CURRICULUM VITAE JESSIE P. BUCKLEY, PH.D., M.P.H.

PERSONAL

Department of Epidemiology, CB#7435 University of North Carolina at Chapel Hill Chapel Hill, NC 27599-7435 Jessie.Buckley@unc.edu

EDUCATION

2014	Ph.D., Epidemiology The University of North Carolina at Chapel Hill, Chapel Hill, NC
2007	M.P.H., Environmental and Occupational Health The George Washington University, Washington, DC
2002	A.B., Biology and English, minor in Africana Studies Bowdoin College, Brunswick, ME
Other Training	
2015 - 2016	Postdoctoral Fellowship, Epidemiology
	The University of North Carolina at Chapel Hill, Chapel Hill, NC

PROFESSIONAL EXPERIENCE

The University of Nor 2024 – Present 2023 – 2024	Associate Professor, Tenured, Department of Epidemiology Associate Professor, Tenure-Track, Department of Epidemiology	
Johns Hopkins University, Baltimore, MD		
2023 – Present	Adjunct Associate Professor, Department of Environmental Health and Engineering	
2020 - 2023	Associate Professor, Department of Environmental Health and Engineering	
2016 - 2023	Joint Appointment, Department of Epidemiology	
2021 - 2023	Affiliated Faculty, Wendy Klag Center for Autism and Developmental Disabilities	
2020 - 2023	Affiliated Faculty, Bloomberg American Health Initiative	
2016 - 2020	Assistant Professor, Department of Environmental Health and Engineering	
Other Professional Experience		
2009 – 2014	Graduate Research Assistant, Department of Epidemiology, University of North Carolina at Chapel Hill	
2002 - 2008	Associate Scientist, Sciences International, Inc., Alexandria, VA	

HONORS

2022, 2023	Pediatric Loan Repayment Program Award Renewals, NIEHS
2020 - 2023	Recognition for Excellence in Teaching, Johns Hopkins Bloomberg
	School of Public Health
2020	Pediatric Loan Repayment Program Award, NIEHS
2019	Outstanding New Environmental Scientist Award, NIEHS
2018	Spirit of Sustainability Award, Johns Hopkins University
2017	Science Communication Fellowship, Advancing Green Chemistry
2015	Barbara Sorenson Hulka Dissertation Award, University of North Carolina at Chapel Hill
2015	Tyroler Student Prize Paper Award runner-up, Society for Epidemiologic
	Research
2015	Inducted into the Theta Chapter of Delta Omega, the National Honorary
	Society in Public Health, University of North Carolina at Chapel Hill
2014	Marilyn and Al Tyroler Endowed Scholarship in Epidemiology,
	University of North Carolina at Chapel Hill
2012	Student Dissertation Workshop, Society for Epidemiologic Research
2011	Nancy A. Dreyer Endowed Scholarship in Epidemiology, University of
	North Carolina at Chapel Hill
2010	6th Annual Summer Institute in Reproductive and Perinatal Epidemiology,
• • • •	NICHD-IHDCYH
2006	Inducted into the Omega Chapter of Delta Omega, the National Honorary
	Society in Public Health, George Washington University
2006	Lazlo N. Tauber Scholarship for Public Health, George Washington
	University
2004	School of Public Health and Health Services Merit Scholarship, George
	Washington University

PUBLICATIONS

Refereed Journal Articles

- 1. Liu SH, Chen Y, Kuiper JR, Ho E, **Buckley JP**, Feuerstahler L. 2024. Applying latent variable models to estimate cumulative exposure burden to chemical mixtures and identify latent exposure subgroups: A critical review and future directions. *Statistics in Biosciences*. https://doi.org/10.1007/s12561-023-09410-9. In press.
- 2. Liu Y, Gairola R, Kuiper JR, Papandonatos G, Kelsey K, Langevin S, **Buckley JP**, Chen A, Lanphear B, Cecil K, Yolton K, Braun JM. 2024. Lifetime Postnatal Exposure to Perfluoroalkyl Substance Mixture and DNA Methylation at Twelve Years of Age. *Environmental Science & Technology Letters*. doi: 10.1021/acs.estlett.3c00410. In press.
- 3. Kuiper JR, Liu S, Lanphear BP, Calafat AM, Cecil KM, Xu Y, Yolton K, Kalkwarf HJ, Chen A, Braun JM, **Buckley JP**. 2024. Estimating effects of longitudinal and cumulative exposure

^{*} first author is a student or postdoctoral fellow for whom I was the primary or co-mentor \$ co-first or co-senior authorship

- to PFAS mixtures on early adolescent body composition. *American Journal of Epidemiology*. doi: 10.1093/aje/kwae014. In press.
- 4. **Buckley JP**, Zhou J*, Marquess K*, Lanphear BP, Cecil KM, Chen A, Xu Y, Yolton K, Braun JM, Kalkwarf HJ, Kuiper JR. 2024. Per- and polyfluoroalkyl substances and bone mineral content in early adolescence: modification by diet and physical activity. *Environmental Research*. 252(Pt 1):118872.
- 5. Mourino N, Zhang Z, Pérez-Ríos M, Yolton K, Lanphear BP, Chen A, **Buckley JP**, Kalkwarf HJ, Cecil KM, Braun JM. 2024. Early Life Exposure to Secondhand Tobacco Smoke and Eating Behaviors at Age 12 Years. *Environmental Health*. 23(1):37.
- 6. Trasande L, Nelson ME, Alshawabkeh A, Barrett ES, **Buckley JP**, Dabelea D, Dunlop AL, Herbstman J, Meeker JD, Naidu M, Newschaffer CJ, Padula AM, Romano ME, Ruden DM, Sathyanarayana S, Schantz SL, Starling AP, Etzel T, Hamra GB. 2024. Prenatal Phthalate Exposure and Adverse Birth Outcomes: a Prospective Analysis of U.S. Births and Estimates of Attributable Burden and Costs. *Lancet Planetary Health*. 8(2):e74-e85.
- 7. Liu SH, Chen Y, Feuerstahler L, Chen A, Starling A, Dabelea D, Wang X, Cecil K, Lanphear B, Yolton K, Braun JM, **Buckley JP**. 2024. The U.S. PFAS exposure burden calculator for 2017-2018: Application to the HOME Study, with comparison of epidemiological findings from NHANES. *Neurotoxicology and Teratology*. 102:107321.
- 8. Oh J, **Buckley JP**, Li X, Gachigi KK, Kannan K, Lyu W, Ames JL, Barrett ES, Bastain TM, Breton CV, Buss C, Croen LA, Dunlop AL, Ferrara A, Ghassabian A, Herbstman JB, Hernandez-Castro I, Hertz-Picciotto I, Kahn LG, Karagas MR, Kuiper JR, McEvoy CT, Meeker JD, Morello-Frosch R, Padula AM, Romano ME, Sathyanarayana S, Schantz S, Schmidt RJ, Simhan H, Starling AP, Tylavsky FA, Volk HE, Woodruff TJ, Zhu Y, Bennett DH; program collaborators for Environmental influences on Child Health Outcomes. 2024. Associations of Organophosphate Ester Flame Retardant Exposures during Pregnancy with Gestational Duration and Fetal Growth: The Environmental influences on Child Health Outcomes (ECHO) Program. *Environmental Health Perspectives*. 132(1):17004.
- 9. Fleury E, Kuiper JR, **Buckley JP**, Cecil KM, Chen A, Eaton CB, Kalkwarf HJ, Lanphear BP, Yolton K, Braun JM. 2024. Evaluating the Association Between Longitudinal Exposure to a PFAS Mixture and Adolescent Cardiometabolic Risk in the HOME Study. *Environmental Epidemiology*. 8 (1), e289.
- 10. Trasande L, Nelson ME, Alshawabkeh A, Barrett ES, **Buckley JP**, Dabelea D, Dunlop AL, Herbstman J, Meeker JD, Naidu M, Newschaffer CJ, Padula AM, Romano ME, Ruden DM, Sathyanarayana S, Schantz SL, Starling AP, Etzel T, Hamra GB. 2024. Prenatal Phenol and Paraben Exposures and Adverse Birth Outcomes: A Prospective Analysis of U.S. Births. *Environment International*. 183:108378.
- 11. Sears CG, Liu Y, Lanphear BP, **Buckley JP**, Meyer J, Xu Y, Chen A, Yolton K, Braun JM. 2024. Evaluating mixtures of urinary phthalate metabolites and serum per-/polyfluoroalkyl substances in relation to adolescent hair cortisol: The HOME Study. *American Journal of Epidemiology*. 193(3):454-468.
- 12. Hall A, Fleury E, Papandonatos G, Buckley JP, Cecil K, Chen A, Lanphear B, Yolton K, Walker D, Pennell K, Braun JM, Manz K. 2023. Associations of a Prenatal Serum Per- and Polyfluoroalkyl Substance Mixture with the Cord Serum Metabolome in the HOME Study. *Environmental Science & Technology*. 57(51):21627-21636.
- 13. Welch BM, Keil AP, **Buckley JP**, Engel SM, James-Todd T, Zota AR, Alshawabkeh AN, Barrett ES, Bloom MS, Bush NR, Cordero JF, Dabelea D, Eskenazi B, Lanphear BP,

