

CURRICULUM VITAE

QUAKER ELIZABETH HARMON MD PhD

Education

1992	BSc	Biology, University of North Carolina at Chapel Hill, Chapel Hill, NC
1997	MD	School of Medicine, University of Toronto, Toronto, Ontario
1999	CCFP	Family Medicine, University of British Columbia, Vancouver, British Columbia
2012	PhD	Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC

Employment

1997-2000	Family Medicine Residency, St. Paul's Hospital, Vancouver, British Columbia
2000-2001	Family Physician (Locum Tenens) Bayswater Family Practice, Vancouver, BC
2007	Teaching Assistant, Principles of Epidemiology Online, Schoenbach, Department of Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC
2009	Teaching Assistant, Introduction to Logic in Epidemiology, Poole, Department of Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC
2009-2011	Research Assistant (Savitz/Siege-Riz) Department of Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC
2010	Teaching Assistant, Theory and Quantitative Methods in Epidemiology, Poole Department of Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC
2011-2012	Research Assistant (Engel) Department of Epidemiology, UNC Gillings School of Global Public Health, Chapel Hill, NC
2012-2016	IRTA Postdoctoral Fellow, Epidemiology Branch, National Institute of Environmental Health Sciences
2016-2017	Research Fellow, PI Baird. Epidemiology Branch, National Institute of Environmental Health Sciences
2017-present	Staff Scientist, PI Baird. Epidemiology Branch, National Institute of Environmental Health Sciences

Teaching Activities

2008-2010	Guest Lecturer. Natural History of Disease and Screening. Schoenbach. UNC Gillings School of Global Public Health
2013-present	Guest Lecturer. Introduction to Reproductive Epidemiology. Engel, Olshan, Desrosiers. UNC Gillings School of Global Public Health
2017-present	Invited seminar speaker. Reproductive, Pediatric and Perinatal Epidemiology Seminar Series. Daniels, Engle. UNC Gillings School of Global Public Health

Service Activities

2012-present	External Manuscript Reviews: Fertility and Sterility, Human Reproduction, BMC Women's Health, American Journal of Epidemiology, PLOS ONE, AJOG
2012-present	Internal Manuscript Reviews (NIEHS): Epidemiology Branch, Biostatistics and Computational Biology Branch, National Toxicology Program, Reproductive and Developmental Biology Branch, Clinical Research Branch
2013	Reproductive Epidemiology Journal Club, Organizer
2014-present	NIEHS Representative to the NICHD PregSource Project
2015-2016	Vitamin D Journal Club, NIEHS, Organizer
2016	Environmental Health Science Fest, Volunteer
2018-present	NIEHS Representative to All of Us Planning Meeting

2019-present Member Clinical Advisory Committee (NIEHS)
2019 Planning committee Reproductive Epidemiology—Past, Present and Future Symposium
2019-2020 Planning committee The Basic Science of Uterine Fibroids Scientific Meeting
2019-present Liaison for Epidemiology Branch Training Committee

Honors and Distinctions

Intramural Paper of the Month (Dec), National Institute of Environmental Health Sciences, 2020
Fellow of the Year, National Institute of Environmental Health Sciences, 2014
Student Paper Prize Award, Society for Pediatric and Perinatal Epidemiologic Research, 2014
Fellows Award for Excellence in Research, National Institutes of Health, 2014
Delta Omega, The Honorary Public Health Society, Theta Chapter, 2012
Medical Alumni Association Research Scholarship, University of Toronto, 1994
Morehead Scholar at the University of North Carolina at Chapel Hill, 1988-1992
Phi Beta Kappa University of North Carolina at Chapel Hill, 1992
The Robert E. Coker Award for Excellence in Organismal and Ecological Research, 1992
Order of the Golden Fleece; in recognition of outstanding contributions to UNC, 1991

Professional Membership

2008-present Society for Epidemiologic Research
Society for Pediatric and Perinatal Research

Invited Oral Presentations

Applying Inverse Probability Weighting to Estimate Risk Ratios when Genotyping Data are Available in a Subset, Society for Epidemiological Research, Minneapolis, MN 2012

Polymorphisms in Genes Associated with Natural Killer Cells are Associated with Preterm Birth, Society for Epidemiological Research, Minneapolis, MN 2012

Association between Depo-Provera and Prevalent Fibroids in Young African American Women, Triangle Reproductive Biology Consortium, Durham, NC 2013

Preeclampsia and the Risk of Fetal Death, Society for Perinatal and Pediatric Epidemiologic Research, Seattle, WA, 2014

Use of Estrogen-Containing Contraception is Associated with Increased Levels of Serum 25-hydroxyvitamin D, Society for Perinatal and Paediatric Epidemiologic Research, Denver, CO, 2015

