

Joseph L. Roberts, Ph.D.
Assistant Professor of Nutrition
College of Health Solutions
Arizona State University

CONTACT INFORMATION

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EDUCATION

June 2020 – August 2022 **Postdoctoral Fellowship**, Orthopaedic Surgery
Emory University School of Medicine & Atlanta VA Medical Center, Atlanta, GA
Mentor: Hicham Drissi, Ph.D.

May 2020 **PhD**, Nutrition and Health Sciences
Emory University, Atlanta, GA
Mentor: Hicham Drissi, Ph.D.

May 2015 **MS**, Nutrition and Health Sciences
University of Nebraska-Lincoln, Lincoln, NE
Mentor: Regis Moreau, Ph.D.

May 2013 **BS**, Nutrition Science
North Carolina State University, Raleigh, NC

PROFESSIONAL EXPERIENCE

November 2023 – Present **Research Health Scientist**, Phoenix VA Health Care System, Phoenix AZ

September 2022 – Present **Assistant Professor of Nutrition**, College of Health Solutions, Arizona State University, Phoenix AZ

June 2020 – August 2022 **Postdoctoral Fellow**, Department of Orthopaedics, Emory University School of Medicine, Emory University, & Atlanta VA Healthcare System, Atlanta, GA

August 2017 – May 2020 **Graduate Research Assistant**, Department of Orthopaedics, Emory School of Medicine, Emory University, & Atlanta VA Healthcare System, Atlanta, GA

August 2013 – May 2015 **Graduate Research Assistant**, Department of Nutrition and Health Sciences, University of Nebraska-Lincoln, Lincoln, NE

June 2012 – April 2013 **Research Technician Intern**, Charles River Discovery Services, Morrisville, NC

TEACHING & MENTORING

Arizona State University

Instructor of Record

Introduction to Nutrition Science (NTR 100)

Spring 2023, Fall 2023

Guest Lecturer

Emory UniversityGuest Lecturer

Human Nutrition I: "Regulation of Gene Expression" & "Nutritional Genomics"	Fall 2018, Fall 2019
Introduction to Human Nutrition: "Micronutrients and Musculoskeletal Health"	Spring 2018
Health in Aging: Patient Care in the 21st Century: "Nutrition and Musculoskeletal Health"	Fall 2017
Motor Physiology: "Bone Physiology"	Fall 2017, Spring & Fall 2019, & Spring 2020
Human Nutrition & Chronic Disease: "Nutrition and Osteoporosis"	Fall 2016, Fall 2021, 2022, 2023

Teaching Assistant and Teaching Associate

Human Nutrition I: Nutrition and Health Sciences PhD Curriculum	Fall 2017
Diabetes: Model of Global Non-Communicable Disease Control & Prevention: MPH Curriculum	Spring 2017
Introduction to Human Nutrition: Undergraduate Nutrition Minor Curriculum	Spring 2017
Human Nutrition I: Nutrition and Health Sciences PhD Curriculum	Fall 2016

Other InstitutionsGuest Lecturer

Global Public Health Nutrition: "Nutritional Influences on Bone Health" Georgia State University	Spring 2020 - Spring 2022
Introductory Biology: "Bone Physiology" Morehouse College	Spring 2018

Teaching Assistant

Advanced Human Nutrition: Nutrition and Health Sciences Undergraduate Curriculum University of Nebraska-Lincoln	Spring 2015
Introduction to Human Nutrition: Nutrition Sciences Undergraduate Curriculum North Carolina State University	Spring 2013
Fundamentals of Global Public Health: Undergraduate Curriculum North Carolina State University	Fall 2012

STUDENTS MENTORED**Arizona State University**Medical Students (MD)

- Kaleb Gastelo, Medical Student at University of Arizona College of Medicine - Phoenix Fall 2023 – Present

Master StudentsThesis Mentor

- Elizabeth Saucedo, Fall 2023 – Present

Teaching Mentor

- Karianna Larsen, GSA for NTR 100, Fall 2023
- Tatum Dyska, GSA for NTR 100, Spring 2023

