

Lauren E. McCullough, PhD MSPH

CURRICULUM VITAE

CONTACT INFORMATION	Department of Epidemiology Rollins School of Public Health Emory University 1518 Clifton Rd NE, CNR 3037 Atlanta, GA 30322 USA 404-727-4595 lauren.mccullough@emory.edu	
INTEREST AREAS	Cancer epidemiology, molecular epidemiology, cancer disparities, obesity, physical activity, epigenetics, social determinants of health	
EDUCATION	PhD, Epidemiology University of North Carolina at Chapel Hill	2007-2013
	MSPH, Public Health Meharry Medical College	2005-2007
	Bachelors of Arts, Psychology Vanderbilt University	2001-2005
ACADEMIC POSITIONS	Associate Professor (w/ tenure) Department of Epidemiology, Rollins School of Public Health (RSPH) Emory University	2022-present
	Rollins Assistant Professor (tenure-track) Department of Epidemiology, Rollins School of Public Health (RSPH) Emory University	2016-2022
	Postdoctoral Fellow Cancer Control Education Program UNC Lineberger Comprehensive Cancer Center University of North Carolina at Chapel Hill (UNC-CH)	2013-2015
NON-ACADEMIC POSITIONS	Senior Research Associate Advanced Health Solutions La Jolla, California	2008-2014
	Research Associate GlaxoSmithKine (GSK) Research Triangle Park, North Carolina	2008-2013
	Graduate Research Assistant	2006-2007

Vanderbilt-Ingram Cancer Center
Nashville, Tennessee

DISTINCTIONS AND HONORS	Provost's Distinguished Teaching Award for Excellence in Graduate and Professional Education Emory University	2022
	Hoops for Hope Shero Award Atlanta Hawks	2021
	Department Distinguished Teaching Award Rollins School of Public Health Emory University	2021
	NIH Early Career Reviewer (<i>declined due to COVID-19</i>) National Cancer Institute	2020
	Brian MacMahon Early Career Award Society for Epidemiologic Research Minneapolis, MN	2019
	Mentorship of Graduate Students Award Winship Cancer Institute Emory University	2018
	'Rookie of the Year' Award Glenn Family Breast Center, Winship Cancer Institute Emory University	2018
	TREC Fellow Transdisciplinary Research on Energetics and Cancer Westbrook, Connecticut	2018
	Rollins Endowed Assistant Professorship Emory University	2016
	Best Poster Presentation Award American Society of Preventive Oncology Washington, DC	2014
	NIH Loan Repayment Award National Institutes of Health	2014
	Delta Omega Honor Society, Theta Chapter University of North Carolina at Chapel Hill	2013
	Minority Scholar Award American Association for Cancer Research	2012

Chicago, Illinois

Sidney Kark Award for Distinguished Teaching Assistant 2010
University of North Carolina at Chapel Hill

Graduate School Award for Academic and Scientific 2007
Achievement
Meharry Medical College

Graduate School Award for Service 2007
Meharry Medical College

First Year MSPH Award 2006
Meharry Medical College

The Michael Singletary Memorial Scholarship 2006
Meharry Medical College

National Dean's List 2005, 2006
Meharry Medical College

Vanderbilt Trailblazer Award 2005
Vanderbilt University

National Dean's List 2003, 2004, 2005
Vanderbilt University

Atlanta Constitution-Journal Cup Award 2001
Atlanta, Georgia

Ford Foundation Woodruff Art Academy Graduate 2000
Atlanta, Georgia

RESEARCH
SUPPORT

**Improving our understanding of breast cancer 3/4/2021-2/28/2026
mortality disparities through recurrence: a multi-level
approach among women in Georgia**
NIH/NCI 1R01CA259192
Role: Principal Investigator (PI: McCullough)
Support: \$2,736,557

Emory Prevention Research Center 9/30/2019-9/29/2024
Centers for Disease Control and Prevention
U48DP2018000097
Role: Internal Advisory Board (PI: Kegler)
Support: \$3,740,135

**Targeting patients with breast adipose tissue 7/1/2021 - 6/30/2023
inflammation for statin therapy to prevent breast
cancer recurrence**

Morningside Center, Emory University
Role: Role: Principal Investigator (PI: McCullough)
Support: \$150,000

The legacy of redlining on the burden of air quality and breast cancer outcomes in Georgia 4/1/2022-3/31/2023
HERCULES Program, Emory University
Role: Principal Investigator (PI: McCullough)
Support: \$30,000

Metastatic Breast Cancer Disparities: Identifying Multilevel Determinants in GA 8/16/2019-8/15/2022
Susan G. Komen CCR19608510
Role: Principal Investigator (PI: McCullough)
Support: \$446,402

Drivers of Racial Disparities in Cutaneous T-cell lymphoma in the State of Georgia 10/1/2021-9/30/2022
Woodruff Health Science Center, Emory University
Role: Principal Investigator (MPI: Allen/McCullough)
Support: \$99,647

Pilot Study of the Epigenetic Mechanisms of an Endocrine Disrupting Chemical in the Development of Endocrine-Sensitive Cancers 10/1/2019-5/31/2022
Woodruff Health Science Center, Emory University
Role: Principal Investigator (MPI: McCullough/Smith)
Support: \$99,285

Elucidating Mechanisms of an Endocrine Disrupting Chemical in the Development of Endocrine-Sensitive Cancers 2/1/2020-12/31/2021
Winship Cancer Institute, Emory University 00093001
Role: Principal Investigator (PI: McCullough)
Support: \$45,000

Evaluating Deliberative Democracy Approaches with Citizens of African Ancestry Regarding Population Screening for Hereditary Cancer Syndromes 12/3/2019-1/30/2020
NCI IR21CA238356
Role: Co-Investigator (PI: McBride)
Support: \$185,323

National Cancer Institute Continuing Umbrella of Research Experiences (CURE) Supplement 7/01/2018-5/31/2020
NCI 3U01CA195568
Role: Faculty Candidate (MPI: Cerhan/Flowers)
Support to McCullough: \$122,828

<p>Breast adipose inflammation: epidemiology and outcomes in Black and White women diagnosed with breast cancer V Foundation V2017-005 Role: Principal Investigator (PI: McCullough) Support: \$200,000</p>	<p>11/1/2017-10/31/2019</p>
<p>Obesity and breast tumor methylation: a potential contributor to disparate outcomes Winship Cancer Institute, Emory University 00067187 Role: Principal Investigator (PI: McCullough) Support: \$45,000</p>	<p>4/1/2017-9/30/2018</p>
<p>The effects of a physical activity intervention on inflammation, vascular risk, cognition and mood, on African-American family caregivers at risk for Alzheimer's disease Emory ADRC and Atlanta VA CVNR Pilot Award Role: Co-Investigator (MPI: Hackney/Wharton) Support: \$35,000</p>	<p>5/1/2017-4/30/2018</p>
<p>BMI and its influence on methylation patterns in African American breast cancer patients AVON Foundation 01-2016-087 Role: Sub-PI (PI: Gabram-Mendola) Support to McCullough: \$50,000</p>	<p>1/1/2017-12/31/2017</p>
<p>National Cancer Institute Continuing Umbrella of Research Experiences (CURE) Supplement NCI R25 CA057726 Role: Postdoctoral Candidate (PI: Earp) Support to McCullough: \$207,000</p>	<p>9/1/2013-12/31/2015</p>
<p>Modifying effects of DNA repair variants on physical activity and breast cancer risk DOD W81XWH-10-1-0580 Role: Principal Investigator (PI: McCullough) Support: \$127,157</p>	<p>8/21/2010-9/20/2013</p>

* Denotes mentorship of trainee

† Denotes senior author

Underline denotes training of a person from an under-represented race/ethnic group

PEER-REVIEWED PUBLICATIONS [68] Moubadder L*, Collin LJ*, Nash R*, Switchenko JM, Miller-Kleinhenz JM*, Gogineni K, Ward KC, McCullough LE†. Drivers of racial, regional, and socioeconomic disparities in late-stage breast cancer mortality. *Cancer*. In press.

