

American Aging Association Metabolism of Aging

Event Schedule

Tue, Jul 20, 2021

12:55pm

Nathan Shock Centers

🕒 12:55pm - 3:00pm, Jul 20

📍 Hall A

Sponsored by:



american federation
for aging research



**NATHAN SHOCK CENTERS
OF EXCELLENCE IN THE
BASIC BIOLOGY OF AGING**

Join us for a special session featuring the Nathan Shock Centers at the AGE2021 Annual Meeting. Come learn about the NIA funded Nathan Shock Centers of Excellence in the Basic Biology of Aging: Who they are, what they do, and most importantly, how their services can advance your research.

9 Subsessions

- **Introduction to NSC by Steve Austad**
🕒 12:55pm - 1:00pm, Jul 20
📍 Hall A
- **University of Washington Nathan Shock Center: Innovation to Advance Aging Research**
🕒 1:00pm - 1:15pm, Jul 20
📍 Hall A
- **San Antonio Nathan Shock Center: Your One-Stop Shop for Aging Research**
🕒 1:15pm - 1:30pm, Jul 20
📍 Hall A
- **Albert Einstein College of Medicine Nathan Shock Center: Translating the hallmarks of aging to extend human healthspan**
🕒 1:30pm - 1:45pm, Jul 20
📍 Hall A
- **The Jackson Laboratory Nathan Shock Center: A machine-vision frailty index in mice**
🕒 1:45pm - 2:00pm, Jul 20
📍 Hall A
- **The San Diego Nathan Shock Center: Tackling the Heterogeneity of Aging**

🕒 2:00pm - 2:15pm, Jul 20

📍 Hall A

- **The UAB Nathan Shock Center - Comparative (Bio)Energetics of Aging**

🕒 2:15pm - 2:30pm, Jul 20

📍 Hall A

- **USC-Buck Nathan Shock Center: Multidimensional Models of Aging**

🕒 2:30pm - 2:45pm, Jul 20

📍 Hall A

- **Oklahoma Nathan Shock Aging Center: Assessing the basic biology of aging from genetics to protein and function**

🕒 2:45pm - 3:00pm, Jul 20

📍 Hall A

3:00pm

Coffee Break

🕒 3:00pm - 3:15pm, Jul 20

3:15pm

GeroPath Symposium

🕒 3:15pm - 4:15pm, Jul 20

Sponsored by:



**HEALTHY AGING & LONGEVITY
RESEARCH INSTITUTE**

The Healthy Aging and Longevity (HALO) Research Institute at the University of Washington seeks to enhance research toward understanding of the biological mechanisms of aging in order to promote healthy longevity.

5 Subsessions

- **Introduction to the Geropathology Session**

🕒 3:15pm - 3:20pm, Jul 20

📍 Hall A

- **Rodent geropathology lesion grading in intervention studies**

🕒 3:20pm - 3:35pm, Jul 20

📍 Hall A

- **Establishing a nonhuman primate geropathology grading system**

🕒 3:35pm - 3:55pm, Jul 20

📍 Hall A

- **Computational image analysis for aging mouse tissues**

🕒 3:55pm - 4:10pm, Jul 20

📍 Hall A

- **Wrap up**

🕒 4:10pm - 4:15pm, Jul 20

📍 Hall A

4:30pm

Trainee Career Roundtable

🕒 4:30pm - 6:00pm, Jul 20

Trainee

Trainee Career Roundtable

3 Subsessions

- **Roundtable Speaker: Laura Niedernhofer**

🕒 4:30pm - 6:00pm, Jul 20

📍 Hall A

- **Roundtable Speaker: Bitu Nakhai**

🕒 4:30pm - 6:00pm, Jul 20

📍 Hall A

- **Roundtable Speaker: Ronald Kohanski**

🕒 4:30pm - 6:00pm, Jul 20

📍 Hall A

6:00pm

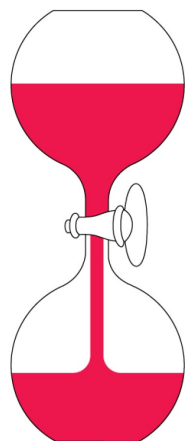
Orentreich: Nutrition and Aging

🕒 6:00pm - 7:30pm, Jul 20

📍 Hall A

Oral Session

Sponsored by the Orentreich Foundation for the Advancement of Sciences, Inc.:



Orentreich Foundation for the Advancement of Science, Inc.

Founded in 1961 by Dr. Norman Orentreich, OFAS is the first to publish that a diet low in methionine extends lifespan in rats. Located in Cold Spring, New York, our dedicated team of scientists is focused on using sulfur amino acid restriction (SAAR) as an intervention in mice and yeast to further understand its effects on the biology of aging. Not only do we continue to enhance our research on SAAR but we also aim to identify and develop interventions that will significantly delay the onset of age-related disease.