Undergraduate

Honors Thesis Mentor

- David Shull, Fall 2023 - Present
- Michael Jakiche, Fall 2023 - Present
- Graham Collis, Fall 2023 - Present

Research Mentor

- Mackenzie Coder, Fall 2023
- Sasha Sherell, Fall 2023
- Julia Curtiss, Fall 2023 - Present
- Kelley Chau, Fall 2023 - Present
- Katie Lalime, Spring 2023 - Present
- Daniel Oesterle, Spring 2023 – Present
- Rida Khan, Spring 2023 - Present
- Yassna Hematti, Spring 2023 - Present
- Allison Rodriguez, Spring 2023
- Adam Stewart, Spring 2023

Emory UniversityMedical Student (MD/DO)

- Brandon Chiedo, Medical Student at Morehouse School of Medicine, Summer 2022
- Derek Harding, Medical Student at Alabama College of Osteopathic Medicine, Summer 2021

Undergraduate/Post-baccalaureate

- William Martin, Spring 2022
- Mateo Gollosi, Fall 2021 – Spring 2022
- Madison Conduah, Summer 2021, Spring 2022 – Summer 2022
- Giovanni Mella, Fall 2018 – Spring 2020
- Matthew Potter, Fall 2017

University of Nebraska-LincolnUndergraduate

- Noel Bruner, Spring 2014
- Whitney Aurand, Summer 2014 – Spring 2015

PROFESSIONAL MEMBERSHIPS

- American Society for Nutrition (ASN), July 2014 – Present
- American Society for Biochemistry and Molecular Biology (ASBMB), February 2016 – February 2020
- Orthopaedic Research Society (ORS), November 2019 – Present
- American Society for Bone and Mineral Research (ASBMR), May 2021-Present

PROFESSIONAL SERVICE**Service to the University*****Arizona State University*****College of Health Solutions:**

Co-Chair: Exercise and Nutritional Sciences PhD Program Admission Committee	2023
Health Innovation Exhibition Judge	2023
Member: Assistant Professor of Veterans Health Search Committee	2023
Member: MS Nutritional Science Admission Committee	2023 - Present
Ad-hoc Member: Tenure-Track Faculty Annual Review	2023

Emory University**College:**

Reviewer: Emory University Postdoctoral Association Professional Development Award	2022
Graduate Partner: Center for the Study of Human Health	2016 - 2020
Member: Public Health Sciences PhD Student Advisory Committee	2016 - 2018
Member: Nutrition and Health Sciences Executive Committee	2016 - 2018
Poster Judge: Emory University Undergraduate Research Symposium	2016
Poster Judge: Scholarly Inquiry and Research Symposium	2016

North Carolina State University**College:**

Member: Director of Student Involvement Search Committee	2013
Member: Global Health Initiatives	2013
Member: Student Centers Board of Directors	2012 - 2013

Service to the Profession**Grant Review Service**

Ad-hoc member: NSF Study Section Grant Reviewer	2023
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Service to Societies

Social Media Chair, Aging and Chronic Disease Research Interest Section, ASN	2023 - 2024
Poster Judge: Emerging Leaders in Nutrition American Society for Nutrition Annual Meeting	2023
Abstract Reviewer: Orthopaedic Research Society Annual Meeting	2022 - Present
Session Moderator: Orthopaedic Research Society Annual Meeting Bone Fracture Healing Session	2022
Abstract Reviewer: American Society for Nutrition Annual Meeting	2021 - Present

Service to Journals

Academic Editor: PLOS One	2023 - Present
Review Editor: Frontiers in Nutrition	2022 - Present

Ad-hoc reviewer (**approximately 10-20 per year**) for the following journals:

