



11th International Symposium on Nutritional Aspects of Musculoskeletal Health

Scientific Program

DAY 1 – Monday, April 29, 2024		
12:00-13:00	<i>Registration</i>	<i>Founders Hall Foyer</i>
13:00-13:15	<u>Connie Weaver</u> (<i>San Diego State University, USA</i>) Welcome and Official Opening	<i>Founders Ballroom B</i>
SESSION 1: UPDATE ON OSTEOPOROSIS & BONE HEALTH <i>Moderators: Connie Weaver (USA) & Anne Schafer (USA)</i> <i>Founders Ballroom B</i>		
13:15-13:45	<u>René Rizzoli</u> (<i>Geneva University Hospitals and Faculty of Medicine, Geneva, Switzerland</i>) Nutrition and lifestyle factors for osteoporosis: A 2024 update	
13:45-14:15	<u>Sue Shapses</u> (<i>Rutgers University, USA</i>) Nutritional Influences on Bone and Body Composition: Ethnic Considerations	
14:15-14:45	<u>Winnie Chee</u> (<i>International Medical University (IMU), Malaysia</i>) Lifestyle and nutritional factors for Asian bone health	
14:45-15:15	<i>Break</i>	<i>Founders Lawn</i>
SESSION 2: UPDATE ON SARCOPENIA & MUSCLE HEALTH <i>Moderators: Sue Lantham-New (UK) & Stuart Phillips (Canada)</i> <i>Founders Ballroom B</i>		
15:15-16:00	<u>Robin M. Daly</u> (<i>Deakin University, Australia</i>) Nutrition and lifestyle factors for sarcopenia: A 2024 update	
16:00-16:30	<u>Timothy Kwok</u> (<i>The Chinese University of Hong Kong, Hong Kong</i>) Interaction between diet, sarcopenia and brain health	
16:30-17:00	<u>Roger Fielding</u> (<i>Tufts University, USA</i>) The role of the gut microbiome and serum metabolome on muscle mass and function in older adults	

SESSION 3: ORAL PRESENTATIONS SELECTED FROM ABSTRACTS		
<i>Moderators: Nana Gletsu-Miller (USA) & Kelsey Mangano (USA)</i> <i>Founders Ballroom B</i>		
17:00-18:00	<p><u>Sisi Cao</u> (<i>San Diego State University, USA</i>) Urinary Sodium and Calcium Excretion in Healthy Men and Women in Response to Dietary Salt: A Randomized Crossover Trial</p> <p><u>Nehe Dole</u> (<i>University of Arkansas for Medical Sciences, USA</i>) Novel role of lipocalin 2 in bone: Protection against mitochondrial function and ferroptosis during obesity-induced bone fragility</p> <p><u>Marie-Noëlle Horcajada</u> (<i>Nestlé Institute of Health Science, Switzerland</i>) A Young-Child Formula with the Synbiotic <i>L. reuteri</i> and Galacto-oligosaccharides Increases Bone and Muscle Strength in Toddlers: a 6-month Randomized Controlled Trial</p> <p><u>Kenneth Lo</u> (<i>The Hong Kong Polytechnic University, Hong Kong</i>) Increasing dietary protein intake and adherence to healthy dietary patterns prevents cognitive decline of older adults with sarcopenia</p> <p><u>Susan Lanham-New</u> (<i>University of Surrey, United Kingdom</i>) Association between vitamin D status and respiratory tract infections requiring hospital admission: analysis of ethnic groups from the UK Biobank cohort</p>	
18:00-19:30	<p><i>Welcome Reception</i></p> <p><i>Interactive Poster Session</i></p>	<p><i>Founders Ballroom A</i></p> <p><i>Founders Ballroom A</i></p>
DAY 2 – Tuesday, April 30, 2024		
7:00-8:00	<i>Registration</i>	<i>Founders Hall Foyer</i>
7:00-8:00	<i>Breakfast</i>	<i>Founders Lawn</i>
SESSION 4: NUTRITION, EXERCISE, MUSCLE, BONE INTERACTIONS		
<i>Moderators: Robin Daly (Australia) & Wendy Kohrt (USA)</i> <i>Founders Ballroom B</i>		
8:00-8:30	<p><u>Luc van Loon</u> (<i>Maastricht University, Netherlands</i>) Protein to support muscle conditioning in aging and disease</p>	
8:30-9:00	<p><u>Andrea Josse</u> (<i>York University, Canada</i>) Dairy and exercise for bone health: Evidence and recommendations</p>	
9:00-9:30	<p><u>Darren Candow</u> (<i>University of Regina, Canada</i>) Effects of creatine on bone, muscle and brain health – hope or hype?</p>	

