

ANNA (ANNIE) NEWTON KIRBY, PhD, RD, LD, CCMS

Edward Via College of Osteopathic Medicine
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Primary Academic Appointment

Assistant Professor, Edward Via College of Osteopathic Medicine
Preventative Medicine and Public Health; Cell Biology and Physiology 2015-present

Licensure/Certification

Registered Dietitian Nutritionist 2011-present
Certified Culinary Medicine Specialist 2020-present

Education

University of Alabama at Birmingham; Birmingham, AL
Doctor of Philosophy, Nutrition Sciences 2015
Dietetic Internship 2011
Auburn University; Auburn, AL
Master of Science, Nutrition and Food Science 2010
Bachelor of Science, Animal Science 2007

Professional Training and Academic Career

Auburn University, Auburn, AL	Affiliate Assistant Professor	2015-present
Auburn University, Auburn, AL	Clinical Dietitian, Preceptor	2015-2020
University of Alabama at Birmingham, Birmingham, AL	Graduate Student Trainee	2012-2015
University of Alabama at Birmingham, Birmingham, AL	Program Coordinator	2011-2012
University of Alabama at Birmingham, Birmingham, AL	Dietetic Intern	2010-2011
Auburn University, Auburn, AL	Graduate Research Assistant	2008-2010

Specialty Professional Training

University of Alabama at Birmingham; Birmingham, AL 2018
CCTS Clinical and Translational Science Training Program
Goldring Center for Culinary Medicine at Tulane University; New Orleans, LA 2018-2020
Certified Culinary Medicine Specialist Training Program

Grant Support (Past)

Futureceuticals. *“The effects of betalain-rich beet root extract supplementation on exercise performance in trained cyclists.”* (PI Roberts, M. 2/2015-2/2016; \$135,606)

Auburn University Pharmaceutical Care Center, *“Assessing the impact of financial incentives on the clinical outcomes of employees who participate in a 12-week pharmacy-directed health and wellness challenge provided by an interdisciplinary team of health care providers.”* (PI Braxton-Lloyd, K 1/2015-1/2016)

UAB CCTS, *“Assessment of the efficacy and economy of an employee-based biometric screening program as a platform for diabetes prevention.”* (PI Gamston, C. 6/2016-6/2017; \$60,000)

Auburn University Competitive Outreach Scholarship Grant, “*Enhancing diversity in health and research investigating youth with developmental disabilities*,” (PI Pangelinan, M. 2/2017-2/2018; \$20,000)

Research Eureka(!) Acceleration Program, “A mobile health and wellness coaching intervention for weight loss,” (PI Hollingsworth, J. 7/2017–6/2018; \$15,441.70)

Research Eureka (!) Accelerator Program, “The effect of macronutrient cycling on metabolic flexibility in the presence of excess adiposity,” (PI Kirby, A. 7/2018-6/2019; \$41,358.16)

Grant Support (Current)

Presidential Award for Interdisciplinary Research, “Extra-virgin olive oil prevents MCI conversion to Alzheimer’s disease,” (PI Kaddoumi, A. 10/2018-10/2021; \$150,000)

Grant Support (Pending)

Research Eureka (!) Accelerator Program, “An interdisciplinary culinary medicine elective to enhance personal health, knowledge, and confidence with counseling on nutrition,” (PI Kirby, A. 7/2021-6/2022; \$23,700)

Publications

Gropper SS, **Newton A**, Harrington P, Simmons KP, Connell LJ, Ulrich P. Body composition changes during the first two years of university. *Preventative Medicine* 2011; 52(1): 20-22.

Casazza K, Cardel M, Dulin-Keita A, Hanks LJ, Gower BA, **Newton AL**, Wallace S. Reduced carbohydrate diet to improve metabolic outcomes and decrease adiposity in obese peripubertal African American girls. *Journal of Pediatric Gastroenterology, Hepatology and Nutrition* 2012; 54(3): 336-342.

Hanks LJ, **Newton AL**, Ashraf AP, Gutierrez OM, Casazza K. Reduced-carbohydrate, weight loss diet is associated with greater bone mineral content in obese African-American girls. *Journal of Diabetes Research & Clinical Metabolism* 2012; DOI: <http://dx.doi.org/10.7243/2050-0866-1-9>.

Newton AL, Hanks LJ, Ashraf AP, Williams E, Davis M, Casazza K. Macronutrient intake influences the effect of 25-hydroxy-vitamin D status on metabolic syndrome outcomes in African American girls. *Cholesterol* 2012; 2012: 581432.

