

CURRICULUM VITAE**Nathan C. Winn, Ph.D.**

Molecular Physiology and Biophysics
 Vanderbilt University
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 Vanderbilt University Medical Center
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 Nashville, Tennessee 37232
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**EDUCATION**

Degree/Training	Institution	Field	Dates
B.S.	Georgia Southwestern State University Americus, GA, USA	Exercise Sciences	2008-2011
Ph.D.	University of Missouri Columbia, MO, USA	Exercise Physiology	2012-2018
Postdoctoral Fellow	Vanderbilt University Nashville, TN, USA	Adipose tissue immunometabolism	2018-present

SCIENTIFIC TRAINING

2012-2018	Research Assistant, Department of Nutrition and Exercise Physiology, University of Missouri, Columbia, MO, USA
2018-current	Postdoctoral Fellow, Department of Molecular Physiology and Biophysics, Vanderbilt University, Nashville, TN, USA

HONORS AND AWARDS

2010	Dr. Richard W. Litwhiler Exercise Science/Wellness Major Award, GSW, Americus, GA
2013	Adeline M. Hoffman Award in Human Environmental Sciences, University of Missouri, Columbia, MO
2014	MIZZOU Advantage Student Travel Awards, University of Missouri, Columbia, MO
2015	Edward J. O'Brien Scholarship, Nutrition and Exercise Physiology, University of Missouri, Columbia, MO
2016	James L. McGregor Scholarship in Health and Exercise Sciences, University of Missouri, Columbia, MO
2016	Corporate Advisory Board, Nutrition and Exercise Physiology, University of Missouri, Columbia, MO
2017	Ben R. Londeree/Tom R. Thomas Award for Outstanding Graduate Student, University of Missouri, Columbia, MO
2017	Human Environmental Sciences Distinguished Graduate Research Award, University of Missouri, Columbia, MO
2018	M. Harold Laughlin Scholar, University of Missouri, Columbia, MO <ul style="list-style-type: none"> Annually recognizes an outstanding graduate student, postdoctoral fellow, medical student, intern, or resident and/or veterinary student, intern, or resident who has contributed outstanding research in physical inactivity and chronic disease or promoted physical activity and health.

RESEARCH INTERESTS

- My current research is focused on understating immunomodulation of adipose tissue across the obesity spectrum.
- More specifically, I am interrogating the physiological and molecular links between adipose tissue macrophage iron handling and metabolic disease.

RESEARCH AND TRAINING SUPPORT

Current:

American Physiological Society (APS) Postdoctoral Fellowship

Trainee: **Nathan C. Winn**

11/1/2019 to 10/31/2020

Laboratory: Alyssa Hasty

Early Career Research Grant: The Obesity Society

Nathan C. Winn (PI)

1/1/2020 to 12/31/2020

Title: *Macrophage Iron Handling and Insulin Action*

NIH T32DK007563-31

10/22/18 to 10/21/2020

Trainee: **Nathan C. Winn** Program Director: Richard M. O'Brien

Laboratory: Alyssa H. Hasty

**Relinquished 10/21/19 to accept APS Postdoctoral Fellowship*

Prior Awards:

Department of Nutrition and Exercise Physiology, University of Missouri (Internal Grant)

Nathan C. Winn (PI), Jill Kanaley, PhD (Sponsor)

2/04/16 to 9/01/16

Title: *Detection of labelled ¹³C₄-octanoic acid in the human plasma pool*

American Egg Board (Fellowship; #00050021)

Nathan C. Winn (PI), Jill Kanaley, PhD (Sponsor)

7/31/15 to 6/31/18

Title: *Interaction between diet composition and physical inactivity on insulin sensitivity and β -cell function*

