
Event Agenda

American Aging Association Annual Meeting

Sun, May 11, 2025

12:00 PM - 5:00 PM

Registration Opens

1:00 PM - 3:30 PM

Nathan Shock Center Symposium

Location: Tikahtnu Ballroom

Introduction

1:00 PM - 1:30 PM
Speaker: Steven Austad

Pilot Grantee Presentations

1:30 PM - 3:30 PM

Vivek Kumar: TBA

1:30 PM - 1:45 PM
Speaker: Vivek Kumar

Andrey Parkhitko: Targeting Age-Related Metabolic Dysfunction to Extend Healthspan

1:45 PM - 2:00 PM
Speaker: Andrey Parkhitko

Nicolas Lehrbach: TBA

2:00 PM - 2:15 PM
Speaker: Nicolas Lehrbach

Stefanie Krick: Mechanisms of Aging in the Cystic Fibrosis Lung

2:15 PM - 2:30 PM
Speaker: Stefanie Krick

Marisol Castillo-Castrejon: TBA

2:30 PM - 2:45 PM
Speaker: Marisol Castillo-Castrejon

Wei Chen: Calciprotein Particles and Vascular Aging

2:45 PM - 3:00 PM

Panel Discussion and Q&A

3:00 PM - 3:30 PM

Caroline Kumsta: TBA

3:00 PM - 3:15 PM
Speaker: Caroline Kumsta

4:30 PM - 5:30 PM

Trainee Roundtable Panel Discussion

Location: Tikahtnu Ballroom
Speaker: Arik Davidyan ; Panelist: Jessica Young, Daniel Promislow

5:30 PM - 7:30 PM

Opening Welcome Reception

Location: Foyer & Terrace

Mon, May 12, 2025

7:30 AM - 8:30 AM

Breakfast

Location: Tikahtnu Ballroom

8:20 AM - 8:30 AM

Opening Remarks

Location: Tikahtnu Ballroom
Speaker: Benjamin Miller

8:30 AM - 10:00 AM

Session 1: Primate and Translation

Location: Tikahtnu Ballroom
Speakers: Noah Snyder-Mackler, Ricki Colman, Aaron Berkowitz ; Co-Chair: Daniel Adekunbi ; Chair: Adam Salmon

Environmental modifiers of molecular aging within and across individuals

8:30 AM - 8:50 AM
Speaker: Noah Snyder-Mackler

Mediterranean Diet Promotes Stress Resilience, Protects Against Inflammation, and Slows Aging in a Multi-System, Randomized, Long Term Nonhuman Primate Trial

8:50 AM - 9:10 AM
Speaker: Brett Frye

Calorie restriction and beyond: Oh! the places we can go with rhesus monkeys

9:10 AM - 9:30 AM
Speaker: Ricki Colman

The Sex Dimorphism of Skeletal Muscle Aging in Rhesus Monkeys

9:30 AM - 9:50 AM
Speaker: Aaron Berkowitz

10:00 AM - 10:30 AM

Break

Location: Foyer

10:30 AM - 12:00 PM

Session 2: Hormonal Aging

Location: Tikahtnu Ballroom
Speakers: Yu-Hua Tseng, Erin Hascup, Cassandra McGill, Victor Ansere ; Co-Chair & Speaker: Mina Peyton ; Chair: Holly Brown-Borg

Phosphoproteomic Changes in Aging Estrogen Deficient Female Mice

10:30 AM - 10:50 AM
Speaker: Mina Peyton

Protection against APOE4-associated aging phenotypes with the longevity-promoting intervention 17a-estradiol: Impact of sex

10:50 AM - 11:00 AM
Speaker: Cassandra McGill

The Role of Lipid Metabolites in Systemic Metabolism

11:00 AM - 11:20 AM
Speaker: Yu-Hua Tseng

Sex reversal mouse model to study hormonal regulation of microglia aging

11:20 AM - 11:30 AM
Speaker: Victor Ansere

The influence of sex on brain function, behavior, and metabolism

11:30 AM - 11:50 AM
Speaker: Erin Hascup

12:00 PM - 1:00 PM

Public Lecture - Geroscience and the extension of healthspan

Location: Tikahtnu Ballroom
Speaker: Daniel Promislow

12:00 PM - 1:00 PM

Lunch On Your Own

12:00 PM - 1:00 PM

GeroScience Editorial Board Meeting/Publication Award Ceremony

1:00 PM - 2:00 PM

Cristofalo Award Lecture: Quantification of Biological Aging

Location: Tikahtnu Ballroom
Speaker: Daniel Belsky

2:00 PM - 3:30 PM

Session 3. Redox Biology and Aging

Location: Tikahtnu Ballroom

Speakers: David Marcinek, Ann Chiao, Weronika Zarzycka, Jasmine Liu, Ajay Bhat ; Co-Chair: Ethan Ostrom ; Chair: Holly Van Remmen

Mechanistic insights from age-related mitochondrial interactome dynamics

2:00 PM - 2:23 PM

Speaker: David Marcinek

Microbial evolution to stress enhances host resilience and lifespan through metabolic reprogramming

2:24 PM - 2:41 PM

Speaker: Ajay Bhat

The role of mitochondrial NAD⁺ transporter SLC25A51 in cardiac function and aging

2:42 PM - 3:05 PM

Speaker: Ann Chiao

Overexpression of SLC25A51 restores mtNAD⁺ levels and NAD⁺-dependent PTMs in old mouse hearts

3:06 PM - 3:18 PM

Speaker: Weronika Zarzycka

Identification of GOT1 as a novel regulator of mitochondrial homeostasis

3:19 PM - 3:30 PM

Speaker: Jasmine Liu

3:30 PM - 4:00 PM

Break

Location: Foyer

4:00 PM - 5:30 PM

Session 4. Mitochondria and Aging (Trainee Chapter Session)

Location: Tikahtnu Ballroom

Chair: Agnieszka Borowik ; Co-Chair: Gavin Pharaoh ; Speakers: Mariya Sweetwyne, Robert Musci, Hanane Hadj-Moussa, Nunaya Polycarp, Abigail Williamson

Kidney as a model of cell-specific approaches in aging mitochondrial dysfunction

4:00 PM - 4:20 PM

Speaker: Mariya Sweetwyne

Re-engineering acetyl coenzyme A metabolism achieves constitutive healthy ageing

4:20 PM - 4:35 PM

Speaker: Hanane Hadj-Moussa

Assessing skeletal muscle mitochondrial DNA synthesis, quantity, and quality in aged rats

4:35 PM - 4:55 PM

Speaker: Robert Musci

B12 SUPPLEMENTATION IMPACTS MITOCHONDRIAL BIOLOGY AND SKELETAL MUSCLE PHYSIOLOGY IN AGED FEMALE MICE

4:55 PM - 5:10 PM

Speaker: Abigail Williamson

Targeting FKBP_s to regulate mitochondrial function to impact aging

5:10 PM - 5:25 PM

Speaker: Nunaya Polycarp

PP1. The Protective Gene APOE2 Enhances Pericyte Function via Efficient Lipid Metabolism

5:30 PM - 6:00 PM

Speaker: Rais Reskiawan Kadir

PP2. Functionally diversified BiP orthologs control body growth, reproduction, stress resistance, aging, and ER-Phagy in *Caenorhabditis elegans*

5:30 PM - 6:00 PM

Speaker: Nicholas Urban

PP4. Implicating Impairment of Plasma Membrane Potential as a Feature of Aging

5:30 PM - 6:00 PM

Speaker: Adam Hruby

PP5. Metabolomic ageing (MileAge) at mid-life predicts incident dementia

5:30 PM - 6:00 PM

Speaker: Julian Mutz

PP6. 17 β -estradiol elicits metabolic benefits in male mice independently of aromatase

5:30 PM - 6:00 PM

Speaker: Roberto Santin-Marquez

PP7. Consequences of overactive PDGFR α and PDGFR β signaling on skeletal muscle function and metabolism

5:30 PM - 6:00 PM

Speaker: Mariola Gimla

PP8. Proteomic biomarkers are better for predicting age group, and sex using Random Forest compared to metabolomics and lipidomics in heterogenous OKC-HET rats.