Hanks LJ, **Newton AL**, Casazza K. Getting to the height of the matter: The relationship between stature and adiposity in pre-pubertal children. *Ethnicity & Disease* 2013; 23: 71-76.

Newton AL, Hanks LJ, Davis M, Casazza K. The relationships among total body fat, bone mineral content, and bone marrow adipose tissue in early pubertal girls. *BoneKEy Reports* 2013; 2 (315): doi: 10.1038/bonekey.2013.49.

Hanks LJ, **Newton AL**, Kondapally P, Casazza K. Bone marrow adipose tissue in adolescents – protective or pathogenic? *J Bone Marrow Research* 2013; 1(3): <http://dx.doi.org/10.4172/2329-8820.1000126>

Vincent D, **Newton AL**, Hanks LJ, Fontaine K, Casazza K. Improvement in body satisfaction among obese preadolescent African American girls after participation in a weight-loss intervention. *Infant Child & Adolescent Nutrition* 2015; DOI: 10.1177/1941406415577108

Newton AL, Hanks LJ, Judd S, Wallace S, Durant N, Casazza K. Low HDL cholesterol may lead to disruption of bone remodeling in obese early pubertal girls. *International Journal of Orthopaedics* 2015; 2 (3).

Haun CT, Vann CG, Mobley CB, Roberson PA, Osburn SC, Holmes MH, Mumford PM, Romero MA, Young KC, Moon JR, Gladden LB, Arnold RD, Israetel MA, **Kirby AN**, Roberts, MD. Effects of graded whey supplementation during extreme volume resistance training. *Front. Nutr.* 2018; 5:84.

Gamston CE, **Kirby AN**, Hansen R, Redden D, Lloyd KB. Description of a pharmacist-led diabetes prevention service within an employer-based wellness program. *J Am Pharm Assoc.* 2019 Sep - Oct; 59(5):736-741. doi: 10.1016/j.japh.2019.05.023.

Gamston CE, **Kirby AN**, Hansen RA, Redden DT, Whitley HP, Hanson C, Lloyd KB. Comparison of 3 risk factor-based screening tools for the identification of prediabetes. *J Am Pharm Assoc.* 2020 60(3):481-484. doi: 10.1016/j.japh.2019.11.015.

Drummond D, **Kirby AN**, Gamston CE, Westrick S, Saunders J, Braxton-Lloyd K. Impact of an interdisciplinary education module on pharmacy student knowledge and comfort with drug-nutrient interactions. *Currents in Pharmacy Teaching and Learning.* 2020. ISSN 1877-1297, <https://doi.org/10.1016/j.cptl.2020.11.007>.

Book Chapter

Hanks LJ, **Newton AL**, Lorch D, Kondapally P, Casazza K. Genetic Contributions to Pediatric Obesity – Beyond More Iterations of BMI. In: Ask the Experts: Obesity and Childhood. Expert Reviews Ltd. 2013.

Thesis Publications

Newton, AL. Freshman versus sophomore year changes in body weight and composition. Master's Thesis, Auburn University, 2010

Newton, AL. The interrelationships among obesity, insulin sensitivity, and bone phenotype in pre-pubertal girls. Doctoral Dissertation, University of Alabama at Birmingham, 2015

Research Presentations

Newton AL, Hanks LJ, Ashraf AP, Williams E, Davis M, Casazza K. *The Contribution of 25-Hydroxy Vitamin to Metabolic Syndrome Outcomes in African American Girls is influenced by Macronutrient Intake.* Poster presented at Minority Health Disparities Symposium, 2012.

Newton AL, Hanks LJ, Davis M, Casazza K. *The relationships among total body fat, bone mineral content, and bone marrow adipose tissue in early pubertal girls.* Poster presented at Minority Health Disparities Symposium, 2013.

Newton AL, Hanks LJ, Judd S, Wallace S, Durant N, Casazza K. *Physiologic Relevance of Lipid Profile on Bone Modeling in Overweight Children.* Poster presented at The Obesity Society's ObesityWeek, 2013.

Gamston CE, **Newton AL**, Hansen R, Gaillard P, Braxton Lloyd K. *Assessment of the feasibility of utilizing an employer-based biometric screening program to prospectively recruit individuals with prediabetes into a diabetes prevention program.* Poster presented at Boshell Research Day, 2016.

Pangelinan M, **Kirby AN**, Russell J, Wadsworth D, Rudisill M. *An inclusive program to improve physical activity and nutrition.* Workshop presented at the 18th annual Engagement Scholarship Consortium conference, 2017

Kirby AN, Young K, Roberts M, Shan L, Greene M. *The effect of macronutrient cycling on metabolic flexibility in the presence of excess adiposity.* Orally presented at VCOM Auburn Research Day, 2018.

