# 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

Masters of Public Health, Applied Epidemiology (in progress)

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

2010-present Professor

Department of Environmental Health Rollins School of Public Health Emory University

Atlanta, GA

1997-2009 Chief, Pesticide Laboratory

Acting Chief, Personal Care Products Laboratory

Title 42 Distinguished Consultant (above GS scale 15) Supervisory Research Chemist

Division of Laboratory Science

National Center for Environmental Health 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

* 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.
* AXΩ’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: 342 peer-reviewed journal articles; 14 book chapters; 57 published abstracts
* Current book contract with Wiley and Sons titled *Biomonitoring of Exposure to Environmental Chemicals* scheduled for publication in early 2021
* 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)
* H-index=98 (median for National Academy of Science inductees=57; minimum=45)
* i10 index = 316
* Total Citations = 32806
* Most highly cited article = Google Scholar states cited in 1346 publications (Barr et al., EHP, 2005).
* Average citations per year (last 4 years) = 2424 (range 2326-2527)

PEER-REVIEWED JOURNAL ARTICLES

1. Genome-wide DNA methylation differences and polychlorinated biphenyl (PCB) exposure in a US population. Curtis SW, Cobb DO, Kilaru V, Terrell ML, Marder ME, **Barr DB**, Marsit CJ, Marcus M, Conneely KN, Smith AK. Epigenetics. 2020 Jul 22:1-15. doi: 10.1080/15592294.2020.1795605. Online ahead of print. PMID: 32660331
2. Prenatal maternal organophosphorus pesticide exposures, paraoxonase 1, and childhood adiposity in the Mount Sinai Children's Environmental Health Study. Etzel TM, Engel SM, Quirós-Alcalá L, Chen J, **Barr DB**, Wolff MS, Buckley JP. Environ Int. 2020 Sep;142:105858. doi: 10.1016/j.envint.2020.105858. Epub 2020 Jun 26. PMID: 32599353
3. Letter to the Editors-in-Chief regarding Velmurugan et al.,-Association of co-accumulation of arsenic and organophosphate insecticides with diabetes and atherosclerosis in a rural agricultural community: KMCH-NNCD-I study. **Barr DB**, Jaacks LM. Acta Diabetol. 2020 Jun 6. doi: 10.1007/s00592-020-01543-3. Online ahead of print. PMID: 32506197
4. Sex-specific DNA methylation differences in people exposed to polybrominated biphenyl. Curtis SW, Gerkowicz SA, Cobb DO, Kilaru V, Terrell ML, Marder ME, **Barr DB**, Marsit CJ, Marcus M, Conneely KN, Smith AK. Epigenomics. 2020 ay;12(9):757-770. doi: 10.2217/epi-2019-0179. Epub 2020 Jun 4. PMID: 32496131
5. Prediagnostic serum concentrations of organochlorine pesticides and non-Hodgkin lymphoma: A nested case-control study in the Norwegian Janus Serum Bank Cohort.

Chen D, Grimsrud TK, Langseth H, **Barr DB**, Bassig BA, Blair A, Cantor KP, Gammon MD, Lan Q, Rothman N, Engel LS. Environ Res. 2020 Aug;187:109515. doi: 10.1016/j.envres.2020.109515. Epub 2020 Apr 29. PMID: 32445944

1. Design and Rationale of the HAPIN Study: A Multicountry Randomized Controlled Trial to Assess the Effect of Liquefied Petroleum Gas Stove and Continuous Fuel Distribution. Clasen T, Checkley W, Peel JL, Balakrishnan K, McCracken JP, Rosa G, Thompson LM, **Barr DB**, Clark ML, Johnson MA, Waller LA, Jaacks LM, Steenland K, Miranda JJ, Chang HH, Kim DY, McCollum ED, Davila-Roman VG, Papageorghiou A, Rosenthal JP; HAPIN Investigators. Environ Health Perspect. 2020 Apr;128(4):47008. doi: 10.1289/EHP6407. Epub 2020 Apr 29. PMID: 32347766 Free PMC article.
2. Design and Rationale of the Biomarker Center of the Household Air Pollution Intervention Network (HAPIN) Trial. **Barr DB**, Puttaswamy N, Jaacks LM, Steenland K, Rajkumar S, Gupton S, Ryan PB, Balakrishnan K, Peel JL, Checkley W, Clasen T, Clark ML; HAPIN Investigative Team. Environ Health Perspect. 2020 Apr;128(4):47010. doi: 10.1289/EHP5751. Epub 2020 Apr 29. PMID: 32347765 Free PMC article.
3. Neblett MF 2nd, Curtis SW, Gerkowicz SA, Spencer JB, Terrell ML, Jiang VS,

Marder ME, **Barr DB**, Marcus M, Smith AK. Examining Reproductive Health Outcomes in Females Exposed to Polychlorinated Biphenyl and Polybrominated Biphenyl. Sci Rep. 2020 Feb 24;10(1):3314. doi: 10.1038/s41598-020-60234-9. PMID: 32094419; PMCID: PMC7039953.

1. Chang CJ, Terrell ML, Marcus M, Marder ME, Panuwet P, Ryan PB, Pearson M, Barton H, **Barr DB**. Serum concentrations of polybrominated biphenyls (PBBs), polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) in the Michigan PBB Registry 40 years after the PBB contamination incident. Environ Int. 2020 pr;137:105526. doi: 10.1016/j.envint.2020.105526. Epub 2020 Feb 18.PMID: 32062441.
2. Kartavenka K, Panuwet P, Yakimavets V, Chaikang C, Tipubon K, D'Souza PE, **Barr DB**, Ryan PB. LC-MS quantification of malondialdehyde-dansylhydrazine derivatives in urine and serum samples. J Anal Toxicol. 2020 Jan 2:bkz112. doi:10.1093/jat/bkz112. Epub ahead of print. PMID: 31897465.
3. Jaacks LM, Yadav S, Panuwet P, Kumar S, Rajacharya GH, Johnson C, Rawal I, Mohan D, Mohan V, Tandon N, **Barr DB**, Narayan KMV, Prabhakaran D. Metabolite of the pesticide DDT and incident type 2 diabetes in urban India. Environ Int. 2019 Dec;133(Pt A):105089. doi: 10.1016/j.envint.2019.105089. Epub 2019 Oct 22. PMID:31654984; PMCID: PMC6860016.
4. Barkoski JM, Busgang SA, Bixby M, Bennett D, Schmidt RJ, **Barr DB**, Panuwet P, Gennings C, Hertz-Picciotto I. Prenatal phenol and paraben exposures in relation to child neurodevelopment including autism spectrum disorders in the MARBLES study. Environ Res. 2019 Dec;179(Pt A):108719. doi:10.1016/j.envres.2019.108719. Epub 2019 Sep 4. PMID: 31627027; PMCID: PMC6948181.
5. Curtis SW, Terrell ML, Jacobson MH, Cobb DO, Jiang VS, Neblett MF, Gerkowicz SA, Spencer JB, Marder ME, **Barr DB**, Conneely KN, Smith AK, Marcus M. Thyroid hormone levels associate with exposure to polychlorinated biphenyls and polybrominated biphenyls in adults exposed as children. Environ Health. 2019 Aug23;18(1):75. doi: 10.1186/s12940-019-0509-z. PMID: 31443693; PMCID: PMC6708149.
6. Liao J, McCracken JP, Piedrahita R, Thompson L, Mollinedo E, Canuz E, De Léon O, Díaz-Artiga A, Johnson M, Clark M, Pillarisetti A, Kearns K, Naeher L, Steenland K, Checkley W, Peel J, Clasen TF; **HAPIN investigators**. The use of bluetooth low energy Beacon systems to estimate indirect personal exposure to household air pollution. J Expo Sci Environ Epidemiol. 2019 Sep 26. doi:10.1038/s41370-019-0172-z. Epub ahead of print. Erratum in: J Expo Sci Environ Epidemiol. 2020 Feb 27;: PMID: 31558836.
7. Curtis SW, Cobb DO, Kilaru V, Terrell ML, Marder ME, **Barr DB**, Marsit CJ, Marcus M, Conneely KN, Smith AK. Environmental exposure to polybrominated biphenyl (PBB) associates with an increased rate of biological aging. Aging (Albany NY). 2019 Aug 2;11(15):5498-5517. doi: 10.18632/aging.102134. Epub 2019 Aug 2. PMID: 31375641; PMCID: PMC6710070.
8. Figueroa ZI, Young HA, Mumford SL, Meeker JD, **Barr DB**, Gray GM, Perry MJ. Pesticide interactions and risks of sperm chromosomal abnormalities. Int J Hyg Environ Health. 2019 Aug;222(7):1021-1029. doi: 10.1016/j.ijheh.2019.07.001. Epub 2019 Jul 13. PMID: 31311690.
9. Curtis SW, Cobb DO, Kilaru V, Terrell ML, Marder ME, **Barr DB**, Marsit CJ, Marcus M, Conneely KN, Smith AK. Exposure to polybrominated biphenyl and stochastic epigenetic mutations: application of a novel epigenetic approach to environmental exposure in the Michigan polybrominated biphenyl registry. Epigenetics. 2019 Oct;14(10):1003-1018. doi: 10.1080/15592294.2019.1629232. Epub 2019 Jun 14. PMID: 31200609; PMCID: PMC6691996.
10. Walker DI, Marder ME, Yano Y, Terrell M, Liang Y, **Barr DB**, Miller GW, Jones DP, Marcus M, Pennell KD. Multigenerational metabolic profiling in the Michigan PBB registry. Environ Res. 2019 May;172:182-193. doi: 10.1016/j.envres.2019.02.018. Epub 2019 Feb 13. PubMed PMID: 30782538; PubMed Central PMCID: PMC6534816.
11. Bassig BA, Engel LS, Langseth H, Grimsrud TK, Cantor KP, Vermeulen R, Purdue MP, **Barr DB**, Wong JYY, Blair A, Rothman N, Lan Q. Pre-diagnostic serum concentrations of organochlorines and risk of acute myeloid leukemia: A nested case-control study in the Norwegian Janus Serum Bank Cohort. Environ Int. 2019 Apr;125:229-235. doi: 10.1016/j.envint.2019.01.066. Epub 2019 Feb 2. PubMed PMID: 30721827.
12. Curtis SW, Cobb DO, Kilaru V, Terrell ML, Kennedy EM, Marder ME, **Barr DB**, Marsit CJ, Marcus M, Conneely KN, Smith AK. Exposure to polybrominated biphenyl (PBB) associates with genome-wide DNA methylation differences in peripheral blood. Epigenetics. 2019 Jan;14(1):52-66. doi: 10.1080/15592294.2019.1565590. Epub 2019 Jan 24. PubMed PMID: 30676242; PubMed Central PMCID: PMC6380401.
13. Kartavenka K, Panuwet P, Greenwald R, Ehret KM, D'Souza PE, **Barr DB**, Ryan PB. Quantification of malondialdehyde in exhaled breath condensate using pseudo two-dimensional ultra-performance liquid chromatography coupled with single quadrupole mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2019 Jan 15;1105:210-216. doi: 10.1016/j.jchromb.2018.12.009. Epub 2018 Dec 13. PubMed PMID: 30611078; PubMed Central PMCID: PMC6358417.
14. Choi G, Wang YB, Sundaram R, Chen Z, **Barr DB**, Buck Louis GM, Smarr MM. Polybrominated diphenyl ethers and incident pregnancy loss: The LIFE Study. Environ Res. 2019 Jan;168:375-381. doi: 10.1016/j.envres.2018.09.018. Epub 2018 Sep 18. PubMed PMID: 30384231; PubMed Central PMCID: PMC6294303.
15. Barkoski J, Bennett D, Tancredi D, **Barr DB**, Elms W, Hertz-Picciotto I. Variability of urinary pesticide metabolite concentrations during pregnancy in the MARBLES Study. Environ Res. 2018 Aug;165:400-409. doi: 10.1016/j.envres.2018.05.002. Epub 2018 Jun 1. PubMed PMID: 29860212.
16. Steenland K, Kugathasan S, **Barr DB**. PFOA and ulcerative colitis. Environ Res. 2018 Aug;165:317-321. doi: 10.1016/j.envres.2018.05.007. Epub 2018 May 16. PubMed PMID: 29777922; PubMed Central PMCID: PMC6358414.
17. Hartle JC, Cohen RS, Sakamoto P, **Barr DB**, Carmichael SL. Chemical Contaminants in Raw and Pasteurized Human Milk. J Hum Lact. 2018 May;34(2):340-349. doi: 10.1177/0890334418759308. Epub 2018 Mar 30. PubMed PMID: 29601252; PubMed Central PMCID: PMC6422529.
18. Philippat C, Barkoski J, Tancredi DJ, Elms B, **Barr DB**, Ozonoff S, Bennett DH, Hertz-Picciotto I. Prenatal exposure to organophosphate pesticides and risk of autism spectrum disorders and other non-typical development at 3 years in a high-risk cohort. Int J Hyg Environ Health. 2018 Feb 15. pii: S1438-4639(18)30055-5. doi: 10.1016/j.ijheh.2018.02.004. [Epub ahead of print] PubMed PMID: 29478806.
19. Radford SA, Panuwet P, Hunter RE Jr, **Barr DB**, Ryan PB. Degradation of Organophosphorus and Pyrethroid Insecticides in Beverages: Implications for Risk Assessment. Toxics. 2018 Feb 2;6(1). pii: E11. doi: 10.3390/toxics6010011. PubMed PMID: 29393904.
20. Morgan MK, Nash M, **Barr DB**, Starr JM, Scott Clifton M, Sobus JR. Distribution, variability, and predictors of urinary bisphenol A levels in 50 North Carolina adults over a six-week monitoring period. Environ Int. 2017 Dec 18;112:85-99. doi: 10.1016/j.envint.2017.12.014. [Epub ahead of print] PubMed PMID: 29268160.
21. Bae J, Kim S, **Barr DB**, Buck Louis GM. Maternal and paternal serum concentrations of persistent organic pollutants and the secondary sex ratio: A population-based preconception cohort study. Environ Res. 2018 Feb;161:9-16. doi: 10.1016/j.envres.2017.10.047. Epub 2017 Oct 31. PubMed PMID: 29096317; PubMed Central PMCID: PMC5747985.
22. Kim S, Nussbaum MA, Laurienti PJ, Chen H, Quandt SA, **Barr DB**, Arcury TA. Exploring Associations Between Postural Balance and Levels of Urinary Organophosphorus Pesticide Metabolites. J Occup Environ Med. 2018 Feb;60(2):174-179. doi: 10.1097/JOM.0000000000001194. PubMed PMID: 29023345.
23. Arcury TA, Laurienti PJ, Talton JW, Chen H, Howard TD, **Barr DB**, Mora DC, Quandt SA. Pesticide Urinary Metabolites Among Latina Farmworkers and Nonfarmworkers in North Carolina. J Occup Environ Med. 2018 Jan;60(1):e63-e71. doi:10.1097/JOM.0000000000001189. PubMed PMID: 29023343; PubMed Central PMCID: PMC5758422.
24. Jacobson MH, Darrow LA, **Barr DB**, Howards PP, Lyles RH, Terrell ML, Smith AK, Conneely KN, Marder ME, Marcus M. Serum Polybrominated Biphenyls (PBBs) and Polychlorinated Biphenyls (PCBs) and Thyroid Function among Michigan Adults

Several Decades after the 1973-1974 PBB Contamination of Livestock Feed. Environ

Health Perspect. 2017 Sep 26;125(9):097020. doi: 10.1289/EHP1302. PubMed PMID: 28953452.

1. Panuwet P, Ladva C, **Barr DB**, Prapamontol T, Meeker JD, D'Souza PE, Maldonado H, Ryan PB, Robson MG. Investigation of associations between exposures to pesticides and testosterone levels in Thai farmers. Arch Environ Occup Health.

2017 Sep 13:1-14. doi: 10.1080/19338244.2017.1378606. [Epub ahead of print] PubMed PMID: 28901838.

1. Furlong MA, **Barr DB**, Wolff MS, Engel SM. Prenatal exposure to pyrethroid pesticides and childhood behavior and executive functioning. Neurotoxicology. 2017 Sep;62:231-238. doi: 10.1016/j.neuro.2017.08.005. Epub 2017 Aug 12. PubMed

PMID: 28811173; PubMed Central PMCID: PMC5623638.

1. Liu L, Wang H, Tian M, Zhang J, Panuwet P, D'Souza PE, **Barr DB**, Huang Q, Xia Y, Shen H. Phthalate metabolites related to infertile biomarkers and infertility in Chinese men. Environ Pollut. 2017 Dec;231(Pt 1):291-300. doi: 10.1016/j.envpol.2017.08.018. Epub 2017 Sep 25. PubMed PMID: 28810198.
2. Furlong MA, Herring A, Buckley JP, Goldman BD, Daniels JL, Engel LS, Wolff MS, Chen J, Wetmur J, **Barr DB**, Engel SM. Prenatal exposure to organophosphorus pesticides and childhood neurodevelopmental phenotypes. Environ Res. 2017 Oct;158:737-747. doi: 10.1016/j.envres.2017.07.023. Epub 2017 Jul 22. PubMed PMID: 28743040; PubMed Central PMCID: PMC5577985.
3. Gaspar FW, Chevrier J, Quirós-Alcalá L, Lipsitt JM, **Barr DB**, Holland N, Bornman R, Eskenazi B. Levels and Determinants of DDT and DDE Exposure in the VHEMBE Cohort. Environ Health Perspect. 2017 Jul 7;125(7):077006. doi: 10.1289/EHP353. PubMed PMID: 28696207; PubMed Central PMCID: PMC5744723.
4. Millenson ME, Braun JM, Calafat AM, **Barr DB**, Huang YT, Chen A, Lanphear BP, Yolton K. Urinary organophosphate insecticide metabolite concentrations during pregnancy and children's interpersonal, communication, repetitive, and stereotypic behaviors at 8 years of age: The home study. Environ Res. 2017Aug;157:9-16. doi: 10.1016/j.envres.2017.05.008. Epub 2017 May 11. PubMed PMID: 28501654; PubMed Central PMCID: PMC5506847.
5. Comstra HS, McArthy J, Rudin-Rush S, Hartwig C, Gokhale A, Zlatic SA,Blackburn JB, Werner E, Petris M, D'Souza P, Panuwet P, **Barr DB**, Lupashin V,Vrailas-Mortimer A, Faundez V. The interactome of the copper transporter ATP7A belongs to a network of neurodevelopmental and neurodegeneration factors. Elife. 2017 Mar 29;6. pii: e24722. doi: 10.7554/eLife.24722. PubMed PMID: 28355134; PubMed Central PMCID: PMC5400511.
6. Wolff MS, Buckley JP, Engel SM, McConnell RS, **Barr DB**. Emerging exposures of developmental toxicants. Curr Opin Pediatr. 2017 Apr;29(2):218-224. doi:

10.1097/MOP.0000000000000455. PubMed PMID: 28059904.

