## KRISTEN M. BEAVERS Curriculum Vitae

**ADDRESS:** Department Health and Exercise Science

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**CURRENT ACADEMIC TITLE**: Associate Professor

## EDUCATION/POSTDOCTORAL TRAINING

**Bachelor of Science** – August 2001-May 2004

Cornell University

College of Human Ecology

Ithaca, New York

Major: Human Biology, Health, and Society

## Master of Public Health – August 2004-August 2006

University of North Carolina at Chapel Hill

School of Public Health Chapel Hill, North Carolina

Major: Nutrition

## **Doctorate of Philosophy** – August 2006-August 2009

**Baylor University** 

Department of Health, Human Performance, and Recreation

Waco, Texas

Major: Exercise, Nutrition, and Preventive Health

Minor: Statistics

Dissertation: Effects of Four Weeks of Daily Soy Milk or Dairy Milk Ingestion on

the Exercise-Induced Inflammatory and Oxidative Responses in Serum and

Skeletal Muscle in a Post-Menopausal Female Population.

## Postdoctoral Research Fellow – August 2009-June 2012

Wake Forest School of Medicine (WFSM)

Gerontology and Geriatric Medicine

Winston-Salem, NC; Advisor: Dr. Barbara J. Nicklas

#### PROFESSIONAL INTERESTS

My academic and professional interests lie in the study of nutrition and exercise as interdisciplinary sciences, specifically as they relate to the prevention and etiology of chronic disease and disability in older adults.

#### SPECIALTY CERTIFICATION

- 1. Registered Dietitian Academy of Nutrition and Dietetics, 2006-Present
- 2. Certified Personal Trainer American College of Sports Medicine, 2005-Present
- 3. Certificate of Training in in Obesity Interventions for Adults CDR, 2019

## PAST EMPLOYMENT

- 1. Instructor. Section on Gerontology and Geriatric Medicine, Department of Internal Medicine, Wake Forest School of Medicine, Winston-Salem, NC. 7/1//2013-6/30/2014.
- 2. Visiting Assistant Professor. Department of Health and Exercise Science, Wake Forest University, Winston-Salem, NC 7/1/2012-6/30/2013.
- 3. Assistant Professor. Department of Health and Exercise Science, Wake Forest University, Winston-Salem, NC 7/1/2014-6/30/2020.

## PROFESSIONAL APPOINTMENTS AND ACTIVITIES

- 1. Member of the WFU Translational Science Center, 2012-Present.
- 2. Member of the WFSM Aging Center, 2013-Present.
- 3. WFU Graduate Faculty status, 2014-Present.
- 4. Adjunct member of the WFSM Department of Internal Medicine, 2014-Present.
- 5. Section Editor, Current Nutrition Reports, 2014-2015.
- 6. Health Policy and Administration minor faculty member, 2015-Present.
- 7. Member of the WFSM Center for Diabetes, Obesity, and Metabolism, 2015-Present.
- 8. Member of the WFSM Office of Women in Medicine and Science, 2016-Present.
- 9. WFSM OAIC Executive Committee Leadership Intern, 2019-2022.
- 10. Journal of Bone and Mineral Research Plus Editorial Board Member, 2019-Present.
- 11. WFSM OAIC Clinical Research Core Co-Leader, 2022-Present.

## PROFESSIONAL AFFILIATIONS

- 1. American Society of Bone and Mineral Research. 2016-Present.
- 2. International Society of Clinical Densitometry Member, 2017-Present.
- 3. The Obesity Society. 2017-Present.
- 4. Gerontological Society of America. 2017-Present.

#### HONORS AND AWARDS

- 1. Baylor University Travel Award Recipient, 2007-2008.
- 2. Baylor University Outstanding Graduate Student Teaching Award Recipient, 2008.
- 3. WFSM Postdoctoral Scholar Development Award Recipient, 2010.
- 4. NIH Loan Repayment Award Recipient, 2010-2012.
- 5. WFU OAIC Research Career Development Core Scholar, 2014-2015.
- 6. WFSM Translational Science Institute Research Scholar: Cohort 4, 2014-2015.
- 7. WFSM Early Career Development Program for Women Participant, 2014-2015.

- 8. WFU CRADLE V Participant, 2015-Present.
- 9. 5<sup>th</sup> Annual Obesity Journal Symposium Winning Paper. 2017
- 10. WFU Graduate Student Association Faculty Excellence Award Recipient, 2018.
- 11. AGS/NIA U13 Osteoporosis and Soft Tissue Disorders Rising Star, 2019.
- 12. WFSM Career Development Program for Women Leaders Graduate, 2019-2020.
- 13. WFSM Mentor Academy Graduate, 2019-2020.
- 14. WFU Award for Excellence in Research, 2020.
- 15. WFU Reynolds Leave Recipient, 2022-2023.

## RESEARCH

## **GRANTS**

#### Active

1. R01 AG074979-01A1 (MPIs: K. Beavers/D. Beavers) NIH/NIA

09/01/22-08/31/27

Exercise and Bisphosphonate Use to Minimize Weight Loss Associated Bone Loss among Older Adults

The objective of this proposed 2x2 factorial randomized controlled trial is to compare the independent and combined effects of resistance training (RT) plus bone-loading exercises and bisphosphonate use on dietary weight loss-associated bone loss among 308 older (60+ years) adults living with overweight/obesity who also have low bone mineral density (BMD) over a 12 month period.

# 2. U01 AR080969 (MPIs: Beavers/Ard)

05/20/22-04/30/27

NIH/NIAMS

Bisphosphonate Use to Mitigate Bone Loss Secondary to Bariatric Surgery
Mounting evidence implicates surgical weight loss as a cause of increased skeletal
fragility and fracture risk. This U01 is designed to test whether bisphosphonate therapy
can minimize bone and muscle loss associated with bariatric surgery. Definitive data has
the potential to shift current clinical practice while also offering insight into underlying
biologic mechanisms.

## 3. S10 OD030295-01A1 (PI: Weaver)

02/02/2022

NIH/ORIP

*XtremeCT II high-resolution peripheral quantitative computed tomography (HR-pQCT) scanner.* 

There is a successful and enthusiastic group of investigators at Wake Forest who have substantial need for a high-resolution peripheral computed tomography (HR-pQCT) scanner. Acquisition of HR- pQCT at WFSM will enable this group of investigators to expand their significant contributions to, and remain at the forefront of, research in the field of musculoskeletal health. Role: Major User and Advisory Board Member

4. R01 AR073297 (PI: Beavers)

09/15/19 - 04/30/24

Incorporating Nutrition, Vests, Education, and Strength Training in Bone Health (INVEST in Bone Health)

This R01 is designed to definitively test the hypothesis that weighted vest use during weight loss attenuates bone loss compared to weight loss alone, and similarly to weight loss plus resistance training (a bone-sparing strategy which is effective, but present barriers to large scale implementation) in older adults with obesity. If confirmed, the greater availability, ease of administration, and reduced cost associated with weighted vest use to offset weight loss associated bone loss, as compared to resistance training, holds significant public health potential as a translatable strategy to maximize the cardiometabolic benefits of weight loss, while minimizing negative implications for the musculoskeletal system.

