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Education

9/97- 5/02	BA Biology, Reed College, OR Thesis: The Reed College Campus Carbon Budget: Sources and Sinks of Carbon in the Grassland, Forest, and Spring Water of Reed College Campus
8/03-5/08	PhD Toxicology, University of North Carolina (UNC) at Chapel Hill, NC Dissertation: Influence of diet and maternal dioxin on endocrine disruption: puberty, metabolic syndrome, and breast cancer. Advisors: David Threadgill, Linda Birnbaum
9/08-9/10	MPH, Department of Preventive Medicine, Mount Sinai School of Medicine (MSSM), NY Thesis: Pre-pregnancy body mass index, smoking during pregnancy, and infant birth weight. Advisor: David Savitz
7/08-12/12	Postdoctoral Fellow, Division of Endocrinology, Diabetes & Bone Disease, Mount Sinai School of Medicine, NY Advisors: Philip Landrigan, Christoph Buettner

Positions and Employment

2/99- 3/02	Teacher, Howard Hughes Medical Institute (HHMI) Science Outreach, Reed College (Assistant Coordinator 8/00-5/01)
6/02- 7/03	Staff Assistant, Green Chemistry Institute, American Chemical Society (ACS)
9/04-12/07	Staff Assistant, Community Outreach and Engagement Program, UNC
9/04-7/08	Undergraduate Mentor, Department of Genetics, UNC. Duties: Train four undergraduates in laboratory methods and critical literature review; supervise two undergraduate research theses
9/05-12/06	Teaching Assistant, Principles of Biology Laboratory (BIOL 101), UNC
9/09-10/09	Fogerty Mentor, International Training Program in Environmental and Occupational Health, Department of Preventive Medicine, MSSM
1/09-2/10	Science Communication Fellow, Environmental Health Sciences
4/09-6/10	Teaching Assistant, Toxicology (MPH 515), MSSM
5/11-8/11	Undergraduate Mentor, Division of Endocrinology, MSSM
1/13-present	Associate Professor, Department of Environmental Toxicology, UC Davis
8/14-present	Member, UC Davis Comprehensive Cancer Center
7/15-present	Affiliate, UC Center for Occupational and Environmental Health
4/16-present	Member, University of California (UC) Davis Genome Center
7/16-present	Shared Faculty Member, Environmental Genomics and Systems Biology Division, Lawrence Berkeley National Laboratory

Awards and Honors

2008	Second place for Best Student or Postdoctoral Abstract in the Reproductive and Developmental Toxicology Specialty Section, Annual Meeting of the SOT
2008	Environmental Mutagen Society (EMS) Travel Award, Annual Meeting of the EMS
2008	Tuition Scholarship, Colony Management: Principles and Practices, Jackson Laboratories
2009	Endocrine Trainee Day Travel Award, Annual Meeting of the Endocrine Society
2009	Best Manuscript in the Occupational and Public Health Specialty Section, Society

of Toxicology (SOT)

2009 PPTOXII Student Travel Award, PPTOXII: Role of Environmental Stressors in the Developmental Origins of Disease Workshop

2010 Outstanding Postdoctoral Fellow Award, Women in Toxicology, Annual Meeting of the SOT

2011 AstraZeneca Travel Award, Cellular & Molecular Mechanisms of Toxicity Gordon Research Conference (GRC)

2012 PPTOXIII Travel Award, PPTOXIII: Environmental Stressors in the Developmental Origins of Disease: Evidence and Mechanisms Workshop

Research Grants

2/06-6/08 Department of Defense Breast Cancer Research Program Predoctoral Traineeship Award BC050873: "Environmental and genetic influences on breast cancer susceptibility." $90,000 (PI). Goal: Determine the genomic mechanisms of prenatal dioxin and high fat diet increasing mouse mammary tumor risk.

10/09-9/10 MSSM Children's Environmental Health Pilot Project "Effects of subchronic exposure to PCB126 and BDE47 on metabolic syndrome and cardiovascular disease risk factors" $19,000 (co-I). Goal: Evaluate effects of PCB and BDE on insulin action and cardiac morphology.

10/10-9/11 MSSM Children's Environmental Health Pilot Project "Effects of maternal exposure to persistent organic pollutants on blood pressure in adult women" $25,000 (PI). Goal: Examine the association between prenatal DDT exposure and medicated hypertension in adult women.

8/11-12/12 NIH Pathway to Independence Award K99ES019919 "Perinatal exposure to environmental DDT and risk of metabolic syndrome" $191,370 total costs (PI). Goal: Determine whether perinatal DDT exposure causes long-term changes in mouse body composition, glucose and lipid utilization and energy balance.

10/11-11/12 MSSM Children's Environmental Health Pilot Project "Maternal exposure to environmental DDT and risk of mouse metabolic syndrome" $23,000 (PI). Goal: Expand metabolic syndrome assessment to blood pressure measures in mice.

2/13-1/18 NIH R00ES019919 "Perinatal exposure to environmental DDT and risk of metabolic syndrome" $740,430 total costs (PI). Goal: Evaluate the role of epigenomics in the developmental basis of metabolic syndrome resulting from perinatal DDT exposure in mice and confirm the association between adult metabolic syndrome and prenatal DDT exposure in the Child Health & Development Studies cohort.

