

## **Curriculum Vitae**

**DANA BOYD BARR, Ph.D.**

**Department of Environmental Health  
Rollins School of Public Health  
Emory University  
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### **EDUCATION**

Emory University, Atlanta GA  
Rollins School of Public Health  
Applied Epidemiology

Georgia State University, Atlanta, GA  
Chemistry Department  
College of Arts and Sciences  
*Doctor of Philosophy, Analytical Chemistry (GPA 3.7), March 1994*

Brenau University, Gainesville, GA  
College of Arts and Sciences  
*Bachelor of Science, Biology, Magna Cum Laude (GPA 3.83), June 1987*

### **PROFESSIONAL EXPERIENCE**

|              |                                                                                                                                                                                                                                                                                                     |
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| 2010-present | Professor<br>Department of Environmental Health<br>Rollins School of Public Health<br>Emory University<br>Atlanta, GA                                                                                                                                                                               |
| 1997-2009    | Chief, Pesticide Laboratory<br>Acting Chief, Personal Care Products Laboratory<br>Title 42 Distinguished Consultant (above GS scale 15)<br>Supervisory Research Chemist<br>Division of Laboratory Science<br>National Center for Environmental Health<br>Centers for Disease Control and Prevention |

1987-1997                      Research Chemist  
Division of Laboratory Sciences  
National Center for Environmental  
Health Centers for Disease Control and  
Prevention

## **HONORS AND FELLOWSHIPS**

- Listed as a World's Top Female Scientist, Research.com, 2022
- Elected membership into the Collegium Ramazzini, 2022
- Excellence in Exposure Science, International Society of Exposure Science, 2022
- Environmental Health Teaching Award, GDEH, RSPH, Emory, 2022
- Rollins School of Public Health Research Service Award, Emory University, 2020
- HERCULES Community Service Award, 2018
- Thomas Reuters Top Cited Scientist in Environment/Ecology, 2014, 2015, 2016 (for a 10-year span)
- Listed in Thomson Reuters World's Most Influential Scientific Minds, 2014
- Georgia State University's Distinguished Chemistry Alumnus, 2013.
- Brenau University's Alumnae Hall of Fame, 2017.
- AXQ's Real Strong Women of Distinction, 2017.
- Anant Jain Founders Award for outstanding contributions and leadership of Southern Section of AOAC, 2012
- Scientific and Technological Achievement Award, 2011, EPA
- Superior Performance Award, CDC, 1989-1991 and 1994-2009 (on detail away from CDC 1992 and 1993).
- Outstanding Alumnae Award for recognition of outstanding professional achievement, 2007, Brenau University
- CDC Honor Award for Emergency Response for the Panama Diethylene Glycol Poisoning, 2007
- CDC Honor Award for Public Health Disease Prevention, GS-14 and above, 2005
- CDC Honor Group Award for development of CDC's National Reports on Human Exposure to Environmental Chemicals, 2005
- Silver Medal for Superior Service, U.S. EPA, 2005
- NCID Honor Award for West Nile Investigations, 2003.
- Federal Scientific Employee of the Year, Atlanta Area Federal Executive Board, 2003.
- NCEH Director's Award for Outstanding Scientific Collaborations, 2002.
- NCEH Director's Award for Outstanding Scientific Program Support, 2002.
- Joan Daisy Award for Outstanding Young Investigator, International Society of Exposure Assessment, 2001.
- NCEH Director's Award for superior mission response for the 2000 CDC National Report on Human Exposure to Environmental Chemicals, 2000.
- Department of Health and Human Services Secretary's Award for Distinguished Service for outstanding scientific and technical laboratory response to illegal methyl parathion application in the southern and midwestern United States, 1999.
- Department of Health and Human Services Secretary's Award for Distinguished Service for outstanding scientific and technical response to a life threatening public health emergency in Haiti, 1998.
- NCEH Director's Award for superior mission response to emergency exposure assessment of over 10,000 residents whose homes were illegally sprayed with methyl parathion, 1998.

- NCID James H. Nakano Citation for the peer reviewed journal article "Epidemic of Pediatric Deaths from Acute Renal Failure Caused by Diethylene Glycol Poisoning", JAMA 279(15):1175-1180, 1998.
- CDC/ATSDR Honor Group Award for statistical research and services as a part of the NHANES III laboratory, 1997.
- CDC's Mackel Award for exemplary collaboration between epidemiology and laboratory, 1997. (Laboratory: J Barr, D Barr, L Needham; Epidemiology: K O'Brien, J Selanikio)
- NCEH Director's Award for outstanding scientific and technical response to a life threatening public health emergency in Haiti, 1997.
- CDC/ATSDR Honor Group Award for outstanding epidemiologic and laboratory response to an outbreak of acute renal failure in Haitian children, 1997
- CDC/ATSDR Honor Group award for program operations for the Centers for Disease Control, June 1992
- Young Alumnae Award for Professional Excellence, Brenau University, May 1991.
- Nominated for the Atlanta Area Federal Employee of the Year, 1990.
- CDC/ATSDR Honor Award for Laboratory Research and Epidemiology, 1990.

## PUBLICATIONS

- Summary: 440 peer-reviewed journal articles; 14 book chapters; 57 published abstracts
- Named to the 2022 list of Best Female Scientists in the World by Research.com
- Named a 2014, 2015, and 2016 Thomson Reuters Highly Cited Researcher, Environmental/Ecology representing top 1% of scientists in the field.
- Oral Presentations: Over 350 invited and platform presentations given at multiple meetings
- Research Gate RG Score: 49.53 (upper 2.5 percentile of Research Gate members)
- Research Gate Research Interest Score: 18,269 (median=422; IQR=1271)
- H-index=117 (median for National Academy of Science inductees=57; minimum=45)
- i10 index = 395
- Total Citations = 47,615
- Most highly cited article = Google Scholar states cited in 2072 publications (Barr et al., EHP, 2005).
- Second Most highly cited article = Google Scholar states cited in 1138 publications (Silva et al., EHP, 2004).
- Average citations per year (last 4 years) = 2975 (range 2737-3088)

## PEER-REVIEWED JOURNAL ARTICLES

1. \*Association between Personal Exposure to Household Air Pollution and Glycated Hemoglobin among Women in Rural Areas of Guatemala, India, Peru, and Rwanda: Household Air Pollution Intervention Network Trial. Ndikubwimana A, Young BN, Checkley W, Chen Y, Clasen T, Contreras CL, Diaz AA, Dusabimana E, de Las Fuentes L, Garg SS, Jaacks LM, Jabbarzadeh S, Johnson M, Kalisa E, Karakwende P, Kirby M, McCracken JP, Ndagijimana F, Ntakirutimana T, Ntivuguruzwa D, Peel JL, Piedrahita R, Pillarisetti A, Davila-Roman VG, Rosa G, Steenland K, Underhill L, Waller LA, Wang J, Ye W, **Barr DB**, Puttaswamy N, Clark ML; HAPIN Investigators. J Health Pollut. 2025

Jan 10;13(1-4):017002. doi: 10.1289/JHP1053. eCollection 2025 Dec. PMID: 40342590