<i>Radiation Oncology</i>	<i>International J. for Vitamin and Nutrition Research</i>
<i>Advances in Nutrition</i>	<i>J. of Herbal Medicine</i>
<i>Bone</i>	<i>Frontiers in Pharmacology and Entropharmacology</i>
<i>Osteology</i>	<i>J. of Bone and Mineral Research</i>
<i>Frontiers in Nutrition</i>	<i>International J. of Molecular Sciences</i>
<i>Food Bioscience</i>	<i>J. of Cellular Biochemistry</i>
<i>Aging</i>	<i>Current Developments in Nutrition</i>
<i>Nutrients</i>	<i>Frontiers in Nutrition</i>

Service to the Community

Workshop Leader: Topic "Fostering your own research self-efficacy" Phoenix VA Summer Research Program	2023
Presenter: Mirabella Resident Tour of 850 PBC	2022

AWARDS AND HONORS

- Winner of the Orthopaedic Research Society New Investigator Research Award: February 14, 2023
- International Section on Fracture Repair Travel Award to the ORS 2023 Meeting: February 14, 2023
- 1st Annual Atlanta VA Research Day Rehabilitation Section Poster Competition Winner: May 19, 2022

- Finalist for the Orthopaedic Research Society International Section on Fracture Repair Podium Award: 2022
- American Society for Bone and Mineral Research Young Investigator Travel Grant: 2021
- American Society for Nutrition Emerging Leaders in Nutrition Finalist: 2020
- John B. Lyon Memorial Scholarship: 2019-2020
- Donald McCormick Award for Outstanding Research Achievements in Nutrition: 2019-2020
- Nutrition and Health Sciences Outstanding Student Mentor Award: 2019-2020
- American Society for Nutrition Emerging Leaders in Nutrition Competition Winner: June 8, 2019
- Award of Excellence for Meritorious Poster Presentation at the University of Alabama-Birmingham Comprehensive Arthritis, Musculoskeletal, Bone and Autoimmunity Research Day: December 7, 2018
- Molecules to Mankind Fellow, Emory University: 2016-2018
- Invited Participant, NIH Office of Dietary Supplements Research Practicum: June 7-9, 2016
- Emory University Laney Graduate School Fellowship Recipient: 2015 - 2020
- Larrick-Whitmore Travel Grant Recipient: 2015
- Cayman Chemical Travel Grant Recipient: 2015
- College of Education and Human Sciences Travel Grant Recipient: 2015
- Nebraska Gateway to Nutrigenomics Graduate Student Poster Competition Winner: March 13, 2015
- UNL Chancellor's Fellowship Recipient: 2013/2014, 2014/2015
- NC State University Scholars Program: 2009-2013

RESEARCH AND TRAINING FUNDING

Current

1. **Funding Source:** U.S. Department of Veterans Affairs, Career Development Award (CDA-1; IK1RX003783)
Role: PI
Total Direct Costs: \$218,833
Title: The contribution of the intestinal microbiota to fracture-induced pain
Purpose: The major goals of this project are to establish the therapeutic potential of probiotic dietary supplements in managing fracture related pain through modulation of metabolites and metabolism in young mice.
Effort: 7.5 calendar months / year
Date of Award: 11/1/2023 – 10/31/2025

Pending

1. **Funding Source:** Chicago Center on Musculoskeletal Pain (C-COMP), Pilot and Feasibility Study
Role: PI
Total Direct Costs: \$24,936
Title: The role of the aged gut microbiota in fracture-induced pain
Purpose: The major goal of this project is to study the contribution of the aged gut microbiota to fracture-induced pain through modulating inflammatory immune cell populations.
Effort: 0.173 summer months / year
Date of Award: 9/1/2023 – 8/31/2025
2. **Funding Source:** National Institutes of Health, R01
Role: Co-I
Total Direct Costs: \$557,152
Title: *Bifidobacterium longum* as a therapeutic adjuvant to promote fracture healing in aging mice
Purpose: The major goal of this project is to study the contribution of the aged gut microbiota to fracture-induced pain through modulating inflammatory cell populations.

