

# Kelsey M. Mangano, Ph.D., R.D. Associate Professor, Nutrition Program Director Department of Biomedical and Nutritional Sciences University of Massachusetts Lowell

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### A. EDUCATION AND ACADEMIC QUALIFICATIONS

Education				
2007 2009 2012	BS, summa cum laude MS PhD	Dietetics Allied Health Sciences Nutritional Sciences Dr. Jane E. Kerstetter, Ph.D., R.D.	University of Connecticut University of Connecticut University of Connecticut	
Postdoctora	al Training			
09/12- 08/13	Post-Doctoral Research Fellow	Nutrition, Aging and Musculoskeletal Research Dr. Marian T. Hannan, D.Sc.	Institute for Aging Research, Hebrew Senior Life, Harvard Medical School	
08/13 - 07/15	Post-Doctoral Research Fellow	Nutrition, Aging and Musculoskeletal Research Dr. Marian T. Hannan, D.Sc.	BIDMC/Harvard Translational Research in Aging Training Program	
Appointme	nts			
09/2021- present 01/17- present 09-15- present	Associate Professor  Nutrition Program  Director  Adjunct Faculty	Department of Biomedical and Nutritional Sciences Department of Biomedical and Nutritional Sciences Marcus Institute	University of Massachusetts, Lowell University of Massachusetts, Lowell Hebrew SeniorLife, Harvard Medical School Affiliate, Boston	
09/15- 08/2021	Assistant Professor	Department of Biomedical and Nutritional Sciences	University of Massachusetts, Lowell	
Honors and	l Prizes			
2017	BNS Department Teachi Excellence Award	ng University of Massachusetts, Lowell	Competitive teaching award	
2015	2016 Future Leader Awa Finalist		Competitive young investigator research award	
2015	Postdoctoral Research Award Competition	DuPont Nutrition and Health American Society of Nutrition	Competitive abstract and research award	
2015	Nominee Emerging Leaders in Nutrition Science Poster Competition Nominee	American Society of Nutrition	Competitive abstract and research award	

2014	U.S. Bone and Joint Initiative Young Investigators program	U.S. Bone and Joint Initiative	Competitive award of acceptance
2014	Aging and Chronic Disease Research Interest Section Poster Competition Award Winner	American Society of Nutrition	Competitive abstract and research award
2013	Young Investigator Award	American Society for Bone and Mineral Research	Competitive abstract and research award
2013	Seventh Fellows Forum on Metabolic Bone Diseases	American Society for Bone and Mineral Research	Selected participant and travel award recipient
2010	Mary Frances Picciano Dietary Supplement Research Practicum	National Institutes of Health	Selected participant and travel award recipient
2007	American Dietetic Association Outstanding Dietetic Student	American Dietetic Association	Scholastic excellence
2006	G. Jane Hartman Scholarship Recipient	American Dietetic Association	Scholastic excellence

#### **B. PROFESSIONAL ACTIVITIES**

Professional Societies				
2010- present	American Society for Bone and Mineral Research	Member		
2010- present	American Society for Nutrition	Member		
2016- present	American Society for Nutrition	Nutritional Epidemiology Research Interest Section steering committee member; Chair, mini-symposium Experimental Biology, Nutrition 2018-2019; Chair, Nutrition Epi RIS Mentoring Event 2019		
2014-2016	American College of Rheumatology	Member		
2007-2015 2007-2015	Academy of Nutrition and Dietetics Connecticut Dietetic Association	Member Member		

## **Editorial Activities**

PLOS ONE

Journal of Bone Mineral Research

Osteoporosis International

Archives of Osteoporosis
Journal of Nutrition Health and Aging

American Journal of Clinical Nutrition

**Nutrition Research** 

European Journal of Clinical Nutrition

Bone

Calcified Tissue International

Arthritis Care and Research

Public Health Nutrition

**British Journal of Nutrition** 

Journal of Sports Sciences

Advances in Nutrition

Obesity

Journal of the Academy of Nutrition and Dietetics (BOE member)

#### Service to the American Society of Nutrition (ASN)

2016-2019	Nutrition Epidemiology Research Interest Section, Steering Committee Member
2019	Nutrition Epidemiology Research Interest Section, Mentoring Committee Chair
2018	ASN Emerging Leader Competition, Organizer and Lead Judge
2017, 2018, 2019	ASN Research Symposium Chair
2017, 2018, 2019	ASN Abstract Reviewer
2017	ASN Emerging Leader Competition, Judge
2011-2018	Nutrition Epidemiology Research Interest Section, Mentoring Committee Member

#### Service to the Academy of Nutrition and Dietetics (AND)

June 2020-	Board of Editors, Journal of the Academy of Nutrition and Dietetics, Member
Present	