5. R21 AG056900 (MPIs: D. Beavers/K. Beavers) 8/15/19-4/30/23 (2<sup>nd</sup> NCE) Variable adaptive response to weight loss in older adults (VARIA)

The main objective of this R21 grant application is to describe the extent and correlates of inter-individual variability in physical function response to weight loss in older adults with obesity, utilizing data collected as a part of 8 Wake Forest University Claude D. Pepper Older Americans Independence Center (P30 AG021332) supported randomized controlled trials of weight loss and representing 1590 participants. Results will directly enhance our understanding of factors that optimize functional response to weight loss in

6. P30 AG021332-20 (PI: Kritchevsky)

7/1/2018 - 6/30/2023

NIH/NIA

Wake Forest Claude D. Pepper OAIC

The major goals of this project are the developing, testing and dissemination of effective therapies for the treatment and prevention of physical disability in later life and training the next generation of leaders in clinical geriatrics research.

obese older adults, thereby informing the design of future R01 geriatric weight loss trials.

Role: Executive committee member; co-leader of clinical research core

## **Pending**

1. P30 AG021332-21 (PI: Kritchevsky) NIH/NIA

7/1/2023 - 6/30/2028

Wake Forest Claude D. Pepper OAIC

The major goals of this project are the developing, testing and dissemination of effective therapies for the treatment and prevention of physical disability in later life and training the next generation of leaders in clinical geriatrics research. Role: Executive committee member; co-leader of clinical research core

#### Prior

1. WFSM Internal Pilot Grant Award (MPIs: Miller/ Beavers) 7/1/2021-6/30/2022 OAIC/CDOM

Adding the D3Cr Muscle Mass Measure to the Innovative INVEST Randomized Trial of

Older Adults undergoing Weight Loss

The purpose of this proposed research is to add D3Cr muscle mass assessment to a subset of INVEST study participants (R01AG059186) to generate pilot data in support of related external applications.

2. WFSM Pilot Research Grant (Co-PIs: Beavers/Ard) 1/01/17-6/30/2020 Weight Loss with Risedronate for Bone Health (WE RISE)

The main objective of this pilot project is to determine the feasibility of recruiting, enrolling, treating, and following 24 older sleeve gastrectomy patients into a randomized controlled trial examining the efficacy of bisphosphonate use (versus placebo) in the prevention of surgical weight loss associated bone loss.

## 3. K01 AG047921 (PI: Beavers)

08/15/15-12/31/2019

Effect of exercise modality during weight loss on bone health in older adults

The main **research** objective of this Mentored Research Scientist Development Award
(MRSDA) is to generate data to inform future R-level awards, led by the candidate, identifying weight-loss strategies that minimize bone loss and subsequent fracture risk in overweight and obese older adults. The **training** objective is to provide the candidate with the skill to design and conduct behavior-based weight-loss interventions as well as in-depth knowledge on the effects of weight-loss strategies on bone density and quality in older adults, as the necessary continuation of her previous NRSA-supported postdoctoral work studying the effects of fat- and lean-mass loss on cardiometabolic risk and physical function in older adults.

4. REU Award No. 155970 (Co-PIs: Stitzel/Weaver)

05/01/16-04/30/19

National Science Foundation

REU Site: Imaging and Mechanics-based Projects on Accidental Cases of Trauma (IMPACT) Role: Co-I.

5. WFU 15-0053 (PI: Beavers)

07/01/15-06/30/18

Medifast® for Seniors Study

The primary goal of this study is to determine whether higher protein intake ( $\geq 1.0 \text{ g/kg/d}$ ) during weight loss in obese older adults improves physical function by favorably affecting body composition. In a six-month trial, 96 obese (BMI 30-40 kg/m²), older (65-79 years) men and women at risk for mobility disability are randomized to either: (1) high protein intake ( $\geq 1.0 \text{ g/kg/d}$ ) during weight loss or (2) weight-stable control.

- 6. WFU Pilot Research Grant (PI: Beavers) 01/01/15-12/31/15

  Effect of exercise modality during weight loss on bone health in older adults. This pilot grant enabled CT scan acquisition and analysis for the parent K01 award.
- 7. WFU Science Research Fund Pilot Grant (PI: Beavers) 01/01/13-06/30/13 Dose-response effects of global and regional fat-mass loss on inflammation in older adults.

- 8. Translational Science Center Pilot Grant (PI: Beavers). 07/01/14-12/31/15 Effect of exercise modality during weight loss on bone health in older adults. This pilot grant enabled CT scan acquisition and analysis for the parent K01 award.
- 9. R01 AG033087 NIH/NIA (PI: Kritchevsky) 09/30/09-08/31/14 *Intentional weight reduction and physical and cognitive function.* Role: Co-Investigator
- 10. WFSM OAIC Pilot Grant (PI: Beavers)

  Use of a soy-based meal-replacement weight-loss intervention to impact ectopic fat and associated cardio-metabolic risk in obese older adults: A feasibility study. Older Americans Independence Center support was leveraged with support committed by the WFSM Clinical Research Unit, Center for Integrative Medicine, Translational Science Institute, Translational Science Center, and Jason Pharmaceuticals, Inc.
- 11. F32 AG039186 NIH/NIA (PI: Beavers) 01/01/11-06/30/12 The role of metabolic syndrome and inflammation on physical function in the elderly.
- 12. WFSM GCRC Pilot Grant (PI: Beavers) 01/01/10-06/01/10 The relationship between serum uric acid and physical function in older adults at-risk for disability: The LIFE-P study.
- 13. R01 AG027529 NIH/NIA (PI: Nicklas) 09/15/06-08/31/10 *Exercise training and inflammatory risk factors for disability*. Role: Postdoctoral Research Fellow.
- 14. R01 HL093713 NIH/NHLBI (PI: Nicklas) 07/01/09-12/31/10 Effect of fat loss on functional and cardiovascular benefits of aerobic exercise. Role: Postdoctoral Research Fellow.

#### **PUBLICATIONS**

## Journal Articles in Print (denotes \*undergraduate and \*\*graduate students)

- 1. **Beavers KM**, Beavers DP, Bowden RG, Wilson RL, Gentile M. Omega-3 fatty acid supplementation and total homocysteine levels in end-stage renal disease patients. Nephrology (Carlton). 2008 Jun;13(4):284-8. doi: 10.1111/j.1440-1797.2008.00934.x. Epub 2008 Mar 5. PubMed PMID: 18331436.
- 2. **Beavers KM**, Beavers DP, Serra MC, Bowden RG, Wilson RL. Low relative skeletal muscle mass indicative of sarcopenia is associated with elevations in serum uric acid levels: findings from NHANES III. J Nutr Health Aging. 2009 Mar;13(3):177-82. PubMed PMID: 19262948.
- 3. **Beavers KM**, Jonnalagadda SS, Messina MJ. Soy consumption, adhesion molecules, and pro-inflammatory cytokines: a brief review of the literature. Nutr Rev. 2009

