

Carolyn F. McCabe, MS, PhD
100 North Academy Avenue
Geisinger Medical Center
Department of Population Health Sciences
Danville, PA 17822-2607
Phone: (215) 589-9504
E-mail: cmccabe1@geisinger.edu

EDUCATION

- PhD*, Nutritional Sciences
University of Michigan School of Public Health 2016-2020
Thesis: Epigenetic Reprogramming in Response to Early-Life Exposures: Maternal Urinary Bisphenols and One-Carbon Metabolites.
Dissertation Defense Completed September 30, 2020
- Master of Science*, Nutritional Sciences
University of Michigan School of Public Health 2014-2016
- Bachelor of Science*, Biology
Emory University 2010-2013

BIBLIOGRAPHY

Scholarly outcomes of efforts with Geisinger Department of Population Health Sciences and Geisinger Obesity Institute

Manuscripts in Preparation

1. **Carolyn McCabe**, Craig Wood, William Cochran, Jennifer Franceschelli Hosterman, Jennifer S. Savage, Lisa Bailey-Davis. Patient-Reported Outcome Measures Can Advance Population Health, but Is Access to Instruments Equitable? *Frontiers in Pediatrics*, *Under Review*
2. Bailey-Davis L, Wood GC, **McCabe CF**, Cook A, Rolston DD, Seiler C, Still CD. Communicating risk of diabetes to patients results in lower incidence at 1- and 3-year follow-up and improved preventive intervention. medRxiv. (*Under review*)

Scholarly outcomes of efforts with the University of Michigan, Departments of Nutritional Sciences and Environmental Health Sciences

Peer-Reviewed Publications:

1. **Carolyn F. McCabe**, Jennifer L. LaBarre, Steven E. Domino, Marjorie C. Treadwell, Ana Baylin, Charles F. Burant, Dana C. Dolinoy, Vasantha Padmanabhan, Jaclyn M. Goodrich. Prenatal Timing of Exposure to One-Carbon Metabolites and the Epigenome-Wide Response in Infant Cord Blood Leukocytes. *Journal of Nutritional Biochemistry*. *J Nutr Biochem* 2022 Mar;101:108938. doi:10.1016/j.jnutbio.2022.108938. Epub 2022 Jan 10.

2. Marchlewicz E*, **McCabe C***, Djuric Z, Hoenerhoff M, Barks J, Tang L, Song PX, Peterson K, Padmanabhan V, Dolinoy DC. Gestational exposure to high fat diets and bisphenol A alters metabolic outcomes in dams and offspring, but produces hepatic steatosis only in dams. *Chemosphere*. 2021 Jul 29;286(Pt 2):131645. doi:10.1016/j.chemosphere.2021.131645. PMID: 34426127. *Co-first author
3. Anderson OS, Weirauch K, Roper R, Phillips J, **McCabe C**, Chuisano SA, Sadovnikova A. The Efficacy of Hybrid Telesimulation with Standardized Patients in Teaching Medical Students Clinical Lactation Skills: A Pilot Study. *Breastfeed Med*. 2021 Jan 25. doi: 10.1089/bfm.2020.0253. PMID: 33493401.
4. **Carolyn F McCabe**, Vasantha Padmanabhan, Dana C Dolinoy, Steven E Domino, Tamara R Jones, Kelly M Bakulski, Jaclyn M Goodrich, Maternal environmental exposure to bisphenols and epigenome-wide DNA methylation in infant cord blood, *Environmental Epigenetics*, Volume 6, Issue 1, 2020, dvaa021, <https://doi.org/10.1093/eep/dvaa021>
5. Anderson OS, **McCabe CF**, Chuisano SA, Wicoff E, Grabowski A, Sadovnikova A. Virtual Experiential Learning: A Description of an Internship Framework That Engages Students to Build Public Health Competencies. *Pedagogy in Health Promotion*. December 2020. doi:10.1177/2373379920977537
6. Jennifer L. LaBarre, **Carolyn McCabe**, Muraly Puttabyatappa, Tamara R. Jones, Peter X.K. Song, Steven E. Domino, Marjorie C. Treadwell, Dana C. Dolinoy, Vasantha Padmanabhan, Charles F. Burant, and Jaclyn M. Goodrich. Maternal lipidome across pregnancy is associated with the neonatal DNA methylome. *Epigenomics*, Volume 12, No. 23, 2020, <https://www.futuremedicine.com/doi/10.2217/epi-2020-0234>
7. **McCabe, C. F.**, O'Brien-Combs, A., & Anderson, O. S. (2020). Cultural Competency Training and Evaluation Methods Across Dietetics Education: A Narrative Review. *Journal of the Academy of Nutrition and Dietetics* <https://doi.org/https://doi.org/10.1016/j.jand.2020.01.014>
8. **McCabe, C.**, & Anderson, O. S. (2017). Development of a concept inventory to investigate student learning gains in life cycle nutrition. *Journal of Nutritional Health & Food Engineering*, 7(3), 1–0. <https://doi.org/10.15406/JNHFE.2017.7.00241>
9. **McCabe, C.**, Anderson, O. S., Montrose, L., Neier, K., & Dolinoy, D. C. (2017). Sexually Dimorphic Effects of Early-Life Exposures to Endocrine Disruptors: Sex-Specific Epigenetic Reprogramming as a Potential Mechanism. *Current Environmental Health Reports*, 4(4), 426–438. <https://doi.org/10.1007/s40572-017-0170-z>
10. **McCabe, C. F.**, & Perng, W. (2017). Metabolomics of Diabetes in Pregnancy. *Current Diabetes Reports*. <https://doi.org/10.1007/s11892-017-0890-3>