5:30 PM - 6:00 PM

Speaker: Hoang Van Nguyen

PP9. Neuronal mTORC1 is a key driver of A β -induced cognitive dysfunction

5:30 PM - 6:00 PM

Speaker: Stacy Hussong

PP10. Tissue resident macrophages contribute to ovarian aging

5:30 PM - 6:00 PM

Speaker: Ewa Poljanska

PP00. Genetically bypassing mitochondrial dysfunction cell non-autonomously in *C. elegans*

5:30 PM - 6:00 PM

Speaker: Carmen Ramos

PP85. PTGER2-related network of mitochondrial dysfunction and inflammatory response in human monocytes and development of aging-related diseases

5:30 PM - 6:00 PM

Speaker: Jingzhong Ding

5:59 PM - 8:00 PM

Virtual Posters

Age-related changes in DNA methylation networks

5:59 PM - 8:00 PM

Speaker: Evans Cheruiyot

The cardio-splenic axis: A key pathway linking doxorubicin-induced immunosenescence to hypertension-associated cardiomyopathy

5:59 PM - 8:00 PM

Speaker: Mary Raphael Daniel

ROS targeted new synthetic molecule improves mitochondrial function while reducing cellular senescence in vitro and in vivo.

5:59 PM - 8:00 PM

Speaker: Chathurika Henpita

Experimental application of in silico drug repurposing for improving life-span and health span

5:59 PM - 8:00 PM

Speaker: Byungju Kim

Associations Between Air Pollution and Markers of Neuroinflammation, Synaptic Dysfunction and AD Pathology by APOE Genotype

5:59 PM - 8:00 PM

Speaker: Kana Kimura

Chromosomal Sex Effects of TREM2-R47H on the Skeletal System in Gonadal Male and Female Four Core Genotypes Mice at 4 and 5.5 Months

5:59 PM - 8:00 PM

Speaker: Gabriel Ramirez

Low Protein Diet-Induced Changes in the Aging Murine Microbiome

5:59 PM - 8:00 PM

Speaker: Prerana Vaddi

Systemic deficits in lipid homeostasis promote aging-associated impairments in B cell progenitor development

5:59 PM - 8:00 PM

Speaker: Silvia Vicenzi

Aging-Associated Epigenetic Reprogramming Alters Germinal Center Reactions and Targets Pathways Linked to Lymphomagenesis

5:59 PM - 8:00 PM

Speaker: Nahuel Zamponi

A quantitative approach to measure inflammaging within stem cells

5:59 PM - 8:00 PM

Speaker: Pradeep Ramalingam

Decoding the chaperone code in ALS

5:59 PM - 8:00 PM

Speaker: Yevheniia Bushman

6:00 PM - 8:00 PM

Poster Session I & Trainee/Faculty Mixer

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PP85. PTGER2-related network of mitochondrial dysfunction and inflammatory response in human monocytes and development of aging-related diseases

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Speaker: Jingzhong Ding

24. Investigating the role of age-associated immune suppression on CD44-mediated liver cancer initiation.

6:00 PM - 8:00 PM

Speaker: Armin Aabish Gandhi

25.The hTSC Secretome Attenuates SASP by Reducing DNA Damage and NF- κ B Activity

6:00 PM - 8:00 PM

Speaker: Kotb Abdelmohsen

26. Sex-specific decline in prefrontal cortex mitochondrial bioenergetics in aging baboons correlates with walking speed

6:00 PM - 8:00 PM

Speaker: Daniel Adekunbi

27. Machine learning for quantification of behavior in rodent models of aging and Alzheimer's disease.

6:00 PM - 8:00 PM

Speaker: Joy Afolabi

28. Subcutaneous Adipose Tissue-Secreted Proteins as Endocrine Regulators of Physical and Cognitive Function in Older Adults

6:00 PM - 8:00 PM

Speaker: Cheehoon Ahn

29. Astrocytic regulation of neuronal lipid metabolism

6:00 PM - 8:00 PM

Speaker: Mariyam Akter

31. Hedgehog signaling converges with HAP40 to control intestinal aging and disease

6:00 PM - 8:00 PM

Speaker: Jennifer Alexander

32. Investigating the molecular mechanisms through which age-associated neuronal lysosomal dysfunction promotes synaptic dysfunction

6:00 PM - 8:00 PM

Speaker: Manuel Alvarez

33. Age- and Sex-related Differences in Adaptation Response to Work-Normalized Exercise Training

6:00 PM - 8:00 PM

Speaker: Niloufar Amiri

34. A Human Neuron Alzheimer's Disease Model Reveals Non-Selective Cytotoxicity as a Potential Barrier for Senolytic Translatability

6:00 PM - 8:00 PM

Speaker: Julie Andersen

36. Unraveling protective mechanisms of aging: A new role for histone chaperone HIRA

6:00 PM - 8:00 PM

Speaker: Rouven Arnold

37. Candida auris: A growing threat to the elderly

6:00 PM - 8:00 PM

Speaker: Hossam Ashour

40. Assessment of Anti-Cataract and Pro-Longevity Properties of Flavonoids

6:00 PM - 8:00 PM

Speaker: Rilee Bahner

41. Cellular senescence is a central driver of cognitive disparities in aging.

6:00 PM - 8:00 PM

Speaker: Matthew Baier

42. Linking single-cell profiling to functional validation: Age and sex impact neutrophil metabolism, migration, and response to acute infection

6:00 PM - 8:00 PM

Speaker: Clayton Baker

43. Linking lipid turnover, senescence and endothelial dysfunction in age-related vascular cognitive impairment

6:00 PM - 8:00 PM

Speaker: Priya Balasubramanian

45. SCALIWAG: The Single Cell Aging Library With A Genome Browser

6:00 PM - 8:00 PM

Speaker: Joshua Bartz

48. An atlas of brain aging in the naturally short-lived African turquoise killifish reveals a conserved role for glucocorticoid signaling

6:00 PM - 8:00 PM

Speaker: Bérénice Benayoun

49.Using AI To Evaluate Resilience to Aging in Non-Human Primates

6:00 PM - 8:00 PM

Speaker: Robert Bennett

50. Rapamycin 2.0: Case examples of rationale polypharmacy with rapid optimization

using human biomarkers

6:00 PM - 8:00 PM

Speaker: Jon Berner

51. Does a Gero-protective drug in *C. elegans* alter aging rate indicators in mice?

6:00 PM - 8:00 PM

Speaker: Safa Beydoun

52. The Role of IGF-1 Signaling in Smooth Muscle Cells in Age-Related Brain Microvascular Fragility

6:00 PM - 8:00 PM

Speaker: Marisa Bickel

53. Age-related changes in the rat ovarian transcriptome at single-cell resolution

6:00 PM - 8:00 PM

Speaker: Subhasri Biswas

54. Evaluating 1,600+ epigenetic proxies for predicting age-related disease and responsiveness to anti-aging interventions across 100+ datasets using transAge.