5 Subsessions

- **Dietary protein restriction and metabolic adaption**

🕒 6:00pm - 6:12pm, Jul 20

📍 Hall A

● **Branched-chain amino acids and healthy aging**

🕒 6:12pm - 6:24pm, Jul 20

📍 Hall A

● **Sulfur Amino Acid Restriction**

🕒 6:24pm - 6:36pm, Jul 20

📍 Hall A

● **Application of ketone biology to modulate geroscience pathways**

🕒 6:36pm - 6:48pm, Jul 20

📍 Hall A

● **Panel Discussion**

🕒 6:48pm - 7:30pm, Jul 20

📍 Hall A

7:30pm

Rooftop Garden Reception

🕒 7:30pm - 10:30pm, Jul 20

📍 Rooftop Garden

Social

Sponsored by:



We welcome all meeting attendees to join us for our opening celebration. Enjoy food, drinks, and the company of colleagues on the Roof of the beautiful Monona Terrace. With a magnificent lake panorama on one side and the Capitol Building on the other it is the ideal location for a summer evening with friends.

Wed, Jul 21, 2021

7:30am

Continental Breakfast & Coffee Break

🕒 7:30am - 8:30am, Jul 21

Sponsored by:



DEPARTMENT OF MEDICINE

University of Wisconsin
School of Medicine and Public Health

8:00am

Plenary Keynote: Metabolic Regulation of Longevity

🕒 8:00am - 9:00am, Jul 21

📍 Hall A

Keynote

Metabolic Regulation of Longevity. Meng C. Wang Baylor College of Medicine, Howard Hughes Medical Institute Metabolism is fundamental to life. During metabolic reactions, thousands of metabolites are generated, which are directly connected with cellular activities and highly conserved across species. In addition to their best-known functions as structural building blocks and energy resources, research in my group focuses on their novel roles in orchestrating organelle homeostasis, coordinating microbe-host communication and extending lifespan and healthspan. Through harnessing the power of functional genetics, multi-omics, and chemical engineering, our work uncovers several previously unknown metabolite-directed signaling mechanisms and develops new therapeutic compounds and strategies to promote longevity and healthy aging.

 Speaker



Meng Wang Professor, Baylor College of Medicine/HHMI

9:00am

Session 1: Metabolism of Stem Cell Maintenance

🕒 9:00am - 10:30am, Jul 21

📍 Hall A

Oral Session

Chair: Ashley Webb/Co-Chair Darcie Moore

4 Subsessions

- **Muscle stem cell aging and adaptive stress response**

🕒 9:00am - 9:30am, Jul 21

- **Epigenetic alterations of aged hematopoietic stem cells (HSCs) after lifelong caloric restriction**

🕒 9:30am - 9:50am, Jul 21

- **Transplantation of Muscle Stem cell-Derived Mitochondria Rejuvenates the Bioenergetic function of Aged Host Muscle.**

🕒 9:50am - 10:05am, Jul 21

📍 Hall A

- **Adult hippocampal neurogenesis during physiological and pathological aging.**

🕒 10:05am - 10:25am, Jul 21

📍 Hall A

10:30am

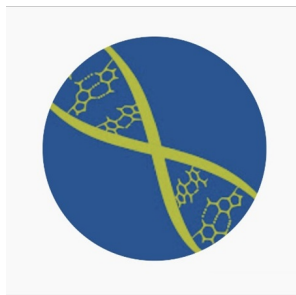
Coffee Break

🕒 10:30am - 11:00am, Jul 21

📍 Hall A

Break

Sponsored by:



Genentech
A Member of the Roche Group

Coffee Break

11:00am

Session 2: RNA-based Mechanisms in Aging

🕒 11:00am - 12:30pm, Jul 21

📍 Hall A

Oral Session

Chair: Myriam Gorospe/Co-Chair Allison Herman

4 Subsessions

- **Alternative polyadenylation utilization leads to atrophy in a model for muscle ageing**
🕒 11:00am - 11:30am, Jul 21
📍 Hall A
- **RNA processing and metabolic reprogramming in longevity regulation**
🕒 11:30am - 11:50am, Jul 21
📍 Hall A
- **Deficiency of the RNA-binding protein Cth2 extends replicative lifespan by remodeling of iron utilization in yeast**
🕒 11:50am - 12:05pm, Jul 21
📍 Hall A
- **Reduction of Lamin B Receptor levels by miR-340-5p disrupts chromatin, promotes cell senescence, and enhances senolysis**
🕒 12:05pm - 12:25pm, Jul 21
📍 Hall A

12:30pm

Career Challenges Lunch

🕒 12:30pm - 1:45pm, Jul 21

Trainee

Sponsored by:



Geriatrics and Gerontology
Department of Medicine
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

We are calling for trainees at all levels, graduate student, post-doctoral fellow, and junior faculty, to sign up for the Career Challenges Working Lunch. Participants will meet in “nests” with senior faculty who will share their experiences navigating an academic career. Topics for discussion will include solutions and strategies to career obstacles, grants and awards and getting a foot in the door to NIH funding, and get the “in-side track” on the benefits of a career in Aging Research.