Two denominators for one numerator: The case of neonatal mortality, Society for Perinatal and Pediatric Epidemiologic Research, Epidemiology Congress of the Americas, Miami, FL, 2016

Preeclampsia: Advances using clinically validated data, University of Bergen, Department of Global Public Health and Primary Care December 2019

Use of depot medroxyprogesterone acetate reduces fibroid growth and incidence: a prospective study, Society for Perinatal and Pediatric Epidemiologic Research, Boston, MA December 2020

Body mass index and C-reactive protein: time to revisit who has acute inflammation in population-based cohorts? Society for Epidemiologic Research Annual Meeting, San Diego, CA June 2021

Poster Presentation

Integrated assessment of behavioral, nutritional, and psychosocial risk factors for preterm birth, Society for Perinatal and Paediatric Epidemiologic Research, Anaheim, CA 2009

Keloids Are Not Associated with Fibroids in African American Women, Society for Epidemiological Research, Boston, MA 2013

Association between Depo-Provera and Prevalent Fibroids in Young African American Women, Society for Epidemiological Research, Seattle, WA, 2014

Use of estrogen-containing contraception is associated with increased levels of serum 25-hydroxyvitamin D, Society for Epidemiologic Research, Denver, CO, 2015

Menstrual cycle estradiol is associated with vitamin D status, Society for Perinatal and Paediatric Epidemiologic Research, Seattle, WA 2017

Exogenous estrogen increases vitamin D binding protein, Society for Epidemiologic Research, Baltimore, MD 2018

Time between onset of preeclampsia and delivery, Society for Perinatal and Paediatric Epidemiologic Research, Minneapolis, MN 2019

Publications

1. Savitz D. A., **Harmon Q.**, Siega-Riz A. M., Herring A. H., Dole N., Thorp J. M., Jr. Behavioral influences on preterm birth: integrated analysis of the pregnancy, infection, and nutrition study. *Maternal and child health journal*. 2012; Aug 16(6):1151-63.
2. **Harmon Q. E.**, Laughlin S. K., Baird D. D. Keloids and ultrasound detected fibroids in young African American women. *PloS One*. 2013; 8(12):e84737.
3. **Harmon Q. E.**, Engel S. M., Olshan A. F., Moran T., Stuebe A. M., Luo J., Wu M. C., Avery C. L. Association of polymorphisms in natural killer cell-related genes with preterm birth. *American journal of epidemiology*. 2013; Oct 15 178(8):1208-18.
4. Wu M. C., Maity A., Lee S., Simmons E. M., **Harmon Q. E.**, Lin X., Engel S. M., Molldrem J. J., Armistead P. M. Kernel machine SNP-set testing under multiple candidate kernels. *Genetic epidemiology*. 2013; Apr 37(3):267-75.
5. Starling A. P., Engel S. M., Richardson D. B., Baird D. D., Haug L. S., Stuebe A. M., Klungsoyr K., **Harmon Q.**, Becher G., Thomsen C., Sabaredzovic A., Eggesbo M., Hoppin J. A., Travlos G. S., Wilson R. E., Trogstad L. I., Magnus P., Longnecker M. P. Perfluoroalkyl substances during pregnancy and validated preeclampsia among nulliparous women in the Norwegian Mother and Child Cohort Study. *American journal of epidemiology*. 2014; Apr 01 179(7):824-33.
6. Klungsoyr K., **Harmon Q. E.**, Skard L. B., Simonsen I., Austvoll E. T., Alsaker E. R., Starling A., Trogstad L., Magnus P., Engel S. M. Validity of pre-eclampsia registration in the medical birth registry of Norway for women participating in the Norwegian mother and child cohort study, 1999-2010. *Paediatr Perinat Epidemiol*. 2014; Sep 28(5):362-71.