- Padmanabhan V, Sathyanarayana S, Swan SH, Aalborg J, Baird DD, Binder AM, Bradman A, Braun JM, Calafat AM, Cantonwine DE, Christenbury KE, Factor-Litvak P, Harley KG, Hauser R, Herbstman JB, Hertz-Picciotto I, Holland N, Jukic AMZ, McElrath TF, Meeker JD, Messerlian C, Michels KB, Newman RB, Nguyen RHN, O'Brien KM, Rauh VA, Redmon B, Rich DQ, Rosen EM, Schmidt RJ, Sparks AE, Starling AP, Wang C, Watkins DJ, Weinberg CR, Weinberger B, Wenzel AG, Wilcox AJ, Yolton K, Zhang Y, Ferguson KK. 2023. Racial and ethnic disparities in phthalate exposure and preterm birth: A pooled study of 16 US cohorts. *Environmental Health Perspectives*. 131(12):127015.
- 14. Liu SH, Feuerstahler L, Chen Y, Braun JM, **Buckley JP**. 2023. Towards advancing precision environmental health: Developing a customized exposure burden score to PFAS mixtures to enable equitable comparisons across population subgroups, using mixture item response theory. *Environmental Science & Technology*. 57(46):18104-18115.
- 15. Eaves L, Choi G, Hall E, Sille F, **Buckley JP**, Keil AP. 2023. Prenatal exposure to toxic metals and neural tube defects: a systematic review of the epidemiologic evidence. *Environmental Health Perspectives*. 131(8):86002.
- 16. Smith TJS*, Navas-Acien A, Baker S, Kok C, Kruczynski Kate, Avolio LN, Pisanic N, Fry RC, Goessler W, van Geen A, **Buckley JP**, Rahman MH, Ali H, Haque R, Shaikh S, Siddiqua TJ, Schulze K, West KP, Labrique AB, Heaney CD. 2023. Anthropometric Status and Arsenic Methylation among Pregnant Women in Rural Northern Bangladesh. *Environmental Research*. 234:116453.
- 17. Martínez Steele E, **Buckley JP**, Monteiro CA. 2023. Ultra-processed food consumption and exposure to acrylamide in a nationally representative sample of the US population aged 6 years and older. *Preventative Medicine*. 174:107598.
- 18. Liu Y, Calafat AM, Chen A, Lanphear BP, Jones NY, Cecil KM, Rose S, Yolton K, **Buckley JP**, Braun JM. 2023. Associations of prenatal and postnatal exposure to perfluoroalkyl substances with pubertal development and reproductive hormones in females and males: The HOME study. *Science of the Total Environment*. 890:164353.
- 19. Xu R, Hong X, Ladd-Acosta C, **Buckley JP**, Choi G, Wang G, Hou W, Wang X, Liang L, Ji H. 2023. Contrasting association of maternal plasma biomarkers of smoking and one-carbon micronutrients with offspring DNA methylation: Evidence of AHRR gene-smoking-folate interaction. *Journal of Nutrition*. S0022-3166(23)37595-3.
- 20. Sultan H, **Buckley JP**, Cecil KM, Chen A, Kalkwarf HJ, Lanphear BP, Yolton K, Braun JM. 2023. Dietary Per- and Polyfluoroalkyl Substance (PFAS) Exposure in Adolescents: The HOME Study. *Environmental Research*. 231(Pt 1):115953.
- 21. Rous SJ, Lees PSJ, Koehler K, **Buckley JP**, Quirós-Alcalá L, Han M, Hoffman EA, Martinez C, Barr RG, Peters SP, Paine R, Pirozzi C, Cooper CB, Dransfield MT, Comellas AP, Kanner RE, Drummond MB, Putcha N, Hansel NN, Paulin LM. 2023. Association of occupational exposures and chronic obstructive pulmonary disease morbidity. *Journal of Occupational and Environmental Medicine*. 65(7):e443-e452.
- 22. Wang G, **Buckley JP**, Bartell TR, Hong X, Pearson C, Wang W. 2023. Gestational diabetes mellitus, postpartum lipidomic signatures, and subsequent risk of type 2 diabetes: a lipidomewide association study. *Diabetes Care*. 46(6):1223-1230.
- 23. Liu Y, Wosu AC, Hamra GB, Fleisch AF, Dunlop AL, Starling AP, Ferrara A, Dabelea D, Oken E, **Buckley JP**, Chatzi L, Karagas MR, Romano ME, Schantz S, O'Connor TG, Woodruff TJ, Braun JM. 2023. Associations of Gestational Perfluoroalkyl Substances

- Exposure with Early Childhood BMI z-Scores and Risk of Overweight/Obesity: Results from the ECHO Cohorts. *Environmental Health Perspectives*. 131(6):67001.
- 24. *Louis LM, **Buckley JP**, Kuiper JR, Meeker J, Diette G, Hansel NN, McCormack MC, Quirós-Alcalá L. 2023. Exposures to organophosphate esters and respiratory morbidity among school-aged children with asthma. *Environmental Science & Technology*. 57(16):6435-6443.
- 25. Wang G, Radovick S, **Buckley JP**, Hauser R, Williams P, Hong X, Pearson C, Adams W, Wang X. 2023. Plasma insulin concentration in newborns and children and age at menarche. *Diabetes Care*. 46(6):1231-1238.
- 26. Chen Y, Feuerstahler L, Martinez Steele E, **Buckley JP**, Liu SH. 2023. Phthalate mixtures and insulin resistance: An item response theory approach to quantify exposure burden to phthalate mixtures. *Journal of Exposure Science and Environmental Epidemiology*. doi: 10.1038/s41370-023-00535-z.
- 27. Wang G, **Buckley JP**, Bartell TR, Hong X, Pearson C, Wang X. 2023. Cord Blood Insulin Concentration and Hypertension Among Children and Adolescents Enrolled in a US Racially Diverse Birth Cohort. *Hypertension*. 80(5):1092-1101.
- 28. Mourino N, Pérez-Ríos M, Yolton K, Lanphear BP, Chen A, **Buckley JP**, Kalkwarf HJ, Cecil KM, Braun JM. 2023. Pre- and postnatal exposure to secondhand tobacco smoke and cardiometabolic risk at 12 years: periods of susceptibility. *Environmental Research*. 224:115572.
- 29. Herbstman JB, Romano ME, Li X, Jacobson LP, Margolis A, Bennett DH, Braun JM, **Buckley JP**, Colburn T, Deoni S, Hamra G, Hoepner L, Riley K, Sathyanarayana S, Schantz SL, Trasande L, Woodruff TJ, Perera FP, Karagas MR. 2023. Characterizing changes in behaviors associated with chemical exposures during the COVID-19 pandemic. *PLOS One*. 18(1):e0277679.
- 30. *Smith TS, Keil AP, **Buckley JP**. 2023. Estimating causal effects of interventions on early-life environmental exposures using observational data. *Current Environmental Health Reports*. 10(1):12-21.
- 31. *Kuiper JR, Pan S, Lanphear BP, Calafat AM, Chen A, Cecil KM, Xu Y, Yolton K, Kalkwarf HJ, Braun JM, **Buckley JP**. 2022. Associations of Maternal Gestational Urinary Environmental Phenols Concentrations with Bone Mineral Density Among 12-year-old Children in the HOME Study. *International Journal of Hygiene and Environmental Health*. 248:114102.
- 32. Zhang Z, Li N, **Buckley JP**, Cecil KM, Chen A, Eaton CB, Kalkwarf HJ, Lanphear BP, Yolton K, Braun JM. 2023. Association between eating behaviors and cardiometabolic risk among adolescents in the HOME Study. *Pediatric Obesity*. 18(2):e12979.
- 33. *Etzel TE, Kuiper JR, Wang X, Mueller NT, Calafat AM, Cecil KM, Chen A, Lanphear BP, Yolton K, Kalkwarf HJ, Braun JM, **Buckley JP**. 2022. Associations of early life phthalate exposures with adolescent lipid levels and insulin resistance: The HOME Study. *International Journal of Hygiene and Environmental Health*. 248:114104.
- 34. Zhang M, Brady TM, **Buckley JP**, Appel LJ, Hong X, Wang G, Liang L, Wang X, Mueller NT. 2022. Metabolome-wide association study of cord blood metabolites on blood pressure in childhood and adolescence. *Hypertension*. 79(12):2806-2820.
- 35. Liu SH, Kuiper JR, Chen Y, Feuerstahler L, Teresi J, **Buckley JP**. 2022. Developing an Exposure Burden Score for Chemical Mixtures Using Item Response Theory, with Applications to PFAS Mixtures. *Environmental Health Perspectives*. 130:11 CID: 117001.

- 36. *Choi G, **Buckley JP**, Kuiper JR, Keil AP. 2022. Log-transformation of independent variables: must we? *Epidemiology*. 33(6):843-853.
 - ***2023 SER Lilienfeld Postdoctoral Prize Paper Award.
- 37. *Kuiper JR, Vuong AM, Braun JM, Lanphear BP, Cecil KM, Calafat AM, Ospina M, Xu Y, Yolton K, Kalkwarf HJ, Chen A, **Buckley JP**. 2022. Early life organophosphate ester exposures and bone health at age 12 years: The Health Outcomes and Measures of the Environment (HOME) Study. *Science of the Total Environment*. 851(Pt 2):158246. ***Extramural Paper of the Month, NIEHS Environmental Factor.
- 38. *Choi G, Kuiper JR, Bennett DH, Barrett ES, Bastain T, Breton CV, Chinthakindi S, Dunlop AL, Farzan SF, Herbstman JB, Karagas MR, Marsit CJ, Meeker JD, Morello-Frosch R, O'Connor TG, Pellizzari ED, Romano ME, Sathyanarayana S, Schantz S, Schmidt RJ, Watkins DJ, Zhu H, Kannan K, **Buckley JP**§, Woodruff TJ§ on behalf of program collaborators for the Environmental influences on Child Health Outcomes (ECHO). 2022. Exposure to melamine and its derivatives and aromatic amines among pregnant women in the United States: The ECHO Program. *Chemosphere*. 307(Pt 2):135599.
- 39. **Buckley JP**[§], Zhang M[§], Yu CH[§], Wang G[§], Hong X, Pearson C, Fan Z, Wang X. 2022. Longitudinal trajectories and determinants of plasma per- and polyfluoroalkyl substance (PFAS) levels from birth to early childhood and metabolomic associations: A pilot study in the Boston Birth Cohort. *Precision Nutrition*. 1(1):10.1097.
- 40. Braun JM, Li N, Sears C, **Buckley JP**, Cecil K, Chen A, Eaton CB, Kalkwarf HJ, Kelsey K, Lanphear BP, Papandonatos G, Yolton K. 2022. Physical activity modifies the association between gestational perfluorooctanoic acid exposure and adolescent cardiometabolic risk. *Environmental Research*. 214(Pt 3):114021.
- 41. Mourino N, Pérez-Ríos M, Yolton K, Lanphear BP, Chen A, **Buckley JP**, Kalkwarf HJ, Cecil KM, Braun JM. 2022. Pre- and postnatal exposure to secondhand tobacco smoke and body composition at 12 years: periods of susceptibility. *Obesity*. 30(8): 1659-1669.
- 42. McArthur K, Zhang M, Hong X, Wang G, **Buckley JP**, Wang X, Mueller N. 2022. Trimethylamine N-oxide and its precursors are associated with gestational diabetes mellitus and pre-eclampsia among women delivering at an urban safety-net hospital. *Current Developments in Nutrition*. 6(7):nzac108.
- 43. Welch BM, Keil AP, **Buckley JP**, Calafat AM, Christenbury KE, Engel SM, O'Brien KM, Rosen EM, James-Todd T, Zota AR, Ferguson KK; Pooled Phthalate Exposure and Preterm Birth Study Group. 2022. Associations Between Prenatal Urinary Biomarkers of Phthalate Exposure and Preterm Birth: A Pooled Study of 16 US Cohorts. *JAMA Pediatr*. 176(9):895-905.
 - ***Intramural Paper of the Year, NIEHS Environmental Factor.
- 44. Huang W, Igusa T, Wang G, **Buckley JP**, Hong X, Bind E, Steffens A, Mukherjee J, Halmeier D, Ji Y, Xu R, Hou W, Fan Z, Wang X. 2022. In-utero co-exposure to toxic metals and micronutrients on the childhood risk of overweight or obesity: New insight on micronutrients counteracting toxic metals. *International Journal of Obesity*. 46(8):1435-1445.
- 45. **Buckley JP**, Kuiper JR, Bennett DH, Barrett ES, Bastain T, Breton CV, Chinthakindi S, Dunlop AL, Farzan SF, Herbstman JB, Karagas MR, Marsit CJ, Meeker JD, Morello-Frosch R, O'Connor TG, Romano ME, Schantz S, Schmidt RJ, Watkins DJ, Zhu H, Pellizzari ED, Kannan K, Woodruff TJ on behalf of program collaborators for the Environmental influences on Child Health Outcomes (ECHO). 2022. Exposure to contemporary and emerging

