

UNIVERSITY OF MASSACHUSETTS LOWELL
COMPREHENSIVE PROCESSIONAL VITAE

Liam E. Fouhy, ScD, MPH
Research Scientist, Center for Population Health
Zuckerberg College of Health Sciences
University of Massachusetts Lowell
Email: Liam_Fouhy@uml.edu
Date Prepared:12/10/2024

A. EDUCATION AND ACADEMIC QUALIFICATIONS

| Education | | | |
|------------------|-----|----------------------------|------------------------------------|
| 2019 | BS | Nutritional Sciences | University of Massachusetts Lowell |
| 2021 | MPH | Epidemiology | University of Massachusetts Lowell |
| 2024 | ScD | Public Health Epidemiology | University of Massachusetts Lowell |

| Appointments | | | |
|---------------------|-----------------------------|---|------------------------------------|
| 09/20-05/22 | Graduate Teaching Assistan | Anatomy & Physiology I & II | University of Massachusetts Lowell |
| 05/22-05/23 | Graduate Research Assistant | Centers for Population Health | University of Massachusetts Lowell |
| 09/23-05/24 | Adjunct Professor | Nutrition and Wellness/ Human Nutrition | University of Massachusetts Lowell |
| 09/24-05/25 | Adjunct Professor | Human Nutrition/ Nutrigenetics | University of Massachusetts Lowell |

| Honors and Awards | | | |
|--------------------------|------------------------------------|---|---------------------------|
| 2018 | Professional Development Award | University of Massachusetts Lowell | Professional Development |
| 2022 | Student Investigators Travel Award | American Society of Bone Mineral Research | Student Research |
| 2024 | Outstanding Dissertation Award | University of Massachusetts Lowell | Graduate Student Research |

1. Academic and Professional Publications

Professional Societies

| | | |
|--------------|--|--------|
| 2023-2024 | Student Member American College of Sports Medicine | Member |
| 2024-present | Member American Society of Bone Mineral Research | Member |

Manuscript Peer-Review Activities

Nutrients – Impact factor: 4.55
Advances in Nutrition – Impact factor: 7.24
American Journal of Clinical Nutrition – Impact factor: 6.77
Journal of Nutrition – Impact factor: 4.28

Associated Press for Community Recognition:

- 1) Eagle Tribune: https://www.eagletribune.com/news/merrimack_valley/umass-grad-working-to-improve-senior-life-in-lawrence/article_7560b2d6-dc68-5639-868a-22835e061304.html
- 2) UML News: <https://www.uml.edu/news/stories/2023/research-osteoporosis.aspx#:~:text=His%20research%20was%20published%20in,appears%20to%20harm%20bone%20health.%E2%80%9D>

3) Other Research Activities

Presentations

Local

| | | |
|------|--|---|
| 2022 | Bone Health Disparities among Hispanic/Latino Adults of Caribbean Origin: Is dietary quality an important risk factor for this population. | Invited Speaker; Boston University School of Medicine, Nutrition and Disease Prevention course |
| 2019 | Updates Age Friendly Lawrence and Lowell | Invited Speaker; Massachusetts Healthy Aging Collaborative Executive Council Meeting |

National

| | | |
|------|---|--|
| 2023 | Association Between Epinephrine, Bone Mineral Density, and Osteoporosis Among Puerto Rican Adults | Invited Speaker; American Psychosomatic Society National Conference |
|------|---|--|

Funded Projects:

| | | |
|-----------|--|--|
| 2025-2026 | Harnessing Meal Kits to Combat Food Insecurity and Enhance Well-being BJ's Foundation PI: Sabrina Noel \$185,336 Major Goals: To quantify bone mineral density in the PROSPECT study cohort, and to compare prevalence of osteoporosis to national data and data for US mainland Puerto Rican adults; 2) assess dietary intake and biomarkers in relation to bone outcomes; and 3) quantify measures of psychophysiological stress and assess their relationships to bone outcomes in PROSPECT. | |
| 2024-2028 | Behavioral, Lifestyle, and Cultural Risk Factors for Bone Quality and Osteoporosis in the | |

PROSPECT Cohort

National Institutes of Health

PI: Sabrina Noel \$1,725,562

Main Goals: To examine the impact of a cultural-tailored meal kit nutrition education program on food insecurity, dietary quality, psychosocial health, quality of life and cardiometabolic risk factors.

Manuscripts Published

1. Mangano KM, **Fouhy LE**, Zhang X, Noel SE, Rajabiun S, Merrill L, Falcon L, Tucker KL. The longitudinal impact of the SARS-CoV-2 pandemic on participants from the Boston Puerto Rican Health Study. *AJPM Focus*. 2023; Apr 6:100097. doi: 10.1016/j.focus.2023.100097. PMID: PMC10076072.
Role: manuscript preparation and revision
Citations: 0
Impact Factor: 6.6
1. **Fouhy LE***, Mangano KM, Zhang X, Dawson-Hughes B, Tucker KL, Noel SE. Association between a calcium to magnesium ratio and osteoporosis among Puerto Rican adults. *J Nutr*. 2023 Sep;153(9):2642-2650. doi: 10.1016/j.tjnut.2023.05.009. Epub 2023 May 9. PMID: 37164266; PMCID: PMC10550845.
Role: Conceptualization, manuscript preparation, review and revision.
Citations: 1
Impact Factor: 4.2
2. **Fouhy LE**, Lai CQ, Parnell LD, Tucker KL, Ordovás JM, Noel SE. Genome-wide association study of osteoporosis identifies genetic risk and interactions with DASH diet and sugar sweetened beverages in a Hispanic cohort of older adults. *J Bone Miner Res*. 2024 Mar 14.. doi:10.1093/jbmr/zjae047. Epub ahead of print. PMID: 38484114.
Citations: 0
Impact Factor: 6.2
3. **Fouhy L**, Mangano KM, Zhang X, Dawson-Hughes B, Cornell D, Tucker KL, Noel SE. Association between urinary catecholamines and glucocorticoids and bone mineral density and osteoporosis in Puerto Rican Adults. *J Bone Miner Res*. 2024 Oct. Epub to be released.
Role: Conceptualization, statistical analysis, manuscript preparation, review and revision
Citations: 0
Impact Factor: 6.2