7. Hillesund E. R., Overby N. C., Engel S. M., Klungsoyr K., **Harmon Q. E.**, Haugen M., Bere E. Associations of adherence to the New Nordic Diet with risk of preeclampsia and preterm delivery in the Norwegian Mother and Child Cohort Study (MoBa). *Eur J Epidemiol.* 2014; Oct 29(10):753-65.
8. **Harmon Q. E.**, Engel S. M., Wu M. C., Moran T. M., Luo J., Stuebe A. M., Avery C. L., Olshan A. F. Polymorphisms in inflammatory genes are associated with term small for gestational age and preeclampsia. *American journal of reproductive immunology.* 2014; May 71(5):472-84.
9. **Harmon Q. E.**, Baird D. D. Use of depot medroxyprogesterone acetate and prevalent leiomyoma in young African American women. *Human reproduction.* 2015; Jun 30(6):1499-504.
10. Wilcox A. J., Weinberg C. R., Basso O., **Harmon Q. E.** Re: "Analyzing risks of adverse pregnancy outcomes". *American journal of epidemiology.* 2015; Feb 01 181(3):218.
11. **Harmon Q. E.**, Huang L., Umbach D. M., Klungsoyr K., Engel S. M., Magnus P., Skjaerven R., Zhang J., Wilcox A. J. Risk of fetal death with preeclampsia. *Obstetrics and gynecology.* 2015; Mar 125(3):628-35.
12. Baird D. D., **Harmon Q. E.**, Upson K., Moore K. R., Barker-Cummings C., Baker S., Cooper T., Wegienka G. A Prospective, Ultrasound-Based Study to Evaluate Risk Factors for Uterine Fibroid Incidence and Growth: Methods and Results of Recruitment. *Journal of women's health.* 2015; Nov 24(11):907-15.
13. **Harmon Q. E.**, Umbach D. M., Baird D. D. Use of Estrogen-Containing Contraception Is Associated With Increased Concentrations of 25-Hydroxy Vitamin D. *The Journal of clinical endocrinology and metabolism.* 2016; Sep 101(9):3370-7.
14. Upson K., **Harmon Q. E.**, Baird D. D. Soy-Based Infant Formula Feeding and Ultrasound-Detected Uterine Fibroids among Young African-American Women with No Prior Clinical Diagnosis of Fibroids. *Environmental health perspectives.* 2016; Jun 124(6):769-75.
15. Upson K., **Harmon Q. E.**, Laughlin-Tommaso S. K., Umbach D. M., Baird D. D. Soy-based Infant Formula Feeding and Heavy Menstrual Bleeding Among Young African American Women. *Epidemiology.* 2016; Sep 27(5):716-25.
16. Jukic A. M., Upson K., **Harmon Q. E.**, Baird D. D. Increasing serum 25-hydroxyvitamin D is associated with reduced odds of long menstrual cycles in a cross-sectional study of African American women. *Fertility and sterility.* 2016; Jul 106(1):172-9 e2.
17. He Q., Cai T., Liu Y., Zhao N., **Harmon Q. E.**, Almli L. M., Binder E. B., Engel S. M., Ressler K. J., Conneely K. N., Lin X., Wu M. C. Prioritizing individual genetic variants after kernel machine testing using variable selection. *Genetic epidemiology.* 2016; Dec 40(8):722-31.
18. Weinberg C. R., Shi M., Basso O., DeRoo L. A., **Harmon Q. E.**, Wilcox A. J., Skjaerven R. Season of Conception, Smoking, and Preeclampsia in Norway. *Environmental health perspectives.* 2017; Jun 29 125(6):067022.
19. Bauer A. E., Avery C. L., Shi M, Weinberg C. R., Olshan A. F., **Harmon Q. E.**, Luo J, Yang J, Manuck T. A., Wu M. C., et al. A Family Based Study of Carbon Monoxide and Nitric Oxide Signalling Genes and Preeclampsia. *Paediatr Perinat Epidemiol.* 2018 Jan;32(1):1-12.
20. O'Brien K. M., Sandler D. P., Shi M, **Harmon Q. E.**, Taylor J. A., Weinberg C. R. Genome-Wide Association Study of Serum 25-Hydroxyvitamin D in US Women. *Frontier Genetics* 2018; 9:67.