- chemicals in commerce among pregnant women in the United States: The Environmental influences on Child Health Outcomes (ECHO) Program. *Environmental Science & Technology*. 56(10):6560-6573.
- 46. *Kuiper JR, O'Brien K, Welch BM, Barrett ES, Nguyen RHN, Sathyanarayana S, Milne GL, Swann SH, Ferguson KK, **Buckley JP**. 2022. Combining urinary biomarker data from studies with different measures of urinary dilution. *Epidemiology*. 33(4):533-540.
- 47. *Etzel TE, Braun JM, Kuiper JR, Calafat AM, Cecil KM, Chen A, Lanphear BP, Yolton K, Kalkwarf H, **Buckley JP**. 2022. Gestational and early childhood phthalate exposures and adolescent body composition: The HOME Study. *Environmental Research*. 212(Pt B):113320.
- 48. *Louis LM, Quirós-Alcalá L, Kuiper JR, Diette G, Hansel NN, McCormack MC, Meeker JD, **Buckley JP**. 2022. Variability and predictors of urinary organophosphate ester concentrations among school-aged children. *Environment Research*. 212(Pt A):113192.
- 49. Liu Y, Eliot MN, Papandonatos G, Kelsey KT, Fore R, Langevin S, **Buckley JP**, Chen A, Lanphear BP, Cecil K, Yolton K, Hivert M, Sagiv SK, Baccarelli AA, Oken E, Braun, JM. 2022. Longitudinal analysis of DNA methylation in relation to gestational perfluoroalkyl substance exposure: An epigenome-wide association study. *Environmental Health Perspectives*. 130(3) 037005.
- 50. Zhang M, **Buckley JP**, Liang L, Hong X, Wang G, Guallar E, Wang M, Wills-Karp M, Wang X, Mueller N. 2022. A metabolome-wide association study of *in utero* metal and trace element exposures with cord blood metabolome profile: findings from the Boston Birth Cohort. *Environment International*. 158: 106976.
- 51. Gajjar P, Li N, Liu Y, **Buckley JP**, Chen A, Lanphear BP, Kalkwarf HJ, Cecil K, Yolton K, Braun JM. 2021. Associations of Exposure to Bisphenol A and Bisphenol S in Middle Childhood with Obesity Measures at Ages 8 and 12 years. *Environmental Epidemiology*. 6 (1), e187.
- 52. *Kuiper JR, Braun JM, Calafat AM, Lanphear BP, Cecil KM, Chen A, Xu Y, Yolton K, Kalkwarf HJ, **Buckley JP**. 2021. Associations of pregnancy phthalate concentrations and their mixture with early adolescent bone mineral content and density: The Health Outcomes and Measures of the Environment (HOME) Study. *Bone*. 154:116251.
- 53. Ozdemir S, Sears CG, Harrington JM, Poulsen AH, **Buckley JP**, Howe CJ, James KA, Tjonneland A, Wellenius GA, Raaschou-Nielsen O, Meliker J. 2021. Relationship between urine creatinine and urine osmolality in spot samples among men and women. *Toxics*. 9(11), 282.
- 54. **Buckley JP**, Kuiper JR, Lanphear BP, Calafat AM, Cecil KM, Chen A, Xu Y, Yolton K, Kalkwarf HJ, Braun JM. 2021. Associations of maternal serum perfluoroalkyl substances concentrations with early adolescent bone mineral content and density: The Health Outcomes and Measures of the Environment (HOME) Study. *Environmental Health Perspectives*. 129(9):97011.
 - ***Article highlighted with an EHP Science Selection.
- 55. Pearce JL, Neelon B, Bloom MS, **Buckley JP**, Ananth C, Perera F, Vena J, Hunt K. 2021. Exploring associations between prenatal exposure to multiple endocrine disruptors and birth weight with exposure continuum mapping. *Environmental Research*. 200:111386.
- 56. *Kuiper JR, Ferguson KK, O'Brien K, **Buckley JP**. 2021. Urinary specific gravity measures in the U.S. population: implications for the adjustment of non-persistent chemical urinary biomarker data. *Environment International*. 156:106656.

- 57. Zhang M, Liu T, Wang G, **Buckley JP**, Guallar E, Hong X, Wang M, Wills-Karp M, Wang X, Mueller N. 2021. *In utero* exposure to mixture of heavy metals and trace minerals and childhood blood pressure in a US urban, low-income, minority birth cohort. *Environmental Health Perspectives*. 129(6):67005.
- 58. Romano ME, **Buckley JP**, Elliott AJ, Johnson CC, Paneth N on behalf of program collaborators for Environmental influences on Child Health Outcomes. 2021. SPR Perspectives: Scientific Opportunities in the Environmental influences on Child Health Outcomes (ECHO) Program. Accepted for publication: *Pediatric Research*.
- 59. Keil AP, **Buckley JP**, Kalkbrenner A. 2021. Bayesian G-Computation to Estimate Impacts of Interventions on Exposure Mixtures: Demonstration with Metals from Coal-fired Power Plants and Birthweight. *American Journal of Epidemiology*. doi: 10.1093/aje/kwab053.
- 60. Hamra GB, Lesko CR, **Buckley JP**, Jensen ET, Tancredi D, Lau B, Hertz-Picciotto I; program collaborators for Environmental influences on Child Health Outcomes. 2021. Combining Effect Estimates Across Cohorts and Sufficient Adjustment Sets for Collaborative Research: A Simulation Study. *Epidemiology*. 32(3):421-424.
- 61. Braun JM, Eliot M, Papandonatos GD, **Buckley JP**, Cecil KM, Kalkwarf HJ, Chen A, Eaton CB, Kelsey K, Lanphear BP, Yolton K. 2021. Gestational Perfluoroalkyl Substance Exposure and Body Mass Index Trajectories over the First 12 Years of Life. *International Journal of Obesity*. 45(1):25-35.
- 62. *Dantzer J, Wood R, **Buckley JP**. 2020. Organophosphate Pesticide Exposure and Atopic Disease in NHANES 2005-2006. *JACI In Practice*. 14:S2213-2198(20)31230-7.
- 63. McAlexander TP, Bandeen-Roche K, **Buckley JP**, Pollak J, Michos E, McEvoy JW, Schwartz BS. 2020. Association between unconventional natural gas development activity and hospitalization among patients with heart failure in Pennsylvania, 2008-2015. *Journal of the American College of Cardiology*. 76(24) 2862-74.
- 64. Volk H, Perera F, Levine S, Braun JM, Kingsley SL, Gray K, **Buckley JP**, Clougherty JE, Croen L, Eskenazi B, Herting M, Just A, Kloog I, Margolis A, McClure L, Miller R, Wright R. 2020. Prenatal Air Pollution Exposure and Neurodevelopment: A Review and Blueprint for A Harmonized Approach Within ECHO. *Environmental Research*. 22;110320.
- 65. Bezold C, Bauer S, **Buckley JP**, Batterman S, Haroon H, Fink L. 2020. Demolition activity and elevated blood lead levels among children in Detroit, Michigan, 2014 2018. *International Journal of Environmental Research and Public Health*. 17:6018.
- 66. *Etzel TM, Engel SM, Quirós-Alcalá L, Chen J, Barr DB, Wolff MS, **Buckley JP**. 2020. Prenatal maternal organophosphorus pesticide exposures, paraoxonase 1, and childhood adiposity in the Mount Sinai Children's Environmental Health Study. *Environment International*. 142:105858.
- 67. **Buckley JP**[§], Schantz SL[§], Eskenazi B[§], Braun JM[§], Sprowles JN, Bennett DH, Cordero J, Frazier JA, Lewis J, Hertz-Picciotto I, Lyall K, Nozadi SS, Sagiv S, Strousstrup A, Volk HE, Watkins DJ on behalf of program collaborators for ECHO. 2020. A Framework for Assessing the Impact of Chemical Exposures on Neurodevelopment in ECHO: Opportunities and Challenges. *Environmental Research*. 188:109709.
- 68. *Kuiper JR, Stapleton H, Wills-Karp M, Wang X, Burd I, **Buckley JP**. 2020. Predictors and reproducibility of urinary organophosphate ester metabolite concentrations during pregnancy and associations with birth outcomes in an urban population. *Environmental Health*. 19(1):55.

- 69. Braun JM, **Buckley JP**, Cecil KM, Chen A, Kalkwarf HJ, Lanphear BP, Xu Y, Woeste A, Yolton K. 2020. Adolescent follow-up in the Health Outcomes and Measures of the Environment (HOME) Study: cohort profile. *BMJ Open.* 10:e034838.
- 70. **Buckley JP**[§], Everett AD[§], Ellis G, Yang J, Graham D, Griffiths M, Bembea M, Graham EM. 2020. Association of Neurodevelopmental Outcomes With Environmental Exposure to Cyclohexanone During Neonatal Congenital Cardiac Operations: A Secondary Analysis of a Randomized Clinical Trial. *JAMA Network Open.* 3(5):e204070.
- 71. Keil AP, **Buckley JP**, O'Brien K, Ferguson KK, Zhao S, White AJ. 2020. A quantile-based g-computation approach to addressing the effects of exposure mixtures. *Environmental Health Perspectives*. 128(4):47004.
 - ***Article highlighted with an EHP Science Selection.
- 72. **Buckley JP**, Barrett ES, Beamer PI, Bennett DH, Bloom MS, Fennell TR, Fry RC, Funk WE, Hamra GB, Hecht SS, Kannan K, Iyer S, Karagas MR, Lyall K, Parsons PJ, Pellizzari ED, Signes-Pastor AJ, Starling AP, Wang A, Watkins DJ, Zhang M, Woodruff TJ on behalf of program collaborators for ECHO. 2020. Opportunities for evaluating chemical exposures and child health in the United States: the Environmental influences on Child Health Outcomes (ECHO) Program. *Journal of Exposure Science and Environmental Epidemiology*. 30(3):397-419.
- 73. *Kim H, Eugenia Wong E, Rebholz CM, **Buckley JP**. 2020. Urinary organophosphate ester concentrations in relation to ultra-processed food consumption in the general US population. *Environmental Research*. 182: 109070.
- 74. Pellizzari ED, Woodruff TJ, Boyles RR, Kannan K, Beamer P, **Buckley JP**, Wang A, Zhu Y, Bennett DH (Environmental influences on Child Health Outcomes). 2019. Identifying and Prioritizing Chemicals with Uncertain Burden of Exposure: Opportunities for Exposure and Health-Related Research. *Environmental Health Perspectives*. 127(12):126001.
- 75. **Buckley JP**, Kim H, Eugenia Wong E, Rebholz CM. 2019. Associations of ultra-processed food consumption with phthalate and bisphenol exposures in the National Health and Nutrition Examination Survey (NHANES), 2013-2014. *Environment International*. 131: 105057.
- 76. Boyle MD, **Buckley JP**, Quirós-Alcalá L. 2019. Associations between urinary organophosphate ester metabolites and measures of adiposity among U.S. children and adults: NHANES 2013-2014. *Environment International*. 127: 754-763.
- 77. *Chawla D, Daniels JL, Fuemmeler BF, Benjamin Neelon SE, Murphy S, Hoyo C, **Buckley JP**. 2019. Racial and ethnic differences in predictors of vitamin D among pregnant women in Durham, North Carolina. *Journal of Nutritional Science*. doi:10.1017/jns.2019.4.
- 78. *Etzel TM, Braun JM, **Buckley JP**. 2019. Relationships between serum biomarkers of perfluoroalkyl substances and vitamin D in the U.S. general population: NHANES 2003-2010. *International Journal of Hygiene and Environmental Health*. 222(2):262-269.
- 79. **Buckley JP**, Hamra GB, Braun JM. 2019. Statistical approaches for assessing periods of susceptibility in children's environmental health research. *Current Environmental Health Reports*. 6(1):1-7.
- 80. Quirós-Alcalá L, **Buckley JP**, Boyle MD. 2018. Exposure to parabens and measures of obesity among children and adults from the U.S. general population: NHANES 2005-2014. *International Journal of Hygiene and Environmental Health*. 221(4):652-660.

