



# 11th International Symposium on Nutritional Aspects of Musculoskeletal Health

## Scientific Program

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

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

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

<b>SESSION 8: NUTRITION IN THE BARIATRIC SURGERY PATIENT: EMERGING SCIENCE AND CLINICAL STRATEGIES</b>		
<i>Moderators: Connie Weaver (USA) &amp; Steven Heymsfield (USA)</i>		<i>Founders Ballroom B</i>
16:00-17:30	<u>Anne Schafer</u> ( <i>University of California, San Francisco</i> ) <b>Calcium and bone metabolism after bariatric surgery</b>  <u>Karin Wu</u> ( <i>University of California, San Francisco</i> ) <b>The gut microbiome after bariatric surgery and its role in musculoskeletal health</b>  <u>Nana Gletsu-Miller</u> ( <i>Indiana University</i> ) <b>Iron deficiency after bariatric surgery</b>	
18:00-	<b>Cocktails/Gala Dinner, VISTA TERRACE</b> <b>Presentation of Young Investigator Awards</b> <ul style="list-style-type: none"> <li>▪ Peter Burckhardt Award for Best Conference Presentation</li> <li>▪ Bess Dawson-Hughes Award for Best Poster Presentation</li> </ul> Entertainment provided by California Gold Acoustic	
<b>DAY 3 – Wednesday 1<sup>st</sup> May 2024</b>		
7:00-8:00	<i>Registration</i>	<i>Founders Ballroom B</i>
7:00-8:00	<i>Breakfast</i>	<i>Founders Lawn</i>
<b>SESSION 9: CALCIUM AND VITAMIN D: WHAT'S NEW?</b>		
<i>Moderators: Connie Weaver (USA) &amp; René Rizzoli (Switzerland)</i>		<i>Founders Ballroom B</i>
8:00-8:30	<u>Bess Dawson-Hughes</u> ( <i>Tufts University, USA</i> ) <b>Calcium, vitamin D and bone in older adults: What is the evidence in 2024?</b>	
8:30-9:00	<u>Wendy Kohrt</u> ( <i>University of Colorado, USA</i> ) <b>Defense of exercise-induced serum calcium loss</b>	
9:00-9:30	<u>Charles Ginsberg</u> ( <i>University of California, San Diego, USA</i> ) <b>Vitamin D metabolites Better Predict Health</b>	
9:30-10:00	<b>Debate: Vitamin D Recommendations for Health Remain Strong</b> PRO-Taylor Wallace ( <i>Think Healthy Group LLC, George Mason University and Tufts University</i> ) CON-Connie Weaver ( <i>San Diego State University</i> )	
10:00-10:30	<i>Break</i> <i>Visit Poster Exhibition</i>	<i>Founders Lawn</i> <i>Founders Ballroom A</i>

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

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