# Report of Clinical Activities

#### **Current Licensure and Certification**

2007- Registered Dietitian

Present

2007-2013 Connecticut Certified Dietitian-Nutritionist

#### **Practice Activities**

ietitian The Hospital of Central	Per-diem
Connecticut	
ietitian The University of	Per-diem
Connecticut Health Cente	er
	Connecticut ietitian The University of

#### C. RESEARCH

#### **Grants and Contracts**

#### **Report of Funded Projects**

2021-2023 Longitudinal associations between dairy foods and biomarkers with cardiometabolic outcomes among adults from the Boston Puerto Rican Osteoporosis Study National Dairy Council

#### PI: Kelsey M. Mangano, \$166,110

2021-2023 Dietary titanium dioxide exposure and gut health among adults

USDA, A1343

PI: Kelsey M. Mangano, \$496,885

The impact of the COVID-19 pandemic on psychosocial health and other social factors in a longitudinal cohort of Puerto Rican adults living on the US mainland.

University of Massachusetts, Lowell Internal Seed Grant COVID-19 Response

PI: Kelsey M. Mangano, \$10,000

This project will build on an existing NIH-funded cohort, the Boston Puerto Rican Health Study (BPRHS), to obtain data regarding the impact of the COVID-19 pandemic on this vulnerable ethnic minority population.

2018-2022 Bone microarchitecture, diabetes and change in bone mineral density in Puerto Rican adults

NIH- R01, NIAMS R01AR072741

Co-I (20% effort): Kelsey M. Mangano (PI: Katherine Tucker, \$3,000,000)

The goal of this study is to investigate longitudinal changes in bone microarchitecture and strength among Puerto Rican adults with and without diabetes.

2019-2020 Dry beans predict muscle health via increased SCFA production in the gut.

Dry Beans Association Grant Award

PI: Kelsey M. Mangano, \$20,000

The goal of this study is to elucidate mechanisms behind dry bean intake's association with muscle outcomes in the Boston Puerto Rican Health Study.

2017-2019 Identifying mechanisms underpinning the impact of daily yogurt supplementation on the gut microbiome, inflammation and bone biomarkers

Yogurt in Nutrition Initiative, American Society for Nutrition, International Osteoporosis Foundation, Dannone

PI: Kelsey M. Mangano, \$30,000

The goal of this study is to examine how yogurt influences the gut microbiome and biomarkers of inflammation and bone turnover in older adults.

2017-2018 UMOVE (UMass MOVEment Research Center): Exploring the mechanics of movement and muscle function

University of Massachusetts Lowell, Science and Technology Grant Award

Co-I: Kelsey Mangano (PI: Matthew Gage, \$25,000)

2017-2019 Linking Nutrition with Muscle Function via Signaling Pathways

University of Massachusetts, Lowell, Internal Seed Grant

Co-I: Kelsey M. Mangano, \$10,000 (PI: Nicolai Konow)

The goal of this study is to investigate the molecular underpinnings of differential protein food types on muscle power and function in mice.

2016-2018 Total Student Health

College of Health Sciences, University of Massachusetts Lowell, Internal Seed Grant

**Co-PI: Kelsey M. Mangano**, \$6,000 (with co-PIs Herpreet Thind, Brenna Quinn and Mazen El Ghaziri)

The goal of this study is to investigate determinants of health among college students.

2016-2018 Aging from the Inside Out: Diet, Inflammation and Gut Microbiota
College of Health Sciences, University of Massachusetts Lowell, Internal Seed Grant
PI: Kelsey M. Mangano, \$8,000

The goal of this study is to investigate whether dysbiosis mediates the association between the dietary patters of Caribbean Latinos and their high levels of chronic inflammation.

2013-2014 Protein Food Clusters and Measures of Bone Mineral Density and Muscle Strength Academy of Nutrition and Dietetics, Healthy Aging DPG

PI: Kelsey M. Mangano, \$5,000

The goal of this study is to investigate the relation of protein food groups (as defined by cluster analysis) with bone mineral density and muscle strength using the data from the Framingham Osteoporosis Study.

Protein Food Clusters and Measures of Bone Mineral Density and Muscle Strength NIA- T32 grant: BIDMC/Harvard Translational Research in Aging Training Program Project leader: Kelsey M. Mangano, \$100,000 (PI: Lewis Lipsitz, MD)

The goal of this study is to investigate the relation of protein food groups (as defined by cluster analysis) with bone mineral density and muscle strength using the data from the Framingham Osteoporosis Study.