2:00pm

Session 3: Metabolic Contributions to Brain Aging

🕒 2:00pm - 4:00pm, Jul 21

📍 Hall A

Oral Session

Chair: Holly Brown-Borg/Co-Chair Marianna Sadagurski

4 Subsessions

- **Intermittent bioenergetic challenges bolster brain resilience**
🕒 2:00pm - 2:30pm, Jul 21
📍 Hall A
- **A novel diabetes anti-aging drug Canagliflozin as a potential treatment for aging brain pathologies**
🕒 2:30pm - 2:45pm, Jul 21
📍 Hall A
- **PET imaging of metabolic changes in the aging human brain**
🕒 2:45pm - 3:05pm, Jul 21
📍 Hall A
- **Promoting healthy aging by environmental and genetic activation of a brain-fat axis**
🕒 3:05pm - 3:25pm, Jul 21
📍 Hall A

3:25pm

Poster Teaser 1-10

🕒 3:25pm - 3:55pm, Jul 21

📍 Hall A

Poster

Poster Teaser 1-10

10 Subsessions

- **Poster Teaser - Presented by Chris Morrow**
🕒 3:25pm - 3:27pm, Jul 21
- **Poster Teaser - Presented by Ankur Kumar**
🕒 3:27pm - 3:29pm, Jul 21
- **Poster Teaser - Presented by Sujata Mukherjee**
🕒 3:29pm - 3:31pm, Jul 21
- **Poster Teaser - Presented by Sarah Ocanas**
🕒 3:31pm - 3:33pm, Jul 21
- **Poster Teaser - Presented by Ahire Chetan**
🕒 3:33pm - 3:35pm, Jul 21
- **Poster Teaser - Presented by Manali Potnis**
🕒 3:35pm - 3:37pm, Jul 21
- **Poster Teaser - Presented by Cassandra McGill**
🕒 3:37pm - 3:39pm, Jul 21
- **Poster Teaser - Presented by Mark Bouska**
🕒 3:39pm - 3:41pm, Jul 21

- **Poster Teaser - Presented by Abdiasis Hussein**

⌚ 3:41pm - 3:43pm, Jul 21

- **Poster Teaser - Presented by Kishore Chittimalli**

⌚ 3:43pm - 3:45pm, Jul 21

4:00pm

Coffee Break

⌚ 4:00pm - 4:30pm, Jul 21

📍 Hall A

Break

Sponsored by:



Calico

Coffee Break

4:30pm

Session 4: The systems biology of aging

⌚ 4:30pm - 6:00pm, Jul 21

📍 Hall A

Oral Session

Chair: Morgan Levine/Co-Chair Margarita Meer

4 Subsessions

- **Quantifying the Aging Process**

⌚ 4:30pm - 5:00pm, Jul 21

📍 Hall A

- **The arc of astrocyte aging: Insights from scRNAseq**

⌚ 5:00pm - 5:20pm, Jul 21

📍 Hall A

- **Predicting mortality through analysis of metabolic rate**

⌚ 5:20pm - 5:35pm, Jul 21

📍 Hall A

- **Rejuvenome – toward a comprehensive, multiomics understanding of aging and rejuvenation**

⌚ 5:35pm - 5:55pm, Jul 21

📍 Hall A

6:00pm

Board Meeting

⌚ 6:00pm - 8:00pm, Jul 21

📍 Hilton - Founders Room

Business

Trainee Data Blitz

🕒 6:00pm - 8:00pm, Jul 21

📍 Hall A

Trainee

This annual event is for trainees exclusively and is run by the American Aging Association Trainee Chapter. Meet peers and future collaborators in an informal data sharing and presentation setting. Learn the future of Aging Research direct from source, the folks doing the experiments and advancing the field. Refreshments will be provided – bring yourself, your data, and your dancing shoes!

8:00pm

Networking Social

🕒 8:00pm - 10:00pm, Jul 21

📍 Hall A

Social

Sponsored by:



This

sponsored event is designed to bring aging researchers at all career stages together in an informal setting. This networking opportunity brings together the die-hards and the new hopes – the goal is to share ideas, forge new collaborations, and identify new approaches, avenues, and connections in the field. Everyone welcome!