PEER-REVEIUED PUBLICATIONS

Primary articles

- 1) Heden TD, Liu Y, Park Y, Nyhoff LM, **Winn NC**, Kanaley JA. Impact of high fructose and high glucose sweetened beverages on metabolic health and insulin kinetics in male and female adolescents. [PMID: 25030782]. *Am J Clin Nutr*, Sep;100(3):796-805, 2014
- 2) Heden TD, Liu Y, Park Y, **Winn NC**, Kanaley JA. Low-intensity physical activity reduces postprandial insulin secretion in obese adolescents consuming high-fructose and high-glucose diets. [PMID: 25277125]. *Journal of Physical Activity and Health*, Aug;12(8):1153-61, 2014
- 3) Heden TD, **Winn NC**, Mari A, Booth FW, Rector RS, Thyfault JP, Kanaley JA. Post-dinner resistance exercise improves postprandial metabolic risk factors more effectively than pre-dinner resistance exercise in patients with type 2 diabetes. [PMID: 25539939]. *J App Physiol*, Mar 1;118(5):624-34, 2014
- 4) Nyhoff L, Timothy TD, Leidy HJ, **Winn NC**, Park YM, Thyfault JP, Kanaley JA. Prior exercise does not alter the incretin response to a subsequent meal in obese women. [PMID: 26188172]. *Peptides*, Sep;71:94-9, 2015
- 5) **Winn NC**, Vieira-Potter VJ, Gastecki, ML, Welly RJ, Zidon TM, Gaines TL, Woodford ML, Karasseva NG, Sacks HS, Padilla J. Loss of UCP-1 exacerbates Western diet-induced glycemic dysregulation

- independent of changes in body weight in female mice. [PMID: 27881400]. *Am J Physiol Regul Integr Comp Physiol*, Jan 1;312(1):R74-R84, 2017
- 6) **Winn NC**, Grunewald ZI, Liu Y, Heden TD, Nyhoff LM, Kanaley JK. Plasma irisin modestly increases during moderate and high-intensity afternoon exercise in obese females. [PMID: 28125733]. *PLoS One*, Jan 26;12(1):e0170690, 2017
 - 7) **Winn NC**, Grunewald ZI, Gastecki ML, Woodford ML, Welly RJ, Ball JR, Clookey SL, Gaines TL, Karasseva NG, Kanaley JA, Sacks HS, Vieira-Potter VJ, Padilla J. Deletion of UCP1 enhances ex vivo aortic vasomotor function in female but not male mice despite similar susceptibility to metabolic dysfunction. [PMID: 28655717]. *Am J Physiol Endocrinol Metab*, Oct 1;313(4):E402-E412, 2017
 - 8) Porter JW, Rowles JL III, Fletcher JA, Zidon TM, **Winn NC**, McCabe LT, Park YM, Perfield JW II, Thyfault JP, Rector RS, Padilla J, Vieira-Potter VJ. Anti-inflammatory Effects of Exercise Training in Adipose Tissue Do Not Require FGF21. [PMID: 28765264]. *J Endocrinology*, Nov;235(2):97-109, 2017
 - 9) **Winn NC**, Liu Y, Rector RS, Parks EJ, Ibdah JA, Kanaley JA. Energy-matched moderate and high intensity exercise training improves NAFLD risk independent of changes in body mass and abdominal adiposity – a randomized trial. [PMID: 28941598]. *Metabolism*, Jan;78:128-140, 2018
 - 10) Jurrissen TJ, Olver TD, **Winn NC**, Grunewald ZI, Lin GS, Hiemstra JA, Edwards JC, Gastecki ML, Welly RJ, Emptor CA, Vieira-Potter VJ, Padilla J. Endothelial dysfunction occurs independently of adipose tissue inflammation and insulin resistance in ovariectomized Yucatan swine. [PMID: 29283284]. *Adipocyte*, Jan 2;7(1):35-44, 2018
 - 11) Grunewald ZI, **Winn NC**, Gastecki ML, Woodford ML, Ball JR, Hansen SA, Sacks HS, Vieira-Potter VJ, Padilla J. Substantial loss of brown adipose tissue does not disrupt glycemic control but modulates aortic stiffness in mice. [PMID: 29351429]. *Am J Physiol Regul Integr Comp Physiol*, Apr 1;314(4):R584-R597, 2018
 - 12) Clookey SL, Welly RJ, Zidon TM, Gastecki ML, Grunewald ZI, **Winn NC**, Karasseva NG, Sacks HS, Padilla J, Vieira-Potter VJ. UCP1 gene ablation increases susceptibility to OVX-associated metabolic dysfunction. [PMID: 30089681]. *J Endocrinol*, Aug 8; JOE-18-0139, 2018
 - 13) **Winn NC**, Jurrissen TJ, Grunewald ZI, Cunningham RP, Woodford ML, Kanaley JA, Lubahn DB, Manrique-Acevedo C, Rector RS, Vieira-Potter VJ, Padilla J. Estrogen receptor alpha signaling maintains immunometabolic function in males and is obligatory for exercise-induced amelioration of nonalcoholic fatty liver. [PMID: 30512987]. *Am J Physiol Endocrinol Metab*, Feb 1;316(2):E156-E167, 2019
 - 14) **Winn NC**, Pettit-Mee R, Walsh LK, Restaino RM, Ready ST, Padilla J, Kanaley JA. Metabolic implications of diet and energy intake during physical inactivity. [PMID: 30694977]. *Med Sci Sports Exerc*, May;51(5):995-1005, 2019
 - 15) Huang Z, Wang Y, Shafer R, **Winn NC**, Kanaley JA, Vardhanabhuti B. Glycemic effects following the consumption of mixed soy protein isolate and alginate beverages in healthy adults. [PMID 30848259]. *Food & Function*, Mar 20;10(3):1718-1725, 2019
 - 16) **Winn NC**, Acin-Perez R, Woodford ML, Hansen SA, Haney M, Ayedun L, Rector RS, Vieira-Potter VJ, Shirihai OS, Sacks HS, Kanaley JA, Padilla J. A thermogenic-like brown adipose tissue phenotype is dispensable for enhanced glucose tolerance in female mice. [PMID: 30862679] *Diabetes*, Sep;68(9):1717-1729, 2019
 - 17) Peterson KR, Gutierrez DA, Kikuchi T, Anderson-Baucum EK, **Winn NC**, Shuey MM, Bolus WR, McGuinness OP, Hasty AH. Impaired insulin signaling in the B10.D2-Hc0 H2d H2-T18c/oSnJ mouse