SESSION 5: ORAL PRESENTATIONS SELECTED FROM ABSTRACTS (cont)	
Moderators: <i>Elisabet Børshheim (USA) & Taylor Wallace (USA)</i> <i>Founders Ballroom B</i>	
9:30-10:00	<p><u>Lisa Merrill</u> (<i>University of Massachusetts, Lowell, USA</i>) The Gut Microbiome, Bone Material Strength, and Diet in Puerto Rican Adults</p> <p><u>Brenda Smith</u> (<i>Indiana University School of Medicine, USA</i>) Short Chain Frucotooligosaccharide Promotes Bone Mineralization and Formation in Conjunction with Increasing Osteocytes, Independent of T Regulatory Cells</p> <p><u>Liping Zhou</u> (<i>The Hong Kong Polytechnic University, Hong Kong</i>) Investigation of the modulation of soy exposure in early life on bone development and gut microbiota</p>
10:00-11:30	<p><i>Break</i> <i>Founders Lawn</i> <i>Visit Poster Exhibition</i> <i>Founders Ballroom C</i></p>
SESSION 6: DIETARY PROTEIN AND MUSCULOSKELETAL HEALTH ACROSS THE LIFE AND HEALTH SPAN	
Moderators: <i>Mark Kern (USA) & Darren Candow (Canada)</i> <i>Founders Ballroom B</i>	
11:00-12:30	<p><u>David Church</u> (<i>University of Arkansas Medical School, USA</i>) Text</p> <p><u>Luc Van Loon</u> (<i>Maastricht University, Netherlands</i>) Plant derived proteins: Game Changers?</p> <p><u>Elisabet Børshheim</u> (<i>Arkansas Children's Nutrition Center, USA</i>) Text</p> <p><u>Stuart Phillips</u> (<i>McMasters University, Canada</i>) At the intersection of protein nutrition and exercise: advice for athletes and mere mortals for sport performance and health</p>
12:30-14:00	<p><i>Lunch</i> <i>Founders Lawn</i> <i>Visit Poster Exhibition</i> <i>Founders Ballroom A</i></p>
SESSION 7: DIET INTERACTIONS AND BONE HEALTH: THE PROTECTIVE POWER OF PRUNES <i>Sponsored by California Prune Board</i>	
Moderators: <i>Mary Jane DeSouza (USA) & Ailsa Welch (UK)</i> <i>Founders Ballroom B</i>	
14:00-14:35	<u>Mary-Jane DeSouza</u> (<i>Pennsylvania State University, USA</i>) Effects of Prunes on Bone Health in a Cohort of US Women. Findings from the PRUNE Study
14:35-14:55	<u>Shirin Hooshmand</u> (<i>San Diego State University, USA</i>) Prunes and bone health: Are there sex differences?
14:55-15:20	Moderator led discussion with audience. Q&A
15:20-16:00	<i>Break</i> <i>Founders Lawn</i>

SESSION 8: NUTRITION IN THE BARIATRIC SURGERY PATIENT: EMERGING SCIENCE AND CLINICAL STRATEGIES

Moderators: *Connie Weaver (USA) & Steven Heymsfield (USA)*

Founders Ballroom B

16:00-17:30	<p><u>Anne Schafer</u> (<i>University of California, San Francisco</i>) Calcium and bone metabolism after bariatric surgery</p> <p><u>Karin Wu</u> (<i>University of California, San Francisco</i>) The gut microbiome after bariatric surgery and its role in musculoskeletal health</p> <p><u>Nana Gletsu-Miller</u> (<i>Indiana University</i>) Iron deficiency after bariatric surgery</p>
18:00-	<p>Cocktails/Gala Dinner, VISTA TERRACE Presentation of Young Investigator Awards</p> <ul style="list-style-type: none"> ▪ Peter Burckhardt Award for Best Conference Presentation ▪ Bess Dawson-Hughes Award for Best Poster Presentation <p>Entertainment provided by California Gold Acoustic</p>

DAY 3 – Wednesday 1st May 2024

7:00-8:00	<i>Registration</i>	<i>Founders Ballroom B</i>
7:00-8:00	<i>Breakfast</i>	<i>Founders Lawn</i>

SESSION 9: CALCIUM AND VITAMIN D: WHAT'S NEW?