- Apr;67(4):213-21. doi: 10.1111/j.1753-4887.2009.00191.x. Review. PubMed PMID: 19335715.
- 4. **Beavers KM**, Serra MC, Beavers DP, Cooke MB, Willoughby DS. Soymilk supplementation does not alter plasma markers of inflammation and oxidative stress in postmenopausal women. Nutr Res. 2009 Sep;29(9):616-22. doi: 10.1016/j.nutres.2009.09.002. PubMed PMID: 19854376.
- 5. **Beavers KM**, Beavers DP, Bowden RG, Wilson RL, Gentile M. Effect of over-the-counter fish-oil administration on plasma Lp(a) levels in an end-stage renal disease population. J Ren Nutr. 2009 Nov;19(6):443-9. doi: 10.1053/j.jrn.2009.06.005. Epub 2009 Sep 12. PubMed PMID: 19748798.
- 6. **Beavers KM**, Serra MC, Beavers DP, Hudson GM, Willoughby DS. The lipid-lowering effects of 4 weeks of daily soymilk or dairy milk ingestion in a postmenopausal female population. J Med Food. 2010 Jun;13(3):650-6. doi: 10.1089/jmf.2009.0171. PubMed PMID: 20521988.
- Beavers KM, Serra MC, Beavers DP, Cooke MB, Willoughby DS. Soy and the exercise-induced inflammatory response in postmenopausal women. Appl Physiol Nutr Metab. 2010 Jun;35(3):261-9. doi: 10.1139/H10-015. PubMed PMID: 20555369.
- Beavers KM, Brinkley TE, Nicklas BJ. Effect of exercise training on chronic inflammation. Clin Chim Acta. 2010 Jun 3;411(11-12):785-93. doi: 10.1016/j.cca.2010.02.069. Epub 2010 Feb 25. Review. PubMed PMID: 20188719; PubMed Central PMCID: PMC3629815.
- 9. **Beavers** KM, Hsu FC, Isom S, Kritchevsky SB, Church T, Goodpaster B, Pahor M, Nicklas BJ. Long-term physical activity and inflammatory biomarkers in older adults. Med Sci Sports Exerc. 2010 Dec;42(12):2189-96. doi: 10.1249/MSS.0b013e3181e3ac80. PubMed PMID: 20421832; PubMed Central PMCID: PMC2964389.
- 10. **Beavers KM**, Nicklas BJ. Effects of lifestyle interventions on inflammatory markers in the metabolic syndrome. Front Biosci (Schol Ed). 2011 Jan 1;3:168-77. Review. PubMed PMID: 21196367; PubMed Central PMCID: PMC3665333.
- 11. Kreider RB, Serra M, **Beavers KM**, Moreillon J, Kresta JY, Byrd M, Oliver JM, Gutierrez J, Hudson G, Deike E, Shelmadine B, Leeke P, Rasmussen C, Greenwood M, Cooke MB, Kerksick C, Campbell JK, Beiseigel J, Jonnalagadda SS. A structured diet and exercise program promotes favorable changes in weight loss, body composition, and weight maintenance. J Am Diet Assoc. 2011 Jun;111(6):828-43. doi: 10.1016/j.jada.2011.03.013. PubMed PMID: 21616195.
- 12. **Beavers KM**, Lyles MF, Davis CC, Wang X, Beavers DP, Nicklas BJ. Is lost lean mass from intentional weight loss recovered during weight regain in postmenopausal women?. Am J Clin Nutr. 2011 Sep;94(3):767-74. doi: 10.3945/ajcn.110.004895. Epub 2011 Jul 27. PubMed PMID: 21795437; PubMed Central PMCID: PMC3155932.
- 13. Beavers DP, **Beavers KM**, Miller M, Stamey J, Messina MJ. Exposure to isoflavone-containing soy products and endothelial function: a Bayesian meta-analysis of randomized controlled trials. Nutr Metab Cardiovasc Dis. 2012 Mar;22(3):182-91. doi: 10.1016/j.numecd.2010.05.007. Epub 2010 Aug 14. Review. PubMed PMID: 20709515.

- 14. Serra MC, **Beavers** KM, Beavers DP, Willoughby DS. Effects of 28 days of dairy or soy ingestion on skeletal markers of inflammation and proteolysis in post-menopausal women. Nutr Health. 2012 Apr;21(2):117-30. doi: 10.1177/0260106012467243. PubMed PMID: 23275453.
- 15. Brinkley TE, Hsu FC, **Beavers KM**, Church TS, Goodpaster BH, Stafford RS, Pahor M, Kritchevsky SB, Nicklas BJ. Total and abdominal adiposity are associated with inflammation in older adults using a factor analysis approach. J Gerontol A Biol Sci Med Sci. 2012 Oct;67(10):1099-106. doi: 10.1093/gerona/gls077. Epub 2012 Mar 26. PubMed PMID: 22451470; PubMed Central PMCID: PMC3437966.
- 16. **Beavers KM**, Miller ME, Rejeski WJ, Nicklas BJ, Kritchevsky SB. Fat mass loss predicts gain in physical function with intentional weight loss in older adults. J Gerontol A Biol Sci Med Sci. 2013 Jan;68(1):80-6. doi: 10.1093/gerona/gls092. Epub 2012 Apr 13. PubMed PMID: 22503993; PubMed Central PMCID: PMC3598365.
- 17. Beavers KM, Beavers DP, Houston DK, Harris TB, Hue TF, Koster A, Newman AB, Simonsick EM, Studenski SA, Nicklas BJ, Kritchevsky SB. Associations between body composition and gait-speed decline: results from the Health, Aging, and Body Composition study. Am J Clin Nutr. 2013 Mar;97(3):552-60. doi: 10.3945/ajcn.112.047860. Epub 2013 Jan 30. PubMed PMID: 23364001; PubMed Central PMCID: PMC3578402.
- 18. Beavers KM, Hsu FC, Houston DK, Beavers DP, Harris TB, Hue TF, Kim LJ, Koster A, Penninx BW, Simonsick EM, Strotmeyer ES, Kritchevsky SB, Nicklas BJ. The role of metabolic syndrome, adiposity, and inflammation in physical performance in the Health ABC Study. J Gerontol A Biol Sci Med Sci. 2013 May;68(5):617-23. doi: 10.1093/gerona/gls213. Epub 2012 Oct 29. PubMed PMID: 23109678; PubMed Central PMCID: PMC3623483.
- 19. Beavers DP, **Beavers KM**, Lyles MF, Nicklas BJ. Cardiometabolic risk after weight loss and subsequent weight regain in overweight and obese postmenopausal women. J Gerontol A Biol Sci Med Sci. 2013 Jun;68(6):691-8. doi: 10.1093/gerona/gls236. Epub 2012 Nov 26. PubMed PMID: 23183902; PubMed Central PMCID: PMC3660120.
- 20. **Beavers KM**, Ambrosius WT, Nicklas BJ, Rejeski WJ. Independent and combined effects of physical activity and weight loss on inflammatory biomarkers in overweight and obese older adults. J Am Geriatr Soc. 2013 Jul;61(7):1089-94. doi: 10.1111/jgs.12321. Epub 2013 Jun 17. PubMed PMID: 23772804; PubMed Central PMCID: PMC3714323.
- 21. **Beavers KM**, Hsu FC, Serra MC, Yank V, Pahor M, Nicklas BJ. The effects of a long-term physical activity intervention on serum uric acid in older adults at risk for physical disability. J Aging Phys Act. 2014 Jan;22(1):25-33. doi: 10.1123/japa.2012-0018. Epub 2013 Jan 4. PubMed PMID: 23295313; PubMed Central PMCID: PMC4120269.
- 22. McAuley PA, **Beavers KM**. Contribution of cardiorespiratory fitness to the obesity paradox. Prog Cardiovasc Dis. 2014 Jan-Feb;56(4):434-40. doi: 10.1016/j.pcad.2013.09.006. Epub 2013 Oct 11. Review. PubMed PMID: 24438735.

