

Agenda Summary - Marrow Adiposity: Bone, Aging and Beyond (BMA2020)

The 6th International Meeting on Bone Marrow Adiposity

September 9 – 10, 2020 • Whova Virtual Conference Platform • Live times listed in EDT – US Eastern Daylight Time

PRE-RECORDED CONTENT WILL BE AVAILABLE THROUGHOUT THE CONFERENCE AS INDICATED

WEDNESDAY, SEPTEMBER 9

9:00–10:15 (Livestream w/Q&A) Stream Anytime Sept 9-10, 2020 (after live keynote is complete)	<u>Welcome and Keynote Address</u> <ul style="list-style-type: none">○ Beata Lecka-Czernik, PhD, University of Toledo; Meghan McGee-Lawrence, PhD, Augusta University; Erica L Scheller DDS, PhD, Washington University <i>BMA2020 Welcome and Overview</i> <ul style="list-style-type: none">○ Ormond MacDougald, PhD, University of Michigan <i>Keynote address: Bone marrow adipose tissue (BMAT) biology, endocrine physiology and metabolism – unique and common traits with peripheral adipose tissue depots</i>
10:20-11:00 (Live Zoom Meetings Only)	Networking Meetups/Trainee Sessions (LIVE) <ul style="list-style-type: none">• General Networking• Early Stage Investigators• Meet the Keynote Speaker• Trainee Topics: Publishing, Preprints, and Open Access
11:00–12:30 (Livestream w/Q&A) Stream Individual Sessions Anytime Sept 9-10, 2020	<u>Session I: Bone Marrow Adipose Tissue, Aging, and Skeletal Homeostasis</u> <ul style="list-style-type: none">○ Sundeep Khosla, MD, Mayo Clinic <i>Plenary Talk 1: BMAT, aging, senolytics and skeletal health</i> <ul style="list-style-type: none">○ Short talks selected from abstracts<ol style="list-style-type: none">1. Sex differences in skeletal development and maintenance mediated by the osteoblastic glucocorticoid receptor (Anuj Sharma)2. Role of Senescence in Age- and Radiation- Associated Bone Marrow Adiposity (Abhishek Chandra)3. Loss of skeletal stem cell diversity drives a pro-inflammatory, pro-adipogenic bone marrow niche (Thomas Ambrosi)4. Interplay between Bone Marrow Adiposity and bone loss in TgRANKL osteoporotic models (Vagelis Rintotas)
12:30-13:30 (Live Q&A by chat) View Individual Posters Anytime Sept 9-10, 2020	Exhibitor Center <i>Virtual Poster Session with Live Q&A (37 posters)</i>
13:30-14:40 (Livestream w/Q&A) Stream Individual Sessions Anytime Sept 9-10, 2020	<u>Session II: Environmental Regulation of Bone and Marrow Adipose Tissue</u> <ul style="list-style-type: none">○ Pouneh Fazeli, MD, MPH, University of Pittsburgh <i>Plenary Talk 2: BMAT and bone in states of obesity and malnutrition</i> <ul style="list-style-type: none">○ Janet Rubin, MD, University of North Carolina at Chapel Hill <i>Plenary Talk 3: Exercise, bone marrow adipose tissue, and bone: convergence on beta-catenin</i> <ul style="list-style-type: none">○ Short talks selected from abstracts<ol style="list-style-type: none">5. Reconstitution of the host holobiont acutely increases bone growth and marrow adiposity of the gnotobiotic rat (Piotr Czernik)
14:30-14:45	Break
14:45-16:00 (Livestream w/Q&A) Stream Individual Sessions Anytime Sept 9-10, 2020	<u>Session III: Endocrine Regulation of Bone Marrow Adipose Tissue in Health and Disease</u> <ul style="list-style-type: none">○ Clifford Rosen, MD, Maine Medical Center Research Institute <i>Plenary Talk 4: PTH/Endocrine regulation of Bone Marrow Adiposity</i> <ul style="list-style-type: none">○ Short talks selected from abstracts<ol style="list-style-type: none">6. Adipsin as a novel adipokine regulating bone remodeling (Nikki Aaron)7. PPARG in Osteocytes Regulates Sclerostin Expression, Bone Mass and Marrow Adiposity (Sudipta Baroi)8. A secreted factor from bone that regulates bone and fat formation and metabolism balance (Li Chen)
16:20-17:20	BMA2020 After-Hours TRIVIA (Virtual Social Event)