6:00 PM - 8:00 PM

Speaker: Daniel Borrus

55. Mapping the interactions of dietary macronutrients and sex on aging in mice

6:00 PM - 8:00 PM

Speaker: Amanda Brandon

56. Cardioprotective Effects of the Novel Mitochondria-Targeted Compound SBT-255

6:00 PM - 8:00 PM

Speaker: Kristy Vardy

57. Atrial Natriuretic Peptide as a Circadian Modulator of Age-Related Nocturia

6:00 PM - 8:00 PM

Speaker: Danielle Bruns

58. Administration of endogenous and synthetic exerkines increases mitochondrial oxygen consumption in C2C12 myoblasts

6:00 PM - 8:00 PM

Speaker: Matthew Bubak

60. Aging alters the CSF-brain barrier

6:00 PM - 8:00 PM

Speaker: Claire Caballero

61. Prior history of dietary amino acid composition epigenetically marks a persistent metabolic signature

6:00 PM - 8:00 PM

Speaker: Mariah Calubag

63. Epigenetic Reprogramming as a Preventive Strategy Against Age-Related Cancer

6:00 PM - 8:00 PM

Speaker: Carolina Cano Macip

64. Aging cohort of people living with HIV

6:00 PM - 8:00 PM

Speaker: Gustavo Casas

65. Alternative Splicing Alterations Affect (Reproductive) Aging in the nematode *Caenorhabditis elegans*

6:00 PM - 8:00 PM

Speaker: Margaret Champion

66. Functional Ultrasound Imaging Reveals Impaired Neurovascular Coupling, Cerebral Blood Flow, and Microvascular Rarefaction in a Mouse Model of Paclitaxel-Induced Chemobrain

6:00 PM - 8:00 PM

Speaker: Siva Sai Chandragiri

67. Regulatory role of RORs at the interface of circadian rhythms and aging

6:00 PM - 8:00 PM

Speaker: Zheng Chen

68. Multi-omic analysis of Chromatin Architectural Defect (CAD) response in human using IMR-90 cell

6:00 PM - 8:00 PM

Speaker: Seung-Sub Choi

70. Distinct mechanisms of non-autonomous UPRER mediated by GABAergic, glutamatergic, and octopaminergic neurons.

6:00 PM - 8:00 PM

Speaker: Aeowynn Coakley

71. BIOLOGICAL RESOURCES AT THE NATIONAL INSTITUTE ON AGING: A ONE STOP SHOP FOR AGING RESEARCH

6:00 PM - 8:00 PM

Speaker: Tiziana Cogliati

72. Sex-specific microglial responses to amyloid pathology

6:00 PM - 8:00 PM

Speaker: Jillian Cox

73. An Update of MIDAS: a Multispecies Nonhuman Primate Aging Resource

6:00 PM - 8:00 PM

Speaker: Laura Cox

74. HSPA8 as a Putative Mediator of Aging-Related Molecular Changes across Metabolic Tissues in Normal Primate Aging

6:00 PM - 8:00 PM

Speaker: Laura Cox

75. Time-restricted eating improves cerebrovascular function during cognitive stimulation in older adults

6:00 PM - 8:00 PM

Speaker: Ana Clara da C. P. Langley

76. Creating Opportunities for Community Dialogue Using a Community Advisory Council

6:00 PM - 8:00 PM

Speaker: Denise Daniello

77. The impact of serine and glycine availability on skeletal muscle cell composition following injury in aged mice

6:00 PM - 8:00 PM

Speaker: Ryan Dannemiller

78. Characterization of Aromatase Expression in the Ventromedial Prefrontal Cortex, Claustrum, and Nucleus Accumbens of Aged Male Mice

6:00 PM - 8:00 PM

Speaker: Darrell Davis

79. Selective stimulation of melanocortin-4 receptors on astrocytes in the hippocampus are unable to reverse neuroinflammation and improve cognition in an accelerated aging, obese mouse model

6:00 PM - 8:00 PM

Speaker: Adrianna De Santis

80. Novel Pathway causing Cognitive Impairment by Synaptic Dysfunction in the Aging Brain

6:00 PM - 8:00 PM

Speaker: Ferenc Deak

81. The Role of Lipid Metabolism in Genomic Stability

6:00 PM - 8:00 PM

Speaker: Mahima Devarajan

82. Investigating the Contribution of Senescence to Age-Related Mitochondrial Dysfunction in a Primary Aortic Smooth Muscle Cell Model

6:00 PM - 8:00 PM

Speaker: Arjune Dhanekula

83. Investigation of multiple biomarkers of aging and disease in urine specimens from the CALERIE study

6:00 PM - 8:00 PM

Speaker: Johanna Diernegger

84. Circadian reprogramming in cellular senescence

6:00 PM - 8:00 PM

Speaker: Kristi Dietert-Rathmell

86. HIBERNATION-INDUCED NEUROPROTECTION AGAINST FERROPTOSIS IN ARCTIC GROUND SQUIRREL HIPPOCAMPUS: DIFFERENTIAL EXPRESSION AND PATHWAY ANALYSIS

6:00 PM - 8:00 PM

Speaker: Kelly Drew

87. Restoring actin integrity: a novel function of uprmt

6:00 PM - 8:00 PM

Speaker: Naibedya Dutta

88. Multiple forms of food perception modulate dietary-restriction mediated longevity through biogenic amine and neuroendocrine signaling

6:00 PM - 8:00 PM

Speaker: Sarah Easow

89. Unveiling the network relationship of somatic mutations

6:00 PM - 8:00 PM

Speaker: Joseph Ehlert

91. Examining acute insulin signaling in hippocampal metabolism

6:00 PM - 8:00 PM

Speaker: Beatriz Ferran Perez

92. 17 β -Estradiol Reduces Age-Related Liver Cancer Risk in Male Mice Through Hepatic Metabolic Benefits but Reveals Immune Trade-Offs

6:00 PM - 8:00 PM

Speaker: Michal Fornalik

93. Hormone replacement therapy and liver cancer in women: systematic review and meta-analysis

6:00 PM - 8:00 PM

Speaker: Michal Fornalik

94. Aging disrupts the Metabolic Regulation of Wound Healing in Mammalian Skin

6:00 PM - 8:00 PM

Speaker: Maria Forni

95. Human Primary Myotubes Display Diminished Muscle Protein Synthesis After Doxorubicin Treatment

6:00 PM - 8:00 PM

Speaker: Thomas Francis

96. Deep phenotyping of microglial phenotypic states with aging and neurodegeneration

6:00 PM - 8:00 PM

Speaker: Willard Freeman

97. Differences in DNA methylation between the right and left heart ventricles during aging

6:00 PM - 8:00 PM
Speaker: Shyleen Frost

98. Social frailty and brain health in nonhuman primates

6:00 PM - 8:00 PM
Speaker: Brett Frye

99. Age, glucose tolerance, and cognitive performance in vervet monkeys

6:00 PM - 8:00 PM
Speaker: Brett Frye

100. mTORC1 inhibition to counteract proteostatic and mitochondrial dysfunction in aged skeletal muscle following disuse