Thu, Jul 22, 2021

7:30am

Continental Breakfast & Coffee Break

🕒 7:30am - 8:30am, Jul 22

Sponsored by:



DEPARTMENT OF MEDICINE

University of Wisconsin
School of Medicine and Public Health

8:30am

Session 5: Critical themes in Aging Metabolomics Research

🕒 8:30am - 10:30am, Jul 22

📍 Hall A

Oral Session

Chair: Joe Baur/Co-Chair Karthikeyani Chellappa

4 Subsessions

- **From Metabolomics to Medicines: Realizing the DREAM of an Alzheimer's Cure**

🕒 8:30am - 9:00am, Jul 22

📍 Hall A

- **Implications of bidirectional interactions between host and microbes on NAD metabolism**

🕒 9:00am - 9:20am, Jul 22

📍 Hall A

- **Molecular mechanisms of natural lifespan variation**

🕒 9:20am - 9:35am, Jul 22

📍 Hall A

- **Big Data Approaches to Identify New Targets in Aging**

🕒 9:35am - 9:55am, Jul 22

📍 Hall A

9:55am

Poster Teaser 11-21

🕒 9:55am - 10:19am, Jul 22

📍 Hall A

Poster

Poster Teaser 11-21

12 Subsessions

- **Poster Teaser - Presented by Daniel Adekunbi**

🕒 9:55am - 9:57am, Jul 22

- **Poster Teaser: Novel senotherapeutics by design. Presented by Lei Zhang**

🕒 9:57am - 9:59am, Jul 22

- **Poster Teaser: Optogenetic elevation of mitochondrial membrane potential increases *C. elegans* lifespan. Presented by: Brandon Berry**

🕒 9:59am - 10:01am, Jul 22

- **Poster Teaser: Ablation of Poly-ADP-Ribose Polymerase 1 (PARP1) in muscle stem cells prevents full regeneration and alters the muscle gene program in mature muscle. Presented by: Alexander Green**

🕒 10:01am - 10:03am, Jul 22

- **Poster teaser - Necroptosis contributes to chronic inflammation and fibrosis in aging liver**

🕒 10:03am - 10:05am, Jul 22

- **Poster Teaser - Presented by Dibyadeep Datta**

🕒 10:05am - 10:07am, Jul 22

- **Poster Teaser: Effect of riboflavin deficiency on Alzheimer's Disease (AD) in the 5XFAD mouse model. Presented by: Dushani Palliyaguru**

🕒 10:07am - 10:09am, Jul 22

- **Poster Teaser - Presented by Allancer Nunes**
⌚ 10:09am - 10:11am, Jul 22
- **Poster Teaser - Presented by Venkateswara Gogulamudi**
⌚ 10:11am - 10:13am, Jul 22
- **Poster Teaser - Presented by Chathurika Henpita**
⌚ 10:13am - 10:15am, Jul 22
- **Poster Teaser - Presented by Ryan Barnes**
⌚ 10:15am - 10:17am, Jul 22
- **Poster Teaser - Presented by Cassandra McGill**
⌚ 10:17am - 10:19am, Jul 22
📍 Hall A

10:30am

Coffee Break

⌚ 10:30am - 11:00am, Jul 22

📍 Hall A

Break

Sponsored by:



Coffee Break

11:00am

Session 6: Lipids & Adipose Tissue in Aging Homeostasis

⌚ 11:00am - 12:30pm, Jul 22

📍 Hall A

Oral Session

Chair: Rozalyn Anderson/ Co-Chair Judith Simcox

4 Subsessions

- **Regulation of the one carbon folate cycle as a shared metabolic signature of longevity**
⌚ 11:00am - 11:30am, Jul 22
📍 Hall A
- **Age dependent changes in circulating lipids impact brown adipose tissue thermogenesis: Why we are cold when we become old.**
⌚ 11:30am - 11:50am, Jul 22
📍 Hall A
- **The SKN-1A/Nrf1 lipid homeostatic response: a mechanism for oleic acid driven longevity**
⌚ 11:50am - 12:05pm, Jul 22
📍 Hall A

- **Visceral-fat resident gamma delta T cells increase by aging and promote local and systemic inflammation**

🕒 12:05pm - 12:20pm, Jul 22

📍 Hall A

12:30pm

GeroScience Editorial

🕒 12:30pm - 2:00pm, Jul 22

📍 Hilton - Founders Room

Business

GeroScience Editorial Board Meeting

Lunch on your own

🕒 12:30pm - 2:00pm, Jul 22

Break

Lunch on your own

2:00pm

Session 7: Metabolism and Inflammaging

🕒 2:00pm - 4:00pm, Jul 22

📍 Hall A

Oral Session

Chair: Vishwa Deep Dixit/Co-Chair Christina Camell

4 Subsessions

- **Immune aging and age-associated CD8 T cells**

🕒 2:00pm - 2:30pm, Jul 22

📍 Hall A

- **Senolytics reduce coronavirus-related mortality in old mice**

🕒 2:30pm - 2:50pm, Jul 22

📍 Hall A

- **Mitochondrial retrograde signaling drives senescence-associated inflammation**

🕒 2:50pm - 3:05pm, Jul 22

📍 Hall A

- **Metformin enhances autophagy and normalizes mitochondrial function to alleviate aging-associated inflammation**