2. Are NHANES data representative of the US population for chemicals with seasonal and regional use? Naiman J, Naiman DQ, LaKind JS, **Barr DB**. *Environ Health Perspect*. 2025 Apr 25. doi: 10.1289/EHP17203. Online ahead of print. PMID: 40279270
3. \*Assessment of human exposure to uncommon industrial toxicants in Glynn County, Georgia. Scovronick N, Lappe B, Pearson MA, Smith KA, Eick SM, D'Souza PE, Panuwet P, Kong M, Yakimavets V, Stephenson R, **Barr DB**. *Environ Pollut*. 2025 Apr 15;375:126240. doi: 10.1016/j.envpol.2025.126240. Online ahead of print. PMID: 40239937
4. \*Impact of prenatal phthalate exposure on newborn metabolome and infant neurodevelopment. Hoffman SS, Tang Z, Dunlop A, Brennan PA, Huynh T, Eick SM, **Barr DB**, Rushing B, McRitchie SL, Sumner S, Taibl KR, Tan Y, Panuwet P, Lee GE, Eatman J, Corwin EJ, Ryan PB, Jones DP, Liang D. *Nat Commun*. 2025 Apr 2;16(1):2539. doi: 10.1038/s41467-025-57273-z. PMID: 40175358
5. \*Prenatal exposure to persistent organic pollutants and associations with child behavior problems at 1-5 years. Eick SM, Ortlund KE, **Barr DB**, Dunlop AL, Liang D, Corwin EJ, Ryan PB, Friedman S, Buhr M, Panuwet P, D'Souza PE, Yakimavets V, Lee GE, Huels A, Sehgal N, Tan Y, Brennan PA. *Environ Pollut*. 2025 May 15;373:126123. doi: 10.1016/j.envpol.2025.126123. Epub 2025 Mar 26. PMID: 40154865
6. \*Perceived racial discrimination and tobacco and cannabis use in pregnant Black Americans: The mediating role of depressive symptoms. Stanfield J, Dunlop AL, **Barr DB**, Corwin EJ, Panuwet P, Yakimavets V, Brennan PA. *Drug Alcohol Depend*. 2025 Jun 1;271:112660. doi: 10.1016/j.drugalcdep.2025.112660. Epub 2025 Mar 20. PMID: 40154101
7. \*A birth cohort observational study to assess the association of prenatal biomarkers of organophosphates with visual attention, recognition memory and information processing among Thai infants. Fiedler N, Nimmapirot P, Sullivan MW, Promduang W, Chaikittipornlert N, Prapamontol T, Naksen W, Panuwet P, **Barr DB**, Baumert BO, Ohman-Strickland P, Suttiwan P. *Environ Res*. 2025 Jun 1;274:121197. doi: 10.1016/j.envres.2025.121197. Epub 2025 Feb 28. PMID: 40024501
8. \*Housing characteristics, dietary patterns, and sociodemographic characteristics as predictors of persistent organic pollutant exposure among African American pregnant women in Atlanta. Ortlund K, Chandler M, Dunlop AL, **Barr DB**, Ryan PB, Liang D, Brennan PA, Buhr M, Corwin EJ, Panuwet P, Lee GE, Eatman J, Tan Y, Sehgal N, Eick SM. *Environ Res*. 2025 May 1;272:121172. doi: 10.1016/j.envres.2025.121172. Epub 2025 Feb 19. PMID: 39978620
9. \*Baseline associations between exposure to metals and systolic and diastolic blood pressure among women in the Household Air Pollution Intervention Network Trial. Karakwende P, **Barr DB**, Checkley W, Clasen T, Lovvorn A, Contreras CL, Diaz AA, Dusabimana E, De Las Fuentes L, Jabbarzadeh S, Johnson M, Kalisa E, Kirby M, McCracken JP, Ndagijimana F, Ndikubwimana A, Ntakirutimana T, de Dieu Ntivuguruzwa J, Jennifer L, Peel AP, Davila-Roman VG, Rosa G, Waller LA, Wang J, Thompson L, Clark ML, Young BN. *medRxiv [Preprint]*. 2025 Jan 22:2025.01.21.25320894. doi: 0.1101/2025.01.21.25320894. PMID: 39973984
10. Associations of PFAS and pesticides with lung function changes from adolescence to young adulthood in the ESPINA study. Kornher K, Gould CF, Manzano JM, Baines K, Kayser G, Tu X, Suarez-Torres J, Martinez D, Peterson LA, Huset CA, **Barr DB**, Suarez-Lopez JR. *Int J Hyg Environ Health*. 2025 Apr;265:114526. doi: 10.1016/j.ijheh.2025.114526. Epub 2025 Feb 3. PMID: 39904133

11. \*Sex-specific effects of in utero exposure to per- and polyfluoroalkyl substances on placental development. Perez C, Sehgal N, Eick SM, **Barr DB**, Panuwet P, Yakimavets V, Chen K, Shankar K, Pearson KJ, Andres A, Everson TM. *Environ Res.* 2025 Apr 1;270:120868. doi: 10.1016/j.envres.2025.120868. Epub 2025 Jan 28. PMID: 39884538
12. \*Placental PFAS concentrations are associated with perturbations of placental DNA methylation. Everson TM, Sehgal N, Campbell K, **Barr DB**, Panuwet P, Yakimavets V, Chen K, Perez C, Shankar K, Eick SM, Pearson KJ, Andres A. *Environ Pollut.* 2025 Mar 1;368:125737. doi: 10.1016/j.envpol.2025.125737. Epub 2025 Jan 23. PMID: 39862910
13. \*Corrigendum to "Phthalate exposure increases interferon- $\gamma$  during pregnancy: The Atlanta African American Maternal-Child Cohort" [*Sci. Total Environ.* 916 (2024)/Article 170344]. Taibl KR, Dunlop AL, **Barr DB**, Ryan PB, Panuwet P, Corwin EJ, Eatmana JA, Tan Y, Liang D, Eick SM. *Sci Total Environ.* 2025 Jan 15;960:178210. doi: 10.1016/j.scitotenv.2024.178210. Epub 2025 Jan 8. PMID: 39788844 . No abstract available.
14. \*Correction to "Association between a Mixture of Per- and Polyfluoroalkyl Substances (PFAS) and Inflammatory Biomarkers in the Atlanta African American Maternal-Child Cohort". Tan Y, Taibl KR, Dunlop AL, **Barr DB**, Panuwet P, Yakimavets V, Kannan K, Corwin EJ, Ryan PB, Eatman JA, Liang D, Eick SM. *Environ Sci Technol.* 2025 Jan 21;59(2):1467. doi: 10.1021/acs.est.4c13968. Epub 2025 Jan 9. PMID: 39783771 No abstract available.
15. Urinary arsenic species and birth outcomes in Tacna, Peru, 2019: a prospective cohort study. Fano-Sizgorich D, Gribble MO, Vásquez-Velásquez C, Ramírez-Atencio C, Aguilar J, Wickliffe JK, Lichtveld MY, **Barr DB**, Gonzales GF. *UCL Open Environ.* 2024 Dec 6;6:e3146. doi: 10.14324/111.444/ucloe.3146. eCollection 2024. PMID: 39687685.
16. Prenatal exposure to pesticide mixtures and the placental transcriptome: Insights from trimester-specific, sex-specific and metabolite-scaled analyses in the SAWASDEE cohort. Wang Y, Hermetz K, Burt A, Lesseur C, Panuwet P, Fiedler N, Prapamontol T, Suttiwan P, Nimmapirot P, Sittiwang S, Naksen W, Yakimavets V, **Barr DB**, Hao K, Chen J, Marsit CJ. *Environ Res.* 2025 Feb 15;267:120637. doi: 10.1016/j.envres.2024.120637. Epub 2024 Dec 14. PMID: 39675449
17. \*Per- and polyfluoroalkyl substances in paired serum and breastmilk samples among pregnant farmworkers in Thailand. Eick SM, Sehgal N, Salamova A, Fiedler N, Hood RB, Yakimavets V, Promkam N, Prapamontol T, Suttiwan P, Sittiwang S, Mangklabruks A, Naksen W, Panuwet P, **Barr DB**. *Int J Hyg Environ Health.* 2025 Mar;264:114509. doi: 10.1016/j.ijheh.2024.114509. Epub 2024 Dec 7. PMID: 39647432
18. \*Associations between prenatal exposure to environmental phenols and child neurodevelopment at two years of age in a South African birth cohort. Zhou T, Abrishamcar S, Christensen G, Eick SM, **Barr DB**, Vanker A, Hoffman N, Donald KA, Wedderburn CJ, Andra SS, Wright RO, Zar HJ, Stein DJ, Hüls A. *Environ Res.* 2025 Jan 1;264(Pt 1):120325. doi: 10.1016/j.envres.2024.120325. Epub 2024 Nov 9. PMID: 39528036
19. A Prospective Analysis of Per- and Polyfluoroalkyl Substances from Early Pregnancy to Delivery in the Atlanta African American Maternal-Child Cohort. Tan Y, Eick SM, Dunlop AL, **Barr DB**, Taibl KR, Steenland K, Kannan K, Robinson M, Chang CJ, Panuwet P, Yakimavets V, Marsit CJ, Ryan PB, Liang D. *Environ Health Perspect.* 2024 Nov;132(11):117001. doi: 10.1289/EHP14334. Epub 2024 Nov 6. PMID: 39504273
20. \*Maternal symptoms of depression and anxiety as modifiers of the relationship between prenatal phthalate exposure and infant neurodevelopment in the Atlanta African American maternal-child cohort. Springer K, Eatman JA, Brennan PA, Dunlop AL, **Barr DB**, Panuwet P, Ryan PB, Corwin E, Taibl KR, Tan Y, Hoffman SS, Liang D, Eick SM.