#### **Pending**

#### Report of Scholarship

#### **Academic and Professional Publications**

Scopus H index score 17, i10-index 19 (1,222 total citations)

#### **Peer reviewed publications**

#### Published, peer-reviewed

- 1. **Mangano KM**, Noel SE, Zhang X, Tucker KL. Sufficient plasma vitamin C is related to greater bone mineral density among postmenopausal women from the Boston Puerto Rican Health Study. J Nutr. (In Press, August 2021).
- 2. Riseberg E, Lopez-Cepero A, **Mangano KM**, Tucker KL, Mattei J. Specific dietary protein sources are associated with cardiometabolic risk factors in the Boston Puerto Rican Health Study. Academy of Nutrition and Dietetics. (In Press, May 2021).
- 3. Putra C; Konow N; Gage M; York CG; **Mangano KM**. Protein Source and Muscle Health in Older Adults: A Literature Review. Nutrients 2021, 13(3), 743; https://doi.org/10.3390/nu13030743
- 4. **Mangano KM**; Noel, SE; Lai, CQ; Christensen, JJ, Ordovas, JM, Dawson-Hughes, B, Tucker, KL; Laurence D. Parnell, PhD. Diet-derived fruit and vegetable metabolites suggest sex-specific mechanisms

- conferring protection against osteoporosis in humans. Bone. 2021 Mar;144:115780. doi: 10.1016/j.bone.2020.115780. Epub 2020 Dec 2.
- 5. Kronrod A, Hammar M, Lee J, Thind H, **Mangano KM**. On mood and food: figurative language encourages healthier food choices via perceived fun. Linguistic Delight Promotes Eating Right: Figurative Language Increases Perceived Enjoyment and Encourages Healthier Food Choices. Health Communication, 2020. DOI: 10.1080/10410236.2020.1805231
- 6. Maldonado-Contreras AL, Noel SE, Ward DV, Velez M, **Mangano KM**. Associations between diet, the gut microbiome and short chain fatty acid production among older Caribbean Latino adults are ameliorated by laxative use. J Acad Nutr Diet. 2020 Dec;120(12):2047-2060.e6. doi: 10.1016/j.jand.2020.04.018. Epub 2020 Aug 12.
- 7. Noel SE, **Mangano KM**, Mattei J, Griffith JL, Dawson-Hughes B, Bigornia S, and Tucker KL. DASH, Mediterranean and Alternative Healthy Eating Indices are associated with bone health among Puerto Rican adults from the Boston Puerto Rican Osteoporosis Study. The American Journal of Clinical Nutrition, Volume 111, Issue 6, June 2020, Pages 1267–1277, <a href="https://doi.org/10.1093/ajcn/nqaa090">https://doi.org/10.1093/ajcn/nqaa090</a>
- 8. Noel SE, Arevalo SP, Mena NZ, **Mangano KM**, Velez M, Dawson-Hughes B, Tucker KL. Knowledge, attitudes, beliefs, and health behaviors of bone health among Caribbean Hispanic/Latino adults. Arch Osteoporos. 2019 Feb 4;14(1):14. doi: 10.1007/s11657-019-0566-5.
- 9. Quinn, BL, El Ghaziri, M, **Mangano, KM,** Thind, H. (2019). Towards total student health: A qualitative pilot study. Journal of American College Health. 67(5), 391-396.
- 10. **Mangano KM**, Noel SE, Sahni S, Tucker KL. Higher Dairy Intakes Are Associated with Higher Bone Mineral Density among Adults with Sufficient Vitamin D Status: Results from the Boston Puerto Rican Osteoporosis Study. J Nutrition, 2018. Accepted Author Manuscript; doi: 10.1093/jn/nxy234
- 11. Clark LR, Dellogono M, Chenette E, **Mangano KM**, Wilson TA. A Twelve-week Treadmill Program Elicits Low Energy Availability Without Changes in Serum Testosterone in Male Rats Fed Either a Low or High Cholesterol Diet. Sports Sciences for Health, April 2018. DOI: 10.1007/s11332-018-0455-0
- 12. Clark LR, Dellogono MJ, **Mangano KM**, Wilson TA. Clinical Menstrual Dysfunction Is Associated with Low Energy Availability but Not Dyslipidemia in Division I Female Endurance Runners. Journal of Exercise Physiology Online, 2018. 21(2), 265-277.
- 13. Noel SE, **Mangano KM**, Griffith JL, Wright NC, Dawson-Hughes B, Tucker KL. Prevalence of osteoporosis and low bone mass among Puerto Rican older adults. J Bone Miner Res. 2018 Mar; 33(3): 396–403. Published online 2017 Dec 7. doi: 10.1002/jbmr.3315
- 14. Sahni S, **Mangano KM**, Kiel DP, Tucker KL, Hannan MT. Dairy Intake Is Protective against Bone Loss in Older Vitamin D Supplement Users: The Framingham Study. J Nutr. 2017 Apr;147(4):645-652. doi: 10.3945/jn.116.240390.
  - **ASSOCIATED PRESS:** see below \*\*
- 15. **Mangano KM**, Sahni S, Kiel DP, Tucker KL, Dufour AB, Hannan MT. Dietary protein is associated with musculoskeletal health independently of dietary pattern: the Framingham Third Generation Study. Am J Clin Nutr, 2017 Feb 8. 105 (3), 714-722.

