

Anna E. Arthur, PhD, MPH, RD
Curriculum Vitae

PERSONAL INFORMATION

Anna E. Arthur (Professional)
Anna Arthur Parker (Legal name)
Postdoctoral Scholar
Cancer Prevention and Control Training Program
Department of Nutrition Sciences
University of Alabama-Birmingham
1675 University Blvd
348 Webb
Birmingham, AL 35294
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PROFESSIONAL CERTIFICATION

Academy of Nutrition and Dietetics
Registered Dietitian, 2010 – Present (RD #1035383)

EDUCATION

2013	Doctor of Philosophy , Nutritional Sciences (Sub-plan in Nutritional Epidemiology) The University of Michigan, Ann Arbor, MI
2009	Master of Public Health , Human Nutrition and Dietetics The University of Michigan, Ann Arbor, MI
2007	Bachelor of Science , Nutritional Sciences Michigan State University, East Lansing, MI
2004	Study Abroad , General Studies Lancaster University, Lancaster, United Kingdom

OTHER TRAINING

2013 – Present	Postdoctoral Scholar , Cancer Prevention and Control Training Program, Department of Nutrition Sciences, University of Alabama-Birmingham, Birmingham, AL
2009 – 2010	Dietetic Internship , University of Michigan School of Public Health Dietetic Internship Program, Ann Arbor, MI

PROFESSIONAL RESEARCH POSITIONS

2012 – 2013	Rackham Predoctoral Fellow The Role of Diet in the Pathogenesis and Prognosis of Head and Neck Cancer Rackham Graduate School, The University of Michigan, Ann Arbor, MI
2011 – 2012	Graduate Student Research Assistant Integrative Epigenomic/Genomic Profiling and Biomarker Discovery in HPV+ and HPV- Squamous Cancers Departments of Otolaryngology and Environmental Health Sciences, The University of Michigan, Ann Arbor, MI NIH/NCI R01 CA158286 (Rozek contact PI/Sartor)
2009 – 2011	Graduate Student Research Assistant SPORE in Head and Neck Cancer: The Molecular Basis of Head and Neck Cancer Biology, Treatment and Prevention Department of Otolaryngology, The University of Michigan, Ann Arbor, MI NIH/NCI 2P50 CA097248 (Wolf)
2008 –2009	Research Assistant A Mediterranean Diet in Colon Cancer Prevention Department of Family Medicine, The University of Michigan Comprehensive Cancer Center, Ann Arbor, MI NIH/NCI R01 CA120381 (Djuric)
2007 – 2008	Subject Recruiter A Randomized Study of Exclusion Criteria in a University Population Department of Epidemiology, The University of Michigan, Ann Arbor, MI
2007	Research Associate A Pilot Study of Diabetes Risk Reduction Program with Overweight WIC Mothers Department of Research, College of Nursing, Michigan State University, East Lansing, MI
2004 – 2007	Research Associate Food Safety and Toxicology Lab Department of Food Science and Human Nutrition, Michigan State University, East Lansing, MI

TEACHING EXPERIENCE

- 2015 **Guest Lecturer**, NTR 724: Research Strategies for the Study of Diet, Energetics and Cancer, Department of Nutrition Sciences, The University of Alabama at Birmingham
- 2012 – 2013 **Guest Lecturer**, School of Public Health Dietetic Internship Program, The University of Michigan
- 2010 **Graduate Student Instructor**, EHS 513: Pathologic Basis of Disease, Department of Environmental Health Sciences, The University of Michigan
- 2005 – 2006 **Student Athlete Tutor**, Clara Bell Smith Student Athlete Academic Center, Michigan State University

TEACHING/MENTORING TRAINING

- 2013 Lab Management Course for Postdoctoral Scholars. Office of Postdoctoral Education, University of Alabama-Birmingham, Birmingham, AL
- 2013 Program in Biomedical Sciences (PIBS) 505 – Teaching in the Sciences – 2 credit course, The University of Michigan, Ann Arbor, MI
- 2012 Preparing Future Faculty Conference: Getting Ready for an Academic Career. Center for Research on Learning and Teaching and Rackham Graduate School, The University of Michigan, Ann Arbor, MI

CLINICAL EXPERIENCE

- 2013 – Present **Oncology Dietitian**, Resistance Training in Head and Neck Cancer Patients (RETAIN) Study, The University of Alabama at Birmingham, Birmingham, AL
- 2009 – 2010 **Dietetic Intern**, School of Public Health Dietetic Internship, The University of Michigan, Ann Arbor, MI
- 2008 – 2009 **Nutrition Program Assistant**, Menu Systems and Nutrition Information Management Office, Residential Dining Services, The University of Michigan, Ann Arbor, MI