1. Darrow LA, Jacobson MH, Preston EV, Lee GE, Panuwet P, Hunter RE Jr, Marder ME, Marcus M, **Barr DB**. Predictors of Serum Polybrominated Diphenyl Ether (PBDE) Concentrations among Children Aged 1-5 Years. Environ Sci Technol. 2017 Jan 3;51(1):645-654. doi: 10.1021/acs.est.6b04696. Epub 2016 Dec 21. PubMed PMID:28000443.
2. Arcury TA, Laurienti PJ, Chen H, Howard TD, **Barr DB**, Mora DC, Summers P, Quandt SA. Organophosphate Pesticide Urinary Metabolites Among Latino Immigrants: North Carolina Farmworkers and Non-farmworkers Compared. J Occup Environ Med. 2016 Nov;58(11):1079-1086. PubMed PMID: 27820757; PubMed Central PMCID: PMC5113293.
3. Lum KJ, Sundaram R, **Barr DB**, Louis TA, Buck Louis GM. Perfluoroalkyl Chemicals, Menstrual Cycle Length, and Fecundity: Findings from a Prospective Pregnancy Study. Epidemiology. 2017 Jan;28(1):90-98. PubMed PMID: 27541842; PubMed Central PMCID: PMC5131715.
4. Wainstock T, Pearce B, **Barr DB**, Marder ME, Terrell M, Marcus M. Exposure to

PBB-153 and Digit Ratio. Early Hum Dev. 2016 Dec;103:33-35. doi:

10.1016/j.earlhumdev.2016.07.004. Epub 2016 Jul 27. PubMed PMID: 27474862.

1. Bornman MS, Chevrier J, Rauch S, Crause M, Obida M, Sathyanarayana S, **Barr DB**, Eskenazi B. Dichlorodiphenyltrichloroethane exposure and anogenital distance in the Venda Health Examination of Mothers, Babies and their Environment (VHEMBE) birth cohort study, South Africa. Andrology. 2016 Jul;4(4):608-15. doi:

10.1111/andr.12235. PubMed PMID: 27457477.

1. Marder ME, Panuwet P, Hunter RE, Ryan PB, Marcus M, **Barr DB**. Quantification of Polybrominated and Polychlorinated Biphenyls in Human Matrices by Isotope-Dilution Gas Chromatography-Tandem Mass Spectrometry. J Anal Toxicol. 2016 Sep;40(7):511-8. doi: 10.1093/jat/bkw041. Epub 2016 Jul 21. PubMed PMID: 27445313; PubMed Central PMCID: PMC4986627.
2. Chandler JD, Wongtrakool C, Banton SA, Li S, Orr ML, **Barr DB**, Neujahr DC, Sutliff RL, Go YM, Jones DP. Low-dose oral cadmium increases airway reactivity and lung neuronal gene expression in mice. Physiol Rep. 2016 Jul;4(13). pii: e12821. doi: 10.14814/phy2.12821. PubMed PMID: 27401458; PubMed Central PMCID: PMC4945833.
3. Dennis KK, Marder E, Balshaw DM, Cui Y, Lynes MA, Patti GJ, Rappaport SM,

Shaughnessy DT, Vrijheid M, **Barr DB**. Biomonitoring in the Era of the Exposome.

Environ Health Perspect. 2017 Apr;125(4):502-510. doi: 10.1289/EHP474. Epub 2016 Jul 6. PubMed PMID: 27385067; PubMed Central PMCID: PMC5381997.

1. Naksen W, Prapamontol T, Mangklabruks A, Chantara S, Thavornyutikarn P, Robson MG, Ryan PB, **Barr DB**, Panuwet P. A single method for detecting 11 organophosphate pesticides in human plasma and breastmilk using GC-FPD. J Chromatogr B Analyt Technol Biomed Life Sci. 2016 Jul 1;1025:92-104. doi: 10.1016/j.jchromb.2016.04.045. Epub 2016 May 14. PubMed PMID: 27232054; PubMed Central PMCID: PMC4930899.
2. Jacobson MH, **Barr DB**, Marcus M, Muir AB, Lyles RH, Howards PP, Pardo L, Darrow LA. Serum polybrominated diphenyl ether concentrations and thyroid function in young children. Environ Res. 2016 Aug;149:222-30. doi: 10.1016/j.envres.2016.05.022. Epub 2016 May 23. PubMed PMID: 27228485; PubMed Central PMCID: PMC4907865.
3. Radford SA, Panuwet P, Hunter RE Jr, **Barr DB**, Ryan PB. Production of Insecticide Degradates in Juices: Implications for Risk Assessment. J Agric Food Chem. 2016 Jun 8;64(22):4633-8. doi: 10.1021/acs.jafc.6b01143. Epub 2016 May 31. PubMed PMID: 27213611.
4. Louis GM, Sapra KJ, **Barr DB**, Lu Z, Sundaram R. Preconception perfluoroalkyl and polyfluoroalkyl substances and incident pregnancy loss, LIFE Study. Reprod Toxicol. 2016 Oct;65:11-17. doi: 10.1016/j.reprotox.2016.06.011. Epub 2016 Jun 16. PubMed PMID: 27319395; PubMed Central PMCID: PMC5067185.
5. Sapra KJ, **Barr DB**, Maisog JM, Sundaram R, Buck Louis GM. Time-to-pregnancy associated with couples' use of tobacco products. Nicotine Tob Res. 2016 May 17. pii: ntw132. [Epub ahead of print] PubMed PMID: 27190399.
6. Berg CJ, Haardörfer R, Lewis M, Getachew B, Lloyd SA, Thomas SF, Lanier A,Trepanier K, Johnston T, Grimsley L, Foster B, Benson S, Smith A, **Barr DB**, Windle

M. DECOY: Documenting Experiences with Cigarettes and Other Tobacco in Young Adults. Am J Health Behav. 2016 May;40(3):310-21. doi: 10.5993/AJHB.40.3.3. PubMed PMID: 27103410.

1. Buck Louis GM, **Barr DB**, Kannan K, Chen Z, Kim S, Sundaram R. Paternal exposures to environmental chemicals and time-to-pregnancy: overview of results from the LIFE study. Andrology. 2016 Apr 7. doi: 10.1111/andr.12171. [Epub ahead of print] PubMed PMID: 27061873.
2. Watkins DJ, Fortenberry GZ, Sánchez BN, **Barr DB**, Panuwet P, Schnaas L, Osorio- Valencia E, Solano-González M, Ettinger AS, Hernández-Ávila M, Hu H, Téllez-Rojo MM, Meeker JD. Urinary 3-phenoxybenzoic acid (3-PBA) levels among pregnant women in Mexico City: Distribution and relationships with child neurodevelopment. Environ Res. 2016 May;147:307-13. doi: 10.1016/j.envres.2016.02.025. Epub 2016 Feb 27. PubMed PMID: 26922411; PubMed Central PMCID: PMC4821665.
3. Smarr MM, Grantz KL, Zhang C, Sundaram R, Maisog JM, **Barr DB**, Louis GM. Persistent organic pollutants and pregnancy complications. Sci Total Environ. 2016 May 1;551-552:285-91. doi: 10.1016/j.scitotenv.2016.02.030. Epub 2016 Feb 12. PubMed PMID: 26878640.
4. Jaacks LM, **Barr DB**, Sundaram R, Maisog JM, Zhang C, Buck Louis GM. Pre- pregnancy maternal exposure to polybrominated and polychlorinated biphenyls and gestational diabetes: a prospective cohort study. Environ Health. 2016 Jan 20;15:11. doi: 10.1186/s12940-016-0092-5. PubMed PMID: 26792546; PubMed Central PMCID: PMC4721055.
5. Harley KG, Engel SM, Vedar MG, Eskenazi B, Whyatt RM, Lanphear BP, Bradman A, Rauh VA, Yolton K, Hornung RW, Wetmur JG, Chen J, Holland NT, **Barr DB**, Perera FP, Wolff MS. Prenatal Exposure to Organophosphorous Pesticides and Fetal Growth: Pooled Results from Four Longitudinal Birth Cohort Studies. Environ Health Perspect. 2015 Dec 18. [Epub ahead of print] PubMed PMID: 26685281.
6. Morgan MK, Sobus JR, **Barr DB**, Croghan CW, Chen FL, Walker R, Alston L, Andersen E, Clifton MS. Temporal variability of pyrethroid metabolite levels in bedtime, morning, and 24-h urine samples for 50 adults in North Carolina. Environ Res. 2016 Jan;144(Pt A):81-91. doi: 10.1016/j.envres.2015.11.003. Epub 2015 Nov 14. PubMed PMID: 26584066.
7. Figueroa ZI, Young HA, Meeker JD, Martenies SE, **Barr DB**, Gray G, Perry MJ. Dialkyl phosphate urinary metabolites and chromosomal abnormalities in human sperm. Environ Res. 2015 Nov;143(Pt A):256-65. doi: 10.1016/j.envres.2015.10.021. Epub 2015 Oct 28. PubMed PMID: 26519831; PubMed Central PMCID: PMC4743645.
8. Engel SM, Bradman A, Wolff MS, Rauh VA, Harley KG, Yang JH, Hoepner LA, **Barr DB**, Yolton K, Vedar MG, Xu Y, Hornung RW, Wetmur JG, Chen J, Holland NT, Perera FP, Whyatt RM, Lanphear BP, Eskenazi B. Prenatal Organophosphorus Pesticide Exposure and Child Neurodevelopment at 24 Months: An Analysis of Four Birth Cohorts. Environ Health Perspect. 2015 Sep 29. [Epub ahead of print] PubMed PMID: 26418669.
9. Gaspar FW, Chevrier J, Bornman R, Crause M, Obida M, **Barr DB**, Bradman A, Bouwman H, Eskenazi B. Undisturbed dust as a metric of long-term indoor insecticide exposure: Residential DDT contamination from indoor residual spraying and its association with serum levels in the VHEMBE cohort. Environ Int. 2015 Dec;85:163-7. doi: 10.1016/j.envint.2015.09.014. Epub 2015 Sep 20. PubMed PMID: 26398044.
10. Rauh VA, Garcia WE, Whyatt RM, Horton MK, **Barr DB**, Louis ED. Prenatal exposure to the organophosphate pesticide chlorpyrifos and childhood tremor. Neurotoxicology. 2015 Dec;51:80-6. doi: 10.1016/j.neuro.2015.09.004. Epub 2015 Sep 15. PubMed PMID: 26385760; PubMed Central PMCID: PMC4809635.
11. Handal AJ, Hund L, Páez M, Bear S, Greenberg C, Fenske RA, **Barr DB**. Characterization of Pesticide Exposure in a Sample of Pregnant Women in Ecuador. Arch Environ Contam Toxicol. 2016 May;70(4):627-39. doi:10.1007/s00244-015-0217-9. Epub 2015 Aug 27. PubMed PMID: 26311023; PubMed Central PMCID: PMC4769681.
12. Naksen W, Prapamontol T, Mangklabruks A, Chantara S, Thavornyutikarn P, Srinual N, Panuwet P, Ryan PB, Riederer AM, **Barr DB**. Associations of maternalorganophosphate pesticide exposure and PON1 activity with birth outcomes in SAWASDEE birth cohort, Thailand. Environ Res. 2015 Oct;142:288-96. doi:10.1016/j.envres.2015.06.035. Epub 2015 Jul 15. PubMed PMID: 26186137; PubMed Central PMCID: PMC4609250.
13. Salvatore AL, Castorina R, Camacho J, Morga N, López J, Nishioka M, **Barr DB**, Eskenazi B, Bradman A. Home-based community health worker intervention to reduce pesticide exposures to farmworkers' children: A randomized-controlled trial. J Expo Sci Environ Epidemiol. 2015 Nov-Dec;25(6):608-15. doi: 10.1038/jes.2015.39. Epub 2015 Jun 3. PubMed PMID: 26036987.
14. Chen H, Quandt SA, **Barr DB**, Arcury TA. Assessing Assay Variability of Pesticide Metabolites in the Presence of Heavy Left-Censoring. J Agric Biol Environ Stat. 2015 Mar;20(1):65-82. PubMed PMID: 26023279; PubMed Central PMCID:PMC4443874.
15. LaKind JS, Goodman M, **Barr DB**, Weisel CP, Schoeters G. Lessons learned from the application of BEES-C: Systematic assessment of study quality of epidemiologic research on BPA, neurodevelopment, and respiratory health. Environ Int. 2015 Jul;80:41-71. doi: 10.1016/j.envint.2015.03.015. Epub 2015 Apr 14.PubMed PMID: 25884849.
16. Bradman A, Quirós-Alcalá L, Castorina R, Schall RA, Camacho J, Holland NT, **Barr DB**, Eskenazi B. Effect of Organic Diet Intervention on Pesticide Exposures in Young Children Living in Low-Income Urban and Agricultural Communities. Environ Health Perspect. 2015 Oct;123(10):1086-93. doi: 10.1289/ehp.1408660. Epub 2015 Apr 10. PubMed PMID: 25861095; PubMed Central PMCID: PMC4590750.
17. Koutros S, Langseth H, Grimsrud TK, **Barr DB**, Vermeulen R, Portengen L, Wacholder S, Freeman LE, Blair A, Hayes RB, Rothman N, Engel LS. Prediagnostic Serum Organochlorine Concentrations and Metastatic Prostate Cancer: A Nested Case-Control Study in the Norwegian Janus Serum Bank Cohort. Environ Health Perspect. 2015 Sep;123(9):867-72. doi: 10.1289/ehp.1408245. Epub 2015 Mar 3. PubMed PMID: 25734605; PubMed Central PMCID: PMC4559951.
18. Fiedler N, Rohitrattana J, Siriwong W, Suttiwan P, Ohman Strickland P, Ryan PB, Rohlman DS, Panuwet P, **Barr DB**, Robson MG. Neurobehavioral effects of exposure to organophosphates and pyrethroid pesticides among Thai children.Neurotoxicology. 2015 May;48:90-9. doi: 10.1016/j.neuro.2015.02.003. Epub 2015 Feb 24. PubMed PMID: 25721160; PubMed Central PMCID: PMC4442703.
19. Berg CJ, **Barr DB**, Stratton E, Escoffery C, Kegler M. Attitudes toward E-Cigarettes, Reasons for Initiating E-Cigarette Use, and Changes in Smoking Behavior after Initiation: A Pilot Longitudinal Study of Regular Cigarette Smokers. Open J Prev Med. 2014 Oct;4(10):789-800. PubMed PMID: 25621193; PubMed Central PMCID: PMC4304080.
20. Panuwet P, Hunter RE Jr, D'Souza PE, Chen X, Radford SA, Cohen JR, Marder ME, Kartavenka K, Ryan PB, **Barr DB**. Biological Matrix Effects in Quantitative Tandem Mass Spectrometry-Based Analytical Methods: Advancing Biomonitoring. Crit Rev Anal Chem. 2016;46(2):93-105. doi: 10.1080/10408347.2014.980775. PubMed PMID:25562585; PubMed Central PMCID: PMC4695332.
21. Zhang C, Sundaram R, Maisog J, Calafat AM, **Barr DB**, Buck Louis GM. A prospective study of prepregnancy serum concentrations of perfluorochemicals and the risk of gestational diabetes. Fertil Steril. 2015 Jan;103(1):184-9. doi:10.1016/j.fertnstert.2014.10.001. Epub 2014 Oct 22. PubMed PMID: 25450302; PubMed Central PMCID: PMC4282598.
22. Rohitrattana J, Siriwong W, Tunsaringkarn T, Panuwet P, Ryan PB, **Barr DB**, Robson MG, Fiedler N. Organophosphate pesticide exposure in school-aged children living in rice and aquacultural farming regions of Thailand. J Agromedicine. 2014;19(4):406-16. doi: 10.1080/1059924X.2014.947457. PubMed PMID: 25275406.
23. Chen X, Panuwet P, Hunter RE, Riederer AM, Bernoudy GC, **Barr DB**, Ryan PB. Method for the quantification of current use and persistent pesticides in cow milk, human milk and baby formula using gas chromatography tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2014 Nov 1;970:121-30. doi: 10.1016/j.jchromb.2014.08.018. Epub 2014 Aug 19. PubMed PMID: 25261753.
24. Zhang J, Shen H, Xu W, Xia Y, **Barr DB**, Mu X, Wang X, Liu L, Huang Q, Tian M. Urinary Metabolomics Revealed Arsenic Internal Dose-Related Metabolic Alterations: A Proof-of-Concept Study in a Chinese Male Cohort. Environ Sci Technol. 2014 Oct 21;48(20):12265-74. doi: 10.1021/es503659w. Epub 2014 Oct 2. PubMed PMID: 25233106.
25. Steenland K, Mora AM, **Barr DB**, Juncos J, Roman N, Wesseling C. Organochlorine chemicals and neurodegeneration among elderly subjects in Costa Rica. Environ Res. 2014 Aug 27;134C:205-209. doi: 10.1016/j.envres.2014.07.024. [Epub ahead of print] PubMed PMID: 25173053.
26. LaKind JS, Sobus JR, Goodman M, **Barr DB**, Fürst P, Albertini RJ, Arbuckle TE, Schoeters G, Tan YM, Teeguarden J, Tornero-Velez R, Weisel CP. A proposal for assessing study quality: Biomonitoring, Environmental Epidemiology, and Short-lived Chemicals (BEES-C) instrument. Environ Int. 2014 Dec;73:195-207. doi: 10.1016/j.envint.2014.07.011. Epub 2014 Aug 17. PubMed PMID: 25137624.
27. Buck Louis GM, Chen Z, Schisterman EF, Kim S, Sweeney AM, Sundaram R, Lynch CD, Gore-Langton RE, **Barr DB**. Perfluorochemicals and Human Semen Quality: The LIFE Study. Environ Health Perspect. 2014 Aug 15. [Epub ahead of print] PubMed PMID: 25127343.
28. Robledo CA, Yeung E, Mendola P, Sundaram R, Maisog J, Sweeney AM, **Barr DB**, Buck Louis GM. Preconception Maternal and Paternal Exposure to Persistent Organic Pollutants and Birth Size: The LIFE Study. Environ Health Perspect. 2014 Aug 5. [Epub ahead of print] PubMed PMID: 25095280.
29. Schisterman EF, Mumford SL, Browne RW, **Barr DB**, Chen Z, Louis GM. Lipid concentrations and couple fecundity: the LIFE study. J Clin Endocrinol Metab. 2014 Aug;99(8):2786-94. doi: 10.1210/jc.2013-3936. Epub 2014 May 20. PubMed PMID: 24846535; PubMed Central PMCID: PMC4121020.
30. McKelvey W, Jacobson JB, Kass D, **Barr DB**. Biomonitoring of Exposure to Organophosphate Pesticides: McKelvey et al. Respond. Environ Health Perspect. 2014 Jul 1;122(7):A178-9. doi: 10.1289/ehp.1408444R. PubMed PMID: 24984157; PubMed Central PMCID: PMC4080521.
31. Furlong MA, Engel SM, **Barr DB**, Wolff MS. Prenatal exposure to organophosphate pesticides and reciprocal social behavior in childhood. Environ Int. 2014

Sep;70:125-31. doi: 10.1016/j.envint.2014.05.011. Epub 2014 Jun 13. PubMed PMID: 24934853.