- 23. **Beavers KM**, Beavers DP, Nesbit BA, Ambrosius WT, Marsh AP, Nicklas BJ, Rejeski WJ. Effect of an 18-month physical activity and weight loss intervention on body composition in overweight and obese older adults. Obesity (Silver Spring). 2014 Feb;22(2):325-31. doi: 10.1002/oby.20607. Epub 2013 Sep 20. PubMed PMID: 23963786; PubMed Central PMCID: PMC3880399.
- 24. Beavers DP, **Beavers KM**, Loeser RF, Walton NR, Lyles MF, Nicklas BJ, Shapses SA, Newman JJ, Messier SP. The independent and combined effects of intensive weight loss and exercise training on bone mineral density in overweight and obese older adults with osteoarthritis. Osteoarthritis Cartilage. 2014 Jun;22(6):726-33. doi: 10.1016/j.joca.2014.04.002. Epub 2014 Apr 15. PubMed PMID: 24742955; PubMed Central PMCID: PMC4051847.
- 25. Nicklas BJ, Gaukstern JE, **Beavers KM**, Newman JC, Leng X, Rejeski WJ. Selfmonitoring of spontaneous physical activity and sedentary behavior to prevent weight regain in older adults. Obesity (Silver Spring). 2014 Jun;22(6):1406-12. doi: 10.1002/oby.20732. Epub 2014 Mar 17. PubMed PMID: 24585701; PubMed Central PMCID: PMC4037357.
- 26. Weaver AA, **Beavers KM**, Hightower RC, Lynch SK, Miller AN, Stitzel JD. Lumbar bone mineral density phantomless computed tomography measurements and correlation with age and fracture incidence. Traffic Inj Prev. 2015;16 Suppl 2:S153-60. doi: 10.1080/15389588.2015.1054029. PubMed PMID: 26436225; PubMed Central PMCID: PMC4602406.
- 27. **Beavers KM**, Gordon MM, Easter L, Beavers DP, Hairston KG, Nicklas BJ, Vitolins MZ. Effect of protein source during weight loss on body composition, cardiometabolic risk and physical performance in abdominally obese, older adults: a pilot feeding study. J Nutr Health Aging. 2015 Jan;19(1):87-95. doi: 10.1007/s12603-015-0438-7. PubMed PMID: 25560821; PubMed Central PMCID: PMC4818969.
- 28. **Beavers KM**, Beavers DP, Newman JJ, Anderson AM, Loeser RF Jr, Nicklas BJ, Lyles MF, Miller GD, Mihalko SL, Messier SP. Effects of total and regional fat loss on plasma CRP and IL-6 in overweight and obese, older adults with knee osteoarthritis. Osteoarthritis Cartilage. 2015 Feb;23(2):249-56. doi: 10.1016/j.joca.2014.11.005. Epub 2014 Nov 13. PubMed PMID: 25450847; PubMed Central PMCID: PMC4304884.
- 29. Kritchevsky SB, **Beavers KM**, Miller ME, Shea MK, Houston DK, Kitzman DW, Nicklas BJ. Intentional weight loss and all-cause mortality: a meta-analysis of randomized clinical trials. PLoS One. 2015;10(3):e0121993. doi: 10.1371/journal.pone.0121993. eCollection 2015. PubMed PMID: 25794148; PubMed Central PMCID: PMC4368053.
- 30. **Beavers KM**, Case LD, Blackwell CS, Katula JA, Goff DC Jr, Vitolins MZ. Effects of weight regain following intentional weight loss on glucoregulatory function in overweight and obese adults with pre-diabetes. Obes Res Clin Pract. 2015 May-Jun;9(3):266-73. doi: 10.1016/j.orcp.2014.09.003. Epub 2014 Oct 5. PubMed PMID: 25293586; PubMed Central PMCID: PMC4385513.

- 31. Beavers KM, Neiberg RH, Houston DK, Bray GA, Hill JO, Jakicic JM, Johnson KC, Kritchevsky SB. Body weight dynamics following intentional weight loss and physical performance: The Look AHEAD Movement and Memory Study. Obes Sci Pract. 2015 Oct;1(1):12-22. doi: 10.1002/osp4.3. Epub 2015 Sep 14. PubMed PMID: 27453790; PubMed Central PMCID: PMC4950993.
- 32. Espeland MA, **Beavers KM**, Gibbs BB, Johnson KC, Hughes TM, Baker LD, Jakicic J, Korytkowski M, Miller M, Bray GA. Ankle-brachial index and inter-artery blood pressure differences as predictors of cognitive function in overweight and obese older adults with diabetes: results from the Action for Health in Diabetes movement and memory study. Int J Geriatr Psychiatry. 2015 Oct;30(10):999-1007. doi: 10.1002/gps.4253. Epub 2014 Dec 26. PubMed PMID: 25546032; PubMed Central PMCID: PMC4964588.
- 33. Crandall CJ, Hovey KM, Andrews CA, Cauley JA, Manson JE, Wactawski-Wende J, Wright NC, Li W, **Beavers K**, Curtis JR, LeBoff MS. Bone Mineral Density as a Predictor of Subsequent Wrist Fractures: Findings From the Women's Health Initiative Study. J Clin Endocrinol Metab. 2015 Nov;100(11):4315-24. doi: 10.1210/jc.2015-2568. Epub 2015 Sep 14. PMID: 26367200; PMCID: PMC4702460.
- 34. Chmelo EA, Beavers DP, Lyles MF, Marsh AP, Nicklas BJ, **Beavers KM**. Legacy effects of short-term intentional weight loss on total body and thigh composition in overweight and obese older adults. Nutr Diabetes. 2016 Apr 4;6:e203. doi: 10.1038/nutd.2016.8. PubMed PMID: 27043417; PubMed Central PMCID: PMC4855260.
- 35. Ard JD, Cook M, Rushing J, Frain A, **Beavers K**, Miller G, Miller ME, Nicklas B. Impact on weight and physical function of intensive medical weight loss in older adults with stage II and III obesity. Obesity (Silver Spring). 2016 Sep;24(9):1861-6. doi: 10.1002/oby.21569. Epub 2016 Jul 19. PMID: 27430587; PMCID: PMC5536247.
- 36. **Beavers KM**, Leng I, Rapp SR, Miller ME, Houston DK, Marsh AP, Hire DG, Baker LD, Bray GA, Blackburn GL, Hergenroeder AL, Jakicic JM, Johnson KC, Korytkowski MT, Dorsten BV, Kritchevsky SB. Effects of longitudinal glucose exposure on cognitive and physical function: results from the Action for Health in Diabetes Movement and Memory Study. J Am Geriatr Soc. 2017 Jan;65(1):137-145. doi: 10.1111/jgs.14478. Epub 2016 Sep 27. PubMed PMID: 27676466; PubMed Central PMCID: PMC5258836.
- 37. Welti LM\*\*, Beavers DP, Caan BJ, Sangi-Haghpeykar H, Vitolins MZ, **Beavers KM**. Weight fluctuation and cancer risk in postmenopausal women: The Women's Health Initiative. Cancer Epidemiol Biomarkers Prev. 2017 May;26(5):779-786. doi: 10.1158/1055-9965.EPI-16-0611. Epub 2017 Jan 9. PubMed PMID: 28069684; PubMed Central PMCID: PMC5413381.
- 38. Harris R, Chang Y, **Beavers K**, Laddu-Patel D, Bea J, Johnson K, LeBoff M, Womack C, Wallace R, Li W, Crandall C, Cauley J. Risk of Fracture in Women with Sarcopenia, Low Bone Mass, or Both. J Am Geriatr Soc. 2017 Dec;65(12):2673-2678. doi: 10.1111/jgs.15050. Epub 2017 Sep 27. PMID: 28960230; PMCID: PMC5729083.