3/13-3/14 Superfund Research Program UC Davis Pilot "Effects of exogenous activators of RyR on skeletal muscle and adipose tissue" $25,265 (PI). Goal: Assess DDT binding and activation of RyR tissue-specific isoforms.

4/13-3/14 College of Agriculture and Environmental Sciences Programmatic Initiatives "Does mobilization of fat-soluble pollutants during marked weight loss make weight loss dangerous?" $5,600 (PI). Goal: Evaluate the metabolic toxicities of DDT exposure that occur during weight loss.

6/13-5/14 West Coast Metabolomics Center Pilot Project "Dysfunctional lipid metabolism underlies the effect of perinatal DDT exposure on the development of metabolic syndrome" $33,044 (PI). Goal: Determine the effect of perinatal DDT exposure on oxylipins, bile acids and steroid hormones.

6/14-5/17 Office of Environmental Health Hazard Assessment 13-E0014 "Risk assessment for obesogens and diabetogens" $311,298 total costs (PI). Goal: Screen and validate environmental chemicals for their effects on insulin action.

12/14-11/15 Beijing Genome Institute Signature Research in Genomics "Identifying persistent and functionally relevant DNA methylation across tissues from mice exposed to

DDT" $44,660 (PI). Goal: Identify methylation changes resulting from prenatal DDT that are functionally linked to RNA expression changes, persistent into adulthood, and are concordant with a subset of differential DNA methylation in blood.

3/16-2/21 NIH R01ES024946 "Perinatal DDT causes insulin resistance in mice through impaired thermogenesis" $1,876,138 total costs (PI). Goal: Determine the adrenergic and epigenetic mechanisms of impaired thermogenesis.

4/16-12/17 NIH P30ES023513 Environmental Health Sciences Core Center Pilot Project Program "In vitro model of developmental endocrine disruption" $29,602 (PI). Goal: Derive cells lines with from mammary tumors with in utero exposure.

6/17-6/18 Office of Environmental Health Hazard Assessment 17-E0032 "Risk Assessment for Obesogens and Diabetogens (Contract 16-E0032)" $157,663 total costs (PI). Goal: Screen and validate personal care chemicals for their metabolic and reproductive system effects.

6/18-5/20 Office of Environmental Health Hazard Assessment 17-E0024 "Investigate the endocrine disrupting properties of chemical abuse" $170,071 total costs (PI). Goal: Screen and validate environmental chemicals for their endocrine disrupting effects.

1/19-12/23 NIH R01ES029126 "Air pollution, atherosclerosis, and the role of the aryl hydrocarbon receptor" $353,250 FY1 (co-I). Goal: Evaluate simultaneous activation and interaction of AhR and NLRP3/inflammasome from TRAP exposure combined with a high-fat diet that enhances vascular inflammation and dysfunction in the aortic wall, which ultimately increases atherosclerosis.

9/19-8/22 UC Davis Office of Research IMPACT Center Award "Perinatal Origins of Disparities (POD) Research Center" (co-I). Goal: The POD Center investigates exposure to social and chemical environment disparities during pregnancy, and their clinical intervention in association with excess body fat in mothers and offspring.

9/19-8/24 "Effects of DDE exposure on adipose tissue function, weight loss and metabolic improvement after bariatric surgery: A new paradigm for study of lipophilic chemicals" (subcontract PI). Goal: Demonstrate the associations between human adipose and primary adipocyte DDE levels between impaired bariatric surgery metabolic outcomes, and adipose and adipocyte transcriptome and metabolome.

Original Literature (**denotes corresponding author***)**

1. Netusil NR, Boyd E, van Giffen Z, **La Merrill M** and Rainsberger E**.** Can open spaces be self-financing: results from Portland, Oregon. *Choices*, **2000**, Second Quarter, 21-23.
2. Gordon R, Hunter K, **La Merrill M**, Sørensen P, Threadgill D, and Pomp D. Genotype x diet interactions in mice predisposed to mammary cancer: II. tumors and metastasis. *Mammalian Genome,* **2008***, 19:* 179-189, PMID18288525.
3. **La Merrill M**, Baston DS, Denison MS, Birnbaum LS, and Threadgill DW. Mouse breast cancer model-dependent changes in metabolic syndrome-associated phenotypes caused by maternal dioxin exposure and dietary fat. *American Journal of Physiology-Endocrinology and Metabolism,* **2009***, 296:* E203-210, PMID18840765/PMCID:PMC2636987.
4. **La Merrill M**, Kuruvilla BS, Birnbaum LS, Pomp D, and Threadgill DW. Dietary fat alters pubertal body composition and P450 induction following maternal TCDD exposure in DBA/2J mice. *Environmental Health Perspectives,* **2009**, *117:* 1414-1419, PMID19750107/PMCID:PMC2737019.
5. **La Merrill M***, Gordon R, Hunter K, Threadgill D, and Pomp D. Dietary fat alters pulmonary metastasis of mammary cancers through cancer autonomous and non-autonomous changes in gene expression. *Clinical and Experimental Metastasis*, **2010**, 27: 107-116, PMID20151316.