- Brain Behav Immun Health. 2024 Aug 10;40:100846. doi: 10.1016/j.bbih.2024.100846. eCollection 2024 Oct. PMID: 39224563 .
21. \*Association of per- and polyfluoroalkyl substances with the antioxidant bilirubin across pregnancy. Taibl KR, Dunlop AL, Smith MR, Walker DI, Ryan PB, Panuwet P, Corwin EJ, Kannan K, Jones DP, Marsit CJ, Tan Y, Liang D, Eick SM, **Barr DB**. Free Radic Biol Med. 2024 Oct;223:184-192. doi: 10.1016/j.freeradbiomed.2024.07.037. Epub 2024 Aug 2. PMID: 39097204
  22. \*Invited Perspective: The Far Reach of PFAS-Inert Ingredients and Adjuvants in Pesticide Formulations. Sehgal N, **Barr DB**, Eick SM. Environ Health Perspect. 2024 Jul;132(7):71304. doi: 10.1289/EHP15445. Epub 2024 Jul 24. PMID: 39046249 . No abstract available.
  23. Association of household air pollution exposure and anemia among pregnant women: Analysis of baseline data from 'Household Air Pollution Intervention Network (HAPIN)' trial. Deng Y, Steenland K, Sinharoy SS, Peel JL, Ye W, Pillarisetti A, Eick SM, Chang HH, Wang J, Chen Y, Young BN, Clark ML, **Barr DB**, Clasen On Behalf Of The Hapin Investigators TF. Environ Int. 2024 Aug;190:108815. doi: 10.1016/j.envint.2024.108815. Epub 2024 Jun 13. PMID: 38889623 . Clinical Trial.
  24. \*Protocol for CARES-HAPIN: an ambidirectional cohort study on exposure to environmental tobacco smoke and risk of early childhood caries. Patil SS, Puttaswamy N, Cardenas A, **Barr DB**, Ghosh S, Balakrishnan K. BMJ Open. 2024 May 15;14(5):e083874. doi: 10.1136/bmjopen-2024-083874. PMID: 38749682
  25. \*Prenatal exposure to per- and polyfluoroalkyl substances (PFAS) and associations with hypertensive disorders of pregnancy in the Atlanta African American Maternal-Child cohort. Thompson M, Eatman JA, Dunlop AL, **Barr DB**, Kannan K, Corwin EJ, Ryan PB, Panuwet P, Yakimavets V, Taibl KR, Tan Y, Liang D, Eick SM. Chemosphere. 2024 Jun;357:142052. doi: 10.1016/j.chemosphere.2024.142052. Epub 2024 Apr 16. PMID: 38631500
  26. Per- and polyfluoroalkyl substances (PFAS) in senior care facilities and older adult residents. Burdette T, Yakimavets V, Panuwet P, Ryan PB, **Barr DB**, Salamova A. Sci Total Environ. 2024 Jun 10;928:172316. doi: 10.1016/j.scitotenv.2024.172316. Epub 2024 Apr 7. PMID: 38593875
  27. \*Corrigendum to "Exposure to phthalate metabolites, bisphenol A, and psychosocial stress mixtures and pregnancy outcomes in the Atlanta African American maternal-child cohort" [Environ. Res. 233, 15 September 2023, 116464]. Eatman JA, Dunlop AL, **Barr DB**, Corwin EJ, Hill CC, Brennan PA, Ryan PB, Panuwet P, Taibl KR, Tan Y, Liang D, Eick SM. Environ Res. 2024 Jun 15;251(Pt 1):118548. doi: 10.1016/j.envres.2024.118548. Epub 2024 Mar 8. PMID: 38460339 No abstract available.
  28. Genetics and Environment Distinctively Shape the Human Immune Cell Epigenome. Wang W, Hariharan M, Ding W, Bartlett A, Barragan C, Castanon R, Rothenberg V, Song H, Nery J, Aldridge A, Altshul J, Kenworthy M, Liu H, Tian W, Zhou J, Zeng Q, Chen H, Wei B, Gündüz IB, Norell T, Broderick TJ, McClain MT, Satterwhite LL, Burke TW, Petzold EA, Shen X, Woods CW, Fowler VG Jr, Ruffin F, Panuwet P, **Barr DB**, Beare JL, Smith AK, Spurbeck RR, Vangeti S, Ramos I, Nudelman G, Sealfon SC, Castellino F, Walley AM, Evans T, Müller F, Greenleaf WJ, Ecker JR. bioRxiv [Preprint]. 2025 Jan 4:2023.06.29.546792. doi: 10.1101/2023.06.29.546792. PMID: 37425926 . Preprint.
  29. \*Prenatal exposure to persistent and non-persistent chemical mixtures and associations with adverse birth outcomes in the Atlanta African American Maternal-Child Cohort. Eick SM, Tan Y, Taibl KR, Barry Ryan P, **Barr DB**, Hüls A, Eatman JA, Panuwet P, D'Souza

