

CURRICULUM VITAE

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CURRENT POSITION

2017-present **Faculty Athletics Representative**, University of Missouri–Columbia (0.5 FTE)

2018-present **Professor of Nutritional Sciences**, Department of Nutrition and Exercise Physiology, University of Missouri-Columbia

EDUCATION

1997-2000 National Institutes of Health Postdoctoral Trainee in Maternal and Child Nutrition Division of Nutritional Sciences, **Cornell University**

1991-1997 Doctor of Philosophy, Nutritional Sciences
Department of Nutritional Sciences, **University of Wisconsin–Madison**

1986-1991 Bachelor's of Science Graduated with Distinction, Molecular Biology
College of Letters and Sciences, **University of Wisconsin–Madison**

EXPERIENCE

2018-present **Professor of Nutritional Sciences**, Department of Nutrition and Exercise Physiology, University of Missouri-Columbia

2017-present **Faculty Athletics Representative**, University of Missouri–Columbia

2010-present **Director of Graduate Studies, Nutritional Sciences**, Department of Nutrition and Exercise Physiology, University of Missouri-Columbia

2006-2018 **Associate Professor of Nutritional Sciences**, Department of Nutrition and Exercise Physiology, University of Missouri-Columbia

2000-2006 **Assistant Professor of Nutritional Sciences**, Department of Nutritional Sciences, University of Missouri–Columbia

1998-2000 **NIH Postdoctoral Trainee in Maternal and Child Nutrition** with Christine M. Olson, PhD, RD, Cornell University. Research describing the socio-demographic and psychological characteristics of women who exercise during pregnancy and the effects of exercise on post-partum weight retention.

1998 **Nutrition Trainee** with Dr. Richard Kreipe in Interdisciplinary Leadership Education in Adolescent Health, University of Rochester. Seminars addressing current issues in

adolescent health and clinical training in treatment of adolescents with eating disorders, obesity and malnutrition.

- 1997-1998 **NIH Postdoctoral Trainee in Maternal and Child Nutrition** with Jere D. Haas, PhD, Cornell University. Research investigating the effects of iron deficiency without anemia on changes in endurance capacity in response to physical training in young women.
- 1992-1997 **Graduate Research Assistant** for Denise M. Ney, PhD, RD, Professor of Nutritional Sciences, University of Wisconsin–Madison. Thesis work investigating how insulin-like growth factor-I and growth hormone and the lipid composition of total parenteral nutrition (TPN) solutions affect immune function using a rat TPN model.
- 1991-1992 **Wisconsin Alumni Research Foundation Fellow** for Denise M. Ney, PhD, RD, Department of Nutritional Sciences, and Richard E. Keeseey, PhD, Department of Psychology, University of Wisconsin-Madison. Non-thesis work studying the role of the growth hormone/insulin-like growth factor-I axis in rats maintaining reduced body protein mass due to lesion of the lateral hypothalamus.

RESEARCH ACTIVITIES

Research Interests

The general focus of my research program during my nineteen years as a faculty in the Department of Nutrition and Exercise Physiology has been the effects of energy balance on metabolic and bone health. My completed research projects have focused on the effects of energy balance on bone and the possible therapeutic use of nutrition and physical activity to maintain bone health in various populations, including male and female athletes, sedentary, overweight/obese adults undergoing weight reduction, and middle-aged men with low bone mass for age. The results of our studies of bone health in overweight/obese adults coupled with the recent recognition by the bone and diabetes communities that bone fragility is a complication of type 2 diabetes (T2DM), has caused my research to take a new direction—identification of cellular mechanisms and signaling pathways by which obesity and T2DM cause bone to become fragile. We are currently investigating the why diabetic bone is more fragile and how it becomes more fragile using a rat model of obesity and T2DM. We are exploring the therapeutic potential of exercise, caloric restriction, and soy-protein-based diets as “treatments” for diabetic bone fragility in an animal model.

Publications: Peer-reviewed journal articles

*author is an undergraduate or graduate student

†corresponding author

*Dirkes, R.K., Ortinau, L.C., Linden, M.A., Rector, R.S., **Hinton, P.S.**[†] Type 2 diabetes, not insulin resistance, adversely affects tibia trabecular microarchitecture and cortical biomechanical properties in hyperphagic Otsuka Long Evans Tokushima Fatty rats. *In preparation.*

*Dirkes, R.K., Winn, N.C., Jurrissen, T.J., Lubahn, D.B., Vieira-Potter, V.J., Padilla, J., **Hinton, P.S.** Voluntary wheel running partially compensates for the effects of global estrogen receptor- α in male mice. *In preparation.*

*Dirkes, R.K., Winn, N.C., Jurrissen, T.J., Lubahn, D.B., Vieira-Potter, V.J., Padilla, J., **Hinton, P.S.**[†] Global estrogen receptor- α knockout negatively alters femoral cortical geometry, but improves trabecular microarchitecture, in aged male mice. *FACETS*, 2019, *Under review.*

*Dirkes, R.K., Richard, M.W., Meers, G.M., Butteiger, D.N., Krul, E.S., Thyfault, J.P., Rector, R.S., **Hinton, P.S.**[†] Soy protein isolate is not detrimental to skeletal development in spontaneously hyperphagic, adolescent male Otsuka Long Evans Tokushima Fatty rats. *Current Developments in Nutrition*, 2018, <https://doi.org/10.1093/cdn/nzy010>.

Hinton, P.S.[†], Richard, M.W., Ortinau, L.C., Zidon, T.A., Vieira-Potter, V. Long-term feeding of a soy-protein-based diet improves trabecular and cortical bone outcomes in low-fit, intact and ovariectomized female rats. *Bone Reports*, 2018, May 18:244-254.

Dannecker, E.A., and **Hinton, P.S.** Comparison of effort, pain, and unpleasantness during eccentric and concentric isokinetic contractions: methods of controlling for contraction intensity. *Eur J Appl Physiology*, 2017, **Submitted**.

*Ortinau, L.C., Linden, M.A., Rector, R.S., **Hinton, P.S.**[†] Obesity and Type 2 Diabetes, not a high-fat , high-sucrose diet, negatively impacts bone outcomes in the Otsuka Long Evans Tokushima Fatty rat. *Bone*, 2017, Dec;105:200-211. doi: 10.1016/j.bone.2017.09.003. Epub 2017 Sep 9.

*Ortinau, L.C., Linden, M.A., Rector, R.S., **Hinton, P.S.**[†] Exercise initiated after the onset of insulin resistance improves trabecular microarchitecture and cortical bone biomechanics of the tibia in hyperphagic Otsuka Long Evans Tokushima Fatty rats. *Bone*, 2017, 103:188-199.

*Ortinau, L.C., Linden, M.A., Rector, R.S., **Hinton, P.S.**[†] Exercise improves bone strength to a greater extent than caloric restriction in hyperphagic OLETF rats. *Appl Physiol Nutr Metab.*, May 1. doi: 10.1139/apnm-2017-0077. [Epub ahead of print].

Dirkes, R., Ortinau, L.C., Rector, R.S. Olver T.D, **Hinton, P.S.**[†]. Effects of exercise on basal and insulin-stimulated bone blood flow in hyperphagic insulin resistant OLETF rats. *J. Bone Min. Res Plus*, Accepted manuscript online: 12 MAY 2017, DOI: 10.1002/jbm4.10007.

Hinton, P.S.[†], Nigh, P., Thyfault, J.P. Serum sclerostin decreases following 12 months of resistance- or jump-training in men with low bone mass. *Bone*, 96:85-90, 2017.

Hinton, P.S.[†] Bone blood flow in the pathogenesis of whole-body insulin resistance and diabetic bone fragility. *Medical Hypotheses*, 2016, 93:81-86.

Hinton, P.S.[†] An exercise prescription to increase bone mineral density in men with low bone mass: evidence for resistance training. *Lower Extremity Review*, March, 2016.

Hinton, P.S.[†], Nigh, P., Thyfault, J.P. Effectiveness of resistance training or jumping-exercise to increase bone mineral density in men with low bone mass: a 12-month randomized, clinical trial. *Bone*, 2015 Oct;79:203-12. doi: 10.1016/j.bone.2015.06.008. Epub 2015 Jun 16., 2015.

Hinton, P.S.[†], Shankar, K., Eaton, L., Rector, R.S. Obesity-related changes in bone structural and material properties in hyperphagic OLETF rats and protection by voluntary wheel running. *Metabolism*, 2015, doi:10.1016/j.metabol.2015.04.004 (Epub ahead of print).

Branson, R.*, **Hinton, P.S.**[†] College students' knowledge and attitudes towards eating disorders in males. *J FoodNutri*, 2(3): 015, 2015.

Mavrakis, Y.*, Jian, J., Ortinau, L.C., **Hinton, P.S.**[†] Associations between serum ferritin and markers of glucose homeostasis and inflammation in overweight young women. *Austin J Nutri Food Sci*, 2:1046, 2014.

Jiang, J., Boyle, L.J., Thyfault, J.P., **Hinton, P.S.**[†] Effects of statin treatment with or without exercise on bone health in overweight, middle-aged adults. *Metabolism*, 63:498-408, 2014.

Strope, M.*. **Hinton, P.S.**[†] Physical activity-associated bone loading during adolescence and young adulthood is positively associated with adult bone mineral density in men. *Am J Men's Health*, Sep 18. pii: 1557988314549749. [Epub ahead of print], 2014.

Hinton, P.S.[†] Iron and the endurance athlete. *Applied Physiology Nutrition and Metabolism*, 39:1012-1018, 2014.

Carter, M.I., **Hinton, P.S.**[†] Physical activity and bone health. *Mo Med*. 2014 Jan-Feb;111(1):59-64. Review.

Oberlin, D.J., Mikus, C., Kearney, M.L., **Hinton, P.S.**, Leidy, H.J., Kanaley, J.A., Rector, R.S., Thyfault, J.P. Changes in postprandial glycemic control following one bout of exercise in volunteers with type 2 diabetes. *Med Sci Sports Exerc*, 46:32-38, 2014.

Hinton, P.S.[†] Iron and exercise update. *Sports, Cardiovascular and Wellness Nutritionists' Pulse*, 2013.

Eaton, L.S. and **Hinton, P.S.**[†] Current exercise training volume and energy expenditure are associated with increased risk of recent fracture in physically active men. *Journal of Athletic Medicine*, 1:56-64, 2013.

Hinton, P.S.[†], Rector, R.S., Linden, M.A, Warner, S.O., Dellsperger, K.C., Chockalingam, A., Whaley-Connell, A.T., Liu, Y., and Thomas, T.R. Weight-loss-associated changes in bone mineral density and bone turnover persist after partial weight regain with or without aerobic exercise in obese women. *Eur J Clin Nutr*, 66:606-612 2012.

Hinton, P.S.[†] Reply to Scott, Sale, Greeves, and Fraser. *J Appl Physiol*. 112:330, 2012.

Hinton, P.S.[†], Johnstone, B., Blaine, E., Bodling, A. Effects of current exercise and diet on late-life cognitive health of former college athletes. *Phys Sportsmed*.39:11-22, 2011.

Rogers, R.S., Dawson, A., Wang, Z., Thyfault, J.P., **Hinton, P.S.**[†], Acute response of serum markers of bone turnover to a single-bout of resistance-training or plyometrics. *J Appl Physiol*.111:1353-60, 2011.

Hinton, P.S.[†], Thyfault, J.P., Thomas, T.R., Smith, B.K., Donnelly, J.E., and Rector, R.S. Weight loss-induced increases in osteocalcin: bone formation or glucose regulation? *Endocrinol Metabol Syndrome*, 2011.

Hinton, P.S.[†], and Rogers, R.S. Bone loading during young adulthood predicts bone mineral density in physically active, middle-aged men. *Phys Sportsmed*,;38:146-55, 2010.

Hinton, P.S.[†], Smith, B.K., Bailey, B., Rector, R.S., Donnelly, J.E. Total body bone mineral content and density during 36 weeks of weight loss and maintenance in obese men and women. *Eur J Clin Nutr*, 64:392-399, 2010.

Hinton, P.S.[†], Rolleston, A., Rehrer, N.J, Hellemans, I, and Miller, B.F. Bone formation is increased to a greater extent than bone resorption during a cycling stage race. *Appl Physiol Nutr Metab*, 35:344-349, 2010. Thomas, T.R., Warner, S.O., Dellsperger, K., **Hinton, P.S.**, Whaley-Connell, A., Rector, R.S., Liu, Y., Linden, M., Chockalingam, A., Thyfault, J.P., Huyette, D., Wang, Ze., and Cox, R. Exercise and the metabolic syndrome with weight regain. *J Appl Physiol*. 109:3-10, 2010.

Warner, S, Linden, M., Liu, Ying., Harvey, B., Thyfault, J., Whaley-Connell, A., Chockalingam, A., **Hinton, P.S.**, Dellsperger, K, and Thomas, T. Effects of resistance training on metabolic health with weight regain. *J Clin Hypertens* (Greenwich). 12):64-72, 2010.

Hinton, P.S.[†], LeCheminant, J.D., Smith, B.K., Rector, R.S., Donnelly, J.D. Weight loss-induced alterations in serum markers of bone turnover persist during weight maintenance in obese men and women *J Am Coll Nutr*, 28:565-573, 2009.

Woolf, K., St. Thomas, M.M., Primak, N., Vaughan, L.A., Carlson, A.G., **Hinton, P.S.** Iron status in highly active and sedentary young women. *Int J Sport Nutr Ex Metab*, 19:519-35, 2009.