16:00-24:00	<p>Break/Networking/Attendee-Scheduled Meetups</p> <p>Visit the Exhibitor Center to:</p> <ul style="list-style-type: none"> ➤ View Posters ➤ Learn About the BMA2020 Labs ➤ Visit Our Sponsors <p><u>Visit the Community Center to:</u></p> <ul style="list-style-type: none"> ➤ Schedule or Attend a Live Meetup ➤ Post or Respond to Job Openings ➤ Get to Know One Another – We miss seeing you in person! Share a photo of you and something you enjoy (e.g. travel, pets, family, instruments, etc)
THURSDAY, SEPTEMBER 10	
<p>3:00-4:30 (Livestream w/Q&A)</p> <p>Stream Individual Sessions Anytime Sept 9-10, 2020</p>	<p><u>Session IV: Advanced Methods for Clinical and Pre-Clinical Assessment of Bone Marrow Adiposity and Skeletal Health</u></p> <ul style="list-style-type: none"> ○ Gustavo Duque, MD, PhD, University of Melbourne <i>Plenary Talk 5: Assessing lipotoxicity in bone</i> ○ Greet Kerckhofs, PhD, Université Catholique de Louvain <i>Plenary Talk 6: Novel pre-clinical contrast agents for 3D imaging of BMAT</i> ○ Short talks selected from abstracts <ul style="list-style-type: none"> 9. Visceral Fat Metabolic Activity Evaluated by 18F-FDG PET/CT Predicts Osteoporosis in Healthy Postmenopausal Korean Women (Kisoo Pahk) 10. An injectable 3D tissue-engineered model of bone marrow adipogenesis and hematopoiesis (Josefine Tratwal)
4:15-9:00	<p>Break/Networking/Attendee-Scheduled Meetups</p> <p>Visit the Exhibitor Center to:</p> <ul style="list-style-type: none"> ➤ View Posters ➤ Learn About the BMA2020 Labs ➤ Visit Our Sponsors <p><u>Visit the Community Center to:</u></p> <ul style="list-style-type: none"> ➤ Schedule or Attend a Live Meetup ➤ Post or Respond to Job Openings ➤ Get to Know One Another – We miss seeing you in person! Share a photo of you and something you enjoy (e.g. travel, pets, family, instruments, etc)
8:00-9:00	<p>BMAS Scientific Board Meeting (Board Members Only)</p>
<p>9:00-10:40 (Livestream w/Q&A)</p> <p>Stream Individual Sessions Anytime Sept 9-10, 2020</p>	<p><u>Session V: Bone Marrow Adipose Tissue, Cancer, and Hematopoiesis</u></p> <ul style="list-style-type: none"> ○ Olaia Naiveras, MD, École polytechnique fédérale de Lausanne <i>Plenary Talk 7: BMAT, bone marrow reconstitution, and hematopoiesis</i> ○ Izabela Podgorski, PhD, Wayne State University <i>Plenary Talk 8: BMAT and cancer metastasis to bone</i> ○ Short talks selected from abstracts <ul style="list-style-type: none"> 11. The PPAR-gamma antagonist Bisphenol A diglycidyl ether induces myeloma cell death in vitro and in vivo via a PPAR-gamma independent mechanism (Emma Morris) 12. A close relationship between adipocytes and megakaryocytes: a link with obesity (Sonia Severin) 13. Bone marrow adipocytes induce multiple myeloma cell adipomimicry and dexamethasone resistance (Mariah Farrell)
<p>10:40-11:30 (Live Zoom Meetings Only)</p>	<p>Networking Meetups/Trainee Sessions</p> <ul style="list-style-type: none"> • General Networking • Trainee Topics: Life After Research Training – What's Next? • Q&A With the National Institutes of Health (USA Grant Agency)
<p>11:30–12:45 (Livestream w/Q&A)</p> <p>Stream Individual Sessions Anytime</p>	<p><u>Session VI: Bone Marrow Adipose Tissue Origins and Maturation</u></p> <ul style="list-style-type: none"> ○ Moustapha Kassem, MD, PhD, University of Southern Denmark

<p>Sept 9-10, 2020</p>	<p><i>Plenary Talk 9: Bone marrow adipocytes: regulation of lineage commitment to fat versus bone by bone marrow secreted factors</i></p> <ul style="list-style-type: none"> ○ Short talks selected from abstracts <ul style="list-style-type: none"> 14. Role of Kit Signaling in Maturation of Bone Marrow Adipocytes in Mouse Long Bones (Russell Turner) 15. Single cell transcriptomics identifies a unique adipose lineage cell population that regulates bone marrow environment (Leilei Zhong) 16. Fat in a fatless mouse: a novel origin of maladapted bone marrow adipocytes with age and disease (Xiao Zhang)
<p>12:15-13:15 (Live Zoom Meetings)</p> <p>Stream Individual Sessions Anytime Sept 9-10, 2020</p>	<p>Break and BMAS Working Groups <i>WG1 - Nomenclature</i> <i>WG2 - Methodologies</i> <i>WG3 - Biobanking</i> <i>WG4 - Public Engagement</i> <i>WG5 - Repositories</i> <i>WG6 - Sponsoring</i></p>
<p>13:45-15:15 (Livestream w/Q&A)</p> <p>Stream Individual Sessions Anytime Sept 9-10, 2020</p>	<p><u>Session VII: Bone Marrow Adipocyte Differentiation, Metabolism and the Skeletal Niche</u></p> <ul style="list-style-type: none"> ○ Courtney Karner, PhD, Duke University <i>Plenary Talk 10: Glutamine metabolism provides glutathione necessary for osteoblast differentiation in mice</i> ○ Short talks selected from abstracts <ul style="list-style-type: none"> 17. Cellular interactions in the bone marrow niche evaluated with a bone marrow adipocyte-specific knockout mouse model (Ziru Li) 18. An integrative bioinformatics approach to dissect adipocyte-induced transdifferentiation of osteoblast (Ayyoub Salmi) 19. PPARα in osteocytes regulates bone marrow adipose tissue development (Amit Chougule) 20. Bone marrow adipogenic lineage precursors (MALPs) promote osteoclastogenesis in bone remodeling and pathologic bone loss (Wei Yu)
<p>15:15-15:45 (Live Zoom Meeting)</p> <p>Stream Anytime After 15:15 on Sept 10, 2020</p>	<p><u>BMAS General Assembly, Awards, and Closing Remarks</u></p>
<p>15:45-24:00+</p>	<p>The conference website will remain open until midnight on September 10th, 2020. Select content will be available for viewing for up to 30-days (until October 9th, 2020).</p> <p>Thank you and see you next year!!</p>