- 39. Boutin RD, Bamrungchart S, Bateni CP, Beavers DP, **Beavers KM**, Meehan JP, Lenchik L. CT of patients with hip fracture: muscle size and attenuation help predict mortality. AJR Am J Roentgenol. 2017 Jun;208(6):W208-W215. doi: 10.2214/AJR.16.17226. Epub 2017 Mar 7. PubMed PMID: 28267356; PubMed Central PMCID: PMC5898447.
- 40. Xu Z, Feng X, Dong J, Wang ZM, Lee J, Furdui C, Files DC, **Beavers KM**, Kritchevsky S, Milligan C, Jin JP, Delbono O, Zhang T. Cardiac troponin T and fast skeletal muscle denervation in ageing. J Cachexia Sarcopenia Muscle. 2017 Oct;8(5):808-823. doi: 10.1002/jcsm.12204. Epub 2017 Apr 16. PubMed PMID: 28419739; PubMed Central PMCID: PMC5659053.
- 41. **Beavers KM**, Beavers DP, Martin SB\*, Marsh AP, Lyles MF, Lenchik L, Shapses SA, Nicklas BJ. Change in bone mineral density during weight loss with resistance versus aerobic exercise training in older adults. J Gerontol A Biol Sci Med Sci. 2017 Oct 12;72(11):1582-1585. doi: 10.1093/gerona/glx048. PubMed PMID: 28379325; PubMed Central PMCID: PMC5861903.
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# Journal Articles in Press/Preparation (denotes \*undergraduate and \*\*graduate students)

- 1. Hsieh KL, Neiberg RH, **Beavers KM**, Beavers DP. Effect of Baseline BMI and IL-6 Subgroup Membership on Gait Speed Response to Caloric Restriction. Accepted at the Journal of Nutrition, Health, and Aging.
- 2. Stapleton JR\*\*, Ard JD, Beavers DP, Cogdill LS, Fernandez AZ, Howard MJ, Justice JN, Lynch SD, Newman JJ, Todoroff CM, Weaver AA, and **Beavers KM**. Strategies to

- Reduce the Onset of Sleeve Gastrectomy Associated Bone Loss (STRONG BONES): Trial Design and Methods. Submitted to Contemporary Clinical Trials Communications.
- 3. **Beavers KM**, Avery AE\*\*, Shankaran Makalakshmi, Evans WJ, Lynch SD\*\*, Dwyer C\*, Howard M, Beavers DP, Weaver AA, and Cawthon PM. Application of the D<sub>3</sub>Cr Muscle Mass Assessment Tool to a Geriatric Weight Loss Trial. In preparation.

## **Book Chapters**

- 1. **Beavers K**, Serra M. Micronutrients in sport. In Greenwood M, Kalman D, Antonio J. (2009). Nutritional Supplements in Sports & Exercise. Humana Press, Totowa, NJ. pp. 121-165.
- 2. Serra MC, **Beavers KM**. Essential and nonessential micronutrients and sport. In Greenwood M, Cooke M, Ziegenfuss T, Kalman D, Antonio J. (2015). Nutritional Supplements in Sports and Exercise. Springer International Publishing. pp 77-103.
- 3. **Beavers KM**, Serra MC, Weaver AA, Houston, DK. Bone, Muscle, and Sarcopenia. In Dempster, Cauley, Bouxsein, and Cosman (2020). Marcus and Feldman's Osteoporosis 5<sup>th</sup> Edition. Academic Press, pp. 847-873.

## **Abstract Presentations at National Meetings**

- 1. **Beavers KM,** Serra MC, Beavers DP, Kreider RB. Analysis of the ability to comply with high carbohydrate and high protein diet prescription. Sports, Cardiovascular, and Wellness Nutrition Symposium Austin, TX. 4/2007.
- 2. **Beavers KM**, Serra MC, Marcello B, Kerksick CM, Rasmussen CJ, Beavers DP, Kreider RB. Body composition data on Division I athletes using dual energy x-ray absorptiometry: Body fat percentage. Sports, Cardiovascular, and Wellness Nutrition Symposium. Boston, MA. 4/2008.
- 3. **Beavers KM**, Chandran R, Jitomir J, Shelmadine B, Kerksick C, ... Kreider R. Relationship of uric acid to markers of metabolic syndrome (MS) and medical status. Experimental Biology. San Diego, CA. 4/2008.
- **4. Beavers KM**, Serra M, Moreillon J, Hudson G, Shelmadine B, ...Kreider R. Comparison of two 10-week diet and exercise programs for weight loss in women. Experimental Biology. New Orleans, LA. 4/2009.
- 5. **Beavers KM**, Hsu FC, Isom S, Kritchevsky SB, Church T, Goodpaster B, Pahor M, Nicklas BJ. Long-term physical activity and inflammatory biomarkers in older adults. American College of Sports Medicine annual meeting. 6/2010.
- 6. **Beavers KM**, Hsu FC, Houston DK, Beavers DP, Harris TB,... Kritchevsky SB, Nicklas BJ. The role of metabolic syndrome, adiposity, and inflammation in physical performance in the Health ABC study. American Diabetes Association 72<sup>nd</sup> scientific session. Philadelphia, PA. 6/2012.
- 7. **Beavers KM**, Beavers DP, Houston DK, Harris TB, Hue TF, ... Kritchevsky SB. Associations between body composition and gait speed decline: Results from the Health ABC study. Obesity Conference, San Antonio, TX. 9/2013.
- 8. **Beavers KM**, Beavers DP, Houston DK, Harris TB, Hue TF, ... Kritchevsky SB. Associations between body composition and gait speed decline: results from the Health

- ABC study. GSA 65<sup>th</sup> annual scientific meeting. San Diego, CA. 11/2013.
- 9. **Beavers KM**, Gordon MM, Beavers DP, Hairston KG, Nicklas BJ, Kritchevsky SB, Vitolins MZ. Relationship between change in body composition and physical function in abdominally obese older adults undergoing 12-weeks of caloric restriction. Poster ID#: A2. American Geriatrics Society annual scientific meeting. 5/15/14.
- 10. Beavers KM, EA Chmelo, Beavers DP, Shapses SA, Marsh AP, Kritchevsky SB, Nicklas BJ. Weight loss added to resistance training does not attenuate positive effects on BMD in older adults: The I'M FIT study. GSA 66<sup>th</sup> annual scientific meeting. Washington, DC. 11/2014.
- 11. **Beavers KM**, Beavers DP, Martin SB, Marsh AP, Lyles MF, Lenchik L, Nicklas BJ. Effect of exercise modality during weight loss on bone mineral density in overweight and obese, older adults. ASBMR 2015 annual meeting, Seattle WA. 10/10/2015.
- 12. **Beavers KM**, Neiberg RH, Johnson KC, Casanova R, Schwartz AV, Crandall CJ, Lewis CE, Pi-Sunyer X, and Kritchevsky SB. Impact of body weight dynamics following intentional weight loss on fracture risk: results from the Action for Health in Diabetes Study. ASBMR 2016 Annual Meeting, Atlanta, GA. 9/18/16.
- 13. **Beavers KM**, Walkup MP, Ambrosius WT, Kritchevsky SB, Lenchik L, Shapses SA, Nicklas BJ, Marsh AP and Rejeski WJ. Effect of Exercise Modality during Weight Loss on Hip and Spine Bone Mineral Density in Older Adults with Obesity. ASBMR 2017 Annual Meeting, Denver, CO. 9/8/17.
- 14. **Beavers KM**, Beavers DP, Coleman C, Colins AE, Ford S, Henderson RM, Kiel J, Kritchevsky SB, Nesbit BA, Nicklas BJ, Sheedy JL, and Arterburn LM. Effect of High Protein Diet on Body Mass, Composition, and Mobility in Older Adults with Obesity. The Obesity Society Annual Meeting. Oxon Hill, MD. 11/1/2017.
- 15. **Beavers KM**, Walkup MP, Ambrosius WT, Lenchik L, Shapses SA, Nicklas BJ, Marsh AP, and Rejeski WJ. Hip Bone Loss Persists One Year Following an Intentional Weight Loss Intervention in Older Adults. American Society for Bone and Mineral Research Annual Meeting, Montreal, Quebec, CA. 10/1/2018.
- 16. **Beavers KM**, Waltman NL, Kupzyk KA, Lappe JM, Flores LE, Fasth L, Bilek LD. The Effect of Bisphosphonate Use or Exercise on Bone Density and Structure in Older Women Experiencing Modest Weight Loss. Plenary Poster at the American Society for Bone and Mineral Research Annual Meeting, Orlando, FL. 9/20/2019-9/21/2019.
- 17. **Beavers KM**, Neiberg RH, Beavers DP, Dewey EJ, Kitzman DW, Messier SP, Rejeski WJ, Kritchevsky SB. Does physical function response to intentional weight loss in older adults vary by sex? Gerontological Society of America Annual Meeting. Austin, TX. 11/16/2019.
- 18. **Beavers KM**, Beavers DP, Fernandez AZ, Weaver AA, Ard JD. Feasibility of risedronate to prevent bone loss after sleeve gastrectomy: A pilot randomized controlled trial (P-622). Presented virtually at the 2020 American Society for Bone and Mineral Research Annual Meeting (9/11-15/2020).