Rector, R.D., Loethen, J.L., Ruebel, M.S., Thomas T.R., **Hinton, P.S.**[†] Bone turnover during short-term weight loss with and without weight-bearing exercise in premenopausal overweight women. *Applied Physiology, Nutrition and Metabolism*, 34:933-41, 2009.

Rector, R.S., Rogers, R., Ruebel, M., Widzer, M.O., **Hinton, P.S.**[†] Lean body mass and weight-bearing activity in the prediction of bone mineral density in physically active males. *J Strength Con Res*, 2009:23:427-435.

Rector, R.S., Rogers, R., Rubel, M., **Hinton, P.S.**[†] Participation in road cycling versus running is associated with lower bone mineral density in men. *Metabolism*, 2008 57:226-32.

Rector, R.S., Warner, S.O., Liu, Y., **Hinton, P.S.**, Sun, G.Y., Cox, R.H., Stump, C.S., Laughlin, M.H., Dellsperger, K.C., and Thomas, T.R.. Exercise and diet induced weight loss improves measures of oxidative stress and insulin sensitivity in adults with characteristics of the metabolic syndrome. *Am J Physiol Endocrinol Metab*. 2007 293:E500-6.

Hinton, P.S.[†], Rector, R.S., Viele, V.A., Thomas, T.R. Effects of weight loss via exercise and energy restriction on markers of bone turnover in overweight adults. *Metabolism* 55:1616-8, 2006.

Hinton, P.S.[†], Peppers, J.E., Rector, R.S., Hillman, L.S. Effects of exercise-associated menstrual disorders and hormonal contraceptive use on markers of inflammation and endothelial dysfunction. *J Sports Sci Med* 5:235-242, 2006.

Hinton, P.S.[†] Iron deficiency in physically active adults. *ACSM'S Health and Fitness Journal* 10:12-18, 2006.

Hinton, P.S.[†] and Sinclair, L.M.* Iron supplementation maintains ventilatory threshold and improves energetic efficiency in iron-deficient nonanemic athletes. *Eur J Clin Nutr* 61:30-39, 2007.

Hinton, P.S.[†], Hillman, L.S. and Imhoff, R.D.* Bone mineral content and turnover in premenopausal women with exercise-associated menstrual disorders. *WSPAJ* 15:28-38, 2007.

Hinton, P.S.[†] and Beck, N.C. Nutrient intakes of men and women collegiate athletes with disordered eating. *J Sports Sci Med* 4:253-262, 2005.

Kubas, K.L.* and **Hinton, P.S.**[†] Psychosocial correlates of disordered eating in female collegiate athletes: validation of the ATHLETE questionnaire. *J Am Coll Health*. 54:149-56, 2005.

Sinclair, L.M.* and **Hinton, P.S.**[†] Prevalence of iron deficiency with and without anemia in endurance-trained males and females. *J Am Diet Assoc* 105:975-978, 2005.

Porock, D. †, Beshears, B., **Hinton, P.S.**, Anderson, C. Nutritional, functional, and emotional characteristics related to fatigue in patients during and after biochemotherapy. *Oncol Nurs Forum* 32:661-667, 2005.

Cox, R.H. †, Thomas, T.R., **Hinton, P.S.** and Donahue, O.M.* Effects of acute sixty and eighty percent VO₂max bouts of aerobic exercise on state anxiety of women of different age groups across time. *Res Q Ex Sci*, 75:165-175, 2004.

Sanford, T.C.* , Davidson, M.M.* , Yakushoko, O.F.* , Martens, M.P.* , **Hinton, P.S.**, Beck, N.C. † Clinical and subclinical eating disorders: an examination of collegiate athletes. *J Appl Sport Psych* 17:79-86, 2005.

Hinton, P.S. †, Sanford, T.C.* , Davidson, M.M.* , Yakushoko, O.F.* and Beck, N.C. Nutrient intakes and dietary behaviors of male and female collegiate athletes. *Int J Sport Nutr Ex Metab* 14:389-405, 2004.

Brownlie, T., Utermohlen, V., **Hinton, P.S.**, Giordano, C. and Haas, J.D. † Tissue-iron deficiency without anemia impairs endurance adaptation among previously untrained women. *Am J Clin Nutr* 79:437-443, 2004.

Olson, C.M. †, Strawderman, M.S., **Hinton, P.S.**, Pearson, T.A. Gestational weight gain and postpartum behaviors associated with weight retention and major weight gain following pregnancy. *Int J Obesity* 27:117-127, 2003.

Brownlie, T., Utermohlen, V., **Hinton, P.S.**, Giordano, C. and Haas, J.D. † Marginal iron depletion without anemia reduces adaptation to physical training in previously untrained women. *Am J Clin Nutr* 75:734-742, 2002.

Hinton, P.S. † and Olson, C.M. Postpartum exercise and food intake: the importance of behavior-specific self-efficacy. *J Am Diet Assoc* 101:1430-1437, 2001.

Hinton, P.S. † and Olson, C.M. Predictors of pregnancy-associated change in physical activity in a rural, white population. *Matern Child Health J* 5:7-14, 2001.

Hinton, P.S. †, Brownlie, T., Giordano, C. and Haas, J.D. Iron supplementation improves endurance after training in iron-depleted, non-anemic women. *J Appl Physiol* 88:1103-1111, 2000.

Hinton, P.S. †, Hirvonen, M.D., Ney, D.M. and Keeseey, R.E. Growth hormone, insulin-like growth factor-I and the insulin-like growth factor-I binding proteins in rats maintaining reduced body protein following lesions of the lateral hypothalamus. *Physiol Behav* 68:667-672, 2000.

Hinton, P.S. †, Peterson, C.A., McCarthy, D.O. and Ney, D.M. Medium-chain compared with long-chain triacylglycerol emulsions enhance macrophage response and increase mucosal mass in parenterally-fed rats. *Am J Clin Nutr* 76:1265-72, 1998.

Hinton, P.S., Peterson, C.A., Dahly, E.M. and Ney, D.M. IGF-I alters lymphocyte survival and regeneration in thymus and spleen after dexamethasone treatment. *Am J Physiol*. 274: R912-920, 1998.

Peterson, C.A., Carey, H.V., **Hinton, P.S.**, Lo, H.C. and Ney, D.M. † GH elevates serum IGF-I levels but does not alter mucosal atrophy in parenterally-fed rats. *Am J Physiol* 272:G1100-1108, 1997.

Peterson, C.A. †, **Hinton, P.S.**, Ney, D.M. and Carey, H.V. Insulin-like growth factor-I attenuates changes in jejunal structure and transport function in parenterally-fed rats. *Gastroenterology* 111:1507-1514, 1996.

Lo, H.C., **Hinton, P.S.**, Yang, H., Unterman, T.G. and Ney, D.M. † Insulin-like growth factor-I but not growth hormone attenuates dexamethasone-induced catabolism in parenterally-fed rats. *JPEN J Parenter Enterol Nutr* 20:171-177, 1996.

Hinton, P.S., Peterson, C.A., Lo, H.C., Yang, H., McCarthy, D. and Ney, D.M. Insulin-like growth factor-I enhances immune function in dexamethasone-treated or surgically-stressed rats maintained with total parenteral nutrition. *JPEN J Parenter Enterol Nutr* 19:444-452, 1995.

Lo, H.C., **Hinton, P.S.**, Peterson, C.A. and Ney, D.M. † Simultaneous treatment with IGF-I and GH additively increases anabolism during total parenteral nutrition in rats. *Am J Physiol* 269 (Endocrinol Metab 32):E368-E376, 1995.

Publications: Abstracts Presented at Meetings

Dirkes, R.K.*, Weiss, ED, Welly, R.J., Mao, J., Kinkade, J., Vieira-Potter, V.J., Rosenfeld, C.S., **Bruzina, P.S.** Impact of maternal exercise on cortical geometry and trabecular microarchitecture in mouse offspring. American College of Sports Medicine, Annual Meeting, 2020, submitted.

Dirkes, R.K.*, Winn, N.C., Jurrissen, T.J., Lubahn, D.B., Vieira-Potter, V.J., Padilla, J. **Hinton, P.S.** Voluntary Wheel Running Partially Compensates for the Effects of Global Estrogen Receptor- α Knockout on Cortical Bone in Young Male Mice. American Society of Bone and Mineral Research, Annual Meeting, Orlando, FL, 2019.

Hinton, P.S., Dirkes, R.K. Differential effects of ER α knock out on cancellous and cortical bone are associated with altered sclerostin expression in aged male mice. ASBMR Annual Meeting, Montreal, Quebec, Canada, 2018.

Dirkes, R.K., Ortinau, L.C., Linden, M.A., Rector, R.S., **Hinton, P.S.** Serum Bone Turnover Markers are Altered Early, but Cortical Geometry, Trabecular Microarchitecture, and Biomechanical Strength of the Femur are Altered Later in the Hyperphagic OLETF Rat Model of Obesity and Type 2 Diabetes Orthopedic Research Society Midwest Musculoskeletal Workshop, Washington University, Saint Louis, MO, 2017.

Hinton, P.S., Dirkes, R.K., Olver, D.T. “Type 2 Diabetes Impairs Insulin-Stimulated Blood Flow in Femur and Lumbar Vertebra of Hyperphagic OLETF Rats” (ID: A17017277) has been selected to be presented as a poster presentation at the ASBMR Symposium: Current Concepts in Bone Fragility – From Cells to Surrogates, Denver, CO, 2017.

Hinton, P.S., Dirkes, R.K., Olver, D.T. “Type 2 Diabetes Impairs Insulin-Stimulated Blood Flow in Femur and Lumbar Vertebra of Hyperphagic OLETF Rats” (ID: A17017277) at the ASBMR Welcome Reception and Plenary Poster Session. Plenary Posters are highly ranked posters presented at the ASBMR Annual Meeting. ASBMR Annual Meeting, Denver, CO, 2017.

Dirkes, R.K., Richard, M.W., Meers, G.M., Butteiger, D.N., Krul, E.S., Thyfault, J.P., Rector, R.S., **Hinton, P.S.** A Diet Containing Soy Protein Isolate is Not Detrimental to Skeletal Development in Spontaneously Hyperphagic, Adolescent Male OLETF Rats, American Society for Nutrition Annual Meeting, Experimental Biology, Chicago, IL, 2017.

Khaleel, M., **Hinton, P.S.** Effects of Exercise or Caloric Restriction on Bone Shape and Strength in Hyperphagic OLETF Rats, Life Sciences Week, University of Missouri, Columbia, MO, 2017.

Shaw, E.L., Parks, E.J., **Hinton, P.S.** Osteocalcin: a link between bone metabolism and energy metabolism? Life Sciences Week, University of Missouri, Columbia, MO, 2017.

Dannecker, E.A.[†], Peterson, R.A., **Hinton, P.S.** Changes in and importance of patient-reported outcomes during long-term therapeutic exercise programs, Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX, 2017.

Shaw, E., Richard, M.W., Dirkes, R., Ortinau, L.C., **Hinton, P.S.** The effects of long-term feeding of a soy-protein-based diet on tibial advanced glycation end product content in low-fit, intact and ovariectomized female rats. Health Sciences Research Day, University of Missouri, Columbia, MO, November 17, 2016.

Hinton, P.S., Dirkes, R.K., Ortinau, L.C., Richard, M.W., Rector, R.S., Olver, D.T. Type 2 Diabetes Impairs Insulin-Stimulated Bone Blood Flow and Compromises Bone Biomechanical Properties in Hyperphagic OLETF Rats. American Society for Bone and Mineral Research Annual Meeting, Atlanta, GA, 2016.

Ortinau, L.C., Richard, M.W., Dirkes, R., Linden, M.A., Rector, R.S., **Hinton, P.S.** Exercise or Caloric Restriction Treatments Beneficially Affect Trabecular Microarchitecture, while Cortical Bone Strength is only Improved with Exercise in Obese, T2D rats. American Society for Bone and Mineral Research Annual Meeting, Atlanta, GA, 2016.

Hercher, H.R., Ortinau, L.C., Richard, M.W., Dirkes, R., Linden, M.A., Rector, R.S., **Hinton, P.S.** Caloric restriction, not exercise, increases irisin in obese, diabetic OLETF rats. Life Sciences Week, University of Missouri, Columbia, MO, 2016.

Dirkes, R.K., Ortinau, L.C., Richard, M.W., Linden, M.A., Rector, R.S., **Hinton, P.S.** Bone geometry and trabecular and cortical microarchitecture are altered by type 2 diabetes, but not insulin resistance, in the hyperphagic OLETF rat. American Society for Nutrition Annual Meeting, Experimental Biology, San Diego, CA, 2016.

Ortinau, L.C., Richard, M.W., Linden, M.A., Rector, R.S., **Hinton, P.S.** Exercise or Caloric Restriction Reduces Bone Resorption and Improves Cortical Bone Strength in Hyperphagic OLETF Rats. American Society for Nutrition Annual Meeting, Experimental Biology, San Diego, CA, 2016.

Ortinau, L.C., Richard, M.W., Dirkes, R., Linden, M.A., Rector, R.S., **Hinton, P.S.** Effects of a High-Fat, High-Cholesterol Diet or Hyperphagia on Bone Mass, Bone Strength and Serum Turnover Markers in Male Rats. American Society for Nutrition Annual Meeting, Experimental Biology, San Diego, CA, 2016.