1. Liu L, Xia T, Zhang X, **Barr DB**, Alamdar A, Zhang J, Tian M, Huang Q, Shen H. Biomonitoring of infant exposure to phenolic endocrine disruptors using urine expressed from disposable gel diapers. Anal Bioanal Chem. 2014 Aug;406(20):5049-54. doi: 10.1007/s00216-014-7908-3. Epub 2014 Jun 13. PubMed PMID: 24924209.
2. Radford SA, Panuwet P, Hunter RE Jr, **Barr DB**, Ryan PB. HPLC-MS/MS Method for the Measurement of Insecticide Degradates in Baby Food. J Agric Food Chem. 2014 Jul 11. [Epub ahead of print] PubMed PMID: 24910900.
3. Thompson B, Griffith WC, **Barr DB**, Coronado GD, Vigoren EM, Faustman EM. Variability in the take-home pathway: Farmworkers and non-farmworkers and their children. J Expo Sci Environ Epidemiol. 2014 Mar 5. doi: 10.1038/jes.2014.12. [Epub ahead of print] PubMed PMID: 24594649.
4. Mumford SL, Sundaram R, Schisterman EF, Sweeney AM, **Barr DB**, Rybak ME, Maisog JM, Parker DL, Pfeiffer CM, Louis GM. Higher urinary lignan concentrations in women but not men are positively associated with shorter time to pregnancy. J Nutr. 2014 Mar;144(3):352-8. doi: 10.3945/jn.113.184820. Epub 2014 Jan 8. PubMed PMID: 24401816; PubMed Central PMCID: PMC3927547.
5. Fortenberry GZ, Meeker JD, Sánchez BN, **Barr DB**, Panuwet P, Bellinger D, Schnaas L, Solano-González M, Ettinger AS, Hernandez-Avila M, Hu H, Tellez-Rojo MM. Urinary 3,5,6-trichloro-2-pyridinol (TCPY) in pregnant women from Mexico City: distribution, temporal variability, and relationship with child attention and hyperactivity. Int J Hyg Environ Health. 2014 Mar;217(2-3):405-12. doi:10.1016/j.ijheh.2013.07.018. Epub 2013 Aug 13. PubMed PMID: 24001412; PubMed Central PMCID: PMC3946926.
6. Prapamontol T, Sutan K, Laoyang S, Hongsibsong S, Lee G, Yano Y, Hunter RE, Ryan PB, **Barr DB**, Panuwet P. Cross validation of gas chromatography-flame photometric detection and gas chromatography-mass spectrometry methods for measuring dialkylphosphate metabolites of organophosphate pesticides in human urine. Int J Hyg Environ Health. 2014 Apr-May;217(4-5):554-66. doi: 10.1016/j.ijheh.2013.10.005. Epub 2013 Nov 7. PubMed PMID: 24280209.
7. Naeher LP, **Barr DB**, Adetona O, Simpson CD. Urinary levoglucosan as a biomarker for woodsmoke exposure in wildland firefighters. Int J Occup Environ Health. 2013 Oct-Dec;19(4):304-10. PubMed PMID: 24588036.
8. Bustamante-Montes LP, Hernández-Valero MA, Flores-Pimentel D, García-Fábila M, Amaya-Chávez A, **Barr DB**, Borja-Aburto VH. Prenatal exposure to phthalates is associated with decreased anogenital distance and penile size in male newborns. J Dev Orig Health Dis. 2013 Aug;4(4):300-6. doi: 10.1017/S2040174413000172. PubMed PMID: 24349678; PubMed Central PMCID: PMC3862078.
9. Young HA, Meeker JD, Martenies SE, Figueroa ZI, **Barr DB**, Perry MJ. Environmental exposure to pyrethroids and sperm sex chromosome disomy: a cross-sectional study. Environ Health. 2013 Dec 17;12:111. doi: 10.1186/1476-069X-12-111. PubMed PMID: 24345058; PubMed Central PMCID: PMC3929259.
10. Prapamontol T, Sutan K, Laoyang S, Hongsibsong S, Lee G, Yano Y, Hunter RE, Ryan PB, **Barr DB**, Panuwet P. Cross validation of gas chromatography-flame photometric detection and gas chromatography-mass spectrometry methods for measuring dialkylphosphate metabolites of organophosphate pesticides in human urine. Int J Hyg Environ Health. 2014 Apr-May;217(4-5):554-66. doi: 10.1016/j.ijheh.2013.10.005. Epub 2013 Nov 7. PubMed PMID: 24280209.
11. Upson K, De Roos AJ, Thompson ML, Sathyanarayana S, Scholes D, **Barr DB**, Holt VL. Organochlorine pesticides and risk of endometriosis: findings from a population-based case-control study. Environ Health Perspect. 2013 Nov-Dec;121(11-12):1319-24. doi: 10.1289/ehp.1306648. Epub 2013 Sep 17. PubMed PMID: 24192044; PubMed Central PMCID: PMC3855515.
12. Muñoz-Quezada MT, Lucero BA, **Barr DB**, Steenland K, Levy K, Ryan PB, Iglesias V, Alvarado S, Concha C, Rojas E, Vega C. Neurodevelopmental effects in children associated with exposure to organophosphate pesticides: a systematic review. Neurotoxicology. 2013 Dec;39:158-68. doi: 10.1016/j.neuro.2013.09.003. Epub 2013 Oct 9. PubMed PMID: 24121005; PubMed Central PMCID: PMC3899350.
13. McKelvey W, Jacobson JB, Kass D, **Barr DB**, Davis M, Calafat AM, Aldous KM. Population-based biomonitoring of exposure to organophosphate and pyrethroid pesticides in New York City. Environ Health Perspect. 2013 Nov-Dec;121(11-12):1349-56. doi: 10.1289/ehp.1206015. Epub 2013 Sep 24. PubMed PMID: 24076605; PubMed Central PMCID: PMC3855501.
14. Dipietro JA, Davis MF, Costigan KA, **Barr DB**. Fetal heart rate and motor activity associations with maternal organochlorine levels: results of an exploratory study. J Expo Sci Environ Epidemiol. 2013 Apr 17. doi: 10.1038/jes.2013.19. [Epub ahead of print] PubMed PMID: 23591698.
15. Buck Louis GM, Sundaram R, Schisterman EF, Sweeney AM, Lynch CD, Gore-Langton RE, Maisog J, Kim S, Chen Z, **Barr DB**. Persistent environmental pollutants and couple fecundity: the LIFE study. Environ Health Perspect. 2013 Feb;121(2):231-6. doi: 10.1289/ehp.1205301. Epub 2012 Oct 31. PubMed PMID: 23151773; PubMed Central PMCID: PMC3569685.
16. Bradman A, Kogut K, Eisen EA, Jewell NP, Quirós-Alcalá L, Castorina R, Chevrier J, Holland NT, **Barr DB**, Kavanagh-Baird G, Eskenazi B. Variability of organophosphorous pesticide metabolite levels in spot and 24-hr urine samples collected from young children during 1 week. Environ Health Perspect. 2013 Jan;121(1):118-24. doi: 10.1289/ehp.1104808. Epub 2012 Oct 9. PubMed PMID: 23052012; PubMed Central PMCID: PMC3553429.
17. Buck Louis GM, Sundaram R, Schisterman EF, Sweeney AM, Lynch CD, Gore-Langton RE, Maisog J, Kim S, Chen Z, **Barr DB**. Persistent Environmental Pollutants and Couple Fecundity: The LIFE Study. Environ Health Perspect. 2012 Nov 14 PubMed PMID: 23151773.
18. Bradman A, Kogut K, Eisen EA, Jewell NP, Quirós-Alcalá L, Castorina R, Chevrier J, Holland NT, **Barr DB**, Kavanagh-Baird G, Eskenazi B. Variability of Organophosphorous Pesticide Metabolite Levels in Spot and 24-hr Urine Samples Collected from Young Children during 1 Week. Environ Health Perspect. 2012 Oct 9. [Epub ahead of print] PubMed PMID: 23052012.
19. Horton MK, Kahn LG, Perera F, **Barr DB**, Rauh V. Does the home environment and the sex of the child modify the adverse effects of prenatal exposure to chlorpyrifos on child working memory? Neurotoxicol Teratol. 2012 Sep-Oct;34(5):534-41. doi: 10.1016/j.ntt.2012.07.004. Epub 2012 Jul 21. PubMed PMID: 22824009.
20. Quirós-Alcalá L, Bradman A, Smith K, Weerasekera G, Odetokun M, **Barr DB**, Nishioka M, Castorina R, Hubbard AE, Nicas M, Hammond SK, McKone TE, Eskenazi Organophosphorous pesticide breakdown products in house dust and children's urine. J Expo Sci Environ Epidemiol. 2012 Nov;22(6):559-68. doi: 10.1038/jes.2012.46. Epub 2012 Jul 11. PubMed PMID: 22781438.
	1. Coronado GD, Holte SE, Vigoren EM, Griffith WC, **Barr DB**, Faustman EM, Thompson B. Do workplace and home protective practices protect farm workers? Findings from the "For Healthy Kids" study. J Occup Environ Med. 2012 Sep;54(9):1163-9. PubMed PMID: 22772953.
21. Muñoz-Quezada MT, Iglesias V, Lucero B, Steenland K, **Barr DB**, Levy K, Ryan PB, Alvarado S, Concha C. Predictors of exposure to organophosphate pesticides in schoolchildren in the Province of Talca, Chile. Environ Int. 2012 Oct 15;47:28-36. doi: 10.1016/j.envint.2012.06.002. Epub 2012 Jun 23. PubMed PMID:22732215; PubMed Central PMCID: PMC3408779.
22. Rauh VA, Perera FP, Horton MK, Whyatt RM, Bansal R, Hao X, Liu J, **Barr DB**, Slotkin TA, Peterson BS. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. Proc Natl Acad Sci U S A. 2012 May 15;109(20):7871-6. doi: 10.1073/pnas.1203396109. Epub 2012 Apr 30. PubMed PMID: 22547821; PubMed Central PMCID: PMC3356641.
23. Rauch SA, Braun JM, **Barr DB**, Calafat AM, Khoury J, Montesano AM, Yolton K, Lanphear BP. Associations of prenatal exposure to organophosphate pesticide metabolites with gestational age and birth weight. Environ Health Perspect. 2012 Jul;120(7):1055-60. doi: 10.1289/ehp.1104615. Epub 2012 Mar 20. PubMed PMID: 22476135; PubMed Central PMCID: PMC3404666.
24. Fortenberry GZ, Hu H, Turyk M, **Barr DB**, Meeker JD. Association between urinary 3, 5, 6-trichloro-2-pyridinol, a metabolite of chlorpyrifos and chlorpyrifos-methyl, and serum T4 and TSH in NHANES 1999-2002. Sci Total Environ. 2012 May 1;424:351-5. doi: 10.1016/j.scitotenv.2012.02.039. Epub 2012 Mar 17. PubMed PMID: 22425279; PubMed Central PMCID: PMC3327766.
25. Panuwet P, Nguyen JV, Wade EL, D'Souza PE, Ryan PB, **Barr DB**. Quantification of melamine in human urine using cation-exchange based high performance liquid chromatography tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2012 Mar 1;887-888:48-54. doi: 10.1016/j.jchromb.2012.01.007. Epub 2012 Jan 21. PubMed PMID: 22309774.
26. Buck Louis GM, Sundaram R, Schisterman EF, Sweeney AM, Lynch CD, Gore-Langton RE, Chen Z, Kim S, Caldwell KL, **Barr DB**. Heavy metals and couple fecundity, the LIFE Study. Chemosphere. 2012 Jun;87(11):1201-7. doi: 10.1016/j.chemosphere.2012.01.017. Epub 2012 Feb 4. PubMed PMID: 22309709; PubMed Central PMCID: PMC3327819.
27. Panuwet P, Siriwong W, Prapamontol T, Ryan PB, Fiedler N, Robson MG, **Barr DB**. Agricultural Pesticide Management in Thailand: Situation and Population Health Risk. Environ Sci Policy. 2012 Mar;17:72-81. PubMed PMID: 22308095; PubMed Central PMCID: PMC3269779.
28. Clune AL, Ryan PB, **Barr DB**. Have regulatory efforts to reduce organophosphorus insecticide exposures been effective? Environ Health Perspect. 2012 Apr;120(4):521-5. doi: 10.1289/ehp.1104323. Epub 2012 Jan 17. PubMed PMID: 22251442; PubMed Central PMCID: PMC3339465.
29. Weldon RH, **Barr DB**, Trujillo C, Bradman A, Holland N, Eskenazi B. A pilot study of pesticides and PCBs in the breast milk of women residing in urban and agricultural communities of California. J Environ Monit. 2011 Nov;13(11):3136-44. doi: 10.1039/c1em10469a. Epub 2011 Oct 19. PubMed PMID: 22009134.
30. **Barr DB**, Wong LY, Bravo R, Weerasekera G, Odetokun M, Restrepo P, Kim DG, Fernandez C, Whitehead RD Jr, Perez J, Gallegos M, Williams BL, Needham LL. Urinary concentrations of dialkylphosphate metabolites of organophosphorus pesticides: National Health and Nutrition Examination Survey 1999-2004. Int J Environ Res Public Health. 2011 Aug;8(8):3063-98. doi: 10.3390/ijerph8083063. Epub 2011 Jul 25. PubMed PMID: 21909292; PubMed Central PMCID: PMC3166728.
31. Harley KG, Huen K, Schall RA, Holland NT, Bradman A, **Barr DB**, Eskenazi B. Association of organophosphate pesticide exposure and paraoxonase with birth outcome in Mexican-American women. PLoS One. 2011;6(8):e23923. doi: 10.1371/journal.pone.0023923. Epub 2011 Aug 31. PubMed PMID: 21904599; PubMed Central PMCID: PMC3164135.
	1. Coronado GD, Holte S, Vigoren E, Griffith WC, **Barr DB**, Faustman E, Thompson Organophosphate pesticide exposure and residential proximity to nearby fields: evidence for the drift pathway. J Occup Environ Med. 2011 Aug;53(8):884-91. doi: 10.1097/JOM.0b013e318222f03a. PubMed PMID: 21775902; PubMed Central PMCID: PMC3414435.
32. Quirós-Alcalá L, Alkon AD, Boyce WT, Lippert S, Davis NV, Bradman A, **Barr DB**, Eskenazi B. Maternal prenatal and child organophosphate pesticide exposures and children's autonomic function. Neurotoxicology. 2011 Oct;32(5):646-55. doi: 10.1016/j.neuro.2011.05.017. Epub 2011 Jun 29. PubMed PMID: 21741403.
33. Bradman A, Castorina R, **Barr DB**, Chevrier J, Harnly ME, Eisen EA, McKone TE, Harley K, Holland N, Eskenazi B. Determinants of organophosphorus pesticide urinary metabolite levels in young children living in an agricultural community. Int J Environ Res Public Health. 2011 Apr;8(4):1061-83. doi: 10.3390/ijerph8041061. Epub 2011 Apr 8. PubMed PMID: 21695029; PubMed Central PMCID: PMC3118878.
34. Sexton K, Ryan AD, Adgate JL, **Barr DB**, Needham LL. Biomarker measurements of concurrent exposure to multiple environmental chemicals and chemical classes in children. J Toxicol Environ Health A. 2011;74(14):927-42. doi: 10.1080/15287394.2011.573745. PubMed PMID: 21623537.
35. Bishop AM, Fernandez C, Whitehead RD Jr, Morales-A P, **Barr DB**, Wilder LC, Baker SE. Quantification of riboflavin in human urine using high performance liquid chromatography-tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2011 Jun 15;879(20):1823-6. doi: 10.1016/j.jchromb.2011.04.032. Epub 2011 May 6. PubMed PMID: 21612990.
36. Engel SM, Wetmur J, Chen J, Zhu C, **Barr DB**, Canfield RL, Wolff MS. Prenatal Exposure to Organophosphates, Paraoxonase 1, and Cognitive Development in Childhood. Environ Health Perspect. 2011 Apr 21. [Epub ahead of print] PubMed PMID: 21507778.
37. Rauh V, Arunajadai S, Horton M, Perera F, Hoepner L, **Barr DB**, Whyatt R. 7-Year Neurodevelopmental Scores and Prenatal Exposure to Chlorpyrifos, a Common Agricultural Pesticide. Environ Health Perspect. 2011 Apr 21. [Epub ahead of print] PubMed PMID: 21507777.
38. Bouchard MF, Chevrier J, Harley KG, Kogut K, Vedar M, Calderon N, Trujillo C, Johnson C, Bradman A, **Barr DB**, Eskenazi B. Prenatal Exposure to Organophosphate Pesticides and IQ in 7-Year Old Children. Environ Health Perspect. 2011 Apr 21. [Epub ahead of print] PubMed PMID: 21507776.
39. Zelenka MP, **Barr DB**, Nicolich MJ, Lewis RJ, Bird MG, Letinski DJ, Metcalf SW, O'Lone RB. A weight of evidence approach for selecting exposure biomarkers for biomonitoring. Biomarkers. 2011 Feb;16(1):65-73. PubMed PMID: 21250852.
40. Neta G, Goldman LR, **Barr D**, Apelberg BJ, Witter FR, Halden RU. Fetal Exposure to Chlordane and Permethrin Mixtures in Relation to Inflammatory Cytokines and Birth Outcomes. Environ Sci Technol. 2011 Jan 14. [Epub ahead of print] PubMed PMID: 21235202.
41. Cohen Hubal EA, **Barr DB**, Koch HM, Bahadori T. The promise of exposure science. J Expo Sci Environ Epidemiol. 2011 Mar;21(2):121-2. Epub 2011 Jan 12. PubMed PMID: 21224897.
42. Braun JM, Kalkbrenner AE, Calafat AM, Bernert JT, Ye X, Silva MJ, **Barr DB**, Sathyanarayana S, Lanphear BP. Variability and predictors of urinary bisphenol A concentrations during pregnancy. Environ Health Perspect. 2011 Jan;119(1):131-7. PubMed PMID: 21205581; PubMed Central PMCID: PMC3018492.
43. **Barr, DB**, Wong, LY, Bravo R, Weerasekera G, Odetokun M, Restrepo P, Kim DG, Fernandez C, Perez J, Gallegos M, Caltabiano L, Williams BL, Needham LL. Urinary concentrations of dialkylphosphate metabolites of organophosphorus pesticides: National Health and Nutrition Examination Survey 1999-2004. J. Expo. Science Environ Epid. (In press).