model of complement factor 5 (C5) deficiency. [PMID: 31084499]. *Am J Physiol Endocrinol Metab*, Aug 1;317(2):E200-E211, 2019

- 18) Jurrissen TJ, Grunewald ZI, Woodford ML, **Winn NC**, Ball JR, Smith TN, Wheeler A, Rawlings AL, Staveley-O'Carroll, Ji Y, Fay WP, Paradis P, Schiffrin EL, Vieira-Potter VJ, Fadel PJ, Martinez-Lemus LA, Padilla J. Overproduction of endothelin-1 impairs glucose tolerance but does not promote visceral adipose tissue inflammation or limit metabolic adaptations to exercise. [PMID: 31310581]. *Am J Physiol Endocrinol Metab*, Sep 1;317(3):E548-E558, 2019
- 19) Dirkes RK, **Winn NC**, Jurrissen TJ, Lubahn DB, Vieira-Potter VJ, Padilla J, Hinton PS. Global estrogen receptor- α knockout has differential effects on cortical and cancellous bone in aged male mice. *FACETS*, 10.1139/facets-2019-0043.

Editorials

- 1) Padilla J, **Winn NC**, Walsh LK. When gain is greater than loss: Effects of physical activity on insulin sensitivity after short-term inactivity in older subjects. [PMID: 30211450] *J Physiol*, Nov;596(21):5071-5072, 2018

Reviews

- 1) **Winn NC**, Volk KM, Hasty AH. Regulation of tissue iron homeostasis: The macrophage 'ferrostat'. *JCI Insight*, Jan 30;5(2), 2020.

Selected Abstracts from Professional Meetings

- 1) Bosak A, **Winn NC**, Ryan G, Rochus A, Vial I. Effects of two minutes active recovery on a "booster max" VO₂max test using NCAA division II female "team sports" athletes. *International Journal of Exercise Science*, vol. 8, no. 1, 2011
- 2) **Winn NC**, Bosak A, Andre T, Glover F, Porley D. Assessment of carotid versus radial heart rate palpation accuracy following a submaximal three minute step test. *Southeast ACSM Annual Conference* (Jacksonville, FL: February 2012).
- 3) **Winn NC**, Bosak A., Andre T, Glover F, and Porley D. Assessment of carotid versus radial heart rate palpation accuracy following a submaximal three minute step test. *ACSM Annual Conference* (San Francisco, CA: May, 2012).
- 4) **Winn NC**, Liu Y, Heden T, Boyle L, Nyhoff L, Thyfault J, Kanaley J. Circulating irisin levels in response to acute and chronic exercise training in obese adults. *Central States ACSM Annual Conference* (Warrensburg, MO: October, 2013).
- 5) Kanaley JA, Park, Y, Liu, Y, Nyhoff, L, **Winn NC**, McCleery J, and Heden TD. Can meal composition alter overnight glucose and insulin responses in obese individuals with impaired fasting glucose levels? *Obesity Society Annual Scientific Meeting* (Atlanta, GA: November, 2013).
- 6) Bosak A, Andre T, Porley D, **Winn NC**. Relationship between body composition, aerobic capacity, and heart rate palpation accuracy following a step test. *ACSM Annual Conference* (Indianapolis, IN: May 2013).
- 7) Nyhoff LM, Heden TD, Leidy HJ, **Winn NC**, Park Y, Liu Y, Pulakat L, Thyfault JP, Kanaley JA. Incretin response to acute exercise of differing intensities in obese women. *ACSM Annual Conference* (Orlando, FL: May 2014).
- 8) Heden TD, Liu Y, Park Y, **Winn NC**, Nyhoff LM, Kanaley, JA. Low-intensity physical activity reduces postprandial insulin secretion in obese adolescents consuming high-fructose and high-glucose diets. *ACSM Annual Conference* (Orlando, FL: May, 2014).