6:00 PM - 8:00 PM
Speaker: Jordan Fuqua

101. Genes Versus Lifestyle

6:00 PM - 8:00 PM
Speaker: Noor Gajraj

102. The interaction of heavy metal and osmotic stress in *Caenorhabditis elegans*

6:00 PM - 8:00 PM
Speaker: Emily Gardea

103. Posttraumatic stress disorder, depressive symptoms, and cognitive function among middle-aged urban adults: Healthy Aging in Neighborhoods of Diversity across the Life Span study

6:00 PM - 8:00 PM
Speaker: Michael Georgescu

104. Investigating the role of hallmarks of aging in immunity and aging

6:00 PM - 8:00 PM
Speaker: Rituparna Ghosh

105. A mutation in *slx4ip* results in shortened lifespan and perturbs bone modeling in zebrafish

6:00 PM - 8:00 PM
Speaker: Arianna Gomez

109. IGF-1/IGF-1R Signaling as a Mediator of Cerebrovascular Rejuvenation: Evidence from Heterochronic Parabiosis

6:00 PM - 8:00 PM
Speaker: Rafal Gulej

110. Expression of Mas related G-Protein Coupled Receptor D (MrgD) in the aging mouse tissues

6:00 PM - 8:00 PM
Speaker: David Gyamfi

111. Modeling Alzheimer's Disease in context of aging: characterizing cortical brain organoids exposed to a freefall culture

6:00 PM - 8:00 PM
Speaker: Floris-Jan Haan

112. Is 17 α -estradiol an effective obesity treatment that preserves aged muscle mass and metabolic function during fat loss?

6:00 PM - 8:00 PM
Speaker: Jessica Halle

113. Age-related changes in BDNF: surprising correlations with Maturation, Alzheimer's, & Atherosclerosis in Down syndrome.

6:00 PM - 8:00 PM
Speaker: Eric Hamlett

114. Quiescence Profiling: High throughput yeast CLS analysis offered through the UAB NSC

6:00 PM - 8:00 PM
Speaker: John Hartman

115. Repurposing Canagliflozin for treatment of neurodegenerative disease

6:00 PM - 8:00 PM
Speaker: Dulmalika Herath Manchanayake

116. Senescent increases in aged and PTSD-exposed brains are driven by kynurenine pathway metabolites: A potential novel AD mechanism.

6:00 PM - 8:00 PM
Speaker: William Hill

117. Cell type-specific hippocampal DNA modification landscapes with brain aging

6:00 PM - 8:00 PM
Speaker: Walker Hoolehan

119. Molecular mechanisms of neural targeting of aging and age-related diseases

6:00 PM - 8:00 PM
Speaker: Shaijiao Huang

120. Sex differences in lifespan/healthspan of 12 nonhuman primate species in translational aging research

6:00 PM - 8:00 PM
Speaker: Hillary Huber

121. DNA damage drives Alzheimer's disease phenotypes

6:00 PM - 8:00 PM
Speaker: Jun-Wei Hughes

123. Analysis of large-scale datasets for age-associated mitochondrial DNA variance and its role in pathogenicity

6:00 PM - 8:00 PM

Speaker: Nitya Jain

124. Specific Microbiome signatures could predict aging continuum and cognitive impairment in older adults

6:00 PM - 8:00 PM

Speaker: Adewale James

126. Gene Length-dependent Transcription Decline (GLTD) in pneumonia and aging

6:00 PM - 8:00 PM

Speaker: Martin Jenkins

129. Sex Differences in Rhesus Macaque Immune System Aging

6:00 PM - 8:00 PM

Speaker: Cameron Kelsey

130. Dissecting amyloid beta- and tau-mediated dopamine neuron alterations in Alzheimer's disease.

6:00 PM - 8:00 PM

Speaker: William Kennedy

132. Estropausal gut microbiota transplant improves measures of ovarian function in adult mice

6:00 PM - 8:00 PM

Speaker: Minhoo Kim

136. The Role of Estrogen in Alzheimer's Disease and Microglial Regulation

6:00 PM - 8:00 PM

Speaker: Sunghwan Ko

133. When Actin Is Not Actin-Like Actin: The Role of Nuclear Actin in C. elegans and Its Implications for Aging

6:00 PM - 8:00 PM

Speaker: Juri Kim

134. Mitochondrial-Encoded Immunometabolism in Aging and Oral Health

6:00 PM - 8:00 PM

Speaker: Jessica Kim

135. Protein restriction ameliorates ovariectomy-induced metabolic dysfunction by inhibition of mTORC1

6:00 PM - 8:00 PM

Speaker: Bailey Knopf

137. Aging abrogates female-specific protection against cardiometabolic stress induced heart failure with preserved ejection fraction in mice

6:00 PM - 8:00 PM

Speaker: Kamil Kobak

138. Investigating ovarian aging in Pallas's long-tongued bat, Glossophaga soricina

6:00 PM - 8:00 PM

Speaker: Alison Kochersberger

139. Effect of dietary protein intake on the health of young and middle-aged mice

6:00 PM - 8:00 PM

Speaker: Yoshitaka Kondo

140. Systemic signatures of age and metabolic health in rhesus monkeys.

6:00 PM - 8:00 PM

Speaker: Di "Silas" Kuang

141. Estrogen: The Hero for Menopause-Induced Brain Mitochondrial Complex IV Deficits

6:00 PM - 8:00 PM

Speaker: Benjamin Kugler

142. Increased autophagy flux in aging may be reversed by exercise

6:00 PM - 8:00 PM

Speaker: Caroline Kumsta

143. Proteostatic dysregulation and fibrosis in aged skeletal muscle and tendon

6:00 PM - 8:00 PM

Speaker: Seongeun Kwak

144. The role of necroptosis in the induction of cellular senescence

6:00 PM - 8:00 PM

Speaker: Sunho Lee

145. Investigating the Role of SUV39H1 in H3K9me3-Mediated Transposable Element Repression and Aging in the African Turquoise Killifish

6:00 PM - 8:00 PM

Speaker: Aaron Lemus

146. Isoleucine as a regulator of plasma cholesterol in mice

6:00 PM - 8:00 PM

Speaker: Yang Liu

147. Identification of interneurons in stress resistance and longevity

6:00 PM - 8:00 PM

Speaker: Mingyi Liu

148. Mitochondria-lysosome coupling contributes to lysosome acidification and aging

6:00 PM - 8:00 PM

Speaker: Qingqing Liu

149. Female-specific age-related dysfunction of murine macrophages

6:00 PM - 8:00 PM

Speaker: Ryan Lu

150. Investigating CCN1 as a potential regulator of aging in the bone marrow hematopoietic niche

6:00 PM - 8:00 PM

Speaker: Milos Marinkovic

151. Functional ultrasound (fUS) imaging of Vascular Density and Neurovascular Coupling in Aged Mice

6:00 PM - 8:00 PM

Speaker: Sharon Negri

152. Synergistic effects of aging and high-fat diet induced obesity on brain senescence and neurovascular function

6:00 PM - 8:00 PM

Speaker: Sharon Negri

153. Selective Removal of Deleterious mtDNA Mutations from Mammalian Cells

6:00 PM - 8:00 PM

Speaker: Sarah Shemtov

290. Transcript errors generate amyloid-like proteins in human cells

6:00 PM - 8:00 PM

Speaker: Claire Chung

Tue, May 13, 2025

7:00 AM - 8:00 AM

Breakfast

Location: Tikahtnu Ballroom

8:00 AM - 9:30 AM

Session 5. Environmental Perception and Aging

Location: Tikahtnu Ballroom

Chair: Scott Leiser ; Co-Chair: Shaijiao Huang ; Speakers: Scott Pletcher, Rebecca Taylor, Mike Garratt, Elizabeth Kitto