- 81. **Buckley JP**, Quirós-Alcalá L, Teitelbaum SL, Calafat AM, Wolff MS, Engel SM. 2018. Associations of prenatal environmental phenol and phthalate biomarkers with respiratory and allergic diseases among children aged 6 and 7 years. *Environment International*, 115:79-88.
- 82. Hamra GB and **Buckley JP**. 2018. Environmental Exposure Mixtures: Questions and Methods to Address Them. *Current Epidemiology Reports*, 5(2):160-165.
- 83. Keil AP, Daza E, Engel SM, **Buckley JP**, Edwards JK. 2018. A Bayesian approach to the gformula. *Statistical Methods in Medical Research*. 27(10):3183-3204.
- 84. Furlong MA, Herring AH, **Buckley JP**, Goldman BD, Daniels JL, Engel LS, Wolff MS, Chen J, Wetmur J, Barr DM, Engel SM. 2017. Prenatal exposure to organophosphorus pesticides and childhood neurodevelopmental phenotypes. *Environmental Research*, 158: 737-747.
- 85. **Buckley JP**, Doherty BT, Keil AP, Engel SM. 2017. Statistical approaches for estimating sex-specific effects in endocrine disruptors research. *Environmental Health Perspectives*. 23;125(6):067013. *Article highlighted as an EHP Science Selection*.
- 86. Adibi JJ, **Buckley JP**, Lee MK, Williams PL, Just AC, Zhao Y, Bhat HK, Whyatt RM. 2017. Prenatal phthalate exposure was associated with sex-specific placental mRNA levels with potential relevance to birth size and to gestational diabetes. *Environmental Health*, 16(1):35.
- 87. O'Brien KM, Upson K, **Buckley JP**. 2017. Lipid and creatinine adjustment to evaluate health effects of environmental exposures. *Current Environmental Health Reports*, 4(1):44-50.
- 88. Wolff MS, **Buckley JP**, Engel SM, McConnell R, Barr DB. 2017. Emerging exposures of developmental toxicants. *Current Opinion in Pediatrics*, 29(2):218-224.
- 89. Kinlaw AC, **Buckley JP**, Engel SM, Poole C, Brookhart MA, Keil AP. 2017. Left truncation bias to explain the protective effect of smoking on preeclampsia: potential, but how plausible? *Epidemiology*, 28(3):428-434.
- 90. Doherty BT, Engel SM, **Buckley JP**, Silva MJ, Calafat AM, Wolff MS. 2017. Prenatal phthalate biomarker concentrations and performance on the Bayley Scales of Infant Development-II in a population of young urban children. *Environmental Research*, 152:51-58.
- 91. **Buckley JP**, Engel SM, Braun JM, Whyatt RM, Daniels JL, Mendez MA, Richardson DB, Xu Y, Calafat AM, Lanphear BP, Wolff MS, Herring AH, Rundle AG. 2016. Prenatal phthalate exposures and body mass index among 4 to 7 year old children: A pooled analysis. *Epidemiology*, 27(3):449-58.
- 92. **Buckley JP**, Herring AH, Wolff MS, Calafat AM, Engel SM. 2016. Prenatal exposure to environmental phenols and childhood fat mass in the Mount Sinai Children's Environmental Health Study. *Environment International*, 91:350-356.
- 93. **Buckley JP**, Engel SM, Mendez MA, Richardson DB, Daniels JL, Calafat AM, Wolff MS, Herring AH. 2016. Prenatal phthalate exposures and childhood fat mass in a New York City cohort. *Environmental Health Perspectives*, 124:507-513.
 - ***Article highlighted with an EHP Science Selection.
- 94. Starling, AP, Engel LS, Calafat AM, Koutros S, Satagopan JM, Yang G, Matthews CE, Cai Q, **Buckley JP**, Ji B, Cai H, Chow W, Zheng W, Gao Y, Rothman N, Xiang Y, Shu X. 2015. Predictors and long-term reproducibility of urinary phthalate metabolites in middle-aged men and women living in urban Shanghai. *Environment International*. 84:94-106.
- 95. **Buckley JP**, Keil A, McGrath LS, Edwards JK. 2015. Evolving methods for inference in the presence of healthy worker survivor bias. *Epidemiology*. 26(2):204-212.

- 96. **Buckley JP**, Kappelman MD, Allen JK, VanMeter SA, Cook SF. 2015. Prevalence of chronic narcotic use among children with inflammatory bowel disease. *Clinical Gastroenterology and Hepatology*. 13(2):310-315.
- 97. Edwards JK, McGrath LS, **Buckley JP**, Schubauer-Berigan MK, Cole SR, Richardson DB. 2014. Occupational radon exposure and lung cancer mortality: estimating intervention effects using the parametric g-formula. *Epidemiology*. 25(6):829-834.
- 98. **Buckley JP**, Samet JM, Richardson DB. 2014. Commentary: Does air pollution confound studies of temperature? *Epidemiology*. 25(2):242-245.
- 99. Engel LS, **Buckley JP**, Liao L, Satagopan J, Calafat AM, Yang G, Cai Q, Ji B, Cai H, Engel SM, Wolff MS, Rothman N, Zheng W, Xiang Y, Shu X, Gao Y, Chow W. 2014. Predictors and variability of repeat measurements of urinary phenols and parabens in a cohort of Shanghai women and men. *Environmental Health Perspectives*. 122(7):733-740.
- 100. **Buckley JP**, Kappelman MD, Allen JK, VanMeter SA, Cook SF. 2013. The burden of comedication among patients with inflammatory bowel disease. *Inflammatory Bowel Diseases*. 19(13):2725-36.
- 101. **Buckley JP**, Matuszewski JM, Herring AH, Baird DD, Hartmann KE, Hoppin JA. 2012. Consumer product exposures associated with urinary phthalate levels in pregnant women. *Journal of Exposure Assessment and Environmental Epidemiology*. 22:468-75.
- 102. **Buckley JP**, Richardson DB. 2012. Seasonal modification of the association between temperature and adult emergency department visits for asthma: a case-crossover study. *Journal of Environmental Health*. 11(1):55.
- 103. **Buckley JP**, Sestito JP, Hunting KL. 2008. Fatalities in the landscape and horticultural services industry, 1992-2001. *American Journal of Industrial Medicine*. 51(9):701-13.
- 104. Gibb HJ, Kozlov K, **Buckley JP**, Centeno J, Jurgenson V, Kolker A, Conko K, Landa E, Panov B, Panov Y, Xu H. 2008. Biomarkers of mercury exposure at a mercury recycling facility in Ukraine. *Journal of Occupational and Environmental Hygiene*. 5(8):483-9.

Invited Commentaries

- 1. **Buckley JP** and Braun JM. 2023. Invited Perspective: Long-Term Effects of Gestational PFAS Exposures on Adiposity-Time for Solutions. *Environmental Health Perspectives*. 131(12):121301.
- 2. **Buckley JP**. 2022. Bone accrual during adolescence: do endocrine disrupting chemicals play a role? Invited Commentary. *Journal of Clinical Endocrinology and Metabolism*. 107(10):e4242-e4243.

Letters to the Editor

- 1. Keil AP, **Buckley JP**, O'Brien KM, White AJ. 2023. RE: "A Permutation Test-Based Approach to Strengthening Inference on the Effects of Environmental Mixtures: Comparison between Single-Index Analytic Methods. *Environmental Health Perspectives*. 131(1):18001.
- 2. Keil AP, **Buckley JP**, O'Brien KM, Ferguson KK, Zhao S, White AJ. 2021. Response to Comment on 'A Quantile-Based g-Computation Approach to Addressing the Effects of Exposure Mixtures'. *Environmental Health Perspectives*. 129(3):38002.
- 3. Keil AP, **Buckley JP**, Kalkbrenner AE. RE: The promise and pitfalls of causal inference with multivariate environmental exposures. 2021. *American Journal of Epidemiology*. kwab143.

Books or Monographs

1. **Poulin J**, Gibb H. 2008. Mercury: Assessing the environmental burden of disease at national and local levels. Editor, Prüss-Üstün A. World Health Organization, Geneva. WHO Environmental Burden of Disease Series, Monograph No. 16.

Book Chapters

1. Gibb HJ and **Buckley JP**. 2010. "Cancer Epidemiology" In: *Cancer Risk Assessment* – *Chemical Carcinogenesis and Standards Quantification*. Eds. C-H. Hsu and T. Stedeford. John Wiley & Sons, Inc.