2008 **Nutricare Program Assistant**, Ellen Thompson Women's Health Center, St. Joseph Mercy Health System, Ypsilanti, MI

SERVICE

2014 - Present **Member**, Grant Review Committee, Colgate Palmolive Fellowship in Nutrition and Oral Health/Dental Education Research

2015 **Judge**, UAB Undergraduate Research Expo

2013 **Student Member**, Human Nutrition Program Faculty Search Committee, Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI

2008 **Summer Food Service Program Volunteer**, Food Gatherers Food Bank, Ann Arbor, MI

2007 – 2008 **Community Nutrition Volunteer**, Washtenaw County Head Start, Ypsilanti, MI

2006 – 2007 **Information Specialist Volunteer**, American Red Cross Regional Food Distribution Center, Lansing, MI

FUNDING SUPPORT

Active

Research Enhancement Project
Arthur (PI) \$15,000 10/1/2014 – 09/30/2015

Sponsor: UAB Center for Palliative and Supportive Care

Improving dietary patterns in head and neck cancer survivors to optimize disease outcomes and supportive care: a pilot/feasibility study

The goal of this proposal is to assess the feasibility of a post-treatment dietary intervention for head and neck cancer (HNC) survivors. The intervention is based on a dietary pattern previously associated with improved biomarkers of prognosis, symptom reduction, and disease-free survival.

R25 CA047888
Demark-Wahnefried, Meneses (PIs) 09/01/2013 – 08/31/2015
Sponsor: NIH/NCI
Role: Postdoctoral Fellow
UAB Cancer Prevention and Control Training Program

Completed

Colgate-Palmolive Fellowship in Nutrition and Oral Health

Arthur (PI)

\$15,000

04/01/2011 – 08/31/2013

Sponsor: Colgate Palmolive and the Academy of Nutrition and Dietetics

Diet and nutritional status in the year following diagnosis with head and neck cancer

The goal of this project is to observationally investigate how pretreatment dietary patterns and serum antioxidant levels influence biomarkers of disease prognosis

HONORS & AWARDS

2015	Participant, New Investigators Workshop, American Society of Preventive Oncology
2013	John R. Durant Award for Excellence in Cancer Research
2013	Rackham Predoctoral Fellowship
2012	American Institute for Cancer Research Annual Conference Travel Scholarship
2011	Colgate-Palmolive Fellowship in Nutrition and Oral Health
2011	Honor Society of Phi Kappa Phi
2011	2 nd place award winner, student poster competition, UM-SPH Annual Toxicology Symposium
2010, 2011, 2012, 2013	Rackham Graduate School Travel Grant
2010	Susan G. Komen Scholar-in-Training Travel Grant
2007, 2008, 2009	University of Michigan School of Public Health Dean's Award
2002	Rapaich Family Scholarship
2002	Dickinson County Hospital Health Careers Scholarship
2002	Michigan Merit Award

PROFESSIONAL MEMBERSHIPS

2014 – Present	American Society for Preventive Oncology
2013 – Present	Alabama Dietetic Association
2012 – Present	American Society for Nutrition
2010 – Present	American Association for Cancer Research
2007 – Present	Academy of Nutrition and Dietetics – Oncology Nutrition DPG
2007 – 2013	Michigan Dietetic Association

SKILLS

Statistical: SAS, linear regression, logistic regression, survival analysis, principal component analysis, multinomial logistic regression, proportional odds models, linear mixed models, survey analysis

Dietary Assessment and Analysis: Food frequency questionnaires, 24-hour dietary recalls, Nutrition Data System for Research (NDSR), CBORD, dietary pattern analysis,

diet quality indices, analysis of single foods/nutrients, adjustment for total energy intake, anthropometric assessments

Laboratory: HPLC, PCR, DNA extractions

AD HOC REVIEWER

Cancer Epidemiology, Biomarkers & Prevention
International Journal of Cancer
British Journal of Clinical Nutrition
Nutrition and Cancer: an International Journal
Journal of Nutrition in Gerontology and Geriatrics

INVITED LECTURES AND SYMPOSIA

External

“Dietary patterns predict nutrition impact symptoms 1-year after diagnosis in patients with head and neck cancer.” Breakout Session on Multiple Health Behaviors, *Biennial Cancer Survivorship Research Conference 2014*, Atlanta, GA, June 2014.

“Characterization and stability of dietary patterns in the year following head and neck cancer diagnosis.” Diet and Cancer Mini Symposium, *Experimental Biology 2013*, Boston, MA, April 2013.

“The role of diet in the pathogenesis and prognosis of head and neck cancer”. *Special Seminar in Cancer Epidemiology*. Department of Epidemiology, Louisiana State University Health Sciences Center, New Orleans, LA, February 2013.