- 9) **Winn NC**, Liu Y, Heden T, Boyle L, Nyhoff L, Thyfault J, and Kanaley J. Circulating irisin levels in response to acute and chronic exercise training in obese adults. *ACSM Annual Conference* (Orlando, FL: May, 2014).
- 10) **Winn NC**, Lee N, Parks EJ, Ibdah J, Rector RS, Kanaley JK. Moderate and high intensity exercise training matched for energy expenditure reduces intrahepatic lipid in obese individuals with hepatic steatosis: 3189 Board #254 June 3, 2: 00 PM - 3: 30 PM. *Med Sci Sport Exerc*, 2016
- 11) **Winn NC**, Lee N, Kanaley JA, Rector RS, Parks EJ, and Ibdah JA. Exercise training differentially impacts ¹³C₄-octanoic acid oxidation in obese individuals with high and low intrahepatic lipid content- *a pilot study*. *Experimental Biology* (San Diego, CA: April, 2016).
- 12) Vieira-Potter VJ, **Winn NC**, Gastecki ML, Welly RJ, Zidon TM, Gaines TL, Woodford ML, Karasseva NG, Sacks HS, and Padilla J. Loss of UCP-1 disrupts glucose metabolism in female mice. *Diabetes*, June 2016, Vol. 65, Suppl. 1A, 232-LB (New Orleans, LA: June 2016).
- 13) **Winn NC**, Jurrissen TJ, Lin GS, Gastecki ML, Woodford ML, Welly RJ, Lubahn DB, Vieira-Potter VJ, Padilla J. Features of metabolic syndrome in male mice with deficiency of estrogen receptor alpha. *Experimental Biology* (Chicago, IL: April 2017).
- 14) Jurrissen TJ, Olver TD, Lin GS, **Winn NC**, Gastecki ML, Welly RJ, Grunewald ZI, Emptner CA, Vieira-Potter VJ, Padilla J. Endothelial dysfunction occurs independently of adipose tissue inflammation and insulin resistance in ovariectomized Yucatan swine. *Experimental Biology* (Chicago, IL: April 2017).
- 15) Walsh LK, Restaino RM, Jones CA, **Winn NC**, Padilla J. Young healthy men and women are protected from prolonged sitting and postprandial hyperglycemia-induced brachial artery endothelial dysfunction. *Experimental Biology* (Chicago, IL: April 2017).
- 16) Grunewald ZI, **Winn NC**, Gastecki ML, Woodford ML, Ball JR, Hansen SA, Sacks HS, Vieira-Potter VJ, Padilla J. Imbalance of periaortic adipose tissue browning-to-inflammatory gene expression is associated with increased aortic stiffness in mice. *Experimental Biology* (Chicago, IL: April 2017).
- 17) **Winn NC**, Grunewald ZI, Gastecki ML, Woodford ML, Welly RJ, Clookey SL, Gaines TL, Karasseva NG, Kanaley JK, Sacks SS, Vieira-Potter VJ, Padilla J. Loss of UCP1 improves aortic vasomotor function in female but not male mice despite similar susceptibility to metabolic dysfunction. *Experimental Biology* (Chicago, IL: April 2017).
- 18) Clookey SL, Welly RJ, Zidon TM, Gastecki ML, Grunewald ZI, **Winn NC**, Karasseva NG, Sacks HS, Padilla J, Vieira-Potter, VJ. UCP1-null mice display increased susceptibility to ovariectomy-associated metabolic dysfunction. *Experimental Biology* (Chicago, IL: April 2017).
- 19) McCabe LT, Zidon TM, Welly RJ, Porter JW, **Winn NC**, Stricklin OE, Gastecki ML, Lubahn DB, Padilla J, Vieira-Potter VJ. Role of Estrogen Receptor Alpha in Protective Effects of Soy in Adipose Tissue Following Ovariectomy. (Chicago, IL: April 2017).
- 20) Porter J, Rowles JL, Fletcher JA, Zidon TM, **Winn NC**, McCabe L, Park YM, Perfield JW, Thyfault JP, Rector RS, Vieira-Potter VJ. Exercise Normalizes Dysfunctional Adipose Tissue Phenotype in FGF21-Null Mice. *ACSM Annual Conference* (Denver, CO: June 2017).
- 21) **Winn NC**, Pettit-Mee R, Walsh LK, Restaino RM, Ready ST, Padilla J, Kanaley JA. Weight maintenance diets prevent short-term physical inactivity-induced glycemic dysregulation in young healthy subjects. *Experimental Biology* (San Diego, CA: April 2018).
- 22) Jurrissen TJ, Grunewald ZI, Ball JR, Ramirez-Perez FI, Woodford ML, Aroor AR, Ayedun LA, **Winn NC**, Paradis P, Schiffrin EL, Martinez-Lemus LA, Padilla J. Regular exercise reduces adipose tissue inflammation and improves glycemic control in Western diet-fed mice despite hyperendothelinemia. *Experimental Biology* (San Diego, CA: April 2018).