PRESENTATIONS

Oral Presentations from Submitted Abstracts
* indicates presenting author (if not first author)

- 1. **Buckley JP**. *Multipollutant Mixtures: To Synergy and Beyond*. Society for Epidemiologic Research Annual Meeting. Austin, Texas. June 2024.
- 2. **Buckley JP**. Cumulative exposure to per- and polyfluoroalkyl substances from pregnancy to age 12 years and bone health in early adolescence: the HOME Study. International Society for Environmental Epidemiology Annual Meeting. Athens, Greece. September 2022.
- 3. **Buckley JP**. *Solution-oriented research for chemical exposures and children's health: the ECHO Program*. Co-chaired symposium at the International Society for Environmental Epidemiology Annual Meeting. Athens, Greece. September 2022.
- 4. **Buckley JP**. *Identifying periods of susceptibility to perfluoroalkyl substances and bone mineral density in early adolescence: the HOME Study*. International Society for Environmental Epidemiology Annual Meeting. New York, New York. August 2021.
- 5. **Buckley JP**. *Estimating policy-relevant mixture effects*. International Society for Environmental Epidemiology Annual Meeting. New York, New York. August 2021.
- 6. **Buckley JP** and White A. *Got multiple exposure troubles? How causal inference and machine learning can help*. Co-chaired symposium at the Society for Epidemiologic Research Annual Meeting. Boston, Massachusetts. December 2020.
- 7. Keil AP, **Buckley JP***, O'Brien K, Ferguson KK, Zhao S, White AJ. *A quantile-based g-computation approach to addressing the effects of exposure mixtures*. International Society for Environmental Epidemiology Annual Meeting. Utrecht, The Netherlands. August 2019.
- 8. Keil AP, **Buckley JP***, O'Brien K, Ferguson KK, Zhao S, White AJ. *A quantile-based g-computation approach to addressing the effects of exposure mixtures*. Society for Epidemiologic Research Annual Meeting. Minneapolis, Minnesota. June 2019.
- 9. **Buckley JP** and Pollack AZ. *Novel methods for assessing complex exposure mixtures in environmental epidemiology*. Co-chaired symposium at the Joint Annual Meeting of the International Society of Exposure Science and the International Society for Environmental Epidemiology. Ottawa, Canada. August 2018.
- 10. **Buckley JP** and Woodruff TJ for the ECHO Program. *Opportunity to Accelerate Knowledge on Complex Developmental Chemical Exposures and Child Health: Environmental influences on Child Health Outcomes (ECHO)*. Co-chaired symposium at the Joint Annual Meeting of the International Society of Exposure Science and the International Society for Environmental Epidemiology. Ottawa, Canada. August 2018.

- 11. **Buckley JP**. *Bayesian methods for limit of detection problems*. Society for Epidemiologic Research Annual Meeting. Baltimore, Maryland. June 2018.
- 12. Pollack AZ, **Buckley JP***. *Is your soup toxic or nutritious? Methods for assessing exposure mixtures in environmental and nutritional epidemiology*. Co-chaired symposium at the Society for Epidemiologic Research Annual Meeting. Baltimore, Maryland. June 2018.
- 13. **Buckley JP**. *Best practices in individual pooled data analyses*. Preconference workshop speaker: *Research in collaborative study designs: design and analytic considerations*. Society for Epidemiologic Research Annual Meeting. Baltimore, Maryland. June 2018.
- 14. **Buckley JP**, Herring AH, Wolff MS, Calafat AM, Engel SM. *Prenatal Exposure to Environmental Phenols and Childhood Fat Mass in the Mount Sinai Children's Environmental Health Study*. Epidemiology Congress of the Americas. Miami, Florida. June 2016.
- 15. **Buckley JP**. Estimating Effects of Interventions on Exposure Mixtures using the Parametric G-Formula. Preconference workshop speaker: Epidemiological approaches to assessing health effects of environmental mixtures. Epidemiology Congress of the Americas. Miami, Florida. June 2016.
- 16. Keil A, Edwards JE, **Buckley JP**. *Direct Assessment of Public Health Impacts of Exposure Mixtures: A Bayesian G-formula Approach*. NIEHS Workshop: Statistical Approaches for Assessing Health Effects of Environmental Chemical Mixtures in Epidemiology Studies. Research Triangle Park, North Carolina. July 2015.
- 17. **Buckley JP**, Naimi AI. *G-methods in Practice: An Example from Occupational Epidemiology*. Co-chaired symposium at the Society for Epidemiologic Research Annual Meeting. Denver, Colorado. June 2015.
- 18. **Buckley JP**, Engel SM, Herring AH. *Assessing Nonignorable Loss to Follow-up in a Longitudinal Birth Cohort Study of Body Fat in Childhood*. Society for Epidemiologic Research Annual Meeting. Denver, Colorado. June 2015.
- 19. **Buckley JP**, Engel SM, Herring AH, Braun JM, Whyatt RM, Daniels JL, Mendez MA, Richardson DB, Calafat AM, Lanphear BP, Wolff MS, Rundle AG. *Prenatal Phthalate Exposures and Body Mass Index among 4 to 7 Year Old Children: A Pooled Analysis*. Fourth international summit of Prenatal Programming and Toxicity (PPTOX IV). Boston, Massachusetts. October 2014.
- 20. **Buckley JP**, Engel SM, Teitelbaum SL, Calafat AM, Wolff MS. *Prenatal Phthalate and Phenol Exposure and Childhood Wheezing*. 23rd Annual Conference of the International Society for Environmental Epidemiology. Barcelona, Spain. September 2011.

Invited Presentations

- 1. Developmental PFAS exposures and bone health: mixtures and modifiers. EDC-NC Science Meeting, National Institute of Environmental Health Sciences. March 2024.
- 2. Evaluating the impact of early life PFAS exposures on bone accrual in adolescence: a mixtures journey. HERCULES Exposome Research Center Seminar Series, Rollins School of Public Health, Emory University. February 2024.
- 3. Gestational exposures to emerging chemicals and birth outcomes: results from the ECHO *Program*. 4th Annual Epidemiology Doctoral Student Distinguished Lecture, Rutgers School of Public Health. February 2024.
- 4. *Got chemicals? Endocrine disruptors and adolescent bone health.* Epidemiology Branch Seminar, National Institute of Environmental Health Sciences. October 2023.

- 5. Early life chemical exposures and children's health: emerging toxicants and targets. Center for Environmental Health and Susceptibility and Children's Research Institute seminar. University of North Carolina at Chapel Hill. November 2023.
- 6. Early life phthalate and perfluoroalkyl substance exposures and childhood bone health. Outstanding New Environmental Scientist (ONES) and Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) Awardee Symposium. National Institute of Environmental Health Sciences. Research Triangle Park, North Carolina. July 2023.
- 7. Characterizing pregnancy exposure to understudied toxicants in the United States: case study of melamine, melamine derivatives, and aromatic amines in the Environmental influences on Child Health Outcomes (ECHO) Program. Program on Reproductive Health and the Environment (PRHE), Science Action Network webinar. University of California, San Francisco. December 2022.
- 8. Exposure to melamine and its derivatives and aromatic amines among pregnant women in the United States. Human Health Exposure Analysis Resource (HHEAR) Grantee Meeting, Durham, North Carolina. December 2022.
- 9. Chemical mixtures: identifying emerging exposures and health impacts to inform interventions. Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill. June 2022.
- 10. Characterizing chemical exposures during critical periods of development in the Environmental influences on Child Health Outcomes (ECHO) Program. Department of Environmental Health Sciences Seminar Series, Mailman School of Public Health, Columbia University. April 2022.
- 11. Early life PFAS exposures and children's bone health. PFAS Workgroup Webinar, Council for State and Territorial Epidemiologists. January 2022.
- 12. Glass half full: applying a solution-oriented research framework to advance environmental health. Exposome and Health Workshop. Translational Research Center on Environmental Health, University of Southern California. October 2021.
- 13. Applying a solution-oriented framework to advance environmental mixtures research. Mixtures Interest Group Cross-Divisional Seminar, National Institute of Environmental Health Sciences (NIEHS). August 2021.
- 14. *Solution-oriented Environmental Epidemiology*. Advancing Environmental Health Research: Key Gaps in Environmental Epidemiology and Exposomics. Environmental Epidemiology Webinar Series, National Cancer Institute (NCI). June 2021.
- 15. Assessment of exposure to chemicals of uncertain body burden and multi-panel chemical assay for analysis in ECHO. Environmental influences on Child Health Outcomes (ECHO) Discovery Webinar Series, National Institutes of Health. May 2021.
- 16. Statistical approaches for assessing exposure mixtures and periods of susceptibility: an application to endocrine disrupting chemicals and childhood bone health. Environmental Health Science and Research Bureau Seminar Series, Health Canada. April 2021.
- 17. Prenatal exposure to endocrine disrupting chemical mixtures and childhood bone health. Department of Environmental Health Sciences Seminar Series, Mailman School of Public Health, Columbia University. November 2020.
- 18. Characterizing novel industrial chemical exposures during critical periods of development: Opportunities within the Environmental influences on Child Health Outcomes (ECHO) Program. Generation Chemical: How Environmental Exposures are Affecting Reproductive Health and Development. Collaborative on Health and the Environment (CHE) Partnership

- Webinar Series. October 2020.
- 19. Gestational perfluoroalkyl substance exposures and childhood bone health: assessing mixtures and mediation. Mount Sinai School of Medicine. September 2020.
- 20. Early Life Phthalate and Perfluoroalkyl Substance Exposures and Childhood Bone Health. NIEHS Outstanding New Environmental Scientist (ONES) Grantee Meeting. July 2020.
- 21. Early Stage Investigator (ESI) Panel Discussion: Being a successful ESI while managing challenges. Navigating career and research development during challenging times, 2020 Virtual EHS Core Center Webinar Series. NIEHS P30 EHS Core Center Program. July 2020.
- 22. Estimating effects of exposure mixtures on child health: novel methods for solution-oriented *ECHO research*. Environmental influences on Child Health Outcomes (ECHO) Discovery Webinar Series, National Institutes of Health. June 2020.
- 23. Developmental origins of bone health: the role of environmental chemicals and their mixtures. Brown University. Providence, RI. March 2020.
- 24. Measuring novel chemicals in pregnant women across ECHO: a pilot to produce environmental exposure data for identifying environmental influences on child health outcomes. Human Health and Exposure Analysis Resource (HHEAR) Grantee Meeting. New York, New York, March 2020.
- 25. Environmental Osteotoxicants: Do Early Life Chemical Exposures Affect Childhood Bone Health? University of Massachusetts Amherst. Amherst, Massachusetts. January 2020.
- 26. Prenatal Exposure to Emerging Contaminants and Implications for Children's Health. Environmental & Occupational Epidemiology Seminar Series, University of North Carolina. Chapel Hill, North Carolina. November 2019.
- 27. *Phthalates: Characterizing Exposures and Metabolic Consequences*. Medical University of South Carolina. Charleston, South Carolina. January 2019.
- 28. Environmental Chemicals as Metabolic Disruptors: from Obesity to Bone Health. Seminar co-sponsored by the Center for Human Health and the Environment and the Toxicology Program. North Carolina State University. Raleigh, North Carolina. October 2018
- 29. The Impact of Prenatal Exposure to Flame Retardant Chemicals on Childhood Obesity in Baltimore. Mid-Atlantic Nutrition and Obesity Research Center Annual Symposium, University of Maryland. Baltimore, Maryland. October 2018.
- 30. *Determining Causality in Obesity*. Workshop on Advances in Causal Understanding for Human Health Risk-Based Decision Making. Standing Committee on Emerging Science for Environmental Health Decisions of the National Academies of Science, Engineering, and Medicine. Washington, DC. March 2017.
- 31. *Phthalates and the Developmental Origins of Obesity*. Center for Environmental Health and Technology Seminar Series, Brown University. Providence, Rhode Island. December 2016.
- 32. Developmental Origins of Childhood Obesity: Do Endocrine Disruptors Play a Role? University of Massachusetts Amherst. Amherst, Massachusetts. January 2016.
- 33. *Endocrine Disrupting Chemicals: A Link to the Obesity Epidemic?* Johns Hopkins Bloomberg School of Public Health. Baltimore, Maryland. October 2015.
- 34. Emphasizing the Public in Public Health: Focusing on Interventions in Environmental Epidemiology. UNC Environmental Epidemiology Seminar. Chapel Hill, North Carolina. August 2015.
- 35. *Endocrine Disruptors and Children's Health*. NIEHS Special Seminar. Research Triangle Park, North Carolina. June 2015.
- 36. Developmental Origins of Obesity and Autism: The Role of Environmental Exposures. A.J.