6. **La Merrill M**, Harper R, Birnbaum LS, Cardiff RD, and Threadgill DW. Maternal TCDD along with a diet high in fat increases mammary cancer incidence in mice. *Environmental Health Perspectives,* **2010**, 118: 596-601 (Cover article and Science Selection), PMID20435547/PMCID:PMC2866672.
7. Gordon R, **La Merrill M**, Hunter K, Threadgill D, and Pomp D. Dietary fat-dependent transcriptional architecture and copy number alterations associated with modifiers of mammary cancer metastasis. *Clinical and Experimental Metastasis*, **2010**, 27: 279-293, PMID20354763/PMCID: PMC439766.
8. **La Merrill M***, Stein CR, Landrigan P, Engel SM, and Savitz DA. Prepregnancy body mass index, smoking during pregnancy, and infant birth weight. *Annals of Epidemiology*, **2011**, 21: 413-420, PMID21421328/PMCID:PMC3090467.
9. **La Merrill M***, Torres-Sanchez L, Ruiz-Ramos R, López-Carrillo L, Cebrián Garcia M, and Chen J. The association between first trimester micronutrient intake, MTHFR genotypes, and global DNA methylation in pregnant women. *Journal of Maternal-Fetal and Neonatal Medicine*, **2012**, 25: 133-137, PMID21443409/PMCID:PMC3279137.
10. **La Merrill M***, Cirillo PM, Terry MB, Krigbaum NY, Flom JD, and Cohn BA. Prenatal exposure to the pesticide DDT and hypertension diagnosed in women before age 50: a longitudinal birth cohort study. *Environmental Health Perspectives*, **2013**, 121: 594-599, doi:10.1289/ehp.1205921, PMID 23591545/PMCID 3673196.
11. **La Merrill M***, Karey E, Moshier E, Lindtner C, La Frano MR, Newman JW, Buettner C. Perinatal exposure of mice to the pesticide DDT impairs energy expenditure and metabolism in adult female offspring. *PLOS ONE*, **2014**, 9: e103337, PMCID: PMC4116186.
12. **La Merrill MA***, Cirillo PM, Krigbaum NY, and Cohn BA. The impact of prenatal parental tobacco smoking on risk of diabetes mellitus in middle-aged women. Journal of Developmental Origins of Health and Disease, **2015**, Feb 10:1-8, PMID25665487.
13. Cohn BA, **La Merrill M**, Krigbaum NY, Yeh G, Park JS, Zimmermann L, and Cirillo PM. DDT exposure in utero and breast cancer. *Journal of Clinical Endocrinology and Metabolism*, **2015**, 8: 2865-2872, PMID 26079774.
14. Ishikawa T, Graham JL, Stanhope KL, Havel PJ, **La Merrill MA***. Effect of DDT exposure on lipids and energy balance in obese Sprague-Dawley rats before and after weight loss. Toxicology Reports, **2015**, 2: 990-995, PMID processing. Open Access.
15. **La Merrill MA***, Sethi, S, Benard L, Moshier E, Haraldsson B, Buettner C. Perinatal DDT exposure induces hypertension and cardiac hypertrophy in adult mice. *Environmental Health Perspectives*, **2016**,124:1722-1727, doi:10.1289/EHP164, PMID 27325568.
16. Green AJ, Graham JL, Gonzalez EA, La Frano MR, Petropoulou S-SE, Park J-S, Newman JW, Stanhope KL, Havel PJ, **La Merrill MA***. Perinatal triphenyl phosphate exposure accelerates type 2 diabetes onset and increases adipose accumulation in UCD-Type 2 Diabetes Mellitus rats. Invited special issue of *Reproductive Toxicology "Developmental Basis of Health and Disease"*, **2017**, 68: 119-129, doi:10.1016/j.reprotox.2016.07.009, PMID 27421578.
17. Cano-Sancho G, Smith A, **La Merrill MA***. Triphenyl phosphate enhances adipogenic differentiation, glucose uptake and lipolysis via endocrine and noradrenergic mechanisms. *In Vitro Toxicology*, **2017**, 40: 280-288, PMID 28163246.
18. Smith AM, Smith AT, La Merrill MA, Liaw J, Steinmaus C. 2,4-Dichlorophenoxyacetic Acid (2,4-D) and Risk of Non-Hodgkin Lymphoma: A meta-analysis accounting for exposure levels. *Annals of Epidemiology*, **2017**, 27: 281-289.
19. Cano-Sancho G, Salmon AG, **La Merrill MA***. Association between exposure to p,p'-DDT and its metabolite p,p'-DDE with obesity: integrated systematic review and meta-analysis. *Environmental Health Perspectives*, **2017**, doi:10.1289/EHP527. Featured as an EHP Science Selection: doi:10.1289/EHP2545.