#### ASSOCIATED PRESS: see below \*

- 16. **Mangano KM**, Kenny AM. The Role of Diet and Nutritional Status in Recovery from Hip Fracture in the Elderly. Curr Nutr Rep (2016) 5: 113. doi:10.1007/s13668-016-0164-8
- 17. McLean RR, **Mangano KM**, Hannan MT, Kiel DP, Sahni S. Dietary Protein Intake Is Protective Against Loss of Grip Strength Among Older Adults in the Framingham Offspring Cohort. J Gerontol A Biol Sci Med Sci. 2016 Mar;71(3):356-61. doi: 10.1093/gerona/glv184. PMID: 26525088
- 18. Sahni S, **Mangano KM**, McLean RR, Hannan MT, Kiel DP. Dietary Approaches for Bone Health: Lessons from the Framingham Osteoporosis Study. Curr Osteoporos Rep. 2015 Aug;13(4):245-55. doi: 10.1007/s11914-015-0272-1. PMID: 26045228
- 19. Sahni S, **Mangano KM**, Hannan MT, Kiel DP, McLean RR. Higher Protein Intake Is Associated with Higher Lean Mass and Quadriceps Muscle Strength in Adult Men and Women. J Nutr. 2015 Jul;145(7):1569-75. doi: 10.3945/jn.114.204925. Epub 2015 May 27. PMID: 26019246
- 20. Bihuniak J, Kerstetter JE, Brindisi J, Sullivan R, **Mangano KM**, Larocque S, Kotler B, Simpson C, Cusano AM, Kleppinger A, Reynolds J, Dziura J, Kenny AM, Insogna KL. The effect of a whey protein supplement on bone mass in older Caucasian adults. J Clin Endocrinol Metab. 2015 Jun;100(6):2214-22. doi: 10.1210/jc.2014-3792. Epub 2015 Apr 6.
- 21. Hannan MT, **Mangano KM**, Sahni S. Commentary: Do Nutrients Influence Bone Health? A Commentary on New Findings in the Field. J Bone Miner Res. 2015 Jun;30(6):967-9. doi: 10.1002/jbmr.2526.
- 22. **Mangano KM**, Sahni S, Kiel DP, Tucker KL, Dufour AB, Hannan MT. Bone mineral density and protein derived food clusters from the Framingham Offspring Study. J Acad Nutr Diet. 2015 May 30. pii: S2212-2672(15)00392-5. doi: 10.1016/j.jand.2015.04.001.
- 23. Sahni S, **Mangano KM**, Tucker KL, Kiel DP, Casey VA, Hannan MT. Protective association of milk intake on the risk of hip fracture: Results from the Framingham Original Cohort. J Bone Miner Res. 2014 Aug;29(8):1756-62.
- 24. Gregorio L, Brindisi J, Kleppinger A, Sullivan R, **Mangano KM**, Bihuniak J, Kenny AM, Kerstetter JE, Insogna KL. Adequate dietary protein is associated with better physical performance among postmenopausal women 60-90 years. Journal of Nutrition Health and Aging, 2014, 18(2): 155-160.
- 25. **Mangano KM**, Sahni S, Kerstetter JE. Dietary protein is beneficial to bone health under conditions of adequate calcium intake: an update on clinical research. Curr Opin Clin Nutr Metab Care. 2014 Jan;17(1):69-74.
- 26. **Mangano KM**, Walsh SJ, Kenny AM, Insogna KL, Kerstetter JE. Dietary acid load is associated with lower bone mineral density in men with low intake of dietary calcium. J Bone Miner Res, 2014. 29(2):500-6.
- 27. **Mangano KM**, Kerstetter JE, Kenny A, Insogna KL, Walsh SJ. An investigation of the association between omega 3 fatty acids and bone mineral density among older adults: results from the National Health and Nutrition Examination Survey years 2005-2008. Osteoporos Int. 2014;25(3):1033-41.

- 28. **Mangano KM**, Hutchins-Weiss H, Kenny AM, Walsh SJ, Abourizk R, Bruno R, Lipcius R, Fall P, Kleppinger A, Pesce L, Prestwood K, Kerstetter JE. Soy proteins and isoflavones reduce interleukin-6 but not serum lipids in older women: A randomized controlled trial. Nutr Res, 2013. 33(12):1026-33.
- 29. **Mangano KM**, Sahni S, Kerstetter JE, Kenny AM, Hannan MT. Polyunsaturated fatty acids and their relation with bone and muscle health in adults. Curr Osteoporosis Rep, 2013. 11(3):203-12.
- 30. **Mangano KM**, Walsh SJ, Insogna KL, Kenny AM, Kerstetter JE. Calcium Intake in the United States from Dietary and Supplemental Sources Across Adult Age Groups: New Estimates from the National Health and Nutrition Examination Survey 2003-2006. J Am Diet Assoc, 2011. 111(5): 687-695.
- 31. Kenny AM, **Mangano KM**, Abourizk R, Bruno R, Anamani D, Kleppinger A, Walsh SJ, Prestwood K and Kerstetter JE. Soy proteins and isoflavones affect bone mineral density in older women: a randomized controlled trial. Am J Clin Nutr, 2009. 90(1): 234-42.