Internal

“Improving vegetable intake in head and neck cancer survivors: a pilot/feasibility intervention study.” *Center for Palliative and Supportive Care Center Scholars Monthly Meeting*, University of Alabama at Birmingham, Birmingham, AL, April 2015.

“Pretreatment serum micronutrient levels predict head and neck cancer recurrence and survival.” *UAB Annual Postdoctoral Research Day*, University of Alabama at Birmingham, Birmingham, AL, February 2015.

“Increasing intake of cruciferous and green leafy vegetables in head and neck cancer survivors: development of a pilot/feasibility intervention trial.” *Head and Neck Cancer Think Tank*. The University of Alabama-Birmingham, Birmingham, AL, January 2014.

“Diet and head and neck cancer: current evidence and areas for future research.” *Head and Neck Cancer Think Tank*. The University of Alabama-Birmingham, Birmingham, AL, October 2013.

“A comprehensive analysis of DNA methylation in head and neck cancers”.
Environmental Molecular Epidemiology Research Group: EMERG. Department of Environmental Health Sciences, University of Michigan, Ann Arbor, MI, February 2011. Presented in conjunction with J. Colacino.

“Associations between reported diet and HPV-status of head and neck tumors”. *Cancer Epidemiology Working Group*. Comprehensive Cancer Center, University of Michigan, Ann Arbor, MI, December 2010.

“The role of diet in head and neck cancer prognosis: a pilot study”. *University of Michigan Head and Neck Specialized Program of Research Excellence (SPORE) Annual Retreat*. Department of Otolaryngology, University of Michigan, Ann Arbor, MI, October 2010.

Lay Audience

“Eat this, not that: healthy lifestyle for cancer prevention”. *Focus on Women Series: This Not That – What to Test, Eat, and Wear*. The University of Michigan Comprehensive Cancer Center and Women’s Health Program, Ann Arbor, MI, March 2013.

“Antioxidant supplementation during cancer treatment”. *The University of Michigan School of Public Health Dietetic Internship Conference*. Ann Arbor, MI, January 2010.

ABSTRACTS (Presented by first author unless otherwise noted)

1. **Arthur AE**, Virani S, Bellile EL, Colacino JA, Peterson LA, Wolf GT, Rozek LS. Diet and methylation of candidate genes associated with head and neck cancer prognosis. To be presented at the *Congress of the International Society of Nutrigenetics and Nutrigenomics*, Chapel Hill, NC, May 2015. (Poster Presentation)
2. **Arthur AE**, Bellile EL, Rozek LS, Peterson KE, Ren J, Harris E, Mueller C, Peterson LA, Wolf GT, Djuric Z. Pretreatment serum carotenoid levels predict head and neck cancer recurrence and mortality. *American Society for Preventive Oncology Annual Conference*, Birmingham, AL, March 2015. (Poster Presentation)
3. **Arthur AE**, Peterson KE, Djuric Z, Taylor JMG, Hebert JR, Duffy SA, Peterson LA, Bellile EL, Whitfield J, Chepeha DB, Schipper MJ, Shen JC, Wolf GT, Rozek LS. Pretreatment diet, proinflammatory cytokines, and cachexia in head and neck squamous cell carcinoma. *American Institute for Cancer Research Annual Research Conference on Food, Nutrition, Physical Activity and Cancer*, Bethesda, MD, November 2013. (Poster Presentation)
4. Jolly S, **Arthur AE**, Shen J, Schipper MJ, Peterson LA, Peterson KE, Wolf GT, Eisbruch A, Rozek LS. Physical activity levels and dietary patterns in head and neck cancer patients. *10th International Conference of the Society for Integrative Oncology*, Vancouver, BC, October 2013. (Oral Presentation)