Richard, M.W., Ortinau, L.C., Zidon, T.Z., Vieira-Potter, V., **Hinton, P.S.** Long-Term Feeding of a Soy-Protein-Based Diet Improves Trabecular and Cortical Bone Outcomes in Low-Fit, Intact and Ovariectomized Female Rat. American Society for Nutrition Annual Meeting, Experimental Biology, San Diego, CA, 2016.

Ortinau, L.C., Richard, M.W., Linden, M.A., Rector, R.S., **Hinton, P.S.** Exercise or caloric restriction improves BMD and increases bone formation relative to resorption in obese, type 2 diabetic OLETF rats. Life Sciences Week, University of Missouri-Columbia, 2015.

Richard, M.W., Ortinau, L.C., Zidon, T.A., **Hinton, P.S.**, Viera-Potter, V. A soy-protein-based diet does not alter serum markers of bone formation and resorption in ovariectomized, low-fit rats. Life Sciences Week, University of Missouri-Columbia, 2015.

Hinton, P.S., Nigh, P., Thyfault, J.P. Serum sclerostin decreases following 12 months of resistance- or jump-training in men with low bone mass. ASBMR Annual Meeting, Seattle, WA, 2015.

Dannecker, E.A., **Hinton, P.S.** Pain and effort during eccentric contractions in comparison to concentric contractions. Am Physical Therapy Assoc, Indianapolis, IN, 2015.

Hinton, P.S., Thyfault, J.P., Nigh, P., Carter, M.I., Lin, N., Jiang, J. Bone mineral density in osteopenic men is increased after resistance training or plyometric exercise. American Society for Bone and Mineral Research Annual Meeting, Houston, TX, 2014.

Dannecker, E.A., **Hinton, P.S.** Relationships among fear of pain and movement, strength test performance and indicators of hypothalamic pituitary adrenal axis (HPA axis) activity. 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL, 2014.

Branson, R., **Hinton, P.S.** College students' knowledge and attitudes towards eating disorders in males. Health Sciences Research Day, University of Missouri-Columbia, November 14, 2013.

Strope, M.A., Thyfault, J.P., Nigh, P., Carter, M.I., Lin, N., Jun, J., **Hinton, P.S.** The influences of physical activity on bone mineral density: A study on the active prevention of osteopenia and osteoporosis. Health Sciences Research Day, University of Missouri-Columbia, November 14, 2013.

Lin, N.T., Carter, M.I., Jun, J., Sinak, T.P., Strope, M., Eaton, L., Thyfault, J.P., **Hinton, P.S.** Plyometrics or resistance training increase bone mass in men with osteopenia after a 6-month intervention. Health Sciences Research Day, University of Missouri-Columbia, November 14, 2013.

Strope, M.A., Thyfault, J.P., Nigh, P., Carter, M.I., Lin, N., Jun, J., **Hinton, P.S.** The influences of physical activity on bone mineral density: A study on the active prevention of osteopenia and osteoporosis. 5th annual Interdisciplinary Biomedical Research Symposium for 2013. A.T. Still University of Health Sciences, Kirksville College of Osteopathic Medicine, November 2, 2013.

Carter, M.I., Thyfault, J.P., Sinak, T.P., Nigh, P., Eaton, L., **Hinton, P.S.** Exploring the Relationship between Changes in Bone Mineral Density, Lean Body Mass, and Hormones in Active, Adult Males with Osteopenia after a 12-month Exercise Intervention. YOUNG INVESTIGATOR AWARD. American Society for Bone and Mineral Research Annual Meeting, October 2013, Baltimore, MD.

Jiang, J., Boyle, L.J., Thyfault, J.P., **Hinton, P.S.** Effects of statins with or without exercise on bone turnover markers in obese, middle-aged adults. Central States ACSM Annual Meeting, October 2012, Columbia, MO.

Carter, M.I., Dawson, A., Sinak, T., Eaton, L., Nigh, P., Jiang, J., **Hinton, P.S.** Relationship between changes in lean body mass and bone mineral density in active adult males with osteopenia after a 12-month exercise intervention. YOUNG INVESTIGATOR AWARD. Bone and Skeletal Muscle Interactions, ASBMR Topical Meeting, July 2012, Kansas City MO.

Carter, M.I., Dawson, A., Sinak, T., Eaton, L., Nigh, P., **Hinton, P.S.** Relationship between changes in lean body mass and bone mineral density in active adult males with osteopenia after a 6-month exercise intervention. Nutrition and Exercise Research Week, March 2012, University of Missouri, Columbia, MO.

Eaton, L.I. and **Hinton, P.S.** Relationship between recent fracture and adolescent bone loading, bone mineral density and current physical activity in males. Nutrition and Exercise Research Week, March 2012, University of Missouri, Columbia, MO.

Carter, M.I., Dawson, A.W., Sinak, T.P., Rogers, R.S., Eaton, L.M., **Hinton, P.S.** The relationship between change in lean body mass and bone mineral density in active, adult males with osteopenia after a 6-month exercise intervention. Missouri Musculoskeletal Conference, July, 2011, Kansas City, MO.

Eaton, L.M., Carter, M.I., Dawson, A.W., Sinak, T.P., Rogers, R.S., Thyfault, J.P., **Hinton, P.S.** Ratio of bone formation to bone resorption increases after six months of osteogenic exercise. Missouri Musculoskeletal Conference, July, 2011, Kansas City, MO.

Dawson, A., Rogers, R.S., Widzer, M.O., Thyfault, J.P., **Hinton, P.S.** Bone loading during adolescence and young adulthood increases adult bone mineral density. ACSM Annual Meeting, June 2011, Denver, CO.

Kearney, M.L., Linden, M.A., Warner, S.O., Liu, Y., Dellsperger, K.C., Chockalingam, A., Whaley-Connell, A.T., Thyfault, J.P., **Hinton, P.S.**, and Thomas, T.R. Outcomes of a weight-loss, weight-gain intervention at one year follow-up. Central States ACSM Annual Meeting, November, 2010, Lawrence, KS.

Warner, S., Linden, M., Liu, Y., Harvey, B., Thyfault, J., Whaley-Connell, A., Chockalingam, A., **Hinton, P.S.**, Dellsperger, K., and Thomas, T. Effects of resistance training on metabolic health with weight regain. Central States ACSM Annual Meeting, November 2009, Columbia, MO 65211.

Rogers, R.S., Widzer, M.O., Dawson, A., Thyfault, J.P., **Hinton, P.S.** The acute effects of a single bout of resistance training or plyometrics on hormones and markers of bone turnover. Central States ACSM Annual Meeting, November 2009, Columbia, MO 65211.

Widzer, M.O., Rogers, R.S., and **Hinton, P.S.** Three-year follow-up of bone density in male athletes with osteopenia. Central States ACSM Annual Meeting, November 2009, Columbia, MO 65211.

Mobley, S.K., **Hinton, P.S.**, and Dannecker, E.A. Physiological measures in response to pain rating from sensory stimuli. Central States ACSM Annual Meeting, November 2009, Columbia, MO 65211.

Dawson, A., Rogers, R.S., Widzer, M.O., Thyfault, J.P., **Hinton, P.S.** Bone loading during adolescence and young adulthood increases adult bone mineral density. Central States ACSM Annual Meeting, November 2009, Columbia, MO 65211.

Widzer, M.O., Rogers, R.S., Dawson, A.W., and **Hinton, P.S.** Fed and fasted effects of plyometric vs. resistance exercise on hormones and bone turnover markers. National Annual Meeting, American College of Sports Medicine, 2009, Seattle, WA.

Loethen, J.V., Rector, R.S., Ruebel, M.L., Thomas, T.R., **Hinton, P.S.** Effects of weight-bearing and non-weight bearing exercise on markers of bone turnover during short-term weight loss in overweight premenopausal women. National Annual Meeting, American College of Sports Medicine, 2008, Indianapolis, IN.

Rogers, R.S., Rector, R.S., Ruebel, M.L., Widzer, M.O., **Hinton, P.S.** Lean body mass predicts bone mineral density in male resistance-trained athletes. National Annual Meeting, American College of Sports Medicine, 2008, Indianapolis, IN.

Peterson, C.A., Ring, S., Loethen, J.V., Rector, R.S., Thomas, T.R., **Hinton, P.S.** Vitamin D status is unaltered by mild weight reduction in obese premenopausal women. Experimental Biology, San Diego, CA, 2008.

Loethen, J.V., Rector, R.S., Ruebel, M.L., Thomas, T.R., **Hinton, P.S.** Effects of weight-bearing and non-weight bearing exercise on markers of bone turnover during short-term weight loss in overweight premenopausal women. Central States Chapter Annual Meeting, American College of Sports Medicine, October 2007, Springfield, MO.

Rogers, R.S., Rector, R.S., Ruebel, M.L., Widzer, M.O., **Hinton, P.S.** Lean body mass predicts bone mineral density in male resistance-trained athletes. Central States Chapter Annual Meeting, American College of Sports Medicine, October 2007, Springfield, MO.

Warner, S.O., Rector, R.S., Liu, Y., **Hinton, P.S.**, Huyette, D.R., Thomas, T.R. Changes in abdominal adipose tissue compartments with changes in body weight. Central States Chapter Annual Meeting, American College of Sports Medicine, October 2007, Springfield, MO.

Rector, R.S., Warner, S.O., Liu, Y., **Hinton, P.S.**, Thomas, T.R.. Exercise and diet induced weight loss improves markers of insulin sensitivity and oxidative stress. National Meeting, American College of Sports Medicine, Jun 2007. New Orleans, LA.

Warner, S.O., Rector, R.S., Liu, Y., **Hinton, P.S.**, Huyette, D.R., Thomas, T.R. Changes in abdominal adipose tissue compartments with changes in body weight. National Meeting, American College of Sports Medicine, Jun 2007. New Orleans, LA.

Naples, S.P., Warner, S.O., Thyfault, J.P., Rector, R.S., Liu, Y., **Hinton, P.S.**, Thomas, T.R. Diet- and exercise-induced weight loss lowers intermuscular fat and low-density muscle attenuation in overweight individuals. National Meeting, American College of Sports Medicine, Jun 2007. New Orleans, LA.

Rector, R.S., Viele, V.A., **Hinton, P.S.**, Thomas, T.R. Aerobic training increases markers of bone formation during short-term weight loss. Annual Meeting, American College of Sports Medicine, 2006.

Rector, R.S., Rogers, R.S., Ruebel, M.L., **Hinton, P.S.**. Effect of weight-bearing and non-weight-bearing exercise on bone mineral density and turnover in men. Central States Chapter Annual Meeting, American College of Sports Medicine, October 2006, Kansas City, MO.

Ruebel, M.L., Herndon, K.S., Rector, R.S., Loethen, J.V., Thomas, T.R., **Hinton, P.S.** Dietary fatty acid intake and inflammatory markers in men and women. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2006.

Viele, V.A., Rector, R.S., Thomas, T.R., **Hinton, P.S.** Effects of weight loss via exercise and energy restriction on markers of bone turnover in overweight adults. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2005.

Hinton, P.S., Peppers, J.E., Rector, R.S., Hillman, L.S. Effects of exercise-associated menstrual disorders and hormonal contraceptive use on markers of inflammation and endothelial dysfunction. American College of Sports Medicine Central States Chapter Annual Meeting, Kansas City, MO, 2005.

Imhoff, R.D., Hillman, L.S. and **Hinton, P.S.**. Effects of exercise-induced menstrual dysfunction on bone mineral density in young women. Experimental Biology, American Society for Nutritional Sciences, San Diego, CA, 2005.

Sinclair, L.M. and **Hinton, P.S.** Iron supplementation maintains ventilatory threshold and improves energetic efficiency in iron-deficient nonanemic athletes. American College of Sports Medicine, Annual Meeting, Nashville, TN, 2005.

McClanahan, M.W., Toedebusch, B.W., Giles, B.L., Rector, R.S., **Hinton, P.S.** and Thomas, T.R. Effects of controlled weight loss and regain with exercise on insulin resistance and thigh composition. American College of Sports Medicine Central States Chapter Annual Meeting, Kansas City, MO, 2004.

Giles, B.L., Rector, R.S., Toedebusch, B.W., McClanahan, M.W., Cox, R.H., **Hinton, P.S.** and Thomas, T.R. The effects of exercise training on maintenance of abdominal adiposity and lipoproteins during weight regain. American College of Sports Medicine Central States Chapter Annual Meeting, Kansas City, MO, 2004.

Sinclair, L.M. and **Hinton, P.S.** Iron supplementation maintains ventilatory threshold and improves energetic efficiency in iron-deficient nonanemic athletes. 15th annual FINA World Sports Medicine Congress, Indianapolis, IN, 2004.

Imhoff, R.D., Hillman, L.S. and **Hinton, P.S.** Effects of exercise-induced menstrual dysfunction on bone mineral density in young women. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2004.

Sinclair, L.M. and **Hinton, P.S.** Prevalence of iron deficiency with and without anemia among endurance-trained males and females. Experimental Biology, Washington, D.C., 2004.

Campbell, N.C., **Hinton, P.S.** and Swain, S. Difference in age at menarche observed between African-American and Caucasian athletes. Annual Biomedical Research Conference for Minority Students, San Diego, CA, 2003.

Brannan, M.E., **Hinton, P.S.** and Beck, N.C. An examination of eating behaviors of collegiate athletes. Poster session presented at the annual meeting of the Association for the Advancement of Applied Sport Psychology, Philadelphia, PA, 2003.