🕒 3:05pm - 3:25pm, Jul 22

📍 Hall A

3:25pm

Poster Teaser 22-30

🕒 3:25pm - 3:45pm, Jul 22

📍 Hall A

Poster

Poster Teaser 22-30

10 Subsessions

- **Poster Teaser - Presented by Claire Richardson**
⌚ 3:25pm - 3:27pm, Jul 22
- **Poster Teaser - Presented by Danielle Bruns**
⌚ 3:27pm - 3:29pm, Jul 22
- **Poster Teaser - Presented by Scott Leiser**
⌚ 3:29pm - 3:31pm, Jul 22
- **Poster Teaser - Presented by Brian Wasko**
⌚ 3:31pm - 3:33pm, Jul 22
- **Poster Teaser - Presented by Jeremy Whitson**
⌚ 3:33pm - 3:35pm, Jul 22
- **Poster Teaser - Turnover Matters for Aging! Presented by Nathan Basisty**
⌚ 3:35pm - 3:37pm, Jul 22
- **Poster Teaser - Healthy lifespan extension through 3-hydroxyanthranilic acid, Presented by George Sutphin**
⌚ 3:37pm - 3:39pm, Jul 22
- **Poster Teaser - Presented by Anurag Sethi**
⌚ 3:39pm - 3:41pm, Jul 22
- **Poster Teaser - Presented by Alessandro Bitto**
⌚ 3:41pm - 3:43pm, Jul 22
- **Poster Teaser - Presented by Abdiasis Hussein**
⌚ 3:43pm - 3:45pm, Jul 22

4:00pm

Coffee Break

⌚ 4:00pm - 4:30pm, Jul 22

📍 Hall A

Break

Sponsored by:



Calico

Coffee Break

4:30pm

Session 8: Metabolism as a regulator of Chromatin Remodeling

⌚ 4:30pm - 6:00pm, Jul 22

📍 Hall A

Oral Session

Chair: Weiwei Dang/Co-Chair Payel Sen

4 Subsessions

- **Coupling embryonic development to late life aging**

🕒 4:30pm - 4:50pm, Jul 22

📍 Hall A

- **A repressive chromatin state is a barrier to productive regeneration during aging**

🕒 4:50pm - 5:10pm, Jul 22

📍 Hall A

- **The dynamic relationship between metabolism and the epigenome**

🕒 5:10pm - 5:30pm, Jul 22

📍 Hall A

- **Chromatin changes underlie transcription alterations during aging in mammalian stem cells**

🕒 5:30pm - 5:50pm, Jul 22

📍 Hall A

6:00pm

Membership Meeting

🕒 6:00pm - 6:15pm, Jul 22

📍 Hall A

Business

Membership Meeting

6:30pm

Poster Session

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

Poster

Poster Session

107 Subsessions

- **Epigenetic regulation of the aryl hydrocarbon receptor (AhR) in normal aging.**

Presenter: Abudahab, Sara

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Defining the role of cellular resilience in baboon aging. Presenter: Adekunbi, Daniel**

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Mitochondrial dysfunction contributes to fibrosis in aging-associated benign prostatic hyperplasia (BPH). Presenter: Adrian, Alexis**

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **The Mitochondrial Permeability Transition Pore Activates the Mitochondrial Unfolded Protein Response and Promotes Aging. Presenter: Angeli, Suzanne**

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Cellular hallmarks of aging emerge in the ovary prior to primordial follicle depletion.**

Presenter: Ansere, Victor

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Elucidating the metabolic mechanisms that preserve the quiescent neural stem cell**

- pool throughout aging. Presenter: Audess, Amanda**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Beneficial effects of dietary protein restriction on metabolic health, cognition and AD pathology. Presenter: Babygirija, Reji**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Telomeric 8-Oxoguanine Drives Rapid Premature Senescence in the Absence of Telomere Shortening. Presenter: Barnes, Ryan**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **TurnoverR: A Software Tool for the Analysis of Protein Turnover from Metabolic Labeling Studies in Aging and Disease. Presenter: Basisty, Nathan**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Optogenetic elevation of mitochondrial membrane potential increases C. elegans lifespan. Presenter: Berry, Brandon**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Nematode FMO-2 rescues the negative effect of high glucose. Presenter: Bhat, Ajay**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Acarbose Suppresses Symptoms of Mitochondrial Disease in a Mouse Model of Leigh Syndrome Independently of mTOR inhibition. Presenter: Bitto, Alessandro**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Worm-YOLO: A Machine Learning Approach to Analyzing Data from the WormBot Image Capture Platform.. Presenter: Blue, Benjamin**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Individual protein dynamics in aged muscle and brain. Presenter: Borowik, Agnieszka**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Loxl2 is a mediator of cardiac aging in Drosophila melanogaster; genetically examining the role of aging clock genes. Presenter: Bouska, Mark**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Gene correlation network alterations across the lifespan. Presenter: Brown, Chase**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Right heart failure in aged mice and the sex-specific outcomes of metformin. Presenter: Bruns, Danielle**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Heterochronic Plasma Transfer Alters Proteostatic Maintenance in Skeletal Muscle. Presenter: Bubak, Matthew**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
 - **Inflammatory aged adipose B cell accumulation causes adipose tissue dysregulation. Presenter: Carey, Anna**