- 23) Syed-Abdul MM, Le N, Jacome-Sosa M, Hu Q, **Winn NC**, Oxler B, Bingham K, Arreola R, Al Jaboori A, Gaballah AH, Barthlow BD, Parks EJ. Tailgate Study: A Pilot Study Measuring the Impact of Food and Alcohol Intake on Whole-body and Liver Metabolism. *Experimental Biology* (San Diego, CA: April 2018).
- 24) **Winn NC**, Acin-Perez R, Woodford ML, Hansen SA, Haney M, Ayedun L, Rector RS, Vieira-Potter VJ, Shirihai OS, Sacks HS, Kanaley JA, Padilla J. A thermogenic-like brown adipose tissue phenotype is dispensable for enhanced glucose tolerance in female mice. *Experimental Biology* (Orlando, FL: April 2019).
- 25) **Winn NC**, Cottam MA, Pinette J, Hasty AH. Myeloid-targeted depletion of ferroportin disrupts glucose homeostasis in mice. *Southeastern Immunology Symposium* (Atlanta, GA: May 2019).

PROFESSIONAL AFFILIATIONS

2009-2010	National Strength and Conditioning Association (NSCA)
2016-2017	American Heart Association/American Stroke Association (AHA/ASA)
2010-2018	American College of Sports Medicine (ACSM)
2015-2018	American Society for Nutrition (ASN)
2015-Present	American Physiologic Society (APS)
2019-Present	The Obesity Society

PROFESSIONAL SERVICE

I. Letter to the Editor

Winn NC, Kanaley JA. Comment in “High Serum Irisin Level as an Independent Predictor of Diabetes Mellitus: A Longitudinal Population-Based Study”. *Medicine*, 2016

II. Ad Hoc Reviewer

- *Medicine and Science in Sports and Exercise* – (2018-present)
- *Applied Physiology, Nutrition, and Metabolism* – (2018-present)
- *Obesity* – (2018-present)
- *Frontiers in Physiology* – (2019-present)
- *Journal of applied Physiology* – (2020-present)

Co-reviewer under Alyssa Hasty, PhD; Jill Kanaley, PhD; or Jaume Padilla, PhD

- *Hormone and Metabolic Research*
- *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*
- *Physiological Reports*
- *Experimental Physiology*
- *Nutrition*
- *Adipocyte*
- *Diabetologia*
- *Journal of Physiology*
- *Diabetes*
- *Cell Reports*
- *Nature Metabolism*

LECTURES AND INVITED TALKS

“Principles of flexibility training for human health”

Introduction to Exercise and Fitness; Instructor: Steve Ball, PhD; University of Missouri- Columbia, October 2012 to 2014