[67] Devericks EN, Carson MS, **McCullough LE**, Coleman MF, Hursting SD. The obesity-breast cancer link: a multidisciplinary perspective. *Cancer and Metastasis Reviews*. In press.

[66] **McCullough LE**, Maliniak LM*, Amin AB, Baker JM, Baliashvili D, Barberio J, Barrera CM, Brown CA, Collin LJ, Freedman AA, Gibbs DC, Haddad MB, Hall EW, Hamid S, Harrington KRV, Holleman AM, Kaufman JA, Khan MA, Labgold K, Lee VC, Malik AA, Mann LM, Marks KJ, Nelson KN, Quader ZS, Ross-Driscoll K, Sarkar S, Shah MP, Shao IV, Smith JP, Stanhope KK, Valenzuela-Lara M, Van Dyke ME, Vyas KJ, Lash TL. Epidemiology Beyond its Limits. *Science Advances*. Jun 10;8(23):eabn3328.

[65] **McCullough LE**, Byrd DA. Total Energy Intake: Implications for Epidemiologic Analyses. *Am J Epidemiol*. 2022. In press

[64] Collin LJ*, Ross-Driscoll K*, Nash R*, Miller-Kleinhenz JM*, Moubadder I*, Osborn C*, Subhedar PD, Gabram-Mendola SGA, Switchenko JM, Ward KC, **McCullough LE**†. Time to surgical treatment and facility characteristics as potential drivers of racial disparities in breast cancer mortality *Annals of Surgical Oncology*. In press.

[63] **McCullough LE**. The long red line: Breast cancer incidence at the intersection of unjust structural policies and their contemporary manifestations. *JNCI Cancer Spectrum*. 2022. Mar 2;6(2):pkac018.

[62] Garber MD*, Flanders WD, Watkins KE, Lobelo RLF, Kramer MR, **McCullough LE**†. Have paved trails and protected bike lanes caused more bicycling in Atlanta? A synthetic-control analysis with crowdsourced data. *Epidemiology*. 2022 Jul 1;33(4):493-504.

[61] Hackney ME, Wharton W, Jeong L, Ni L, Bay AA, Shin RJ, **McCullough LE**, Silverstein H, Hart AR, Swieboda D, Hu W. A Pilot Randomized Clinical Trial of Adapted Tango to Improve Cognition and Psychosocial Function in African American Women with Family History of Alzheimer's Disease (ACT trial). *Cerebral Circulation - Cognition and Behavior*. In press.

[60] Nash R*, Russell MC, Miller-Kleinhenz JM*, Collin LJ*, Ross-Driscoll K*, Switchenko JM, **McCullough LE**†. Gastrointestinal cancer mortality in Georgia: geographic and racial disparities vary by site and are largely driven by treatment characteristics. *Cancer Epidemiology*. 2022 Apr;77:102110.

[59] Gohar J*, Do WL*, Miller-Kleinhenz J*, Conneely K, Krishnamurti U, D'Angelo O*, Gogineni K, Torres M, Gabram-Mendola S, **McCullough LE**†. Neighborhood characteristics and breast tumor methylation: using social epigenomics to explore cancer outcome disparities. *Breast Cancer Research and Treatment*. 2022 Feb;191(3):653-663.

[58] Do W*, Gohar J*, **McCullough LE**, Travis LD, Galaviz KI, Conneely KN, Narayan KMV. Examining the association between obesity and DNA methylation: a systematic review and meta-analysis. *Obesity Reviews*. 2021 Oct;22(10):e13319

[57] Collin LJ*, Yan M*, Jiang R, Gogineni K, Subhedar P, Ward KC, Switchenko JM, Lipscomb J, Miller-Kleinhenz J*, Torres M, Lin J, **McCullough LE**†. Receipt of guideline-concordant care does not explain breast cancer mortality disparities by race in Metropolitan Atlanta. *Journal of the National Comprehensive Cancer Network. J Natl Compr Canc Netw*. 2021 Aug 16:jnccn20258.

[56] Miller-Kleinhenz JM*, Collin LJ*, Seidel R, Reddy A*, Gogineni K, Nash R*, Switchenko JM, **McCullough LE**†. Racial disparities in diagnostic delay among women with breast cancer. *Journal of the American College of Radiology. J Am Coll Radiol*. 2021 Jul 17:S1546-1440(21)00549-4.

[55] Maliniak ML*, Miller-Kleinhenz J*, Cronin-Fenton D, Lash TL, Gogineni K, Janssen EAM, **McCullough LE**†. The influence of crown-like structures in the breast adipose tissue microenvironment on breast cancer etiology and outcomes. *Cancers (Basel)*. 2021 May 6;13(9):2222.

[54] Collin LJ* and **McCullough LE**†. Redlining, lending bias and breast cancer mortality—Response. *Cancer Epidemiology Biomarkers and Prevention*. Apr;30(4):800.

[53] Maliniak ML*, Gapstur SM, **McCullough LE**, Rees-Punia E, Gaudet MM, Um C, Guinter M, Fallon E, Flanders WD, Patel AV. Joint associations of physical activity and body mass index with the risk of established excess body fatness-related cancers among postmenopausal women. *Cancer Causes and Control*. 2021 Feb;32(2):127-138.

[52] Collin LJ*, Gaglioti AH, Beyer KM, Zhou Y, Moore MA, Nash R*, Switchenko JM, Miller-Kleinhenz J*, Ward KC, **McCullough LE**†. Neighborhood-level redlining and lending bias are associated with breast cancer mortality. *Cancer Epidemiology Biomarkers and Prevention*. 2021 Jan;30(1):53-60.
**2022 Best of AACR Journal Award*

[51] Collin LJ*, Cronin Fenton D, Ahern T, Goodman M, **McCullough LE**, Waller L, Kjærsgaard A, Damkier P, Christiansen P, Ejlersen B, Jensen MB, Sørensen HT, Lash TL. Early discontinuation of endocrine therapy and recurrence of breast cancer among premenopausal women. *Clin Ca Research*. 2020 Dec 17:clincanres.3974.2020.

[50] Maguire RL, House JS, Lloyd DT, Skinner H, Raffi AM, Skaar DA, Park SS, **McCullough LE**, Kollins SH, Bilbo DS, Collier DN, Murphy SK, Fuemmeler BF, Gowdy KM, Hoyo C. Associations Between Maternal Obesity, Gestational Cytokine Levels, and Child Obesity in the NEST Cohort. *Pediatric Obesity*. 2020 Dec 30:e12763.

[49] Garber MD*, **McCullough LE**, Mooney SJ, Kramer MR, Watkins KE, Lobelo RLF, Flanders WD. Measure-at-risk sampling in case-control studies. *Epidemiology*. 2020 Oct 19. 2021 Jan;32(1):101-110.

**2022 Rothman Epidemiology Prize Winner*

[48] Moubadder L*, **McCullough LE**, Flowers CR, Koff J. Linking Environmental Exposures to Molecular Pathogenesis in Non-Hodgkin's Lymphoma Subtypes. *Cancer Epidemiology Biomarkers and Prevention*. 2020 Oct;29(10):1844-1855.

[47] Maliniak ML*, Cheriyan AM*, Sherman ME, Liu Y, Gogineni K, Liu J, He J, Krishnamurti U, Miller-Kleinhenz J, Ashiqueali R, He J, Yacoub R, **McCullough LE**†. Detection of crown-like structures in breast adipose tissue: a potential driver of poor prognosis and breast cancer disparities? *Breast Cancer Res*. 2020 Jun 17;22(1):65.

[46] Lee KN*, Torres MA, Troeschel AN*, He J, Gogineni K, **McCullough LE**†. Type 2 diabetes, breast cancer specific and overall mortality: associations by metformin use and modification by race, body mass, and estrogen receptor status. *PLOS One*. PLoS One. 2020 May 5;15(5):e0232581.