Hinton, P.S. and Beck, N.C. Nutrient intakes of male and female collegiate athletes with disordered eating. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2003.

Kubas, K.L. and **Hinton, P.S.** Psychosocial correlates of disordered eating in female collegiate athletes: validation of the ATHLETE questionnaire. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2003.

Sinclair, L.M., McDaniel, T.M. and **Hinton, P.S.** Prevalence of iron deficiency with and without anemia among endurance-trained males and females. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2003.

Sinclair, L.M., McDaniel, T.M. and **Hinton, P.S.** Prevalence of iron deficiency with and without anemia among endurance-trained males and females. Central States Chapter of the ACSM Annual Meeting, Kansas City, MO, 2003.

Hinton, P.S., Vetter, M.J., Sinclair, L.M. and Wendtland C.D. Effects of iron status on performance during maximal and submaximal cycle ergometry in trained males. Experimental Biology, American Society for Nutritional Sciences, San Diego, CA, 2003.

Hinton, P.S., Vetter, M.J., Sinclair, L.M. and Wendtland, C.D. Effects of iron status on performance during maximal and submaximal cycle ergometry in trained females. American College of Sports Medicine Annual Meeting, San Francisco, CA, 2003.

Sanford, T.C., Davidson, M.M., Yakushko, O.F., **Hinton, P.S.**, Beck, N. and Doyel, J. A continuum perspective of eating disorders among collegiate athletes. Poster presented at the 110th Annual Convention of the American Psychological Association, Chicago, IL, 2002.

Hinton, P.S., Vetter, M.J., Sinclair, L.M. and Wendtland, C.D. Effects of iron status on performance during maximal and submaximal cycle ergometry in trained females. Central States Chapter of the ACSM Annual Meeting, Kansas City, MO, 2002.

Sinclair, L.M., Wendtland, C.D., Beck, N.C. and **Hinton, P.S.** Dietary intakes and weight-related behaviors of female collegiate athletes. Central States Chapter of ACSM Annual Meeting, Kansas City, MO, 2002.

Hinton, P.S., Sanford, T.C., Davidson, M.M., Yakushoko, O.F. and Beck, N.C. Dietary intakes and behaviors of female collegiate athletes. American College of Sports Medicine Annual Meeting, St. Louis, MO, 2002.

Hinton, P.S., Donahue, O.M. and Thomas, T.R. Effects of iron status on performance during maximal and submaximal exercise in women 18-20 and 35-45 years of age. *FASEB J* 16:A, 2002.

Hinton, P.S. and Olson, C.M. Behavior-specific self-efficacy predicts postpartum changes in exercise and food intake. Presented at the Missouri Symposium on Women's Health Research, MU School of Medicine, University of Missouri-Columbia, 2001.

Hinton, P.S. and Olson, C.M. Weight retention and obesity at two years postpartum. American Public Health Annual Meeting, Atlanta, GA, 2001.

Hinton, P.S., Donahue, O.M. and Thomas, T.R. Effects of iron status on performance during maximal and submaximal exercise in women 18-20 and 35-45 years of age. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2001.

Doyel, J. and **Hinton, P.S.** Validation of the Youth/Adolescent Questionnaire in a college-aged population. Nutrition Emphasis Week, Dept. of Nutritional Sciences, Univ. of Missouri, Columbia, MO, 2001.

Hinton, P.S. Development of an athletics-oriented measure of psychosocial determinants of disordered eating in female athletes. American College of Sports Medicine Annual Meeting, Baltimore, MD, 2001.

Hinton, P.S. and Olson, C.M. Behavior-specific self-efficacy predicts postpartum changes in exercise and food intake. *FASEB J* 15:A302, 2001.

Brownlie, T., **Hinton, P.S.**, Giordano, C. and Haas, J.D. Iron supplementation enhances adaptation to aerobic training in marginally iron-deficient non-anemic women. American College of Sports Medicine Mid-Atlantic Regional Chapter 22nd Annual Scientific Meeting, Ithaca, NY, November 1999.

Hinton, P.S. and Besler, J. Development of an athletics-oriented measure of psychosocial determinants of disordered eating in female athletes. American College of Sports Medicine Mid-Atlantic Regional Chapter 22nd Annual Scientific Meeting, Ithaca, NY, November 1999.

Hinton, P.S., Peterson C.A. and Ney, D.M. Insulin-like growth factor-I (IGF-I) does not alter the decrease in pre-lymphoid bone marrow (BM) cells observed during total parenteral nutrition (TPN) in rats. *FASEB J* 13:199.2, 1999.

Brownlie, T., **Hinton, P.S.**, Giordano, C. and Haas, J.D. Effect of iron treatment on adaptation to physical training in marginally iron-deficient non-anemic women. *FASEB J* 13:450.4, 1999.

Hinton, P.S., Brownlie, T., Giordano, C. and Haas, J.D. Iron supplementation improves endurance after training in iron-depleted, non-anemic women. *FASEB J* 13:450.3, 1999.

Hinton, P.S., Peterson, C.A., McNall, A. and Ney, D.M. IGF-I alters lymphocyte recovery after dexamethasone-induced apoptosis in rats maintained with total parenteral nutrition. Endocrine Society Meeting, San Francisco, CA. Abstract #P2-239, 1996.

Peterson, C.A., **Hinton, P.S.** and Ney, D.M. Medium-chain triglyceride (MCT) emulsions improve immune response and attenuate mucosal atrophy in parenterally-fed rats. *FASEB J* 10(3):1195, 1996.

Hinton, P.S., Peterson, C.A., Lo, H.C., McCarthy, D. and Ney, D.M. Insulin-like growth factor-I coinjected with total parenteral nutrition solution enhances immune function in dexamethasone-treated or surgically-stressed rats. *FASEB J* 9:5001, 1995.

Lo, H.C., **Hinton, P.S.**, Peterson, C.A. and Ney, D.M. Anabolic response to concurrently administered recombinant human insulin-like growth factor-I and/or growth hormone during total parenteral nutrition in surgically-stressed rats. *FASEB J* 9:5002, 1995.

Lo, H.C., Oster, M.H., **Hinton, P.S.** and Ney, D.M. IGF-I with GH during total parenteral nutrition (TPN) additively increased anabolism in surgically-stressed rats. Endocrine Society Meeting, Washington, D.C. Abstract #P3-210, p. 521, 1995.

Hinton, P.S., Hirvonen, M.D., Keeseey, R.E. and Ney, D.M. GH and IGF-I levels in lateral - hypothalamically (LH) lesioned rats maintaining reduced body protein mass. North American Association for the Study of Obesity (NAASO) Meeting, Milwaukee, WI, October 1993.

Publications: *Invited Reviews*

Hinton, P.S. An exercise prescription to increase bone mineral density in men with low bone mass: evidence for resistance training. *Lower Extremity Review*, 2016.

Carter, M.I., **Hinton, P.S.** Physical activity and bone health. *Missouri Medical Review*, 2014.

Hinton, P.S. Iron and the endurance athlete. *Applied Physiology, Nutrition, and Metabolism*, 2014.

Hinton, P.S. Iron deficiency in athletes: the role of interleukin-6 and hepcidin. *SCAN Pulse*, 2013.

Hinton, P.S. Do-it-yourself nutrition. *ACSM Health and Fitness Journal*, 2012.

Hinton, P.S. Vegetarian nutrition. *ACSM Health and Fitness Journal*, 2011.

Hinton, P.S. Iron deficiency. *ACSM Health and Fitness Journal* 10:12-18, Sept/Oct, 2006.

Hinton, P.S. Iron deficiency in athletes. *Training and Conditioning*, Nov/Dec, 2005.

Hinton, P.S. Under-eating in collegiate athletes. *Training and Conditioning*, Sept/Oct, 2005.

Hinton, P.S. Nutrient intakes of collegiate male and female athletes with disordered eating. *Research Brief*, Sports, Cardiovascular, and Wellness Nutrition Practice Group of the American Dietetics Association, January, 2006.

Publications: *Book Chapters*

Hinton, P.S. Bone Health in Men: Osteoporosis. *Men's Health: Global Perspectives, Current Trends and Selected Research*, Nova Science Publishers, 2017.

Hinton, P.S. Iron and Zinc. *Nutrition and the Female Athlete-- From Research to Practice*, K. Beals, editor, CRC Press, 2013.

Hinton, P.S. Sports Nutrition. *Nutrition Throughout the Lifecycle—An Evidence-based Approach, Second Edition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2013.

Hinton, P.S. Adolescent Nutrition. *Nutrition Throughout the Lifecycle—An Evidence-based Approach, Second Edition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2013.

Hinton, P.S. Eating Disorders. *Nutrition Throughout the Lifecycle—An Evidence-based Approach, Second Edition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2013.

Hinton, P.S. Running on Empty. *The Nutrition Edge*, Susan Kundrat, editor, Momentum Media Sports Publishing, 2010.

Hinton, P.S. Sports Nutrition. *Essentials of Life Cycle Nutrition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2010.

Hinton, P.S. Adolescent Nutrition. *Essentials of Life Cycle Nutrition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2010.

Hinton, P.S. Eating Disorders. *Essentials of Life Cycle Nutrition*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2010.

Hinton, P.S. Sports Nutrition. *Nutrition Throughout the Lifecycle—An Evidence-based Approach*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2008.

Hinton, P.S. Adolescent Nutrition. *Nutrition Throughout the Lifecycle—An Evidence-based Approach*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2008.

Hinton, P.S. Eating Disorders. *Nutrition Throughout the Lifecycle—An Evidence-based Approach*, S. Edelstein and J. Sharlin, eds., Jones & Bartlett Publishers, 2008.

Hillman, L.S., **Hinton, P.S.**, Peterson, C.A., Thomas, T.R., Sun, G.Y., Hillman, R. and Raedeke, M.D. Nutrition. *Cardiovascular Diseases in Women*, H.N. Winn and K.C. Dellsperger, eds., Taylor & Francis Books Ltd., Oxford, U.K.

Publications: *Curriculum*

Curriculum Development Team, MU Extension, *Sports Nutrition*, 2015

Lay media reports

Our work has relevance and applicability to the general public, and has been reported on by international and national news outlets, including those listed below. Our clinical trial of resistance training and jump training is going to be featured in an 8-episode documentary on the human body by Japanese Public television (NHK) for release in 2018.

Ag Day

ArthritisResearchuk.org
Bicycling Magazine
BMDreport.com
Columbia Tribune
comocyco.blogspot.com
cyclingnews.com
DailyNewsandAnalysis.com
EMaxHealth.com
esciencenews.com (**#24 most visited science news website**)
EurekAlert! (**#10 most visited science news website**)
Fitness Magazine
Health Magazine
Health Day (**featured on more than 5,000 websites and syndicated by *The New York Times*, Yahoo!
News, BusinessWeek, US News & World Report, and more than 100 Gannett newspapers**)
Illumination (<http://illumination.missouri.edu/spr08/hin1>).
Kansas City Infozine
KMOX radio – St. Louis
La Tercera newspaper in Chile
LA Times (**616,547 daily circulation**)
LiveStrong.com
MedCitizen.com
Medical News Today (UK) (**ranked 3rd among health news websites**)
medicalxpress.com
MedicineExchange.com
MedicineWorld.org
Men's Fitness Magazine (**8th most popular fitness magazine**)
Men's Health Magazine
MSN News (**#17 most visited health news website**)
news.ac2.org
News-medical.net
Physorg.com
Runner's World
ScienceBlog.com
ScienceDaily.com (**ranked 1st among science news websites**)
Shape Magazine
SweatScience.com
The Missourian
The Philadelphia Inquirer (**#13 U.S. newspaper, 343,710 daily circulation**)
The Wall Street Journal
Times of India (Circ. 13.3 million)
topics.dallasnews.com
Tufts' Health & Nutrition Letter
Twitter.com
U.S. News and World Report
Voices of America
YAHOO! News/Shine

RESEARCH ACTIVITIES: *Research Grants*

FUNDING AWARDED

Project Title: **Lifestyle Treatments for diabetic bone fragility**

Project Period: 8/01/17-7/31/18

Funding Agency: University of Missouri Research Board

Role (% Contribution): Principal Investigator

Amount Awarded: \$47,048

Project Title: **Role of bone blood flow in diabetic bone fragility**

Project Period: 7/01/15-6/30/16

Funding Agency: University of Missouri Research Council

Role (% Contribution): Principal Investigator

Amount awarded: \$4750

Project Title: **Is Diabetic Bone Fragility Caused by Preferential Differentiation of Bone Stem Cells into Fat Rather than Bone?**

Project Period: 7/01/15-6/30/16

Funding Agency: Margaret Mangel Research Catalyst Award

Role (% Contribution): Principal Investigator

Amount awarded: \$2998

Project Title: **Efficacy of plyometrics to increase bone mass in males with osteopenia**

Percent effort: 7%

Project Period: 9/01/09-8/31/12, no cost extension through 8/31/2013

Funding Agency: National Institutes of Health

Amount Awarded: \$214,005

Project Title: **Plyometrics to increase bone mass in osteopenic males**

Project Period: 12/01/07-11/30/09

Funding Agency: University of Missouri Research Board

Role (% Contribution): Principal Investigator

Amount awarded: \$33,500

Project Title: **Effects of weight loss and regain with and without weight-bearing exercise in overweight men and women with the metabolic syndrome**

Project Period: 6/14/07-8/20/07

Funding Agency: Food for the 21st Century Summer Research Intern Program

Role (% Contribution): Principal Investigator

Amount Awarded: \$2,500

Project Title: **Exercise and the metabolic syndrome with weight regain**

Project Period: 1/01/06-12/31/10

Funding Agency: National Institutes of Health

Role (% Contribution): Co-Investigator (15%); Tom Thomas (Nutritional Sciences, University of Missouri) P.I.

