

Role: PI

No Grant Number

Nov 2020 – Nov 2021

Office of Dietary Supplements Research Scholars Award

Maternal Prenatal Fatty Acid Supplementation and Offspring Immune Dysregulation

Amount: \$100,000

Role: PI

UL1 TR001450, TL1 TR001451

Oct 2016 – July 2018

National Center for Advancing Translational Sciences

Prenatal and Early Life Exposures and Subsequent Cardiometabolic Risk

Role: Trainee

PUBLICATIONS

* indicates co-first authorship. † indicates mentorship.

Peer reviewed publications – published

1. **Stevens DR**, Hinton K, O'Brien KM, Buckley JP, Welch BM, Watts JA, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Saade G, Abuhamad A, Ferguson KK. Urinary flow rate and specific gravity across gestation: Considerations for the analysis of urinary environmental chemical concentrations during pregnancy. 2025 Nov. *Epidemiology*.
2. Pacyga DC, Buckley JP, Martinez-Steele E, Bommarito P, Ferguson KK, **Stevens DR**. Degree of food processing and serum poly- and perfluoroalkyl substance concentrations in the US National Health and Nutrition Examination Survey, 2003-2018. 2025 May. *Int J Hyg Environ Health*.
3. McNell EE†, **Stevens DR**, Welch BM, Rosen EM, Fenton S, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Saade G, Abuhamad A, Ferguson KK. Exposure to phthalates and replacements during pregnancy in association with gestational blood pressure and hypertensive disorders of pregnancy. 2025 Apr. *Environ Res*.
4. Welch BM, Bommarito PA, Cantonwine DE, Ginger M, **Stevens DR**, Matthew E, Zeldin D, Meeker JD, McElrath TF, Ferguson KK. Consumer product chemical mixtures and oxylipin-mediated inflammation and oxidative stress during early pregnancy: Findings from a large US pregnancy cohort. 2025 Feb. *Environ Sci Technol*.
5. **Stevens DR**, Blaauwendraad SM, Bommarito PA, van den Driess M, Spaan S, Pronk A, Tiemeier H, Gaillard R, Jaddoe VVW, Ferguson KK. Gestational organophosphate pesticide exposure and childhood cardiovascular outcomes. 2024 Oct. *Environ Int*.

★ Awarded NIEHS December 2024 Paper of the Month

6. Quiñones S†, Nie J, **Stevens DR**, Gleason J, Ha S, Seeni I, Grantz KL, Mendola P. Exposure to acute ambient temperature extremes and neonatal intensive care unit admissions: A case-crossover study. 2024 Nov. *Sci Total Environ*.
7. Lueth AJ†, Bommarito PA, **Stevens DR**, Welch BM, Cantonwine DE, Ospina M, Calafat A, Meeker JD, McElrath TF, Ferguson KK. Exposure to organophosphate ester flame retardants and plasticizers and associations with preeclampsia and blood pressure in pregnancy. 2024 Sept. *Environ Res*.

