
Event Agenda

AGE 52nd Annual Meeting: Integrative Approaches to Geroscience

Sun, Jun 02, 2024

10:00 AM - 10:00 AM

AGE Registration Opens

1:00 PM - 4:00 PM

Nathan Shock Center Symposium: Celebrating 50 Years of NIA and 30 Years of Progress at the Nathan Shock Centers

Location: Madison / Wisconsin Rooms

NSC Welcome Remarks

1:00 PM - 1:10 PM

Speakers: Steven Austad, Christy Carter

NSC Keynote Presentation - NIA Efforts in Aging Biology Research

1:10 PM - 1:40 PM

Speaker: Richard Hodes

NSC Presentation on Nonhuman Primate Core program

1:40 PM - 1:50 PM

What have we learned about free radicals in aging since Harman's theory?

1:50 PM - 2:20 PM

Speaker: Holly Van Remmen

Break

2:20 PM - 2:30 PM

Cellular Senescence: A Detective Story

2:30 PM - 3:00 PM

Speaker: Christopher Wiley

Somatic mutations and aging: cause or effect?

3:00 PM - 3:30 PM

Interventions for Healthy Aging: Progress and Caveats

3:30 PM - 4:00 PM

Speaker: Rafael de Cabo

4:30 PM - 6:00 PM

Trainee Roundtable Organized by the Trainee Chapter

Location: Madison / Wisconsin Rooms

Panel: Sue Bodine, Bitu Nakhai, Christy Carter, Sarah Ocanas, Matt Yousefzadeh, Martin Borch-Jensen

6:00 PM - 7:30 PM

AGE Welcoming Reception and Dinner Buffet

Location: Grand Ballroom

7:30 PM - 8:30 PM

AFAR Cristofalo Award Presentation and Talk: Sex-dimorphic regulation of macrophage aging in mice

Location: Grand Ballroom

Speaker: Berenice Benayoun

Mon, Jun 03, 2024

7:30 AM - 8:25 AM

Breakfast

Location: Madison / Wisconsin Rooms

7:30 AM - 8:25 AM

NIH Lounge at the AGE Breakfast

8:20 AM - 8:40 AM

AGE 2024 Opening Remarks & Award Presentation

Location: Madison / Wisconsin Rooms

Opening Remarks from the AGE 2024 President

8:20 AM - 8:25 AM

Speaker: Dudley Lamming

Women in AGE Mentoring Award Presentation

8:25 AM - 8:30 AM

Speaker: Holly Van Remmen

Opening Remarks: Director of the NIA, Dr. Richard Hodes

8:30 AM - 8:40 AM

Speaker: Richard Hodes

8:40 AM - 10:00 AM

Session 1. Translational Insights in Aging Biology

Location: Madison / Wisconsin Rooms

Chair: Rozalyn Anderson

Intervention with rapamycin to promote longevity and health in non-human primate.

8:40 AM - 9:00 AM

Speaker: Adam Salmon

A frailty index based on clinically evident health deficits predicts mortality and changes in blood-based frailty biomarkers in females in humans and in mouse models

9:00 AM - 9:10 AM

Speaker: Susan Howlett

A hematology-based clock to detect aging pace emerging from the Study of Longitudinal Aging in Mice (SLAM) and its translation to human populations.

9:10 AM - 9:30 AM

Speaker: Rafael de Cabo

Single-cell atlas of healthy human blood unveils age-related loss of NKG2C+GZMB-CD8+ memory T cells and accumulation of type 2 memory T cells

9:30 AM - 9:40 AM

Speaker: Marina Terekhova

Senescence and aging signatures in healthy human lung tissues across the lifespan in native tissues and explants with senescence induction in lung and ovary

9:40 AM - 10:00 AM

Speaker: Birgit Schilling

10:00 AM - 10:30 AM

BREAK

Location: Foyer

10:30 AM - 11:45 AM

Session 2. Gerotherapeutic Drugs, Exercise, and Their Interactions

Location: Madison / Wisconsin Rooms

Chair: Adam Konopka

Is adding rapamycin to exercise geroprotective?