Neural states as conserved modulators of aging

8:00 AM - 8:20 AM

Speaker: Scott Pletcher

Activation of the UPR by environmental perception can modulate organismal aging

8:20 AM - 8:40 AM

Speaker: Rebecca Taylor

Olfactory perception of social cues and regulation of aging in mice

8:40 AM - 9:00 AM

Speaker: Mike Garratt

Regulation of behavior by the longevity gene fmo-2

9:00 AM - 9:15 AM

Speaker: Elizabeth Kitto

Aging in a Good Way Through the Eyes of Alaska Native Elders: Results from a 17-year-long CBPR Study

9:15 AM - 9:30 AM

Speaker: Jordan Lewis

9:30 AM - 10:00 AM

Break

Location: Foyer

10:00 AM - 11:30 AM

Session 6. Parental Age Effects

Location: Tikahtnu Ballroom

Chair & Speaker: Kristin Gribble ; Speakers: Silvia Cattelan, Edward Ivimey-Cook, Laura Cox, Ninadini Sharma

Maternal age effects across the tree of life

10:00 AM - 10:17 AM

Speaker: Edward Ivimey-Cook

Maternal obesogenic during pregnancy programs liver signaling and metabolism in young adult baboon offspring

10:18 AM - 10:35 AM

Speaker: Laura Cox

Transcriptional and mitochondrial signatures of intergenerational and transgenerational inheritance of maternal age

10:36 AM - 10:53 AM

Speaker: Kristin Gribble

Impact of maternal aging on the DNA repair landscape in mammalian oocytes

10:54 AM - 11:11 AM

Speaker: Ninadini Sharma

Paternal age impairs offspring reproductive success and lifespan via ejaculate-mediated effects in a short-lived vertebrate

11:12 AM - 11:30 AM

Speaker: Silvia Cattelan

11:30 AM - 12:15 PM

Mark Smith Award Presentation and Lecture
Location: Tikahtnu Ballroom

12:15 PM - 1:30 PM

Building Community Lunch Hosted by Women in AGE
Location: Tikahtnu Ballroom
Chair: Arik Davidyan

1:30 PM - 3:00 PM

Session 7. Extracellular Matrix
Location: Tikahtnu Ballroom
Speakers: Katarzyna Cieslik, Andrew Dillin, Elizabeth Harper, Jessica Proulx, Subhasri Biswas ; Co-Chair: Jessica Halle ; Chair: Danielle Bruns

The extracellular matrix integrates mitochondrial homeostasis

1:30 PM - 1:50 PM
Speaker: Andrew Dillin

Mitochondrial Diversity as a Driver of Ovarian Aging

1:50 PM - 2:05 PM
Speaker: Subhasri Biswas

Sex Differences in the ECM and Fibroblast Activity in the Aging Mouse Heart

2:05 PM - 2:25 PM
Speaker: Katarzyna Cieslik

Investigating the role and therapeutic potential of HNF4a in loss of hepatocyte cell identity with age

2:25 PM - 2:40 PM
Speaker: Jessica Proulx

The role of the aged tumor microenvironment in therapy response

2:40 PM - 3:00 PM
Speaker: Elizabeth Harper

3:00 PM - 3:30 PM

Break
Location: Foyer

3:30 PM - 4:30 PM

Keynote Address: Aging as the Great Connector
Keynote Speaker: Daniel Promislow

4:30 PM - 5:00 PM

Poster Pitch Session II

Location: Tikahtnu Ballroom

PP 11. DNA methylation of transposons pattern aging differences across a diverse cohort of dogs from the Dog Aging Project

4:30 PM - 5:00 PM

Speaker: Blaise Mariner

PP12. Growth hormone-deficient Ames dwarf mice resist sarcopenia and exhibit enhanced endurance running capacity at 24 months

4:30 PM - 5:00 PM

Speaker: Matthew Johnston

PP13. Timing of castration modulates its life-extending effect in genetically heterogeneous mice: castration at midlife is more effective than at earlier ages

4:30 PM - 5:00 PM

Speaker: Laurence Maeyens

PP14. In vivo longitudinal assessment of cerebrovascular mitochondrial dynamic

4:30 PM - 5:00 PM

Speaker: Sharon Negri

PP15. Leveraging large human genetic datasets to uncover regulators of transposable elements in health and disease

4:30 PM - 5:00 PM

Speaker: Eyaël Habtemariam

PP16. Sex, sterilization and metabolic profiles shape aging trajectories and age-related disease risk in dogs

4:30 PM - 5:00 PM

Speaker: Filippo Artoni

PP17. Endogenous RNA interference pathways regulate longevity synergistically with insulin/IGF-1 signaling through germline cell non-autonomous communication

4:30 PM - 5:00 PM

Speaker: Thomas Lontis

PP20. The Hepatic Glucagon Receptor as a Novel Regulator of Lifespan

4:30 PM - 5:00 PM

Speaker: Alexander Lasher

PP21. Ketogenesis is dispensable in the metabolic adaptation to caloric restriction with fasting

4:30 PM - 5:00 PM

Speaker: Yang Yeh

PP22. Single-cell RNA sequencing identifies distinct visceral adipose tissue-resident $\gamma\delta$ T cell subsets with age-dependent shifts

4:30 PM - 5:00 PM

Speaker: Caitlyn Smith

PP23. FOXO3 modulates chromatin accessibility and protects against DNA damage in a model of cellular senescence

4:30 PM - 5:00 PM

Speaker: Jose Arevalo

5:00 PM - 7:00 PM

Poster Session II

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5:00 PM - 7:00 PM

Speaker: Jose Arevalo

154. Maternal and grandmaternal age influences offspring lifespan, reproduction and gene expression on the marine rotifer *Brachionus manjavacas*

5:00 PM - 7:00 PM

Speaker: Nelia Luviano Aparicio

155. NPA7: a novel designed peptide that protects against oxidative stress induced senescence through improving NAD⁺ homeostasis

5:00 PM - 7:00 PM

Speaker: Xiaoyu Ma

156. Powerful Genetic Dissection of Lifespan Variation in *Drosophila melanogaster*

5:00 PM - 7:00 PM

Speaker: Stuart Macdonald

157. Tau-induced astrocyte senescence and dysfunction in AD tauopathy

5:00 PM - 7:00 PM

Speaker: Haneen Makhoulouf

158. Mechanism of age-dependent decline in angiogenesis

5:00 PM - 7:00 PM

Speaker: Akiko Mammoto

159. The proximal pulmonary artery plays a critical role in regulating age-related decline of cardiopulmonary function in humans

5:00 PM - 7:00 PM

Speaker: Edward Manning

161. A Plasma Metabolomic and Lipidomic Signature of mTORC1-specific Inhibition

5:00 PM - 7:00 PM

Speaker: Ryan Marshall

162. Identifying Key Genes for the Prolongation of the Mitochondrial Unfolded Protein Response (UPR^{mt}).

5:00 PM - 7:00 PM

Speaker: Melisa Matonsi

163. MARY1 increases ATP and AMPK α in the Kidney Cortex of Aged Mice

5:00 PM - 7:00 PM

Speaker: Kai McAlister

164. Adiponectin pathway activation reduces tau burden and rescues electrophysiological defects

5:00 PM - 7:00 PM

Speaker: Eric McGregor

165. Coupling Time-Restricted Feeding and Circadian Rhythms for Enhancing Lipid Modulation, Aging, and Metabolic Wellness