Manuscripts in Preparation:

1. **Carolyn F. McCabe**, Carrie Ly, Brigid Gregg, Olivia S. Anderson, A Description of Breast Models used to Teach Clinical Skills, *Medical Science Educator* (*Under review*)
2. **Carolyn F. McCabe**, Jaclyn M. Goodrich, Kelly M. Bakulsky, Dana C. Dolinoy, Steven E. Domino, Tamara R. Jones, Justin Colacino, Vasantha Padmanabhan, DNA Methylation in Cord Blood, Cord Tissue, and Placenta: Comparison and Association with Prenatal Bisphenol Exposures, *Environmental and Molecular Mutagenesis* (*In process*)

PRESENTATIONS

1. **Carolyn McCabe**, Craig Wood, William Cochran, Jennifer Franceschelli Hosterman, Jennifer S. Savage, Lisa Bailey-Davis. Food Parenting Behaviors are Associated with Sleep Quality Measures in Children 0-26 Months of Age. *Accepted Platform Presentation*. International Society of Behavioral Nutrition and Physical Activity (ISBNPA), Phoenix, AZ; May 2022.
2. **Carolyn McCabe**, Craig Wood, William Cochran, Jennifer Franceschelli Hosterman, Jennifer S. Savage, Lisa Bailey-Davis. Patient-Reported Outcome Measures Can Advance Population Health, but Is Access to Instruments Equitable? *Accepted Poster Presentation*. Health Care Systems Research Network (HCSRN), Pasadena, CA; April 2022.
3. **Carolyn McCabe**, Craig Wood, William Cochran, Jennifer Franceschelli Hosterman, Jennifer S. Savage, Lisa Bailey-Davis. *Accepted Poster Presentation*. Weight Management Dietetics Practice Group Virtual Symposium, Academy of Nutrition and Dietetics. February 2022.
4. **Carolyn McCabe**, Craig Wood, William Cochran, Jennifer Franceschelli Hosterman, Jennifer S. Savage, Lisa Bailey-Davis. Diet, activity, and screen-time behaviors have varied associations with sleep indices early in life. *Accepted Poster Presentation*. Obesity Week; November 2021.
5. **Carolyn F. McCabe**, Jaclyn M. Goodrich, Kelly M. Bakulsky, Dana C. Dolinoy, Steven E. Domino, Tamara R. Jones, Justin Colacino, Vasantha Padmanabhan, DNA Methylation in Cord Blood, Cord Tissue, and Placenta: Comparison and Association with Prenatal Bisphenol Exposures. *Accepted Platform Talk*. Environmental Mutagenesis and Genomics Society Meeting; September 2021.
6. Olivia S. Anderson, **Carolyn F. McCabe**, Samantha A. Chuisano, Aria Grabowski, Emily J. Wicoff, and Anna Sadovnikova. Preliminary results from the evaluation of an innovative, online public health lactation course for interprofessional education in clinical lactation. *Accepted Poster Presentation*. International Lactation Consultant Association; July 2020; Houston, Texas.
7. Olivia S. Anderson, **Carolyn F. McCabe**, Samantha A. Chuisano, Aria Grabowski, Emily J. Wicoff, and Anna Sadovnikova. A virtual, interprofessional internship engages health sciences students to develop translational skills in public health lactation. *Submitted for poster presentation*. American Public Health Association's 2020 Annual Meeting and Expo; October 24-28, 2020; San Francisco, California.
8. Olivia Anderson, **Carly McCabe**, Anna Sadovnikova, Sam Chuisano, Aria Grabowski, and Emily Copeland. A virtual, interprofessional approach to develop expertise in the public health perspectives of lactation. *Accepted poster presentation*. University of Michigan Health Professions Education Day; April 14, 2020; Ann Arbor, Michigan.
9. **Carolyn F. McCabe**, Vasantha Padmanabhan, Dana C. Dolinoy, Steven E. Domino, Tamara Jones, Kelly Bakulski, and Jaclyn Goodrich. Fetal Epigenetic Reprogramming in