Amount Awarded: \$897,000

Project Title: **Bone Health of Young Adult and Masters Male Athletes in Weight-Bearing and Non-Weight Bearing Sports**

Project Period: 6/15/06-8/15/06

Funding Agency: Food for the 21st Century Summer Research Intern Program, University of Missouri

Role (% Contribution): Principal Investigator

Amount Awarded: \$1,250

Project Title: Dietary trans fatty acid intake and serum markers of inflammation

Project Period: 6/15/06-8/15/06

Funding Agency: Food for the 21st Century Summer Research Intern Program

Role (% Contribution): Principal Investigator

Amount Awarded: \$ 1,250

Project Title: Effects of weight-bearing and non-weight bearing exercise on serum markers of bone formation and breakdown during short-term weight loss in overweight adult women

Project Period: 1/01/05-8/31/07

Funding Agency: Margaret Mangel Research Catalyst Fund

Amount awarded: \$2,500

Project Title: Effects of diet and exercise induced weight loss on serum markers of bone turnover

Project Period: 6/15/05-8/15/05

Funding Agency: Food for the 21st Century Summer Research Intern Program, University of Missouri

Role (% Contribution): Principal Investigator

Amount Awarded: \$2,500

Project Title: Effects of exercise-induced menstrual disorders on serum markers of endothelial dysfunction

Project Period: 6/15/05-8/15/05

Funding Agency: Food for the 21st Century Summer Research Intern Program

Role (% Contribution): Principal Investigator

Amount Awarded: \$ 2,500

Project Title: Bone turnover in physically-active women with oligomenorrhea or amenorrhea

Project Period: 5/01/04-4/30/05

Funding Agency: Margaret Mangel Faculty Catalyst Award

Role (% Contribution): Principal Investigator

Amount Awarded: \$1,500

Project Title: Effect of iron supplementation on endurance performance in iron deficient trained male and female athletes

Project Period: 4/01/03-3/31/04

Funding Agency: MU Alumni Association Faculty Incentive Grant for Research Enhancement

Role (% Contribution): Principal Investigator

Amount Awarded: \$1,500

Project Title: Effect of iron supplementation on endurance performance in iron deficient trained male and female athletes

Project Period: 6/01/03-5/31/04

Funding Agency: Missouri University Alumni Association.

Role (% Contribution): Principal Investigator

Amount Awarded: \$2,000

Project Title: Iron deficiency and aerobic exercise: relation between functional iron and performance

Project Period: 7/01/02-6/30/04

Funding Agency: Gatorade Sports Science Institute

Role (% Contribution) Principal Investigator
Amount Awarded: \$500

Project Title: Validation of an athletics-oriented measure of psychosocial correlates of disordered eating

Project Period: 2/02/02-8/31/03
Funding Agency: University of Missouri Research Council
Role (% Contribution): Principal Investigator
Amount Awarded: \$4,000

Project Title: Iron status and performance during maximal and submaximal cycle ergometry in trained women

Project Period: 6/01/02-8/31/02
Funding Agency: Life Sciences Undergraduate Research Opportunity Program
Role (% Contribution): Principal Investigator
Amount Awarded: \$3,000

Project Title: Multidisciplinary treatment for cancer fatigue

Project Period: 8/01/01-5/01/02
Funding Agency: University of Missouri Research Board
Role (% Contribution): Co-Investigator (20%); D. Porock, Nursing, University of Missouri, P.I.
Amount Awarded: \$39,000

Project Title: Nutritional status of undergraduates

Project Period: 6/01/01-8/31/01
Funding Agency: Food for the 21st Century Summer Research Intern Program
Role (% Contribution): Principal Investigator
Amount Awarded: \$2,500

Project Title: Effects of iron repletion on muscle enzymes in young women

Project Period: 2/01/01-1/31/02
Funding Agency: Missouri University Alumni Association
Role (% Contribution): Principal Investigator
Amount Awarded: \$1,500

FUNDING APPLIED FOR—DECISION PENDING

Project Title: Bone loss and fertility restoration via cryopreserved ovarian tissue auto-grafting using a rat model

Project Period: 4/01/19-3/31/21
Funding Agency: NIH R21
Amount Awarded: \$409,399
Role (% Contribution): Co-investigator (Agca)

GRANTS NOT FUNDED

Project Title: Exercise, down-regulation of sclerostin, and treatment of diabetic bone fragility

Project Period: 4/01/19-3/31-21
Funding Agency: American Diabetes Association
Amount Awarded: \$230,000
Role (% Contribution): Principal Investigator

Project Title: Exercise, down-regulation of sclerostin, and treatment of diabetic bone fragility
Project Period: 4/01/18-3/31-20
Funding Agency: American Diabetes Association
Amount Awarded: \$230,000
Role (% Contribution): Principal Investigator

Project Title: Bone loss and fertility restoration via cryopreserved ovarian tissue auto-grafting using a rat model
Project Period: 4/01/18-3/31/20
Funding Agency: NIH R21
Role (% Contribution): Co-investigator (Agca)

Project Title: Diabetic bone fragility: when bone vascular endothelial cells and osteoblasts stop communication
Project Period: 4/01/18-3/31/20
Funding Agency: NIH/NIAMS 1X02AR071999-01
Role (% Contribution): Principal Investigator

Project Title: Is reduced bone blood flow cause bone fragility in diabetes
Project Period: 6/01/17-5/31/18
Funding Agency: Richard Wallace Faculty Incentive Grant
Role (% Contribution): Principal Investigator
Amount Awarded: \$4,700

Project Title: Role of bone and vasculature cross-talk in type 2 diabetes
Project Period: 2/01/17-1/31-19
Funding Agency: American Heart Association
Amount Awarded: \$150,000

Project Title: Role of sclerostin in the pathogenesis of diabetic bone fragility
Project Period: 1/01/17-12/31-18
Funding Agency: Kansas City Life Sciences Institute
Amount Awarded: \$50,000

Project Title: Increased bone blood flow and reduced AGE content with empagliflozin to treat bone fragility in T2DM
Project Period: 10/01/16-9/30-18
Funding Agency: Boehringer Ingelheim
Amount Awarded: \$200,000

Project Title: Mechanisms for increased bone fragility in T2DM and therapeutic potential of exercise and caloric restriction
Project Period: 4/01/17-3/31-19
Funding Agency: American Diabetes Association
Amount Awarded: \$230,000

Project Title: Lifestyle Treatments for diabetic bone fragility
Project Period: 6/01/16-5/31/17
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator
Amount Awarded: \$60,200

Project Title: **Exercise in adolescents with serious emotional disturbance to reduce cardio-metabolic risk**
Percent effort: Co-PI (20%); Laine Young-Walker Co-PI (Psychiatry, University of Missouri)
Project Period: 7/1/2016-6/30/2020
Funding Agency: NIAMS (MH-16-600)
Amount Awarded: \$1,729,992

Project Title: **Mechanisms for increased bone fragility in T2DM and therapeutic potential of exercise and caloric restriction**
Project Period: 4/01/16-3/31-18
Funding Agency: American Diabetes Association
Amount Awarded: \$221,355

Project Title: **An animal model of diabetic skeletal fragility: OLETF rat**
Project Period: 6/01/15-5/31/16
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator
Amount Awarded: \$58,637

Project Title: **An animal model of diabetic skeletal fragility: OLETF rat**
Project Period: 2/01/15-1/31/16
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator
Amount Awarded: \$58,637

Project Title: **An animal model of diabetic skeletal fragility: OLETF rat**
Project Period: 6/01/14-1/31/15
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator
Amount Awarded: \$58,637

Project Title: **Do dairy foods enhance the osteogenic effects of exercise?**
Percent effort: PI
Funding Agency: Dairy Research Institute

Project Title: **Efficacy of Prolia and resistance training to increase bone mass in men with osteopenia**
Percent effort: PI
Funding Agency: Amgen

Project Title: **Dietary fat: a potential therapeutic target to improve cognitive function after repeated brain injury**
Percent effort: co-PI
Project Period: 2014-2017
Funding Agency: Department of Defense
Amount Awarded: \$1,000,000

Project Title: **Effects of daily ingestion of JuicePlus on serum markers of chronic, systemic inflammation in normal weight or overweight/obese adults**
Percent effort: 25% (PI)
Project Period: 3/01/2014-2/28/2015
Funding Agency: NSA, LLC
Amount Awarded: \$194,948

Project Title: Exercise vs. Diet for the Treatment of NASH
Percent effort: 10% (Co-I)
Project Period: 04/01/13-03/31/18
Funding Agency: National Institutes of Health
Amount Awarded: \$3,924,467

Project Title: Interaction of Repeated Brain Injuries and Lifestyle Behavior on Cognitive Health
Percent effort: (Co-PI)
Project Period: 2013-2015
Funding Agency: Department of Defense
Amount Awarded: \$250,000

Project Title: Interaction of Concussion/Subconcussive Events and High-Fat Diet on the Cognitive, Emotional and Physical Health of Former College Football Athletes
Percent effort: 8% (Co-I)
Project Period: 3/01/2012-2/28/2013
Funding Agency: National Football League Charities
Amount Awarded: \$151,500

Project Title: Inter-organ regulation of insulin sensitivity and bone metabolism
Percent effort: 30%
Project Period: 7/01/11-6/30/16
Funding Agency: National Institutes of Health
Amount Awarded: \$1,851,102

Project Title: Predictors of cognitive, behavioral, and emotional health in former collegiate athletes
Percent effort: 10% (Co-I)
Project Period: 1/1/11-12/31/11
Funding Agency: National Football League
Amount Awarded: \$150,996

Project Title: Resistance training and the metabolic syndrome with weight regain
Percent effort: 15% (Co-I)
Project Period: 1/01/10-12/31/4
Funding Agency: National Institutes of Health
Amount Awarded: \$1,824,043

Project Title: Bone: a novel therapeutic target in the prevention and treatment of insulin resistance?
Project Period: 6/01/10-5/31/11
Funding Agency: MU-iCATS
Role (% Contribution): Principal Investigator; Scott Rector (Gastroenterology, University of Missouri) and John Thyfault (N&EP, University of Missouri) Co-Is
Amount Requested: \$50,000

Project Title: The role of bone in the pathogenesis of insulin resistance
Project Period: 6/01/09-5/31/10
Funding Agency: MU-iCATS
Role (% Contribution): Principal Investigator (20%); Scott Rector (Gastroenterology, University of Missouri) and John Thyfault (N&EP, University of Missouri) Co-Is
Amount Requested: \$50,000

Project Title: Exercise vs. Diet in the Treatment of the Metabolic Syndrome and NAFLD
Percent effort: 10% (Co-I)
Project Period: 10/01/09-9/30/11
Funding Agency: National Institutes of Health
Amount Awarded: \$673,215

Project Title: Evaluating blood lead as a biomarker of bone loss
Percent effort: 10% (Co-I)
Project Period: 07/01/09-6/30/12
Funding Agency: Department of Defense
Amount Awarded: \$1,010,764

Project Title: Efficacy of plyometrics to increase bone mass in osteopenic men
Percent effort: 25%
Project Period: 10/01/09-9/30/11
Funding Agency: National Institutes of Health
Amount Awarded: \$422,831

Project Title: Exercise to preserve bone health during weight loss in overweight young women
Percent effort: 10%
Project Period: 7/01/09-6/30/10
Funding Agency: Albert Foundation
Amount requested: \$88,720

Project Title: Efficacy of plyometrics to increase bone mass in male cyclists with osteopenia
Percent effort: 8%
Project Period: 8/01/07-7/31/10
Funding Agency: National Institutes of Health
Amount requested: \$202,994

Project Title: Bone effects of soy isoflavones in women athletes
Project Period: 4/01/06-3/31/10
Funding Agency: National Institutes of Health
Role (% Contribution): Principal Investigator (40%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$1,800,000
Score=255, percentile=43.6%

Project Title: Effects of soy isoflavones on bone health in active women with menstrual dysfunction
Project Period: 01/01/06-12/31/10
Funding Agency: United States Department of Agriculture
Role (% Contribution): Principal Investigator (30%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$500,000

Project Title: MU Center for Transdisciplinary Research on Energetics and Cancer
Project Period: 9/01/05-8/31/10
Funding Agency: National Institutes of Health
Role (% Contribution): Core Leader
Amount Requested: \$3,477,043

Project Title: **Effects of soy isoflavones on bone density and turnover in physically-active women with oligomenorrhea or amenorrhea**
Project Period: 1/01/05-12/31/08
Funding Agency: U.S. Army PMPRR
Role (% Contribution): Principal Investigator (40%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$1,079,970

Project Title: **Effects of soy isoflavones on bone health in active women with menstrual dysfunction**
Project Period: 1/01/05-12/31/08
Funding Agency: United States Department of Agriculture
Role (% Contribution): Principal Investigator (15%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$578,675
Medium priority score

Project Title: **Exercise and the metabolic syndrome with weight regain**
Project Period: 1/01/05-12/31/09
Funding Agency: National Institutes of Health
Role (% Contribution): Co-Investigator (15%); Tom Thomas (Nutritional Sciences, University of Missouri) P.I.
Amount Requested: \$1,798,993