[45] Do WL*, Conneely K, Gabram-Mendola S, Krishnamurti U, D'Angelo O*, Miller-Kleinhenz J*, Gogineni K, Torres M, **McCullough LE**†. Obesity-associated methylation in breast tumors: a possible link to disparate outcomes? *Breast Cancer Research and Treatment*. 2020 May;181(1):135-144.

[44] Troeschel AN*, Hartman TJ, Flanders WD, Wang Y, Hodge RA, **McCullough LE**, Mitchell DC, Sampson L, Patel AV, McCullough ML. The American Cancer Society Cancer Prevention Study-3 food frequency questionnaire has reasonable validity and reproducibility for food groups and a diet quality score. *J. Nutrition*. 2020 Jun 1;150(6):1566-1578.

[43] Troeschel AN*, Hartman TJ, Jacobs EJ, Stevens VL, Gansler T, Flanders WD, **McCullough LE**, Wang Y. Post-diagnosis body mass index, weight change and mortality from prostate cancer, cardiovascular disease and all causes in a cohort of non-metastatic prostate cancer survivors. *J Clinical Oncology*. 2020 Apr 6;JCO1902185.

[42] Collin LJ*, Troeschel AN*, Liu Y, Gogineni K, Borger K*, Ward KC, **McCullough LE**†. A balancing act: racial disparities in cardiovascular disease mortality among women diagnosed with breast cancer. *Annals of Cancer Epidemiology*. 2020 Mar;4:4.

[41] Collin LJ*, Ulrichsen SP, Ahern TP, Goodman M, **McCullough LE**, Waller LA, Christensen CB, Damkier P, Hamilton-Dutoit S, Lauridsen KL, Yacoub R, Christiansen PM, Ejlersen B, Sørensen HT, Cronin-Fenton DP, Lash TL. b17β-hydroxysteroid dehydrogenase 1:2 and breast cancer recurrence: a Danish population-based study. *Acta Oncologica*. 2020 Mar;59(3):329-333.

- [40] Collin LJ*, Yan M*, Jiang R, Ward KC, Crawford B*, Torres MA, Gogineni K, Subhedar PD, Gaudet MM, Puvanesarajah S, **McCullough LE**†. Oncotype DX recurrence score: implications for disparities in receipt of chemotherapy and breast cancer-specific mortality in Georgia. *NPJ Breast Cancer*. 2019 Sep 26;5:32.
- [39] **McCullough LE**, Collin LJ*, Conway K, White AJ, Cho YH, Shantakumar S, Terry MB, Teitelbaum SL, Neugut AI, Santella RM, Chen J, Gammon MD. Reproductive characteristics are associated with gene-specific promoter methylation status in breast cancer. *BMC Cancer*. 2019 Sep 18;19(1):926.
- [38] Josey M, **McCullough LE**, Hoyo C, Williams-DeVane C. Gestational Weight Gain Mediates the Relationship Between Maternal and Child Obesity. *BMC Public Health*. 2019 Aug 7;19(1):1062.
- [37] Collin LJ*, Jiang R, Ward KC, Gogineni K, Subhedar PD, Sherman ME, Gaudet MM, Breitkopf CR, D'Angelo O*, Garbram-Mendola S, Aneja R, Gaglioti AH, **McCullough LE**†. Racial disparities in breast cancer outcomes in the metropolitan Atlanta area: new insights and approaches for health equity. *JNCI Ca Spectrum*. 2019 Aug 7;3(3).
- [36] Ayers AA, Lyua L, Dance K, Ward KC, Flowers CR, Koff JL, **McCullough LE**. Characterizing Lymphoma Incidence and Disparities for a Cancer Center Catchment Region. *Clinical Lymphoma, Myeloma and Leukemia*. 2019 Nov 1;125(21):3836-3844.
- [35] Wang T, **McCullough LE**, White AJ, Bradshaw PT, Xu X, Cho YH, Terry MB, Teitelbaum SL, Neugut AI, Santella RM, Chen J, Gammon MD. Pre-diagnosis aspirin use, DNA methylation, and mortality after breast cancer: a population-based study. *Cancer*. 2019 Nov 1;125(21):3836-3844.
- [34] Troeschel AN*, Liu Y, Collin LJ*, Bradshaw PT, Ward KC, Gogineni K, **McCullough LE**†. Race differences in cardiovascular disease and breast cancer mortality among U.S. women diagnosed with invasive breast cancer. *International Journal of Epidemiology*. 2019 Dec 1;48(6):1897-1905.
- [33] Saini G, Ogden A, **McCullough LE**, Torres T, Rida P, Aneja R. Disadvantaged neighborhoods and racial disparity in breast cancer outcomes: the biological link. *Cancer Causes and Control*. 2019 Jul;30(7):677-686.
- [32] Quader ZS*, Gazmararian JA, **McCullough LE**†. Obesity and understudied minority children: existing challenges and opportunities in epidemiology. *BMC Pediatrics*. *BMC Pediatr*. 2019 Apr 10;19(1):103.
- [31] Hackney M, **McCullough LE**, Bay A, Silverstein H, Hart A, Shin R, Wharton W. Rationale and Design of a Clinical Trial of Adapted Tango to Improve Negative Health Impacts in Middle Aged African-American Female Caregivers of

Persons with Alzheimer's Disease (ACT trial). *J Alzheimers Dis.* 2019;68(2):767-775.

[30] Martin CL, Jimal D, Sharp G, **McCullough LE**, Park S, Gowdy K, Skaarl D, Cowley M, Maguire R, Fuemmeler B, Collier D, Relton C, Jirtlel RL, Murphy SK, Hoyo CH. Maternal pre-pregnancy obesity, cord blood DNA methylation of TAPBP, and offspring cardiometabolic health outcomes in early childhood: an epigenome-wide association study. *Epigenetics.* 2019 Apr;14(4):325-340.

[29] Collin LJ*, **McCullough LE**, Conway K, White AJ, Xu X, Cho YH, Shantakumar S, Teitelbaum SL, Neugut AI, Santella RM, Chen J, Gammon MD. Reproductive characteristics modify the association between global DNA methylation and breast cancer risk in a population-based sample of women. *Plos One.* 2019 Feb 14;14(2):e0210884. doi: 10.1371.

[28] Adler C*, Friesen MC, Yeboah ED, Tettey Y, Biritwum RB, Adjei AA, Tay E, Okyne V, Mensah JE, Truelove A, Yang B, Kelly SP, Zhou CK, **McCullough LE**, Pardo L, Hoover RN, Hsing AW, Cook MB, Koutros S. Usual adult occupation and risk of prostate cancer in West African men: The Ghana Prostate Study. *Occup Environ Med.* 2019 Feb;76(2):71-77.

[27] Ross K*, Gogineni K, Subhedar PD, Lin JY, **McCullough LE**†. Obesity and cancer treatment efficacy: existing challenges and opportunities. *Cancer.* 2019 Jan 11. DOI: 10.1002/cncr.31976.

[26] **McCullough LE** and Flowers CR. Identifying and Addressing Disparities in Survival Outcomes for Rural Cancer Patients. *JAMA Network Open.* 2018 Aug 3;1(4):e181243.

[25] **McCullough LE**, Miller EE*, Calderwood LE*, Shivappa N, Steck SE, Forman MR, Mendez M, Maguire R, Fuemmeler BF, Kollins SH, Bilbo S, Huang Z, Murtha AP, Murphy SK, Hébert JR, Hoyo C. Maternal inflammatory diet and adverse pregnancy outcomes: circulating cytokines and genomic imprinting as potential regulators? *Epigenetics.* 2017 Aug;12(8):688-697.