Effort: 2.01 summer months / year
Date of Award: 4/1/2024 – 3/31/2029

3. **Funding Source:** Arizona Biomedical Research Centre (ABRC), New Investigator Award (NIA)
Role: PI
Total Direct Costs: \$202,500
Title: Effects of prebiotic-supplemented diets on fracture healing
Purpose: The major goal of this project is to study the impact of prebiotic-rich diets on fracture healing.
Effort: 1 summer month and 0.27 academic months / year
Date of Award: 1/1/2024 – 12/31/2026
4. **Funding Source:** American Heart Association (AHA)
Role: Co-I
Total Direct Costs: \$361,006
Title: Food is Medicine: Training the Practitioners
Purpose: The major goal of this project is to develop food is medicine learning modules for healthcare practitioners.
Effort: 0.48 summer month and 0.96 academic month / year
Date of Award: 1/1/2024 – 06/30/2025

Completed

1. **Funding Source:** Atlanta Veterans Affairs Medical Center Career Development Award
Role: PI
Total Direct Costs: \$25,000
Title: Probiotic supplementation for the management of fracture-related pain
Purpose: The major goal of this project was to evaluate the effects of consumption of three probiotic species on pain outcomes during the inflammatory phase of fracture healing.
Effort: 0 calendar months
Date of Award: 12/1/2021 – 9/30/2022
2. **Funding Source:** National Institutes of Health, NIA R21AG065977
Role: Graduate Student/Postdoctoral fellow
Total Direct Costs: \$25,000
Title: Influence of the Gut Microbiome on Normal and Senile Fracture Healing
Purpose: The major goal of this project was to evaluate the effects of consumption of probiotic species on fracture healing in young and aged mice.
Effort: 12 calendar months / year
Date of Award: 1/1/2020 – 12/31/2021
3. **Funding Source:** Emory University Laney Graduate School
Role: PI
Total Direct Costs: \$2,500
Title: Microbiome influences on bone fracture healing
Purpose: The major goal of this project was to evaluate the effects femoral fractures on the composition of the gut microbiome.
Effort: 0 calendar months
Date of Award: 3/14/2019 – 6/1/2019
4. **Funding Source:** Burroughs Wellcome Fund
Role: PI
Total Direct Costs: \$3,500
Title: Defining age-related changes in the systemic inflammatory response to fracture
Purpose: The major goal of this project was to evaluate the effects femoral fractures on the systemic inflammatory profile in young and aged mice.

Effort: 0 calendar months

Date of Award: 3/7/2018 – 9/11/2018

5. **Funding Source:** National Institutes of Health, NIDDK T32 DK007734

Role: Trainee

Total Direct Costs: \$3,500

Title: Nutrition and Health Sciences Training Grant Fellowship

Purpose: To provide stipend support during the first two years of the Nutrition and Health Sciences PhD program at Emory University.

Effort: 12 calendar months / year

Date of Award: 8/15/2015 – 8/15/2017

REFERRED PUBLICATIONS

Source	H-index	Citations	i-10 index
Google Scholar	11	539	12
Scopus	9	357	-

Full Bibliography:

- NIH: <https://www.ncbi.nlm.nih.gov/myncbi/joseph.roberts.2/bibliography/public/>
- Google Scholar: <https://scholar.google.com/citations?user=Dr4nr8AAAAAJ&hl=en>
- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=56991790900>
- ORCID: <https://orcid.org/0000-0001-6839-1173>

Shaded = student or mentee under full or partial supervision of JLR

^c = JLR corresponding author

* = Co-first author

2023

17. **Roberts JL**^c, Chiedo B, Drissi H. Systemic inflammatory and gut microbiota responses to fracture in young and middle-aged mice. *Geroscience*. 2023. <https://doi.org/10.1007/s11357-023-00963-7>
16. **Roberts JL**, Yu M, Viggewarapu M, Arnst JL, Pacifici R, Beck GR. Dietary phosphorus consumption alters T cell populations, cytokine production, and bone volume in mice. *JCI Insight*. 2023. 8(10):e154729. <https://doi.org/10.1172/jci.insight.154729>
15. **Roberts JL**, Gollosi M, Harding DB, Conduah M, Drissi H. Bifidobacterium longum supplementation improves age-related delays in fracture repair. *Aging Cell*. 2023. 22(4):e13786. <https://doi.org/10.1111/acer.13786>