## Miscellaneous - Letters, Editorials, Non-Refereed Publications

1. **Beavers, KM.** Endothelial dysfunction: Role of diet and exercise. Invited review, Sport Cardiovascular, and Wellness Nutritionist Newsletter: The PULSE. 2009; 28(2):4-8.

2. **Beavers K.**, Jitomir J., Serra M. Appendix B: Meal Exchange Table and Sample Diets. In: Kreider RB, Leutholtz BC, Katch FI, Katch VL. Exercise & Sport Nutrition: Principles, Promises, Science & Recommendations. Fitness Technologies Press, Santa Barbara, CA. 2009: 513.

## **Media Appearances**

- 1. Thigh fat slows walking speeds down for seniors. Huffington Post 2/20/2013. https://www.huffpost.com/entry/thigh-fat-slows-walking-speeds-seniors\_n\_2725820
- 2. Fluctuations after weight loss diminish physical performance in adults with diabetes. Endocrine Today. 09/29/2015. <a href="http://www.healio.com/endocrinology/obesity/news/online/%7B130504f7-76c7-4b6e-bcc0-690bf165fd5d%7D/fluctuations-after-weight-loss-diminish-physical-performance-in-adults-with-diabetes">http://www.healio.com/endocrinology/obesity/news/online/%7B130504f7-76c7-4b6e-bcc0-690bf165fd5d%7D/fluctuations-after-weight-loss-diminish-physical-performance-in-adults-with-diabetes</a>
- 3. Resistance training seems to preserve BMD in seniors. Medpage Today. 10/11/2015. <a href="http://www.medpagetoday.com/MeetingCoverage/ASBMR/54039">http://www.medpagetoday.com/MeetingCoverage/ASBMR/54039</a>
- 4. Weight regain, muscle loss follow resistance training, caloric restriction. Endocrine Today. 4/13/16. <a href="http://www.healio.com/endocrinology/obesity/news/in-the-journals/%7Bfba9e0f3-977f-418d-92de-46355cfbb81a%7D/weight-regain-muscle-loss-follow-resistance-training-calorie-restriction">http://www.healio.com/endocrinology/obesity/news/in-the-journals/%7Bfba9e0f3-977f-418d-92de-46355cfbb81a%7D/weight-regain-muscle-loss-follow-resistance-training-calorie-restriction</a>
- 5. How to lose weight in your 70s and beyond. U.S. News and World Report. 4/13/2017. <a href="https://health.usnews.com/wellness/aging-well/articles/2017-04-13/how-to-lose-weight-in-your-70s-and-beyond">https://health.usnews.com/wellness/aging-well/articles/2017-04-13/how-to-lose-weight-in-your-70s-and-beyond</a>
- 6. Chaffin B. (Narrator). (2017, November 6). Study Finds Strength Training Beats Aerobic Exercise for Older Adults Trying to Lose Weight [Radio broadcast episode]. In Health & Safety, Science. Winston-Salem, NC: WFDD affiliate of National Public Radio.
- 7. To maintain muscle and lose fat as you age, add weights. The New York Times. 11/15/2017. <a href="https://www.nytimes.com/2017/11/15/well/move/to-maintain-muscle-and-lose-fat-as-you-age-add-weights.html">https://www.nytimes.com/2017/11/15/well/move/to-maintain-muscle-and-lose-fat-as-you-age-add-weights.html</a>
- 8. Bone loss still likely in dieting seniors, despite strength gains. Wake Forest News 8/8/2018. <a href="https://news.wfu.edu/2018/08/08/bone-loss-still-likely-in-dieting-seniors-despite-strength-training/">https://news.wfu.edu/2018/08/08/bone-loss-still-likely-in-dieting-seniors-despite-strength-training/</a>
- 9. New study shows more protein and fewer calories help older people lose weight safely. Wake Forest News. 2/14/2019. <a href="https://news.wfu.edu/2019/02/14/new-study-shows-more-protein-and-fewer-calories-help-older-people-lose-weight-safely/">https://news.wfu.edu/2019/02/14/new-study-shows-more-protein-and-fewer-calories-help-older-people-lose-weight-safely/</a>
- 10. One-size-fits-all weight loss doesn't benefit all older adults. Wake Forest News. 8/23/2019. <a href="https://news.wfu.edu/2019/08/23/one-size-fits-all-weight-loss-doesnt-benefit-all-older-adults/">https://news.wfu.edu/2019/08/23/one-size-fits-all-weight-loss-doesnt-benefit-all-older-adults/</a>
- 11. BMD loss fails to recover after weight regain among older adults. Healio Endocrine Today. 9/10/19.

  <a href="https://www.healio.com/endocrinology/obesity/news/online/%7B915c795b-efcf-407a-b68e-b5cbc27b914e%7D/bmd-loss-fails-to-recover-after-weight-regain-among-older-adults">https://www.healio.com/endocrinology/obesity/news/online/%7B915c795b-efcf-407a-b68e-b5cbc27b914e%7D/bmd-loss-fails-to-recover-after-weight-regain-among-older-adults</a>
- 12. Can weighted vests help maintain bone health when older adults slim down? Wake Forest News. 1/23/2020. <a href="https://news.wfu.edu/2020/01/23/can-weighted-vests-help-maintain-">https://news.wfu.edu/2020/01/23/can-weighted-vests-help-maintain-</a>

- bone-health-when-older-adults-slim-down/
- 13. How to lose weight safely as we age. Ivanhoe Neswire. 7/31/20. https://www.news4jax.com/health/2020/07/31/how-to-lose-weight-safely-as-we-age/
- 14. Black and White women benefit for than men from weight loss late in life. UPI Health News. 8/21/2020. https://www.upi.com/Health\_News/2020/08/21/Black-and-White-women-benefit-more-than-men-from-weight-loss-late-in-life/4991598020676/
- 15. AGEWISE: Losing weight in a healthy way. Winston-Salem Journal. 11/8/2020. <a href="https://journalnow.com/news/local/agewise-losing-weight-in-a-healthy-way/article">https://journalnow.com/news/local/agewise-losing-weight-in-a-healthy-way/article</a> ce971116-20b0-11eb-852d-3b0ac25d8f19.html
- 16. High-Intensity Exercise, Not Pilates, Builds Bone in Older Women. Medscape Medical News. 10/15/2021. <a href="https://www.medscape.com/viewarticle/960972">https://www.medscape.com/viewarticle/960972</a>
- 17. How can strength training build healthier bodies as we age? NIA Research Highlights 6/30/2022. <a href="https://www.nia.nih.gov/news/how-can-strength-training-build-healthier-bodies-we-age">https://www.nia.nih.gov/news/how-can-strength-training-build-healthier-bodies-we-age</a>

## INVITED PRESENTATIONS AND SEMINARS

#### National

- 1. Weight management for menopause and beyond. Weight Management through a Woman's Life Cycle Symposium. Obesity Society annual scientific meeting. Atlanta, GA. 11/14/2013.
- 2. Exercise, weight loss, and effects on inflammation. American College of Sports Medicine Conference on Integrative Physiology of Exercise. Miami, FL. 9/20/2014.
- 3. Effect of Exercise Type During Intentional Weight Loss on Body Composition in Older Adults with Obesity. The Obesity Journal Symposium. The Obesity Society Annual Meeting. Oxon Hill, MD. 10/31/2017.