5:00 PM - 7:00 PM

Speaker: Girish Melkani

166. Changes in diaphragm collagen proteostasis with aging, exercise, and rapamycin treatment

5:00 PM - 7:00 PM

Speaker: Paulo Mesquita

167. FOXO transcription factors in starvation-induced differential stress resistance

5:00 PM - 7:00 PM

Speaker: Kayla Miller

168. Negative regulation of brain cellular senescence by the lncRNA H19

5:00 PM - 7:00 PM

Speaker: Lauren Miller

169. Amelioration of accelerate brain aging by free fatty acid receptor (FFAR2) stimulants

5:00 PM - 7:00 PM

Speaker: Sidharth Mishra

170. Exploring sex dimorphism in the metabolome across species: insights into age-related changes.

5:00 PM - 7:00 PM

Speaker: Avani Mital

171. Alterations in Perineuronal Nets within the Hippocampal CA2 Region are Associated with Age-Related Social Memory Dysfunction

5:00 PM - 7:00 PM

Speaker: Jacqueline Moats

172. Molecular mechanisms underlying cognitive aging in maternal obesity offspring

5:00 PM - 7:00 PM

Speaker: Eric Moore

174. Heat stress impairs resiliency in satellite cells: implications for heat shock response in skeletal muscle regeneration

5:00 PM - 7:00 PM

Speaker: Nyssa Morgan

175. Lessons learned from oral health and sphingolipids metabolism in the context of aging

5:00 PM - 7:00 PM

Speaker: Alexandru Movila

176. The impact of age on the relationship between gait pattern and domain-specific cognitive function: a human study

5:00 PM - 7:00 PM

Speaker: Peter Mukli

177. A role of LRP1 in tau transmission to brain microvascular endothelial cells

5:00 PM - 7:00 PM

Speaker: Aishwarya Muppala

178. DNA methylation clock age and the integrated methylome-transcriptome in young and aged skeletal muscle after regeneration

5:00 PM - 7:00 PM

Speaker: Kevin Murach

179. Machine learning analysis of gait-pattern based cognitive aging predictors in humans

5:00 PM - 7:00 PM

Speaker: Mihaly Muranyi

180. A metabolite-wide association study of age and frailty in over 200,000 adults

5:00 PM - 7:00 PM

Speaker: Julian Mutz

181. Impaired endothelial IGF1R signaling regulates skeletal muscle vascular function: implications for age-related sarcopenia

5:00 PM - 7:00 PM

Speaker: Dorina Nagy

182. Aging Affects Lymphatic Vessel Pumping, Mitochondrial Bioenergetics, and Lymphedema Progression

5:00 PM - 7:00 PM

Speaker: Zhanna Nepiyushchikh

183. Neurogenesis in arctic ground squirrel hippocampus-optimized immunohistochemical protocol

5:00 PM - 7:00 PM

Speaker: Vy Nguyen

184. A unique inflammaging profile generated by T cells from people with obesity is metformin-resistant

5:00 PM - 7:00 PM

Speaker: Barbara Nikolajczyk

185. Mitochondrial SDHs regulate age-related inflammatory responses in vascular endothelial cells.

5:00 PM - 7:00 PM

Speaker: Masayuki Nomura

186. Impact of Frequent and Intermittent Rapamycin Treatment on Muscle Hypertrophy in Aged Female Mice Following Progressive Weighted Wheel Running

5:00 PM - 7:00 PM

Speaker: Szczepan Olszewski

187. The Role of Adipose Tissue Inflammation and Senescence in Age-Related Skeletal Muscle Phenotypes

5:00 PM - 7:00 PM

Speaker: Zinnarky Ortiz Correa

188. Long-living Ames Dwarf Mouse Liver is protected from High-Fat Diet-Induced Metabolic Insult

5:00 PM - 7:00 PM

Speaker: Jaspreet Kaur Osan

189. Mitochondrial oxidative stress alters adaptive stress response signaling to muscle contraction

5:00 PM - 7:00 PM

Speaker: Ethan Ostrom

190. Plasma Cell Survival, Dynamics, and Competition in Old Mice

5:00 PM - 7:00 PM

Speaker: Luis Ovando

191. Delayed age-related sarcopenia onset in female long-living Ames dwarf mice

5:00 PM - 7:00 PM

Speaker: Taylor Painter

192. Post-transcriptional control of fibro/adipogenic progenitor cell plasticity and fibrofatty expansion in aged skeletal muscle

5:00 PM - 7:00 PM

Speaker: Joanna Papinska

193. Neuroendocrine aging as a driver of skeletal muscle aging

5:00 PM - 7:00 PM

Speaker: Joanna Papinska

194. Methionine restriction started late in life promotes healthy aging

5:00 PM - 7:00 PM

Speaker: Andrey Parkhitko

195. Aging, Mitochondria, and Cerebral Microhemorrhages: SS-31 Evaluation and a Machine Learning Imaging Pipeline for Therapeutic Screening

5:00 PM - 7:00 PM

Speaker: Roland Patai

196. Novel biosensors enable super-resolution imaging of innate immunity in brain aging

5:00 PM - 7:00 PM

Speaker: Ethan Perets

197. In vivo mosaic screening identifies therapeutic targets in age-related diseases including heart failure with preserved ejection fraction

5:00 PM - 7:00 PM

Speaker: Gavin Pharaoh

198. Life extension via genetic/drug interventions occurs by delaying the onset of aging, not by slowing the rate of aging

5:00 PM - 7:00 PM

Speaker: Patrick Phillips

199. Cmpk2 modulates sterile inflammatory responses in senescent macrophages

5:00 PM - 7:00 PM

Speaker: Cristian Ponce

200. Age-associated increase of estradiol biosynthesis enzyme, aromatase, in the aged mouse brain

5:00 PM - 7:00 PM

Speaker: Abigail Postle

201. Skeletal muscle passive mechanics in aging and acute fatigue

5:00 PM - 7:00 PM

Speaker: Grace Privett

202. Aging does not attenuate human mesenchymal stromal cell secretome response to inflammatory microenvironment

5:00 PM - 7:00 PM

Speaker: Grace Privett

204. THE CARNOSINE CLOCK TICKS FOR HEALTHY AGING

5:00 PM - 7:00 PM

Speaker: Mattia Quattrocchi

205. Exploring the roles of iron and host-microbe interactions in the lifespan extension mediated by 3-hydroxyanthranilic acid

5:00 PM - 7:00 PM

Speaker: Robert Bailey

209. Microplastics induce Ovarian Aging and Transgenerational Metabolic Disruptions.

5:00 PM - 7:00 PM

Speaker: Khushbu Raval

210. Extracellular matrix characterization in aged tendon following disuse

5:00 PM - 7:00 PM

Speaker: Christiana Raymond-Pope

211. MCU haploinsufficiency induces sex-specific bioenergetic remodeling in the mouse brain

5:00 PM - 7:00 PM

Speaker: Traci Redwine

213. The mitochondrial-encoded microprotein MOTS-c regulates interferon signaling under age-related metabolic stress in macrophages.