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Implications of bidirectional interactions between host and microbes on NAD metabolism. Presenter: Chellappa, Karthikeyani**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Chemotherapy-induced accelerated cerebrovascular aging. Presenter: Chetan, Ahire**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **ACE2/ACE imbalance in the aging-associated leaky gut in mice. Presenter: Chittimalli, Kishore**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Caloric restriction improves lipid and lipoprotein profiles in rhesus monkeys. Presenter: Clark, Josef**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **CD8+ T cell dysfunction regulates infection-induced mortality in aged mice. Presenter: Dahlquist, Korbyn**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Dietary protein restriction attenuates high-fat induced inflammation in aging heart by activation of AMPK-ULK1 mediated mitophagy. Presenter: Dantas, Wagner**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Subcellular localization of PDE4D and HCN1 in rhesus macaque entorhinal cortex layer II: Signature of vulnerability in Alzheimer's Disease. Presenter: Datta, Dibyadeep**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Assessing the Dynamic Mitochondrial Fission and Fusion Events in Skeletal Muscle in vivo. Presenter: Davidyan, Arik**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **In silico identification of new potential senolytics. Presenter: Del Angel, Kevin Samael**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **FGF21 prevents low protein diet-induced renal inflammation in aged mice. Presenter: Fang, Han**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Epigenetic histone modifications alter the pSIRT1 pathway to promote Alzheimer's disease. Presenter: Fulcomer, Nicolette**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Machine learning-based one year mortality prediction among residents in senior living facilities. Presenter: Garikipati, Anurag**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Endothelial metabolic shift from anaerobic glycolysis to oxidative phosphorylation with aging. Presenter: Gogulamudi, Venkateswara**

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Induction of multiple senescence markers by tumor inoculation in young C57BL/6 mice. Presenter: Grant, Marianne**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Ablation of Poly-ADP-Ribose Polymerase 1 (PARP1) in muscle stem cells prevents full regeneration and alters the muscle gene program in mature muscle. Presenter: Green, Alexander**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Increased Tau Phosphorylation and Aggregation in Mitochondrial Disease Mice. Presenter: Grillo, Anthony**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Dietary amino acid balance for reproduction and storage in grasshoppers. Presenter: Hatle, John**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Improving mitochondrial function via drug treatments can reduce cellular senescence. Presenter: Henpita, Chathurika**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Mitochondrial DNA deletion mutation frequency as a metric of biological age. Presenter: Herbst, Allen**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Mechanisms underlying genomic instability in laminopathies. Presenter: Hervas, Susana**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **A computational solution for bolstering reliability of epigenetic clocks: Implications for clinical trials and longitudinal tracking. Presenter: Higgins-Chen, Albert**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Role of the epigenetic writer SUV420H2 in Early Human Pluripotency and in quiescence. Presenter: Hussein, Abdiasis**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Activation of human small heat shock protein HSPB5 by zinc: Taking advantage of a multitude of possibilities.. Presenter: Janowska, Maria**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Necroptosis contributes to chronic inflammation and fibrosis in aging liver. Presenter: Jazir, Sabira Mohammed**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Senolytics reversibly improve metabolic health in nonhuman primates. Presenter: Kavanagh, Kylie**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A

- **Influence of iron dyshomeostasis in mitochondrial disease progression. Presenter: Kelly, CJ**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Loss of DNA repair mechanisms in cardiac myocytes induces dilated cardiomyopathy. Presenter: Kieu, Tra**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **The interplay of peroxisome and mitochondrial dynamics during aging in Drosophila. Presenter: Kumar, Ankur**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Polarization of gamma delta T cells toward IL-17A production in natural aging and accelerated aging. Presenter: Lee, Kyooa**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Pharmacogenomic and metabolomic predictors of healthspan interventions in natural populations. Presenter: Lee, Mitchell**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **FMO rewires metabolism to promote longevity through one carbon metabolism. Presenter: Leiser, Scott**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Expression levels of GPLD1 regulated by Cap-Independent Translation in Long-Lived Mice. Presenter: Li, Xinna**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Evolutionary aspects of immunosenescence and inflammaging. Presenter: Lidsky, Peter**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Protection against APOE4-associated aging phenotypes with a longevity-promoting intervention. Presenter: McGill, Cassandra**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Neuron-specific mechanisms control the mitochondrial regulator PGC-1a. Presenter: McGregor, Eric**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Endogenous variation in chaperone expression and variation in aging and cancer. Presenter: Mendenhall, Alexander**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Neurodegeneration in a murine model of accelerated brain aging. Presenter: Menon, Vinal**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A
- **Life-shortening effect of DMSO-solubilized rapamycin in y w male Drosophila melanogaster. Presenter: Mockett, Robin**
 ⌚ 6:30pm - 8:00pm, Jul 22
 📍 Hall A