“The role of thyroid hormones in regulating exercise training adaptations”

Exercise Endocrinology; Instructor: Jill Kanaley, PhD; University of Missouri-Columbia, May 2015

“The role of high-intensity exercise training in ameliorating fatty liver”

Department of Nutrition and Exercise Physiology Seminar Series, University of Missouri- Columbia, September 21, 2017

“The brown adipose tissue phenotype: A role in cardiometabolic health”

Department of Pharmacology, University of Iowa, March 7, 2018

“The brown adipose tissue phenotype: A role in cardiometabolic health”

Department of Molecular Physiology and Biophysics, Vanderbilt University, March 30, 2018

UNIVERSITY SERVICE

2010	The National Society of Leadership and Success, Georgia Southwestern State University, Americus, GA
2010-2011	Gamma Beta Phi Honor Society, Georgia Southwestern State University, Americus, GA
2011	The L3 Summit Leaving a Legacy of Leadership, University of North Georgia, Dahlonega, GA
2012-2015	Health Sciences Graduate Student Association, University of Missouri, Columbia, MO
2015-2016	Graduate Profession Council representative for Exercise Physiology, University of Missouri, Columbia, MO
2015-2017	Diabetes Journal Club Coordinator, Department of Nutrition and Exercise Physiology, University of Columbia, MO
2019	Vanderbilt Summer Science Academy Research Symposium

ADDITIONAL TRAINING

2019	Glucose Clamping the Conscious Mouse: A Laboratory Course, Vanderbilt University
2019	12th Annual Course Isotope Tracers in Metabolic Research, Vanderbilt University
2019	Bystander Intervention Training (Teaching objectives: building and maintaining a respectful and safe work environment), Vanderbilt University

MENTORING

Rotating Graduate Students (since 2019)

Julia Pinette – Interdisciplinary Graduate Program

- Project: Role of iron in regulating macrophage polarization

Elysa Wolf – Interdisciplinary Graduate Program

- Project: Role of iron in regulating macrophage mitochondrial respiration

Undergraduate Mentees (since 2016)

T’Keaya Gaines – supported by National Institutes of Health (NIH) Initiative for Maximizing Student Diversity (IMSD) EXPRESS Fellows Program R25GM056901

- T’Keaya presented research at the Annual Biomedical Research Conference for Minority Students (ABRCMS), University of Missouri-Columbia (2016). Title: Loss of the UCP1 gene disrupts glucose metabolism in female mice.

Gabriela Lin – Intern (Summer 2016)

- Gaby presented research at the ABRCMS, Tampa, FL (2016). Title: Loss of estrogen receptor alpha causes metabolic and endothelial dysfunction in male mice.

James Ball – supported by NIH IMSD EXPRESS Fellows Program R25GM056901

- James received an Outstanding Poster Presentation Award at the ABRCMS, Indianapolis, IN (2018). Title: The regulatory effects of diet and exercise on glucose metabolism and vascular insulin signaling in obese mice.

Lolade Ayedun – supported by NIH IMSD EXPRESS Fellows Program R25GM056901.

Caroline Hegemann (2019) – Medical Health and Society

LAY CONTRIBUTIONS

- Prevention Magazine (2015)

PREVIOUS WORK EXPERIENCE

2008-2010 Assistant Strength and Conditioning Coach, Southland Academy High School, Americus, GA
2010-2011 Exercise Physiology Laboratory Assistant, Georgia Southwestern State University, Americus, Georgia
2011-2012 Southwest Georgia Clinic: *Physical Medicine Clinic*, Americus, GA
2013-2014 Boone Hospital Center: *Cardiac Rehabilitation Fellowship*, Columbia, MO

VOLUNTEER EXPERIENCE

2007 Bell Ringer for Salvation Army (Lagrange, GA)
2007 Animal Rescue Shelter (Lagrange, GA)
2007 Red Cross Natural Disaster Clean-Up (Americus, GA)
2008 Habitat for Humanity (Americus, GA)
2009 Georgia Southwestern Community Health Fair Volunteer (Americus, GA)
2011 Tyson Foods Corporate Health/Fitness Fair (Americus, GA)
2014 Diabetes Fair (Boone Hospital Center, Columbia, MO)
2014 Heart Fair (Boone Hospital Center, Columbia, MO)
2016 Livestock Symposium (Kirksville, MO)

Last Update – February, 2020