- PE, Yakimavets V, Lee GE, Brennan PA, Corwin EJ, Dunlop AL, Liang D. *J Expo Sci Environ Epidemiol*. 2024 Jul;34(4):570-580. doi: 10.1038/s41370-023-00530-4. Epub 2023 Feb 25. PMID: 36841843
30. \*Placental PFAS concentrations are associated with perturbations of placental DNA methylation at loci with important roles on cardiometabolic health. Everson TM, Sehgal N, **Barr DB**, Panuwet P, Yakimavets V, Perez C, Shankar K, Eick SM, Pearson KJ, Andres A. medRxiv [Preprint]. 2024 May 7:2024.05.06.24306905. doi: 10.1101/2024.05.06.24306905. PMID: 38766233
  31. \*Protocol for CARES-HAPIN: an ambidirectional cohort study on exposure to environmental tobacco smoke and risk of early childhood caries. Patil SS, Puttaswamy N, Cardenas A, **Barr DB**, Ghosh S, Balakrishnan K. *BMJ Open*. 2024 May 15;14(5):e083874. doi: 10.1136/bmjopen-2024-083874. PMID: 38749682
  32. \*Prenatal exposure to per- and polyfluoroalkyl substances (PFAS) and associations with hypertensive disorders of pregnancy in the Atlanta African American Maternal-Child cohort. Thompson M, Eatman JA, Dunlop AL, **Barr DB**, Kannan K, Corwin EJ, Ryan PB, Panuwet P, Yakimavets V, Taibl KR, Tan Y, Liang D, Eick SM. *Chemosphere*. 2024 Jun;357:142052. doi: 10.1016/j.chemosphere.2024.142052. Epub 2024 Apr 16. PMID: 38631500
  33. Per- and polyfluoroalkyl substances (PFAS) in senior care facilities and older adult residents. Burdette T, Yakimavets V, Panuwet P, Ryan PB, **Barr DB**, Salamova A. *Sci Total Environ*. 2024 Jun 10;928:172316. doi: 10.1016/j.scitotenv.2024.172316. Epub 2024 Apr 7. PMID: 38593875
  34. \*Corrigendum to "Exposure to phthalate metabolites, bisphenol A, and psychosocial stress mixtures and pregnancy outcomes in the Atlanta African American maternal-child cohort" [*Environ. Res.* 233, 15 September 2023, 116464]. Eatman JA, Dunlop AL, **Barr DB**, Corwin EJ, Hill CC, Brennan PA, Ryan PB, Panuwet P, Taibl KR, Tan Y, Liang D, Eick SM. *Environ Res*. 2024 Jun 15;251(Pt 1):118548. doi: 10.1016/j.envres.2024.118548. Epub 2024 Mar 8. PMID: 38460339
  35. \*Association of prenatal chlorpyrifos exposure with sexually dimorphic differences in anogenital distance among Thai farmworker children. Dang T, Sehgal N, **Barr DB**, Panuwet P, Liang D, Smarr M, Naksen W, Fiedler N, Promkam N, Prapamontol T, Suttiwan P, Sittiwang S, Eick SM. *Environ Res*. 2024 May 1;248:118325. doi: 10.1016/j.envres.2024.118325. Epub 2024 Jan 28. PMID: 38286251
  36. \*Phthalate exposure increases interferon- $\gamma$  during pregnancy: The Atlanta African American Maternal-Child Cohort. Taibl KR, Dunlop AL, **Barr DB**, Ryan PB, Panuwet P, Corwin EJ, Eatman JA, Tan Y, Liang D, Eick SM. *Sci Total Environ*. 2024 Mar 15;916:170344. doi: 10.1016/j.scitotenv.2024.170344. Epub 2024 Jan 23. PMID: 38266723
  37. \*Systematic review of microplastics and nanoplastics in indoor and outdoor air: identifying a framework and data needs for quantifying human inhalation exposures. Eberhard T, Casillas G, Zarus GM, **Barr DB**. *J Expo Sci Environ Epidemiol*. 2024 Mar;34(2):185-196. doi: 10.1038/s41370-023-00634-x. Epub 2024 Jan 6. PMID: 38184724 .
  38. Exposure to persistent organic pollutants in newborn dried blood spots and childhood acute myeloid leukemia. Janitz AE, Marcotte EL, **Barr DB**, Xu C, Peck JD, Campbell JE. *Environ Res*. 2024 Mar 1;244:117954. doi: 10.1016/j.envres.2023.117954. Epub 2023 Dec 16. PMID: 38104918
  39. \*Predictors of executive function among 2 year olds from a Thai birth cohort. Nimmapirot P, Fiedler N, Suttiwan P, Sullivan MW, Ohman-Strickland P, Panuwet P, **Barr DB**, Prapamontol T, Naksen W; SAWASDEE birth cohort investigative team. *Infant Behav Dev*. 2024 Mar;74:101916. doi: 10.1016/j.infbeh.2023.101916. Epub 2023 Dec 13. PMID:

38096613

40. \*Metabolic Perturbations Associated with an Exposure Mixture of Per- and Polyfluoroalkyl Substances in the Atlanta African American Maternal-Child Cohort. Liang D, Taibl KR, Dunlop AL, **Barr DB**, Ryan PB, Everson T, Huels A, Tan Y, Panuwet P, Kannan K, Marsit C, Jones DP, Eick SM. *Environ Sci Technol*. 2023 Oct 31;57(43):16206-16218. doi: 10.1021/acs.est.3c04561. Epub 2023 Oct 19. PMID: 37857362
41. \*Assessing Metabolic Differences Associated with Exposure to Polybrominated Biphenyl and Polychlorinated Biphenyls in the Michigan PBB Registry. Hoffman SS, Liang D, Hood RB, Tan Y, Terrell ML, Marder ME, Barton H, Pearson MA, Walker DI, **Barr DB**, Jones DP, Marcus M. *Environ Health Perspect*. 2023 Oct;131(10):107005. doi: 10.1289/EHP12657. Epub 2023 Oct 10. PMID: 37815925
42. Polybrominated biphenyls (PBBs) and prevalence of autoimmune disorders among members of the Michigan PBB registry. Hood RB, Terrell ML, Mardovich S, Somers EC, Pearson M, Barton H, Tomlinson MS, Marder ME, **Barr DB**, Marcus M. *Environ Res*. 2023 Dec 15;239(Pt 1):117312. doi: 10.1016/j.envres.2023.117312. Epub 2023 Oct 6. PMID: 37806482
43. \*Association between a Mixture of Per- and Polyfluoroalkyl Substances (PFAS) and Inflammatory Biomarkers in the Atlanta African American Maternal-Child Cohort. Tan Y, Taibl KR, Dunlop AL, **Barr DB**, Panuwet P, Yakimavets V, Kannan K, Corwin EJ, Ryan PB, Eatman JA, Liang D, Eick SM. *Environ Sci Technol*. 2023 Sep 12;57(36):13419-13428. doi: 10.1021/acs.est.3c04688. Epub 2023 Aug 30. PMID: 37649345
44. \*Phytoremediation of Lead-Contaminated Soil in the Westside of Atlanta, GA. Yao X, Saikawa E, Warner S, D'Souza PE, Ryan PB, **Barr DB**. *Geohealth*. 2023 Aug 25;7(8):e2022GH000752. doi: 10.1029/2022GH000752. eCollection 2023 Aug. PMID: 37637997
45. Human Immune Cell Epigenomic Signatures in Response to Infectious Diseases and Chemical Exposures. Wang W, Hariharan M, Bartlett A, Barragan C, Castanon R, Rothenberg V, Song H, Nery J, Aldridge A, Altshul J, Kenworthy M, Ding W, Liu H, Tian W, Zhou J, Chen H, Wei B, Gündüz IB, Norell T, Broderick TJ, McClain MT, Satterwhite LL, Burke TW, Petzold EA, Shen X, Woods CW, Fowler VG Jr, Ruffin F, Panuwet P, **Barr DB**, Beare JL, Smith AK, Spurbeck RR, Vangeti S, Ramos I, Nudelman G, Sealfon SC, Castellino F, Walley AM, Evans T, Müller F, Greenleaf WJ, Ecker JR. *bioRxiv [Preprint]*. 2023 Jun 30:2023.06.29.546792. doi: 10.1101/2023.06.29.546792. PMID: 37425926
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#### BOOK CHAPTERS