Moderators: *Connie Weaver (USA) & René Rizzoli (Switzerland)*

Founders Ballroom B

8:00-8:30	<p><u>Bess Dawson-Hughes</u> (<i>Tufts University, USA</i>) Calcium, vitamin D and bone in older adults: What is the evidence in 2024?</p>
8:30-9:00	<p><u>Wendy Kohrt</u> (<i>University of Colorado, USA</i>) Defense of exercise-induced serum calcium loss</p>
9:00-9:30	<p><u>Charles Ginsberg</u> (<i>University of California, San Diego, USA</i>) Vitamin D metabolites Better Predict Health</p>
9:30-10:00	<p>Debate: Vitamin D Recommendations for Health Remain Strong PRO-Taylor Wallace (<i>Think Healthy Group LLC, George Mason University and Tufts University</i>) CON-Connie Weaver (<i>San Diego State University</i>)</p>
10:00-10:30	<p><i>Break</i> <i>Visit Poster Exhibition</i></p>

Founders Lawn
Founders Ballroom A

SESSION 10: LIFESTYLE CHOICES AND MUSCULOSKELETAL HEALTH	
<i>Moderators: Man-sau Wong (Hong Kong) & Bess Dawson-Hughes (USA) Founders Ballroom B</i>	
10:30-11:00	<u>Ailsa Welch</u> (<i>University of East Anglia, United Kingdom</i>) Dietary patterns for optimizing bone & muscle - Are they effective?
11:00-11:30	<u>Pamela Von Hurst</u> (<i>Massey University, New Zealand</i>) Veganism – Is it good or bad for bone and muscle?
11:30-12:00	<u>Connie Weaver</u> (<i>San Diego State University, USA</i>) Food Matrix and Ultraprocessing: Does it matter for bone?
12:00-13:00	<i>Lunch</i> <i>Visit Poster Exhibition</i> <i>Founders Lawn</i> <i>Founders Ballroom A</i>
SESSION 11: GUT-BONE CROSS-TALK	
<i>Moderators: Winnie Chee (Malaysia) & Shirin Hooshmand (USA) Founders Ballroom B</i>	
13:00-13:30	<u>Laura McCabe</u> (<i>Michigan State University, USA</i>) Prunes prevent glucocorticoid induced osteoporosis and enhance gut microbiota health in animals
13:30-14:00	<u>Cristina Palacios</u> (<i>Florida International University, USA</i>) Prebiotics and bone health in children
14:00-14:30	<u>Man-sau Wong</u> (<i>Hong Kong Polytechnic University, Hong Kong</i>) Lignans from <i>Sambucus Williamsii</i> protect bone via microbiome
14:30-15:00	<i>Break</i> <i>Founders Lawn</i>
SESSION 12: THE BENEFICIAL MICROBES FROM FRESH FRUITS AND VEGETABLES AND THEIR EFFICACY TO MAINTAIN BONE MINERAL DENSITY IN POSTMENOPAUSAL WOMEN	
<i>Moderators: Gerardo V. Toledo (Solarea Bio, Inc., USA) Founders Ballroom B</i>	
15:00-16:30	<u>Shivani Sahni</u> (<i>Harvard Medical School, USA</i>) The beneficial effects of fresh fruits and vegetables on bone health: The Framingham cohort evidence <u>Gerardo V. Toledo</u> (<i>Solarea Bio, Inc., USA</i>) Followed by a Panel Discussion with Gina Woods (USA) and René Rizzoli (Switzerland) <u>Eric M. Schott</u> (<i>Solarea Bio, Inc., USA</i>) Preclinical and clinical development of probiotics and synbiotics to maintain bone mineral density in postmenopausal women Followed by a Panel Discussion with Gina Woods (USA) and René Rizzoli (Switzerland)

SESSION 13: RESEARCH NEEDS FOR MUSCULOSKELETAL HEALTH*Moderators: Joseph Kindler (USA) & Sue Shapses (USA)**Founders Ballroom B*

16:30-17:00	<u>Kelsey Mangano</u> (<i>University of Massachusetts Lowell, USA</i>) Future of 'omics' to link diet to musculoskeletal health
17:00-17:30	<u>Steven Heymsfield</u> (<i>Louisiana State University, USA</i>) Digital Health Innovations in Musculoskeletal Care: Tools for Shaping the Future
17:30-18:00	<u>Robin Daly</u> (<i>Deakin University, Australia</i>) Innovation in digital technologies for sarcopenia and osteoporosis: opportunities and challenges
18:00	MEETING CLOSE