Hollingsworth J, **Kirby AN**, Gamston C, Fox B, Braxton Lloyd K. *Six-month randomized trial of digital health and wellness coaching for weight loss.* Poster presented at Obesity Society's Obesity Week, 2018

Meacham S, Sutphin D, Dimucci Ward J, **Kirby A**, Eraza X, Alvarado C, Benner T, Lopez MJ, Alvarado Z, Cockrell C, Rojas D, Vaquedano I, Rivera S, Rodriguez S, Cruz D, Trent A, Choubey N, Quade L, Dowis A, Reynolds C, Saggio M. *Nutrition assessment in VCOM international service areas: comparative study.* Poster presented at VCOM Virginia Research Day, 2019.

Speakman L, Gamston C, **Kirby AN**, Braxton Lloyd K. *Impact of a biometric screening program on eating habits and physical activity.* Poster presented at VCOM Auburn Research Day, 2019.

Stewart S, Bonam D, Peebles M, Stickley K, **Kirby AN**, Hollingsworth J. *Validity and reliability of popular mobile consumer food logs.* Poster presented at VCOM Auburn Research Day, 2019

DeGregory V, Woodie L, Sexton C, Nakashima J, Shealey H, Roberts M, Young K, Greene M, **Kirby AN**. *The effect of macronutrient cycling on respiratory quotient in a high-fat Western diet-induced rat model of obesity.* Poster presented at VCOM Auburn Research Day, 2019

Nakashima J, Woodie L, Sexton C, DeGregory V, Shealey H, Roberts M, Young K, Greene M, **Kirby AN** *The effect of diet quality on sleep and activity in a high-fat Western diet-induced rat model of obesity.* Poster presented at VCOM Auburn Research Day, 2019

Hollingsworth J, **Kirby AN**, Gamston C, Fox B, Braxton Lloyd K. *Six-month randomized trial of digital health and wellness coaching for weight loss.* Poster presented at VCOM Auburn Research Day, 2019

Drummond D, Gamston C, **Kirby AN**, Westrick S, Saunders J, Braxton Lloyd K. *Pharmacy student comfort with counseling on drug-nutrient interactions, pre- and post-interdisciplinary education.* Poster presented at VCOM Auburn Research Day, 2019

Kirby AN, Dimucci Ward J, Wilson M, Horn R, Pappas S, Bianchi A, Alrafati A, Meyer K, Meacham S. *Nutrition in osteopathic medical education.* Poster presented at VCOM Auburn Research Day, 2019

Kirby AN, DiMucci Ward J, Sutphin D, Lopez MJ, Benner T, Alvarado Z, Meacham S. *The association between socioeconomic factors and body mass index in adult women of El Salvador; part of a comparative international study.* Poster presented at VCOM Auburn Research Day, 2019

DiMucci Ward J, Meacham S, **Kirby AN**, Sutphin D, Lopez MJ, Benner T, Alvarado Z, Dowis A, Quade L, Reynolds C, Trent A, Saggio M. *Waist circumference complementing body mass index measures*

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assessed as non-communicable disease risk indicators in adult women in El Salvador; part of a comparative international study. Poster presented at American Society of Nutrition's Annual Meeting, 2019

Gilliam A, Woodie L, Sexton C, Patodia S, Song E, Roberts M, Young K, Greene M, **Kirby AN**. *Effects of macronutrient cycling on energy expenditure and spontaneous activity in obese rats*. Poster presented at VCOM Auburn Research Day, 2020. Awarded 2nd place in the biomedical research competition.

Patodia S, Woodie L, Sexton C, Gilliam A, Song E, Roberts M, Young K, Greene M, **Kirby AN**. *The effect of macronutrient cycling on serum markers of metabolic syndrome*. Poster presented at VCOM Auburn Research Day, 2020. Awarded 3rd place in the biomedical research competition.

Song E, Woodie L, Sexton C, Gilliam A, Patodia S, Roberts M, Young K, Greene M, **Kirby AN**. *Effect of macronutrient cycling on metabolic flexibility in obese rats*. Poster presented at VCOM Auburn Research Day, 2020.

Gilliam A, Woodie L, Sexton C, Patodia S, Song E, Roberts M, Young K, Greene M, **Kirby AN**. *The effect of macronutrient cycling on metabolic phenotype and markers of metabolic syndrome in a western diet-induced rat model of obesity*. Orally presented at ALOMA 6th Annual Science & Management CME Conference, 2020.