- Drexel Autism Institute, Drexel University. Philadelphia, Pennsylvania. March 2015.
- 37. Prenatal Phthalate Exposure and Childhood Obesity: An Exploration of the Developmental Origins Hypothesis. University of Pittsburgh, Graduate School of Public Health. Pittsburgh, Pennsylvania. February 2015.
- 38. Prenatal Phthalate Exposures and Childhood Adiposity: Examining the Obesogen Hypothesis. NIEHS Reproductive Lunch Seminar. Research Triangle Park, North Carolina. November 2014.
- 39. Chronic Narcotic Use among Commercially-Insured Children with Inflammatory Bowel Disease. UNC Gastrointestinal Epidemiology Conference. Chapel Hill, North Carolina. March 2014.
- 40. *The Burden of Comedication among Inflammatory Bowel Disease Patients*. UNC Gastrointestinal Epidemiology Conference. Chapel Hill, North Carolina. February 2013.

Selected Posters and Published Abstracts

- * indicates first author is a student or postdoctoral fellow for whom I was the primary mentor
- 1. Ames J, Hamra GB, Burjak M, Feng J, Avalos L, Bastain T, Bennett D, Braun J, **Buckley J**, Bulka C. Prenatal Exposures to Endocrine-Disrupting Chemicals and Autism-Related Outcomes in Childhood. INSAR 2023.
- 2. Ames JL, Feng J, Avalos LA, Barrett E, Bastain TM, Bennett DH, **Buckley JP**, Carignan C, Cintora P, Ferrara A. Exposure to organophosphate ester flame retardants and plasticizers (OPEs) during pregnancy and autism-related outcomes. ISEE Conference Abstracts, 2023.
- 3. Gupta R, Kuiper J, **Buckley J**, Russell M, Ellis G, Graham EM, Stengelin M, Graham D, Everett AD. Perioperative Cyclohexanone Exposure During Neonatal Congenital Heart Surgery Potentiates Brain Injury. Circulation 2023, 148 (Suppl_1), A14308-A14308.
- 4. Hall AM, Martin JA, Liang CL, Papandonatos G, Arbuckle TE, Borghese MM, **Buckley JP**, Cecil KM, Chen A, Fisher M. Personal care product use and perfluoroalkyl substances in pregnant and postpartum women and adolescents in the United States and Canada. ISEE Conference Abstracts, 2023.
- 5. Lin JJ, Kuiper JR, Lawrence KG, Rohlman DS, Jackson WB, Sandler DP, Dickerson AS, **Buckley JP**, Engel LS, Rule AM. Associations of a Toenail Metal Mixture with Adult Attention and Memory in the Gulf Longterm Follow-up (GuLF) Study. ISEE Conference Abstracts, 2023.
- 6. *Smith T, **Buckley JP**, Navas-Acien A, Fry RC, van Geen A, Ali H, Siddiqua TJ, West Jr KP, Labrique AB, Heaney CD. Drinking Water Arsenic, Hemoglobin, and Anemia among Pregnant Women in Rural Northern Bangladesh. ISEE Conference Abstracts, 2022.
- 7. Kuiper J, Braun J, Liu S, Lanphear B, Cecil K, Xu Y, Yolton K, Kalkwarf H, Chen A, **Buckley J**. Latent profiles of early life perfluoroalkyl substances exposure and body composition at age 12 years: The Health Outcomes and Measures of the Environment (HOME) Study. ISEE Conference Abstracts, 2022.
- 8. *Choi G, Wang X, **Buckley J**. Prenatal heavy metals exposure and neurodevelopmental disorders in the Boston Birth Cohort: examining risk and protective factors. ISEE Conference Abstracts, 2022.
- 9. **Buckley J**, Kuiper J, Lanphear B, Calafat A, Cecil K, Chen A, Xu Y, Yolton K, Kalkwarf H, Braun J. Cumulative exposure to per-and polyfluoroalkyl substances from pregnancy to age 12 years and bone health in early adolescence: the HOME Study. ISEE Conference Abstracts, 2022.

- 10. **Buckley J**. Solution-oriented research for chemical exposures and children's health: the ECHO Program. ISEE Conference Abstracts, 2022.
- 11. Braun J, **Buckley J**, Kalkwarf H, Eaton C, Cecil K, Chen A, Kelsey K, Langevin S, Lanphear B, Yolton K. Cardiometabolic and Bone Health Effects of PFAS Exposure in Adolescents. *Birth Defects Research*, 2022: 369-369.
- 12. **Buckley JP**, Kuiper JR, Bennett DH, Barrett ES, Bastain T, Breton CV, Chinthakindi S, Dunlop AL, Farzan SF, Herbstman JB, Karagas MR, Marsit CJ, Meeker JD, Morello-Frosch R, O'Connor TG, Romano ME, Schantz S, Schmidt RJ, Watkins DJ, Zhu H, Pellizzari ED, Kannan K, Woodruff TJ. Widespread Exposure to Emerging and Previously Unmeasured Chemicals in Commerce in Pregnant women Across the US. ISEE Conference Abstracts. 2021.
- 13. *Smith T, **Buckley JP**, Pearce JL. Navas-Acien A, Heaney C. Using Self-Organizing Maps to Identify Metal Mixture Exposures among Pregnant Women in Rural Northern Bangladesh. ISES conference abstracts, 2021.
- 14. Zhang M, Liu T, Wang G, **Buckley JP**, Guallar E, Hong X, Wang MC, Wills-Karp M, Appel LJ, Wang X. In Utero Exposure To Metal Mixtures And Offspring Blood Pressure: An Analysis Of The Boston Birth Cohort Using Bayesian Kernel Machine Regression. *Circulation* 2021;143(Suppl_1):A077-A077.
- 15. *Louis LM, **Buckley JP**, Kuiper J, Romero K, Woo H, Diette GB, Hansel NN, Mc Cormack MC, Meeker J, Quiros Alcala L. Organophosphate Ester (OPE) Exposures and Asthma Morbidity Among Urban School-Aged Children in Baltimore City, Maryland. ISEE Conference Abstracts, 2021.
- 16. *Louis L, Buckley J, Kuiper J, Romero K, Woo H, Diette G, Hansel N, McCormack M, Meeker J, Quiros-Alcala L. Asthma Morbidity and Organophosphate Ester (OPE) Exposures Among Urban School-Aged Children in Baltimore City, Maryland. TP65. American Thoracic Society, 2021;A3118-A3118.
- 17. *Kuiper JR, Vuong AM, Braun JM, Lanphear BP, Cecil KM, Calafat AM, Ospina M, Xu Y, Yolton K, Kalkwarf HJ, **Buckley JP**. Gestational organophosphate ester exposures and bone mineral density in early adolescence: The HOME Study. ISEE Conference Abstracts, 2021.
- 18. *Etzel TM, Braun JM, Kuiper JR, Yolton K, Cecil KM, Chen A, Lanphear BP, Kalkwarf HJ, **Buckley JP**. Gestational and early childhood phthalate exposures and adolescent body composition: The HOME Study. ISEE Conference Abstracts, 2021.
- 19. **Buckley JP**, Kuiper JR, Lanphear BP, Cecil KM, Chen A, Xu Y, Yolton K, Kalkwarf HJ, Braun JM. Identifying periods of susceptibility to perfluoroalkyl substances and bone mineral density in early adolescence: the HOME Study. ISEE Conference Abstracts, 2021.
- 20. **Buckley JP**. Applying a potential outcomes framework to estimate policy-relevant effects of exposure mixtures. ISEE Conference Abstracts, 2021.
- 21. *Kuiper JR, Ferguson KK, O'Brien KM, **Buckley JP.** Correcting urinary biomarkers for hydration status using specific gravity: A comparison of methods using NHANES 2007-2008. Society for Epidemiologic Research. 2020.
- 22. *Louis LM, Quirós-Alcalá L, Diette G, Hansel NN, McCormack MC, Meeker J, **Buckley JP.** Variability and determinants of organophosphate ester (OPE) exposures among urban school aged children in Baltimore City, MD. International Society of Exposure Science. 2020.
- 23. Park CY, Kuiper J, **Buckley JP**, Ellis G, Graham D, Graham EM, Everett AD. Cyclohexanone Contamination of Medical Plastics is Associated With Worse Congenital

