

**U13 Bench-to-Bedside Conference Series
Osteoporosis and Soft Tissue (Muscle/Fat) Disorders**

*Supported by National Institute on Aging and American Geriatrics Society
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American Society for Bone and Mineral Research, American Federation for
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March 11-12, 2019
Hyatt Regency Bethesda
Room: Regency III/IV

CONFERENCE AGENDA AND SPEAKERS

DAY 1: MONDAY, MARCH 11

7:30am **Breakfast**

Opening Session

8:00–8:15 Opening Remarks and Introduction **Bruce Troen**

8:20–8:45 Framing the discussion with clinical cases **Cathleen Colón-Emeric**

8:45–9:00 **Break**

Topic 1: The Hallmarks of Aging in Muscle, Bone, and Soft Tissue – Implications for Clinical Case Studies

Moderator: Cliff Rosen

9:00–9:15 Proteostasis and autophagy **Jim White**

9:20–9:35 Nutrient sensing **Christopher Adams**

9:40–9:55 Mitochondrial dysfunction **Anthony Molina**

10:00–10:15 Senescence and Senolytics **Ming Xu**

10:15–10:30 **Break**

Topic 2: Epidemiology and Clinical Measures

Moderator: Roger Fielding

10:30–10:45 Epidemiology – Life trajectories of lean body, fat, and bone mass changes **Cyrus Cooper**

10:50–11:05 Body Composition– Measures, physiologic and functional impact, health disparities
Anne Newman

11:10–11:25 Environmental Interactions **Tamara Harris**

11:30–11:45 Population-level Genetics – human gene-muscle-bone associations **Doug Kiel**

11:50–12:05pm Biomarkers **Kim Huffman**

12:10–1:30 **Lunch and Networking**

Topic 3: Management and Medical Decision-Making

Moderator: Sarah Berry

1:30–1:45	Clinical phenotypes and targeting Bruce Troen
1:50–2:05	Weight reduction Denise Kathryn Houston
2:10–2:25	Exercise Marco Pahor
2:30–2:45	Nutritional Factors impacting muscle, fat, and bone Shivani Sahni
2:50–3:05	Myostatin/activin receptor pathways and SARMs Shalender Bhasin
3:10–3:25	Moderated discussion on gaps and future directions Sarah Berry
3:25–3:40	Break
3:40–5:00	Small Group Discussions <i>(Please find your Small Group table assignment)</i>

1. Health Disparities What disparities in muscle-bone diseases exist and what is their impact on health outcomes and cost? What mechanisms underlie these disparities, including genetic, environmental, and behavioral factors? How can interventions for sarco-osteoporosis be modified to improve impact for minority populations?
2. Multi-disciplinary/multi-factorial interventions and education What are key components of multidisciplinary and/or multi-factorial interventions to reduce the impact of sarco-osteoporosis? How can the overlap in muscle bone diseases be exploited to obtain pleiotropic benefits? How should existing models of care be modified to address the overlap of muscle/bone/fat? What are the most salient health-related outcomes that should be measured in such interventions? What aspects/assessments of functional capacity and mobility disability would be most useful? How can interdisciplinary partners/team members be best integrated in assessment and intervention paradigms?
3. Pharmacologic interventions What new pathways/targets should be tested for potential pleiotropic effects on muscle, fat and bone? How does the physiologic overlap of muscle/fat/bone impact potential toxicities of pharmacologic therapies? Will patients and clinicians accept pharmacologic therapies for sarco-osteopenia?
4. Trial design and outcomes What populations/conditions should be targeted? What outcomes should be measured and what is a minimally clinically important change? What potential toxicities should be assessed?
5. Biomarkers/imaging What biomarkers/imaging technologies are currently available and what are their indications? Limitations? What characteristics of new screening modalities would be most important for sarco-osteoporosis?
6. Polypharmacy and co-morbid conditions How does the presence of common co-morbid conditions change the presentation/impact/treatment of sarco-osteoporosis? What medications impact muscle and bone, and what is their impact on the other tissue? How does risk for falls impact screening/diagnosis/treatment of sarco-osteoporosis? How can interdisciplinary team-based assessment be best utilized in this setting?

6:00pm–7:30 **Reception and Rising Stars Poster Session** in Regency Annex

7:30–9:00 **Dinner/Rising Stars Recognition**

DAY 2: TUESDAY, MARCH 127:30am–8:30 **Breakfast and One-on-one Mentee/Mentor Meetings****Moving the Field Forward: Priorities, Agenda-setting, Wrap-up**

8:30–9:00 Setting Priorities for the Field Stakeholder Group Panel Discussion

9:00–10:00 Small groups 1-3 provide 10-minute reports from each break-out group

10:00 – 10:15 **Break**

10:15–11:15 Small groups 4-6 provide 10-minute reports from each break-out group

11:15–11:45 Moderated Discussion/Brainstorming

11:45 –12:00pm Closing Remarks from the Chairs, Evaluation, Thank you's

Lunch/Networking

(Dismissal of those not involved in Rising Stars: Afternoon Session for Junior Investigators)

Rising Stars: Afternoon Session for Junior Investigators

1:00–2:00 Consultancy challenge

2:00–3:00 Specific aims session: specific aims page feedback from peers and senior reviewers

3:00–3:30 Evaluations, action item postcards, adjourn

CONFERENCE PLANNING COMMITTEE**Heather Whitson, MD (PI)**

Duke University School of Medicine

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Cathleen Colon-Emeric, MD (Co-Chair)

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Harvard Medical School

Bruce Troen, MD (Co-Chair)

University at Buffalo School of Medicine

Clifford J. Rosen, MD

Maine Medical Center

Sarah D. Berry, MD, MPH

Harvard Medical School

Gregg Recanzone, PhD

University of California Davis

Roger Fielding, PhD

Tufts University

Kenneth L. Seldeen, PhD (Rising Star)

University at Buffalo School of Medicine

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Wake Forest School of Medicine

Elena Volpi, MD, PhD

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