#### **Book Chapters**

- 1. **Mangano KM**, Bao YH, Zhao. Whey Protein Production, Chemistry, Functionality and Applications. Nutritional Properties of Whey Proteins. Editor: Mingruo Guo. Publisher: John Wiley and Sons Ltd. 2019
- 2. McKinney S, **Mangano KM**. Chapter 27 Illustrating the Results of Research; Research: Successful Approaches 4th edition. © Academy of Nutrition and Dietetics, 2018.
- 3. **Mangano KM**, Tucker KL. Bone health and vegan diets. François Mariotti (Ed.), Vegetarian and Plant-Based Diets in Health and Disease Prevention. © Elsevier, 2016.
- 4. Hannan MT, Sahni S, **Mangano KM**. Evidence for a link between dietary protein and bone and muscle health in adults. C. Weaver, R. Daly and H. Bischoff-Ferrari (Eds.), Nutritional Influences on Bone Health. DOI: 10.1007/978-3-319-32417-3\_5, © Springer International Publishing, Switzerland 2016, 8, pp 51-60.

#### \* Associated Press Online:

- a. Time Magazine Health: http://time.com/4664468/plant-protein-meat-muscle-health/
- b. Health Medicine Network: <a href="http://healthmedicinet.com/i/dietary-protein-from-any-source-2/">http://healthmedicinet.com/i/dietary-protein-from-any-source-2/</a>
- c. Men's Journal: <a href="http://www.mensjournal.com/health-fitness/articles/cutting-meat-without-cutting-muscle-w466902">http://www.mensjournal.com/health-fitness/articles/cutting-meat-without-cutting-muscle-w466902</a>
- d. Research MD: <a href="https://www.reachmd.com/news/veggie-burger-builds-muscle-well-meat/1430114/">https://www.reachmd.com/news/veggie-burger-builds-muscle-well-meat/1430114/</a>
- e. Reuters Health: <a href="http://www.reuters.com/article/us-health-muscle-dietary-protein-idUSKBN15N2TX">http://www.reuters.com/article/us-health-muscle-dietary-protein-idUSKBN15N2TX</a>
- f. Coach: <a href="http://coach.nine.com.au/2017/02/10/09/56/plant-protein-for-muscle-health">http://coach.nine.com.au/2017/02/10/09/56/plant-protein-for-muscle-health</a>
- g. One Green Planet: <a href="http://www.onegreenplanet.org/news/study-confirms-plant-based-protein-is-the-same-as-meat/">http://www.onegreenplanet.org/news/study-confirms-plant-based-protein-is-the-same-as-meat/</a>
- h. The Asian Age: <a href="http://www.asianage.com/life/health/090217/dietary-protein-may-help-muscle-health.html">http://www.asianage.com/life/health/090217/dietary-protein-may-help-muscle-health.html</a>

- i. Health: <a href="http://www.health.com/nutrition/vegetarian-protein-animal-protein-build-muscle">http://www.health.com/nutrition/vegetarian-protein-animal-protein-build-muscle</a>
- j. Orthopedics This Week: <a href="https://ryortho.com/2017/02/unilateral-amputees-fare-better-than-limb-salvage-patients-and-more/">https://ryortho.com/2017/02/unilateral-amputees-fare-better-than-limb-salvage-patients-and-more/</a>

#### Radio:

**a. German Public Radio**, WDR Section for Science, Technology and Environment, Westdeutscher Rundfunk, February 13, 2017.

#### \*\* Associated Press Online:

a. **Media Alert** for Volume 147 Issue 4 of the Journal of Nutrition: <a href="http://jn.nutrition.org">http://jn.nutrition.org</a>

#### **Clinical Guidelines and Reports**

Clinical protocol at the Hospital of Central Connecticut

Guidelines for inpatient dietitians regarding the use of the Nutrition Care Process as outlined by the Academy of Nutrition and Dietetics, 2011

Co-author

Standard of care at the Hospital of Central Connecticut

Nutrition risk criteria used for screening assessment by all inpatient dietitians at the Hospital of Central Connecticut, updated 08/11

Co-author

#### **Thesis**

Relating dietary lipids and protein to bone health using the National Health and Nutrition Examination Survey 2005-2008.

Kelsey M. Mangano, University of Connecticut, Department of Nutritional Sciences 2012.

# Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings (within the past 5y)

- 1. McGrail L, Noel SE, Maldonado-Contreras A, **Mangano KM**. The Effect of Daily Yogurt Supplementation on Inflammation and Bone Biomarkers. American Society for Nutrition, Nutrition 2021 annual scientific meeting (Virtual, 2021) poster.
- 2. Putra C, Bello D, Kelleher SL, Tucker KL, **Mangano KM**. Dietary Intake and Fecal Excretion of Titanium Dioxide in U.S. Adults from Lowell, Massachusetts. American Society for Nutrition, Nutrition 2021 annual scientific meeting (Virtual, 2021) poster.
- 3. **Mangano KM**, Noel SE, Dawson-Hughes B, Tucker KL. Plasma Vitamin C Sufficiency is Related to Higher Bone Mineral Density: The Boston Puerto Rican Osteoporosis Study. American Society for Bone and Mineral Research Annual Scientific Meeting (Virtual, 2020) poster presentation.
- 4. **Mangano KM**, Noel SE, Zhang X, Tucker KL. Prospective Relations Between the Dietary Approaches to Stop Hypertension (DASH) and Mediterranean Diet (MeDS) Scores and Self-Report Arthritis Among Puerto Rican Adults. American Society for Nutrition Annual Scientific Meeting (Seattle, WA, 2020) poster presentation.
- 5. Mangano KM, Noel SE, Lai CQ, Ordovas JM, Tucker KL, Laurence D. Parnell. Metabolomic

- signatures among men and women with and without osteoporosis: The Boston Puerto Rican Osteoporosis Study. American Society for Bone and Mineral Research Annual Scientific Meeting (Orlando, FL, 2019) poster presentation.
- 6. Putra C, Rimkus B, ShehajA, Konow N, Gage M, **Mangano KM**. Impact of Dietary Protein Source on Muscle Performance: an In-vivo Behavioral Assay. American Society for Nutrition Annual Scientific Meeting (Baltimore, MD, 2019) *oral presentation*.
- 7. **Mangano KM**, Noel SE, Lai CQ, Parnell LD, Ordovas JM, Dawson-Hughes B, Tucker KL. Association between diet-derived fruit and vegetable metabolites and sex-specific metabolomics pathways among Puerto Rican Adults with healthy bone phenotypes: The Boston Puerto Rican Osteoporosis Study. American Society for Bone and Mineral Research Annual Scientific Meeting (Montreal, CA, 2018) poster presentation.
- 8. Putra C, Maldonado AL, Noel SE, **Mangano KM**. Exploratory Study of Microbiota, Diet, and Disease in an Understudied Population of Caribbean Latino Adults. American Society for Nutrition Annual Scientific Meeting (Boston, 2018) poster presentation.
- 9. **Mangano KM**, Barmashi J, Velez M, Noel SE. Engaging the Latino Community to Increase Awareness of Bone Health in Lawrence, MA. Community Engagement Symposium, University of Massachusetts Worcester, Medical Center (Worcester, MA, 2017) poster presentation.
- 10. **Mangano KM**, Noel SE, Bigornia SJ, Tucker KL. Dairy Based Desserts are Negatively Associated with Bone Mineral Density among Puerto Rican Adults. American Society of Nutrition, Experimental Biology Scientific Meeting (San Diego, CA, 2016) poster presentation.

#### **Invited Presentations** Local 2<sup>nd</sup> Annual *Healthy Aging – Living Well* 2016 University of Massachusetts, Lowell Center for Gerontology Research and Forum **Partnerships** University of Massachusetts, Lowell 2015 Dietary Protein Food Patterns and their Influence on the Aging Musculoskeletal College of Health Sciences System Faculty seminar series Regional 2021 Diet, metabolome and bone: application American Society for Nutrition Annual from the Boston Puerto Rican Health Study Scientific Meeting, Nutrition Working **Invited Presentation** Group 2021 The impact of the COVID-19 pandemic on Center for Puerto Rican Studies, Hunter psychosocial health and other social factors College in a longitudinal cohort of Puerto Rican adults living on the US mainland Invited Speaker & Panelist 2021 Bone health throughout the lifespan: the role General Mills, Webinar >800 attendees of dairy (clinicians and researchers) Keynote Speaker Does your dietary protein food pattern 2014 Institute for Aging Research