5:00 PM - 7:00 PM

Speaker: Michelle Rice

214. Identification of prostatic senescent cells using single cell RNA-sequencing (scRNAseq) and spatial transcriptomics

5:00 PM - 7:00 PM

Speaker: Emily Ricke

215. Assessment of Posttranslational Modification Across the Spatiotemporal Gradient of the Mammalian Eye Lens

5:00 PM - 7:00 PM

Speaker: Julian Rodriguez

216. Age-dependent effects of the endosymbiont Wolbachia during RNA viral infection in Drosophila melanogaster

5:00 PM - 7:00 PM

Speaker: Michael Rodwell

217. Mitochondrial Ca²⁺ uniporter downregulation leads to sexually dimorphic changes in the metabolome and redox state of neural tissue

5:00 PM - 7:00 PM

Speaker: Hadyn Rose

218. Mechanisms of cholesterol-dependent lifespan extension in C. elegans

5:00 PM - 7:00 PM

Speaker: Skye Rounseville

219. Proteomic Analysis of Aged and NDUSF4^{-/-} Mouse Lenses Reveals Commonalities and Divergences

5:00 PM - 7:00 PM

Speaker: Elizabeth Rubeira

220. Neurovascular Coupling Modulation Through tDCS: Preliminary Findings

5:00 PM - 7:00 PM

Speaker: Demian Rudyk

221. Low Protein Diet Potentiates the Effects of Vertical Sleeve Gastrectomy

5:00 PM - 7:00 PM

Speaker: Samuel Saghafi

222. Cellular senescence and differentiation bias in aged progenitor cells impair liver regeneration

5:00 PM - 7:00 PM

Speaker: Rahagir Salekeen

223. Health Octo Tool: Matching Personalized Health with Rate of Aging

5:00 PM - 7:00 PM

Speaker: Shabnam Salimi

224. Macrophages represent a significant source of p21+ senescent cells in aged and steatotic liver.

5:00 PM - 7:00 PM

Speaker: Ivan Salladay-Perez

225. Development of a Comprehensive Pheno-Frailty Index for Aging Mice

5:00 PM - 7:00 PM

Speaker: Brady Samuelson

226. Age-associated effects of CD74 on osteoclastogenesis and experimental periodontitis

5:00 PM - 7:00 PM

Speaker: Natasha Sanz

227. A frailty-based plasma proteomic signature capturing overall health and well-being in older adults

5:00 PM - 7:00 PM

Speaker: Sanish Sathyan

228. Changes in Age-Related Factors in a Long-Term Vitamin C Deficiency Model

5:00 PM - 7:00 PM

Speaker: Ayami Sato

230. The role of protein succinylation in skeletal muscle regeneration in aging

5:00 PM - 7:00 PM

Speaker: Susan Schmitt

231. Tracing the Impact of Urban Environmental Stressors on Hallmarks of Aging

5:00 PM - 7:00 PM

Speaker: Marianna Sadagurski

232. Gold sodium thiomalate and 3-bromopyruvate increase lifespan across diverse Caenorhabditis genetic backgrounds and reset the transcriptional aging clock toward a "youthful" state

5:00 PM - 7:00 PM

Speaker: Christine Sedore

233. The impact of mitochondrial-haplotype on the age-related changes in inflammation, fibrosis, and senescence in the livers of the novel OKC-HETB/W rats

5:00 PM - 7:00 PM

Speaker: Ramasamy Selvarani

234. Differential Effects of Aging on Proactive and Reactive Attentional Control

5:00 PM - 7:00 PM

Speaker: Joshua Senior

235. Multiplexed single-cell imaging and time-lapse microscopy reveal multiple senescent subpopulations during long-term senescence induction.

5:00 PM - 7:00 PM

Speaker: Garrett Sessions

237. Targeting Lysosomal Exocytosis as a Senolytic Strategy in Aging and age-related Fibrotic lung disease

5:00 PM - 7:00 PM

Speaker: Amit Sharma

238. SomaMutDB 2.0: A Comprehensive Resource for Exploring Somatic Mutation Accumulation and Functional Impacts in Human Aging

5:00 PM - 7:00 PM

Speaker: Anthony Shea

240. The ELITE and AD Knowledge Portals: FAIR Data Resources for Aging Research

5:00 PM - 7:00 PM

Speaker: Solveig Sieberts

242. Disruption of Ovarian-Brain Axis: Culprit and Therapeutic Target in Menopause-induced Brain Aging

5:00 PM - 7:00 PM

Speaker: Parminder Singh

244. Optimal late life protein intake may be dependent on early to mid-life protein intake

5:00 PM - 7:00 PM

Speaker: Michelle Sonsalla

245. Systems-mechanobiology of cardiovascular ageing

5:00 PM - 7:00 PM

Speaker: Fabian Spill

246. Nonhuman Primate Age-Related Spatial Differences in CD3+ T Cells Within the

Colonic Mucosa

5:00 PM - 7:00 PM

Speaker: Christina Stevens

247. Effects of Adenylyl Cyclase 8 Overexpression in Young and Old mice

5:00 PM - 7:00 PM

Speaker: Shaun Stevenson

248. Walking Speed and Brain Connectivity in Older Adults

5:00 PM - 7:00 PM

Speaker: Nathan Stiehl

250. Lifespan extension by spermidine and low methionine: a mechanism in common?

5:00 PM - 7:00 PM

Speaker: Wei-Hsuan Su

251. Hyperbaric Oxygen Therapy and Brain Health

5:00 PM - 7:00 PM

Speaker: Nathalie Sumien

252. Role of GPR84 in aging-related cardiometabolic dysfunction

5:00 PM - 7:00 PM

Speaker: Xuenan Sun

254. Relating mesoscale neuromuscular morphology and physical function using ultra-high field MRI

5:00 PM - 7:00 PM

Speaker: Bragi Sveinsson

255. Novel therapeutic approaches for prevention of endothelial dysfunction and cognitive decline in patients with peripheral artery disease

5:00 PM - 7:00 PM

Speaker: Zsafia Szarvas

256. Determinants of heterogeneity of healthy aging

5:00 PM - 7:00 PM

Speaker: Marina Terekhova

258. Neuronal Necroptosis: Linking Neuroinflammation to Accelerated Cognitive Decline

5:00 PM - 7:00 PM

Speaker: Nidheesh Thadathil

259. The Role of Senescent Macrophages as a Driver of Inflammaging and Aging-related Diseases

5:00 PM - 7:00 PM

Speaker: Grasiela Torres

260. Discovery of genes underlying cognitive resilience in individuals predisposed to Alzheimer's disease risk

5:00 PM - 7:00 PM

Speaker: Wei Tsai

262. Chemotherapy-Induced Neurovascular Dysfunction: Persistent Blood-Brain Barrier Disruption and Cellular Senescence in Chemotherapy-Associated Cognitive Impairment

5:00 PM - 7:00 PM

Speaker: Kiana Vali Kordestan

263. Accelerated Musculoskeletal Aging in Survivors of Childhood Cancer Resulting from Increased Senescent Burden of Muscle Progenitors

5:00 PM - 7:00 PM

Speaker: Elizabeth van der Bijl

264. Senescence and endothelial to mesenchymal transition in the aging cerebral vasculature.

5:00 PM - 7:00 PM

Speaker: Michaela Vance

265. Hexavalent Chromium Accelerates Biological Aging to Induce Neurotoxicity in a Worm Model

5:00 PM - 7:00 PM

Speaker: Samuel Vielee

266. High-fat diet accelerates brain aging and triggers cognitive deficits in adult mice

5:00 PM - 7:00 PM

Speaker: Gavin Wang

267. Impact of Actin Altering Molecules on Aging

5:00 PM - 7:00 PM

Speaker: Tiffany Wang

268. Modeling Human Rapamycin Resistance Mutations in Yeast

5:00 PM - 7:00 PM

Speaker: Brian Wasko

269. Dopamine-Dependent Aging: Investigating the Role of DAT-1 in Neuromuscular Function and Longevity in Caenorhabditis elegans.