44. Eskenazi B, Huen K, Marks A, Harley KG, Bradman A, **Barr DB**, Holland N. PON1 and neurodevelopment in children from the CHAMACOS study exposed to organophosphate pesticides in utero. Environ Health Perspect. 2010 Dec;118(12):1775-81. PubMed PMID: 21126941; PubMed Central PMCID: PMC3002199.
45. Marks AR, Harley K, Bradman A, Kogut K, **Barr DB**, Johnson C, Calderon N, Eskenazi B. Organophosphate pesticide exposure and attention in young Mexican-American children: the CHAMACOS study. Environ Health Perspect. 2010 Dec;118(12):1768-74. PubMed PMID: 21126939; PubMed Central PMCID: PMC3002198.
46. Braun JM, Daniels JL, Poole C, Olshan AF, Hornung R, Bernert JT, Khoury J, Needham LL, **Barr DB**, Lanphear BP. Prenatal environmental tobacco smoke exposure and early childhood body mass index. Paediatr Perinat Epidemiol. 2010 Nov;24(6):524-34. doi: 10.1111/j.1365-3016.2010.01146.x. Epub 2010 Aug 16. PubMed PMID: 20955230.
47. Berman T, Hochner-Celnikier D, **Barr DB**, Needham LL, Amitai Y, Wormser U, Richter E. Pesticide exposure among pregnant women in Jerusalem, Israel: results of a pilot study. Environ Int. 2011 Jan;37(1):198-203. Epub 2010 Oct 16. PubMed PMID: 20952069.
48. Schier JG, **Barr DB**, Li Z, Wolkin AF, Baker SE, Lewis LS, McGeehin MA. Diethylene Glycol in Health Products Sold Over-the-Counter and Imported from Asian Countries. J Med Toxicol. 2010 Oct 7. [Epub ahead of print] PubMed PMID: 20927618.
49. Jayatilaka NK, Angela Montesano M, Whitehead RD Jr, Schloth SJ, Needham LL, **Barr DB**. High-Throughput Sample Preparation for the Quantitation of Acephate, Methamidophos, Omethoate, Dimethoate, Ethylenethiourea, and Propylenethiourea in Human Urine Using 96-Well-Plate Automated Extraction and High-Performance Liquid Chromatography-Tandem Mass Spectrometry. Arch Environ Contam Toxicol. 2010 Sep [Epub ahead of print] PubMed PMID: 20878153.
50. Perry MJ, Venners SA, Chen X, Liu X, Tang G, Xing H, **Barr DB**, Xu X. Organophosphorous pesticide exposures and sperm quality. Reprod Toxicol. 2010 Sep 17. [Epub ahead of print] PubMed PMID: 20850521.
51. Panuwet P, Wade EL, Nguyen JV, Montesano MA, Needham LL, **Barr DB**. Quantification of cyanuric acid residue in human urine using high performance liquid chromatography-tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2010 Oct 15;878(28):2916-22. Epub 2010 Aug 21. PubMed PMID: 20843749.
52. Braun JM, Daniels JL, Poole C, Olshan AF, Hornung R, Bernert JT, Xia Y, Bearer C, **Barr DB**, Lanphear BP. A prospective cohort study of biomarkers of prenatal tobacco smoke exposure: the correlation between serum and meconium and their association with infant birth weight. Environ Health. 2010 Aug 27;9:53. PubMed PMID: 20799929; PubMed Central PMCID: PMC2944243.
53. Weldon RH, Webster M, Harley KG, Bradman A, Fenster L, Davis MD, Hubbard A, **Barr DB**, Holland N, Eskenazi B. Serum Persistent Organic Pollutants and Duration of Lactation among Mexican-American Women. J Environ Public Health. 2010;2010:861757. Epub 2010 Jun 30. PubMed PMID: 20671963; PubMed Central PMCID: PMC2910484.
54. Arcury TA, Grzywacz JG, Talton JW, Chen H, Vallejos QM, Galván L, **Barr DB**, Quandt SA. Repeated pesticide exposure among North Carolina migrant and seasonal farmworkers. Am J Ind Med. 2010 Aug;53(8):802-13. PubMed PMID: 20623661;PubMed Central PMCID: PMC2904622.
55. Grzywacz JG, Quandt SA, Vallejos QM, Whalley LE, Chen H, Isom S, **Barr DB**, Arcury TA. Job demands and pesticide exposure among immigrant Latino farmworkers. J Occup Health Psychol. 2010 Jul;15(3):252-66. PubMed PMID: 20604632; PubMed Central PMCID: PMC2913248.
56. Jones EA, Wright JM, Rice G, Buckley BT, Magsumbol MS, **Barr DB**, Williams BL. Metal exposures in an inner-city neonatal population. Environ Int. 2010 Oct;36(7):649-54. PubMed PMID: 20553999.
57. Neta G, Goldman LR, **Barr D**, Sjödin A, Apelberg BJ, Witter FR, Halden RU. Distribution and determinants of pesticide mixtures in cord serum using principal component analysis. Environ Sci Technol. 2010 Jul 15;44(14):5641-8. PubMed PMID: 20550184.
58. Odetokun MS, Montesano MA, Weerasekera G, Whitehead RD Jr, Needham LL, **Barr DB**. Quantification of dialkylphosphate metabolites of organophosphorus insecticides in human urine using 96-well plate sample preparation and high-performance liquid chromatography-electrospray ionization-tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2010 Oct 1;878(27):2567-74. Epub 2010 Apr 24. PubMed PMID: 20494630.
59. Weerasekera G, Smith KD, Quirós-Alcalá L, Fernandez C, Bradman A, Eskenazi B, Needham LL, **Barr DB**. A mass spectrometry-based method to measure dialkylphosphate degradation products of organophosphorous insecticides in dust and orange juice. J Environ Monit. 2009 Jul;11(7):1345-51. Epub 2009 Apr 23. PubMed PMID: 20449223.
60. Pérez JJ, Williams MK, Weerasekera G, Smith K, Whyatt RM, Needham LL, **Barr DB**. Measurement of pyrethroid, organophosphorus, and carbamate insecticides in human plasma using isotope dilution gas chromatography-high resolution mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2010 Oct 1;878(27):2554-62. Epub 2010 Apr 3. PubMed PMID: 20434413.
61. Trabert B, De Roos AJ, Schwartz SM, Peters U, Scholes D, **Barr DB**, Holt VL. Non-dioxin-like polychlorinated biphenyls and risk of endometriosis. Environ Health Perspect. 2010 Sep;118(9):1280-5. Epub 2010 Apr 27. PubMed PMID:20423815; PubMed Central PMCID: PMC2944090.
62. Panuwet P, Restrepo PA, Magsumbol M, Jung KY, Montesano MA, Needham LL, **Barr DB**. An improved high-performance liquid chromatography-tandem mass spectrometric method to measure atrazine and its metabolites in human urine. J Chromatogr B Analyt Technol Biomed Life Sci. 2010 Apr 15;878(13-14):957-62. Epub 2010 Mar 1. PubMed PMID: 20299293.
63. Harari R, Julvez J, Murata K, **Barr D**, Bellinger DC, Debes F, Grandjean P. Neurobehavioral deficits and increased blood pressure in school-age children prenatally exposed to pesticides. Environ Health Perspect. 2010 Jun;118(6):890-6. Epub 2010 Feb 25. PubMed PMID: 20185383; PubMed Central PMCID: PMC2898869.
64. **Barr DB**, Olsson AO, Wong LY, Udunka S, Baker SE, Whitehead RD, Magsumbol MS, Williams BL, Needham LL. Urinary concentrations of metabolites of pyrethroid insecticides in the general U.S. population: National Health and Nutrition Examination Survey 1999-2002. Environ Health Perspect. 2010 Jun;118(6):742-8.Epub 2010 Feb 3. PubMed PMID: 20129874; PubMed Central PMCID: PMC2898848.
65. Castorina R, Bradman A, Fenster L, **Barr DB**, Bravo R, Vedar MG, Harnly ME, McKone TE, Eisen EA, Eskenazi B. Comparison of current-use pesticide and other toxicant urinary metabolite levels among pregnant women in the CHAMACOS cohort and NHANES. Environ Health Perspect. 2010 Jun;118(6):856-63. Epub 2010 Feb 3. PubMed PMID: 20129873; PubMed Central PMCID: PMC2898864.
66. Aylward LL, Morgan MK, Arbuckle TE, **Barr DB**, Burns CJ, Alexander BH, Hays SM. Biomonitoring data for 2,4-dichlorophenoxyacetic acid in the United States and Canada: interpretation in a public health risk assessment context using Biomonitoring Equivalents. Environ Health Perspect. 2010 Feb;118(2):177-81. Review. PubMed PMID: 20123603; PubMed Central PMCID: PMC2831914.
67. Montesano MA, Whitehead RD Jr, Jayatilaka NK, Kuklenyik P, Davis MD, Needham LL, **Barr DB**. Measurement of ethyl methanesulfonate in human plasma and breast milk samples using high-performance liquid chromatography-atmospheric pressure chemical ionization-tandem mass spectrometry. J Pharm Biomed Anal. 2010 Jun 5;52(2):260-4. Epub 2010 Jan 11. PubMed PMID: 20102787.
68. Purdue MP, Engel LS, Langseth H, Needham LL, Andersen A, **Barr DB**, Blair A, Rothman N, McGlynn KA. Prediagnostic serum concentrations of organochlorine compounds and risk of testicular germ cell tumors. Environ Health Perspect. 2009 Oct;117(10):1514-9. Epub 2009 May 20. PubMed PMID: 20019899; PubMed Central PMCID: PMC2790503.
69. Bahadori T, **Barr DB**. Close encounters: reflections on the successes and near misses of exposure science. J Expo Sci Environ Epidemiol. 2010 Jan;20(1):1. PubMed PMID: 20019689.
70. Riederer AM, Smith KD, **Barr DB**, Hayden SW, Hunter RE Jr, Ryan PB. Current and historically used pesticides in residential soil from 11 homes in Atlanta, Georgia, USA. Arch Environ Contam Toxicol. 2010 May;58(4):908-17. Epub 2009 Dec PubMed PMID: 20016886.
71. Busby-Hjerpe AL, Campbell JA, Smith JN, Lee S, Poet TS, **Barr DB**, Timchalk C. Comparative pharmacokinetics of chlorpyrifos versus its major metabolites following oral administration in the rat. Toxicology. 2010 Jan 31;268(1-2):55-63. Epub 2009 Dec 4. PubMed PMID: 19963030.
72. **Barr DB**, Ananth CV, Yan X, Lashley S, Smulian JC, Ledoux TA, Hore P, Robson MG. Pesticide concentrations in maternal and umbilical cord sera and their relation to birth outcomes in a population of pregnant women and newborns in New Jersey. Sci Total Environ. 2010 Jan 15;408(4):790-5. Epub 2009 Nov 8. PubMedPMID: 19900697.
73. Naeher LP, Tulve NS, Egeghy PP, **Barr DB**, Adetona O, Fortmann RC, Needham LL, Bozeman E, Hilliard A, Sheldon LS. Organophosphorus and pyrethroid insecticide urinary metabolite concentrations in young children living in a southeastern United States city. Sci Total Environ. 2010 Feb 1;408(5):1145-53. Epub 2009 Nov PubMed PMID: 19896164.
74. Arcury TA, Grzywacz JG, Isom S, Whalley LE, Vallejos QM, Chen H, Galván L, **Barr DB**, Quandt SA. Seasonal variation in the measurement of urinary pesticide metabolites among Latino farmworkers in eastern North Carolina. Int J Occup Environ Health. 2009 Oct-Dec;15(4):339-50. PubMed PMID: 19886344; PubMed Central PMCID: PMC2774908.
75. Blount BC, Rich DQ, Valentin-Blasini L, Lashley S, Ananth CV, Murphy E, Smulian JC, Spain BJ, **Barr DB**, Ledoux T, Hore P, Robson M. Perinatal exposure to perchlorate. thiocyanate, and nitrate in New Jersey mothers and newborns. Environ Sci Technol. 2009 Oct 1;43(19):7543-9. PubMed PMID: 19848174; PubMed Central PMCID: PMC2766598.
76. Whitehead RD Jr, Montesano MA, Jayatilaka NK, Buckley B, Winnik B, Needham LL, **Barr DB**. Method for measurement of the quaternary amine compounds paraquat and diquat in human urine using high-performance liquid chromatography-tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2010 Oct 1;878(27):2548-53. Epub 2009 Sep 25. PubMed PMID: 19837016.
77. Barr, DB. Biomonitoring of exposure to pesticides. J. Chem. Health Safety (2008), doi:10.1016/j.jchas.2008.07.001
78. **Barr DB**. Bringing exposure science into the 21st century. J Expo Sci Environ Epidemiol. 2009 Sep;19(6):535. PubMed PMID: 19690553.
79. Winnik B, **Barr DB**, Thiruchelvam M, Montesano MA, Richfield EK, Buckley B. Quantification of Paraquat, MPTP, and MPP+ in brain tissue using microwave-assisted solvent extraction (MASE) and high-performance liquid chromatography-mass spectrometry. Anal Bioanal Chem. 2009 Sep;395(1):195-201. Epub 2009 Jul 19. PubMed PMID: 19618168.
80. Schier JG, Rubin CS, Miller D, **Barr D**, McGeehin MA. Medication-associated diethylene glycol mass poisoning: a review and discussion on the origin of contamination. J Public Health Policy. 2009 Jul;30(2):127-43. Review. PubMed PMID: 19597445.
81. Soldin OP, Nsouli-Maktabi H, Genkinger JM, Loffredo CA, Ortega-Garcia JA, Colantino D, **Barr DB**, Luban NL, Shad AT, Nelson D. Pediatric acute lymphoblastic leukemia and exposure to pesticides. Ther Drug Monit. 2009 Aug;31(4):495-501. Erratum in: Ther Drug Monit. 2009 Oct;31(5):668. Nsouly-Maktabi, Hala [corrected to Nsouli-Maktabi, Hala]. PubMed PMID: 19571777.
82. Arcury TA, Grzywacz JG, Chen H, Vallejos QM, Galván L, Whalley LE, Isom S, **Barr DB**, Quandt SA. Variation across the agricultural season in organophosphorus pesticide urinary metabolite levels for Latino farmworkers in eastern North Carolina: project design and descriptive results. Am J Ind Med. 2009 Jul;52(7):539-50. PubMed PMID: 19517490; PubMed Central PMCID: PMC2735197.
83. Whyatt RM, Garfinkel R, Hoepner LA, Andrews H, Holmes D, Williams MK, Reyes A, Diaz D, Perera FP, Camann DE, **Barr DB**. A biomarker validation study of prenatal chlorpyrifos exposure within an inner-city cohort during pregnancy. Environ Health Perspect. 2009 Apr;117(4):559-67. Epub 2008 Dec 5. PubMed PMID: 19440494; PubMed Central PMCID: PMC2679599.
84. Meeker JD, **Barr DB**, Hauser R. Pyrethroid insecticide metabolites are associated with serum hormone levels in adult men. Reprod Toxicol. 2009 Apr;27(2):155-60. Epub 2009 Jan 24. PubMed PMID: 19429394; PubMed Central PMCID: PMC2692246.
85. Chang A, Montesano MA, **Barr D**, Thomas J, Geller R. Urinary elimination kinetics of acephate and its metabolite, methamidophos, in urine after acute ingestion. J Med Toxicol. 2009 Jun;5(2):68-72. PubMed PMID: 19415590.
86. Yan X, Calafat A, Lashley S, Smulian J, Ananth C, **Barr D**, Silva M, Ledoux T, Hore P, Robson MG. Phthalates Biomarker Identification and Exposure Estimates in a Population of Pregnant Women. Hum Ecol Risk Assess. 2009 May 1;15(3):565-578. PubMed PMID: 20686649; PubMed Central PMCID: PMC2913903.
87. Smith JN, Campbell JA, Busby-Hjerpe AL, Lee S, Poet TS, **Barr DB**, Timchalk C. Comparative chlorpyrifos pharmacokinetics via multiple routes of exposure and vehicles of administration in the adult rat. Toxicology. 2009 Jun 30;261(1-2):47-58. Epub 2009 May 3. PubMed PMID: 19397948.
88. Panuwet P, Prapamontol T, Chantara S, Thavornyuthikarn P, Bravo R, Restrepo P, Walker RD, Williams BL, Needham LL, **Barr DB**. Urinary paranitrophenol, a metabolite of methyl parathion, in Thai farmer and child populations. Arch Environ Contam Toxicol. 2009 Oct;57(3):623-9. Epub 2009 Apr 14. PubMed PMID: 19365648.
89. Bhatti P, Blair A, Bell EM, Rothman N, Lan Q, **Barr DB**, Needham LL, Portengen L, Figgs LW, Vermeulen R. Predictors of 2,4-dichlorophenoxyacetic acid exposure among herbicide applicators. J Expo Sci Environ Epidemiol. 2010 Mar;20(2):160-8. Epub 2009 Mar 25. PubMed PMID: 19319162; PubMed Central PMCID: PMC2823960.
90. Curwin BD, Hein MJ, **Barr DB**, Striley C. Comparison of immunoassay and HPLC-MS/MS used to measure urinary metabolites of atrazine, metolachlor, and chlorpyrifos from farmers and non-farmers in Iowa. J Expo Sci Environ Epidemiol. 2010 Mar;20(2):205-12. Epub 2009 Mar 11. PubMed PMID: 19277069.
91. Harley KG, Marks AR, Bradman A, **Barr DB**, Eskenazi B. DDT exposure, work in agriculture, and time to pregnancy among farmworkers in California. J Occup Environ Med. 2008 Dec;50(12):1335-42. PubMed PMID: 19092487; PubMed Central PMCID: PMC2684791.