Project Title: **Isoflavones and bone in oligo-/amenorrheic women**
Project Period: 2/01/05-1/31/05
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator (20%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$49,630

Project Title: **Isoflavones and bone in oligo/amenorrheic women**
Project Period: 2/01/04-1/31/06
Funding Agency: University of Missouri Research Board
Role (% Contribution): Principal Investigator (20%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$50,000

Project Title: **Exercise and the metabolic syndrome with weight regain**
Project Period: 4/01/04-3/31/09
Funding Agency: National Institutes of Health
Role (% Contribution): Co-Investigator (15%); Tom Thomas (Nutritional Sciences, University of Missouri) P.I.
Amount Requested:

Project Title: **Bone effects of soy isoflavones in women athletes**
Project Period: 4/01/04-3/31/08
Funding Agency: National Institutes of Health
Role (% Contribution): Principal Investigator (40%); Laura Hillman (Child Health, University of Missouri) and George Rottinghaus (Veterinary Sciences, University of Missouri) Collaborators
Amount Requested: \$1,055,360

Project Title: **The Female Athlete Triad in physically-active young women**

Project Period: 4/01/04-3/31/09
Funding Agency: National Institutes of Health
Role (% Contribution): Principal Investigator (40%); Edward Frongillo (Nutritional Sciences, Cornell University) and Niels Beck (Psychiatry, University of Missouri) Collaborators
Amount Requested: \$1,109,625

Project Title: Soy isoflavones and attenuation of bone loss in physically active women with menstrual dysfunction

Project Period: 8/01/03-7/31/05
Funding Agency: Illinois and Missouri Biotechnology Alliance
Role (% Contribution) PI (50%)
Amount Requested: \$309,000

Project Title: Iron deficiency and aerobic exercise in young women

Project Period: 8/01/03-7/31/05
Funding Agency: United States Department of Agriculture
Role (% Contribution): Principal Investigator (15%); Martin Childers (University of Missouri), Richard Eisenstein (University of Wisconsin), Collaborators
Amount Requested: \$277,154

Project Title: Interaction of exercise and omega-3 fatty acids in individuals with elevated postprandial lipemia

Project Period: 7/01/02-6/30/04
Funding Agency: American Heart Association, Heartland Affiliate
Role (% Contribution): Co-Investigator (5%); Tom Thomas (Nutritional Sciences, University of Missouri) P.I.
Amount Requested: \$121,000

Project Title: Reducing Coronary Heart Disease Risk: Strategies for Decreasing Triglycerides

Project Period: 7/01/01-6/31/05
Funding Agency: American Heart Association
Role (% Contribution): Co-Investigator (3%); Tom Thomas (Nutritional Sciences, University of Missouri) P.I.
Amount Requested: \$217,500

Project Title: Bone turnover in physically-active young women with oligomenorrhea or amenorrhea

Project Period: 1/01/02-12/31/04
Funding Agency: Children's Miracle Network
Role (% Contribution): Co-Investigator; L.S. Hillman (Child Health, University of Missouri) P.I.
Amount Requested: \$9,906

Project Title: Iron deficiency and aerobic exercise in young women

Project Period: 8/01/02-7/31/04
Funding Agency: United States Department of Agriculture
Role (% Contribution): Principal Investigator (15%); Martin Childers (University of Missouri), Richard Eisenstein (University of Wisconsin), Collaborators
Amount Requested: \$304,870

Medium priority score

Project Title: Beef in the diets of physically-active young women

Project Period: 7/01/01-6/30/03
Funding Agency: National Cattlemen's Beef Association Nutrition Research Program

Role (% Contribution) Principal Investigator

Amount Requested: \$90,744

TEACHING ACTIVITIES

During my tenure at the University of Missouri, I have been the primary instructor for 8 undergraduate courses for majors in Nutrition and Fitness, Nutritional Sciences, and Dietetics (*Diet Therapy for Healthcare Professionals, Nutrition Throughout the Lifespan, Research Methods in Dietetics Lecture and Practice, Human Nutrition II, Human Nutrition II Laboratory, Eating Disorders, and Capstone: Sports Nutrition*), and I developed the curriculum for 6 of these. In addition, I have been the primary instructor for 3 graduate-level Nutritional Sciences courses—*Sports Nutrition, Human Nutrition and Health, and Master's Seminar in Nutritional Sciences*—all of which I developed. In May 2017, I was appointed the University of Missouri's Faculty Athletics Representative to the Southeastern Conference and National Collegiate Athletics Association by Interim Chancellor Foley, as was provided course release.

Undergraduate courses

- 2019 *Nutrition for Athletic Performance and Rehabilitation* (ATHTRN 4500, 3 credits, co-instructor)
- 2016 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2015 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2014 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2013 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2012 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2011 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2010 *Nutrition and Fitness Capstone—Sports Nutrition* (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2009 *Nutrition Throughout the Life Span* (NS 2450, 3 credits)
Nutrition and Fitness Capstone—Sports Nutrition (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2008 *Nutrition Throughout the Life Span* (NS 2450, 3 credits)
Nutrition and Fitness Capstone—Sports Nutrition (NS 4970, 2 credits)
Eating Disorders (NS 2460, 2 credits)
- 2007 *Nutrition Throughout the Life Span* (NS 2450, 3 credits)
Nutrition and Fitness Capstone—Sports Nutrition (NS 4970, 2 credits)
- 2006 *Nutrition Throughout the Life Span* (NS 2450)
Eating Disorders (NS 2460)
Nutrition and Fitness Capstone, Sports Nutrition (NS 4950, Section II, 2 credits)

- 2005 *Nutrition Throughout the Life Span* (NS 2450, 3 credits)
 Eating Disorders (NS 2460, 2 credits)
- 2004 *Nutrition Throughout the Life Span* (NS 245, 3 credits)
 Research Methods in Dietetics (313P, 2 credits)
 Human Nutrition II (4340, 3 credits)
 Human Nutrition II Laboratory (4330, 2 credits)
- 2003 *Nutrition Throughout the Life Span* (NS 245, 3 credits)
 Eating Disorders (NS 246, 2 credits)
 Research Methods in Dietetics (NS 313, 2 credits)
 Human Nutrition Laboratory (NS 330, 2 credits)
 Human Nutrition II (NS 434, 3 credits)
- 2002 *Diet Therapy for Healthcare Professionals* (NS 238, 3 credits)
 Eating Disorders (NS 246, 2 credits)
- 2001 *Diet Therapy for Healthcare Professionals* (NS 238, 3 credits)
 Eating Disorders (NS 246, 2 credits)
 Co-instructor for Nutritional Sciences 434 (3 graduate credits): *Human Nutrition*, University of
 Missouri-Columbia
- 2000 *Eating Disorders* (NS 246)

Graduate Courses

- 2019 *Masters' Seminar in Nutritional Sciences* (NS 8087, 1 credit)
 Doctoral Seminar in Nutritional Sciences (NS 9087, 1 credit)
- 2018 *Masters' Seminar in Nutritional Sciences* (NS 8087, 1 credit)
 Doctoral Seminar in Nutritional Sciences (NS 9087, 1 credit)
- 2017 *Masters' Seminar in Nutritional Sciences* (NS 8087, 1 credit)
 Doctoral Seminar in Nutritional Sciences (NS 9087, 1 credit)
- 2016 *Human Nutrition and Health* (NS 8340, 3 credits)
 Sports Nutrition (NS 7970, 2 credits)
 Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)
 Doctoral Seminar in Nutritional Sciences (NS 9087, 1 credit)
- 2015 *Human Nutrition and Health* (NS 8340, 3 credits)
 Sports Nutrition (NS 7970, 2 credits)
 Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)
 Doctoral Seminar in Nutritional Sciences (NS 9087, 1 credit)
- 2014 *Human Nutrition and Health* (NS 8340, 3 credits)
 Sports Nutrition (NS 7970, 2 credits)
 Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)
- 2013 *Sports Nutrition* (NS 7970, 2 credits)
 Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)

2012 *Human Nutrition and Health* (NS 8340, 3 credits)
Sports Nutrition (NS 7970, 2 credits)
Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)

2011 *Human Nutrition and Health* (NS 8340, 3 credits)
Sports Nutrition (NS 7970, 2 credits)
Masters' Seminar in Nutritional Sciences (NS 8087, 1 credit)

2010 *Sports Nutrition* (NS 7970, 2 credits)

2009 *Sports Nutrition* (NS 7970, 2 credits)

2008 *Sports Nutrition* (NS 7970, 2 credits)

2006 *Human Nutrition and Health* (NS 8340, 3 credits, Co-Instructor)

Guest Lectures, Course Coordinator

2019 My Journey to FAR, *Student Success Center* (SSC 1151)

Disordered Eating in Athletes, *Athletic Training* (ATHTRN 4500)

2018 My Journey to FAR, *Student Success Center* (SSC 1151)

Eating Disorders, *Introduction to Human Nutrition* (NEP 1034 Honors)

The Faculty Athletics Representative Role in Governance of D1 Athletics, *Governance & Policy in Sport and Leisure* (PRST 3282)

2017 Academic Integrity, *College Success Seminar* (SSC 1150)
Eating Disorders, *Introduction to Human Nutrition* (NEP 1034 Honors)

2014 Exercise Metabolism, *Human Nutrition II* (NS 4340)
Exercise Metabolism, *Exercise Physiology*, Columbia College, Columbia MO
Exercise is Medicine for Bone, *Exercise Physiology*, Columbia College, Columbia MO

2013 Exercise Metabolism, *Human Nutrition II* (NS 4340)

2012 Exercise Metabolism, *Human Nutrition II* (NS 4340)

2011 Binge Eating Disorder, *Landscape of Obesity* (NS)

2010 Binge Eating Disorder, *Landscape of Obesity*

2009 Nutrients Important for Blood, *Human Nutrition I* (NS 2340)
Exercise Metabolism, *Human Nutrition II* (NS 4340)

2008 Iron Deficiency and Training Adaptations *Human Nutrition and Health* (NS 8340)
Energy Balance and Bone Health, *Human Nutrition and Health* (NS 8340)
Nutrients Important in Metabolism, *Human Nutrition I* (NS 2340)
Exercise Metabolism, *Human Nutrition II* (NS 4340)

2007 Exercise Metabolism, *Human Nutrition II* (NS 4340)

- 2006 Exercise Metabolism, *Human Nutrition II* (NS 4340)
- 2003 Eating Disorders, Second Year Medical Students
Eating Disorders in Athletes, *Problems in Psychology, Eating Disorders* (PSYCH 400)
Physical Activity in the Prevention and Treatment of Chronic Disease, *Nutritional Assessment* (NS 236)
- 2002 The Female Athlete Triad, *Nutrition and Fitness* (NS 134)
Physical Activity in the Prevention and Treatment of Chronic Disease, *Nutritional Assessment* (NS 236)
Eating Disorders, Second Year Medical Students
- 2001 Physical Activity in the Prevention and Treatment of Chronic Disease, *Nutritional Assessment* (NS 236)
The Female Athlete Triad, *Advanced Exercise Physiology* (NS 485)
Eating Disorders, Second Year Medical Students

MENTORING

I have been the primary research advisor for 16 graduate students in Exercise Physiology and Nutritional Sciences, as our department houses both graduate programs. I am very proud that 10 of my masters students published their thesis work in peer-reviewed journals. In addition, I have served on the thesis committee for 22 masters and doctoral students in Exercise Physiology, Nutritional Sciences, Counseling Psychology, Clinical Psychology, Vet Biomedical Sciences, Biological Sciences, and Health Education and Promotion.

Visiting Scientists

Ruihua Zhou, North China Coal Medical College, 2006

Postdocs

Thomas Altena, postdoctoral trainee, NIH Training Grant

Dissertation/Thesis Committee Chair

2015-present	Rebecca Dirkes	Ph.D., Nutritional Sciences
2014-2016	Matthew Richard	M.S., Nutritional Sciences
2014-2016	Laura Ortinau	Ph.D., Nutritional Sciences
2014-2015	Tyler Lasley	M.S., Nutritional Sciences (co-mentor)
2012-2014	Nantian Lin	M.S., Nutritional Sciences
2011-2014	Jun Jiang	M.S., Nutritional Sciences
2010-2012	Tim Sinak	M.S., Exercise Physiology
2010-2012	Melissa Carter	M.S., Exercise Physiology
2009-2011	Andrew Dawson	M.A., Exercise Physiology
2008-2010	Sarah Mobley	M.A., Exercise Physiology
2007-2009	Robert Rogers	M.A., Exercise Physiology
2006-2009	Joanne Loethen	M.A., Exercise Physiology
2005-2006	Tixieanna Dissmore	Ph.D., Nutritional Sciences
2003-2005	Karen Kubas	Ph.D., Nutritional Sciences
2002-2005	Rebecca Imhoff	M.S., Nutritional Sciences
2001-2004	Lisa Sinclair	M.A., Exercise Physiology