- **Aggresome Mediated Neural Stem Cell Quiescence Exit.** Presenter: Morrow, Chris
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Peripheral migration contributes to age-associated gamma delta($\gamma\delta$)-T cell accumulation in visceral adipose tissue in mice.** Presenter: Mukherjee, Sujata
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Dietary isoleucine restriction reverses diet-induced obesity in mice.** Presenter: Murphy, Michaela
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Hyperglycemia-associated retinal changes in a murine model of Type II diabetes.** Presenter: Narasimhan, Akilavalli
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Cysteine-Specific Effects of Sulfur Amino Acid Restriction on Adipose Metabolism.** Presenter: Nichenametla, Sailendra
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **miR-146a-5p Modulates Cellular Senescence and Apoptosis in Visceral Adipose Tissue of Long-Lived Ames Dwarf Mice and in Cultured Pre-Adipocytes.** Presenter: Nunes, Allancer
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Effects of whey protein on blood glucose concentrations with oral glucose intake in younger and older men.** Presenter: Oberoi, Avneet
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Sexually divergent induction of microglial inflammatory pathways with hippocampal aging.** Presenter: Ocanas, Sarah
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Adiponectin receptor activation impacts skeletal muscle aging in mice.** Presenter: Osterbauer, Katie
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Metformin and tBHQ treatment combined with an exercise regime prevent osteosarcopenic-obesity in middle-aged female Wistar rats.** Presenter: Perez, Rafael
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Role of hepatic mTORC1 Signaling in Mediating the Calorie Restriction Response.** Presenter: Pak, Heidi
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Effect of riboflavin deficiency on Alzheimer's Disease (AD) in the 5XFAD mouse model.** Presenter: Palliyaguru, Dushani
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Acute Induction of Senescence Triggers eIF2 γ Phosphorylation Without ATF4 Expression.** Presenter: Payea, Matthew
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A

- **Metformin suppresses SARS-CoV-2 induced inflammation in monocytes independent of AMPK activation.** Presenter: Pence, Brandt
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Many chronological aging clocks can be found throughout the epigenome: implications for quantifying biological aging.** Presenter: Porter, Hunter
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **An evolving role for the long non-coding RNA H19 in aging and senescence.**
Presenter: Potnis, Manali
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Metabolic Rewiring of Aged Myoblasts and Restores Regenerative Potential of Progeric Skeletal muscle.** Presenter: Rajabian, Nika
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Shifts in epigenetic context associated with development and aging influence regulatory variation and disease risk.** Presenter: Richard, Daniel
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **How to stall neuron aging.** Presenter: Richardson, Claire
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Sulfur amino acid metabolism in the regulation and function of *C. elegans* flavin-containing monooxygenase-2.** Presenter: Rossner, Ryan
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Gpnmb is Chondroprotective with Age-related Osteoarthritis.** Presenter: Safadi, Faye
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Effect of obesity in the brain inflammatory state and its relationship with cognitive decline during the aging process in female Wistar rats.** Presenter: Salas, Veronica
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Molecular interaction analysis of heat shock cognate protein A8 and TLQP-21 by surface plasmon resonance assay.** Presenter: Salekeen, Rahagir
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Effect of sulforaphane-treatment in preventing age-associated cognitive decline in female and male Wistar rats, and its relationship with the cortical and hippocampal redox state.** Presenter: Santin-Marquez, Roberto
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Senolytic Treatment Reduces Cell Senescence and Necroptosis in Sod1 Knockout Mice that is Associated with Reduced Chronic Liver Disease, and Hepatocellular Carcinoma.** Presenter: Selvarani, Ramasamy
⌚ 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Epidemiological Models of Aging Identifies Biomarkers Associated with Aging Rates.** Presenter: Sethi, Anurag
⌚ 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **ELOVL2: Not just a biomarker of aging.** Presenter: Skowronska-Krawczyk, Dorota
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Effect of acarbose on metabolic health and cognitive function in a mouse model of Alzheimer's disease.** Presenter: Sonsalla, Michelle
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **An Lsd1 histone demethylase inhibitor as a novel senotherapeutic.** Presenter: Soto-Palma, Carolina
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Application of ketone biology to modulate geroscience pathways.** Presenter: Stubbs, Brianna
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Healthy lifespan extension through 3-hydroxyanthranilic acid.** Presenter: Sutphin, George
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **The role of necroptosis in age-associated neuroinflammation.** Presenter: Thadathil, Nidheesh
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Gene network analysis of senescence genes present in human adipose tissue.** Presenter: Thirumurugan, Kavitha
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Role of Methionine sulfoxide reductase A (MsrA) in the longevity effects of Methionine Restriction.** Presenter: Thyne, Kevin
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Profiling epigenetic age in single cells.** Presenter: Trapp, Alexandre
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Amyloid-Beta 42 levels in companion dog brains increase with age and correlate with cognitive scores.** Presenter: Urfer, Silvan
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Interplay between iron and pH homeostasis and aging.** Presenter: Wasko, Brian
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Quinolate Phosphoribosyltransferase Knock Out (QPRT KO) Mice Develop Frail-like Characteristics at Middle Age.** Presenter: Westbrook, Reyhan
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **The synergistic effects of elamipretide and NMN on restoring function in aged mouse hearts.** Presenter: Whitson, Jeremy
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Reducing methylglyoxal rescues obesity related phenotypes and lifespan in a leptin**