92. Williams MK, Rundle A, Holmes D, Reyes M, Hoepner LA, **Barr DB**, Camann DE, Perera FP, Whyatt RM. Changes in pest infestation levels, self-reported pesticide use, and permethrin exposure during pregnancy after the 2000-2001 U.S. Environmental Protection Agency restriction of organophosphates. Environ Health Perspect. 2008 Dec;116(12):1681-8. Epub 2008 Aug 15. PubMed PMID: 19079720; PubMed Central PMCID: PMC2599763.
93. De Alwis GK, Needham LL, **Barr DB**. Automated solid phase extraction, on-support derivatization and isotope dilution-GC/MS method for the detection of urinary dialkyl phosphates in humans. Talanta. 2009 Jan 15;77(3):1063-7. Epub 2008 Aug 23. PubMed PMID: 19064092.
94. Bakke B, De Roos AJ, **Barr DB**, Stewart PA, Blair A, Freeman LB, Lynch CF, Allen RH, Alavanja MC, Vermeulen R. Exposure to atrazine and selected non-persistent pesticides among corn farmers during a growing season. J Expo Sci Environ Epidemiol. 2009 Sep;19(6):544-54. Epub 2008 Dec 3. PubMed PMID: 19052531.
95. Hemakanthi De Alwis GK, Needham LL, **Barr DB**. Determination of dialkyl phosphate metabolites of organophosphorus pesticides in human urine by automated solid-phase extraction, derivatization, and gas chromatography-mass spectrometry. J Anal Toxicol. 2008 Nov-Dec;32(9):721-7. PubMed PMID: 19021926.
96. Panuwet P, Prapamontol T, Chantara S, Thavornyuthikarn P, Montesano MA,Whitehead RD Jr, **Barr DB**. Concentrations of urinary pesticide metabolites in small-scale farmers in Chiang Mai Province, Thailand. Sci Total Environ. 2008 Dec 15;407(1):655-68. Epub 2008 Oct 26. PubMed PMID: 18954893.
97. Rentz ED, Lewis L, Mujica OJ, **Barr DB**, Schier JG, Weerasekera G, Kuklenyik P, McGeehin M, Osterloh J, Wamsley J, Lum W, Alleyne C, Sosa N, Motta J, Rubin C. Outbreak of acute renal failure in Panama in 2006: a case-control study. Bull World Health Organ. 2008 Oct;86(10):749-56. PubMed PMID: 18949211; PubMed Central PMCID: PMC2649516.
98. Naeher LP, **Barr DB**, Rithmire N, Edwards J, Holmes AK, Needham LL, Rubin CS. Pesticide exposure resulting from treatment of lice infestation in school-aged children in Georgia. Environ Int. 2009 Feb;35(2):358-62. Epub 2008 Oct 22. PubMed PMID: 18947873.
99. Grandjean P, Budtz-Jørgensen E, **Barr DB**, Needham LL, Weihe P, Heinzow B. Elimination half-lives of polychlorinated biphenyl congeners in children. Environ Sci Technol. 2008 Sep 15;42(18):6991-6. PubMed PMID: 18853821; PubMed Central PMCID: PMC2600453.
100. Lu C, **Barr DB**, Pearson MA, Walker LA, Bravo R. The attribution of urban and suburban children's exposure to synthetic pyrethroid insecticides: a longitudinal assessment. J Expo Sci Environ Epidemiol. 2009 Jan;19(1):69-78. Epub 2008 Sep 3. PubMed PMID: 18766203.
101. Panuwet P, Prapamontol T, Chantara S, **Barr DB**. Urinary pesticide metabolites in school students from northern Thailand. Int J Hyg Environ Health. 2009 May;212(3):288-97. Epub 2008 Aug 29. PubMed PMID: 18760967.
102. Riederer AM, Bartell SM, **Barr DB**, Ryan PB. Diet and nondiet predictors of urinary 3-phenoxybenzoic acid in NHANES 1999-2002. Environ Health Perspect. 2008 Aug;116(8):1015-22. Erratum in: Environ Health Perspect. 2008 Aug;116(8):1021. PubMed PMID: 18709153; PubMed Central PMCID: PMC2516573.
103. Biggs ML, Davis MD, Eaton DL, Weiss NS, **Barr DB**, Doody DR, Fish S, Needham LL, Chen C, Schwartz SM. Serum organochlorine pesticide residues and risk of testicular germ cell carcinoma: a population-based case-control study. Cancer Epidemiol Biomarkers Prev. 2008 Aug;17(8):2012-8. PubMed PMID: 18708392; PubMed Central PMCID: PMC2766345.
104. Salvatore AL, Bradman A, Castorina R, Camacho J, López J, **Barr DB**, Snyder J, Jewell NP, Eskenazi B. Occupational behaviors and farmworkers' pesticide exposure: findings from a study in Monterey County, California. Am J Ind Med. 2008 Oct;51(10):782-94. PubMed PMID: 18702096; PubMed Central PMCID: PMC2605684.
105. Meeker JD, **Barr DB**, Hauser R. Human semen quality and sperm DNA damage in relation to urinary metabolites of pyrethroid insecticides. Hum Reprod. 2008 Aug;23(8):1932-40. Epub 2008 Jun 25. PubMed PMID: 18579513; PubMed Central PMCID: PMC2733825.
106. Williams BL, **Barr DB**, Wright JM, Buckley B, Magsumbol MS. Interpretation of biomonitoring data in clinical medicine and the exposure sciences. Toxicol Appl Pharmacol. 2008 Nov 15;233(1):76-80. Epub 2008 May 9. Review. PubMed PMID: 18561969.
107. Chevrier J, Eskenazi B, Holland N, Bradman A, **Barr DB**. Effects of exposure to polychlorinated biphenyls and organochlorine pesticides on thyroid function during pregnancy. Am J Epidemiol. 2008 Aug 1;168(3):298-310. Epub 2008 Jun 10. PubMed PMID: 18550560; PubMed Central PMCID: PMC2727265.
108. Panuwet P, Nguyen JV, Kuklenyik P, Udunka SO, Needham LL, **Barr DB**. Quantification of atrazine and its metabolites in urine by on-line solid-phase extraction-high-performance liquid chromatography-tandem mass spectrometry. Anal Bioanal Chem. 2008 Jul;391(5):1931-9. Epub 2008 May 3. PubMed PMID: 18454284.
109. Morgan MK, Stout DM, Jones PA, **Barr DB**. An observational study of the potential for human exposures to pet-borne diazinon residues following lawn applications. Environ Res. 2008 Jul;107(3):336-42. Epub 2008 Apr 29. PubMed PMID: 18448091.
110. Duprey Z, Rivers S, Luber G, Becker A, Blackmore C, **Barr D**, Weerasekera G, Kieszak S, Flanders WD, Rubin C. Community aerial mosquito control and naled exposure. J Am Mosq Control Assoc. 2008 Mar;24(1):42-6. PubMed PMID: 18437813.
111. Lu C, **Barr DB**, Pearson MA, Waller LA. Dietary intake and its contribution to longitudinal organophosphorus pesticide exposure in urban/suburban children. Environ Health Perspect. 2008 Apr;116(4):537-42. PubMed PMID: 18414640; PubMed Central PMCID: PMC2290988.
112. Bradman A, Salvatore AL, Boeniger M, Castorina R, Snyder J, **Barr DB**, Jewell NP, Kavanagh-Baird G, Striley C, Eskenazi B. Community-based intervention to reduce pesticide exposure to farmworkers and potential take-home exposure to their families. J Expo Sci Environ Epidemiol. 2009 Jan;19(1):79-89. Epub 2008 Mar PubMed PMID: 18368011.
113. Weerasekera G, Smith KD, Needham LL, **Barr DB**. A rapid, cost-effective method for analyzing organophosphorus pesticide metabolites in human urine for counter-terrorism response. J Anal Toxicol. 2008 Jan-Feb;32(1):106-15. PubMed PMID: 18269802.
114. Meeker JD, Ravi SR, **Barr DB**, Hauser R. Circulating estradiol in men is inversely related to urinary metabolites of nonpersistent insecticides. Reprod Toxicol. 2008 Feb;25(2):184-91. Epub 2007 Dec 28. PubMed PMID: 18249523; PubMed Central PMCID: PMC2330088.
115. Eskenazi B, Rosas LG, Marks AR, Bradman A, Harley K, Holland N, Johnson C, Fenster L, **Barr DB**. Pesticide toxicity and the developing brain. Basic Clin Pharmacol Toxicol. 2008 Feb;102(2):228-36. Review. PubMed PMID: 18226078.
116. Needham LL, Calafat AM, **Barr DB**. Assessing developmental toxicant exposures via biomonitoring. Basic Clin Pharmacol Toxicol. 2008 Feb;102(2):100-8. Review. PubMed PMID: 18226062.
117. **Barr DB**. REACH: Innovative legislation to reduce chemical exposures. J Expo Sci Environ Epidemiol. 2007 Dec;17 Suppl 1:S1. PubMed PMID: 18066097.
118. **Barr DB**. Exposure assessment using biomonitoring: Is its usefulness fully realized? J Expo Sci Environ Epidemiol. 2007 Jul; 17(4):307. PMID: 17625577 [PubMed - in process]
119. Chevrier J, Eskenazi B, Bradman A, Fenster L, **Barr DB**. Associations between prenatal exposure to polychlorinated biphenyls and neonatal thyroid-stimulating hormone levels in a Mexican-American population, Salinas Valley, California. Environ Health Perspect. 2007 Oct;115(10):1490-6. PubMed PMID: 17938741; PubMed Central PMCID: PMC2022659.
120. **Barr DB**, Panuwet P, Nguyen JV, Udunka S, Needham LL. Assessing exposure to atrazine and its metabolites using biomonitoring. Environ Health Perspect. 2007 Oct;115(10):1474-8. PubMed PMID: 17938738; PubMed Central PMCID: PMC2022667.
121. **Barr DB**, Leng G, Berger-Preiss E, Hoppe HW, Weerasekera G, Gries W, Gerling S, Perez J, Smith K, Needham LL, Angerer J. Cross validation of multiple methods for measuring pyrethroid and pyrethrum insecticide metabolites in human urine. Anal Bioanal Chem. 2007 Oct;389(3):811-8. Epub 2007 Sep 9. PubMed PMID: 17828527.
122. **Barr DB**, Barr JR, Weerasekera G, Wamsley J, Kalb SR, Sjödin A, Schier JG, Rentz ED, Lewis L, Rubin C, Needham LL, Jones RL, Sampson EJ. Identification and quantification of diethylene glycol in pharmaceuticals implicated in poisoning epidemics: an historical laboratory perspective. J Anal Toxicol. 2007 Jul-Aug;31(6):295-303. PubMed PMID: 17725874.
123. Arcury TA, Grzywacz JG, **Barr DB**, Tapia J, Chen H, Quandt SA. Pesticide urinary metabolite levels of children in eastern North Carolina farmworker households. Environ Health Perspect. 2007 Aug;115(8):1254-60. PubMed PMID: 17687456; PubMed Central PMCID: PMC1940070.
124. Timchalk C, Busby A, Campbell JA, Needham LL, **Barr DB**. Comparative pharmacokinetics of the organophosphorus insecticide chlorpyrifos and its major metabolites diethylphosphate, diethylthiophosphate and 3,5,6-trichloro-2-pyridinol in the rat. Toxicology. 2007 Jul 31;237(1-3):145-57. Epub 2007 May 18. PubMed PMID: 17590257.
125. Nguyen JV, Olsson AO, Bravo R, Needham LL, **Barr DB**. Quantification of atrazine, phenylurea, and sulfonylurea herbicide metabolites in urine by high-performance liquid chromatography-tandem mass spectrometry. J Anal Toxicol. 2007 May;31(4):181-6. PubMed PMID: 17555640.
126. Engel LS, Laden F, Andersen A, Strickland PT, Blair A, Needham LL, **Barr DB**, Wolff MS, Helzlsouer K, Hunter DJ, Lan Q, Cantor KP, Comstock GW, Brock JW, Bush D, Hoover RN, Rothman N. Polychlorinated biphenyl levels in peripheral blood and non-Hodgkin's lymphoma: a report from three cohorts. Cancer Res. 2007 Jun 1;67(11):5545-52. PubMed PMID: 17545638.
127. **Barr DB**, Hines CJ, Olsson AO, Deddens JA, Bravo R, Striley CA, Norrgran J, Needham LL. Identification of human urinary metabolites of acetochlor in exposed herbicide applicators by high-performance liquid chromatography-tandem mass spectrometry. J Expo Sci Environ Epidemiol. 2007 Sep;17(6):559-66. Epub 2007 May PubMed PMID: 17534384.
128. Eskenazi B, Marks AR, Bradman A, Harley K, **Barr DB**, Johnson C, Morga N, Jewell NP. Organophosphate pesticide exposure and neurodevelopment in young Mexican-American children. Environ Health Perspect. 2007 May;115(5):792-8. Epub 2007 Jan 4. PubMed PMID: 17520070; PubMed Central PMCID: PMC1867968.
129. Montesano MA, Olsson AO, Kuklenyik P, Needham LL, Bradman AS, **Barr DB**. Method for determination of acephate, methamidophos, omethoate, dimethoate, ethylenethiourea and propylenethiourea in human urine using high-performance liquid chromatography-atmospheric pressure chemical ionization tandem mass spectrometry. J Expo Sci Environ Epidemiol. 2007 Jul;17(4):321-30. Epub 2007 Apr 18. PubMed PMID: 17440487.
130. Engel SM, Berkowitz GS, **Barr DB**, Teitelbaum SL, Siskind J, Meisel SJ, Wetmur JG, Wolff MS. Prenatal organophosphate metabolite and organochlorine levels and performance on the Brazelton Neonatal Behavioral Assessment Scale in a multiethnic pregnancy cohort. Am J Epidemiol. 2007 Jun 15;165(12):1397-404. Epub 2007 Apr 3. PubMed PMID: 17406008.
131. De Alwis GK, Needham LL, **Barr DB**. Automated solid phase extraction and quantitative measurement of 2,3-dibromo-1-propanol in urine using gas chromatography-mass spectrometry. Arch Environ Contam Toxicol. 2007 Jul;53(1):134-9. Epub 2007 Mar 29. PubMed PMID: 17396210.
132. **Barr DB**, Bishop A, Needham LL. Concentrations of xenobiotic chemicals in the maternal-fetal unit. Reprod Toxicol. 2007 Apr-May;23(3):260-6. Epub 2007 Mar 13. Review. PubMed PMID: 17386996.
133. Rubin CS, Holmes AK, Belson MG, Jones RL, Flanders WD, Kieszak SM, Osterloh J, Luber GE, Blount BC, **Barr DB**, Steinberg KK, Satten GA, McGeehin MA, Todd RL. Investigating childhood leukemia in Churchill County, Nevada. Environ Health Perspect. 2007 Jan;115(1):151-7. PubMed PMID: 17366836; PubMed Central PMCID: PMC1797848.
134. Fenster L, Eskenazi B, Anderson M, Bradman A, Hubbard A, **Barr DB**. In utero exposure to DDT and performance on the Brazelton neonatal behavioral assessment scale. Neurotoxicology. 2007 May;28(3):471-7. Epub 2007 Jan 10. PubMed PMID: 17287022.
135. Wolff MS, Engel S, Berkowitz G, Teitelbaum S, Siskind J, **Barr DB**, Wetmur J. Prenatal pesticide and PCB exposures and birth outcomes. Pediatr Res. 2007 Feb;61(2):243-50. Erratum in: Pediatr Res. 2007 Oct;62(4):450. PubMed PMID: 17237730.
136. Rodríguez T, Younglove L, Lu C, Funez A, Weppner S, **Barr DB**, Fenske RA. Biological monitoring of pesticide exposures among applicators and their children in Nicaragua. Int J Occup Environ Health. 2006 Oct-Dec;12(4):312-20. PubMed PMID: 17168218.
137. Needham LL, Calafat AM, **Barr DB**. Uses and issues of biomonitoring. Int J Hyg Environ Health. 2007 May;210(3-4):229-38. Epub 2006 Dec 8. PubMed PMID: 17157561.
138. Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, **Barr DB**, Whitehead R, Tang D, Whyatt RW. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatrics. 2006 Dec;118(6):e1845-59. Epub 2006 Nov 20. PubMed PMID: 17116700.
139. Robison SH, **Barr DB**. Use of biomonitoring data to evaluate methyl eugenol exposure. Environ Health Perspect. 2006 Nov;114(11):1797-801. Review. PubMed PMID: 17107870; PubMed Central PMCID: PMC1665427.
140. **Barr DB**, Angerer J. Potential uses of biomonitoring data: a case study using the organophosphorus pesticides chlorpyrifos and malathion. Environ Health Perspect. 2006 Nov;114(11):1763-9. Review. PubMed PMID: 17107865; PubMed Central PMCID: PMC1665422.
141. Williams MK, **Barr DB**, Camann DE, Cruz LA, Carlton EJ, Borjas M, Reyes A, Evans D, Kinney PL, Whitehead RD Jr, Perera FP, Matsoanne S, Whyatt RM. An intervention to reduce residential insecticide exposure during pregnancy among an inner-city cohort. Environ Health Perspect. 2006 Nov;114(11):1684-9. PubMed PMID: 17107853; PubMed Central PMCID: PMC1665406.
142. Kavlock R, **Barr D**, Boekelheide K, Breslin W, Breysse P, Chapin R, Gaido K, Hodgson E, Marcus M, Shea K, Williams P. NTP-CERHR Expert Panel Update on the Reproductive and Developmental Toxicity of di(2-ethylhexyl) phthalate. Reprod Toxicol. 2006 Oct;22(3):291-399. Review. PubMed PMID: 17068859.
143. Bradman AS, Schwartz JM, Fenster L, **Barr DB**, Holland NT, Eskenazi B. Factors