- Heart Surgery Outcomes. American Heart Association. Circulation 142 (Suppl_3), A13699-A13699. 2020. 2020 Young Hearts Outstanding Research Award in Pediatric Cardiology.
- 24. **Buckley JP,** Kuiper JR, Lanphear BP, Cecil KM, Chen A, Yolton K, Kalkwarf HJ, Braun JM. Gestational perfluoroalkyl substance exposures and early adolescent bone mineral density in the HOME Study. ISEE Conference Abstracts, 2020.
- 25. *Etzel TE, Kuiper JR, Braun JM, Lanphear BP, Cecil KM, Chen A, Yolton K, Kalkwarf HJ, **Buckley JP.** Prenatal phthalate exposures and anthropometry during adolescence: The HOME Study. ISEE Conference Abstracts, 2020.
- 26. *Kuiper JR, Braun JM, Lanphear BP, Cecil KM, Chen A, Yolton K, Kalkwarf HJ, **Buckley JP.** Gestational phthalate exposures and bone mineral density in early adolescence: the HOME Study. ISEE Conference Abstracts, 2020.
- 27. **Buckley JP**, Kim H, Eugenia Wong E, Rebholz CM. Ultra-processed food consumption and exposure to phthalates and bisphenols in the US: Results from the National Health and Nutrition Examination Survey (NHANES), 2013-2014. ISEE Conference Abstracts, 2019.
- 28. *Etzel TM, Engel SM, Wolff MS, Quirós-Alcalá L, **Buckley JP**. Prenatal organophosphorus pesticide exposure and childhood adiposity in the Mount Sinai Children's Environmental Health Study. ISEE Conference Abstracts, 2019.
- 29. *Kezirian O, **Buckley JP**. Rural, urban, & suburban differences of formal and informal support systems on the prevalence of caregiver burden in dementia & Alzheimer's caregivers. Alzheimer's Association International Conference. Los Angeles, California. 2019.
- 30. Quirós-Alcalá L, Boyle M, **Buckley JP**. Organophosphorous flame retardants and adiposity measures among the US general population. Joint International Society of Environmental Epidemiology and International Society of Exposure Science Conference. Ottawa, Canada. *Environmental Health Perspectives*, 124, P02.3480. 2018.
- 31. Quirós-Alcalá L, **Buckley JP**, Boyle M. Parabens and measures of adiposity among children and adults from the general US population: NHANES 2005-2014. International Society for Exposure Science Annual Conference. Durham, North Carolina. 2017.
- 32. **Buckley JP**, Engel SM, Herring AH. Assessing nonignorable loss to follow-up in a longitudinal birth cohort study of body fat in childhood. 28th Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Denver, Colorado. 2015.
- 33. **Buckley JP**, Engel SM, Herring AH, Braun JM, Whyatt RM, Daniels JL, Mendez MA, Richardson DB, Calafat AM, Lanphear BP, Wolff MS, Rundle AG. Prenatal phthalate exposures and childhood body mass index in three Children's Environmental Health Center cohorts. ISEE conference Abstracts, 2014.
- 34. **Buckley JP**, Engel SM, Herring AH, Mendez MA, Richardson DB, Calafat AM, Wolff MS. Prenatal phthalate exposure and fat mass in childhood: examining the obesogen hypothesis. Society for Epidemiologic Research Annual Meeting. Seattle, Washington. 2014.
- 35. **Buckley JP**, Kappelman MD, Allen JK, Muppidi B, VanMeter SA, Cook SF. Analgesic and Psychiatric Co-Medication in Commercially Insured Pediatric Inflammatory Bowel Disease Patients. 29th International Conference on Pharmacoepidemiology & Therapeutic Risk Management (ICPE). Montreal, Canada. *Pharmacoepidemiology and Drug Safety*, 22: 332-332. 2013.
- 36. **Buckley JP**, Kappelman MD, Allen JK, VanMeter SA, Cook SF. Polypharmacy among Medicaid Recipients with Inflammatory Bowel Disease. 29th International Conference on Pharmacoepidemiology & Therapeutic Risk Management (ICPE). Montreal, Canada.

- Pharmacoepidemiology and Drug Safety, 22: 460-461. 2013.
- 37. **Buckley JP**, Kappelman MD, Allen JK, VanMeter SA, Cook SF. The Burden of Comedication among Inflammatory Bowel Disease Patients. Digestive Disease Week (DDW). Orlando, Florida. *Gastroenterology*, 144(5): S-388. 2013.
- **38. Buckley JP**, Shu XO, Xiang YB, Calafat AM, Yang G, Cai Q, Ji BT, Cai H, Rothman N, Zheng W, Gao YT, Chow WH, Engel LS. Predictors of phthalates and phenols exposure in Shanghai, China. 24th Annual Conference of the International Society for Environmental Epidemiology. Columbia, South Carolina. *Epidemiology*, 23(5S), P-225. 2012.
- 39. **Buckley JP** and Richardson DB. Seasonal Modification of the Association between Temperature and Adult Asthma Exacerbations. Society for Epidemiologic Research Annual Meeting. Montreal, Canada. *American Journal of Epidemiology*, 173(Suppl):S321. 2011.
- 40. **Buckley JP** and Richardson DB. Climate and pediatric emergency department visits for asthma in North Carolina. Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting. Seattle, Washington. *American Journal of Epidemiology*, 171(Suppl):S83. 2010.
- 41. **Buckley JP** and Richardson DB. Climate and adult emergency department visits for asthma in North Carolina. Society for Epidemiologic Research Annual Meeting. Seattle, Washington. *American Journal of Epidemiology*, 171(Suppl):S83. 2010.

TEACHING RECORD

Guest Lecturer, The University of North Carolina at Chapel Hill

- Advanced Topics in Perinatal and Pediatric Epidemiology (EPID 853), Department of Epidemiology, *Biomonitoring and exposure measurement error*, 2023.
- Environmental Epidemiology (EPID 785), Department of Epidemiology, *Exposure mixtures:* research questions and analysis methods, 2023.
- Foundations of Maternal and Child Health (MHCH 701), Department of Maternal and Child Health, *Children's Environmental Health: The Special Sensitivity of Children to Environmental Exposures*, 2016.
- Introduction to Pediatric and Perinatal Epidemiology (EPID 742), Department of Epidemiology, *Childhood Obesity*, 2015.
- Integrating Biomarkers in Population-based Research (EPID 851), Department of Epidemiology, *Values Below the Limits of Detection in Biomarker Studies*, 2015.

Classroom Instruction, Johns Hopkins University

- Lead instructor, Molecular Epidemiology and Biomarkers in Public Health (180.640).

 Department of Environmental Health and Engineering. 4 credit hours. 2020, 3rd term (14 students), 2021, 3rd term (32 students), 2022, 3rd term (23 students), 2023, 3rd term (39 students).
- Lead instructor, Advanced Topics in Toxicology and Physiology: Endocrine disrupting chemicals and children's health (188.861). Department of Environmental Health and Engineering. 1 credit hour. 2018, 2nd term (7 students).

Lead instructor, Exposure Sciences and Environmental Epidemiology Journal Club (185.801). Department of Environmental Health and Engineering. 4 credit hours/term, 4 terms/academic year. 2017 – 2018 (26 students), 2018 – 2019 (26 students).

Guest Lecturer, Johns Hopkins University

Environmental and Occupational Epidemiology (340.680), Department of Environmental Health and Engineering, 2017 – 2023

Exposure Sciences for Health Risk Assessment (182.617), Department of Environmental Health and Engineering, 2020 – 2023

Writing Scientific Papers II (180.662), Department of Environmental Health and Engineering, 2021 – 2023

Molecular Epidemiology and Biomarkers in Public Health (180.640), Department of Environmental Health and Engineering, 2017 – 2019

Advanced Environmental Health (180.612), Department of Environmental Health and Engineering, 2017

ADVISING/MENTORING

* Denotes co-mentoring/advising

Postdoctoral Fellows

Diana Pacyga (UNC), 2023 –

Giehae Choi (JHU), 2020 -

Taylor Etzel (JHU), 2022 – 2023, Current position: Research Associate, Johns Hopkins University

Lydia Louis* (JHU), 2019 – 2022, Current position: AAAS Fellow, US Department of State Jordan Kuiper (JHU), 2019 – 2020, Current position: Assistant Professor (Tenure-Track), George Washington University

Doctoral Dissertation Committees, University of North Carolina at Chapel Hill

Jenna Frey, PhD, Department of Environmental Sciences and Engineering, 2024 – Kristina Stuckey, PhD, Department of Environmental Sciences and Engineering, 2024 – Anjali Kumar, PhD, Epidemiology, 2023 – Cherrel Manly, PhD, Epidemiology, 2023 –

Current Doctoral Students, Johns Hopkins University

Katherine Marquess, PhD, Environmental Health and Engineering

Graduated Doctoral Students, Johns Hopkins University

Tyler Smith*, PhD, Environmental Health and Engineering, 2023

Arsenic exposure and maternal and child health in rural northern Bangladesh

Current position: Postdoctoral Fellow, Icahn School of Medicine at Mount Sinai

Taylor Etzel, PhD, Environmental Health and Engineering, 2022

Early life phthalate exposures and adolescent obesity and cardiometabolic health
Current position: Research Associate, Johns Hopkins University

Graduated Master's Students, Johns Hopkins University

Junyi Zhou, MHS, Epidemiology, 2023
Alissa Konicki, MHS, Environmental Health and Engineering, 2023
Roberto Rojas, MHS, Environmental Health and Engineering, 2022
Shudi Pan, ScM, Environmental Health and Engineering, 2021
Haris Malik, MHS, Environmental Health and Engineering, 2021
Maggie Vitale, MHS, Environmental Health and Engineering, 2020
Jennifer Dantzer, MHS, Epidemiology, 2020
Olivia Kezirian, MPH, Epidemiology/Biostatistics Concentration, 2019
Zoha Naseer, MHS, Environmental Health and Engineering, 2018

Doctoral Thesis Advisory Committees, Johns Hopkins University

Elizabeth Boyle, DrPH, Environmental Health and Engineering, 2017 – Emma Moynihan, PhD, Environmental Health and Engineering, 2022 – 2023 Andrea Chiger, PhD, Environmental Health and Engineering, 2022 – 2023 Beth Riess, DrPH, Environmental Health and Engineering, 2022 – 2023 Joyce Lin, PhD, Environmental Health and Engineering, 2021 – 2023 Hannah Holsinger, DrPH, Environmental Health and Engineering, 2020 – 2023 Mingyu Zhang, PhD, Epidemiology, 2020 – 2022 Magdalena Fandiño, PhD, Environmental Health and Engineering, 2018 – 2020 Josiah Kephart, PhD, Environmental Health and Engineering, 2017 – 2019 Jennifer Rous, DrPH, Environmental Health and Engineering, 2017 – 2019 Tara McAlexander, PhD, Environmental Health and Engineering, 2017 – 2019 Miranda Spratlen, PhD, Environmental Health and Engineering, 2017 – 2018

External Reviewer

University Grenoble Alpes, PhD thesis monitoring committee, 2023 – current Brown University, BA thesis reader, 2022 McGill University, PhD external dissertation thesis examiner, 2021

GRANTS

Active

R01 ES030078 (PI: **Buckley**) 12/1/2018 – 11/30/2023 2.4 CM
Early Life Phthalate and Perfluoroalkyl Substance Exposures and Childhood Bone Health
Role: Principal Investigator Total costs: \$1,306,810
This project examines phthalates and perfluoroalkyl substances in relation to height and bone density in children and assesses how vitamin D and calcium status may affect these relationships.

R01 ES033252 (PI: **Buckley**)

09/03/2021 - 06/30/2026

3.6 CM

Endocrine disrupting chemical mixtures and bone health in adolescence

Role: Principal Investigator Total costs: \$3,024,254

This study investigates the impact of exposure to mixtures of endocrine disrupting chemicals on bone strength and fractures in adolescence with the aim of identifying new ways to optimize lifelong bone health.