	dictate your musculoskeletal future? Invited Presentation	Hebrew SeniorLife Institute for Aging Research, Research in Progress
2013, 2014	Mentors and Mentees: Building the Relationship Invited Presentation	Institute for Aging Research, HSL Beth Israel Medical Center T32 Pre-Doctoral Training Program
2013	Protein intake is protective against grip strength loss in adults: The Framingham Osteoporosis Study Invited Presentation	Institute for Aging Research Harvard Medical School Beth Israel Deaconess Medical Center Advanced Aging Research Training Seminar Series
2012	Polyunsaturated fatty acids and bone health: new results from the National Health and Nutrition Examination Survey 2005-2008 Invited Presentation	Institute for Aging Research Hebrew SeniorLife
2011	Maintenance of Adequate Calcium Intake in Adults: Lessons from the National Health and Nutrition Examination Survey	University of Connecticut Health Center Clinical Research Center Framingham, CT
2010	Calcium Intake in the United States: an Update from the National Health and Nutrition Examination Survey	University of Connecticut Health Center Framingham, CT Glanbia Nutritionionals
<b>International</b>		
2021	Bone health throughout the lifespan: the role of dairy Invited speaker	International Dairy Federation International Virtual Symposium
2019	Dairy Foods and Bone Health Invited Speaker	Dairy UK London, United Kingdom
2017	Bone Health: Dairy, Calcium and Beyond Nutrition and Health Symposium Keynote Speaker Invitation	Dairy Farmers of Canada, Edmonton, Toronto, Montreal, Moncton
2017	Dairy products and bone health Webinar	Dairy Farmers of Canada, Montreal, Canada
2016	Dietary protein food sources, dietary patterns and bone health Invited Speaker	The International Dairy Nutrition Symposium, Utrecht University Utrecht, Netherlands
2014	Dietary protein intake is important for bone health in an aging population Invited Speaker	Dairy Council of Northern Ireland Belfast, Ireland

# D. INSTRUCTION RELATED ACTIVITY

# Report of Regional, National and International Invited Teaching and Presentations

Teaching of	Students in Courses	
2018	The Mediterranean Diet and our Health	The International Studies Institute
	Invited Professor	Palazzo Rucellai, Florence Italy
2016 - 2018	Nutrition Assessment, NUTR 6010	University of Massachusetts, Lowell (Fall)
	Assistant Professor	, , , , , , , , , , , , , , , , , , , ,
	Graduate Students	
2015 –	Nutrition and Health, NUTR 2100	University of Massachusetts, Lowell (Fall
present	Assistant Professor	and Spring)
1	Undergraduate Students	1 3
2015 -	Vitamins and Minerals, NUTR 4630/5630	University of Massachusetts, Lowell (Fall)
present	Assistant Professor	, , , , , , , , , , , , , , , , , , , ,
•	Undergraduate/Graduate Students	
2013-2015	AC511.0, Clinical Epidemiology and	Harvard Medical School
	Population Health	
	Instructor	
	1st year medical students	
2013-2015	EPI 517, Issues in Frailty	Harvard School of Public Health
	Guest Lecturer	
	Graduate students	
2015	The Mediterranean Diet and our Health	The International Studies Institute
	Invited Professor	Palazzo Rucellai, Florence Italy
2014	757.NUT, Introduction to Clinical Nutrition	Harvard Medical School
	Instructor	
2011	1 <sup>st</sup> year medical students	m
2014	The Mediterranean Diet and our Health	The International Studies Institute
2012 2014	Invited Professor	Palazzo Rucellai, Florence Italy
2013-2014	SAR HS 300 Epidemiology, Undergraduate	Sargent College of Health and
	Guest Lecturer	Rehabilitation Sciences, Boston University
2012 2014	Health Sciences' students	Destan Hairranita Calcad of Dublic Health
2013-2014	SPH EP 758, Nutritional Epidemiology Guest Lecturer	Boston University School of Public Health
	Graduate MPH Epidemiology students	
2012-2013	NUTR 305.0, Graduate Nutritional	Friedman School of Nutrition Science and
2012-2013	Guest Lecturer	Policy, Tufts University
	Epidemiology, 2nd year MPH students	Toney, Tuits Oniversity
2012	The Mediterranean Diet and our Health	The International Studies Institute
2012	Teaching Assistant	Palazzo Rucellai, Florence Italy
2012-2014	HS 776, Nutritional Epidemiology	Sargent College of Health and
2012 2011	Guest Lecturer	Rehabilitation Sciences, Boston University
	Graduate Nutritional Science students	Zerrandina Zerrando, Zerrando Cini, Cibity
2010	Medical Nutrition Therapy III	University of Connecticut (Fall)
	Interim Instructor	•
	Undergraduate students	
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Formal Teac	hing of Residents, Clinical Fellows and Rese	arch Fellows (post-docs)	
2009, 2010	Scleroderma and Medical Nutrition Therapy First year medical students	University of Connecticut Health Center Medical School	
Clinical Supe	ervisory and Training Responsibilities		
2011-2012	Clinical preceptor for dietetic interns	University of Connecticut (Fall/Spring)	
2008-2012	Food Service Management Practicum I Supervisor/preceptor for dietetic interns	University of Connecticut (Fall)	
Laboratory a	nd Other Research Supervisory and Traini	ng Responsibilities	
2021-present	<b>Primary Thesis Advisor</b> : Nicolas Troisi PhD Student, Pharmaceutical Sciences	University of Massachusetts, Lowell	
2020-present	<b>Primary Thesis Advisor</b> : Lisa Merrill ScD Student, Public Health	University of Massachusetts, Lowell	
2020-present	•	University of Massachusetts, Lowell	
2017-2021	Primary Thesis Advisor: Christianto Putra PhD Candidate, Pharmaceutical Sciences	University of Massachusetts, Lowell	
	Graduated: Senior Scientist III, Roche		
2017-2018	Biotechnology Primary Thesis Advisor: Shweta Batra Master of Public Health Student	University of Massachusetts, Lowell	
2016-2018	Thesis Committee Member: Lyra Clark Primary Advisor: Thomas Wilson Doctoral Candidate, BMEBT	University of Massachusetts, Lowell	
2016	Supervisor of Heather Andrews Senior Research Student	University of Massachusetts, Lowell	
2016	Supervisor of Matthew Sandberg Senior Research Student	University of Massachusetts, Lowell	
2016	Supervisor of Jacqueline Barmashi Senior Research Student	University of Massachusetts, Lowell	
2013	Supervisor of Iris Kim, T32 Pre-Doctoral Research Fellow, Graduate student HSPH	Institute for Aging Research, Harvard Medical School, Beth Israel Deaconess Medical Center	
2010-2012	Supervision of graduate student research training for the NIH funded trial: Supplemental Protein to Offset Osteoporosis Now	University of Connecticut Health Center	