Abstracts and Poster Presentations Presented at Professional Meetings

During Graduate School

1. Fouhy LE, Mangano KM, Cornell DJ, Dawson-Hughes B, Tucker KL, Noel SE. Association between urinary stress hormones and bone mineral density in post-menopausal Puerto Rican females; modification by diet quality. Delivered as a Poster at American Society of Bone Mineral Research Conference 2024.
2. Fouhy LE, Mangano KM, Zhang X, Dawson-Hughes B, Tucker KL, Noel SE. Association between a Social Determinants of Health Index and Bone Mineral Density and Odds of Osteoporosis among Puerto Rican Adults. Delivered as a poster at American Society of Bone Mineral Research Conference 2023
3. Fouhy LE, Mattei J, Cornell DJ, Li W, Tucker KL, Noel SE. Heart Rate Variability Predicts Systemic Inflammation in Puerto Rican Adults Living in the Boston Area. Delivered as a poster at the American Academy of Sports Medicine Conference 2023.
4. Fouhy LE, Mattei J, Cornell DJ, O'Neil, J, Falcon L, Tucker KL, Rodriguez-Orengo J, Noel SE. Association Between Perceived Stress, Chronic Stress, Coping, and Resilience and Self-Reported Osteoporosis Among Puerto Rican Adults Living in Puerto Rico. Delivered as a poster at the American Psychosomatic Annual Conference 2023.
5. Fouhy LE, Noel SE, Tucker KL, Mangano KM, Zhang X. Associations between Adherence to Three Dietary Quality Indices and Osteoporosis: Results from the National Health and Nutrition Examination Survey. Abstract delivered as a poster at ASBMR Annual Conference 2022.
6. Fouhy LE, Noel SE, Flanagan KD, Mangano KM, Tucker KL. A Sweets, Sugared Drink and Dairy Desserts and a Meat, Processed Meat Dietary Pattern is Associated with Higher Odds of Osteoporosis in Puerto Rican Men and Postmenopausal Women. Abstract delivered at American

- Society for Nutrition Annual Conference. Live Online 2022. Doi;
<https://doi.org/10.1093/cdn/nzac054.018>
7. Flanagan KD, Fouhy LE, Mangano KM, Noel SE, Tucker KL. Food Insecurity is Associated with Lower Bone Mineral Density Among Older Puerto Rican Adults living in Boston. Abstract delivered at American Society of Nutrition Annual Conference. Live Online 2022. Doi:
<https://doi.org/10.1093/cdn/nzac051.026>
 8. Adelman BC, Mangano KM, Fouhy LE, Zhang X, Tucker KL, Noel SE. Association between Serum Total Carotenoids and Bone Health in Puerto Rican Adults: The Boston Puerto Rican Osteoporosis Study. *Curr Dev Nutr.* 2021;5(Supplement_2):67. doi: [10.1093/cdn/nzab034_001](https://doi.org/10.1093/cdn/nzab034_001). Abstract delivered as a virtual poster presentation at the American Society for Nutrition 2021 LIVE ONLINE Annual Meeting (June 9-12).
 9. Fouhy LE, Mangano KM, Zhang X, Adelman BC, Tucker KL, Noel SE. Dietary calcium and magnesium are associated with lower odds of osteoporosis among Puerto Rican older adults. *Curr Dev Nutr.* 2021;5(Supplement_2):15. doi: [10.1093/cdn/nzab033_015](https://doi.org/10.1093/cdn/nzab033_015). Abstract delivered as a virtual poster presentation at the American Society for Nutrition 2021 LIVE ONLINE Annual Meeting (June 9-12).
 10. Fouhy LE, Cornel DJ, Fahey K, Daily-Malysa S, Tucker KL, Noel SE. Development of linguistically and culturally tailored materials to assist with in-home data collection among Caribbean Hispanic adults. Abstract delivered as a virtual oral presentation at the Student Research and Community Engagement Symposium, University of Massachusetts Lowell, Lowell, MA, USA (April 27, 2021). [ZCHS Graduate Winner]
 11. Fouhy LE, Cornell DJ, Velez M, Mirochnick J, Yachachin D, Goodrich B, Noel SE. Demographic and usage data for the free bus service in Lawrence, MA. Poster presentation to be delivered at the UMCCTS Community Engagement and Research Symposium, Worcester, MA, USA (March 20, 2020 – NOTE: postponed due to COVID-19).
 12. Mirochnick J, Fouhy LE, Cornell DJ, Velez M, Yachachin D, Miller E, Melendez L, Santos MP†, Martinez-Dominguez V, Noel SE. Preliminary findings from the Age-Friendly Lawrence community survey. Poster presentation to be delivered at the UMCCTS Community Engagement and Research Symposium, Worcester, MA, USA (March 20, 2020 – NOTE: postponed due to COVID-19).