predicting organochlorine pesticide levels in pregnant Latina women living in a United States agricultural area. J Expo Sci Environ Epidemiol. 2007 Jul;17(4):388-99. Epub 2006 Oct 11. PubMed PMID: 17033681.

1. Perry MJ, Venners SA, **Barr DB**, Xu X. Environmental pyrethroid and organophosphorus insecticide exposures and sperm concentration. Reprod Toxicol. 2007 Jan;23(1):113-8. Epub 2006 Sep 1. PubMed PMID: 17011162.
2. Lu C, **Barr DB**, Pearson M, Bartell S, Bravo R. A longitudinal approach to assessing urban and suburban children's exposure to pyrethroid pesticides. Environ Health Perspect. 2006 Sep;114(9):1419-23. PubMed PMID: 16966099; PubMed Central PMCID: PMC1570056.
3. Perera FP, Rauh V, Whyatt RM, Tsai WY, Tang D, Diaz D, Hoepner L, **Barr D**, Tu YH, Camann D, Kinney P. Effect of prenatal exposure to airborne polycyclic aromatic hydrocarbons on neurodevelopment in the first 3 years of life among inner-city children. Environ Health Perspect. 2006 Aug;114(8):1287-92. PubMed PMID:16882541; PubMed Central PMCID: PMC1551985.
4. Eskenazi B, Marks AR, Bradman A, Fenster L, Johnson C, **Barr DB**, Jewell NP. In utero exposure to dichlorodiphenyltrichloroethane (DDT) and dichlorodiphenyldichloroethylene (DDE) and neurodevelopment among young Mexican American children. Pediatrics. 2006 Jul;118(1):233-41. PubMed PMID: 16818570.
5. Arcury TA, Grzywacz JG, Davis SW, **Barr DB**, Quandt SA. Organophosphorus pesticide urinary metabolite levels of children in farmworker households in eastern North Carolina. Am J Ind Med. 2006 Sep;49(9):751-60. PubMed PMID: 16804908.
6. De Alwis GK, Needham LL, **Barr DB**. Measurement of human urinary organophosphate pesticide metabolites by automated solid-phase extraction derivation and gas chromatography-tandem mass spectromy. J Chromatogr B Analyt Technol Biomed Life Sci. 2006 Oct 20;843(1):34-41. PubMed PMID: 16766234.
7. **Barr DB**, Landsittel D, Nishioka M, Thomas K, Curwin B, Raymer J, Donnelly KC, McCauley L, Ryan PB. A survey of laboratory and statistical issues related to farmworker exposure studies. Environ Health Perspect. 2006 Jun;114(6):961-8. PubMed PMID: 16760001; PubMed Central PMCID: PMC1480509.
8. **Barr DB**, Thomas K, Curwin B, Landsittel D, Raymer J, Lu C, Donnelly KC, Acquavella J. Biomonitoring of exposure in farmworker studies. Environ Health Perspect. 2006 Jun;114(6):936-42. Review. PubMed PMID: 16759998; PubMed Central PMCID: PMC1480485.
9. Arcury TA, Quandt SA, **Barr DB**, Hoppin JA, McCauley L, Grzywacz JG, Robson MG. Farmworker exposure to pesticides: methodologic issues for the collection of comparable data. Environ Health Perspect. 2006 Jun;114(6):923-8. PubMed PMID: 16759996; PubMed Central PMCID: PMC1480495.
10. Bradman A, Whitaker D, Quirós L, Castorina R, Claus Henn B, Nishioka M, Morgan J, **Barr DB**, Harnly M, Brisbin JA, Sheldon LS, McKone TE, Eskenazi B. Pesticides and their metabolites in the homes and urine of farmworker children living in the Salinas Valley, CA. J Expo Sci Environ Epidemiol. 2007 Jul;17(4):331-49. Epub 2006 May 31. Erratum in: J Expo Sci Environ Epidemiol. 2009 Nov;19(7):694-5. PubMed PMID: 16736054.
11. Meeker JD, **Barr DB**, Serdar B, Rappaport SM, Hauser R. Utility of urinary 1-naphthol and 2-naphthol levels to assess environmental carbaryl and naphthalene exposure in an epidemiology study. J Expo Sci Environ Epidemiol. 2007 Jul;17(4):314-20. Epub 2006 May 24. PubMed PMID: 16721410.
12. Meeker JD, **Barr DB**, Hauser R. Thyroid hormones in relation to urinary metabolites of non-persistent insecticides in men of reproductive age. Reprod Toxicol. 2006 Oct;22(3):437-42. Epub 2006 Apr 3. PubMed PMID: 16584866.
13. Fenster L, Eskenazi B, Anderson M, Bradman A, Harley K, Hernandez H, Hubbard A, **Barr DB**. Association of in utero organochlorine pesticide exposure and fetal growth and length of gestation in an agricultural population. Environ Health Perspect. 2006 Apr;114(4):597-602. PubMed PMID: 16581552; PubMed Central PMCID: PMC1440787.
14. Joskow R, **Barr DB**, Barr JR, Calafat AM, Needham LL, Rubin C. Exposure to bisphenol A from bis-glycidyl dimethacrylate-based dental sealants. J Am Dent Assoc. 2006 Mar;137(3):353-62. PubMed PMID: 16570469.
15. Grandjean P, Harari R, **Barr DB**, Debes F. Pesticide exposure and stunting as independent predictors of neurobehavioral deficits in Ecuadorian school children. Pediatrics. 2006 Mar;117(3):e546-56. PubMed PMID: 16510633.
16. Lu C, Toepel K, Irish R, Fenske RA, **Barr DB**, Bravo R. Organic diets significantly lower children's dietary exposure to organophosphorus pesticides. Environ Health Perspect. 2006 Feb;114(2):260-3. PubMed PMID: 16451864; PubMed Central PMCID: PMC1367841.
17. Hore P, Zartarian V, Xue J, Ozkaynak H, Wang SW, Yang YC, Chu PL, Sheldon L, Robson M, Needham L, **Barr D**, Freeman N, Georgopoulos P, Lioy PJ. Children's residential exposure to chlorpyrifos: application of CPPAES field measurements of chlorpyrifos and TCPy within MENTOR/SHEDS-Pesticides model. Sci Total Environ. 2006 Aug 1;366(2-3):525-37. Epub 2005 Dec 19. PubMed PMID: 16360767.
18. Meeker JD, Ryan L, **Barr DB**, Hauser R. Exposure to nonpersistent insecticides and male reproductive hormones. Epidemiology. 2006 Jan;17(1):61-8. PubMed PMID: 16357596.
19. Bradman A, Eskenazi B, **Barr DB**, Bravo R, Castorina R, Chevrier J, Kogut K, Harnly ME, McKone TE. Organophosphate urinary metabolite levels during pregnancy and after delivery in women living in an agricultural community. Environ Health Perspect. 2005 Dec;113(12):1802-7. PubMed PMID: 16330368; PubMed Central PMCID: PMC1314925.
20. **Barr DB**, Allen R, Olsson AO, Bravo R, Caltabiano LM, Montesano A, Nguyen J, Udunka S, Walden D, Walker RD, Weerasekera G, Whitehead RD Jr, Schober SE, Needham LL. Concentrations of selective metabolites of organophosphorus pesticides in the United States population. Environ Res. 2005 Nov;99(3):314-26. PubMed PMID: 16307973.
21. Norrgran J, Bravo R, Bishop AM, Restrepo P, Whitehead RD, Needham LL, **Barr DB**. Quantification of six herbicide metabolites in human urine. J Chromatogr B Analyt Technol Biomed Life Sci. 2006 Jan 18;830(2):185-95. Epub 2005 Nov 16.PubMed PMID: 16297668.
22. **Barr DB**. Human Exposure Science: A field of growing importance. J Expo Sci Environ Epidemiol. 2006; 16:473.
23. **Barr DB**. Editorial. J Expo Sci Environ Epidemiol. 2006 Mar; 16(2):105.
24. Baker SE, Olsson AO, Needham LL, **Barr DB**. High-performance liquid chromatography-tandem mass spectrometry method for quantifying sulfonylurea herbicides in human urine: reconsidering the validation process. Anal Bioanal Chem. 2005 Nov;383(6):963-76. Epub 2005 Nov 9. PubMed PMID: 16273339.
25. Fenske RA, Bradman A, Whyatt RM, Wolff MS, **Barr DB**. Lessons learned for the assessment of children's pesticide exposure: critical sampling and analytical issues for future studies. Environ Health Perspect. 2005 Oct;113(10):1455-62. PubMed PMID: 16203262; PubMed Central PMCID: PMC1281295.
26. Calafat AM, Brock JW, Silva MJ, Gray LE Jr, Reidy JA, **Barr DB**, Needham LL. Urinary and amniotic fluid levels of phthalate monoesters in rats after the oral administration of di(2-ethylhexyl) phthalate and di-n-butyl phthalate. Toxicology. 2006 Jan 5;217(1):22-30. Epub 2005 Sep 19. PubMed PMID: 16171919.
27. **Barr DB**, Weihe P, Davis MD, Needham LL, Grandjean P. Serum polychlorinated biphenyl and organochlorine insecticide concentrations in a Faroese birth cohort. Chemosphere. 2006 Feb;62(7):1167-82. Epub 2005 Sep 16. PubMed PMID: 16169054.
28. Perera FP, Rauh V, Whyatt RM, Tang D, Tsai WY, Bernert JT, Tu YH, Andrews H, **Barr DB**, Camann DE, Diaz D, Dietrich J, Reyes A, Kinney PL. A summary of recent findings on birth outcomes and developmental effects of prenatal ETS, PAH, and pesticide exposures. Neurotoxicology. 2005 Aug;26(4):573-87. Review. PubMed PMID: 16112323.
29. Needham LL, **Barr DB**, Calafat AM. Characterizing children's exposures: beyond NHANES. Neurotoxicology. 2005 Aug;26(4):547-53. Epub 2004 Nov 26. Review.PubMed PMID: 16112320.
30. Needham LL, **Barr DB**, Caudill SP, Pirkle JL, Turner WE, Osterloh J, Jones RL, Sampson EJ. Concentrations of environmental chemicals associated with neurodevelopmental effects in U.S. population. Neurotoxicology. 2005 Aug;26(4):531-45. Epub 2005 Jan 11. Review. PubMed PMID: 16112319.
31. Wang RY, Needham LL, **Barr DB**. Effects of environmental agents on the attainment of puberty: considerations when assessing exposure to environmental chemicals in the National Children's Study. Environ Health Perspect. 2005 Aug;113(8):1100-7. PubMed PMID: 16079085; PubMed Central PMCID: PMC1280355.
32. **Barr DB**, Wang RY, Needham LL. Biologic monitoring of exposure to environmental chemicals throughout the life stages: requirements and issues for consideration for the National Children's Study. Environ Health Perspect. 2005 Aug;113(8):1083-91. PubMed PMID: 16079083; PubMed Central PMCID: PMC1280353.
33. Needham LL, Ozkaynak H, Whyatt RM, **Barr DB**, Wang RY, Naeher L, Akland G, Bahadori T, Bradman A, Fortmann R, Liu LJ, Morandi M, O'Rourke MK, Thomas K, Quackenboss J, Ryan PB, Zartarian V. Exposure assessment in the National Children's Study: introduction. Environ Health Perspect. 2005 Aug;113(8):1076-82. PubMed PMID: 16079082; PubMed Central PMCID: PMC1280352.
34. Hoppin JA, Ulmer R, Calafat AM, **Barr DB**, Baker SV, Meltzer HM, Rønningen KS. Impact of urine preservation methods and duration of storage on measured levels of environmental contaminants. J Expo Sci Environ Epidemiol. 2006 Jan;16(1):39-48. PubMed PMID: 16007114.
35. Whyatt RM, Camann D, Perera FP, Rauh VA, Tang D, Kinney PL, Garfinkel R, Andrews H, Hoepner L, **Barr DB**. Biomarkers in assessing residential insecticide exposures during pregnancy and effects on fetal growth. Toxicol Appl Pharmacol. 2005 Aug 7;206(2):246-54. PubMed PMID: 15967215.
36. Valentín-Blasini L, Sadowski MA, Walden D, Caltabiano L, Needham LL, **Barr DB**. Urinary phytoestrogen concentrations in the U.S. population (1999-2000). J Expo Anal Environ Epidemiol. 2005 Nov;15(6):509-23. PubMed PMID: 15928707.
37. Bravo R, Caltabiano LM, Fernandez C, Smith KD, Gallegos M, Whitehead RD Jr, Weerasekera G, Restrepo P, Bishop AM, Perez JJ, Needham LL, **Barr DB**. Quantification of phenolic metabolites of environmental chemicals in human urine using gas chromatography-tandem mass spectrometry and isotope dilution quantification. J Chromatogr B Analyt Technol Biomed Life Sci. 2005 Jun 25;820(2):229-36. Epub 2005 Apr 26. PubMed PMID: 15899376.
38. Curwin BD, Hein MJ, Sanderson WT, **Barr DB**, Heederik D, Reynolds SJ, Ward EM, Alavanja MC. Urinary and hand wipe pesticide levels among farmers and nonfarmers in Iowa. J Expo Anal Environ Epidemiol. 2005 Nov;15(6):500-8. PubMed PMID:15841098.
39. Lu C, Bravo R, Caltabiano LM, Irish RM, Weerasekera G, **Barr DB**. The presence of dialkylphosphates in fresh fruit juices: implication for organophosphorus pesticide exposure and risk assessments. J Toxicol Environ Health A. 2005 Feb 13;68(3):209-27. PubMed PMID: 15762180.
40. Young JG, Eskenazi B, Gladstone EA, Bradman A, Pedersen L, Johnson C, **Barr DB**, Furlong CE, Holland NT. Association between in utero organophosphate pesticide exposure and abnormal reflexes in neonates. Neurotoxicology. 2005 Mar;26(2):199-209. PubMed PMID: 15713341.
41. Hore P, Robson M, Freeman N, Zhang J, Wartenberg D, Ozkaynak H, Tulve N, Sheldon L, Needham L, **Barr D**, Lioy PJ. Chlorpyrifos accumulation patterns for child-accessible surfaces and objects and urinary metabolite excretion by children for 2 weeks after crack-and-crevice application. Environ Health Perspect. 2005 Feb;113(2):211-9. PubMed PMID: 15687060; PubMed Central PMCID: PMC1277867.
42. **Barr DB**, Wilder LC, Caudill SP, Gonzalez AJ, Needham LL, Pirkle JL. Urinary creatinine concentrations in the U.S. population: implications for urinary biologic monitoring measurements. Environ Health Perspect. 2005 Feb;113(2):192-200. PubMed PMID: 15687057; PubMed Central PMCID: PMC1277864.
43. Needham LL, Patterson DG Jr, **Barr DB**, Grainger J, Calafat AM. Uses of speciation techniques in biomonitoring for assessing human exposure to organic environmental chemicals. Anal Bioanal Chem. 2005 Jan;381(2):397-404. Epub 2004 Dec 23. Review. PubMed PMID: 15616776.
44. Currier M, McNeill M, Campbell D, Newton N, Marr JS, Perry E, Berg SW, **Barr DB**, Luber GE, Kieszak SM, Rogers HS, Backer LC, Belson MG, and Rubin C. Human exposure to mosquito-control pesticides: Mississippi, North Carolina, Virginia 2002-03. MMWR. 2005; 54(21):529-532.
45. Gladen BC, Klebanoff MA, Hediger ML, Katz SH, **Barr DB**, Davis MD, Longnecker MP. Prenatal DDT exposure in relation to anthropometric and pubertal measures in adolescent males. Environ Health Perspect. 2004 Dec;112(17):1761-7. PubMed PMID:15579424; PubMed Central PMCID: PMC1253670.
46. Meeker JD, Ryan L, **Barr DB**, Herrick RF, Bennett DH, Bravo R, Hauser R. The relationship of urinary metabolites of carbaryl/naphthalene and chlorpyrifos with human semen quality. Environ Health Perspect. 2004 Dec;112(17):1665-70. PubMed PMID: 15579410; PubMed Central PMCID: PMC1253656.
47. Mage DT, Allen RH, Gondy G, Smith W, **Barr DB**, Needham LL. Estimating pesticide dose from urinary pesticide concentration data by creatinine correction in the Third National Health and Nutrition Examination Survey (NHANES-III). J Expo Anal Environ Epidemiol. 2004 Nov;14(6):457-65. PubMed PMID: 15367927.
48. Meeker JD, **Barr DB**, Ryan L, Herrick RF, Bennett DH, Bravo R, Hauser R. Temporal variability of urinary levels of nonpersistent insecticides in adult men. J Expo Anal Environ Epidemiol. 2005 May;15(3):271-81. PubMed PMID: 15340359.
49. Meeker JD, Singh NP, Ryan L, Duty SM, **Barr DB**, Herrick RF, Bennett DH, Hauser R. Urinary levels of insecticide metabolites and DNA damage in human sperm. Hum Reprod. 2004 Nov;19(11):2573-80. Epub 2004 Aug 27. PubMed PMID: 15333606.
50. Boyer AE, Ash D, **Barr DB**, Young CL, Driskell WJ, Whitehead RD Jr, Ospina M, Preston KE, Woolfitt AR, Martinez RA, Silks LA, Barr JR. Quantitation of the sulfur mustard metabolites 1,1'-sulfonylbis[2-(methylthio)ethane] and thiodiglycol in urine using isotope-dilution Gas chromatography-tandem mass spectrometry. J Anal Toxicol. 2004 Jul-Aug;28(5):327-32. PubMed PMID: 15239851.
51. Whyatt RM, Rauh V, **Barr DB**, Camann DE, Andrews HF, Garfinkel R, Hoepner LA, Diaz D, Dietrich J, Reyes A, Tang D, Kinney PL, Perera FP. Prenatal insecticide exposures and birth weight and length among an urban minority cohort. Environ Health Perspect. 2004 Jul;112(10):1125-32. PubMed PMID: 15238288; PubMed Central PMCID: PMC1247388.
52. Eskenazi B, Harley K, Bradman A, Weltzien E, Jewell NP, **Barr DB**, Furlong CE, Holland NT. Association of in utero organophosphate pesticide exposure and fetal growth and length of gestation in an agricultural population. Environ Health Perspect. 2004 Jul;112(10):1116-24. PubMed PMID: 15238287; PubMed Central PMCID: PMC1247387.
53. Baker SE, Olsson AO, **Barr DB**. Isotope dilution high-performance liquid chromatography-tandem mass spectrometry method for quantifying urinary metabolites of synthetic pyrethroid insecticides. Arch Environ Contam Toxicol. 2004 Apr;46(3):281-8. PubMed PMID: 15195798.
54. Kissel JC, Curl CL, Kedan G, Lu C, Griffith W, **Barr DB**, Needham LL, Fenske RA. Comparison of organophosphorus pesticide metabolite levels in single and multiple daily urine samples collected from preschool children in Washington State. J Expo Anal Environ Epidemiol. 2005 Mar;15(2):164-71. PubMed PMID: 15187987.
55. Bravo R, Caltabiano LM, Weerasekera G, Whitehead RD, Fernandez C, Needham LL, Bradman A, **Barr DB**. Measurement of dialkyl phosphate metabolites of organophosphorus pesticides in human urine using lyophilization with gas chromatography-tandem mass spectrometry and isotope dilution quantification. J Expo Anal Environ Epidemiol. 2004 May;14(3):249-59. PubMed PMID: 15141154.
56. Schecter A, Lucier GW, Cunningham ML, Abdo KM, Blumenthal G, Silver AG, Melnick R, Portier C, **Barr DB**, Barr JR, Stanfill SB, Patterson DG Jr, Needham LL, Stopford W, Masten S, Mignogna J, Tung KC. Human consumption of methyleugenol and its elimination from serum. Environ Health Perspect. 2004 May;112(6):678-80. PubMed PMID: 15121510; PubMed Central PMCID: PMC1241961.