U24 OD023382 (MPI: Jacobson & Catellier)

09/21/2016 - 05/31/2030

2.4 CM

ECHO DAC (Environmental influences on Child Health Outcomes Data Analysis Center)

Role: Co-Investigator (PI of UNC subcontract)

Total costs: \$98,224,604

The ECHO Program will create an extensive resource for elucidating the roles of environmental and genetic characteristics that affect child health. The Data Analysis Center will advance ECHO research by providing state-of-the-art study designs and analyses, and by publicizing high quality, well documented ECHO data to promote informative analyses by the scientific community at-large.

P30 ES010126 (PI: Troester)

03/01/2024 - 02/28/2025

0.6 CM

UNC Center for Environmental Health and Susceptibility

Role: Co-lead of Translational Research Core

Pending

R01 (MPI: Wang/**Buckley**/Wang)

01/01/2025 - 12/31/2029

1.8 CM

Early life exposure to environment chemical mixtures on pubertal development in Boston Birth

Cohort

Role: Multiple Principal Investigator

R21 (MPI: Braun/**Buckley**)

12/01/2024 - 11/30/2026

1.5 CM

Associations of Prenatal PFAS Mixtures With Adult Metabolic, Vascular, and Bone Health

Role: Multiple Principal Investigator

U01 (MPI: Li/Liu)

07/01/2024 - 06/30/2029

1.44 CM

AD/ADRD risk in older Chinese Americans: Quantifying the impacts of per- and polyfluoroalkyl substances (PFAS)

Role: Co-Investigator (PI of UNC subcontract)

R01 (PI: Liu)

09/01/2024 - 08/31/2029

0.6 CM

The PFAS exposure burden calculator: A novel tool for cross-study harmonization,

biomonitoring and report-back

Role: Co-Investigator (PI of UNC subcontract)

R01 (PI: Liu)

12/01/2024 - 11/30/2029

1.44 CM

Reducing MASLD prevalence and progression: Targeting pollution in drinking water as a novel

policy lever

Role: Co-Investigator (PI of UNC subcontract)

R01 (PI: Lyall)

12/01/2024 - 11/30/2026

1.2 CM

Examining Dietary Co-Exposures in Association with Child Neurodevelopmental Outcomes in the US ECHO Program

Role: Co-Investigator (PI of UNC subcontract)

Completed

R03 ES033374 (PI: Liu)

08/01/2021 - 07/31/2023

0.24 CM

Endocrine disruptors and insulin resistance: quantifying impacts with a novel exposure burden score

Role: Co-Investigator (PI of JHU subcontract)

Total costs: \$92,934

We will develop a novel score that summarizes exposure burden to chemicals, and provide easy-to-use software tools to calculate it. This burden score can be useful for risk assessment and biomonitoring, and addresses data harmonization challenges when different sets of chemicals are measured over time or in different cohorts.

R01 ES029531 (PI: Keil/Fry)

09/01/2018 - 05/31/2023

2.4 CM

Public health priority setting for environmental metals mixtures and birth defects

Role: Co-Investigator (PI of JHU subcontract)

Total costs: \$1,171,282

This project identifies optimal public health strategies to reduce birth defects resulting from exposure to a mixture of toxic metals in well water with a Bayesian causal inference framework. We apply this framework to evaluate targeted well water intervention strategies in North Carolina. This method holds exceptional promise for accelerating public health decisions about interventions related to exposure mixtures in the broader United States.

R21 ES033384 (PI: Kuiper)

05/18/2022 - 04/30/2024

0.36 CM

1.2 CM

Impact of phthalate and phenol exposures on congenital heart surgery outcomes

Role: Co-Investigator Total costs: \$462,355

This novel study will provide a deeper understanding of plasticizer exposures and their associations with outcomes following neonatal heart surgery and help to guide new interventions to reduce chemical exposures and promote positive outcomes.

R01 HL158593 (PI: Everett)

06/01/2022 - 05/31/2026

Role of Cyclohexanone Toxicity in Mediating Congenital Cardiac Surgery Outcomes

Role: Co-Investigator Total costs: \$2,957,334

Our goal is to determine whether cyclohexanone, a contaminant of cardiopulmonary bypass circuits, mediates adverse cardiovascular and neurodevelopmental outcomes in neonatal cardiac surgery.

P30 ES032756 (PI: Wills-Karp)

06/24/2022 - 03/31/2026

0.72 CM

Center for Community Health: Addressing Regional Maryland Environmental Determinants of

Disease

Role: Co-Investigator

Total costs: \$3,313,500

The goal is to work to understand how exposures to environmental factors cause adverse health outcomes and then to translate these findings into action to protect and promote the health and well-being of vulnerable communities in the Maryland region.

R01 ES034554 (MPIs Volk and Ladd-Acosta)

09/06/2022 - 08/31/2027

0.6 CM

GEARs Combining advances in Genomics and Environmental science to accelerate Actionable Research and practice in ASD

Role: Co-Investigator Total costs: \$11,716,671

The goal of this project is to establish a network for the investigation of gene-environment interaction in autism spectrum disorder (ASD) and outcomes among people with ASD.

NA (MPI Quirós-Alcalá and **Buckley**) 02/01/2018 – 01/31/2020 0 CM NIEHS Children's Health Exposure Analysis Resource (CHEAR) award: Investigating exposures and health impacts of endocrine disrupting chemicals among inner-city children Role: Co-Principal Investigator Estimated award amount: \$276,800 The aim of this project is to characterize exposures and potential health effects of endocrine disrupting compounds in two pediatric African American cohorts in collaboration with researchers at the BREATHE Center at the Johns Hopkins School of Medicine and the Johns Hopkins Bloomberg School of Public Health.

NA (PI: **Buckley**)

NIDDK Mid-Atlantic Nutrition Obesity Research Center pilot award: The impact of prenatal exposure to flame retardant chemicals on childhood obesity in Baltimore

Role: Principal Investigator Total amount: \$50,000

This pilot project will collect preliminary data on prenatal organophosphorus flame retardant chemical exposures and early metabolic health effects in a Baltimore city birth cohort.

PROFESSIONAL SERVICE

Johns Hopkins University

2021 - 2023	Co-director, Exposure Science and Environmental Epidemiology PhD
	Track, Department of Environmental Health and Engineering
2021 - 2023	Executive Committee, Department of Environmental Health and
	Engineering
2021 - 2023	Educational Programs Committee, Department of Environmental Health
	and Engineering
2017 - 2023	DrPH Program Committee, Department of Environmental Health and
	Engineering
2019 - 2021	Research Committee, Department of Environmental Health and
	Engineering
2021, 2022	Reviewer, Wendy Klag Center for Autism and Developmental Disabilities
	Pilot Project Awards
2017, 2022	Reviewer, Bloomberg American Health Initiative (BAHI) Spark Awards

Study Sections and Proposal Reviews

2024	National Institutes of Health, Social and Environmental Determinants of
	Health (SEDH) Study Section, ad hoc reviewer
2022	National Institute of Environmental Health Sciences, Career Award
	(K99/R00) Special Emphasis Panel, ad hoc reviewer
2022	National Institute of Environmental Health Sciences, Career Award (K01,
	K08, K23) Special Emphasis Panel, ad hoc reviewer

2021	National Institutes of Health, Neurological, Aging and Musculoskeletal	
2021	Epidemiology (NAME) Study Section, ad hoc reviewer National Institutes of Health, National Cancer Institute/National Institute of Environmental Health Sciences, RFA: <i>New Cohorts for Environmental</i>	
2021	Exposures and Cancer Risk, mail reviewer National Institutes of Health, Infectious, Reproductive, Asthma and Pulmonary Conditions (IRAP) Study Section, ad hoc reviewer	
2020	National Institute of Environmental Health Sciences, Revolutionizing Innovative, Visionary Environmental Health Research Award (RIVER	
2020	R35) Special Emphasis Panel, ad hoc reviewer National Institute of Environmental Health Sciences, NIH Pathway to Independence Award (K99/R00) Special Emphasis Panel, ad hoc reviewer	
2020	National Institutes of Health, Infectious, Reproductive, Asthma and Pulmonary Conditions (IRAP) Study Section, ad hoc reviewer	
2019	Harvard Chan – National Institute for Environmental Health Sciences Center for Environmental Health, Pilot Grant reviewer	
2019	New York University, National Institute for Environmental Health Sciences P30 Core Center, Pilot Program reviewer	
2019	National Institute for Environmental Health Sciences, Epidemiology Branch, Intramural Research Proposal reviewer	
2019	University of North Carolina at Chapel Hill, Center for Environmental Health and Susceptibility, Pilot Project Proposal reviewer	
Society Membership		
2008 –	International Society for Environmental Epidemiology (ISEE) 2024 Travel Award Committee	
2008 –	Society for Epidemiologic Research (SER)	
2008 –	Society for Pediatric and Perinatal Epidemiologic Research (SPER)	
2014 – 2022	The Endocrine Society	
Society Leadership		
2024 -	Co-Chair, ISEE North American Chapter	
2023 –	Executive Council, ISEE North American Chapter	
2022	Annual Meeting Program Committee, SPER	
2020 -	Awards Committee, SER	
2019 –	Digital Engagement Committee, SPER	
2019 –	Liaison to SER, SPER	
2019 –	SER-ISEE Collaboration Working Group, SER	
Editorial Board Membership		
2019 –	Section editor: Current Environmental Health Reports	
2017 –	Editorial review board: <i>Environmental Health Perspectives</i> *Recognized as a Top Peer Reviewer: 2020, 2021, 2022, 2023	
2017 –	Editorial board: International Journal of Hygiene and Environmental Health	

Journal Reviewer (last 5 years)

American Journal of Epidemiology

Chemosphere

Environment International

Environmental Chemistry

Environmental Health

Environmental Health Perspectives

Environmental Research

Environmental Science & Technology Letters

Epidemiology

International Journal of Hygiene and Environmental Health

Journal of Bone and Mineral Research Plus

Journal of Clinical Endocrinology & Metabolism

Journal of Exposure Science and Environmental Epidemiology

Obesity

Paediatric and Perinatal Epidemiology

PLOS ONE

Reviews of Environmental Contamination and Toxicology

Science of the Total Environment

Statistics in Medicine

Other Professional Service and Practice

2023 –	Member of the Biospecimen Assay Task Force, NIH Environmental
	influences on Child Health Outcomes (ECHO) Program
2023 –	Co-Chair of the Physical and Chemical Specialized Measures Subgroup,
	NIH Environmental influences on Child Health Outcomes (ECHO)
	Program
2022 - 2023	Advised the Michigan Department of Health and Human Services
	regarding analysis of chemical mixtures
2020 - 2022	Co-Chair of the Chemical Exposures Working Group, NIH Environmental
	influences on Child Health Outcomes (ECHO) Program
2017 - 2020	Advised the Detroit Health Department regarding potential environmental
	health impacts of city demolition program