5:00 PM - 7:00 PM

Speaker: Brandy Weathers

270. Investigating Age-Related Pericyte Changes in Pancreatic Islets

5:00 PM - 7:00 PM

Speaker: Brooke Wheeler

271. The Aging Pancreas: Capillary Changes in Pancreatic Islets

5:00 PM - 7:00 PM

Speaker: Daniel Whisman

272. Analysis of Protein Aging in the Rhesus Macaque Lens Reveals Key Changes

5:00 PM - 7:00 PM
Speaker: Jeremy Whitson

273. B12 SUPPLEMENTATION IMPACTS MITOCHONDRIAL BIOLOGY AND SKELETAL MUSCLE PHYSIOLOGY IN AGED FEMALE MICE

5:00 PM - 7:00 PM
Speaker: Abigail Williamson

274. Using a Toxic Aging Coin Approach to Understand the Neurotoxicity of Hexavalent Chromium: Heads for Age Differences, Tails for Aging Effects

5:00 PM - 7:00 PM
Speaker: Johnny Wise

275. DNA methylation aging of the lower female genital tract

5:00 PM - 7:00 PM
Speaker: Judy Wu

276. Sex- and Strain-Specific Roles of FGF21 in Modulating Metabolic Responses to Isoleucine Restriction in Mice

5:00 PM - 7:00 PM
Speaker: Fan Xiao

278. Understanding the role of ceramide sphingolipids and neutral ceramidase in periodontal disease using clinical samples and experimental mouse models of Alzheimer’s disease

5:00 PM - 7:00 PM
Speaker: Chiaki Yamada

279. Suppression of FOXO1 attenuates liver macrophage reprogramming and improves liver function during aging

5:00 PM - 7:00 PM
Speaker: Wanbao Yang

280. Endothelial IGF1R Deficiency Disrupts the Blood-Brain Barrier and Accelerates Endothelial Senescence in Mice, Recapitulating Key Features of Brain Aging

5:00 PM - 7:00 PM
Speaker: Raghavendra Yelahanka Nagaraja

281. Cannabinoid 1 receptor agonism in optic nerve head astrocytes may increase oxygen consumption rate

5:00 PM - 7:00 PM
Speaker: Olivia Young

283. Wolbachia modulates age-dependent inflammatory responses to viral infection in Drosophila

5:00 PM - 7:00 PM
Speaker: Cody Zamarron

284. Filling a “cavity” on aging research: identifying epigenetic biomarkers of tooth aging.

5:00 PM - 7:00 PM
Speaker: Sara Zapico

287. Molecular Regulators of Cellular Senescence and Cell Fate in Response to Stress

5:00 PM - 7:00 PM
Speaker: Xu Zhang

288. Novel lipid senolytics targeting senescent cell vulnerability through ferroptosis induction

5:00 PM - 7:00 PM
Speaker: Lei Zhang

289. Epigenome-wide association study of methylation in frailty: a longitudinal study of female and male mice

5:00 PM - 7:00 PM
Speaker: Dantong Zhu

7:00 PM - 9:00 PM

Trainee Data Blitz
Location: Tikahtnu Ballroom

7:00 PM - 9:00 PM

AGE Board of Directors Meeting
Location: K’enakatnu 6

Wed, May 14, 2025

7:00 AM - 8:00 AM

Breakfast
Location: Tikahtnu Ballroom

8:00 AM - 9:30 AM

Session 8. Reevaluation of Aging Treatments

Location: Tikahtnu Ballroom

Speakers: Richard Miller, Archana Unnikrishnan, Marta Kovatcheva, Colleen O'Reilly, Thi Thanh My Nguyen ; Co-Chair: Jillian Cox, Sunghwan Ko ; Chair: Sarah Ocañas

Aging Rate Indicators: Shared molecular traits in slow-aging mice

8:00 AM - 8:20 AM

Speaker: Richard Miller

Are the beneficial effects of Metformin on lifespan context specific?

8:20 AM - 8:35 AM

Speaker: Colleen O'Reilly

Effect of Late-life Dietary Restriction on Intestinal Stem Cell Aging

8:35 AM - 8:55 AM

Speaker: Archana Unnikrishnan

Targeting NLRP3 signaling with a novel sulfonylurea compound to inhibit microglial inflammation and treat aging-associated vascular cognitive impairment and dementia

8:55 AM - 9:10 AM

Speaker: Thi Thanh My Nguyen

Targeting the hallmarks: Epigenetic & senolytic approaches to understand and control aging

9:10 AM - 9:30 AM

Speaker: Marta Kovatcheva

9:30 AM - 10:00 AM

Break

Location: Foyer

10:00 AM - 11:30 AM

Session 9. Diet and Aging

Location: Tikahtnu Ballroom

Speakers: Sailendra Nichenametla, Daniela Costa, Purbasha Dasgupta, Mariah Calubag ; Chair: Dudley Lamming

Discovering pharmacologically targetable mechanisms of the lifespan-extending sulfur amino acid-restricted diet

10:00 AM - 10:20 AM

Speaker: Sailendra Nichenametla

Tomatidine: A Promising Senotherapeutic Strategy to Alleviate Age-Related Cognitive Decline

10:20 AM - 10:40 AM

Speaker: Daniela Costa

Intermittent fasting enhances transgenerational longevity and health while delaying reproductive aging via small RNAs in *C. elegans*

10:40 AM - 10:55 AM

Speaker: Purbasha Dasgupta

Prior history of dietary amino acid composition epigenetically marks a persistent metabolic signature

10:55 AM - 11:10 AM

Speaker: Mariah Calubag

Serine metabolism modulation to mitigate age-related metabolic disorders

11:10 AM - 11:30 AM

Speaker: Emeline Joulia

11:30 AM - 1:00 PM

Denham Harman Award Lunch

Location: Tikahtnu Ballroom

Speaker: Rozalyn Anderson

1:00 PM - 2:30 PM

Session 10: Aging on a Chip

Location: Tikahtnu Ballroom
Speakers: Young Jang, Erika Moore, Dominick Rodriguez, Sophia Mahoney ; Chair & Speaker: James McGrath

Microphysiological Model of Macrophage Function in Vasculogenesis Across the Lifespan 1:00 PM - 1:20 PM Speaker: Erika Moore
Ex Vivo Sulforaphane Stimulation Improves Exercise-Induced Nrf2 Signaling in Older Adults 1:20 PM - 1:35 PM Speaker: Dominick Rodriguez
Jang TBD 1:35 PM - 1:55 PM Speaker: Young Jang
The Role of the Senescence-Associated Secretory Phenotype in Vascular Aging: Amelioration by the Natural Senolytic Fisetin 1:55 PM - 2:10 PM Speaker: Sophia Mahoney
Modeling and Measuring the Impact of Aging on Vascular Barriers and Extravascular Tissues On-Chip 2:10 PM - 2:30 PM Speaker: James McGrath

2:30 PM - 3:30 PM

Membership Meeting & Awards

Location: Tikahtnu Ballroom