[24] Conway K, Edmiston SN, Parrish E, Bryant C, Tse CK, Swift-Scanlan T, **McCullough LE**, Kuan PF. Breast tumor DNA methylation patterns associated with smoking in the Carolina Breast Cancer Study. *Breast Cancer Res Treat.* 2017 Jun;163(2):349-361

[23] Luo Y‡, **McCullough LE**‡, Tzeng JY, Darrah T, Vengosh A, Maguire RL, Maity A, Hodge CS, Murphy SK, Mendez MA, Hoyo C. Maternal blood cadmium, lead and arsenic levels, nutrient combinations, and offspring birth weight. *BMC Public Health.* 2017 Apr 24;17(1):354
‡ equal contributors

[22] McClain KM, **McCullough LE**, Bradshaw PT, Shantakumar S, Terry MB, Neugut AI, Gammon MD. Age-specific indicators of a healthy lifestyle and risk for postmenopausal breast cancer. *J Womens Health (Larchmt).* 2017 Apr 6

[21] Zhao Y, Li H, **McCullough LE**, Miller EE*, Zhao M, Wang MJ, Kang M, Huang Y, Wang Q, Li J. Comparison of Breast Cancer Risk Predictive Models and Screening Strategies for Chinese Women. *J Womens Health (Larchmt)*. 2017 Mar;26(3):294-302.

[20] **McCullough LE**, Chen J, Cho YH, Khankari NK, Bradshaw PT, White AJ, Teitelbaum SL, Terry MB, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. Modification of the association between recreational physical activity and survival after breast cancer by promoter methylation in breast cancer-related genes. *Breast Cancer Res*. 2017 Feb 21;19(1):19. PMID: PMC5319077

[19] Niehoff N, White AJ, **McCullough LE**, Steck SE, Beyea J, Mordukhovich I, Shen J, Neugut AI, Conway K, Santella RM, Gammon MD. Polycyclic aromatic hydrocarbons and postmenopausal breast cancer: an evaluation of effect measure modification by body mass index and weight change. *Environ Res*. 2017. Jan;152:17-25

[18] **McCullough LE**, McClain KM, Gammon MD. The promise of leisure-time physical activity to reduce the risk of cancer development. *JAMA Internal Medicine*. 2016 Jun 1;176(6):826-7.

[17] Kim J, Mersereau JE, Khankari N, Bradshaw PT, **McCullough LE**, Cleveland R, Shantakumar S, Teitelbaum SL, Neugut AI, Senie RT, Gammon MD. Polycystic ovarian syndrome (PCOS), related symptoms/sequelae, and breast cancer risk in a population-based case-control study. *Cancer Causes Control*. 2016 Mar; 27(3):403-14. PMID: PMC4981498.

[16] **McCullough LE**, Chen J, Cho YH, Khankari NK, Bradshaw PT, White AJ, Garbowski G, Teitelbaum SL, Terry MB, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. DNA methylation modifies the association between obesity and survival after breast cancer diagnosis. *Breast Cancer Research and Treatment*. 2016 Feb;156(1):183-94. NIHMSID: 780122. PMID: PMC4890602

[15] White AJ, Chen J, Teitelbaum SL, **McCullough LE**, Xu X, Cho YH, Conway K, Beyea J, Stellman SD, Steck SE, Mordukhovich I, Eng SM, Terry MB, Engel LS, Hatch M, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. Sources of polycyclic aromatic hydrocarbons are associated with gene-specific promoter methylation in women with breast cancer. *Environ Res*. 2016 Feb;145:93-100. PMID: PMC4706465.

[14] **McCullough LE**, Miller EE*, Mendez MA, Murtha AP, Murphy SK, Hoyo C. Maternal one-carbon metabolism: effects on offspring birthweight, early life weight gain and DNA methylation at genomically imprinted domains. *Clinical Epigenetics*. 2016 Jan 22;8:8. PMID: PMC4722751

[13] White AJ, Chen J, **McCullough LE**, Xu X, Cho YH, Teitelbaum SL, Neugut AI, Terry MB, Hibshoosh H, Santella RM, Gammon MD. Polycyclic Aromatic

Hydrocarbon (PAH)-DNA adducts and Breast Cancer: Modification by Gene Promoter Methylation in a Population-Based Study. *Cancer Causes Control*. 2015 Dec;26(12):1791-802. PMID: PMC4763714.

[12] **McCullough LE**, Miller E*, Wang Q, Liu Li, Li H, Qi Y, Li J, Zhang J, Yang C, Smith JS. Anthropometric measures, sex-hormones and insulin-like growth factors in Chinese women. *PLoS One*. 2015 Sep 9;10(9):e0137686. PMID: PMC4564271

[11] Cho YH, **McCullough LE**, Gammon MD, Wu HC, Zhang YJ, Gonzalez K, Wang Q, Xu X, Teitelbaum SL, Neugut AI, Chen J, Santella RM. Promoter hypermethylation in white blood cell DNA and breast cancer risk. *J Cancer*. 2015 Jul 15;6(9):819-24. PMID: PMC4532978.

[10] **McCullough LE**, Mendez MA, Miller EE*, Murtha AP, Murphy SK, Hoyo C. Associations between prenatal physical activity, birth weight and DNA methylation at genomically imprinted domains in a multiethnic newborn cohort. *Epigenetics* 2015 Jul 3;10(7):597-606. PMID: PMC4622928

[9] **McCullough LE**, Chen J, White AJ, Xu X, Cho YH, Bradshaw PT, Eng SM, Teitelbaum SL, Terry MB, Garbowski G, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. Global DNA Methylation, Measured by the Luminometric Methylation Assay (LUMA), Associates with Postmenopausal Breast Cancer in Non-Obese and Physically Active Women. *J Cancer* 2015 May 1;6(6):548-54. PMID: PMC4439941

[8] **McCullough LE**, Chen J, White AJ, Xu X, Cho YH, Bradshaw PT, Eng SM, Teitelbaum SL, Terry MB, Garbowski G, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. Gene-specific promoter methylation status in hormone-receptor-positive breast cancer associates with postmenopausal body size and recreational physical activity. *Intl J Cancer and Clin Res* 2015; 2(1):013. PMID: PMC4440485

[7] **McCullough LE**, Eng SM, Bradshaw PT, Cleveland RJ, Steck SE, Terry MB, Shen J, Crew KD, Rossner P, Ahn J, Ambrosone CB, Teitelbaum SL, Neugut AI, Santella RM, Gammon MD. Genetic polymorphisms in DNA repair and oxidative stress pathways may modify the association between body size and postmenopausal breast cancer. *Ann Epidemiol*. 2015 Apr;25(4):263-9. PMID: PMC4369423

[6] Wang Q, Liu L, Li H, **McCullough LE**, Qi YN, Li JY, Zhang J, Miller E, Yang CX, Smith JS. Genetic and dietary determinants of insulin-like growth factor (IGF)-1 and IGF binding protein (BP)-3 levels among Chinese women. *PLoS One*. 2014 Oct 6;9(10). PMID: PMC4186782

[5] Khankari NK, Bradshaw PT, **McCullough LE**, Teitelbaum SL, Steck SE, Fink BN, Xu X, Ahn J, Ambrosone CB, Crew KD, Terry MB, Neugut AI, Chen J, Santella RM, Gammon MD. Flavonoid-gene interactions and breast cancer. *Cancer Causes Control*. 2014 Feb;25(2):215-26. PMID: PMC3932534

[4] McCullough LE, Santella RM, Cleveland RJ, Millikan RC, Olshan AF, North KE, Bradshaw PT, Eng SM, Terry MB, Shen J, Crew KD, Rossner P, Teitelbaum SL, Neugut AI, Gammon MD. Polymorphisms in DNA repair genes, physical activity and breast cancer risk. *Int J Cancer*. 2014 Feb 1;134(3):654-63. PMID: PMC3830595

[3] McCullough LE, Santella RM, Cleveland RJ, Bradshaw PT, Millikan RC, North KE, Olshan AF, Eng SM, Ambrosone CB, Ahn J, Steck SE, Teitelbaum SL, Neugut AI, Gammon MD. Polymorphisms in oxidative stress genes, physical activity, and breast cancer risk. *Cancer Causes Control*. 2012 Dec;23(12):1949-58. PMID: PMC3796339

[2] McCullough LE, Eng SM, Bradshaw PT, Cleveland RJ, Teitelbaum SL, Neugut AI, and Gammon MD. Fat or Fit: The Joint Effects of Physical Activity, Weight Gain, and Body Size on Breast Cancer Risk. *Cancer*. 2012 Oct 1;118(19):4860-8. PMID: PMC3448867

[1] Mordukhovich I, Reiter PL, Backes DM, Family L, McCullough LE, Razzaghi H, O'Brien KM, Olshan AF. A Review of African American-White Differences in Risk Factors for Cancer: Prostate Cancer. *Cancer Causes Control*. 2011 Mar;22(3):341-57. PMID: PMC3443558

INVITED
ACADEMIC
TALKS

[29] *Unpacking the root causes of breast cancer mortality disparities in Georgia*. Cancer Prevention and Control Meeting. University of Vermont Cancer Center. Virtual presentation. May 2022.