5. Colacino JA, **Arthur AE**, Ferguson KK, Ruangyuttikarn W, Satarug S, Rozek LS. Dietary antioxidant and anti-inflammatory intake modifies the effect of cadmium exposure on markers of systemic inflammation and oxidative stress. Environmental Cadmium Conference 2013, February 2013, Chiang Mai, Thailand. (Oral Presentation)
5. **Arthur AE**, Peterson KE, Rozek LS. Dietary micronutrient intake and oral HPV infection in the United States, 2009 – 2010. *American Institute for Cancer Research Annual Research Conference on Food, Nutrition, Physical Activity and Cancer*, Washington, D.C., November 2012. (Poster Presentation)
*This abstract earned a travel scholarship to attend the conference. It was not presented due to the conference being cancelled as a result of Hurricane Sandy.
6. **Arthur AE***, Colacino JA*, Dolinoy DC, Sartor MA, Duffy SA, Chepeha DB, Bradford CR, Walline HM, McHugh JB, D'Silva NJ, Carey TE, Wolf GT, Taylor JMG, Peterson KE, Rozek LS. Dietary intake is associated with tumor suppressor DNA methylation in head and neck squamous cell carcinomas. *American Head and Neck Society 9th International Conference on Head and Neck cancer*, Toronto, Ontario, Canada, July 2012. (Poster Presentation)
7. **Arthur AE***, Colacino JA*, Dolinoy DC, Sartor MA, Duffy SA, Chepeha DB, Bradford CR, Walline HM, McHugh JB, D'Silva NJ, Carey TE, Wolf GT, Taylor JMG, Peterson KE, Rozek LS. Dietary intake is associated with tumor suppressor DNA methylation in head and neck squamous cell carcinomas. *American Association for Cancer Research Annual Meeting*, Chicago, IL, April 2012. (Poster Presentation)
8. **Arthur AE**, Rozek LS, Chepeha DB, Taylor J, Hebert JR, Terrell JE, Wolf GT, Peterson KE, Duffy SA. Pretreatment dietary patterns associated with survival and recurrence in head and neck squamous cell carcinoma. *American Institute for Cancer Research Annual Research Conference on Food, Nutrition, Physical Activity and Cancer*, Washington D.C., November 2011. (Poster Presentation)
9. **Arthur AE**, Duffy SA, Sanchez GI, Gruber SB, Terrell JE, Hebert JR, Bradford CR, D'Silva NJ, Carey TE, Wolf GT, Peterson KE, Rozek LS. Higher micronutrient intake is associated with human papillomavirus-positive head and neck cancer: a case-only analysis. *American Association for Cancer Research Frontiers in Cancer Prevention Annual Conference*, Philadelphia, PA, November 2010. (Poster Presentation)

* - These authors contributed equally to this work

PUBLICATIONS

Manuscripts Published or In Press

1. **Arthur AE**, Peterson KE, Shen J, Djuric Z, Taylor JMG, Hebert JR, Duffy SA, Peterson LA, Bellile EL, Whitfield JR, Chepeha DB, Schipper MJ, Wolf GT, Rozek LS. Diet and proinflammatory cytokine levels in head and neck squamous cell carcinoma. *Cancer*, 2014 Sep 1;120(17):2704-12.
2. Colacino JA, **Arthur AE**, Ferguson KK, Rozek LS. Dietary antioxidant and anti-inflammatory intake modifies the effect of cadmium exposure on markers of systemic inflammation and oxidative stress. *Environ Res*, 2014 Mar 4;131C:6-12.
3. **Arthur AE**, Peterson KE, Rozek LS, Taylor JM, Light E, Chepeha DB, Hébert JR, Terrell JE, Wolf GT, Duffy SA. Pretreatment dietary patterns, weight status, and prognosis of head and neck squamous cell carcinoma. *Am J Clin Nutr*, 2013 Feb;97(2):360-368.
4. Colacino JA*, **Arthur AE***, Dolinoy DC, Sartor MA, Duffy SA, Chepeha DB, Bradford CR, Walline HM, McHugh JB, D'Silva N, Carey TE, Wolf GT, Taylor JM, Peterson KE, Rozek LS. Dietary intake is associated with tumor suppressor DNA methylation in head and neck squamous cell carcinomas. *Epigenetics*, 2012 Aug;7(8):883-91.
5. **Arthur AE**, Duffy SA, Sanchez GI, Gruber SB, Terrell JE, Hebert JR, Light E, Bradford CR, D'Silva NJ, Carey TE, Wolf GT, Peterson KE, Rozek LS. Higher micronutrient intake is associated with human papillomavirus-positive head and neck cancer: a case-only analysis. *Nutr Cancer*, 2011;63(5):734-42.
6. Roze, LV, **Arthur AE**, Hong SY, Chanda A and Linz JE. 2007. The initiation and pattern of spread of histone H4 acetylation parallel the order of transcriptional activation of genes in the aflatoxin cluster. *Mol Microbiol*, 2007;66(3), 713-26.
7. Roze LV, Beaudry R, **Arthur AE**, Calvo AM, and Linz JE. 2007. Fungal volatiles regulate aflatoxin synthesis and asexual sporulation in *Aspergillus parasiticus*. *Appl Environ Microb*, 2007;73(22), 7268-76.

* - These authors contributed equally to this work

Manuscripts Under Review

1. **Arthur AE**, Bellile EL, Rozek LS, Paterson KE, Ren J, Harris E, Mueller C, Jolly S, Peterson LA, Wolf GT, Djuric Z. Pretreatment serum carotenoid concentrations predict head and neck cancer recurrence and survival. *Under Review*.