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429. **Barr DB**, Yang RY, and Needham LL. Biological monitoring of exposure throughout the lifestages. Chapter 13. In: *Environmental Health Risk Assessment, Management, and*

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431. **Barr DB**. Analytical methodology: building the capacity for accurate exposure assessment. Proceedings of the International Symposium on Uses and Effects of Pesticides in Southeast Asia: Ecological, Biomedical and Economic. In press. (INVITED)
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## EXTERNALLY FUNDED RESEARCH

### Active (from 2010 when academic employment began)

- |           |                                                                                                                                                                                                                                                                                          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2016-2021 | Multiple Principle Investigator (admin PI). 1R01ES026082-01A1. Impact of prenatal insecticide exposure on neurodevelopmental trajectories in a Thai birth cohort: building exposure science and neurodevelopmental research capacity in Thailand (NIH, \$498,545/year). PI: Barr/Fiedler |
| 2016-2021 | Co-investigator (director of biomarker core with \$800,000 annual directs). 1UM1HL134590-01. Household Air Pollution and Health: A Multi-Country LPG Intervention Trial (HAPIN Trial) (NIH, \$6,000,000/year). PI: Clasen/Peel/Checkly                                                   |
| 2016-2021 | Co-Investigator. 1R01ES025775-01A1. Collaborative Research and Action: Empowering an Exposed Community (NIH, \$625,000/year). PI: Michele Marcus                                                                                                                                         |
| 2015-2019 | Co-Investigator and Director Project 1. 1P50ES026071-01. Center for Children's Health, the Environment, the Microbiome and Metabolome. (NIH/EPA, \$805,585/year). PI: Linda McCauley/Barry Ryan                                                                                          |
| 2015-2019 | Co-Investigator and Director of Targeted Research Resource. 1U2CES026560-01. National Exposure Assessment Laboratory at Emory (NIH, \$1,200,000 total). PI: Lance Waller.                                                                                                                |
| 2015-2020 | Co-Investigator. R01ES024790-01A1. Genetic Biomarkers of Polybrominated Biphenyl (PBB) Exposure (NIH, \$495,220/year) PI: Alicia Smith/Michele Marcus                                                                                                                                    |
| 2013-2022 | Co-Investigator and Integrated health sciences and facilities core co-director. 1P30ES019776-01A1. HERCULES: Health and Exposome Research Center at Emory (NIH, \$4,050,137/year). PI: Carmen Marsit                                                                                     |
| 2018-2023 | Co-Investigator. R01ES029212; "Placental Functional Networks Linking Developmental Pesticide Exposure and Offspring Neurodevelopment". MPIs: Carmen Marsit, Michael Caudle, Ke Hao (Mt Sinai)                                                                                            |
| 2018-2019 | Primary Investigator, "Chronic Kidney Disease in Thai Farmworkers"; NIH supplement to R01ES026082 SAWASDEE Cohort Study.                                                                                                                                                                 |
| 2018-2020 | Co-Investigator/Mentor. Maternal exposure to endocrine disrupting compounds and Ano-genital Distance, NIH Diversity Supplement to R01ES026082                                                                                                                                            |

SAWASDEE Cohort Study; Melissa Smarr (PI of supplement, Barr/Fiedler MPI of study)

- 2018-2020 Primary Investigator of supplement. Comprehensive, lab-and field-based evaluation and comprehension of innovative passive air samplers: An Inter-Center study. PI: Carmen Marsit, PI of parent project.
- 2018-2023 Co-Investigator. R24ES029490; Maintenance and Enhancement of the Atlanta African American Maternal-Child Cohort. Anne Dunlop (SON) and Dean Jones (SOM) PIs.

**Completed (from 2010 when academic employment began)**

- 2016-2018 Multiple Principle Investigator. 1R21ES027990-01. Protecting neurodevelopment in Latino migrant children by reduced exposure to organophosphate insecticides.
- 2016-2018 Multiple Principal Investigator. 1R21DK105891-01. Association of persistent organic pollutants with incident diabetes in India (NIH, \$127,900)
- 2013-2018 Co-Investigator. 1R01CA179422. Market Research to predict emerging tobacco product use in diverse young adults (NIH, \$2,481,208). PI: Carla Berg
- 2014-2017 Principal Investigator. R21ES023927. Evaluation and Validation of Dried Blood Spots as a Matrix for Exposure Assessment (NIH, \$426,900).
- 2012-2014 Co-Investigator. R01ES021357. BPA and Obesity (NIH, \$2,475,965). PI: Andreas Baccarelli, Harvard University.
- 2010-2014 Multiple-Principal Investigator. 1R21ES019697-01. PBDE Body Burdens, House Dust Concentrations and Associations With Thyroid Hormones in Children Age 2-5 Years (NIEHS, \$319,719).
- 2010-2014 Principal Investigator. EP10D000737. Exposure-based Reconstruction of Dose (EPA, \$100,000).
- 2011-2013 Principle Investigator. 0000014915. Determination of pharmacokinetics of atrazine following a single dose to adult cynomolgous monkeys (Syngenta, \$282,000).
- 2012-2016 Co-Investigator. 4R00ES020346. Prenatal Sex Steroids, Bisphenol A, Phthalates, and sexually dimorphic behaviors (NIH, \$1,244,996). PI: Joe Braun, Brown University.
- 2012-2015 Co-Investigator. 5R01ES020360-04. Indoor Residential Spraying in South Africa (NIH, \$2,491,963). PI: Brenda Eskenazi, UC Berkeley.
- 2005-2011 Co-Investigator. RD-83224401. EPA. A Longitudinal Assessment Study of Human Exposure to Pesticides (EPA, \$35,000). PI: Jeremy Sarnat/Chensheng Lu.
- 2009-2011 Co-Investigator. 5R21ES015465-02. Early Pesticide Exposure and

Neurodevelopmental Outcomes in a Thai Birth Cohort (NIH, \$274, 074). PI: Barry Ryan

- 2009-2011 Co-Investigator. RC1ES018299-01. Validation and pilot testing of methods for assessing infants' dietary pesticide exposure (NIH, \$465, 245).
- 2010-2011 Primary Investigator. Seed Grant of P01 ES016731-01 Emory Neurotoxicology Center. Detection of PBDE levels in human brain tissue and their association with neurodegenerative disease (NIH Center Grant Seed Grant, \$25,000).
- 2008-2013 Co-Investigator. Formative research project under HHS2750080024C (PI: Hogue). Evaluation of dust collection techniques for the NCS. (NIH, \$34, 263).
- 2007-2012 Co-Investigator. Formative research project under HHSN267200700007C (PI:Stoll). Project 19: Evaluation of the feasibility of using saliva as a biomatrix. (NIH, \$342, 244).