[28] *Cancer disparities research at the intersection of social and molecular epidemiology*. Cancer Retreat Keynote. Sidney Kimmel Cancer Center. Virtual presentation. Dec 2021.

[27] *Racism and recurrence: Unpacking the root causes of breast cancer mortality disparities in Georgia*. Public Health Sciences Scientific Seminar. Fred Hutchinson Cancer Research Center. Virtual presentation. Nov 2021.

[26] *Racism and risk: Unpacking the root causes of breast cancer mortality disparities in Georgia*. KPWHRI Scientific Seminar. Kaiser Permanente Washington Health Research Institute. Virtual presentation. Oct 2021.

[25] *Racism and risk: Unpacking the root causes of breast cancer mortality disparities in Georgia*. Cancer Epidemiology Seminar Series. University of North Carolina at Chapel Hill. Virtual presentation. April 2021.

[24] *Racism and risk: Unpacking the root causes of breast cancer mortality disparities in Georgia*. University of Utah Population Health Sciences Seminar Series. Huntsman Cancer Center, University of Utah. Virtual presentation. April 2021.

- [23] *Out with the old, in with the new: strategies for addressing breast cancer mortality disparities in Georgia*. Division of Cancer Epidemiology and Genetics Seminar. National Cancer Institute. Virtual presentation. March 2021.
- [22] *Out with the old, in with the new: strategies for addressing breast cancer mortality disparities in Georgia*. Branch Speaker. National Institute of Environmental Health Sciences. Virtual presentation. March 2021.
- [21] *Understanding breast cancer disparities in Georgia: cells to society*. Rollins School of Public Health, Emory University. Virtual presentation. February 2021.
- [20] *Understanding breast cancer disparities in Georgia: cells to society*. NCI's Cancer Prevention and Control Colloquia Series. National Cancer Institute. Virtual presentation. January 2021.
- [19] *Promoting breast health equity in metro-Atlanta*. Winship Symposium. Winship Cancer Institute, Emory University. Virtual presentation. November 2020.
- [18] *Race, Racism, and Health*. Panel Discussion, Rollins School of Public Health, Emory University. Virtual presentation. September 2020.
- [17] *Understanding breast cancer outcome disparities: exploring drivers below and above the skin*. Department of Sociology Seminar. University of California, San Diego. Virtual presentation. May 2019
- [16] *Building a Research Partnership to Work Across the Translational Spectrum: Financial Stress, Breast Cancer Disparities, and the Breast Tumor Epigenome*. McNairy Science of Disease Seminar Series. Morehouse School of Medicine. Atlanta, GA. March 2019.
- [15] *Obesity and breast tumor methylation in African-American (and Caucasian) women*. Glenn Family Breast Center 3rd Annual retreat. Winship Cancer Institute, Emory University. Atlanta, GA. May 2018.
- [14] *Obesity and Breast Cancer: Opportunities and Challenges in Molecular Epidemiology*. Nutrition Seminar Series, Emory Center for Clinical and Molecular Nutrition, HERCULES. Emory University. Atlanta, GA. April 2018.
- [13] *In our backyard: Black-White disparities in breast cancer mortality*. Winship Symposium. Winship Cancer Institute, Emory University. Atlanta, GA. February 2018.
- [12] *Two sides of the same coin: integrating risk factor and molecular epidemiology in cancer research*. Gillings School of Global Public Health Guest Lecture, Cancer Prevention and Control. University of North Carolina at Chapel Hill. Chapel Hill, NC. October 2017.

[11] *Obesity and breast cancer: opportunities and challenges in epigenetic epidemiology*. Cancer Genetics and Epigenetics Research Group. Winship Cancer Institute, Emory University. Atlanta, GA. September 2017.

[10] *Obesity and breast cancer: the life-course perspective through an epigenetic lens*. Oncology Grand Rounds. Winship Cancer Institute, Emory University. Atlanta, GA. October 2016.

[9] *Obesity and breast cancer: the life-course perspective through an epigenetic lens*. Breast Research Group Seminar Series. Winship Cancer Institute, Emory University. Atlanta, GA. July 2016.

[8] *Physical activity, obesity and cancer: opening the black box*. Department of Epidemiology. Emory University. Atlanta, GA. July 2015.

[7] *Physical activity, obesity and cancer: opening the black box*. Division of Epidemiology, Vanderbilt University. Nashville, TN. June 2015.

[6] *Physical activity and cancer: opening the black box*. Department of Epidemiology and Biostatistics. University of South Carolina. Columbia, SC. May 2015.

[5] *Energy balance and cancer risk: opening the black box*. Cancer Control Education Program Seminar Series. Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill. Chapel Hill, NC. February 2014.

[4] *Modifying Effects of Oxidative Stress and DNA Repair Variants on Recreational Physical Activity and Breast Cancer Risk*. National Institute for Environmental Health Sciences. Research Triangle Park, NC. November 2012.

[3] *A review of African American-White differences in risk factors for breast cancer*. Cancer Epidemiology Seminar Series, Department of Epidemiology, University of North Carolina at Chapel Hill. Chapel Hill, NC. October 2009.

[2] *Modification of the physical activity breast cancer association by Catalase*. Cancer Epidemiology Seminar Series, Department of Epidemiology, University of North Carolina at Chapel Hill. Chapel Hill, NC. October 2008.

[1] *The 'risk' of breast cancer assessment models*. Cancer Epidemiology Seminar Series, Department of Epidemiology, University of North Carolina at Chapel Hill. Chapel Hill, NC. February 2008

INVITED
NON-ACADEMIC
TALKS

[15] *Unpacking the Root Causes of Breast Cancer Mortality Disparities in Georgia*. GA Cancer Summit. Virtual presentation. January 2022.

[14] *Breast Cancer mortality disparities across Georgia*. Paideia and Westminster schools Black Parent Alliance. Virtual presentation. October 2021.

[13] *Building your small business: IDPs, mentors, and your research agenda*. NCI F99/K00 Awardee Meeting. NIH/NCI. Virtual presentation. August 2021.

[12] *Understanding and addressing disparities in breast cancer*. METAvivor Health Disparities Conference. METAvivor. Virtual presentation. September 2021.

[11] *Let's talk about the COVID vaccine: friends and family edition*. Rollins School of Public Health. Emory University. Virtual presentation. February 2021.

[10] *Understanding and addressing disparities in breast cancer*. CME series on Cancer Disparities. Cancer Treatment Centers of America. Virtual presentation. February 2021.

[9] *COVID vaccine education*. Oaks Senior Living. Virtual presentation. February 2021.

[8] *Disparities in breast cancer outcomes: an epidemiologic perspective*. Komen In My Own Voice Program. Susan G. Komen, Headquarters. Virtual presentation. August 2020.

[7] *In our backyard: Addressing breast cancer mortality disparities in Atlanta*. GASCO San Antonio Breast Cancer Symposium. Georgia Society of Clinical Oncology. Hotel Avalon. Alpharetta, GA. January 2020.

[6] *In our backyard: Addressing breast cancer mortality disparities in Atlanta*. Georgia Department of Public Health and the GA Cancer Coalition. Virtual presentation. November 2019.