20. **La Merrill MA***, Lind PM, Salihovic S, van Bavel B, Lind L. The association between p,p'-DDE levels and left ventricular hypertrophy is mainly mediated by obesity. *Environmental Research*, **2018**, doi:10.1016/j.envres.2017.10.031.
21. Daniels SI, Chambers JC, Sanchez SS, **La Merrill MA**, Hubbard AE, Macherone A, McMullin M, Zhang L, Elliot P, Smith MT, Kooner J. Elevated levels of organochlorine pesticides in South Asian Immigrants are associated with an increased risk of diabetes. *Journal of the Endocrine Society,* **2018**, doi:10.1210/js.2017-00480.
22. Eiserich JP, Ott SP, Kadir T, Morrissey BM, Hayakawa KA, **La Merrill MA**, Cross CE. Quantitative assessment of cyanide in cystic fibrosis sputum and its oxidative catabolism by hypochlorous acid. *Free Radical Biology and Medicine*, **2018**,129:146-154. doi: 10.1016/j.freeradbiomed.2018.09.007, PMID 30213640.
23. Cohn BA, Cirillo PM, **La Merrill MA**. Correlation of body mass index with serum DDTs predicts lower risk of breast cancer before the age of 50: prospective evidence in the Child Health and Development Studies. *Journal of Exposure Science & Environmental Epidemiology*, **2018**, doi:10.1038/s41370-018-0072-7, PMID 30224754.
24. da Costa CS, Miranda-Alves L, **La Merrill MA**, Silva IV, Graceli JB. The tributyltin leads to obesogenic mammary gland abnormalities in adult female rats. *Toxicology Letters*, **2019**, 307: 59-71, doi:10.1016/j.toxlet.2019.02.016.
25. Hu X, Li S, Cirrilo P, Krigbaum N, Tran V, Ishikawa T, **La Merrill MA**, Jones DP, Cohn B. Metabolome Wide Association Study of serum DDT and DDE in Pregnancy and Early Postpartum, *Reproductive Toxicology*, **2019**, doi:10.1016/j.reprotox.2019.05.059.
26. Azhagiya Singam ER, Tachachartvanich P, **La Merrill MA**, Smith MT, Durkin KA. Structural Dynamics of Agonist and Antagonist Binding to the Androgen Receptor, Journal of Physical Chemistry B, **2019**, 123, 7657-7666, doi:/10.1021/acs.jpcb.9b05654.
27. **La Merrill MA***, Johnson CL, Smith MT, Kandula NR, Macherone A, Pennell KD, Kanaya AM. Exposure to persistent organic pollutants (POPs) and their relationship to hepatic fat and insulin insensitivity among Asian Indian immigrants in the United States. Environmental Science and Technology, **2019**, 53,13906-13918, doi:10.1021/acs.est.9b03373.
28. Azhagiya Singam ER, Tachachartvanich P, Fourches D, Soshilov A, Hsieh JCY, **La Merrill MA**, Smith MT, Durkin KA. Structure-Based Virtual Screening of Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs) as Endocrine Disruptors of Androgen Receptor Activity Using Molecular Docking and Machine Learning. Environmental Research, **2020**.
29. Tachachartvanich P, Azhagiya Singam,ER, Durkin KA, Smith MT, **La Merrill MA**. Structure-based discovery of the endocrine disrupting effects of hydraulic fracturing chemicals as novel androgen receptor antagonist. Chemosphere, **2020**, 257,127178, doi: 10.1016/j.chemosphere.2020.127178.
30. **La Merrill MA**, Krigbaum NY, Cirillo PM, Cohn BA. Association between maternal exposure to the pesticide *dichlorodiphenyltrichloroethane* (DDT) and risk of obesity. International Journal of Obesity, **2020**, doi: 10.1038/s41366-020-0586-7, PMID 32415255.
31. Castriota F, Zushin PJ, Sanchez SS, Phillips RV, Hubbard A, Stahl A, Smith MT, Wang JC, **La Merrill MA**. Chronic arsenic exposure impairs adaptive thermogenesis in male C57BL/6J mice. American Journal of Physiology-Endocrinology and Metabolism, **2020**, E667-E677, doi:10.1152/ajpendo.00282.2019.
32. Valvi D, Walker D, Inge T, Bartell S, Jenkins T, Helmrath M, Ziegler T, **La Merrill MA**, Eckel S, Conti D, Liang Y, McConnell R, Chatzi L. Environmental chemical burden in metabolic tissues and systemic biological pathways in adolescent bariatric surgery patients: A pilot untargeted metabolomic approach. Environmental International, **2020**, 143:105957, doi:10.1016/j.envint.2020.105957, PMID 32683211.

33. Elmore SE, Cano-Sancho G, La Merrill MA*. Disruption of normal adipocyte development and function by methyl- and propyl- Paraben Exposure. Toxicology Letters, **2020**, 334: 27, doi: 10.1016/j.toxlet.2020.09.009, PMID 32956827.
34. Jugan J, Lind PM, Salihovic S, Stubleski J, Kärrman A, Lind L, **La Merrill MA***. The associations between p,p'-DDE levels and plasma levels of lipoproteins and their subclasses in an elderly population determined by analysis of lipoprotein content. Lipids in Health and Disease, 2020, 19:249, doi: 10.1186/s12944-020-01417-1, PMID 33287856.
35. Vogel CFA, Lazennec G, Kado SY, Dahlem C, He Y, Castaneda A, Ishihara Y, Vogeley C, Rossi A, Haarmann-Stemmann T, Jugan JA, Mori H, Borowsky AD, **La Merrill MA**, Sweeney C. Targeting the aryl hydrocarbon receptor signaling pathway in breast cancer development. Frontiers in Immunology, **2021**, in press, doi: 10.3389/fimmu.2021.625346.
36. Cirillo P, **La Merrill MA** (co-first authors), Krigbaum N, Cohn B. Grandmaternal perinatal serum DDT in relation to granddaughter early menarche and adult obesity: three generations in the Child Health and Development Studies cohort. Cancer Epidemiology, Biomarkers & Prevention, **2021**, in press.
37. vonderEmbse AN, Elmore SE, Jackson KB, Habecker BA, Manz KE, Pennell KE, Lein PJ, **La Merrill MA***. Developmental exposure to DDT or DDE alters sympathetic innervation of brown adipose in adult female mice. Environmental Health, **2021**, in press.