2022

14. Díaz-Hernández ME, Kinter CW, Watson SR, Mella-Velázquez G, Kaiser J, Liu G, Khan NM, **Roberts JL**, Lorenzo J, Drissi H. Sexually dimorphic increases in bone mass following tissue-specific overexpression of Runx1 in myeloid osteoclast precursors. *Endocrinology*. 2022; 163.

2021

13. **Roberts JL**, Mella-Velazquez G, Dar HY, Liu G, Drissi H. Deletion of IL-17ra in osteoclast precursors increases bone mass by decreasing osteoclast precursor abundance. *Bone*. 2021; 157. <https://doi.org/10.1016/j.bone.2021.116310>

2020

12. **Roberts JL**, Liu G, Darby TM, Fernandes LM, Diaz-Hernandez ME, Jones RM, Drissi H. Bifidobacterium adolescentis supplementation attenuates fracture-induced systemic sequelae. *Biomedicine and Pharmacotherapy*. 2020; 132. <https://doi.org/10.1016/j.biopha.2020.110831>
 11. Bellissimo MP*, **Roberts JL***, Jones DP, Liu KH, Taibl KR, Uppal K, Weitzmann MN, Pacifici R, Drissi H, Ziegler TR, Alvarez JA. Metabolomic associations with serum bone turnover markers. *Nutrients*. 2020; 12(10); 3161. *Equal contribution
 10. Gutiérrez OM, Porter AK, Viggewarapu M, **Roberts JL**, Beck GR. Effects of dietary phosphorus and calcium to phosphorus ratio on mineral metabolism and cardiometabolic health. *J Nutr Biochem*. 2020; 80. <https://doi.org/10.1016/j.jnutbio.2020.108374>
 9. Bellissimo MP, Ziegler TR, Jones DP, Liu KH, Fernandes J, **Roberts JL**, Weitzmann MN, Pacifici R, Alvarez JA. Plasma High-Resolution Metabolomics Identifies Linoleic Acid and Linked Metabolic Pathways Associated with Bone Mineral Density. *Clinical Nutrition*. 2020. 40(2):467-475. <https://doi.org/10.1016/j.clnu.2020.05.041>
 8. **Roberts JL**, Liu G, Paglia DN, Kinter CW, Fernandes LM, Lorenzo J, Hansen MF, Arif A, Drissi H. Deletion of Wnt5a in osteoclasts results in bone loss through decreased bone formation. *Ann NY Acad Sci*. 2020; 1463: 45– 59.
 7. Paglia DN*, Diaz-Hernandez ME*, **Roberts JL***, Lorenzo J, Drissi H. Deletion of Runx1 in osteoclasts impairs murine fracture healing through progressive woven bone loss and delayed cartilage remodeling. *J Orthop Res*. 2020; 38:1007-1015. *Equal contribution
 6. **Roberts JL**^C, Drissi H. Advances and promises of nutritional influences on natural bone repair. *J Orthop Res*. 2020; 38: 695-707.
- 2018
5. **Roberts JL**, Paglia DN, Drissi H. Transcriptional mechanisms of secondary fracture healing. *Curr Osteoporos Rep*. 2018; 16(2):146-154
- 2017
4. **Roberts JL**, Stein AD. The impact of nutritional interventions beyond the first two years of life on linear growth: a systematic review and meta-analysis. *Adv Nutr*. 2017; 8(2):323-336.
- 2016
3. **Roberts JL**^C, Moreau R. Functional properties of spinach (*Spinacia oleracea* L.) phytochemicals and bioactives. *Food Funct*. 2016; 7: 3337-3353.
 2. **Roberts JL**, He B, Erickson A, Moreau R. Improvement of mTORC1-driven overproduction of apoB-containing triacylglyceride-rich lipoproteins by short-chain fatty acids, 4-phenylbutyric acid and (R)- α -lipoic acid, in human hepatocellular carcinoma cells. *Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids*. 2016; 1861: 166-176.
- 2015
1. **Roberts JL**, Moreau R. Emerging role of α -lipoic acid in the prevention and treatment of bone loss. *Nutr Rev*. 2015; 73:116-125.