## **TEACHING**

### **Courses Taught**

- EH500: Perspectives in Environmental Health. 2011-2016.
- EH500D: CMPH Perspectives in Environmental Health, 2011-2016
- EH527: Biomarkers in Environmental Public Health. 2010-present
- EH596: Research Methods and Design. 2010
- CHEM 260: Undergraduate Analytical Chemistry. 2010

### **MPH THESIS COMMITTEES, CHAIR**

- 2011 Alyson Lorenz. Evaluation of knowledge, activities and practices of pregnant women living in an agricultural region (Fang District) in Chiang Mai Province, Thailand.
- 2011 Alison Clune. Evaluation of knowledge, activities and practices in small-scale farmers in Bangladesh.
- 2011 Priya D'Souza. Concentrations of neurotoxicant insecticides in traditional and organic baby foods.
- 2011 Ami Shah. Assessing the Impact of WaterGuard and Micronutrient Sprinkles use on Diarrheal Prevalence Among Kenyan Children Aged 6 to 35 Months
- 2012 Jordan Cohen. Polybrominated flame retardants in brain tissue of decedents with neurological pathologies (e.g., Parkinson's Disease and Alzheimer's Disease).
- 2012 Priyanka Pathak. Environmental levels of pesticides near rice and chili farms in Ubon

Ratchathani, Thailand.

- 2012 Emma Virginia. Relation of brominated flame retardants in house dust with thyroid function in 3-5 year old children.
- 2012 Elizabeth George. Understanding the Pharmacokinetics of Atrazine in Cynomolgus Monkeys: Implications for Human Biomonitoring.
- 2012 Lauren Moss (CMPH). Radon exposure in Georgia.
- 2012 Dianne Alexis (CMPH). Occupational Exposures to Chemicals (Organic Solvents) in Laboratories.
- 2012 Leslie Lee (CMPH). Evaluation of biomarkers of thirdhand smoke to inform risk and policy.
- 2013 Christina Brosius. Understanding Variation in Atrazine Metabolism in a Nonhuman Primate Model.
- 2013 Grace Lee. Predicting Body Burden of Polybrominated Diphenyl Ethers in Children Aged 15 Months to 5 Years Using Household Dust and Handwipe Levels and Selected Demographic Variables.
- 2013 Fauzia Rashid. Melamine exposure in the US population.
- 2014 Emilia Matthews. Prenatal Organophosphate Pesticide Exposure and Neurodevelopmental Outcomes in a Thai Agricultural Birth Cohort. (BEST EH THESIS AWARD).
- 2014 Tamara Opila. Environmental exposures to BPA and selected phthalates, measured in human follicular fluid as a determinant for in vitro fertilization success.
- 2014 Yukiko Yano. A Metabolomics Study of Plasma Biological Changes Related to Polybrominated Biphenyl (PBB 153) Exposure in the Michigan PBB Cohort.
- 2015 Grant Walter. Endocrine Modulation & Metal Exposure: Long Term Effects on the Children of Agricultural Working Mothers in Thailand
- 2015 Jennifer Sinatra. The Impact of Meat Consumption on the Urinary Concentration of Dialkyl Phosphate Metabolites
- 2015 Jamie Schenk. Prenatal Heavy Metal Exposure and Neurodevelopmental Outcomes in a Thai Agricultural Birth Cohort
- 2015 Anna Frethiem. Using Meconium as an Alternative Matrix to Measure Cumulative Fetal Exposure to Phthalates
- 2015 Jennifer Truell. A Program Gap Analysis OF GrowNYC's Greenmarket and Youthmarket Programs on Fruit and Vegetable Access Among Residents in East Harlem, Central Harlem, Central Brooklyn, North Brooklyn and the South Bronx
- 2015 Shiwei Gao. Assessing the Health Effects of Air Pollution on High School Athletes

- 2016 Opal Patel. Association Between Food Outlet Density and Overweight/Obesity Among Adults in Delhi, India.
- 2016 Zelalem Adefris. Evaluation of Prenatal Pyrethroid Insecticide Exposure, Fetal Growth, and Neurodevelopmental Outcomes in a Thai Agricultural Birth Pilot Cohort.
- 2016 Eric Czernizer. Relationship between Pesticide Knowledge, Attitudes, and Practice (KAP) and Prenatal Organophosphate Exposure in a Pilot Thai Agricultural Birth Cohort
- 2016 Amanda Elizondo. Dried Blood Spots as a Matrix for Biomonitoring of Polyhalogenated Biphenyls
- 2016 Anthony Murphy. Validation and Characterization of Dried Blood Spots as an Exposure Matrix for Measuring Persistent Organic Pollutants.
- 2016 Jason Wilkens. Blood Metal Concentrations and Timing of Pubertal Onset in a Longitudinal Cohort of Girls, Northern California, 2006-2011.
- 2016 Maureen Hitshfeld. Arsenic exposure determinants on toddlers in Arica, Chile.
- 2017 Catherine Evans. Investigations of the Effect of HIV Status on Lead in the Body.
- 2017 Jiabei He. The Association of Urinary Phthalate Concentrations with Asthma-Related Outcomes among Adults: NHANES 2003-2012.
- 2017 Remy Landon. Urban Greenness and Birth Outcomes in Atlanta, Georgia.
- 2017 Gursharan Claire. Feminine hygiene products: A potential source of phthalate exposure among pregnant African American women in Atlanta, GA
- 2018 Dahnide Williams. Knowledge, Attitude and Practice (KAP) of Hypertension among African Americans in the Southeastern part of the United States known as the "Stroke Buckle"
- 2018 Rouyi Tang. Evaluation of predictors of severity of depression among U.S. population during 2013-2014
- 2018 Yitong Guo. Predictors of serum concentrations of Polybrominated Diphenyl Ethers (PBDEs) among pregnant African-American women in an urban environment: the CHERUB project
- 2019 Anisha Verma. Urinary BPA levels in pregnant African American women in Atlanta.
2019. Michael Essien. Associations between urinary phthalate metabolites and diabetes in the general US adult population.
2019. Pornpimol Kodsup. Factors Contributing to Children's Lead, Cadmium, and Arsenic Exposures using Human Biomonitoring, Environmental Parameter and Qualitative Data Analysis in Southern Thailand.
2020. Tassia Drame. Relation of bisphenol A exposure to birth outcomes in an Atlanta African American birth cohort.
2020. Theresa Williams. Relation of phthalate exposure to cardiometabolic disease in an Atlanta African American birth cohort.