8. Bommarito PA, **Stevens DR**, Welch BM, Meeker JD, Cantonwine DE, McElrath TF, Ferguson KK. Prenatal exposure to environmental phenols and fetal growth across pregnancy in the LIFECODES Fetal Growth Study. 2024 July. *Environ Int*.
9. **Stevens DR***, Bommarito PA*, Welch BM, Ospina M, Calafat A, Cantonwine DE, McElrath TF, Ferguson KK. Organophosphate ester flame retardants and plasticizers in relation to fetal growth in the LIFECODES Fetal Growth Study. 2024 June. *Environ Health Perspect*.
★ Awarded NIEHS September 2024 Paper of the Month
10. Mateus J, **Stevens DR**, Grantz KL, Zhang Cuilin, Grewal J, Grobman WA, Owen J, Sciscione AC, Wapner RJ, Skupski D, Chien E, Wing DA, Ranzini AC, Nageotte MP, Albert PS, Newman RB. Fetal biometry and maternal antenatal factors predictive of labor dystocia - indicated primary cesarean delivery at term: NICHD Fetal Growth Studies. 2024 June. *Am J Perinatol*.
11. Rosen EM†, **Stevens DR**, McNell EE, Wood ME, Engel SM, Keil AP, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson KK. Longitudinal associations between phthalates and replacements with novel in vivo measures of placental health. 2024 June. *Hum Reprod*.
12. **Stevens DR**, Goldberg M, Adgent M, Chin HB, Baird DD, Stallings V, Sandler DP, Calafat AM, Ford EG, Zemel BS, Kelly A, Umbach DM, Rogan W, Ferguson KK. Environmental phenols and growth in infancy: the Infant Feeding and Early Development Study. 2024 May. *J Clin Endocrinol Metab*.
★ Awarded NIEHS August 2024 Paper of the Month
13. Goldberg M, Adgent M, **Stevens DR**, Chin HB, Ferguson KK, Calafat AM, Travalos G, Ford EG, Stallings V, Rogan W, Umbach DM, Baird DD, Sandler DP. Environmental phenol exposures in 6- to 12-week-old infants: the Infant Feeding and Early Development Study. 2024 May. *Environ Res*.
★ Awarded NIEHS July 2024 Paper of the Month
14. Bommarito PA, Blaauwendraad SM, **Stevens DR**, van den Dries M, Spaan S, Pronk A, Tiemeier H, Gaillard R, Trasande L, Jaddoe VVW, Ferguson KK. Prenatal exposure to nonpersistent chemicals and fetal-to-childhood growth trajectories in the Generation R Study. 2024 April. *Epidemiology*
15. Rosen EM†, **Stevens DR**, Ramos AM, McNell EE, Wood ME, Engel SM, Keil AP, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Saade G, Abuhamad A, Ferguson KK. Personal care product use patterns in association with phthalates and phthalate replacement biomarkers across pregnancy. 2023 Nov. *J Expo Sci Environ Epidemiol*.
16. **Stevens DR**, Starling A, Bommarito P, Keil AP, Nakiwala D, Calafat AM, Dabelea D, Ferguson K. Mid-pregnancy phthalate metabolites and phenols in relation to infant body composition: the Healthy Start study. 2023 July. *Environ Health Perspect*.
★ Awarded NIEHS September 2023 Paper of the Month
17. Blaauwendraad SM, **Stevens DR**, van der Dries M, Gaillard R, Ferguson KK, Jaddoe VVW. Fetal organophosphate exposure and childhood adiposity measures in the general population. 2023 July. *Environ Health Perspect*.
18. Rosen EM†, **Stevens DR**, McNell EE, Wood ME, Engel SM, Keil AP, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson KK. Variability and longitudinal trajectories of phthalate and phthalate replacement biomarkers across pregnancy in the Human Placenta and Phthalates Study. 2023 July. *Environ. Sci. Technol*.