## Regional

- 1. Is lost lean mass from intentional weight loss recovered during weight regain in postmenopausal women? North Carolina Dietetic Association Conference, Winston-Salem, NC. 4/16/2011.
- 2. Associations between body composition and gait speed decline: Results from the Health ABC study. Annual Hazzard Symposium. Wake Forest University, Winston-Salem, NC, 10/2012.
- 3. Effects of protein source during weight loss on body composition and associated risk of cardiometabolic and physical dysfunction in obese older adults. Research seminar sponsored by Medifast® Scientific & Clinical Affairs, Owings Mills, MD. 10/25/2013.
- 4. Optimizing weight management for older adults. Winston-Salem State University, School of Education and Human Performance, Winston-Salem, NC. 2/25/2014.
- 5. Weight management for menopause and beyond. MacDonald Center for Obesity Prevention and Education. Villanova University, Philadelphia, PA. 8/13/2014.
- 6. Effects of total and regional fat loss on inflammatory burden in older, obese adults with osteoarthritis. North Carolina Cartilage & Arthritis Research Alliance meeting. East

- Carolina University, Greenville, NC. 10/3/2014.
- 7. Exercise, weight loss, and effects on inflammation. Twin City Dietetic Association Meeting, Winston-Salem, NC. 4/16/15.
- 8. Interventions to optimize intentional weight loss in obese, older adults. 2015 Hazzard Symposium. Wake Forest University, Winston-Salem NC. 9/25/2015.
- 9. The Good, the Bad, and the Ugly Truth about Weight Loss as we Age. WAKEWomen's Weekend, Winston-Salem, NC; 03/25/2017.
- Effect of Exercise Modality on Bone Loss during Weight Loss in Older Adults. The North Carolina Cartilage and Arthritis Research Alliance. Winston-Salem, NC. 10/27/2017.
- 11. Effect of Exercise Modality on Bone Loss during Weight Loss in Older Adults. Bone and Joint Seminar Series. The University of Nebraska Medical Center. Omaha, NE. 03/07/2018.
- 12. Effect of Exercise Modality on Bone Loss during Weight Loss in Older Adults. Department of Nutrition Seminar Series. Rutgers University. New Brunswick, NJ. 10/24/2018.
- 13. Intervening to Preserve Bone Health during Weight Loss in Older Adults with Obesity. Pennington Biomedical Research Center, Baton Rouge, LA. 5/16/2019.
- 14. Intervening to Preserve Bone Health during Weight Loss in Older Adults with Obesity. Grand Rounds, University of Miami, Miller School of Medicine, Miami FL. 9/18/2019.
- 15. Does Physical Function Response to Intentional Weight Loss in Older Adults Vary by Sex or Race/Ethnicity? 2019 William R. Hazzard Translational Research in Aging Symposium. Winston-Salem, NC, 9/27/2019.
- 16. Intervening to Preserve Bone Health during Weight Loss in Older Adults. Massachusetts General Hospital, Endocrine Unit Group Meeting, Boston, MA. 2/28/2020.
- 17. Intervening to Preserve Bone Health during Weight Loss in Older Adults with Obesity. Bone Think Take. University of Colorado Anschutz Medical Campus, Denver, CO, 3/2/2020.
- 18. Intervening to Mitigate Weight Loss Associated Bone Loss in Older Adults. Pittsburgh Older Americans Independence Center, Pittsburgh, PA, 3/27/22.
- 19. Intervening to Mitigate Weight Loss Associated Bone Loss in Older Adults. University of Texas Health Science Center San Antonio. San Antonio, TX. 4/13/22.

## **Internal/Departmental**

- 1. Exposure to isoflavone-containing soy products and endothelial function. Sticht Center Aging Conference, Winston-Salem, NC. 6/9/2010.
- 2. Is lost lean mass from intentional weight loss recovered during weight regain in postmenopausal women? Sticht Center Aging Conference, Winston-Salem, NC. 12/14/2011.
- 3. The role of metabolic syndrome, inflammation, and adiposity on physical function: Findings from the Health ABC Study. Wake Forest Baptist Health, Division of Public Health Sciences, Departments of Epidemiology & Prevention and Social Sciences and Health Policy Seminar Series, Winston-Salem, NC. 1/19/2012.
- 4. Optimizing weight management for older adults. Wake Forest University, Department of

- Health and Exercise Science, Winston-Salem, NC. 2/4/2014.
- 5. Optimizing weight management for older adults. Wake Forest Baptist Health, Department of Pathology, Section on Comparative Medicine, Winston-Salem, NC. 2/18/2014.
- 6. Interventions to Optimize Intentional Weight Loss in Obese older Adults. Nutrition Grand Rounds. Wake Forest School of Medicine, Winston-Salem, NC. 09/01/2016
- 7. The Effect of Exercise Modality During Weight Loss on Bone Health in Obese Older Adults; Translational Science Center Faculty Meeting, Winston-Salem, NC. 04/07/2017
- 8. Optimizing Weight Loss in Older Adults. New Ideas Symposium. Wake Forest University. Winston-Salem, NC. 1/18/2018.
- 9. Optimizing Weight Loss in Older Adults. WFSM Department of Biomedical Engineering's Research Symposium. Winston-Salem, NC. 3/21/2018.
- 10. Intervening to Preserve Bone Health during Weight Loss in Older Adults with Obesity. WFSM Center for Diabetes, Obesity, and Metabolism. Winston-Salem, NC. 9/16/2019.
- 11. Intervening to Preserve Bone Health during Weight Loss in Older Adults. WFIRM, Wake Forest School of Medicine. Winston-Salem, NC. 9/23/2022.
- 12. Intervening to Preserve Bone Health during Weight Loss in Older Adults. Translational Science Center, Wake Forest University. Winston-Salem, NC. 10/21/2022.
- 13. Intervening to Preserve Bone Health during Weight Loss in Older Adults. Department of Health and Exercise Science, Wake Forest University Winston-Salem, NC. 1/12/2023.

## **Community**

- 1. Nutrition for life. Waco Women's Bootcamp, Waco, TX. 2/12/2008
- 2. Nutrition for running. Waco Women's Training Program. Waco, TX 3/13/08.
- 3. Never too late: The benefits of exercise and weight loss in the elderly. Best Health Lecture, Winston-Salem, NC. 12/1/2009.
- 4. Metabolic reality. Best Health Lecture, Winston-Salem, NC. 8/25/2011.
- 5. Nutrition for life. Ardmore Baptist Church. Winston-Salem, NC. 1/7/2105.
- 6. How to Safely Lose Weight in your 70's and Beyond. Aging Well Seminar Series. Winston-Salem, NC. 10/12/2021.
- 7. How to Safely Lose Weight in your 70's and Beyond. Winston-Salem Shepherd Center. Winston-Salem, NC. 11/4/2021.
- 8. How to Safely Lose Weight in your 70's and Beyond. The Mavens Community Group. Winston-Salem, NC. 1/13/2022.