- Response to Early-Life Exposure to Phenols. *Poster presentation*. Society of Toxicology 58th Annual Meeting & Expo; March 10-14, 2019; Baltimore, Maryland.
10. **Carolyn F. McCabe**, Vasantha Padmanabhan, Dana C. Dolinoy, Steven E. Domino, Tamara Jones, Kelly Bakulski, and Jaclyn Goodrich. Fetal Epigenetic Reprogramming in Response to Early-Life Exposures: Maternal Exposure to Phenols. *Poster presentation*. US DOHaD Society Meeting; October 1-2, 2018; Chapel Hill, North Carolina.
 11. **Carolyn F. McCabe**, Vasantha Padmanabhan, Dana C. Dolinoy, Steven E. Domino, Tamara Jones, Kelly Bakulski, and Jaclyn Goodrich. Fetal Epigenetic Reprogramming in Response to Early-Life Exposures: Maternal Urinary Phenols. ***Selected platform talk***. Environmental Mutagenesis and Genomics Society Meeting; September 22-26, 2018; San Antonio, Texas.
 12. **Carolyn F. McCabe**, Jaclyn Goodrich, Kelly Bakulski, Vasantha Padmanabhan, and Dana C. Dolinoy. Elucidating the Role of Epigenetics in Fetal Reprogramming: Evaluating Maternal Exposures and Placental Epigenetics. *Poster presentation*. University of Michigan Health Sciences Bicentennial Luncheon; October 27, 2017; Ann Arbor, Michigan.

INVITED LECTURES

NUTR310/PUBHLTH510, Nutrition Through the Life Cycle <i>Topics: Developmental Origins of Health and Disease (DOHaD)</i>	Winter 2022
Geisinger Maternal & Pediatric Obesity Research Meeting <i>DOHaD and Fetal Epigenetic Reprogramming</i>	November 2021
Maternal Fetal Medicine Fellowship Lecture Series <i>DOHaD and Fetal Epigenetic Reprogramming</i>	Summer 2021
NUTR310/PUBHLTH510, Nutrition Through the Life Cycle <i>Topics: Developmental Origins of Health and Disease (DOHaD)</i>	Winter 2021
NUTR310/PUBHLTH510, Nutrition Through the Life Cycle <i>Topics: Developmental Origins of Health and Disease (DOHaD) and Public Health Perspectives in Lactation</i>	Winter 2020
NUTR631, Metabolism of Vitamins and Minerals <i>Topics: Folate (1) and Choline (2)</i>	Winter 2019

TEACHING EXPERIENCE

Residential Courses

NUTR310/PUBHLTH 510, Nutrition Through the Life Cycle Grader and delivered one guest lecture	Winter 2021
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PUBHLTH384, Public Health in Action: Creating Change Graduate Student Instructor, facilitated class discussions	Fall 2019
NUTR631, Metabolism of Vitamins and Minerals Graduate Student Instructor, delivered three lectures	Winter 2019
NUTR600, Nutritional Sciences Professional Development Capstone Grader	Fall 2018
NUTR510/PUBHLTH310, Nutrition through the Life-Cycle Graduate Student Instructor, led two weekly discussion sections	Winter 2017
PUBHLTH200, Health and Society: Introduction to Public Health Graduate Student Instructor, led three weekly discussion sections	Fall 2016
NUTR510/PUBHLTH310, Nutrition through the Life-Cycle Graduate Student Instructor, led two weekly discussion sections	Winter 2016

Online Courses

Translational Skills in Public Health Lactation University of Michigan, School of Public Health and Office of Academic Innovation Course Developer and Co-instructor. Online Platform: Coursera, Live as of Jan 25, 2020 https://www.coursera.org/learn/breastfeeding-public-health-perspectives	2019-2021
Translational research and practice in lactation: public health applications University of Michigan School of Public Health Summer Internship LiquidGoldConcept Content Developer and Co-facilitator Online Platform: Google Suite	Summer 2019