19. Saizy S, Mendola P, Grobman W, Subramaniam, **Stevens DR**, Mumford SL, Larson K, Chen Z, Messer LC, Duncan V, Faye-Petersen O, Kumar R, Williams A. Prenatal exposure to perceived stress, maternal asthma, and placental size. 2023 June. *Placenta*.
20. **Stevens DR**, Rosen EM, Van Wickle K, McNell EE, Bommarito PA, Calafat AM, Botelho JC, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson KK. Early pregnancy phthalates and replacements in relation to fetal growth: The Human Placenta and Phthalates Study. 2023 April. *Environ Res*.
- ★ Awarded NIEHS June 2023 Paper of the Month
21. **Stevens DR***, Rohn MCH†*, Grobman WA, Deshane J, Biggio JR, Subramaniam A, Grantz K, Sherman S, Kumar R, Chen Z, Mendola P. Periconceptional medication discontinuation in relation to maternal-fetal morbidity. 2023 March. *Am J Perinatol*.
22. Bommarito PA, **Stevens DR**, Welch BM, Weller D, Meeker JD, Cantonwine DE, McElrath TF, Ferguson KK. Temporal trends and predictors of exposure to phthalates, phthalate replacements, and phenols in the LIFECODES Fetal Growth Study. 2023 March. *Environ Int*.
- ★ Awarded NIEHS 2023 Paper of the Year
23. **Stevens DR**, Yeung E, Williams A, Ouidir M, Grobman W, Kumar R, Rohn MCH, Hinkle S, Lipsky L, Kanner J, Sherman S, Chen Z, Mendola P. Maternal asthma associated with infant body composition. 2023 Feb. *JACI: Global*.
24. Bommarito PA, Cantonwine DE, **Stevens DR**, Welch BM, Davalos A, Zhao S, McElrath TF, Ferguson KK. Fetal growth trajectories of babies born large-for-gestational-age in the LIFECODES Fetal Growth Study. 2022 Sept. *Am J Obstet Gynecol*.
25. Bommarito PA, Cantonwine DE, **Stevens DR**, Welch BM, Davalos A, Zhao S, McElrath TF, Ferguson KK. An application of group-based trajectory modeling to define fetal growth phenotypes among SGA births in the LIFECODES Fetal Growth Study. 2022 Aug. *Am J Obstet Gynecol*.
26. Zhao S, Yeung E, Ouidir M, Hinkle SN, Grantz K, Grewal J, Mitro SD, Wu J, **Stevens DR**, Chatterjee S, Tekola-Ayele F, Zhang C. Recreational physical activity before and during pregnancy and placental DNA methylation - an epigenome-wide association study. 2022 April. *Am J Clin Nutr*
27. **Stevens DR**, Bommarito P, Keil AP, McElrath T, Trasande L, Barrett ES, Bush NR, Nguyen RHN, Sathyanarayana S, Swan S, Ferguson K. Urinary phthalate metabolite mixtures in pregnancy and fetal growth: findings from The Infant Development and the Environment Study. 2022 April. *Environ Int*
- ★ Awarded NIEHS June 2022 Paper of the Month
28. **Stevens DR**, Rohn MCH, Hinkle S, Williams A, Kumar R, Grobman W, Lipsky LM, Sherman S, Kanner J, Chen Z, Mendola P. Maternal body composition and gestational weight gain in relation to asthma control during pregnancy. 2022 April. *PLOS ONE*
29. **Stevens DR***, Polinski K*, Mendola P, Bell E, Lin T, Bell G, Louis GB, Adeyeye T, Stern J, Yeung E. Infertility treatment associated with childhood asthma and atopy. 2022 Mar. *Hum Reprod*
30. Newman R, **Stevens DR**, Hunt K, Grobman W, Owen J, Sciscione A, Wapner RJ, Skupski D, Chien ED, Wing DA, Ranzini AC, Porto M, Grantz K. Fetal growth biometry as predictors of shoulder dystocia in a low risk obstetrical population. 2022 Feb. *Am J Perinatol*