[5] *In our backyard: Addressing breast cancer mortality disparities in Atlanta*. Komen Atlanta. Atlanta, GA. November 2019.

[4] *Disparities in breast cancer outcomes*. Sisters by Choice, Awareness and Educational Seminar. Georgia Pacific. Atlanta, GA. October 2019.

[3] *Epidemiology of breast cancer and mortality disparities in Atlanta*. Sisters by Choice, Awareness and Educational Seminar. Georgia Pacific. Atlanta, GA. October 2017.

[2] *Lessons learned: trainee to faculty*. Cancer Control Education Program. Lineberger Comprehensive Cancer Center. University of North Carolina at Chapel Hill. Chapel Hill, NC. October 2017.

[1] *Lessons learned: postdoc to faculty*. Cancer Control Education Program. Lineberger Comprehensive Cancer Center. University of North Carolina at Chapel Hill. Chapel Hill, NC. October 2016.

SELECTED
CONFERENCE
PRESENTATIONS

[32] **McCullough LE**. Digging deeper: the biologic manifestation of area-level neighborhood deprivation in breast cancer outcomes. (April 2022) Invited

symposia oral presentation at the annual American Association for Cancer Research Conference. New Orleans, Louisiana.

Highlighted at AACR Closing Plenary.

[31] Moubadder L*, Collin LJ*, Nash R*, Switchenko JM, Miller-Kleinhenz JM*, Gogineni K, Ward KC, **McCullough LE†**. Drivers of Racial, Regional, and Socioeconomic Disparities in Late-Stage Breast Cancer Mortality. (April 2022) Poster presentation at the annual American Association for Cancer Research Conference. New Orleans, Louisiana.

[30] Nash, R*, Collin LJ*, Switchenko JM, **McCullough LE†**. Area-level Drivers of the Breast Cancer Mortality Race Disparity in Georgia. (April 2022) Poster presentation at the annual American Association for Cancer Research Conference. New Orleans, Louisiana.

Nash selected for the AACR Scholar-in-Training Award.

[29] **McCullough LE**. Obesity and neighborhood redlining: Potential synergism in understanding breast cancer mortality disparities. (Oct 2021) Invited symposia oral presentation at the annual AACR Science of Cancer Health Disparities. Virtual Conference.

[28] Miller-Kleinhenz J*, Beyer K, Moubadder L, Gaglioti A, Gohar J, Henry K, Conneely K, Krishnamurti U, D'Angelo O, Gogineni K, Torres M, Gabram-Mendola S, **McCullough LE†**. Neighborhood-level Redlining-associated methylation in breast tumors: the impact of structural racism on the tumor epigenome. (Oct 2021) Oral presentation at the annual AACR Science of Cancer Health Disparities. Virtual Conference.

[27] Nash R*, **McCullough LE**, Pierce TJ, Collin LJ, Gaglioti AH, Ward KC, Kramer M, Switchenko JM. Spatial heterogeneity and rural-urban differences in the Black-White breast cancer mortality disparity in Georgia. (Oct 2021) Poster presentation at the annual AACR Science of Cancer Health Disparities. Virtual Conference.

Nash selected for the AACR Scholar-in-Training Award.

[26] **McCullough LE**. Back to the future “Total energy intake: implications for epidemiologic analyses”. (June 2021) Invited symposia oral presentation at the annual Society for Epidemiologic Research Conference. Virtual Conference.

[25] Collin LJ*, Gaglioti AH, Beyer KM, Zhou Y, Moore MA, Nash R*, Switchenko JM, Miller-Kleinhenz JM*, Ward KC, **McCullough LE†**. Financial toxicity is associated with increased breast cancer mortality: the role of structural racism on disparities in outcomes. (December 2020) Oral presentation at the annual Society for Epidemiologic Research Conference. Virtual Conference.

[24] Nash R*, Miller-Kleinhenz JM*, Russell MC, Collin LJ*, Ross-Driscoll K*, Switchenko JM, **McCullough LE†**. Association between geography and cause-specific mortality in gastrointestinal cancers in Georgia. (October 2020) Poster

presentation at the annual American Association for Cancer Research Cancer Health Disparities Conference. Virtual Conference.

[23] Collin LJ*, Ross K*, Osborn C*, Yan M*, Jiang R, Switchenko JM, Miller-Kleinhenz J*, Gogineni K, Ward KC, **McCullough LE**†. New perspectives of racial disparities in breast cancer mortality through the care continuum. (September 2019) Poster presentation at the annual American Association for Cancer Research Cancer Health Disparities Conference. New Orleans, Louisiana. **Collin selected for the AACR Scholar-in-Training Award (*declined*).**

[22] Maliniak ML*, Cheriyan AM*, Sherman ME, Liu Y, Gogineni K, Liu J, He J, Krishnamurti U, Ashiqueali R*, He J, Yacoub R, Miller-Kleinhenz J*, **McCullough LE**†. Presence of crown-like structures in breast adipose tissue and clinical outcomes among African-American and White breast cancer patients. (September 2019) Poster presentation at the annual American Association for Cancer Research Cancer Health Disparities Conference. New Orleans, Louisiana. **Maliniak selected for the AACR Scholar-in-Training Award.**

[21] **McCullough LE**. In our Backyard: Building a career examining breast cancer disparities. (June 2019) Invited plenary oral presentation at the annual Society for Epidemiologic Research Conference. Minneapolis, Minnesota.

[20] Collin LJ*, Yan M, Jiang R, Gogineni K, **McCullough LE**†. New insights into racial disparities in breast cancer outcomes: assessing receipt of guideline concordant care. (June 2019) Poster presentation at the annual Society for Epidemiologic Research Conference. Minneapolis, Minnesota.

[19] **McCullough LE**, Cheriyan AM, Sherman ME, Liu Y, Gogineni K, Krishnamurti U, He J, Liu J, Yacoub R, Ashiqueali R. Breast adipose inflammation: epidemiology and outcomes in Black and White women diagnosed with breast cancer. (April 2019) Poster presentation at the V-Scholar Summit. Rochester, Minnesota.

[18] Collin LJ*, Crawford B, Yan M, Jiang R, Ward KC, Torres MA, Gogineni K, Subhedar PD, **McCullough LE**†. Oncotype DX recurrence score: implications for disparities in receipt of chemotherapy and breast cancer-specific mortality in Georgia (April 2019) Poster presentation at the annual American Association for Cancer Research Conference. Atlanta, Georgia.

[17] Maliniak ML*, Gapstur SM, **McCullough LE**, Rees-Punia E, Gaudet MM, Um CY, Guinter MA, Fallon EZ, Patel AV. Joint associations of physical activity and body mass index and the risk of excess body fatness-related cancer (April 2019) Oral presentation at the annual American Association for Cancer Research Conference. Atlanta, Georgia.
Highlighted at AACR Closing Plenary.

[16] Troeschel AN*, Jacobs EJ, Flanders WD, Stevens VL, Hartman TJ, **McCullough LE**, Gansler T, Wang Y. Pre- and Post-Diagnosis Body Mass Index, Weight Change, and Prostate Cancer-Specific Mortality among Prostate Cancer

Survivors in the US. (April 2019) Poster presentation at the annual American Association for Cancer Research Conference. Atlanta, Georgia.

[15] Collin LJ*, Jiang R, Ward KC, Gogineni K, Subhedar PD, Sherman M, Gaudet MM, Radecki Breitkopf C, D'Angelo O, Garbram-Mendola SGA., Siegel J, Aneja R, Gaglioti A, and McCullough LE†. Identification of factors contributing to breast cancer mortality disparities in metropolitan Atlanta area. (November 2018) Poster presentation at the annual American Association for Cancer Research Cancer Health Disparities Conference. New Orleans, Louisiana. **Collin selected for the AACR Scholar-in-Training Award.**

[14] Troeschel AN*, Liu Y, Collin LJ, Ward KC, Gogineni K, McCullough LE†. Racial differences in cause-specific mortality patterns among a cohort of invasive US breast cancer patients. (April 2018) Poster presentation at the annual American Association for Cancer Research Conference. Chicago, Illinois.