WORK EXPERIENCE

Postdoctoral Fellow, Population Health Sciences Obesity Institute, Geisinger	April 2021-
Doctoral Candidate, Laboratory of Dana Dolinoy, PhD University of Michigan School of Public Health	2016-2020
Research Assistant, Laboratory of Dana Dolinoy, PhD University of Michigan School of Public Health	2014-2016
Research Assistant, Laboratory of Cherry Wongtrakool, PhD Emory University School of Medicine	2012-2014
Office Assistant, Department of Pulmonary, Allergy and Critical Care Medicine	

Emory University School of Medicine

2010-2014

Biomedical Laboratory Technician, Department of Pathology and Laboratory Medicine
Emory University, Atlanta, GA

2011-2013

FELLOWSHIP SUPPORT

Rackham One-Term Dissertation Fellowship
Rackham Fellowships Office
Rackham Graduate School

Winter 2020

Center for Research on Equity, Culture and Health (CRECH) Fellow
NIH Division of Minority Opportunities for Research (MORE), Initiative for Maximizing Student Diversity (IMSD)
Department of Health Behavior and Health Education
University of Michigan School of Public Health

2017-2018

GRANTS

Funded Projects

National Institutes of Health/National Heart, Lung, and Blood Institute. 2022-2029
Early Intervention to Promote Cardiovascular Health of Mothers and Children in Northern Appalachia (ENRICH).

Role: Post-doc (Paul/Legro, Co-PIs)

Description: Compare two enhancements to routine well-child care designed to promote family-centered counseling for the prevention of obesity in a high-risk population of rural, lower-income preschool-aged children in the Geisinger Health System.

Pending 05/05/2022

PCORI. Patient-Clinic-Community Integration to Prevent Obesity among Rural Preschool Children (ENCIRCLE). 2020-2024

Role: Post-doc (Bailey-Davis, PI). Effort: 30%

Description: Cluster randomized controlled study to compare the effectiveness of enhancing routine well-child visits to prevent obesity among 2–5-year-old children. Community arm includes a parent training program delivered via telehealth and a Cooking Matters® grocery tour with a trained nutritionist. Multi-level and parent-engaged models will be compared with usual clinical care on obesity prevention. Implementation outcomes and mediation/moderation analyses are planned.

Translational Research and Practice in Lactation: Public Health Applications 2019-2021

University of Michigan Office of Academic Innovation MOOC Funds

To develop and pilot MOOC content, assessments and evaluations that focus on the foundational knowledge and translational skills relevant to public health lactation.

Role: Course Developer & co-instructor
Award: Up to \$30,000 for in-kind support

Evaluation of an Innovative, Online Lactation Curriculum 2019-2021

University of Michigan Office of Academic Innovation General Funds

The LiquidGoldConcept (LGC) lactation internship has been offered to UM-SPH students since 2017 and covers foundational principles in public health and entrepreneurial research methods in regard to the breastfeeding field. The format of the internship is exclusively online as the LGC CEO (lead preceptor) is based in California. Innovative digital technologies like Google Meet and JamBoard are leveraged to facilitate learning.

The aim of this work is to develop appropriate instruments to assess student knowledge acquisition and evaluate satisfaction with curriculum. The extensive evaluation will inform development of a public health lactation Massive Open Online Course (MOOC).

Role: Course Developer & co-instructor
Total Award: \$21,619.69

Placental Epigenomics for Environmental Health Research 2017-2018

Michigan Lifestage Environmental Exposures and Disease Center Pilot Project Grant

The objectives of this pilot project were to identify regions of the placental epigenome that are differentially methylated by exposure to bisphenol A and phthalates and to develop epigenome-wide profiles of seven specific placenta cell types. In this project I co-wrote the submission, and I led laboratory and analysis efforts for the project.

Role: Doctoral student co-investigator

HONORS AND AWARDS

Environmental Mutagenesis and Genomics Society (EMGS) 2018 EMGS Student and New Investigator Travel Award	2018
Momentum Center Student Internship Program Recipient, Summer Award	2016
Rackham Summer Award, Rackham Graduate School Recipient	2015
Dean's Research Opportunity Award University of Michigan School of Public Health	2014-2016

SCIENTIFIC ACTIVITIES

American Society of Nutrition (ASN) Student Member	2017-present
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Environmental Mutagenesis and Genomics Society (EMGS) Student Member	2018-present
US Developmental Origins of Health and Disease (DOHaD) Society Student Member	2018-present
Society of Toxicology (SOT) Student Member	2018-present

COMMUNITY SERVICE AND VOLUNTEERING

SPH Undergrad-Grad Mentorship Program Mentor, University of Michigan School of Public Health	2018
University of Michigan Campus Farm Ann Arbor, Michigan	2018