Review Articles and Scientific Statements (denotes corresponding author*)**

1. **La Merrill MA**, Parent KE, and Kirchhoff MM. Green Chemistry: stopping pollution before it starts. *ChemMatters*, **2003**, April, 7-10.
2. **La Merrill MA**, Parent KE, and Kirchhoff MM. Greener Chemistry in Every Career. *In Chemistry*, **2003**, 12: 15-19.
3. **La Merrill MA** and Parent KE. Packaging food with green chemistry. *In Chemistry*, **2003**, 13: 20-21.
4. **La Merrill M*** and Birnbaum LS. Childhood obesity and environmental chemicals. *Invited by Mount Sinai Journal of Medicine*, **2011**, 78: 22-48, PMID:21259261/ PMCID:PMC3076189.
5. **La Merrill M**, Emond C, Kim MJ, Antignac JP, Le Bizec B, Clement K, Birnbaum LS, and Barouki R. Toxicological function of adipose tissue: focus on persistent organic pollutants. *Environmental Health Perspectives*, **2013**, 121: 413-420 (Science Selection), PMID:23221922/PMCID:PMC3569688.
6. Gore A, Crews D, Doan LL, **La Merrill M**, Patisaul H and Zota A. Introduction to Endocrine Disrupting Chemicals: a guide for public interest organizations and policy-makers. Endocrine Society and IPEN, **2014**, http://press.endocrine.org/edc.
7. Heindel J, Vom Saal FS, Blumberg B, Bovolin P, Calamandrei G, Ceresini G, Cohn BA, Fabbri E, Gioiosa L, Kassotis C, Legler J, **La Merrill M**, Rizzir L, Machtinger R, Mantovani A, Mendez MA, Montanini L, Molteni L, Nagel SC, Parmigiani S, Panzica G, Paterlini S, Pomatto V,Ruzzin J, Sartor G, Schug TT, Street ME, Suvorov A, Volpi R, Zoeller RT, Palanza P. Parma consensus statement on metabolic disruptors. *Environmental Health*, **2015**, 14: 54-61, PMID: 26092037/PMCID:PMC4473834.
8. Loomis D, Guyton K, Grosse Y, El Chissasi F, Bouvard V, Benbrahim-Tallaa L, Guha N, Mattock H, Straif K, Intenational Agency for Research on Cancer Monograph Working Group (Kogevinas M, Larramendy ML, Stewart BW, Sanderson T, Guenel P, Cocco P, Fukushima S, Cebrian ME, Lopez Carrillo LT, Vermeulen R, Naidoo S, Prapamontol T, Martin FL, Rushton L, Alavanja M, Bosland M, Chhabra RS, Chiu W, De Roos A, Herbert R, **La Merrill M**, Reif DM, Roy D, Smith MT, Thomas K, M Wolff.)

Carcinogenicity of lindane, DDT, and 2,4-dichlorophenoxyacetic acid. *The Lancet Oncology*, **2015**, S1470:81-9, doi: 10.1016/S1470-2045(15)00081-9, PMID 26111929.

9. **La Merrill MA***. The economic legacy of endocrine-disrupting chemicals. *Invited by Lancet Diabetes and Endocrinology*, **2016**, 4: 961-962, doi:10.1016/S2213-8587(16)30279-0, PMID27765540.
10. Gill JA, **La Merrill MA***. An emerging role for epigenetic regulation of Pgc-1a expression in environmentally stimulated brown adipose thermogenesis, *Environmental Epigenetics*, **2017**, 3:dvx009, doi:10.1093/eep/dvx009.
11. Mendrick DL, Diehl AM, Topor LS, Dietert RR, Will Y, **La Merrill MA**, Bouret S, Varma V, Hastings KL, Schug TT, Emeigh Hart SG, Burleson FG. Metabolic syndrome and associated diseases: from the bench to the clinic, *Toxicological Sciences*, **2018**, 162: 36-42, doi:10.1093/toxsci/kfx233.
12. Elmore SE, **La Merrill MA***. Oxidative phosphorylation impairment by DDT and DDE, *Frontiers in Endocrinology*, **2019**, 10:1-8, doi:10.3389/fendo.2019.00122.
13. **La Merrill MA***, Vandenberg LN, Smith MT, Goodson W, Browne P, Patisaul HB, Guyton KZ, Kortenkamp A, Cogliano VJ, Woodruff TJ, Rieswijk L, Sone H, Korach KS, Gore AC, Zeise L, Zoeller TR. Consensus on the key characteristics of endocrine-disrupting chemicals as a basis for hazard identification. Nature Reviews Endocrinology, **2019**, doi:10.1038/s41574-019-0273-8.
14. **La Merrill MA**. The environmental chemicals that change our minds and bodies. The Lancet Diabetes & Endocrinology, **2019**, 8: 16, doi: 10.1016/S2213-8587(19)30177-9.
15. Castriota F, Rieswijk L, Dahlberg S, **La Merrill MA**, Steinmaus C, Smith MT, Wang J-C. A state-of-the-science review of arsenic's effects on glucose homeostasis in experimental models. *Environmental Health Perspectives*, **2020**, doi:10:12.89/EHP4517.
16. Smith M, Guyton KZ, Kleinstreuer N, Borrel A, Cardenas A, Chiu W, Felsher DW, Gibbons C, Goodson W, Houck K, La **Merrill MA**, Lebrec H, Lowe L, McHale C, Minocherhomji S, Rieswijk L, Sandy M, Hideko S, Wang A, Zhang L, Zeise L, Fielden M. The Key Characteristics of Carcinogens: Relationship to the Hallmarks of Cancer, Relevant Biomarkers, and Assays to Measure Them. Cancer Epidemiology and Prevention Biomarkers, **2020**, doi:10.1158/1055-9965.EPI-19-1346, PMID 32152214.