31. Robinson SL, Sundaram R, Putnick DL, Gleason JL, Ghassabian A, **Stevens D**, Bell EM, Yeung EH. Age of juice introduction and child anthropometry at 2-3 and 7-9 years. 2022 Feb. *J Pediatrics*
32. **Stevens DR**, Perkins N, Chen Z, Kumar R, Grobman W, Subramaniam A, Biggio J, Grantz K, Sherman S, Rohn MCH, Mendola P. Determining the clinical course of asthma during pregnancy. 2021 Oct. *JACI: In Practice*
33. Kanner J[†], **Stevens DR**, Nobles C, Rohn MCH, Ha S, Mannisto T, Ouidir M, Mendola P. Risk of cardiovascular events during labor and delivery associated with acute ambient temperature changes. 2021 Aug. *Clim Change*
34. Ouidir M, Tekola-Ayele F, Canty T, Grantz K, Sciscione A, Tong D, Jones RR, Sundaram R, Williams A, **Stevens DR**, Mendola P. acute ambient air pollution exposure and fetoplacental doppler results in the NICHD Fetal Growth Studies – Singleton cohort. 2021 July. *Environ Res*
35. Rohn MCH[†], **Stevens DR**, Kanner J, Nobles C, Chen Z, Grantz KL, Sherman S, Grobman W, Kumar R, Biggio J, Mendola P. Asthma medication regimens in pregnancy – longitudinal changes in symptoms, lung function and inflammation. 2021 Mar. *Am J Perinatol*
36. Kanner J[†], Pollack AZ, Ranasinghe S, **Stevens DR**, Nobles C, Rohn MCH, Sherman S, Mendola P. Chronic exposure to air pollution and risk of mental health disorders complicating pregnancy. 2021 Feb. *Environ Res*
37. **Stevens DR**, Grobman W, Kumar R, Lipsky L, Hinkle S, Chen Z, Williams A, Rohn M, Kanner J, Sherman S, Mendola P. Gestational and postpartum weight trajectories among women with and without asthma. 2020 Nov. *Am J Epidemiology*
38. **Stevens DR**, Neelon B, Roberts JR, Taylor SN, Newman RB, Vena JE, Hunt KJ. Mediation of the association between maternal pre-pregnancy overweight/obesity and childhood overweight/obesity by birth anthropometry. 2020 Feb. *J Dev Orig Health Dis*
39. **Stevens DR**, Taylor SN, Roberts JR, Neelon B, Newman RB, Vena JE, Hunt KJ. Breastfeeding initiation as related to the interaction of race/ethnicity and maternal diabetes. 2019 July. *Breastfeed Med*
40. Hunt KJ, Jenkins AJ, Fu D, **Stevens D**, Ma JX, Klein RL, Azar M4, Zhang SX, Lopes-Virella MF, Lyons TJ, VADT Investigators. Serum pigment epithelium-derived factor: relationships with cardiovascular events, renal dysfunction, and mortality in the Veterans Affairs Diabetes Trial (VADT) cohort. 2019 July. *J Diabetes Complications*
41. Vrana-Diaz CJ, **Stevens DR**, Ndeche E, Korte JE. HIV self-testing knowledge and attitudes at sports-based HIV prevention tournaments in Nairobi, Kenya. 2019 June. *J HIV AIDS Soc Serv*
42. Gichangi A, Wambua J, Mutwiwa S, Njogu R, Bazant E, Wamicwe J, Wafula R, Vrana C, **Stevens D**, Mudany M, Korte J. Impact of HIV self-test distribution to male partners of ANC clients: results of a randomized controlled trial in Kenya. 2018 Dec. *J Acquir Immune Defic Syndr*
43. **Stevens DR**, Malek AM, Laggis C, Hunt KJ. In utero exposure to tobacco smoke, subsequent cardiometabolic risks, and metabolic syndrome among U.S. adolescents. 2018 Sep. *Ann Epidemiol*
44. **Stevens DR**, Vrana CJ, Dlin RE[†], Korte JE. A global review of HIV self-testing: themes and implications. 2018 Feb. *AIDS Behav*
45. Baker NL, Hunt KJ, **Stevens DR**, Jarai G, Rosen GD, Klein RL, Virella G, Lopes-Virella MF, DCCT/EDIC Research Group. Association between inflammatory markers and progression to kidney dysfunction: examining different assessment windows in patients with type 1 diabetes. 2018 Jan. *Diabetes Care*

Non-referred publications – published

1. Gichangi A, Korte JE, Wambua J, Vrana C, **Stevens D.** (2017). Increasing male partner HIV testing using self-test kits in Kenya, 3ie impact evaluation report 62. New Delhi: International Initiative for Impact Evaluation (3ie)