57. Olsson AO, Baker SE, Nguyen JV, Romanoff LC, Udunka SO, Walker RD, Flemmen KL, **Barr DB**. A liquid chromatography--tandem mass spectrometry multiresidue method for quantification of specific metabolites of organophosphorus pesticides,synthetic pyrethroids, selected herbicides, and deet in human urine. Anal Chem. 2004 May 1;76(9):2453-61. PubMed PMID: 15117183.
58. Silva MJ, **Barr DB**, Reidy JA, Malek NA, Hodge CC, Caudill SP, Brock JW, Needham LL, Calafat AM. Urinary levels of seven phthalate metabolites in the U.S. population from the National Health and Nutrition Examination Survey (NHANES) 1999-2000. Environ Health Perspect. 2004 Mar;112(3):331-8. Erratum in: Environ Health Perspect. 2004 Apr;112(5):A270. PubMed PMID: 14998749; PubMed Central PMCID: PMC1241863.
59. Kato K, Silva MJ, Reidy JA, Hurtz D 3rd, Malek NA, Needham LL, Nakazawa H, **Barr DB**, Calafat AM. Mono(2-ethyl-5-hydroxyhexyl) phthalate and mono-(2-ethyl-5-oxohexyl) phthalate as biomarkers for human exposure assessment to di-(2-ethylhexyl) phthalate. Environ Health Perspect. 2004 Mar;112(3):327-30. PubMed PMID: 14998748; PubMed Central PMCID: PMC1241862.
60. **Barr DB**, Bravo R, Weerasekera G, Caltabiano LM, Whitehead RD Jr, Olsson AO, Caudill SP, Schober SE, Pirkle JL, Sampson EJ, Jackson RJ, Needham LL. Concentrations of dialkyl phosphate metabolites of organophosphorus pesticides in the U.S. population. Environ Health Perspect. 2004 Feb;112(2):186-200. PubMed PMID: 14754573; PubMed Central PMCID: PMC1241828.
61. Watson C, McCraw J, Polzin G, Ashley D, **Barr D**. Development of a method to assess cigarette smoke intake. Environ Sci Technol. 2004 Jan 1;38(1):248-53. Erratum in: Environ Sci Technol. 2004 Nov 1;38(21):5824. PubMed PMID: 14740743.
62. Wessels D, **Barr DB**, Mendola P. Use of biomarkers to indicate exposure of children to organophosphate pesticides: implications for a longitudinal study of children's environmental health. Environ Health Perspect. 2003 Dec;111(16):1939-46. Review. PubMed PMID: 14644670; PubMed Central PMCID: PMC1241770.
63. Bradman A, **Barr DB**, Claus Henn BG, Drumheller T, Curry C, Eskenazi B. Measurement of pesticides and other toxicants in amniotic fluid as a potential biomarker of prenatal exposure: a validation study. Environ Health Perspect. 2003 Nov;111(14):1779-82. PubMed PMID: 14594631; PubMed Central PMCID: PMC1241723.
64. Adibi JJ, Perera FP, Jedrychowski W, Camann DE, **Barr D**, Jacek R, Whyatt RM. Prenatal exposures to phthalates among women in New York City and Krakow, Poland. Environ Health Perspect. 2003 Nov;111(14):1719-22. PubMed PMID: 14594621; PubMed Central PMCID: PMC1241713.
65. Silva MJ, **Barr DB**, Reidy JA, Kato K, Malek NA, Hodge CC, Hurtz D 3rd, Calafat AM, Needham LL, Brock JW. Glucuronidation patterns of common urinary and serum monoester phthalate metabolites. Arch Toxicol. 2003 Oct;77(10):561-7. Epub 2003 Jun 28. Erratum in: Arch Toxicol. 2005 May;79(5):302. PubMed PMID: 14574443.
66. Bearer CF, Jacobson JL, Jacobson SW, **Barr D**, Croxford J, Molteno CD, Viljoen DL, Marais AS, Chiodo LM, Cwik AS. Validation of a new biomarker of fetal exposure to alcohol. J Pediatr. 2003 Oct;143(4):463-9. PubMed PMID: 14571221.
67. Castorina R, Bradman A, McKone TE, **Barr DB**, Harnly ME, Eskenazi B. Cumulative organophosphate pesticide exposure and risk assessment among pregnant women living in an agricultural community: a case study from the CHAMACOS cohort. Environ Health Perspect. 2003 Oct;111(13):1640-8. PubMed PMID: 14527844; PubMed Central PMCID: PMC1241687.
68. Swan SH, Kruse RL, Liu F, **Barr DB**, Drobnis EZ, Redmon JB, Wang C, Brazil C, Overstreet JW; Study for Future Families Research Group. Semen quality in relation to biomarkers of pesticide exposure. Environ Health Perspect. 2003 Sep;111(12):1478-84. PubMed PMID: 12948887; PubMed Central PMCID: PMC1241650.
69. Kato K, Silva MJ, Brock JW, Reidy JA, Malek NA, Hodge CC, Nakazawa H, Needham LL, **Barr DB**. Quantitative detection of nine phthalate metabolites in human serum using reversed-phase high-performance liquid chromatography-electrospray ionization-tandem mass spectrometry. J Anal Toxicol. 2003 Jul-Aug;27(5):284-9. PubMed PMID: 12908941.
70. Barr JR, Maggio VL, **Barr DB**, Turner WE, Sjödin A, Sandau CD, Pirkle JL, Needham LL, Patterson DG Jr. New high-resolution mass spectrometric approach for the measurement of polychlorinated biphenyls and organochlorine pesticides in human serum. J Chromatogr B Analyt Technol Biomed Life Sci. 2003 Aug 25;794(1):137-48. PubMed PMID: 12888206.
71. Duty SM, Silva MJ, **Barr DB**, Brock JW, Ryan L, Chen Z, Herrick RF, Christiani DC, Hauser R. Phthalate exposure and human semen parameters. Epidemiology. 2003 May;14(3):269-77. PubMed PMID: 12859026.
72. Duty SM, Singh NP, Silva MJ, **Barr DB**, Brock JW, Ryan L, Herrick RF, Christiani DC, Hauser R. The relationship between environmental exposures to phthalates and DNA damage in human sperm using the neutral comet assay. Environ Health Perspect. 2003 Jul;111(9):1164-9. PubMed PMID: 12842768; PubMed Central PMCID: PMC1241569.
73. **Barr DB**, Silva MJ, Kato K, Reidy JA, Malek NA, Hurtz D, Sadowski M, Needham LL, Calafat AM. Assessing human exposure to phthalates using monoesters and their oxidized metabolites as biomarkers. Environ Health Perspect. 2003 Jul;111(9):1148-51. PubMed PMID: 12842765; PubMed Central PMCID: PMC1241566.
74. Olsson AO, Nguyen JV, Sadowski MA, **Barr DB**. A liquid chromatography/electrospray ionization-tandem mass spectrometry method for quantification of specific organophosphorus pesticide biomarkers in human urine. Anal Bioanal Chem. 2003 Jul;376(6):808-15. Epub 2003 Jun 17. PubMed PMID: 12811448.
75. Silva MJ, Malek NA, Hodge CC, Reidy JA, Kato K, **Barr DB**, Needham LL, Brock JW. Improved quantitative detection of 11 urinary phthalate metabolites in humans using liquid chromatography-atmospheric pressure chemical ionization tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2003 Jun 15;789(2):393-404. PubMed PMID: 12742130.
76. Whyatt RM, **Barr DB**, Camann DE, Kinney PL, Barr JR, Andrews HF, Hoepner LA, Garfinkel R, Hazi Y, Reyes A, Ramirez J, Cosme Y, Perera FP. Contemporary-use pesticides in personal air samples during pregnancy and blood samples at delivery among urban minority mothers and newborns. Environ Health Perspect. 2003 May;111(5):749-56. PubMed PMID: 12727605; PubMed Central PMCID: PMC1241486.
77. **Barr DB**, Turner WE, DiPietro E, McClure PC, Baker SE, Barr JR, Gehle K, Grissom RE Jr, Bravo R, Driskell WJ, Patterson DG Jr, Hill RH Jr, Needham LL, Pirkle JL, Sampson EJ. Measurement of p-nitrophenol in the urine of residents whose homes were contaminated with methyl parathion. Environ Health Perspect. 2002 Dec;110 Suppl 6:1085-91. PubMed PMID: 12634145; PubMed Central PMCID: PMC1241298.
78. McCann KG, Moomey CM, Runkle KD, Hryhorczuk DO, Clark JM, **Barr DB**. Chicago area methyl parathion response. Environ Health Perspect. 2002 Dec;110 Suppl 6:1075-8. PubMed PMID: 12634143; PubMed Central PMCID: PMC1241296.
79. Hill RH Jr, Head S, **Barr DB**, Rubin C, Esteban E, Baker SE, Bailey S, Needham LL. Public health decisions: the laboratory's role in the Lorain County, Ohio, investigation. Environ Health Perspect. 2002 Dec;110 Suppl 6:1057-9. PubMed PMID: 12634140; PubMed Central PMCID: PMC1241293.
80. Hryhorczuk DO, Moomey M, Burton A, Runkle K, Chen E, Saxer T, Slightom J, Dimos J, McCann K, **Barr D**. Urinary p-nitrophenol as a biomarker of household exposure to methyl parathion. Environ Health Perspect. 2002 Dec;110 Suppl 6:1041-6. PubMed PMID: 12634137; PubMed Central PMCID: PMC1241290.
81. Shalat SL, Donnelly KC, Freeman NC, Calvin JA, Ramesh S, Jimenez M, Black K, Coutinho C, Needham LL, **Barr DB**, Ramirez J. Nondietary ingestion of pesticides by children in an agricultural community on the US/Mexico border: preliminary results. J Expo Anal Environ Epidemiol. 2003 Jan;13(1):42-50. PubMed PMID: 12595883.
82. Perera FP, Rauh V, Tsai WY, Kinney P, Camann D, **Barr D**, Bernert T, Garfinkel R, Tu YH, Diaz D, Dietrich J, Whyatt RM. Effects of transplacental exposure to environmental pollutants on birth outcomes in a multiethnic population. Environ Health Perspect. 2003 Feb;111(2):201-5. PubMed PMID: 12573906; PubMed Central PMCID: PMC1241351.
83. Sandau CD, Sjödin A, Davis MD, Barr JR, Maggio VL, Waterman AL, Preston KE, Preau JL Jr, **Barr DB**, Needham LL, Patterson DG Jr. Comprehensive solid-phase extraction method for persistent organic pollutants. Validation and application to the analysis of persistent chlorinated pesticides. Anal Chem. 2003 Jan 1;75(1):71-7. PubMed PMID: 12530820.
84. **Barr DB**, Weihe P, Needham LL, Davis MD, Roman W, Hurtz D III, Sclafani A, Thomas A, Preau J Jr, and Grandjean P. PCBs and organochlorine pesticide concentrations in a Faroe Island 14-year old cohort: measurement using new methodology and evaluation of correlations and patterns. Organohalogen Compounds. 2003; 63:5-8.
85. Royster MO, Hilborn ED, **Barr D**, Carty CL, Rhoney S, Walsh D. A pilot study of global positioning system/geographical information system measurement of residential proximity to agricultural fields and urinary organophosphate metabolite concentrations in toddlers. J Expo Anal Environ Epidemiol. 2002 Nov;12(6):433-40. PubMed PMID: 12415492.
86. Kieszak SM, Naeher LP, Rubin CS, Needham LL, Backer L, **Barr D**, McGeehin M. Investigation of the relation between self-reported food consumption and household chemical exposures with urinary levels of selected nonpersistent pesticides. J Expo Anal Environ Epidemiol. 2002 Nov;12(6):404-8. PubMed PMID: 12415488.
87. **Barr DB**, Barr JR, Maggio VL, Whitehead RD Jr, Sadowski MA, Whyatt RM, Needham LL. A multi-analyte method for the quantification of contemporary pesticides in human serum and plasma using high-resolution mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci. 2002 Oct 5;778(1-2):99-111. PubMed PMID: 12376118.
88. **Barr DB**, Needham LL. Analytical methods for biological monitoring of exposure to pesticides: a review. J Chromatogr B Analyt Technol Biomed Life Sci. 2002 Oct 5;778(1-2):5-29. Review. PubMed PMID: 12376114.
89. Bravo R, Driskell WJ, Whitehead RD Jr, Needham LL, **Barr DB**. Quantitation of dialkyl phosphate metabolites of organophosphate pesticides in human urine using GC-MS-MS with isotopic internal standards. J Anal Toxicol. 2002 Jul-Aug;26(5):245-52. PubMed PMID: 12166810.
90. Fenske RA, Lu C, **Barr D**, Needham L. Children's exposure to chlorpyrifos and parathion in an agricultural community in central Washington State. Environ Health Perspect. 2002 May;110(5):549-53. PubMed PMID: 12003762; PubMed Central PMCID: PMC1240847.
91. Driskell WJ, Shih M, Needham LL, **Barr DB**. Quantitation of organophosphorus nerve agent metabolites in human urine using isotope dilution gas chromatography-tandem mass spectrometry. J Anal Toxicol. 2002 Jan-Feb;26(1):6-10. PubMed PMID: 11888020.
92. Balluz L, Philen R, Ortega L, Rosales C, Brock J, Barr D, Kieszak S. Investigation of systemic lupus erythematosus in Nogales, Arizona. Am J Epidemiol. 2001 Dec 1;154(11):1029-36. PubMed PMID: 11724719.
93. Adgate JL, **Barr DB**, Clayton CA, Eberly LE, Freeman NC, Lioy PJ, Needham LL, Pellizzari ED, Quackenboss JJ, Roy A, Sexton K. Measurement of children's exposure to pesticides: analysis of urinary metabolite levels in a probability-based sample. Environ Health Perspect. 2001 Jun;109(6):583-90. PubMed PMID: 11445512; PubMed Central PMCID: PMC1240340.
94. Garry VF, Tarone RE, Kirsch IR, Abdallah JM, Lombardi DP, Long LK, Burroughs BL, **Barr DB**, Kesner JS. Biomarker correlations of urinary 2,4-D levels in foresters: genomic instability and endocrine disruption. Environ Health Perspect. 2001 May;109(5):495-500. PubMed PMID: 11401761; PubMed Central PMCID: PMC1240309.
95. Whyatt RM, **Barr DB**. Measurement of organophosphate metabolites in postpartum meconium as a potential biomarker of prenatal exposure: a validation study. Environ Health Perspect. 2001 Apr;109(4):417-20. PubMed PMID: 11335191; PubMed Central PMCID: PMC1240283.
96. Baker SE, **Barr DB**, Driskell WJ, Beeson MD, Needham LL. Quantification of selected pesticide metabolites in human urine using isotope dilution high-performance liquid chromatography/tandem mass spectrometry. J Expo Anal Environ Epidemiol. 2000 Nov-Dec;10(6 Pt 2):789-98. PubMed PMID: 11138671.
97. Hu YA, **Barr DB**, Akland G, Melnyk L, Needham L, Pellizzari ED, Raymer JH, Roberds JM. Collecting urine samples from young children using cotton gauze for pesticide studies. J Expo Anal Environ Epidemiol. 2000 Nov-Dec;10(6 Pt 2):703-9. PubMed PMID: 11138662.
98. Lyubimov AV, Garry VF, Carlson RE, **Barr DB**, Baker SE. Simplified urinary immunoassay for 2,4-D: validation and exposure assessment. J Lab Clin Med. 2000 Aug;136(2):116-24. PubMed PMID: 10945240.
99. **Barr DB**, Barr JR, Bailey SL, Lapeza CR Jr, Beeson MD, Caudill SP, Maggio VL, Schecter A, Masten SA, Lucier GW, Needham LL, Sampson EJ. Levels of methyleugenol in a subset of adults in the general U.S. population as determined by high resolution mass spectrometry. Environ Health Perspect. 2000 Apr;108(4):323-8. PubMed PMID: 10753090; PubMed Central PMCID: PMC1638031.
100. **Barr DB**. Exposure to contemporary-use pesticides. J Med Assoc Ga. 1999 Dec;88(4):34-7. PubMed PMID: 10666992.
101. Calafat AM, **Barr DB**, Pirkle JL, Ashley DL. Reference range concentrations of N-acetyl-S-(2-hydroxyethyl)-L-cysteine, a common metabolite of several volatile organic compounds, in the urine of adults in the United States. J Expo Anal Environ Epidemiol. 1999 Jul-Aug;9(4):336-42. PubMed PMID: 10489158.
102. Beeson MD, Driskell WJ, **Barr DB**. Isotope dilution high-performance liquid chromatography/tandem mass spectrometry method for quantifying urinary metabolites of atrazine, malathion, and 2,4-dichlorophenoxyacetic acid. Anal Chem. 1999 Aug 15;71(16):3526-30. PubMed PMID: 10464480.
103. **Barr DB**, Barr JR, Driskell WJ, Hill RH Jr, Ashley DL, Needham LL, Head SL, Sampson EJ. Strategies for biological monitoring of exposure for contemporary-use pesticides. Toxicol Ind Health. 1999 Jan-Mar;15(1-2):168-79. PubMed PMID: 10188199.
104. O'Brien KL, Selanikio JD, Hecdivert C, Placide MF, Louis M, **Barr DB**, Barr JR, Hospedales CJ, Lewis MJ, Schwartz B, Philen RM, St Victor S, Espindola J, Needham LL, Denerville K. Epidemic of pediatric deaths from acute renal failure caused by diethylene glycol poisoning. Acute Renal Failure Investigation Team. JAMA. 1998 Apr 15;279(15):1175-80. PubMed PMID: 9555756.
105. **Barr DB**, Ashley DL. A rapid, sensitive method for the quantitation of N-acetyl-S-(2-hydroxyethyl)-L-cysteine in human urine using isotope-dilution HPLC-MS-MS. J Anal Toxicol. 1998 Mar-Apr;22(2):96-104. PubMed PMID: 9547405.
106. **Shealy DB**, Barr JR, Ashley DL, Patterson DG Jr, Camann DE, Bond AE. Correlation of environmental carbaryl measurements with serum and urinary 1-naphthol measurements in a farmer applicator and his family. Environ Health Perspect. 1997 May;105(5):510-3. PubMed PMID: 9222136; PubMed Central PMCID: PMC1469864.
107. Driskell WJ, Hill RH Jr, **Shealy DB**, Hull RD, Hines CJ. Identification of a major human urinary metabolite of alachlor by LC-MS/MS. Bull Environ Contam Toxicol. 1996 Jun;56(6):853-9. PubMed PMID: 8661877.
108. Hill RH Jr, Head SL, Baker S, Gregg M, **Shealy DB**, Bailey SL, Williams CC, Sampson EJ, Needham LL. Pesticide residues in urine of adults living in the United States: reference range concentrations. Environ Res. 1995 Nov;71(2):99-108. PubMed PMID: 8977618.
109. Hill RH Jr, **Shealy DB**, Head SL, Williams CC, Bailey SL, Gregg M, Baker SE, Needham LL. Determination of pesticide metabolites in human urine using an isotope dilution technique and tandem mass spectrometry. J Anal Toxicol. 1995 Sep;19(5):323-9. PubMed PMID: 7500620.
110. **Shealy DB**, Lipowska M, Lipowski J, Narayanan N, Sutter S, Strekowski L, Patonay G. The synthesis, chromatographic separation, and characterization of near- infrared labeled oligonucleotides for use in DNA sequencing. Analytical Chemistry. 1995; 67(2):247-251.
111. **Shealy DB**, Lohrmann R, Ruth JR, Narayanan N, Casay GA, Evans L III, Sutter SL, and Patonay G. Spectral characterization and evaluation of modified near-infrared laser dyes for DNA sequencing. Applied Spectroscopy. 1995; 49:1815-1818.
112. **Shealy DB**, Bailey SL, Orti DL, and Hill RH Jr. Solving the problems of laboratory robotic systems. Laboratory Robotics and Automation. 1991; 3:67-73.