Invited Book Chapters (**denotes corresponding author***)**

1. Landrigan P, Morland K, and **La Merrill M.** Chapter 104: Environment and heart disease in Hurst's The Heart, 13th edition, 2011; McGraw-Hill, Columbus, OH.
2. **La Merrill M***, Taylor K, Thayer KA, and Birnbaum LS. Chapter 36: The environment during development, obesity, and diabetes in The Oxford Textbook of Environmental Pediatrics: Environmental Influences on Health, Development and Disease, 1st edition, 2014; Oxford University Press, Oxford, England.
3. Barouki R, Antignac JP, Emond C, Clement K, Birnbaum L, **La Merrill M**, Kim MJ. Adipose tissue pollutants and obesity in The ECOG's eBook on Child and Adolescent Obesity, 1st edition, 2015; European Childhood Obesity Group, Brussels, Belgium.
4. **La Merrill M**, Galvez M. Chapter 29: Endocrine disrupting chemicals in Pediatric Environmental Health, 4th edition, 2019; American Academy of Pediatrics, Itasca, IL.

Sessions Chaired

3/10 "Translating toxicology to public health practices: lessons learned from Superfund" historical highlight session, Annual SOT Meeting; SOT; Salt Lake City, UT

3/11 "Developmental exposure to environmental toxicants: from persistent toxicities to diseases" symposium session, Annual SOT Meeting; SOT; Washington DC

3/12 "Trainee discussions with opening plenary lecturer, Dr. Leroy Hood" career session, Annual SOT Meeting; SOT; San Francisco CA

3/13 "Toxicological writing for industrial and regulatory audiences" workshop, Annual SOT Meeting; SOT; San Antonio TX
3/15 "Juvenile Toxicity" poster session, Annual SOT Meeting; SOT; San Diego CA

Invited Oral Presentations

3/08 "Obesity and perinatal TCDD exposure increases mammary tumors in FVB mice", 47th Annual SOT Meeting; SOT; Seattle, WA
4/09 "The interaction of perinatal dioxin exposure and high fat diet in mouse models of breast cancer subtypes", Mount Sinai Breast Cancer Translation meeting; New York, NY
11/09 "How to write for the press", Mount Sinai Clinical Research Education seminar series; New York, NY
3/10 "Interaction between pre-pregnancy body mass index and maternal tobacco smoking on birth weight of New York City infants", Annual SOT Meeting; SOT; Salt Lake City, UT
8/11 "Influence of 2,2',4,4'-tetrabromodiphenyl ether (BDE47) on metabolic syndrome and insulin resistance in aging mice fed high fat diet", Cellular & Molecular Mechanisms of Toxicity GRC; Andover, NH
8/11 "The potential role of developmental chemical exposures in contributing to the obesity epidemic", Dioxin2011; Brussels, Belgium
12/11 "Endocrine disruption, obesity, and diabetes", 2011 Educational Symposium; New York Academy of Medicine, NY
2/12 "Environmental chemicals, obesity and diabetes", Mount Sinai Division of Endocrinology Grand Rounds; New York, NY
5/14 "Perinatal DDT exposure and thermogenesis", Environmental Endocrine Disruptors GRC; Barga, Italy
10/14 "Perinatal tobacco exposure, obesity and diabetes", AAP-NCE Provisional Section on Tobacco Control; San Diego, CA
11/14 "Superfund chemicals as risk factors for obesity and type 2 diabetes", Superfund Research Program Annual Meeting; San Jose, CA
4/15 "DDT exposure and metabolic syndrome", UCLA Molecular Toxicology Seminar; Los Angeles, CA
10/15 "DDT exposure impairs brown adipose energy expenditure", Chico State University Biology Seminar; Chico, CA
11/15 "DDT exposure and thermogenesis: the link between DDT, obesity and diabetes?", GETA Fall Symposium; Oakland, CA
4/16 "Experimental evidence that prenatal exposure to a CA Biomonitoring flame retardant leads to obesity and type 2 diabetes", Children's Environmental Health Symposium; Sacramento, CA
5/16 "Developmental exposure to DDT impairs energy expenditure leading to insulin resistance", Outstanding New Environmental Scientist Awardee Symposium; National Institutes of Environmental Health Sciences, NC
6/16 "Environmental chemicals and thermogenesis", European Obesity Summit; Gothenberg, Sweden
6/16 "Environmental chemicals and thermogenesis: obesogens, diabesogens- evidence for impaired thermogenesis as a mechanism", Department of Medicine Occupational and Environmental Medicine Seminar; Uppsala University; Uppsala, Sweden
9/16 "DDT effects across species", 25 Years of Endocrine Disruption Research: Past Lessons and Future Directions; Bethesda, MD
11/16 "Evidence of metabolic disruption in cohorts supported by mechanistic studies", 8th Princess Chulabhorn International Science Congress; Bangkok, Thailand
12/16 "Impaired thermogenesis as an etiology of obesity and insulin resistance", Annual Jaime Kim Memorial Lecture of the Endocrine Research Seminar Series in the Department of Medicine; University of Chicago; Chicago, IL