2020. Victoria Davidson. Relation of tobacco and marijuana biomarkers to cardiometabolic disease in an Atlanta African American birth cohort.

2020. Aaron Blakney. Relation of cadmium exposure to blood pressure in the National Health and Nutrition Examination Survey (2010-2016).

#### **MPH THESIS COMMITTEE, MEMBER**

2013 Jennifer Isenberg. The association between residential crowding and asthma in children in the NHANES 2005-2006 dataset.

2017 Ashley Horne. Prenatal Organochlorine Exposure and Neurobehavioral Performance in a Thai Agricultural Birth Cohort

#### **MPH CAPSTONE ADVISOR**

2014 Theresa Zatirka. Identifying Knowledge Gaps and Development of Educational Intervention Materials for Female Agricultural Workers Exposed to Pesticides in Thailand

2014 Meghan Fitzpatrick. Risk Assessment for the Use of Patient Isolation Units in a High Containment Hospital Suite

2014 Tracey Fountain. Program development, implementation and quality control for use of alkaline hydrolysis tissue digestion for pathological waste

2019 Evelyn Tejeda. HVAC Condensate Disposal Design and Associated Contaminants.

#### **EHS PhD DISSERTATION COMMITTEE, CHAIR**

2016 Elizabeth Marder. Chemistry to Community: Development and Implementation of a GC-MS/MS Method for Exposure Assessment and Evaluation of Community-Engaged Research in the Michigan PBB Research Registry

2020 Brittney Baumert. Environmental exposures to pesticides and birth outcome in a Thai farmworker birth cohort.

2021 Rong Chang. Exposures to organophosphate flame retardants and birth outcomes in an Atlanta area African American birth cohort.

#### **EHS PhD DISSERTATION COMMITTEE, MEMBER**

2016 Laura Zambrano. Predictors of diarrhea and respiratory disease and use of serological markers to assess the health impact of a household filtration intervention among young children in Western Province, Rwanda

2016 Melanie Jacobson. Brominated flame retardants and endocrine disruption: the thyroid as a target organ.

2018 Kostya Kartavenka. Development of Liquid Chromatographic Methods for Quantification of Malondialdehyde, 8-Oxo-2'-deoxyguanosine, and Hydroxylated Metabolites of Polycyclic Aromatic Hydrocarbons in Urine.

2018 Naser Titu. Drinking Water Salinity: Mineral Intake and Cardiovascular Health.

## UNIVERSITY SERVICE

### Department of Environmental Health

2010-present Faculty Search

Committee

2011-present EHS PhD Curriculum Committee

2014-present EHS PhD Qualifying Exam  
Committee

2019-2020 GDEH Chair Search Committee

### Rollins School of Public Health

2013-present Student Honor and Conduct Code Standing Council

2011-2018 Research Advisory Committee, co-chair

2011-2018 Faculty Senate, ex officio

2011-2015 Career Services Advisory Committee

2010-2012 Reaccreditation Steering Committee, 2010-2012

### University-Wide

2011-present Conflict of Interest Committee, 2011-present

2010-present Green Laboratory Committee, 2010-present

2010-2013 Sustainable Food Committee, 2010-2013

## PROFESSIONAL SERVICE

### Editorships/Editorial Boards

2005-2010 Editor-in-Chief, *Journal of Exposure Science and Environmental Epidemiology*

2011-present Editor-in-Chief Emeritus, *Journal of Exposure Science and Environmental Epidemiology*

2010-present Editorial Board, *Journal of Health Research*, Chulalongkorn University, Thailand

2011-present Associate Editor, *Environmental Health Perspectives*

2014-2015 Associate Editor, *Environmental Research*

2013-2017 Associate Editor, *Advances in Medicine*

2012-2017 Editorial Board, *Journal of Chromatographic Separation Techniques*

### Journal Reviewer

*New England Journal of Medicine*

*Lancet*

*Nature*

*Pediatrics*

*Environmental Health Perspectives*

*Journal of Exposure Science and Environmental Epidemiology*

*Epidemiology*

*Environmental Research*

*Environment International*  
*Journal of Analytical Toxicology*  
*Toxicology*  
*Journal of Agriculture and Food Chemistry*  
*Bulletin of Agriculture and Food Chemistry*  
*Critical Reviews in Toxicology*  
*Talanta*  
*Journal of Chromatography B*  
*Science of the Total Environment*  
*Chemosphere*  
*Human Environmental Risk Assessment*  
*Environmental Science and Technology*  
*International Journal of Hygiene and Environmental Health*  
*Journal of Toxicology and Environmental Health*  
*Journal of Occupational and Environmental Medicine*  
*Analytical Chemistry*

#### Professional Organizations/Societies

2011-2012 President, International Society of Exposure Science  
 2003-2006 Treasurer, International Society of Exposure Science  
 2000-present Member, International Society of Exposure Science  
 2008-2009 President, Southern Section of the Association for Official Analytical Chemists  
 2005-present Member, Executive Committee of the Southern Section of the Association for Official Analytical Chemists  
 2000-present Member, International Society of Environmental Epidemiology  
 2009-present Member, Society of Toxicology  
 1995-2009 Member, American Society of Mass Spectrometrists  
 1987-present Member, American Chemical Society

#### Study Sections and Scientific Advisory Panels

2016-2020 NIH, NAME Study section  
 2017 Chair, NIOSH Review Panel for Exposure Assessment Program  
 2014-2018 EPA, Scientific Advisory Panel for Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)  
 2011-2015 NIOSH Study Section, permanent member  
 2013 EPA, Member, Evaluation Panel for Exposure Science in the 21<sup>st</sup> Century  
 2010-present NIH, Ad Hoc Member, 6 study section panels  
 2006-2013 EPA, Scientific Advisory Panel for Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)  
 2008 Member of Scientific Advisory Panel for the Farm Family Study conducted by the University of Minnesota (funded by a consortium of agrosience corporations).  
 This study is evaluating pesticide exposure among farmers, farmer applicators, and their families when using real-world pesticide application practices. Serve as biological monitoring expert on the panel.  
 2007 Member of Scientific Advisory Panel for the Middleport, New York Biomonitoring Study conducted by Exponent Research (supported by FMC Corporation). This study is evaluating the extent of community contamination from arsenical pesticides leaching into the river and groundwater from a pesticide manufacturing facility. Have advised Exponent on many aspects of the study

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|------|-------------------------------------------------------------------------------------------------------|
|      | including sampling strategy, letters to participants, etc.                                            |
| 2004 | Peer reviewer for U.S. EPA's Science to Achieve Results (STAR) grant applications                     |
| 2004 | Peer reviewer for U.S. EPA National Exposure Research Laboratory's Human Exposure Assessment Program. |