Kirby AN, Woodie L, Sexton C, Roberts M, Young K, Greene M. The effect of macronutrient cycling on metabolic flexibility in the presence of excess adiposity. Poster presented at the Obesity Society's Obesity Week, 2020.

Kraus K, Barkhouse J, Kaddoumi A, **Kirby AN**. *How well do older women with mild cognitive impairment comply with dietary guidelines?* Poster presented at the VCOM Auburn Research Day, 2021. Awarded 1st place in the biomedical research competition.

Karne SL, Giles J, **Kirby AN**, Chen N, Hollingsworth J. *The craving conqueror program to reduce food cravings and build healthy eating patterns*. Poster presented at the VCOM Auburn Research Day, 2021.

Professional Invited Speaking Engagements

Abilities Unlimited Outreach Event	2016
<i>Presentation:</i> Nutritional Considerations for Individuals with Disabilities	
Auburn University Guest Lecture	2016
<i>Presentation:</i> Obesity Policy (Course: Community Nutrition)	
VCOM American College of Osteopathic Obstetricians and Gynecologists (ACOOG)	2016
<i>Presentation:</i> Preconception, Pregnancy, and Postpartum Nutrition: A Healthy Foundation for a Healthy Start	
VCOM ACOOG Seminar: Women's Health Week	2017
<i>Presentation:</i> Preconception, Pregnancy, and Postpartum Nutrition: A Healthy Foundation for a Healthy Start	
VCOM Muslim Medical Student Association Ramadan Dinner	2017

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Presentation: Intermittent Fasting During Ramadan

Auburn University Muslim Student Association Ramadan Dinner 2017
Presentation: Healthy Eating During Ramadan

VCOM Muslim Medical Student Association Ramadan Dinner 2018
Presentation: Ramadan: The Effects of Fasting

Harrison School of Pharmacy National Community Pharmacists Association (NCPA) 2019
Presentation: Nutrition in 2019: Breaking Down Fad Diets and Eating for Health

Auburn University Human Resources 2019
Presentation: Basic Nutrition for a Healthy Lifestyle

Auburn High School Women's Soccer Team 2019
Presentation: Sports Nutrition for Female Athletes

Auburn University Administrative Professionals' Day Conference 2019
Presentation: Budget Friendly Nutrition

Academic Service

Via Wellness Committee	Member	2015-present
Via Wellness Intellectual Subcommittee	Faculty Chair	2015-present
Research Retreat Planning Committee	Member	2018, 2019
VCOM Faculty Senate	Secretary	2018-Present
VCOM Research Day, poster competition	Judge	2020, 2021

Community Service

Lead Trainer; Minority Health & Health Disparities Research Center 2012
Happy Health Kids

Registration Attendant; Metabolomics Symposium 2012

Curriculum Developer: Storybook Farm Therapeutic Riding Facility 2015-2016
The Secret Garden

Head Coach: Auburn University Women's Club Ultimate Frisbee Team (*Ares*) 2015-present
2015-2016: 7th place finish at Regional College Championship
2016-2017: 3rd place finish at Regional College Championship
2017-2018: 2nd place finish at Regional College Championship
2018-2019: 9th place finish at Regional College Championship

Volunteer/Faculty Advisor; EAMC COVID-19 Vaccine Clinic 2021

Professional Societies

<i>Academy of Nutrition and Dietetics, Member</i>	2009-present
<i>Weight Management DPG, Member</i>	2009-2015
<i>Sports, Cardiovascular, and Wellness Nutrition DPG, Member</i>	2009-2016
<i>Research DPG, Member</i>	2010-present
<i>The Collegiate and Professional Sports Dietitian Association, Member</i>	2015-2018

Alabama Obesity Task Force, Member	2015-present
The Obesity Society, Member	2017-present
Auburn District Dietetics Association, member	2017-present
Auburn District Dietetics Association, President-Elect	2018-2019
Auburn District Dietetics Association, President	2019-2020

Honors and Awards

Kappa Omicron Nu	2009-2010
Howerde E. Sauberich Endowed Award for Excellence in Nutrition Science Research	2013-2014

Media Features

AL.com news article titled, "Riding a bicycle can open a new world for disabled kids." 2017
http://www.al.com/news/huntsville/index.ssf/2017/04/riding_a_bicycle_can_open_a_ne.html

Podcast: [COSAM Talks – You are what you eat. Part 1](#) November 2020

Podcast: [COSAM Talks – You are what you eat. Part 2](#) December 2020

AOTM Radio show: [Healthy Habits](#) March 2021

Teaching Experience

Courses Taught (Course Master) at Auburn University
NTRI 4620 Community Nutrition