receptor deficient mouse model. Presenter: Wimer, Lauren

🕒 6:30pm - 8:00pm, Jul 22

📍 Hall A

- **Female sarcomeric relaxation and acetylation are uniquely altered in the aging heart. Presenter: Woulfe, Kathleen**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Age-dependent response to the soluble fiber inulin supplementation. Presenter: Wu, Chia-Shan**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Geriatric Mice are Leaner and have Improved Glycemic Control after Dietary Isoleucine Restriction. Presenter: Yeh, Yang**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **An aged immune system drives senescence and aging of solid organs. Presenter: Yousefzadeh, Matt**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Metformin treatment in young mice alters innate immunity. Presenter: Yuan, Rong**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Targeting cellular senescence with novel senotherapeutics by design. Presenter: Zhang, Lei**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Metformin treatment of juvenile mice alters aging-related developmental and metabolic phenotypes. Presenter: Zhu, Yun**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Metformin modulates doxorubicin-induced senescence phenotype in endothelial cells. Presenter: Zordoky, Beshay**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Transcriptomic and epigenetic profiling of neurodegenerative disease models in Drosophila. Presenter: Jason Wood**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A
- **Transplantation of brown adipose tissue from the long-lived Ames dwarf mice improves high-fat diet-induced metabolic abnormalities. Presenter: Tadataka Tsuji**
🕒 6:30pm - 8:00pm, Jul 22
📍 Hall A

8:00pm

Capitol Caper

🕒 8:00pm - 10:00pm, Jul 22

📍 TBD

Social

Check your Whova messages for updates and clues!! Our last night of the meeting we set off in to the wilds of Downtown Madison. Members of the Trainee Chapter will guide the adventures that will involve several renowned emporiums and establishments in the Capitol Area, right outside the meeting venue in Monona

Terrace. Tour departs 8:00 pm sharp, get connected and get out there.

Fri, Jul 23, 2021

7:30am

Continental Breakfast & Coffee Break

🕒 7:30am - 8:30am, Jul 23

Sponsored by:



DEPARTMENT OF MEDICINE

University of Wisconsin
School of Medicine and Public Health

8:30am

Session 9: Longevity Intersecting with Metabolism

🕒 8:30am - 10:00am, Jul 23

📍 Hall A

Oral Session

Chair: Dudley Lamming/Co-Chair Cristal Hill

4 Subsessions

- **Mitochondria as a Potential Target for Intervention in Sarcopenia**
🕒 8:30am - 9:00am, Jul 23
📍 Hall A
- **Lifelong effects of dietary protein restriction: A case for FGF21**
🕒 9:00am - 9:20am, Jul 23
📍 Hall A
- **Age-related neuroprotection by dietary restriction requires OXR1-mediated retromer function**
🕒 9:20am - 9:35am, Jul 23
📍 Hall A
- **Sex and genetic background define the metabolic, physiological and molecular response to protein restriction**
🕒 9:35am - 9:55am, Jul 23
📍 Hall A

10:00am

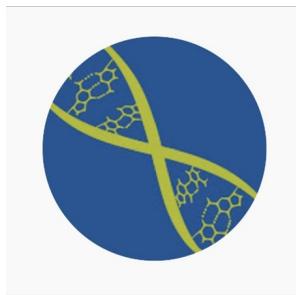
Coffee Break

🕒 10:00am - 10:30am, Jul 23

📍 Hall A

Break

Sponsored by:



Genentech
A Member of the Roche Group

Coffee Break

10:30am

Session 10: Muscles, Movement & Mitochondria

🕒 10:30am - 12:00pm, Jul 23

📍 Hall A

Oral Session

Chair: Ben Miller/Co-Chair Michael Stout

4 Subsessions

● **Muscle, movement and mitochondria**

🕒 10:30am - 11:00am, Jul 23

📍 Hall A

● **Chronic NMN treatment in mice improves metabolic health and delays frailty**

🕒 11:00am - 11:15am, Jul 23

📍 Hall A

● **Aging and extracellular Vesicles: The messages in our bottles change over time**

🕒 11:15am - 11:35am, Jul 23

📍 Hall A

● **Sustaining power: Building energy networks in striated muscles**

🕒 11:35am - 11:55am, Jul 23

📍 Hall A

12:00pm

Awards Ceremony

🕒 12:00pm - 12:30pm, Jul 23

📍 Hall A

Awards Ceremony

Awards Ceremony