Dissertation/Thesis Committee Member

2017-2019	Ryan Owen	M.A., Journalism
2016-present	Majid Syed-Abdu	Ph.D., Nutritional Sciences
2014-2017	Anthony Belenchia	Ph.D., Nutritional Sciences
2005-2012	Benjamin Coe	M.S., Biological Sciences, Ph.D., Biological Sciences
2009-2011	D.J. Oberlin	M.S., Exercise Physiology
2007-2011	Katie Mikus	Ph.D., Nutritional Sciences
2006-2011	Sarah Borengasser	Ph.D., Nutritional Sciences
2005-2010	Shana Warner	Ph.D., Exercise Physiology
2006-2010	Christine Maldonado	Ph.D., Clinical Psychology
2008-2010	Meg Harney	M.A., Clinical Psychology
2006-2008	Vu Ngyuen	Ph.D., Health Education and Promotion
2006-2009	Matt Widzer	Ph.D., Vet Biomedical Sciences
2005-2008	Megan St. Thomas	M.S., Nutritional Sciences, Arizona State University
2006-2008	Amanda Weishuhn	M.A., Clinical Psychology
2001-2007	Randy Scott Rector	Ph.D., Exercise Physiology
2003-2004	Megan Brannan	M.A, Counseling Psychology
2002-2004	Matt McClanahan	M.A., Exercise Physiology
2002-2004	Kamila O'Neill	M.S., Clinical Psychology
2002-2004	Judy Michaelson	M.A., Exercise Physiology
2001-2002	Owen Donahue	M.A., Exercise Physiology
2000-2001	Jon Pellechia	M.A, Exercise Physiology
2001-2002	Bryan Smith	Ph.D., Exercise Physiology
2000-2004	Heather Teavendale	Ph.D., Clinical Psychology

Dissertation Reader

2016	Claire Badenhorst	Ph.D., Sport Science, Exercise and Health University of Western Australia, Perth, Western Australia
2015	Andrew Govus	Ph.D., Health, Engineering, and Science Edith Cowan University, Joondalup, Western Australia

Undergraduate Research

2019	Ethan Weiss	<i>The Effects of Maternal Exercise on Offspring Skeletal Outcomes</i>
2017	Emily Shaw	<i>The Effects of Long-Term Feeding of Soy Protein-Based Diet on Tibia Advanced Glycation End-Product Content in Low-Fit, Intact and Ovariectomized Female Rats</i>
	Mubinah Khaleel	<i>Effects of exercise or caloric restriction on tibia bone shape and strength in hyperphagic OLETF rats</i>
2015	Hannah Hercher	<i>Effects of exercise on irisin in hyperphagic OLETF rats</i>
2014	Yasmine Mavrakis	<i>Associations between serum ferritin and markers of glucose homeostasis and inflammation in overweight young women</i>
2013	Matthew Strope	<i>Physical activity during adolescence and young adulthood and bone mineral density in adult men</i>
2012	Jaccy Billeter Matthew Strope Adam Younkin Zach Wehmeyer	NIH Bone study

	Ryan Branson	<i>College students attitude and knowledge towards eating disorders in males</i>
2011	Lynn Eaton	NEP Summer Research Intern
2010	Blossom Nwaneri	McNair Scholar
2009	Melissa Fox	LSUROP Summer Research Intern
2008	Fatima Al-Ghadban	F21C Summer Research Intern <i>Effects of weight loss and regain with and without weight-bearing exercise in overweight men and women with the metabolic syndrome</i>
2007	Karissa Herndon	Nutritional Sciences 3085: Problems <i>Bone health of young adult and masters male athletes in weight-bearing and non-weight bearing sports</i>
	Meghan Ruebel	F21C Summer Research Intern <i>Dietary trans fatty acid intake and serum markers of inflammation</i>
	Robert Rogers	F21C Summer Research Intern <i>Bone mineral density in men in weight-bearing vs. non-weight-bearing sports</i>
2006	James Peppers	F21C Summer Research Intern Grant <i>Effects of exercise-associated menstrual disorders on markers of endothelial dysfunction</i>
	Valerie Viele	F21C Summer Research Intern Grant <i>Effects of weight loss via exercise and energy restriction on markers of bone turnover in overweight adults</i>
2005	Thomas McDaniel	F21C Summer Research Intern Grant <i>Iron deficiency and performance in trained males and females</i>
2004	Molly Vetter	LSROP Summer Research Intern Grant <i>Iron deficiency and training adaptations in young women and men</i>
2003	Tiffany Knoebel	F21C Summer Research Intern Grant <i>Attitudes Towards Eating Disorders in Students Enrolled in NS 246</i>
2002	Nathan Koffarnus	F21C Summer Research Intern Grant <i>Nutrient intakes and eating behaviors in collegiate wrestlers</i>
2001	Joshua Botdorf	F21C Summer Research Intern Grant <i>Nutrient intakes and eating behaviors of collegiate track and cross-country athletes</i>
2000	Joanna Doyel	F21C Summer Research Intern Grant <i>Validity and reproducibility of the Youth / Adolescent Questionnaire food frequency questionnaire in male and female undergraduate college students</i>

High School Research Projects

2003	Katie Patterson	Tuscumbia High School Science Research <i>The Mirror Within: A study of the relationship between self-esteem, body image, and BMI in children and adolescents</i>
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Undergraduate Advising

I have advised hundreds of undergraduates in Nutrition and Fitness from 2000-2019. I have written numerous letters of recommendation for my undergraduate advisees and I am very pleased that my former students have gone on to graduate programs in Public Health, Exercise Physiology, Nutrition, and Athletic Training and on to professional programs in Dietetics, Dentistry, Physical Therapy, Physician, Physician's Assistant, and Medicine.

PROFESSIONAL ACTIVITIES

Professional Organizations

2012-present American Society for Bone and Mineral Research
2003-present Health Activity Center, University of Missouri
1998-present American College of Sports Medicine, Professional Member
1997-present American Society for Nutritional Sciences, Associate Member
1998-2005 National Eating Disorders Organization, Individual Member

Presentations: *Invited Research Seminars*

- 2015 *Physical activity and bone health.* University of Missouri Annual Extension Conference, Columbia, Missouri, October 29, 2015.
- 2014 *Bone mineral density in osteopenic men is increased after resistance training or plyometric exercise*
NEP Department Seminar, University of Missouri-Columbia
- Opposing dietary recommendations: carbohydrate, sodium and protein for sports performance vs. health*
Applied Health and Sports Sciences Graduate Program, Northwest Missouri State, Maryville, MO
- 2012 *Effects of excess adiposity and insulin resistance on bone health*
Central States ACSM Annual Meeting, Columbia MO
- Effects of excess adiposity on bone*
Nutrition & Exercise Physiology Seminar Series, University of Missouri
- 2010 *Causes and Consequences of Iron Deficiency in Athletes: Research Update.*
Sports, Cardiovascular and Wellness Nutrition (SCAN) Dietetic Practice Groups' Annual Symposium, March 28-31, San Diego, CA.
- Exercise and Bone Health: effects of exercise type, intensity, and duration*
ACSM Exercise is Medicine Symposium, May 14, UMKC, Kansas City, MO.
- 2009 *Determinants of bone health*
LSUROP Seminar Series, University of Missouri
- 2008 *Energy balance and bone health*
Department of Nutritional Sciences Seminar Series, University of Missouri
- 2006 *Energy balance and bone turnover*
Central States ACSM Annual Meeting, Kansas City, MO.
- 2005 *Effects of exercise-induced menstrual disorders on bone mass and bone turnover in premenopausal women*
Department of Nutritional Sciences Seminar Series, University of Missouri

Bone mass and bone turnover in premenopausal women with exercise-associated menstrual disorders and in hormonal contraceptive users
Grand Rounds, Department of Child Health, University of Missouri.

- 2003 *Biochemical, dietary and psychosocial aspects of nutrition in the athlete*
Department of Nutritional Sciences Seminar Series, University of Missouri
- 2001 *The Female Athlete Triad*
Presentation to Coaches, University of Missouri Intercollegiate Athletics
- 2000 *Iron Status and Exercise/Performance*
Nutrition Research Discovery Symposium, National Cattlemen's Beef Association, Chicago, IL
- Exercise frequency and food intake one year postpartum: Psychosocial correlates and effects on weight retention*
Community Nutrition Seminar Series, Cornell University
- 1999 *Psychosocial determinants of exercise behavior during pregnancy*
Community Nutrition Seminar Series, Cornell University
- 1997 *Effects of total parenteral nutrition and insulin-like growth factor-I on immune response*
Nutritional Sciences 931, Department Seminar, University of Wisconsin
- 1996 Female Athlete Triad Symposium: Personalizing the Triad.—Sponsored by Departments of Education and Kinesiology, University of Wisconsin-Madison
Running to Lose: The Female Athlete Triad.—Great Lakes Area Athletic Trainer Association Annual Meeting, Middleton, WI
- 1995 *IGF-I does not prevent dexamethasone-induced apoptosis of thymocytes*
Interdepartmental Graduate Program in Nutritional Sciences Seminar Series, University of Wisconsin
- MCT/LCT admixture vs. LCT enhances reticuloendothelial system function during TPN in rats*
Interdepartmental Graduate Program in Nutritional Sciences Seminar Series, University of Wisconsin
- 1994 *IGF-I increases B cell lymphopoiesis in surgically-stressed rats during TPN*
Interdepartmental Graduate Program in Nutritional Sciences Seminar Series, University of Wisconsin
- 1993 *TPN and immune function: A therapeutic role for IGF-I?*
Interdepartmental Graduate Program in Nutritional Sciences Seminar Series, University of Wisconsin
- The benefits of glutamine-supplemented TPN following bone marrow transplant*
Human and Clinical Nutrition Emphasis Group Seminar, University of Wisconsin

Presentations: Invited talks (lay audience)

- 2019 *Body Positivity*, sponsored by Active Minds Mizzou, University of Missouri
- 2018 *6 Pillars of Performance Nutrition*, Mizzou Men's and Women's Cross-Country Teams

- 2015 *One way to defend against osteoporosis: hit the gym!* Health and Wealth Desk, KBIA
<http://kbia.org/post/one-way-defend-against-osteoporosis-hit-gym>, September 23, 2015
- Iron deficiency and endurance athletes.* Runners Connect podcast
<http://runnersconnect.net/running-interviews/iron-calcium-supplements/>
- Physical activity and bone health.* DoctorRadio: Orthopedics. SiriusXM 110, October 19, 2015
- 2014 *Nutrition101*
CARFAX Health Fair, CARFAX, Columbia MO
- 2012 *What are Eating Disorders?*
College of Education Panel Discussion, National Eating Disorders Awareness Week, University of Missouri, Columbia, Missouri
- 2011 *Nutrition for female cyclists*
Women's Night, Walt's Bicycle and Fitness, Columbia MO
- 2010 *MU Health and Nutrition: Serving Missourians and the Nation, The Effects of Nutrition and Physical Activity on Bone Health*
Presentation to President Forsee and Chancellor Deaton, University of Missouri, Columbia, MO
- 2010 *Nutrition for Runners*
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO
- 2009 *Nutrition for Runners*
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO
- 2008 *Nutrition for Runners*
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO
- 2007 *Nutrition for Runners*
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO
- Sports Nutrition*
Presentation to the Boonville High School Cross-Country Team, Columbia, MO
- 2006 *Nutrition for Preschoolers*
Presentation to students at Homespun Daycare, Claremore, OK
- Eating Disorders: When dieting takes a wrong turn*
Love Your Body Week, University of Missouri, Columbia, MO
- Nutrition for Runners*
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO
- 2004 *Nutrition for Runners*

Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO

2003 *Eating Well and Living Well*
Presentation to the Kiwanis Club, Columbia, MO

Nutrition for Runners
Presentation to Athletes and Coaches, University of Missouri, Cross-Country Camp, Columbia, MO

2002 *The Female Athlete Triad*
Presentation to Female Track Athletes, Hickman High School, Columbia, MO

Staying Active and Eating Well in Our 40s and Beyond
Presentation to the Boone County Medial Alliance, Columbia, MO

Nutrition for Cyclists: does nutrition matter?
Presentation to Athletes, Coaches, Midwest Regional Mountain Bike Development Camp, USA Cycling, Columbia, MO

2001 *Effects of Iron Status on Performance*
Presentation to the Missouri Alumni Association, Columbia, MO

2000 *Nutrition, Supplements and Strength Training*
Presentation to the Cornell Weight Training Club, Cornell University

Is Your Body Running Low on Iron?
Expanding Your Horizons: A workshop for middle school girls, Cornell University

1997 *Sports Nutrition: Eating to maximize training and performance*
Oregon High School Track & Field, Oregon, WI

Professional Development

2019 Southeastern Conference Academic Leadership Development Program

Equity Resolution Hearing Panelist Training
University of Missouri-Columbia, August 1-2, 2019

2018 University of Missouri System Leadership Development Program
Southeastern Conference Academic Leadership Development Program

Equity Resolution Hearing Panelist Training
University of Missouri-Columbia, August 1-2, 2018

2017 University of Missouri Leadership Development Program
Applying Positive Coaching in Practice
University of Missouri Institute for Positive Coaching, Columbia MO, June 11, 2017

2016 *Women in Leadership Conference*

University of Missouri System, Columbia MO, June, 2016

2015 *Microaggressions at Mizzou Part II*
The Chancellor's Diversity Initiative, University of Missouri, June 12, 2015

Women in Leadership Conference
University of Missouri System, Columbia MO, June 22-23, 2015

FACULTY ATHLETICS REPRESENTATIVE ACTIVITIES

I am the Faculty Athletics Representative (FAR) at the University of Missouri-Columbia, a member of the Southeastern Conference. My appointment is 50% FTE, which is indicative of the support of the Chancellor to be actively engaged with athletics and the interface with campus. As FAR, my primary responsibilities per the National Collegiate Athletics Association are ensuring academic integrity, institutional control and student-athlete welfare. I am integrated into many areas within athletics and as such I am actively involved sport program administration, policy development and diversity and inclusion efforts. Below I detail my activities as FAR.