21. **Harmon Q. E.**, Basso O, Weinberg C. R., Wilcox A. J. Two denominators for one numerator: the example of neonatal mortality. *European Journal of Epidemiology* 2018; 33(6):523-530
22. Moore KR, **Harmon QE**, Baird DD. Serum 25-Hydroxyvitamin D and Risk of Self-Reported Bacterial Vaginosis in a Prospective Cohort Study of Young African American Women. *J Womens Health (Larchmt)*. 2018 Oct;27(10):1278-1284.
23. **Harmon QE**. The burden of uterine fibroids: a search for primary and secondary prevention. *Fertil Steril*. 2019 Jan;111(1):50-51.
24. Kresovich JK, **Harmon QE**, Xu Z, Nichols HB, Sandler DP, Taylor JA. Reproduction, DNA methylation and biological age. *Human reproduction (Oxford, England)*. 2019;34(10):1965-73.
25. Kazmi N, Sharp GC, Reese SE, ... **Harmon QE**, ... Lawlor DA, Relton CL. Hypertensive Disorders of Pregnancy and DNA Methylation in Newborns. *Hypertension (Dallas, Tex : 1979)*. 2019;74(2):375-83.
26. Gaston SA, James-Todd T, **Harmon Q**, Taylor KW, Baird D, Jackson CL. Chemical/straightening and other hair product usage during childhood, adolescence, and adulthood among African-American women: potential implications for health. *Journal of exposure science & environmental epidemiology*. 2020;30(1):86-96.
27. **Harmon QE**, Kissell K, Jukic AM, Kim K, Sjaarda L, Perkins N, Umbach DM, Schisterman E, Baird DD, Mumford S. Vitamin D and Reproductive Hormones Across the Menstrual Cycle. *Human Reproduction*. 2020;35(2):413-23.
28. Baird DD, Patchel SA, Saldana TM, Umbach DM, Cooper T, Wegienka G, **Harmon QE**. Uterine fibroid incidence and growth in an ultrasound-based, prospective study of young African Americans. *American journal of obstetrics and gynecology*. 2020;223(3):402.e1-.e18.
29. Jukic AMZ, **Harmon QE**. Accumulating evidence for vitamin D and conception. *Fertility and sterility*. 2020;113(2):330-1.
30. Sun BZ, Moster D, **Harmon QE**, Wilcox AJ. Association of Preeclampsia in Term Births With Neurodevelopmental Disorders in Offspring. *JAMA psychiatry*. 2020;77(8):823-9.
31. Wilcox AJ, **Harmon Q**, Doody K, Wolf DP, Adashi EY. Preimplantation loss of fertilized human ova: estimating the unobservable. *Human reproduction (Oxford, England)*. 2020;35(4):743-50.
32. Kvalvik LG, Wilcox AJ, Skjærven R, Østbye T, **Harmon QE**. Term complications and subsequent risk of preterm birth: registry based study. *BMJ (Clinical research ed)*. 2020;369:m1007.
33. Upson K, **Harmon QE**, Heffron R, Hall JE, Wise LA, Wegienka G, Tokar EJ, Baird DD. Depot Medroxyprogesterone Acetate Use and Blood Lead Levels in a Cohort of Young Women. *Environmental health perspectives*. 2020;128(11):117004.
34. Steinhorsdottir V, McGinnis R, Williams NO, ... **Harmon Q**, ... Stefansson K, Morgan L. Genetic predisposition to hypertension is associated with preeclampsia in European and Central Asian women. *Nat Commun*. 2020;11(1):5976.
35. **Harmon QE**, Brasky TM. Risk factors for uterine fibroids: time to build on what we have learned. *Fertility and sterility*. 2020;114(4):755-6.

36. Hoffman SR, Nicholson WK, Smith JS, Jonsson Funk M, Hudgens MG, Poole C, Baird DD, **Harmon QE**. Reasons for hormonal contraceptive use in a cohort of African-American women living in the Detroit area. *Contraception*. 2020;102(5):346-8.
37. Kana MA, Safiyan H, Yusuf HE, Musa ASM, Richards-Barber M, **Harmon QE**, London SJ. Association of intimate partner violence during pregnancy and birth weight among term births: a cross-sectional study in Kaduna, Northwestern Nigeria. *BMJ Open*. 2020;10(12):e036320.
38. Wise LA, Wesselink AK, Bethea TN, Brasky TM, Wegienka G, **Harmon Q**, Block T, Baird DD. Intake of Lycopene and other Carotenoids and Incidence of Uterine Leiomyomata: A Prospective Ultrasound Study. *J Acad Nutr Diet*. 2021;121(1):92-104.
39. Gaston SA, James-Todd T, Riley NM, Gladney MN, **Harmon QE**, Baird DD, Jackson CL. Hair Maintenance and Chemical Hair Product Usage as Barriers to Physical Activity in Childhood and Adulthood among African American Women. *Int J Environ Res Public Health*. 2020;17(24).
40. Roell KR, **Harmon QE**, Klungsøyr K, Bauer AE, Magnus P, Engel SM. Clustering Longitudinal Blood Pressure Trajectories to Examine Heterogeneity in Outcomes Among Preeclampsia Cases and Controls. *Hypertension (Dallas, Tex : 1979)*. 2021:Hypertensionaha12016239. Epub 2021/04/06. doi: 10.1161/hypertensionaha.120.16239.
41. Bernardi LA, Weiss MS, Waldo A, **Harmon Q**, Carnethon MR, Baird DD, Wise LA, Marsh EE. Duration, recency, and type of hormonal contraceptive use and antimüllerian hormone levels. Fertility and sterility. 2021. Epub 2021/03/24. doi: 10.1016/j.fertnstert.2021.02.007
42. Baird DD, **Harmon QE**. Relugolix - new treatment for uterine fibroid-related heavy bleeding. *Nat Rev Endocrinol*. 2021. Epub 2021/04/16. doi: 10.1038/s41574-021-00493-2