## **TEACHING**

#### COURSES

- 1. FYS 100: Explorations in Translational Science (Fall 2012)
- HES 351: Nutrition in Health and Disease (Fall 2012, Spring 2013, Fall 2013, Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Spring 2021, Fall 2021, Spring 2022)
- 3. HES 353: Exercise Physiology (Spring 2013)

- 4. HES 360: Epidemiology (Fall 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019)
- HES 310: Clinical Externship (Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019)
- HES 311: Clinical Internship (Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019)
- 7. HES 382: Independent Study (Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019)

## **MENTORING**

## **Undergraduate Students**

## **WFU Honors Thesis Primary Mentor**

- 1. Sarah Martin, Department of Health and Exercise Science, 2014-2015
- 2. C. Hunter Davis, Department of Health and Exercise Science, 2015-2016
- 3. Amy Collins, Department of Health and Exercise Science, 2016-2017
- 4. Annie Mampieri, Department of Health and Exercise Science, 2017-2018
- 5. Divya Argalwal, Department of Health and Exercise Science, 2018-2019
- 6. Kylie Reed, Department of Health and Exercise Science, 2019-2020
- 7. Rui Lyu, Department of Health and Exercise Science, 2020-2021
- 8. Becca Knapp, Department of Health and Exercise Science, 2021-2022
- 9. Cailtyn Dwyer, Department of Health and Exercise Science, 2022-Present

## **Summer Research Primary Mentor**

- 1. Divya Jain, University of Maryland College Park, 2014 and 2015
- 2. Elizabeth Lopez, Arizona State University, 2016
- 3. Arlyn Baker, Western Carolina University, 2017
- 4. Angela Kubik, State University of New York at Geneseo. 2018
- 5. Michael Arboledo, Rensselear Polytechnic Institute, 2018
- 6. Lauren Fasth, Salem College, 2018
- 7. Kylie Reed, Wake Forest University, 2019
- 8. Lexi John, Wake Forest University, 2020
- 9. Albi Zhiva, Forsyth Technical Community College, 2021
- 10. Becca Knapp, Wake Forest University, 2021
- 11. Miracle Etim-Andy, Catawba College, 2021

#### **Graduate Students**

## **WFU Master's Thesis Primary Mentor**

- 1. Laura Welti, Department of Health and Exercise Science, 2014-2016
- 2. Jessica Kelleher, Department of Health and Exercise Science, 2015-2017

- 3. Lauren Shaver, Department of Health and Exercise Science, 2016-2018
- 4. Daniel Kammire, Department of Health and Exercise Science, 2017-2019
- 5. Ashlyn Swafford, Department of Health and Exercise Science, 2018-2020
- 6. Kay Tse, Department of Health and Exercise Science, 2019-2021
- 7. Kathryn Alphin, Department of Health and Exercise Science, 2020-2022
- 8. Allison Avery, Department of Health and Exercise Science, 2021-Present
- 9. Carson DeLong, Department of Health and Exercise Science, 2022-Present

#### **WFU Master's Thesis Committee Member**

- 1. J. Thomas Becton, Department of Health and Exercise Science, 2015
- 2. Stephen Powers, Department of Health and Exercise Science, 2018
- 3. Sarah Volz, Department of Psychology, 2018
- 4. Katelyn Greene, Department of Biomedical Engineering, 2019
- 5. Siddharth Dash, Department of Biomedical Engineering, 2021

#### **Doctoral Dissertation Committee Member**

- 1. Samantha Schoell, Department of Biomedical Engineering, WFSM 2017
- 2. Kyle McNemara, Department of Biomedical Engineering, WFSM 2018
- 3. Laura Flores, College of Allied Health Professions, University of Nebraska Medical Center, 2022
- 4. Katelyn Greene, Department of Biomedical Engineering, WFSM Present
- 5. S. Delanie Lynch, Department of Biomedical Engineering, WFSM Present

#### **Postdoctoral Fellows**

- 1. Katherine Hsieh, Wake Forest University School of Medicine, Aging Center T32 Fellowship, 2020-2022.
- 2. Ryan Miller, Wake Forest University School of Medicine, Aging Center T32 Fellowship, 2020-2021.

#### **SERVICE**

#### WFU INTERNAL SERVICE

- 1. OAIC Pilot and Exploratory studies grant reviewer, 2014
- 2. Graduate Richter Scholarship Committee Member, 2016-2018.
- 3. HES DXA Committee Chair, 2016-Present.
- 4. HES Research Advisory Committee Member, 2016-Present
- 5. HES Tenure and Promotion Guidelines Committee Member, 2016-Present
- 6. HES Faculty Search Committee Member, 2018, 2021
- 7. HES DEI Committee Member, 2019-Present
- 8. Guest Lecturer HES 784 (How to read a scientific article), 2018-2019
- 9. Guest Lecturer HES 784 (How to read a scientific article), 2018-2019

- 10. Guest Lecturer CPTS 741 (Writing an Effective K Award), 2018-2019
- 11. Three Minute Thesis Judge, 2019
- 12. Wake Forest Research Fellow Application Reviewer, 2019 & 2022
- 13. Wake Forest IRB Member, 2021-Present
- 14. Wake Forest Research Advisory Council Member, 2021-Present
- 15. LEAP Mentor, Summer 2022

## **EXTERNAL SERVICE**

## **Manuscript Reviewer (2014-Present)**

- 1. Journal of Gerontology Medical Sciences
- 2. Experimental Gerontology
- 3. The Journal of Bone and Mineral Research Plus
- 4. Archives of Gerontology and Geriatrics
- 5. The Journal of Nutrition
- 6. The American Journal of Clinical Nutrition
- 7. Journal of Nutrition, Health, and Aging
- 8. Journal of the American Geriatrics Society
- 9. Prevention Science
- 10. Journal of Clinical Densitometry
- 11. Calcified Tissue International
- 12. The New England Journal of Medicine
- 13. The Journal of Bone and Mineral Research

## **Textbook Reviewer**

1. Discovering Nutrition, 5<sup>th</sup> Edition. Paul Insel, Don Ross, Kimberley McMahon, and Melissa Bernstein. ISBN-10: 9781284064650

## Conference Abstract Reviewer/Symposium Chair

- 1. SEACSM Oral Communications Symposium on Biomechanics Chair, 2017.
- 2. American Society for Bone and Mineral Research Scientific Meeting, 2017-2019
- 3. Gerontological Society of America Annual Scientific Meeting, 2018-2019
- 4. William R. Hazzard Translational Research in Aging Symposium Co-Chair, 2022

## **Grant Reviewer**

1. American Heart Association Behavioral CL Review Panel in the Spring and Fall of 2016.

## **COMMUNITY ACTIVITIES**

1. Waco Women's Training Program Event Coordinator, Waco Texas. 2008-2009.

- 2. Ardmore Neighborhood Association, Winston-Salem, NC, Member 2009-2015.
- 3. Twin City Track Club, Winston-Salem NC, Member 2009-Present.
- 4. Ardmore Baptist Church Member, with continued service on the Lord's Supper and Worship Care Committees, Winston-Salem NC, 2010-2017.
- 5. Winston Salem Downtown School Volunteer; 1-hour/week volunteer commitment, September 2014-2017.
- 6. Member, Mount Tabor United Methodist Church, Winston-Salem NC. 2018-Present.
- 7. Ridgemere Neighborhood Home Owners Association Social Committee Member. Winston-Salem, NC. 2018-Present.