12/16 "Evidence for effects of organochlorines on risk of chronic diseases", Environmental Health and Toxicology Seminar Series; Emory University; Atlanta, GA
12/16 "Chemical exposures, obesity and impaired thermogenesis", Center for Precision Environmental Health NExT Health: Innovators Symposium; Baylor College of Medicine; Houston, TX
3/17 "Environmental Agents and Drugs that May Affect Metabolic Syndrome and Associated Diseases", Metabolic Syndrome and Associated Disease: from the Bench to the Clinic Conference; Baltimore, MD
6/17 "Mouse models of gene by environment interaction in metabolism", UCD Genome Center Faculty Seminar; Davis, CA
12/17 "Susceptibility to environmental disease" invited oral presentation, International Conference on Environmental-related Cancer Prevention 2017: Assessing Low-doses and Cumulative Effects of Exposure to Chemical Mixtures; Tsukuba, Japan
3/18 "Evidence that the pesticide DDT and its metabolite DDE are presumed obesogens", Annual Society of Toxicology Conference; San Antonio, TX
4/18 "Mechanisms of impairments in brown adipose energy expenditure by obesogenic organochlorines" Toxicology & Environmental Health Seminar, Duke University; Durham, NC
5/18 "Impaired thermogenesis as a mechanism that leads to obesity" MRC-PHE Centre Annual Distinguished Guest Lecture, Imperial College; London, UK
6/18 "Epigenetic and adrenergic mechanisms of impaired thermogenesis that lead to obesity in DDT exposures" Institute of Food, Nutrition and Health Seminar, ETH; Zurich, Switzerland
6/18 "Defining Key Characteristics of EDCs" Environmental Endocrine Disruptors Gordon Research Conference; Les Diablerets, Switzerland
11/18 "Positive association of prenatal DDT exposure and obesity among women in their fifties: Findings from the Child Health and Development Studies" Annual Meeting of the American Public Health Association; San Diego, CA
3/19 "Perinatal DDT Exposure Shortens Latency of Spontaneous Mammary Tumorigenesis in PyMT Mice" ELEMENTS UCD Comprehensive Cancer Center Initiative Symposium; Sacramento, CA
4/19 "Do chemicals make it harder to burn calories? Mechanistic evidence that the pesticide DDT and its metabolite DDE are obesogens" UCR Environmental Toxicology seminar; Riverside, CA
4/19 "Do chemicals make it harder to burn calories? Mechanistic evidence that the pesticide DDT and its metabolite DDE are obesogens" UCSC seminar; Santa Cruz, CA
8/19 "Global health impacts of exposure to endocrine-disrupting chemicals" Brazilian Congress of Updating in Endocrinology and Metabolism; Brazilian Society of Endocrinology and Metabolism; Florianopolis, Brazil
8/19 "Global health impacts of exposure to endocrine-disrupting chemicals" Poison Center Seminar; University Hospital, Florianopolis, Brazil
9/19 "Epidemiology and mechanisms of chemical obesogens in California" Environmental Chemistry Seminar, Department of Toxic Substances Control; Berkeley, CA
10/19 "Key characteristics of endocrine-disrupting chemicals" Ramazzini Days; Collegium Ramazzini; Carpi, Italy

Recent Poster Presentations

6/16 **La Merrill MA**, Gonzalez E, Hoang CT, Ishikawa T. "Perinatal DDT exposure shortens the latency of spontaneous mammary tumorigenesis in mice", Global Cancer: Occurrence, Causes, and Avenues to Prevention, International Agency for Research on Cancer 50th Anniversary conference; Lyon, France

7/16 Lili L, **La Merrill M**, Banton S, Ishikawa T, Cirrillo P, Krigbaum N, Zimmermann L, Tran V, Jones D, Cohn B, Li S. "Metabolome wide association of DDT exposure in humans and in mice", International Society for Computational Biology Annual Meeting, Orlando, FL

12/16 **La Merrill MA**, Gonzalez E, Hoang CT, Ishikawa T. "Perinatal DDT exposure shortens the latency of spontaneous mammary tumorigenesis in mice", University of California Davis Environmental Health Sciences Center 2nd Annual Retreat; Davis, CA

4/17 Elmore S., **La Merrill M.** "Impaired thermogenesis accompanied by changes in the brown adipose transcriptome and methylome in mice perinatally exposed to the pesticide DDT", University of California Davis Postdoctoral Research Symposium; Davis, CA