Academic Integrity

- Academic integrity education
 - Student-athlete academic integrity training each semester using real-life case studies and skits
 - Education of athletics tutors and mentors on institutional academic integrity policy and NCAA academic misconduct rules each semester
 - Training for all athletics staff on institutional academic integrity policy and NCAA academic misconduct rules
 - Faculty education at Faculty Council, Dean's, Chair's, new faculty orientation
- Athletics Academic Policies: Review and Enhancement
 - Development of new policies: independent study courses, online courses, grade-change review, course/major clustering, tutor monitoring, course "study" sites
 - Coordination with Provost's Director of the Office of Academic Integrity

Institutional Control

- Monthly meetings with the Chancellor to update him on self-reported NCAA/SEC rule violations, policy changes, other business
- Meet with Faculty Council once per semester
- Monthly meetings with Athletics Director and Deputy Athletics Director/Senior Woman Administrator

Student-Athlete Welfare

- Student-athlete experience survey
 - Design, administer and analyze results of the annual online survey
 - Report results to Athletics director and Deputy Athletics Director/SWA, Chancellor, Athletics Senior Staff, Intercollegiate Athletics Committee
 - Work with AD/SWA and SPA to develop plan to deal with issues identified
- Student-athlete exit interviews
 - Report results to Athletics director and Deputy Athletics Director/SWA, Chancellor, Athletics Senior Staff, Intercollegiate Athletics Committee
 - Meet with SPA and Head Coaches to review sport-specific results
- Transfer exit interviews
 - Report results to Athletics director and Deputy Athletics Director/SWA, Chancellor, Athletics Senior Staff, Intercollegiate Athletics Committee

Department of Intercollegiate Athletics Senior Staff

- Culture
 - Participate in ongoing discussion of athletics department values
 - Integration of values into student-athlete and department surveys
- Policy development
 - Contribute to policy development, offer campus/faculty perspective
 - Education of relevant constituents regarding policy updates
 - Examples: alcohol sales at athletic competitions, online course limitations
- ICA initiatives

University of Missouri Student-Athlete Research Oversight Committee

- Develop policies/procedures for Chancellor-appointed Committee
 - Review process, decision, notification of researchers, integration with Institutional Review Board
- Chair MUSAROC
 - Run meetings
 - Communicate with investigators
 - Draft reports and other communications to investigators
 - Report to Chancellor, Intercollegiate Athletics Committee, Faculty Council
 - Organize meetings with Student-Athlete Advisory Council

Intercollegiate Athletics Committee

- Representative of SEC and NCAA to committee
- Compliance subcommittee chair
 - Work with Executive Associate Athletics Director for Compliance to form Subcommittee focus
 - Report on Compliance Subcommittee activities to IAC and write annual report for Chancellor

Intercollegiate Athletics Department of Performance Nutrition

- Nutrition education
 - Team presentations
 - Assist Director of Performance Nutrition
- Policy development
 - Dietary supplements
 - Body composition testing and DXA frequency

Diversity and Inclusion Activities

- Staff Diversity and Inclusion Annual Survey
- Student-athlete Experience Survey
- Spirit Squad Survey
- Tiger Women's Network

Sport Program Administration

- Work with Sport Program Administrators on
 - Student-athlete exit interview results
 - Student-athlete annual experience survey results
 - Time Management Plan annual review
 - Conduct expectations contracts
 - APR/GSR review

FAR Professional Activities

- Presentations
 - Faculty Athletics Representative Association Annual Meeting, *Academic Misconduct*, 2019
 - NCAA Webinar, *Biometrics in Intercollegiate Athletics*, December, 2019
 - NCAA Data Summit, 2020
 - FAR Mentor NCAA D1 FAR Training Institute 2019
- Professional Development
 - Faculty Athletics Representative Association Annual Meeting, 2018
 - NCAA Data Summit, Indianapolis, IN 2018
 - NCAA D1 FAR Training Institute 2017

SERVICE ACTIVITIES

University Administrative and Committee Service

Service to the Department of Nutrition and Exercise Physiology

2018	Member, Department of Nutrition and Exercise Physiology Search Committee
2017	Member, Department of Nutrition and Exercise Physiology Search Committee
2016	Member, Department of Nutrition and Exercise Physiology Search Committee
2015	Member, Department of Nutrition and Exercise Physiology Search Committee
2014-present	Member, Department of Nutritional Sciences Promotion and Tenure Committee
2010-present	Director of Graduate Studies, Nutritional Sciences
2010-present	Chair Nutritional Sciences Graduate Education Committee
2009-2011	Member, Department of Nutritional Sciences Promotion and Tenure Committee Member, Department of Nutritional Sciences Undergraduate Curriculum Committee
2008	Member, Department of Nutritional Sciences, Faculty Search Committee—F21C Member, Department of Nutritional Sciences, Faculty Search Committee—Exercise Physiology Member, Department of Nutritional Sciences Promotion and Tenure Committee
2007	Member, Department of Nutritional Sciences Promotion and Tenure Committee
2006	Member, Department of Nutritional Sciences Chair Search Committee
2005	Member, Department of Nutritional Sciences Chair Search Committee Member, Department of Nutritional Sciences Exercise Physiology Search Committee
2004	Member, Department of Nutritional Sciences Chair Search Committee Member, Department of Nutritional Sciences Vision Committee
2003	Member, Director of the Coordinated Program in Dietetics, Department of Nutritional Sciences Search Committee Chair, Department of Nutritional Sciences Seminar Series
2002	Chair, Department of Nutritional Sciences Seminar Series
2001	Member, Department of Nutritional Sciences, Extension Search Committee
2000-2010	Dietetics Admission Committee
2000-present	Exercise Physiology and Nutritional Sciences Graduate Program Admission Committee

Service to the College of Human and Environmental Sciences

2019	HES Diversity and Inclusion Task Force Presenter, HES P&T Workshop: Promotion, Columbia, MO
2018	Presenter, HES P&T Workshop: Promotion, Columbia, MO
2017	Presenter, HES P&T Workshop: HES Perspective, Columbia, MO

- 2015-present Member, HES Academic Appeals Committee
 2009-present Member, Promotion and Tenure Committee, College of Human and Environmental Sciences
 2003 Member, Margaret Mangel Lectureship Committee, College of Human and Environmental Sciences

Service to the School of Medicine

- 2016-present Member, Committee on SOM Graduate Program in *Translational Biomedical Sciences*

Service to the University of Missouri

- 2019 Chair, University of Missouri Student-Athlete Research Oversight Committee
 Presenter, “Academic Integrity and Athletics,” New Faculty Orientation
 2018 Co-Presenter, “Academic Integrity,” Celebration of Teaching, University of Missouri-Columbia
 Co-Presenter, “Academic Integrity,” Teaching Renewal Conference, University of Missouri-Columbia
 Presenter, “Academic Integrity and Athletics,” New Faculty Orientation
 Member, Provost’s Award for University Citizenship Review Committee
 Member, Equity Resolution Panel
 Member, Evaluation Panel, Evaluation of Ability to Work
 Member, Standards of Faculty Conduct Faculty Panel
 2017-present Faculty Athletics Representative (50% effort)
 2017 Member, Provost’s Task Force on Academic Integrity
 2016-present Member, Executive Committee, Intercollegiate Athletics Committee
 2016-present Chair, Compliance Subcommittee, Intercollegiate Athletics Committee
 2016-2017 Member, Task Force on Interdisciplinary Studies
 2015-2016 Graduate Faculty Senate
 2015-2016 Member, Graduate Faculty Senate Awards and Fellowships Committee
 2009-present Faculty Member (Chair), Grievance Resolution Panel (25% effort)
 2013-214 Member, Director of Masters of Public Health Search Committee
 2009-2012 Intercollegiate Athletics Committee, Chair Student Welfare Subcommittee
 2006-2009 Faculty Grievance Committee
 2005-2010 Member, Provost’s Committee on Student Conduct
 2005 Presenter, “Learning the Ropes,” Teaching Renewal Conference, University of Missouri-Columbia
 2004-2005 Faculty sponsor for Freedom and Recovery from Eating Disorders MU Student Organization
 2003-present Co-faculty advisor to the University of Missouri Cycling Club
 2001-2003 Nutrition consultant for women’s soccer, University of Missouri-Columbia
 Substance Abuse Committee, ad hoc member, Department of Intercollegiate Athletics, University of Missouri-Columbia
 2001 Member, Program Director Sports Science and Rehabilitation Program Search Committee

Editorial Service

Editorial Board

- 2011-2016 *Journal of Endocrinology and Metabolism*
 2007-2013 American College of Sports Medicine’s *Health and Fitness Journal*

Reviewer for textbook chapters and peer-reviewed journals

- American Journal of Clinical Nutrition*
Calcified Tissue

Endocrinology
European Journal of Applied Physiology
European Journal of Clinical Nutrition
International Journal of Sports Nutrition and Exercise Metabolism
Journal of American College of Nutrition
Journal of American Dietetics Association
Journal of Applied Physiology
Journal of Bone and Mineral Research
Journal of Nutrition, Health and Aging
Journal of Sports Science and Medicine
Journal of Strength and Conditioning Research
Medicine and Science in Sports and Exercise
Metabolism
Musculoskeletal Disorders
Nutrition Reviews
Obesity
Osteoporosis International
Physiology Reviews
PLOSOne
Psychology of Sport and Exercise
Understanding Normal and Clinical Nutrition, 7th edition
Women and Health
Women in Sport and Physical Activity Journal

Professional Society Service

- 2018 American Society for Bone and Mineral Research Reviewer for Abstracts at ASBMR Annual Meeting
- 2017 American Society for Bone and Mineral Research Reviewer for Abstracts at ASBMR Annual Meeting
- ASBMR Reviewer for John Haddad Young Investigator Awards
- 2016 American Society for Nutrition Reviewer for Scientific Sessions at EB

Grant Review Service

- 2016 Rehabilitation Research Institute of Singapore (RRIS) is an institutional collaboration between Agency for Science, Technology and Research (A*STAR), National Healthcare Group (NHG), and Nanyang Technological University (NTU) established in 2014. RRIS focuses on four broad research areas, namely Psychosocial Rehabilitation, Neuro-rehabilitation, Frailty &/or Nutrition Management in Rehabilitation, and Advanced Technology for Rehabilitation Continuum of Care. RRG Ref No: RRG2/16004
- 2014 Special Emphasis Panel ZDK1 GRB-J O4 and contributing your expertise to the teleconference review of 1 ancillary studies application submitted in response to PAR12-265, Ancillary Studies to Major Ongoing Clinical Research Studies to Advance Areas of Scientific Interest within the Mission of the NIDDK (R01).
- 2013 National Institute of Food and Agriculture (NIFA), Institute of Food Safety and Nutrition (IFSN) conference proposal: Function and Efficacy of Nutrients Panel

- 2012 Department of Defense Peer-Reviewed Medical Research Program: Osteoporosis and Related Bone Disease
- 2011 Feminist Review Trust Research and Other Scholarly Activity on All Aspects of Gender
Department of Defense Peer-Reviewed Medical Research Program: Osteoporosis and Related Bone Disease
- 2010 National Institutes of Health, NIDDK Special Emphasis Panel on aspects of diabetes, endocrinology and metabolic diseases
Department of Defense Peer-Reviewed Medical Research Program: Osteoporosis and Related Bone Disease
University of Missouri Research Board
Social Sciences Health Research Council of Canada
Medical Research Council, United Kingdom

Service to the Community

- 2011 Volunteer Bike Walk and Wheel Week, Columbia, MO
2006-present Adopt-a-spot trash pick-up, Ashland Rd., Columbia, MO
2004-present Nutrition expert for Cyclingnews.com Fitness Q&A panel
2004-2006 Nutrition columnist for Team Speed Queen newsletter for women cyclists

HONORS AND SCHOLARSHIPS

University of Wisconsin-Madison

- 1996 Linkswiler/Goessling Travel Award, Endocrine Society Meeting, San Francisco, CA
Linkswiler/Goessling Travel Award, Experimental Biology, Atlanta, GA
1991-93 Wisconsin Alumni Research Foundation Fellowship, University of Wisconsin

Cornell University

- 1997 NIH postdoctoral traineeship in Maternal and Child Nutrition, Division of Nutritional Sciences, Cornell University

University of Missouri

- 2018 Southeastern Conference Academic Leadership Development Program Awardee
2017 University of Missouri System, Leadership Development Program Awardee

University of Missouri Provost's Distinguished Faculty Service Award

Human & Environmental Sciences Distinguished Faculty Service Award

Dewey Schade Scholar

ASBMR Mid-Career Faculty Travel Grant awarded to the top Mid-Career Investigators who will be presenting an oral or plenary poster presentation at the ASBMR 2017 Annual Meeting

- 2015 Friend of MU Extension Award

Athletics

- 2011 Missouri State Cycling Road Race, winner Women's Open
- 2010 Missouri State Cycling Road Race, winner Women's Open
- 2009 Missouri State Cycling Road Race, winner Women's Open
- 2006 Missouri State Cycling Road Race, winner Women's Open
- 2003 Missouri State Cycling Road Race, winner Women's Open
- 1995 Madison Marathon, winner
- 1989-90 NCAA All-American, Outdoor track
American Recorder Holder (4x1500m) 1990-2009
Goodman Most-Outstanding Performance Award
Team Captain, Track & Cross-Country, University of Wisconsin
- 1987-91 Athletic Scholarship, Track & Cross-Country, University of Wisconsin
- 1987-91 Academic All-Big Ten