SELECTED SCIENTIFIC PRESENTATIONS

1. Hinton KM[†], **Stevens DR**, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson K. Longitudinal trajectories of fetal liver growth among SGA, AGA, LGA infants. (August 2024) Poster presentation for NIEHS EB Science Days and Summer Internship Program, Durham, NC, US
2. **Stevens DR**, Sinkovskaya E, Przybylska A, Abuhamad A, Nehme L, Diab Y, Onishi K, Saade G, Ferguson K. Gestational exposure to endocrine disrupting chemicals and fetal liver development: findings from the HPP 3D Study. (August 2024) Rapid oral presentation for the International Society for Environmental Epidemiology Conference, Santiago, Chile
3. **Stevens DR**, Goldberg M, Adgent M, Chin H, Baird D, Stallings V, Rogan W, Umbach DM, Ferguson KK. (March 2024) Environmental phenols and growth in infancy. Oral presentation for HEEDS EDC-North Carolina Working Group Fourth Annual Scientific Meeting, Durham, NC, US
4. Math-Earth T[†], **Stevens DR**, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson K. (July 2023) Racial disparities in phthalate exposure and birthweight outcomes. Poster presentation for NIEHS Summer Internship Program, Durham, NC, US
5. **Stevens DR**, Bommarito PA, Welch BM, Ospina M, Calafat A, Cantonwine DE, McElrath TF, Ferguson KK. (June 2023). Organophosphate ester flame retardants and plasticizers in relation to fetal growth in the LIFECODES Fetal Growth Study. Oral presentation for the International Society for Environmental Epidemiology North American Conference, Corvallis, OR, US
6. Van Wickle K[†], **Stevens DR**, Sinkovskaya E, Przybylska A, Abuhamad A, Saade G, Ferguson K. (July 2022) Gestational weight gain and phthalate exposure. Poster presentation for NIEHS Summer Internship Program, Durham, NC, US

★ Awarded second place NIEHS 2022 Graduate Summer Internship Program poster

7. **Stevens DR**, Keil AP, Bommarito P, McElrath T, Barrett ES, Bush N, Nguyen R, Sathyanarayana S, Swan S, Ferguson K. (November 2021) Urinary phthalate metabolite mixtures in pregnancy, omega-3s, and fetal growth. Oral presentation for the US Developmental Origins of Health and Disease 2021, Chapel Hill, NC, US
8. **Stevens DR**, Ferguson PL, Commodore A, Cobbs, JR, Vena JE, Hunt KJ. (June 2019). The association between a child's built environment, activity levels, and adiposity: A multi-racial cohort of children. Poster presentation at the Society for Epidemiologic Research 52nd Annual Meeting, Minneapolis, MN, US
9. **Stevens DR**, Newman R, Taylor S, Roberts J, Vena J, Neelon B, Hunt KJ. (June 2018). The effect of intrauterine exposure to maternal metabolic disorders on offspring anthropometry in a predominantly African American cohort. Oral presentation at the Canadian Society for Epidemiology and Biostatistics National Student Conference, Thunder Bay, Ontario, CA
10. **Stevens, D**, The, N, Powers, AR, & Fair, ML (July 2015). Culinary Creations: A community-based support for policy change in the elementary school nutrition environment. Poster presentation for the Society of Nutrition Education and Behavior Annual Conference, Pittsburgh, PA.

MENTORING

Please reach out via email for a full list of mentees, their roles, and their accomplishments.

NIEHS Summer Internship Program career panel | 2022

NIH Research Mentor Training course | 2022

Mentor for the Social Scientist | 2019-2020

Mentor for Letters to a Pre-Scientist program | 2019-2020

Mentor for Furman University's Engaging the Younger Public Health Generation | 2019

TEACHING

University of North Carolina – Chapel Hill

Guest lecture “Group-Based Trajectory Modelling” for Advanced Reproductive Epidemiology | 2024, 2026 (planned)

Duke University

Guest lecture “Mediation and Study Design” for Environmental Health and Epidemiology | 2023, 2024, 2026 (planned)

Oregon State University

Guest lecture “Intro to Causal Inference” for Advanced Epidemiologic Methods | 2023, 2024

Xavier University

Guest lecture “Maternal and Child Health” for Intro to Public Health | 2022

NIEHS Summer Internship Program

Lecture “Data Management & Good Coding Practices” for Fellows Seminar | 2022, 2023, 2024

