, Palo Alto, CA, February 2016.
21. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Center for Cancer Statistics, Mayo Clinic, Rochester, MN, February 2016.
22. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Group Health Research Institute, Seattle, WA, February 2016.
23. \***Coley RY**, Zeger SL, and Carter HB. Prediction of the Cancer State to Inform a Personalized Management Program for Prostate Cancer. Grand Rounds, Department of Urology, Johns Hopkins School of Medicine, Baltimore, MD. April 2016.
24. **Coley RY**, Zeger SL, and Carter HB. Prediction of the Cancer State to Inform a Personalized Management Program for Prostate Cancer. American Urological Association (AUA) Annual Meeting, San Diego, CA. May 2016.
25. \***Coley RY**, Carter HB, and Zeger SL. Individualized Medicine and Informative Missingness: A Bayesian Approach to Personalized Prostate Cancer Care. International Society of Bayesian Analysis Annual Meeting, Sardinia, Italy. June 2016.
26. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine: Statistical Methods to Improve Patient Outcomes and Support Value-Based Care, ENAR Annual Meeting, Washington, DC. March 2017.
27. **Coley RY**, Mamawala M, Zeger SL, and Carter HB. Very low risk and low risk patients in active surveillance: Is the distinction relevant? AUA Annual Meeting, Boston, MA. May 2017.
28. \***Coley RY**, Zeger SL. A data science framework for learning health systems. ISBIS Meeting, Yorktown Heights, NY. June 2017.
29. \***Coley RY**, Jackson M. How to make a picture worth a thousand words: Effectively communicating your research results using statistical graphics. KPWHRI Scientific Seminar Series, Seattle, WA. July 2017.
30. \***Coley RY**, Zeger SL. Statisticians leading the way: Advocating for learning health systems and collaborating effectively with clinical stakeholders. JSM Annual Meeting, Baltimore, MD. July 2017.

31. \***Coley RY**, Zeger SL. Development and implementation of a data-driven clinical support tool for low risk prostate cancer. Johns Hopkins University Statistical Symposium, Baltimore, MD. September 2017.
32. \***Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. Fred Hutchinson Cancer Research Center Biostatistics Seminar, Seattle, WA. October 2017.
33. **Coley RY**, Carter HB, and Zeger SL. Precision Medicine, Learning Health Systems, and Improving Surveillance of Low Risk Prostate Cancer. University of Washington Department of Biostatistics Seminar, Seattle, WA. October 2017.
34. \*Bobb J, Cahill C, **Coley RY**, Fuller S, Gray M, Ichikawa L. Effective Data Visualization in Practice: Examples from KPWHRI. KPWHRI Scientific Seminar series, Seattle, WA. October 2017.
35. \***Coley RY**, Mamawala M, Carter HB, Zeger SL. Individualized Decision Support for Men on Active Surveillance. CISNET Prostate Cancer Modeling Symposium. National Cancer Institute, Rockville, MD. November 2017.
36. \***Coley RY**, Mamawala M, Zeger SL, Carter HB. Informed health decisions through creating a learning ecosystem: Application to active surveillance of low risk prostate cancer. Precision Medicine World Conference. Mountain View, CA. January 2018.
37. \***Coley RY**, Jackson M. How to make a picture worth a thousand words: Effectively communicating your research results using statistical graphics. Program in Health Economics and Outcomes Methodology (PHEnOM) seminar series. Comparative Health Outcomes, Policy, Economics (CHOICE) Institute. University of Washington. Seattle, WA. April 2018.
38. **Anau J, Grafton J, Wernli K, Coley RY**. Standing on the shoulders of giants: Conducting research when you wish you didn't have to stand on those guys' shoulders. Scientific Seminar. KPWHRI. Seattle, WA. June 2018.
39. \***Coley RY**. Lead with Statistics: A statistician's role in learning health systems and the delivery of data-driven health care. Association of Clinical and Translational Statisticians (ACTStat) annual meeting. Vancouver, BC, Canada. July 2018.
40. \***Coley RY**, Walker R, Shortreed S, Simon G. Predicting suicide risk: Statistical methods for using EHR data to inform mental health care. Joint Statistical Meetings. Vancouver, BC, Canada. July 2018.
41. \***Coley RY**. A data science framework for learning health systems. 3<sup>rd</sup> Seattle Symposium for Healthcare Data Analytics. Seattle, WA. October 2018.
42. \***Coley RY**. A data science framework for learning health systems. Henry Ford Health System Cancer Grand Rounds. Detroit, MI. December 2018.

## 11. Professionally-Related Community Service

2018 Guest lecture to AP Statistics classes at Ingraham High School, Seattle, WA.

## 12. Teaching History

### a) Formal courses

Statistics 101: Introduction to Statistical Inference, Department of Statistics, Duke University, Durham, NC. Teaching Assistant, Fall 2005-Spring 2006.  
 Biostatistics 570: Regression Methods for Independent Data, Department of Biostatistics, University of Washington, Seattle, WA. Teaching Assistant, Fall 2010.

Biostatistics 571: Regression Methods for Dependent Data, Department of Biostatistics, University of Washington, Seattle, WA. Teaching Assistant, Winter 2011.

Biostatistics 514/7: Applied Biostatistics, Department of Biostatistics, University of Washington, Seattle, WA. Teaching Assistant, Fall 2013.

Biostatistics 140.711: Advanced Data Science, Department of Biostatistics, Johns Hopkins University, Baltimore, MD. Co-Instructor, Fall 2015.

Public Health Studies AS.280.423: Data Visualization for Individualized Health, Department of Public Health Studies, Johns Hopkins University, Baltimore, MD. Instructor, Spring 2016.

How to make a picture worth a thousand words: Effectively communicating your research results using statistical graphics. SER Annual Meeting short course, Seattle, WA. Instructor. June 2017.

Biostatistics 582: Student Seminar, Department of Biostatistics, University of Washington, Seattle, WA. Advisor. Fall 2016 and Fall 2017.

**b) Other teaching**

Biostatistics 563: Computing and Research, Department of Biostatistics, University of Washington, Seattle, WA, Guest Lecturer on Parallel Computing, June 20, 2013.

Clinical and Translational Research Methods, Johns Hopkins Summer Institute of Epidemiology and Biostatistics, Johns Hopkins University, Baltimore, MD, Guest Lecturer on Precision Medicine and Learning Health Systems, June 20, 2015.

Biostatistics 540: Analysis of Longitudinal Data, Department of Biostatistics, University of Washington, Seattle, WA, Guest Lecturer on joint modeling for latent class prediction, April 19, 2017.

**c) Independent study**

Not applicable

**13. Advising and Formal Mentoring**

**a) Masters theses, chair**

Not applicable

**b) Mentored scientists and postdocs**

2019	Mary Akosile, Collaborative Biostatistician I Kaiser Permanente Washington Health Research Institute, Seattle, WA
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**c) Masters and PhD committee in non-chair role**

Not applicable

**d) Other mentoring**

2015-2016	Aaron Fisher, Graduate Research Assistantship Supervisor Department of Biostatistics, Johns Hopkins University, Baltimore, MD
2018-2019	Adam Elder, Graduate Research Assistantship Supervisor Department of Biostatistics, University of Washington, Seattle, WA

**e) Academic Advising**

Not applicable