[13] D'Angelo O*, Gabram-Mendola S, Collin LJ, Troeschel AN, Ward KC, McCullough LE†. Black-White breast cancer mortality disparities in Atlanta: An Update (2004-2014). (March 2018) Oral presentation at Society of Surgical Oncology Annual Cancer Symposium. Chicago, Illinois.

[11] Collin LJ*, McCullough LE, Conway K, White AJ, Xu X, Cho YH, Shantakumar S, Garbowski G, Terry MB, Teitelbaum SL, Neugut AI, Santella RM, Chen J, Gammon MD. Gene-specific promoter methylation status in breast tumor tissue associates with reproductive characteristics. (June 2017) Poster presentation at the annual Society for Epidemiologic Research Conference. Seattle, Washington.

[10] McCullough LE, Chen J, Cho YH, Khankari NK, Bradshaw PT, White AJ, Garbowski G, Teitelbaum SL, Terry MB, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. DNA methylation modifies the association between obesity and survival after breast cancer diagnosis. (February 2016). Poster presentation at the Tenth AACR-Japanese Cancer Association Joint Conference: 'Breakthroughs in Cancer Research from Biology to Therapeutics'. Maui, Hawaii.

[9] McCullough LE, Mendez MA, Miller EE, Murtha AP, Murphy SK, Hoyo C. Associations between prenatal physical activity, birth weight and DNA methylation at genomically imprinted domains in a multiethnic newborn cohort. (June 2015). Poster presentation at the annual Society for Epidemiologic Research Conference. Denver, Colorado.

[8] McCullough LE, Chen J, White AJ, Xu X, Cho YH, Bradshaw PT, Eng SM, Teitelbaum SL, Terry MB, Garbowski G, Neugut AI, Hibshoosh H, Santella RM, Gammon MD. The influence of body size and physical activity on global and gene-specific methylation in a population-based breast cancer study. (April 2014). Poster presentation at the annual American Association of Cancer Research Conference. San Diego, California.

[7] **McCullough LE**, Eng SM, Bradshaw PT, Cleveland RJ, Steck SE, Terry MB, Shen J, Crew KD, Rossner P, Ahn A, Ambrosone CB, Teitelbaum SL, Neugut AI, Santella RM, Gammon MD. Genetic polymorphisms in DNA repair and oxidative stress pathways may modify the association between body size and postmenopausal breast cancer. (March 2014). Poster presentation at the 38th American Society of Preventative Oncology Conference. Arlington, Virginia. **Best poster presentation award.**

[6] **McCullough LE**, Santella RM, Cleveland RJ, Millikan RC, Olshan AF, North KE, Bradshaw PT, Eng SM, Terry MB, Shen J, Crew KD, Rossner P, Teitelbaum SL, Neugut AI, Gammon MD. Polymorphisms in DNA Repair Genes, Physical Activity and Breast Cancer Risk. (February 2013). Poster presentation at the Ninth AACR-Japanese Cancer Association Joint Conference: 'Breakthroughs in Basic and Translational Cancer Research'. Maui, Hawaii.

[5] **McCullough LE**, Family L, O'Brien KM, Razzaghi H, Backus DM, Mordukhovich I, Reiter PL, Olshan AF. The epidemiology of triple-negative breast cancer: A review. (November 2012). Poster presentation at the 2012 AACR Molecular Epidemiology Conference: 'Post-GWAS Horizons in Molecular Epidemiology: Digging Deeper into the Environment'. Hollywood, Florida.

[4] **McCullough LE**, Eng SM, Bradshaw PT, Cleveland RJ, Teitelbaum SL, Neugut AI, and Gammon MD. Polymorphisms in Oxidative Stress Genes, Physical Activity and Breast Cancer Risk. (April 2012), Poster presentation at the Annual American Association of Cancer Research Conference. Chicago, Illinois. **AACR minority scholar award.**

[3] **McCullough LE**, Santella RM, Millikan RC, North KE, Olshan AF, Eng SM, Cleveland RJ, Bradshaw PT, Teitelbaum SL, Neugut AI, Gammon MD. Modifying Effects of DNA Repair Variants on Physical Activity and Breast Cancer Risk. (August 2011). Poster presentation at the Department of Defense Sponsored 'Era of Hope' Conference. Orlando, Florida.

[2] **McCullough LE**. Factors that facilitate adherence to a 12-week walking intervention among breast cancer survivors. (May 2007). Poster presentation at the Vanderbilt-Ingram Cancer Center Retreat, Vanderbilt University, Nashville, Tennessee.

[1] **McCullough LE**. Factors that facilitate adherence to a 12-week walking intervention among breast cancer survivors. (March 2007). Poster presentation at the 51st annual Student Research Day, Meharry Medical College, Nashville, Tennessee.

TEACHING	EPI 561 (2 credits) Methods in Obesity Epidemiology Emory University	2017-present
	PHS 701 (1 credit) Public health research: discovery to practice	2017-present

Emory University

EPI 535 (2 credits, co-instructor) 2020
Designing and Implementing Epidemiologic Studies
Emory University

GUEST
LECTURES

Emory University
EPI 584: Epidemiology of Cancer 2020-2021
EPI 516: Issues in Women's Health 2018-2021
GH 551: Diet and Chronic Disease 2020
EPI 791: Teaching Epidemiology 2019
HLTH 320: Nutrition and Chronic Disease 2018
EPI 585: Advance Topics in Cancer Epidemiology 2017-2020
EPI 510: Intro to Genetic and Molecular Epidemiology 2017-2019
M2M 700: Molecules to Mankind 2016

TEACHING
ASSISTANT

EBM-I 2010-2015
Evidence Based Medicine-I
Duke University
Course Instructors: Patricia Moorman and Perri Morgan

EPI 600 (3 credits) 2010
Principles of Epidemiology
University of North Carolina at Chapel Hill
Course Instructor: Victor Schoenbach

FACULTY
MENTORING

Elizabeth Rogawski McQuade, PhD, MSPH 2022-present
Assistant Professor, Epidemiology, Emory University Co-Mentor

Lia Scott, PhD 2021-present
Assistant Professor, Epidemiology Co-Mentor
Georgia State University

Ruth Sacks, MD 2021-present
Assistant Professor, Hematology and Medical Oncology, Emory University Co-mentor
Mentored Awards: *Winship Clinical Oncology Career Development K12 Award*

Katie Ross-Driscoll, PhD, MPH 2021-present
Assistant Professor, Surgery, Emory University Co-Mentor
Mentored Awards: *Georgia CTSA K12 Award*

Jade Jones, MD 2021-present
Assistant Professor, Hematology and Medical Oncology, Emory University Advisor
Mentored Awards: *K12 Paul Calabresi Career Development Award for Clinical Oncology*