Classes Taught at the Edward Via College of Osteopathic Medicine

MED 7125	Biochemical Nutrition for Practicing Clinicians
	Enzyme Cofactors: Minerals
	Vitamins and Enzyme Cofactors I
	Vitamins and Enzyme Cofactors II
	Digestion and Absorption of Fuels and Nutrients
	Metabolism: An Overview
	The Metabolic States
	Basic Concepts in the Regulation of Fuel Metabolism
	Glycogen Metabolism
	Pentose Phosphate Pathway and the Interconversion of Sugars
	Glucose Metabolism in the Liver
	Carbohydrate Nutrition
	Lipid Nutrition
	Protein Nutrition
	Metabolic Adaptations to Nutrition Interventions
	Nutrition for Maximizing Health and Performance
	Medical Nutrition Therapy in Practice
MED 7301	Ergogenic Aids (Dietary Supplements)
	Musculoskeletal Nutrition and Body Composition
MED 7271	Nutrition in the Nervous System
MED 7277	Nutrition and Cardiovascular Disease
	Nutrition and Pulmonary Disease
MED 7147	Gastrointestinal Motility
	Functional Anatomy and Physiology of the Functional Pancreas
	Small Intestine I: Functional Anatomy and Assimilation of Carbohydrates and Protein

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MED 7289	Small Intestine II: Assimilation of Lipids, Vitamins and Minerals Digestion, Absorption, and Malabsorption Nutrition Support (Enteral and Parenteral Nutrition) Dairy and Gluten Intolerance, and Use of Probiotics
MED 7283	Nutrition for Renal Disease
MED 7313	Medical Nutrition for Diabetes Mellitus
MED 7304	Nutrition and Pregnancy Breast Feeding
MED 7315	Nutrition and Anemias Nutrition and Cancer Prevention
MED 7400	Inter-Professional Early Clinical Experience: Nutrition Counseling

Mentoring Experience:

Current Trainees

Jesse Giles	OMS2, Edward Via College of Osteopathic Medicine
Latha Karne	OMS2, Edward Via College of Osteopathic Medicine
Kristyn Krause	OMS2, Edward Via College of Osteopathic Medicine
Jessica Barkhouse	OMS1, Edward Via College of Osteopathic Medicine
Kathryn Wirth	OMS1, Edward Via College of Osteopathic Medicine
Andrew Sunwood	OMS1, Edward Via College of Osteopathic Medicine
Elijah Morris	OMS1, Edward Via College of Osteopathic Medicine
Alexandra Skoczek	OMS1, Edward Via College of Osteopathic Medicine
Christopher Pittman	OMS1, Edward Via College of Osteopathic Medicine
Lauren Duggins	OMS1, Edward Via College of Osteopathic Medicine

Past Trainees

Angelin Shajan	OMS4, Edward Via College of Osteopathic Medicine
Nigel Jagoo	OMS1, Edward Via College of Osteopathic Medicine
Evelyn Murray	OMS1, Edward Via College of Osteopathic Medicine
Cody Haun	Postdoctoral Candidate, Auburn University
Julie Saunders	Resident, Harrison School of Pharmacy
Justyn Nakashima	OMS2, Edward Via College of Osteopathic Medicine
Vincent DeGregory	OMS2, Edward Via College of Osteopathic Medicine
Sapna Sharma	OMS2, Edward Via College of Osteopathic Medicine
Kelsey Herrera	OMS2, Edward Via College of Osteopathic Medicine
Joselyn Miller	OMS2, Edward Via College of Osteopathic Medicine
Devon Drummond	Resident, Harrison School of Pharmacy
Casey Sexton	Masters Graduate Student, Auburn University
Hayley Shealey	Undergraduate Senior, Auburn University
Jennifer Witt	Undergraduate Dietetic Student, Auburn University
Elli Davis	Undergraduate Dietetic Student, Auburn University
Annie Gilliam	OMS2, Edward Via College of Osteopathic Medicine
Esther Song	OMS2, Edward Via College of Osteopathic Medicine
Siddhi Patodia	OMS2, Edward Via College of Osteopathic Medicine
Stewart Montgomery	Undergraduate Dietetic Student, Auburn University
Kelly Long	Undergraduate Dietetic Student, Auburn University
Melissa McGowan	Undergraduate Dietetic Student, Auburn University
Virginia Ozment	Undergraduate Dietetic Student, Auburn University