4/17 Polsky L, Elmore S, **La Merrill M.** "Impaired thermogenesis accompanied by sex-specific changes in the brown transcriptome and methylome exposed to the pesticide DDT", University of California Davis Undergraduate Research Conference; Davis, CA

4/17 Hickman E, Xu S, **La Merrill M.** "Effects of p,p'-DDT and p,p'-DDE on Respiration and Substrate Utilization in Brown Adipocytes", University of California Davis Undergraduate Research Conference; Davis, CA

8/17 Cohn B, **La Merrill M**, Hovey R, Krigbaum N, Wang M, Park J, Petreas M, Yeh G, Zimmerman L, Cirillo P. "Maternal perinatal serum PFASs and daughters' breast cancer", Dioxin Annual Meeting; Vancouver, Canada

3/18 vonderEmbse AN, Elmore SE, Lein PJ, **La Merrill MA**. "Altered sympathetic connectivity is correlated with thermogenic impairment following perinatal DDT exposure" Annual Society of Toxicology Conference; San Antonio, TX

3/18 Elmore SE, Jackson KJ, **La Merrill MA**. "Impaired thermogenesis accompanied by changes in the brown adipose DNA methylome in mice perinatally exposed to the pesticide DDT" Annual Society of Toxicology Conference; San Antonio, TX

4/18 Jackson KB, Elmore SE, Xu X, **La Merrill MA**. "Epigenetic mechanism of DDT-impaired thermogenesis" 3rd Annual Environmental Health Sciences Center Retreat; UC Davis, California

3/19 Castriota F, Sanchez S, Zushin P, Tong J, Lee R, Kajimura S, Smith MT, Wang J-C, **La Merrill MA**. "The effects of arsenic on beiging and metabolic health"; annual meeting of the Endocrine Society; New Orleans, LA

4/19 Ren S, Elmore S, **La Merrill MA**. "Effects of DDT and DDE Exposure on Sarcolipin-based Thermogenesis in Mice Skeletal Muscle", University of California Davis Undergraduate Research Conference; Davis, CA

4/19 Pena E, vonderEmbse AN, La Merrill MA. "Thermogenesis impaired by DDE as early as parturition in female mice", University of California Davis Undergraduate Research Conference; Davis, CA

6/19 **La Merrill MA**, Gonzalez E, Hoang CT, Ishikawa T. "Perinatal DDT Exposure Shortens Latency of Mouse Mammary Tumorigenesis", Environmental Carcinogenesis: Potential Pathway to Cancer Prevention, American Association for Cancer Research; Charlotte, NC

Continued Education

6/04 "Association Mapping," "Genetic Data in Clinical Trials," and "Microarray Analysis" courses, Summer Institute in Statistical Genetics, North Carolina State University, Raleigh, NC

5/08 "Colony Management: Principles and Practices" workshop, The Jackson Laboratory, Chapel Hill, NC

3/09 "Stress as a Confounding Factor in Toxicology Studies" course, SOT; Baltimore, MD

7/09 "So You Think You Can Teach? A Guide to Improved Teaching Skills for Future (and Current) Faculty" workshop, MSSM, New York, NY

4/11 "Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis" course, National Mouse Metabolic Phenotyping Centers, Little Rock, AR
5/11 "Multilevel Modeling of Hierarchical and Longitudinal Data Using SAS" expert level course, SAS Institute, New York, NY
11/11 "Longitudinal Data Analysis with Discrete and Continuous Responses" expert level course, SAS Institute, New York, NY
8/12 "Microsurgery" course, Data Science International, Minneapolis, MN

Editorial Responsibilities

4/15-present Editorial Review Board for Environmental Epigenetics
5/17-present Editorial Review Board for Environmental Health Perspectives
2/18-present Editorial Board for Clinical Epigenetics

Professional Service Activities

9/07-4/10 SOT Occupational and Public Health Specialty Section Postdoctoral Representative Elect. Activities: Developed 'Translating Toxicology to Public Health' moto and planned annual luncheon.
7/09-6/11 Society of Endocrinology Invited Trainee and Career Development Core Committee- Member. Activities: Sit on Trainee Day Planning Committee and develop Early Career Scientist Award
5/10-5/12 SOT Postdoctoral Assembly Chair Elect. Activities: Develop Trainee Discussions with Plenary Speakers at the Annual Meeting, and Expert-Hosted Annual Meeting Poster Tours for Trainees, & Writing Your K99/R00 Webinar
10/11 SOT Education Summit Invited Participant. Activities: Identify strategies to overcome training gaps
10/11 NIEHS Strategic Planning Workshop Invited Participant. Activities: Develop an NIEHS Mission Statement, Vision Statement, and Strategic Goals
5/13-5/14 SOT Career Resource and Development Committee Appointed Member. Activities: Annual meeting programming, academic job bank initiative
12/14 Endocrine Society and IPEN Invited Author 'Introduction to Endocrine Disrupting Chemicals'
6/15 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Invited Participant of Volume 113 'Some Organochlorine Insecticides and Some Chlorphenoxy Herbicides' Working Group

Professional Society Memberships and Committees

1/13-12/13 American Heart Association Member
11/07-present Endocrine Society Associate Member
9/04-present SOT Member