POST DOCTORAL MENTORING	Brittany Lord, PhD, MPH, MS Post-doctoral trainee, DCEG, NIH/NCI	2022-present NCI DCDP Mentor
	Lauren E. Barber, PhD, MSc Post-doctoral trainee, Epidemiology, Emory University	2022-present Primary Mentor
	Jasmine Miller-Kleinhenz, PhD Post-doctoral trainee, Epidemiology, Emory University <u>Mentored Awards:</u> NCI/NIH K99/00	2019-present Primary Mentor
	Anthony Ross, MD Research Fellow, Pediatrics, Emory University	2018-2020 Science Oversight Committee
DOCTORAL MENTORING	Leah Moubadder, MPH PhD student, Epidemiology, Emory University <u>Title:</u> <i>The legacy of redlining on the burden of air quality and breast cancer outcomes</i>	<i>In progress</i> Dissertation Chair
	Maret Maliniak, MPH PhD student, Epidemiology, Emory University <u>Title:</u> <i>Biologic heterogeneity in breast cancer treatment effectiveness and outcomes: Investigating markers of local inflammation and metabolism as potential drivers</i>	<i>In progress</i> Dissertation Chair
	Rebecca Nash, MPH PhD student, Epidemiology, Emory University <u>Title:</u> <i>Methodological and molecular factors underlying racial disparities in cancer outcomes.</i>	<i>In progress</i> Dissertation Committee
	John Kauffman, MPH PhD student, Epidemiology, Emory University <u>Title:</u> <i>Pathways of Carcinogenesis for Endocrine Disruptors: Polybrominated Biphenyls as a Case Study</i>	<i>In progress</i> Dissertation Committee
	Alyssa Troeschel, MPH PhD candidate, Epidemiology, Emory University <u>Title:</u> <i>Energy balance and prognosis after a cancer diagnosis</i>	Spring 2021 Dissertation Committee
	Michael Garber, MPH PhD candidate, Epidemiology, Emory University <u>Title:</u> <i>The effect of bicycle infrastructure on population-level cycling and cycling-related injury in Atlanta using smartphone-generated data</i> <u>Mentored Awards:</u> NIH F31 Award; Am. Heart Assoc. Predoc Award (declined); Am. College of Sports Med Research Award	Fall 2020 Dissertation Chair

	<p>Lindsay Collin, MPH PhD candidate, Epidemiology, Emory University <u>Title:</u> <i>Biologic and Patient Variation Affecting Breast Cancer Treatment Efficacy</i> <u>Mentored Awards:</u> <i>DOD predoctoral award (declined)</i></p>	<p>Summer 2020 Dissertation Committee</p>
MASTERS MENTORING	<p>Jackie Lanning MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Association of Historic Redlining and Breast Cancer Outcomes from Air Toxics in Atlanta, GA</i></p>	<p>Spring 2022 Thesis Chair</p>
	<p>Ellen Mitchell MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Evaluation of crown-like structures in breast tumor tissue: etiology and outcomes in a diverse population</i></p>	<p>Spring 2022 Thesis Chair</p>
	<p>Nancy Nguyen MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Description of the spatial heterogeneity in the colorectal cancer mortality across Georgia by race and area-level characteristics</i></p>	<p>Spring 2022 Thesis Chair</p>
	<p>Isatou Joff MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Area-level Incarceration as a Driver of Prostate Cancer Mortality and Disparities in Georgia</i></p>	<p>Spring 2021 Thesis Chair</p>
	<p>Jazib Gohar MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Place and the breast tumor epigenome: potential drivers of breast cancer outcome disparities?</i></p>	<p>Spring 2020 Thesis Chair</p>
	<p>Arthi Reddy MPH candidate, Epidemiology, Emory University <u>Title:</u> <i>Drivers of mammogram delay and downstream implications for breast cancer</i></p>	<p>Spring 2020 Thesis Chair</p>
	<p>Teja Nagaradona MPH, Epidemiology, Emory University <u>Title:</u> <i>Characterizing burden of disease in a cohort of people exposed to Indoor air Pollution in China</i></p>	<p>Spring 2019 Thesis Chair</p>
	<p>Miriam Aswathy Cheriyan, MD MPH, Epidemiology, Emory University <u>Title:</u> <i>The epidemiology of crown like structures in breast tissue by body size and race</i></p>	<p>Spring 2019 Thesis Chair</p>

Catherine Osborn
 MPH, Epidemiology, Emory University
Title: Breast cancer mortality disparities by race in Atlanta: treating facility as a potential contributor?
 Spring 2019
 Thesis Chair

Kylee Broger
 MPH, Epidemiology, Emory University
Title: Race, treatment, and CVD mortality following a diagnosis of breast cancer
 Spring 2019
 Thesis Chair

Kyung Lee, PharmD
 MPH, Epidemiology, Emory University
Title: Type 2 diabetes, breast cancer specific and overall mortality: associations by metformin use and modification by race, body mass, estrogen receptor, and menopausal status
 Spring 2018
 Thesis Chair

Colin Adler
 MPH, Epidemiology, Emory University
Title: Usual adult occupation and risk of PCa in West African men: The Ghana Prostate Study
 Spring 2018
 Thesis Chair

Wayne Foo
 MPH, Epidemiology, Emory University
Title: Physical Activity, Sedentary Time, and Intrinsic Subtypes of Breast Cancer
 Spring 2017
 Thesis Chair

Jingxuan Zhao
 MPH, Epidemiology, Emory University
Title: Reproductive Factors and Change in Weight/BMI During the Menopausal Transition
 Spring 2017
 Thesis Chair

Margaret Langhamer
 MPH, Epidemiology, Emory University
Title: Association between biliary tract cancers and family history of cancers in the Biliary Tract Cancers Pooling Project (BiTCaPP)
 Spring 2017
 Thesis Chair

TRAINING GRANTS NIDA-T32, Emory University (PIs: Cooper and Waller)
Training in Advanced Data Analytics to End Drug-Related Harms
 2020-present
 Faculty

NATIONAL SERVICE Advisory Board
 Georgia Center for Oncology Research and Education
 2022-present
 Member

SER Awards Committee
 Society for Epidemiologic Research
 2020-present
 Chair (2021)

TREC Fellowship Program
 2020-present

	Transdisciplinary Research in Energetics and Cancer	Peer mentor
	NCI-CC Associate Member Council NCI Cohort Consortium	2019-present Chair (2022)
INSTITUTIONAL SERVICE	Winship Invest\$ Pilot Program Emory University	2020-present Reviewer
	Rollins Association for Cancer Prevention and Control Emory University	2017-present Faculty advisor
	Office of Career Development Faculty Advisory Board Emory University	2017-present Member
	Epidemiology PhD Program Committee Emory University	2017-present Member
	Epidemiology Qualifying Exam Committee Emory University	2017-present Member
	Winship Symposium Planning Committee Emory University	2018-2019 Member
	Epidemiology Chair Search Committee Emory University	2017-2018 Member
	Achievement Rewards for College Scientists Committee Emory University	2017 Reviewer
	Epidemiology MPH Admissions Committee Emory University	2016-2018 Member
	Epidemiology Faculty Search Committee University of North Carolina at Chapel Hill	2009 Member
	President/CEO Selection Committee Meharry Medical College	2006 Member
NON-ACADEMIC SERVICE	GA Center for Oncology Research and Education, Inc https://www.georgiacancerinfo.org/	2022-present Board Member
	Turning Point Breast Cancer Rehabilitation https://myturningpoint.org/	2021-present Scientific Advisor
	Susan G. Komen African-American Health Equity Initiative https://www.komen.org/about-komen/our-impact/breast-cancer/health-equities-initiative/	2020-present Community Advisory Board

Sisters of Promise, Komen Atlanta https://komenatlanta.org/sisters/	2019-2022 Member
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Greater Atlanta Breast Cancer Task Force https://www.sistersbychoice.org/inspirational-stories/	2017-2020 Research Lead
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AD-HOC
JOURNAL
REVIEW

BMC Public Health
Breast Cancer Research (*frequent reviewer*)
Breast Cancer Research and Treatment
British Journal of Cancer
Cancer
Cancer Causes and Control
Cancer Epidemiology
Cancer Epidemiology Biomarkers and Prevention
Carcinogenesis
Epidemiology
International Journal of Cancer
JAMA Internal Medicine
JNCI Cancer Spectrum
Journal of the National Comprehensive Cancer Network
Journal of Clinical Oncology
Nutrition and Cancer

MEMBERSHIPS
(*denotes
leadership role)

InterLymph	2019-present
NCI-Cohort Consortium Associate Council*	2019-present
American Association for Cancer Research	2012-present
Society for Epidemiologic Research*	2008-present
Association of Vanderbilt Black Alumni	2005-2016
Epidemiology Student Organization (UNC-CH)	2007-2013
American Public Health Association	2006-2008
Tennessee Public Health Association	2006-2007
Division of Public Health Practice Student Association*	2006-2007
Pre-Alumni Association (Meharry Medical College)	2006-2007
Vanderbilt Students for the Awareness of Cancer	2002-2005