Medical University of South Carolina

Teaching Assistant for Epidemiology III | 2018

Teaching Assistant for Epidemiology I | 2016

Teaching Assistant for Design & Conduct of Epidemiologic Studies | 2016

NIH's Scientists Teaching Science | 2019

MUSC Graduate Students Reaching Out With Science | 2015

HONORS & AWARDS

NIH Fellows Award for Research Excellence Award (\$1,500) | 2022, 2024

US DOHAD Conference 2021 Trainee Travel Award | 2021

SER Lilienfeld Postdoctoral Prize Paper Award Finalist | 2021

MUSC College of Medicine High Impact Scientific Publication Award | 2018

First place student poster for the 22nd Annual Diabetes Fall Symposium for Primary Health Care Professionals | 2016

Pathways to Practice Scholars for Region IV Public Health Training Award (\$3,500) | 2018

MUSC Global Health Trainee Travel Award (\$2,000) | 2015

Furman University Health Sciences Schonmeyer Scholarship Recipient | 2013

Furman University Sportsmedicine Scholarship Recipient | 2012

Furman University Achiever's Scholarship Recipient | 2010

CONTINUING EDUCATION

Research Compass Scholar's Leadership Program | 2024

Columbia Mixtures Bootcamp | 2022

NIH Grant Writing workshop | 2022

SPER Time-Varying G-Formula workshop | 2021

SER Causal Inference for Longitudinal Exposures workshop | 2020

SER Causal Inference workshop | 2018

PROFESSIONAL MEMBERSHIPS

Society for Epidemiologic Research (SER)

Society for Pediatric and Perinatal Epidemiologic Research (SPER)

International Society for Environmental Epidemiology (ISEE)

Society of Birth Defects Research and Prevention (BDRP)

American College of Epidemiology (ACE)

PROFESSIONAL SERVICE

Leadership

NIEHS Fellows Grant Peer Review Board Chair (2022-2024)

NIEHS Repro Lunch Coordinator (2022-2024)

NICHD Maternal Fetal Medicine Coordinator (2019-2021)

Committees

NIEHS Epidemiology Branch Retreat (2024)

NIEHS Epidemiology Branch Fellows' Council (2022 – 2024)

NIEHS Epidemiology Branch Quality of Life Assessment (2024)

SER Communications (2022 – Present)

SPER Communications (2019 – Present)

SPER Outreach (2022 – Present)

SPER Trainee committee (2020 – 2022)

Symposia

Invited speaker for selected BDRP symposium “Advancements in Assessing the Effects of Environmental Chemicals on Maternal Health and Fetal Development” (2025)

Co-chair and organizer for selected SPER symposium “Pinpointing homogenous groups in heterogeneous data: applications of latent trajectory modelling in perinatal and pediatric research” (2023)

Moderator

SPER “Pregnancy Outcomes” Speed Talks (2021)

Canadian Society for Epidemiology and Biostatistics National Student Conference (2018)

Grant or Application Reviewer

NIEHS Climate Change and Your Community Environmental Health Challenge (2024)

UKRI Future Leaders Fellowship Grant (2023)
Asthma + Lung UK Research Grant (2022)
ISEE Short Course (2020)
MUSC Global Health Case Competition (2019)
MUSC Global Health Trainee Travel Grant (2016)

Peer Reviewer

Reproductive, perinatal, and pediatric journals: JAMA Pediatr, Paediatr Perinat Epidemiol, Am J Obstet Gynecol, Matern Child Health J, Early Hum Dev

Environmental journals: Environ Res, Environ Health, Environ Int, Int J Environ Res Public Health, Sci Total Environ, Environ Sci & Technol

Cardiovascular, obesity, and nutrition journals: Heart, Obes Sci Pract, Childhood Obesity, Public Health Nutr, Eur J Clin Nutr, Nutrients

Epidemiology and public health journals: Epidemiology, Am J Epidemiol, Int J Epidemiol, Eur J Epidemiol, Ann Epidemiol, PLOS One, BMJ Open, BMC Public Health

Abstract Reviewer

ISEE (2019, 2022)
ISEE-NAC (2023)
SPER (2020-2023)
SER (2019-2023)

Poster Judge

NIH Annual Graduate Student Research Symposium (2019 – 2022)
NIH Postbaccalaureate Poster Day (2020)