#### Other Scientific Service- International

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2013            | Netherlands, reviewer of scientific proposal                                                                                                                                                                                                                                                                                                                                                                              |
| 2010-present    | Adjunct Professor, Chiang Mai University                                                                                                                                                                                                                                                                                                                                                                                  |
| 2011-present    | Israeli Environmental Health Fund, reviewer of scientific proposals                                                                                                                                                                                                                                                                                                                                                       |
| 2011            | Health Canada, reviewer of scientific research proposals                                                                                                                                                                                                                                                                                                                                                                  |
| 2005, 2008-2011 | ISES Technical Organizing Committee                                                                                                                                                                                                                                                                                                                                                                                       |
| 2004            | Steering Team Member for the International Biomarker Conference, Research Triangle Park, NC, September 21-22, 2004.                                                                                                                                                                                                                                                                                                       |
| 2004-2010       | Steering Team Member for the ILSI/HESI Integration of Biomonitoring Data into Risk Assessment Technical Workgroup, 2004-present.                                                                                                                                                                                                                                                                                          |
| 2004-2010       | Member of the ILSI/HESI Integration of Biomonitoring Data into Risk Assessment Technical Workgroup                                                                                                                                                                                                                                                                                                                        |
| 2004            | Consultant for research funding for the Medical Research Council of South Africa (equivalent to NIH in the US). Served on the selection panel for government funding of a major research study.                                                                                                                                                                                                                           |
| 2004-2010       | Advisory committee for the Children's Pesticide Exposure Study, Chiang Mai, Thailand. Designed a simple cross-sectional study that showed that school children had measurable exposures to pesticides, but far less than their farmer parents.                                                                                                                                                                            |
| 2004-2008       | Participant of US – Thailand Technology Exchange program. Trained Thai student to perform biomonitoring. He has since implemented similar methodology in their lab in Thailand.                                                                                                                                                                                                                                           |
| 2004            | Participant of US – Africa Technology Exchange program. Trained 2 scientists (1 South African, 1 Tanzanian) to conduct biomonitoring analyses. They have build similar monitoring capacity in Africa.                                                                                                                                                                                                                     |
| 2002-present    | Consultant to the German Research Foundation for pesticide biological monitoring, 2002-ongoing. Serve as an ad hoc member of the Hazardous Substances in the Environment Subcommittee for designating official methods for measuring environmental and occupational exposures.<br>Asked to join committee on an ongoing basis because of expertise in biological monitoring and insightful comments in previous meetings. |
| 2004            | Chair of session on Persistent Organic Pollutants, 14th Annual ISEA conference, Philadelphia, PA, October 17-21, 2004.                                                                                                                                                                                                                                                                                                    |
| 2003            | Chair of session on Pesticide Exposure and Health Effects, 13th Annual ISEA Conference, Stresa, Italy, September 21-25, 2003.                                                                                                                                                                                                                                                                                             |
| 2001-2002       | Served as mentor to guest researcher from Hoshi University in Tokyo, Japan, working on human exposure to phthalates, 2001-2002.<br>Researcher subsequently obtained her Ph.D., largely because of the skills she acquired at CDC, and has returned to CDC as a research fellow.                                                                                                                                           |

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|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2001 | Chair of session on Nontraditional Matrices, 11th Annual ISEA Conference, Charleston, SC, November 4-8, 2001                                                                                                                                                                                                                                                                                                            |
| 1999 | Consulted with the University of Lancaster, Lancaster, UK on the measurement of pesticides in humans, 1999. This consultation provided new insight into dealing with nonpersistent chemicals for a lab used to measuring only persistent chemicals.                                                                                                                                                                     |
| 1997 | Consulted with the Slovakian Ministry of Health on appropriate methodology for biological monitoring of human pesticide exposure in Bratislava, Slovakia, 1997.                                                                                                                                                                                                                                                         |
| 1997 | Consulted with the Kyoto Institute of Technology, Kyoto, Japan on research projects to measure human exposure to pesticides, 1997.                                                                                                                                                                                                                                                                                      |
| 1997 | Consulted with the Himeji Institute of Technology, Himeji, Japan on research projects to measure human exposure to pesticides, 1997.                                                                                                                                                                                                                                                                                    |
| 1996 | Consulted and collaborated with the World Health Organization, Pan American Health Organization, US Food and Drug Administration and the Haitian Ministry of Health in the outbreak of renal failure due to diethylene glycol poisoning, 1996. Consultation with a private laboratory hired by the pharmaceutical plan allowed them to obtain a DEG result in acetaminophen preparations similar to those found at CDC. |
| 1996 | Consulted with Russian national and regional health officials on pesticide analysis including matrix choice, pesticide selection, and appropriate methodology, 1996. Funded by the US EPA and Russian Ministry of Health.                                                                                                                                                                                               |

#### Other Scientific Service- Domestic

|           |                                                                                                                                                                                                                                                                                                             |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2014-2015 | Member, Panel for development of NIEHS workshop on Exposomics                                                                                                                                                                                                                                               |
| 2006-2010 | Member of Steering Committee for the NIH/NICHD Longitudinal Investigation of Fertility and the Environment (LIFE Study). Develop protocols, questionnaires, OMB materials for full study. Serve as CDC's liaison for this multi-branch large-scale prospective cohort study.                                |
| 2006      | Invited moderator of the National Academies of Science's Institute of Medicine Roundtable on Environmental Health Sciences Research and Medicine, Washington, DC 2006.                                                                                                                                      |
| 2005-2007 | Member of Chemical Exposures workgroup of the multi-agency National Children's Study. Along with other workgroup members, drafted a 200 page guidance paper on exposure assessment for the study advisory committee. Individual sections of the paper are slated for publication in peer-reviewed journals. |
| 2005      | Center for the Evaluation of Risks to Human Reproduction's Expert Panel on 2-Diethylhexyl-phthalate                                                                                                                                                                                                         |
| 2005-2009 | Adjunct Associate Professor, Emory University, Rollins School of Public Health, Environmental and Occupational Health                                                                                                                                                                                       |
| 2005      | Steering Committee for CAST workshop on Dietary Exposures, 2005.                                                                                                                                                                                                                                            |
| 2004      | Steering Committee, EPA Toxicology Workshop, 2004-present.                                                                                                                                                                                                                                                  |
| 2004      | Member of Subcommittee on Exposure Biomarkers for the NIEHS/NCI Breast Cancer and Environment Centers. Serve as the biomarker expert for the breast cancer centers.                                                                                                                                         |
| 2004      | Co-organizer of Farmworker Exposure Comparable Data Conference, September 30-October 1, Winston-Salem, NC.                                                                                                                                                                                                  |

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|-----------|------------------------------------------------------------------------------------------------------------------------------|
| 2004      | Leader, Biomonitoring subcommittee of the Farmworker Exposure Comparable Data Conference, September 30-October 1, 2004.      |
| 2001-2010 | Co-director of laboratory core for Cincinnati's Children's Environmental Health Center, Children's Hospital, Cincinnati, OH. |
| 2002      | Chair of breakout session on measurements, Meeting of NIEHS/EPA Centers for Children's Health Excellence.                    |
| 1992-1994 | Volunteer science mentor with the Women in Science and Engineering (WISE) program for elementary school children (1992-1994) |
| 1992      | National Science Foundation's volunteer scientist for the "Science-by-Mail" program elementary school children               |