1. **Roberts JL**, Kapfhamer D, Devarapali V, Drissi H. Effects of IL-17ra Signaling in Prx1+ Mesenchymal Cells on Fracture Healing in Mice. *International J of Molecular Sciences*

BOOK CHAPTERS

1. **Roberts JL**, Kinter CW, Drissi H. Generation and Experimental Outcomes of Closed Femoral Fracture in Mice. In: Osteoporosis and Osteoarthritis. van Wijnen A. (ed), Second Edition. Springer, New York, New York. 2021; 205-222. https://doi.org/10.1007/978-1-0716-0989-7_13

ORAL PRESENTATIONS

Invited Lectures:

6. **Roberts JL**. "Targeting the gut microbiota for pain management during fracture healing." Chicago Center on Musculoskeletal Pain, December 4, 2023, Chicago, IL, USA
5. **Roberts JL**. "Harnessing the gut microbiota for improved fracture healing and functional outcomes." September 21, 2023, CHS Innovation Talks, Phoenix, AZ, USA
4. **Roberts JL**. "Targeting the gut microbiota for improved bone repair." September 13, 2023, ASU Biodesign Health Through Microbiomes Seminar, Tempe, AZ, USA
3. **Roberts JL**. "Inflammation in Chronic Disease: All the blame on the gut." April 22, 2022, American Society for Parental and Enteral Nutrition (ASPEN) Annual Meeting, Las Vegas, NV, USA
2. **Roberts JL**. "The contribution of the intestinal microbiota to fracture-induced pain." October 27, 2022, Phoenix VA Health Care System Research Day, Phoenix, AZ, USA
1. **Roberts JL**, Viggewarapu M, Habib M, Beck GR. "Effects of habitual phosphorus consumption on bone health." March 8, 2018, Division of General Medicine and Geriatrics Research Seminar, Emory University, Atlanta, GA, USA

Conference Oral Presentations:

16. **Roberts JL**, Golloshi M, Harding DB, Drissi H. "Modulation of the gut microbiota with *Bifidobacterium longum* accelerates bone repair in aged mice." February 12, 2023, Orthopaedic Research Society Annual Meeting, Dallas, TX, USA
15. **Roberts JL**, Golloshi M, Harding DB, Drissi H. "Supplementation with a single Bifidobacterium accelerates bone repair in aged mice." August 26, 2022, 3rd International Conference on Musculoskeletal and Neural Interactions, Atlanta, GA, USA
14. **Roberts JL**, Golloshi M, Harding DB, Drissi H. "Supplementation with a single Bifidobacterium accelerates bone repair in aged mice." May 15, 2022, 8th International Conference on Osteoimmunology, Crete, Greece
13. **Roberts JL**, Drissi H. "Conditional Deletion Of IL-17ra In the Periosteal Mesenchyme Impairs Femoral Fracture Repair." February 6, 2022, Orthopaedic Research Society Annual Meeting, Tampa, FL, USA
12. **Roberts JL**, Mella G, Liu G, Drissi H. "IL-17ra signaling represses Runx1 to promote osteoclastogenesis and bone resorption." February 14, 2021, Orthopaedic Research Society Annual Meeting (Virtual)
11. **Roberts JL**, Kinter CW, Fernandes LM, Diaz-Hernandez ME, Arif A, Drissi H. "Conditional deletion of Wnt5a in committed osteoclasts results in bone loss through decreased bone formation." February 8, 2020, Orthopaedic Research Society Annual Meeting, Phoenix, AZ, USA
10. Mella G, Kinter CW, Diaz-Hernandez ME, Watson SR, Kaiser J, **Roberts JL**, Drissi H. Runx1 overexpression in osteoclast precursors leads to a sexual dimorphic effect on bone." February 10, 2020, Orthopaedic Research Society Annual Meeting, Phoenix, AZ, USA