BOOK CHAPTERS

1. **Barr DB** and Buckley BT. Assessing human exposure to environmental toxicants. In: Encyclopedia of Environmental Health. Jerome Nrigau (ed.). Part 3, chapter 7. In press (INVITED)
2. **Barr DB**. Chapter 8. Assessment of human environmental and occupational exposure to pesticides using biomonitoring. In: Environmental Health Applications of LC- MS/MS. In press. (INVITED)
3. **Barr DB**, Yang RY, and Needham LL. Biological monitoring of exposure throughout the lifestages. Chapter 13. In: Environmental Health Risk Assessment, Management, and Communications, ed. Mark Robson, Wiley: NY, pp 345-381. (INVITED)
4. **Barr DB**, Bradman A, Freeman N, Whyatt RM, Wang RY, Naeher L, and Eskenazi B. Studying the relation between pesticide exposure and human development. In: Human Developmental Neurotoxicology, (ed. David Bellinger). 2006; Chapter 12, pp. 253-285. Taylor and Francis: New York. 2005 (INVITED)
5. **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)
6. **Barr DB**, Olsson AO, Bravo R, and Needham LL. A comprehensive approach for biological monitoring of pesticides in urine using HPLC-MS/MS and GC-MS/MS. Chapter 5, pp 61-78. In Methods in Biotechnology: Volume 19 Pesticide protocols: Volume 1. Analysis for Human Exposure. Eds. JL Martinez-Vidal and A Garrido Frenich. Humana Press: Totowa, NY., 2005 (INVITED)
7. **Barr DB**, Bravo R, Barr JR, and Needham LL. Multi-analyte method for the quantification of current-use pesticides in human serum or plasma. Chapter 3, pp 35-48. In Methods in Biotechnology: Volume 19 Pesticide protocols: Volume 1. Analysis for Human Exposure. Eds. JL Martinez-Vidal and A Garrido Frenich. Humana Press: Totowa, NY., 2005 (INVITED)
8. **Barr DB**, Bravo R, and Needham LL. Organophosphate pesticides. In: Analysis of Hazardous Substances in Biological Materials. Volume 8. Eds: Jurgen Angerer and Karl-Heinz Schaller. Forschungsgemeinschaft (German Research Foundation). John Wiley & Sons Canada, Ltd.: Germany, 2004. (INVITED)
9. **Shealy DB**, Hill RH Jr, Orti DL, Bailey SL, Miller BB, and Turner WE. Automated sample preparation of serum cotinine for GC/MS analysis. Advances in Laboratory Automation-Robotics, Janet Strimaitis and James Little (eds.), Zymark Corporation, Volume 7, 533-544, 1991. (INVITED)
10. Whyatt RM, Camann DE, **Barr DB**, Barr JR, Andrews HF, Kinney PL, and Perera FP. Pesticide levels in 48-hour personal air samples during pregnancy and in blood samples at delivery from urban minority mothers and newborns. In: Proceedings of the 9th International Conference on Indoor Air Quality and Climate; Volume IV; pp. 877-882 (2002). Ed. Hal Levin. Indoor Air: Santa Cruz, CA.
11. Needham LL, Blount B, Rogers HS, Brock JW, and **Barr DB**. Levels of nonpersistent endocrine disruptors in humans. In: ACS Symposium Series No. 747: Analysis of Environmental Endocrine Disruptors. LH Keith, TL Jones, and LL Needham, Eds., 1999.
12. Hill RH Jr., Head SL, Baker SE, Rubin C, Esteban E, Bailey SL, **Shealy DB**, and Needham LL. Chapter 3: The use of reference range concentrations in environmental health investigations. ACS Symposium Series 643: Biomarkers for agrochemicals and toxic substances. JN Blancato, RN Brown, CC Dary, MA Saleh (eds.), American Chemical Society, Washington, D.C.: p. 39-48, 1996.
13. Patterson DG Jr., Barr JR, **Shealy DB**, and Ashley DL. Quantification of non- persistent pesticides in human samples using isotope dilution mass spectrometry:Applications of new analytical techniques. Organohalogen Compounds. 1995; 23:237- 241.
14. Casay GA, **Shealy DB**, and Patonay G. Near-infrared fluorescence probes (Chapter 7). In Topics in Fluorescence Spectroscopy, Volume 4: Probe Design and Chemical Sensing, J. Lakowicz (ed.), Plenum Press, New York, 1994.

PUBLISHED ABSTRACTS

1. Chevrier J, Eskenazi B, Holland N, Bradman A, and **Barr DB**. Effect of exposure to polychlorinated biphenyls and organochlorine pesticides on thyroid function during pregnancy. Epidemiology. 2007 Sep; 18(5) Suppl:S195-S196.
2. Biggs ML, Eaton DL, Weiss NS, Chen C, **Barr DB**, Needham LL, et al. Serum p,p'-DDE, androgen receptor polymorphisms, and risk of testicular germ cell carcinoma. Epidemiology. 2007 Sep; 18(5) Suppl:S166-S167.
3. Harley K, A Marks, Bradman A, **Barr DB**, and Eskenazi B. Maternal DDT and DDE exposure and time to pregnancy. Epidemiology. 2007 Sep; 18(5) Suppl:S165.
4. Harnly M, Castorina R, Bradman A, Montesano M, **Barr DB**, Eskenazi B, et al. Exposures to bisdithiocarbamate fungicides among a pregnant latina population living in an agricultural area. Epidemiology. 2007 Sep; 18(5) Suppl:S158.
5. Warner M, Eskenazi B, Harley K, Bradman A, Fenster L, and **Barr DB**. In utero DDT exposure and prevalence of child. Epidemiology. 2007 Sep; 18(5) Suppl:S66.
6. Smith KD, Weerasekera G, **Barr DB**, Ryan PB, Smith KD, and Ryan PB. Analysis of degradation products of non-persistent pesticides in soil using liquid chromatography-tandem mass spectrometry. Epidemiology. 2006 Nov; 17 (6) Suppl:S445-S446.
7. Wolff M, Eskenazi B, Whyatt R, Engel S, Harley K, Bradman A, Perera F, Rauh V, and **Barr DB**. Environmental exposures and birth outcomes in the NIEHS/EPA Children's Center Birth Cohorts. Epidemiology. 2006 Nov; 17(6) Suppl:S419-S420.
8. Windham G, Wolff M, Pinney S, Teitelbaum S, Calafat A, Sjodin A, Pfeiffer C, **Barr DB**, Erdmann C, Koblick K, and Collmann G. Biomarkers of environmental exposures in a multi-site study of young girls. Epidemiology. 2006 Nov; 17(6) Suppl:S419.
9. Perera F, Rauh V, Whyatt R, Jedrychowski W, Lederman S, Miller R, **Barr DB**, Camann D, Kinney P, Andrews H, Orjuela M, Tang D, Wolff M, Engel S, Gilliland F, Eskenazi B, Bradman A, Holland N, and Harley K. In utero and childhood environmental exposures and multiple health outcomes: NIEHS/EPA Children's Center Cohort Studies. Epidemiology. 2006 Nov; 17(6) Suppl:S411-S412.
10. Lu C, **Barr DB**, Pearson M, Bartell S, and Bravo R. A longitudinal approach of assessing urban and suburban children's exposure to pyrethroid pesticides. Epidemiology. 2006 Nov; 17(6) Suppl:S406-S407.
11. Engel S, Berkowitz G, **Barr DB**, Teitelbaum S, Chelimo C, and Wolff M. Prenatal exposure to organophosphates and organochlorines and performance on the bayley scales of infant development. Epidemiology. 2006 Nov; 17(6) Suppl:S400.
12. Engel S, Berkowitz G, **Barr DB**, Teitelbaum S, Siskind J, Meisel S, and Wolff M. Prenatal exposure to organophosphates and organochlorines and performance on the Brazelton Neonatal Behavioral Assessment Scale. Epidemiology. 2006 Nov; 17(6) Suppl:S400.
13. Riederer A, **Barr DB**, and Ryan PB. Temporal variability in diet and urinary concentrations of pyrethroid and organophosphate pesticide metabolites in adult volunteers from a large U.S. city. Epidemiology. 2006 Nov; 17(6) Suppl:S372-S373.
14. Cragin L, Kesner J, **Barr DB**, Bachand A, Meadows J, and Reif J. Menstrual cycle characteristics and reproductive patterns in women exposed to atrazine in drinking water. Epidemiology. 2006 Nov; 17(6) Suppl:S369.
15. Tornero-Velez R, Xue J, Scollon E, Egeghy P, **Barr DB**, Devito M, and Dary C. Dietary exposure to pyrethroids in the U.S. population. Epidemiology. 2006 Nov; 17(6) Suppl:S303-S304.
16. Meeker JD, **Barr DB**, Serdar B, Rappaport SM, and Hauser R. Utility of urinary 1-Naphthol and 2-Naphthol levels to assess environmental carbaryl and naphthalene exposure in an epidemiology study. Epidemiology. 2006 Nov; 17(6) Suppl:S301.
17. **Barr DB**. Overview of exposure assessment techniques. Epidemiology. 2006 Nov; 17(6) Suppl:S293-S294.
18. Weldon RH, Webster M, Harley K, Bradman A, Fenster L, **Barr DB**, Jewell NP, Holland N, and Eskenazi B. Exposure to persistent organic pollutants and duration of lactation in Mexican-American mothers. Epidemiology. 2006 Nov; 17(6) Suppl:S193.
19. **Barr DB**, Khoury J, Xu Y, Baez S, Bearer C, Dietrich K, Hornung R, Davis M, L Needham, and Lanphear B. Assessment of maternal and infant exposures to pesticides and persistent pollutants. Epidemiology. 2006 Nov; 17(6) Suppl:S135-S136.
20. Engel L, Laden F, Andersen A, Strickland P, Blair A, Needham L, **Barr DB**, Wolff M, Helzlsouer K, Hunter D, Lan Q, Cantor K, Comstock G, Brock J, Bush D, and Rothman N. PCBs and non-hodgkin lymphoma: Results from three cohorts. Epidemiology. 2006 Nov; 17(6) Suppl:S116.
21. Eskenazi B, Marks AR, Harley K, Bradman A, Johnson C, **Barr DB**, Morga N, and Jewell NP. Organophosphate pesticides and neurodevelopment in young Mexican- American children. Epidemiology. 2006 Nov; 17(6) Suppl:S102-S103.
22. Rauh VA, Garfinkel R, Perera R, Andrews H, **Barr DB**, Whitehead RD Jr, Tang D, and Whyatt RM. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first three years of life among inner-city children. Epidemiology. 2006 Nov; 17(6) Suppl:S102.
23. Bradman A, Harnly M, Schwartz J, **Barr DB**, Mckone T, and Eskenazi B. Longitudinal analysis of factors predicting organophosphate pesticide exposure to children living in an agricultural area at ages 6, 12, and 24 months. Epidemiology. 2006 Nov; 17(6) Suppl:S101.
24. Rubin C, Kiesak S, Holmes A, Marcus M, Heron J, **Barr DB**, Calafat A, Sjodin A, Mcgeehin M, Jones R, and Golding J. Physical maturation and exposure to environmental chemicals: A cohort analysis. Epidemiology. 2006 Nov; 17(6) Suppl:S100- S101.
25. Morgan M, Stout D, and **Barr DB**. Pilot study of the potential for human exposures to pet-borne diazinon residues following lawn applications. Epidemiology. 2006 Nov; 17(6) Suppl:S91.
26. Whyatt RM, Perera FP, Williams MK, **Barr DB**, Camann DE, and Rauh VA. Residential pesticides use during pregnancy among an inner-city cohort in New York city: Resultant health effects and an intervention to reduce exposures. Epidemiology. 2006 Nov; 17(6) Suppl:S87.
27. Angerer J, and **Barr DB**. HBM as a reliable tool for assessing exposure to environmental chemicals and ensuring comparable data across studies. Epidemiology. 2006 Nov; 17(6) Suppl:S74-S75.
28. Sabogal R, McElroy RH, Robertson G, **Barr DB**, Camann D, Rubin C, Kieszak S, and Hern S. Pesticide exposure in children living in agricultural areas along the United States - Mexico border: A cross-sectional study. Revista Salud Publica y Nutricion. 2006; Special edition 12-2006, abstract 184.
29. **Barr DB**, Weihe P, Davis MD, Needham LL, and Grandjean P. Serum polychlorinated biphenyl and organochlorine insecticide concentrations in a Faroese birth cohort. Epidemiology. 2005; 16: S94.
30. Eskenazi B, Marks AR, Fenster L, Bradman A, Rodriguez ME, **Barr DB**, and Jewell NP. In utero DDT and DDE exposure and neurodevelopment in children of farmworkers. Epidemiology. 2005; 16: S101.
31. Fenster L , Eskenazi B, Anderson M, Bradman A, Hubbard A, Harley K, Vargas G, and **Barr DB**. Association of in utero organochlorine pesticide exposure and fetal growth and length of gestation in an agricultural population. Epidemiology 2005; 16: S102.
32. Bradman A, Fenster L, **Barr DB**, Anderson M, Weltzien E, Schwartz J, Calderon N, Holland N, and Eskenazi B. DDT and DDE levels in a cohort of pregnant Mexican- American women living in an agricultural area in California. Epidemiology. 2005; 16: S103.
33. Allen R, Mage D, Gondy G, Christensen C, **Barr DB**, and Needham LL. The use of a creatinine correction for reporting children's urinary pesticide concentrations. Epidemiology. 2004; 15: S69.
34. Eskenazi B, Bradman A, Holland N, **Barr DB**, Tager I, Lipsett M, Alkon A, Johnson C, and Gladstone EA. Health effects of environmental exposures to children living in an agricultural community. Epidemiology. 2004; 15: S85.
35. Rauh V, Perera F, Tang DL, **Barr DB**, Camann D, Kinney PL, Andrews H, and Wyatt RM. Relationship between prenatal environmental exposures, birth outcomes and cognitive development in an urban minority cohort. Epidemiology. 2004; 15: S87.
36. Dietrich K, Bearer CF, Kahn R, Yolton K, Hornung R, **Barr DB**, Ris D, Wright J, Watson G, and Lanphear BP. Long-term adverse neurobehavioral consequences of low- level exposure to environmental toxins: An update of the Cincinnnati children's environmental health center. Epidemiology. 2004; 15:S90-S90.
37. **Barr DB**, Olsson A, Bravo R, and Needham LL. New laboratory methods for identifying human exposure to non-persistent pesticides. Epidemiology. 2004; 15:S179.
38. **Barr DB**, and Needham LL. Reference ranges for pesticides: The national exposure report. Epidemiology. 2004; 15: S180.
39. Mendola P, **Barr DB**, Walsh D, Hern S, Rhoney S, Needham LL, Hilborn E, Gonzales M, and Carty C. Organophosphate pesticide exposures - Where are the high risk children? Epidemiology. 2004; 15: S180-S181.
40. Meeker J, Ryan L, **Barr DB**, Herrick R, Bennett D, and Hauser R. Contemporary use insecticides and human semen quality. Epidemiology. 2004; 15:S190.
41. Duty SM, Silva MJ, **Barr DB**, Brock JW, Ryan L, Chen ZY, Herrick RF, Christiani DC, and Hauser R. Phthalate exposure and human semen parameters. Epidemiology. 2003; 14:269-277.
42. Silva MJ, Malek NA, Kato K, Brock JW, **Barr DB**, Needham LL, and Calafat AM. Assessing human exposure to phthalates. Epidemiology. 2002; 13:224.
43. Bradman A, Eskenazi B, McKone T, Castorina R, Harnly M, and **Barr DB**. Organophosphate pesticide exposures to pregnant women living in an agricultural community. Epidemiology. 2002; 13:307.
44. Whyatt RM, Camann DE, **Barr DB**, Barr JR, Andrews HF, Kinney PL, Hoeptner LA, and Perera FP. Pesticide exposures during pregnancy among urban minority mothers and newborns. Epidemiology. 2002; 13: 308.
45. Bradman A, **Barr DB**, Drumheller T, and Eskenazi B. Feasibility of using amniotic fluid to assess fetal pesticide exposure. Epidemiology. 2002; 13: 322.
46. Lanphear BP, Bearer CF, Dietrich KN, Yolton K, Donovan E, Hornung R, and **Barr DB**. Meconium as a biomarker of fetal and childhood exposure to prevalent neurotoxicants. Epidemiology. 2002; 13:323.
47. Shalat SL, Donnelly KC, Freeman NCG, Calvin J, Black K, Jimenez M, Coutinho C, Needham LL, **Barr DB**, and Ramirez J. Quantitative behavioral assessment as a tool for modeling pesticide dose in children. Epidemiology. 2002; 13:526.
48. Hilborn ED, Royster MO, Soukup JM, Walsh D, Bellini W, **Barr DB**, and Becker S. Pesticide exposure and immune function among toddlers. Epidemiology. 2002; 13:548.
49. Duty SM, Silva MJ, **Barr DB**, Brock JW, Ryan L, Chen Z, Herrick RF, Christiani D, and Hauser R. Urinary phthalate monoesters at general population exposure levels are associated with altered semen quality. Epidemiology. 2002; 13:657.
50. Baker JA, Mendola P, **Barr DB**, Walsh D, Creason J, and Needham LL. Non- residential organophosphorus pesticide use as a predictor of children's urinary metabolite levels. Epidemiology. 2002; 13: 893.
51. **Barr DB**, Olsson AO, Bravo R, Sandau C, and Needham LL. Biological monitoring of exposure to pesticides: A comprehensive approach to internal dose measurements. Epidemiology. 2002; 13:909.
52. Mendola P, Walsh D, **Barr DB**, Needham LL, Hilborn E, Hern S, Gonzales M, Robertson G, Rhoney S, Royster M, Carty C, and Creason J. Organophosphate pesticide metabolites in urine from preschool children with flu-like illnesses. Epidemiology. 2001; 12:275.
53. Mendola P, Walsh D, Hern S, Gonzales M, Hilborn E, Needham LL, **Barr DB**, Robertson G, Rhoney S, Royster M, and Carty C. Initial investigation of symptomatic preschool children in an agricultural community. Epidemiology. 2000; 11:609.
54. Hart R, Ortega L, Rosales C, Robertson G, Philen R, and **Barr DB**. Preliminary results from an investigation on pesticide exposure among children living in agricultural areas along the US Mexico border in Yuma County, Arizona. Epidemiology. 2000; 11:714.
55. Needham LL, Pirkle JL, Ashley DL, Patterson DG, Barr JR, **Barr DB**, and Sampson EJ. Role of biomonitoring in human exposure assessment. Epidemiology. 1999; 10:1620.
56. **Barr DB**, Driskell WJ, Beeson MD, Harmon IR, and Needham LL. Biological monitoring of dialkyl phosphates in urine as indicators of cumulative exposure to organophosphate insecticides. Epidemiology. 1999; 10:3560.
57. Barr JR, Barr DB, and Needham LL. Quantification of methyleugenol in human serum. Epidemiology. 1999; 10: 4780

**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 cynamologous 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 feasability 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 Publich 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/Editoral 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 Environemental 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 21st 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 agroscience 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 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.

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.

Researcher subsequently obtained her Ph.D., largely because of the skills she acquired at CDC, and has returned to CDC as a research fellow.

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.

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