# E. SERVICE ACTIVITIES

# **Service to the Community**

# **Community Boards and Activities**

2016-	Lawrence Mayor's Health Task Force Research Initiative Working Group, Member
Current	
2016-	Lawrence Mayor's Health Task Force, Member
Current	
2016	Lawrence Senior Center, Lawrence MA – Dietitian and Researcher
	"Bone Health Wellness Fair" – Supervised the development and execution of a 3-day

"Bone Health Wellness Fair" – Supervised the development and execution of a 3-day wellness fair provided to over 400 older, Caribbean Latino adults to raise bone health awareness

Media Exposure and Contributions				
2021	What is protein? Benefits, sources, deficiency.	Feature Contributor	Business Insider	
2020	Considering adding a meal- kit delivery service to your pandemic routine? Here's what to look for	Media speaker	Boston, 25 Television News Network	
2019	To Beef, or Not To Beef? The Rise of Meatless Burgers	Media speaker	NPR – OnPoint Radio	
2018	Nutrition Expert: A Healthy Gut = A Healthy Body	Feature Contributor	Your Tewskbury Today!	
2018	Nutrition Expert: A Healthy Gut = A Healthy Body	Feature Contributor	Your Dracut Today!	
2017	Beef consumption a cut above this year	Feature Contributor	Lowell Sun Newspaper	
2017	Here's What You Need to Know About Himalayan Pink Salt	Media speaker	Reader's Digest	
2017	Healthfulness of the Korean Diet	Media speaker	Merrimack Valley Magazine	
2017	Eating healthy for Thanksgiving	Media speaker	WCAP-AM, Merrimack Valley Radio	
2013	Using the food plate for healthy aging	Educator	Hebrew SeniorLife, TEACH Study, Orchard Cove, Canton MA –Dietitian/Scientist	
2011	Nutritional Supplements- Which Ones Should You Consider Adding to Your Diet?	Media speaker	NBC30 - Connecticut News	
2010	Calcium and bone health: Are you meeting your	Co-author	Natural Nutmeg Connecticut	

2010	needs? Dietary Calcium and Protein and Bones - A N	Co-author Iew	Home and Garden News University of Connecticut
2010	View Inside a Dietitians Cupboard	Media speake	NBC30 - Connecticut News

# University of Massachusetts, Lowell, Committee Activities

Year(s)	Level	Program	Role
2021	Department	Faculty Search Committee, TT Pharmaceutical Sciences	Member
2015- 2016	Department	Faculty Search Committee, TT Nutritional Epidemiology	Member
2015- 2016	University	Junior Faculty Mentoring Committee	Member
2016- 2017	University	Faculty Search Committee Member, TT Biology Department	Member
2016- 2017	College	Humanism in Interprofessional Education Fellowship, UMass Medical School, Worcester, MA	Member
2016- 2018	College	CHS Undergraduate Committee	Member
2017- 2018	University	Provost Promotion and Tenure Guidelines Committee	Member
2018- 2019	College	ScD Population Health Development Committee	Member
2016- Present	Department	Nutritional Sciences Program Meetings	Chair
2016- Present	Department	Leadership Committee, Department of Biomedical and Nutritional Sciences	Member

# University of Massachusetts, Lowell, Leadership Activities

2016-Present Nutrition Program Director, Department of Nutrition and Biomedical Sciences