9. **Roberts JL**, Darby T, Fernandes LM, Jones R, Drissi H. "Probiotic supplementation enhances bone repair and prevents post-traumatic bone loss." June 9, 2019, Nutrition 2019, American Society for Nutrition, Baltimore, MD, USA. **Emerging Leaders in Nutrition Competition Winner**
8. **Roberts JL**, Darby T, Fernandes LM, Jones R, Drissi H. "Probiotic supplementation enhances bone repair and prevents post-traumatic bone loss." April 19, 2019, Musculoskeletal Research Symposium, Emory University, Atlanta, GA, USA
7. **Roberts JL**. "Transcriptional control of secondary fracture healing." September 19, 2017, Nutrition and Health Sciences Seminar, Emory University, Atlanta, GA, USA
6. **Roberts JL**. "Effects of habitual phosphorus consumption on bone health." April 4, 2017, Nutrition and Health Sciences Seminar, Emory University, Atlanta, GA, USA
5. **Roberts JL**. "The impact of nutritional interventions beyond the first two years of life on linear growth: a systematic review and meta-analysis." September 13, 2016, Nutrition and Health Sciences Seminar, Emory University, Atlanta, GA, USA
4. Moreau R, **Roberts JL**, He B, Erickson A. "Short-Chain Fatty Acids, 4-Phenylbutyric Acid and R-Alpha Lipoic Acid, Improve mTORC1-Driven Overproduction of apoB-Containing Triacylglyceride-Rich Lipoproteins." April 3, 2016, Experimental Biology, San Diego, CA, USA
3. **Roberts JL**. "The myokine irisin: a molecular link between exercise and bone health." January 19, 2016, Nutrition and Health Sciences Seminar, Emory University, Atlanta, GA, USA
2. **Roberts JL**. "Bioavailability and efficacy of plant- and animal-derived microRNAs." October 10, 2015, Nutrition and Health Sciences Seminar, Emory University, Atlanta, GA, USA
1. **Roberts JL**. "Lipoic acid supplementation attenuates mTORC1 signaling in skeletal muscle." March 10, 2015, Nutrition and Health Sciences Seminar, University of Nebraska-Lincoln, Lincoln, NE, USA

POSTER PRESENTATIONS

18. **Roberts JL**, Chiedo B, Conduah M, Kaiser J, Drissi H. "Probiotic supplementation improves fracture-related pain in mice." 2023 Nutrition, American Society for Nutrition Annual Meeting, Boston MA, USA, July 23, 2023.
17. **Roberts JL**, Gollosi M, Harding DB, Drissi H. "Supplementation with a single Bifidobacterium accelerates bone repair in aged mice." 1st Annual Atlanta VA Research Day, Atlanta GA, USA, May 19, 2022. **Rehabilitation Section Poster Competition Winner**
16. **Roberts JL**, Mella-Velazquez G, Dar HY, Drissi H. "IL-17ra signaling represses Runx1 to promote osteoclastogenesis and bone resorption." American Society for Bone and Mineral Research Annual Meeting, San Deigo, CA, USA, October 3, 2021.
15. **Roberts JL**, Bellissimo MP, Taibl K, Uppal K, Jones DP, Drissi H, Ziegler TR, Alvarez JA. "Novel metabolic pathways associated with serum bone turnover markers in healthy young adults." Nutrition 2020, Virtual Meeting. **Emerging Leaders in Nutrition Finalist**
14. **Roberts JL**, Darby T, Fernandes LM, Jones R, Drissi H. "Probiotic supplements protect against post-traumatic bone loss by tightening the intestinal barrier." Orthopaedic Research Society Annual Meeting, Phoenix, AZ, USA, February 9, 2020.
13. **Roberts JL**, Fernandes LM, Kinter CW, Drissi H. "New mechanisms of Wnt5a control of bone turnover." Musculoskeletal Research Symposium, Emory University, Atlanta, GA, USA, April 19, 2019.
12. Kinter CW, Diaz-Hernandez M, Watson SR, **Roberts JL**, Drissi H. "The effect of conditional and temporal overexpression of Runx1 on bone turnover." Musculoskeletal Research Symposium, Emory University, Atlanta, GA, USA, April 19, 2019.

11. **Roberts JL**, Darby T, Fernandes LM, Jones R, Drissi H. "Probiotic Supplementation Accelerate Bone Repair and Prevent Systemic Bone Loss Following Femoral Fracture." Comprehensive Arthritis, Musculoskeletal, Bone and Autoimmunity Center Research Day, Birmingham, AL, USA, December 7, 2018. **Award of Excellence for Meritorious Poster Presentation**
10. Fernandes LM, **Roberts JL**, Kinter CW, Paglia DN, Drissi H. "Novel Role of Wnt5a Signaling in Bone Homeostasis." Comprehensive Arthritis, Musculoskeletal, Bone and Autoimmunity Center Research Day, Birmingham, AL, USA, December 7, 2018.
9. Kinter CW, Diaz-Hernandez M, Watson SR, **Roberts JL**, Drissi H. "The effect of conditional and temporal overexpression of Runx1 on bone phenotype in C57Bl/6J mice." Comprehensive Arthritis, Musculoskeletal, Bone and Autoimmunity Center Research Day, Birmingham, AL, USA, December 7, 2018.
8. **Roberts JL**, Yu M, Viggewarapu M, Habib M, Tyagi AM, Li JY, Pacifici R, Beck GR Jr. "Prolonged consumption of high and low phosphorus diets impacts inflammation, endocrine factors, and the skeleton." Department of Medicine Research Day, Atlanta, GA, USA, October 19, 2018.
7. **Roberts JL**, Viggewarapu M, Habib M, Beck GR. "Prolonged Consumption of High and Low Phosphorus Diets Have Differential Effects on Bone Microarchitecture and Serum Factors in Female C57BL/6J Mice." Nutrition 2018, Boston, MA, USA, June 12, 2017.
6. **Roberts JL**, Paglia DN, Drissi H. "The role of non-canonical Wnt5a in bone homeostasis." Musculoskeletal Research Symposium, Emory University, Atlanta, GA, USA, February 23, 2018.
5. **Roberts JL**, Stein AD. "The impact of nutritional interventions on linear growth after 2 y of life: a systematic review and meta-analysis of controlled trials." Experimental Biology, Chicago, IL, April 23, 2017
4. **Roberts JL**, Moreau R. "Attenuation of mTORC1-Driven Overproduction of Lipoproteins by Phenylbutyric Acid." Experimental Biology, Boston, MA, March 30, 2015.
3. **Roberts JL**, Moreau R. "Attenuation of mTORC1-Driven Overproduction of Lipoproteins by Phenylbutyric Acid." Nebraska Gateway to Nutrigenomics Annual Retreat, Lincoln, NE, March 13, 2015. **Graduate Student Poster Competition Winner**
2. **Roberts JL**, Moreau R. "Activation of mTORC1 promotes the secretion of atherogenic lipoproteins." College of Education and Human Sciences Research Showcase, Lincoln, NE, October 23, 2014.
1. Ghattan S, Glasscock T, **Roberts JL**, Sutton S, Whitfield J. "Creation of Educational Brochures to Raise Awareness of Donor Milk." Department of Food, Bioprocessing, and Nutrition Sciences Senior Capstone Poster Session, Raleigh, NC, May 7, 2013.