10:30 AM - 10:47 AM

Speaker: Adam Konopka

Methylome-Proteome Integration After Late-Life Voluntary Exercise Training Reveals Regulation and Target Information for Improved Skeletal Muscle Health

10:48 AM - 10:58 AM

Speaker: Kevin Murach

Cellular Senescence and Skeletal Muscle Aging

10:59 AM - 11:16 AM

Speaker: Nathan LeBrasseur

Age-Related Differences in Mitophagy Response to Acute Exercise in Skeletal Muscle of Mice

11:17 AM - 11:27 AM

Speaker: Niloufar Amiri

Sex-biased adverse events are associated with sex-biased drug target and metabolism gene expression and gene-regulatory network properties

11:28 AM - 11:45 AM

Speaker: Brittany Lasseigne

11:45 AM - 12:15 PM

Poster Pitches 1 (15 total)

Location: Madison / Wisconsin Rooms

1. Investigating the role of HNF4a in loss of hepatocyte identity with age.

11:45 AM - 11:46 AM

Speaker: Jessica Proulx

2. Following is the title of my abstract: Identification of functional rare coding variants in insulin/insulin-like growth factor-1 (IGF-1) pathway in longevity cohorts.

11:47 AM - 11:48 AM

Speaker: Amanat Ali

3. Graded isoleucine restriction reveals sex-specific physiological and molecular responses to an essential amino acid.

11:49 AM - 11:50 AM

Speaker: Yang Liu

4. The role of MLKL in liver aging and insulin sensitivity

11:51 AM - 11:52 AM

Speaker: Phoebe Ohene-Marfo

5. Dietary isoleucine content defines the metabolic and molecular response to a Western diet.

11:53 AM - 11:54 AM

Speaker: Michaela Trautman

6. mTORC1 inhibition to improve skeletal muscle proteostasis and mitochondrial respiration with age and disuse

11:55 AM - 11:56 AM

Speaker: Jordan Fuqua

7. Development of a novel pheno frailty index for mice

11:57 AM - 11:58 AM

Speaker: Brady Samuelson

8. Epigenetic changes during liver aging and regeneration

11:59 AM - 12:00 PM

Speaker: Na Yang

9. Unraveling the role of neuron-specific ERa in 17a-estradiol-mediated benefits on systemic metabolism in male mice

12:01 PM - 12:02 PM

Speaker: Roshini Sathiaselvan

10. Uncovering the single-cell RNA isoform dynamics of the aging mouse brain using long-read sequencing

12:03 PM - 12:04 PM

Speaker: Emmanouil Maragkakis

11. Non-human primate age-related differences in T-cell types and locations in the large intestinal mucosal immune cell landscape.

12:05 PM - 12:06 PM

Speaker: Christina Stevens

12. Maternal obesogenic diet (MO) during pregnancy programs skeletal muscle signaling and metabolism in young baboon offspring

12:07 PM - 12:08 PM

Speaker: Angelica Riojas

13. Genetically encoded tools for a systems-wide understanding of protein degradation

12:09 PM - 12:10 PM

Speaker: Elijah Mena

14. Crosstalk between the immune system and the extracellular matrix in the context of melanoma and aging

12:11 PM - 12:12 PM

Speaker: Elizabeth Harper

15. Molecular architecture of the Nuclear Pore Complex and Nuclear basket across different organisms

12:13 PM - 12:14 PM

Speaker: Digvijay Singh

12:15 PM - 1:45 PM

Lunch on Your Own

12:15 PM - 1:15 PM

Geroscience Journal Lunch (closed)

Location: Conference I

1:45 PM - 3:15 PM

Session 3. Neurodegeneration & Brain Aging

Location: Madison / Wisconsin Rooms

Chair: Constanza Cortes

Plcg2 regulates microglia, T cells, myelin, and behavior in models of late-onset Alzheimer's disease and inflammation

1:45 PM - 2:00 PM

Speaker: Sarah Hopp

Role of Age-associated T cells in Chronic Inflammatory Diseases

2:05 PM - 2:20 PM

Speaker: Daniel Tyrrell

Unearthing new regulators of memory and cognitive aging using *C. elegans*

2:25 PM - 2:40 PM

Speaker: Rachel Arey

An atlas of brain aging in the naturally short-lived African turquoise killifish.

2:45 PM - 3:00 PM

Speaker: Berenice Benayoun

Long-term Running Rescues Lipid Dysregulation and Promotes the Resolution of Inflammation in 5xFAD Transgenic Mice

3:00 PM - 3:15 PM

Speaker: Constanza Cortes

3:15 PM - 3:45 PM

Break

Location: Foyer

3:45 PM - 5:15 PM

Session 4. Immune-Metabolic Interactions in Aging

Location: Madison / Wisconsin Rooms

Chair: Emily Goldberg, Elsie Gonzalez-Hurtado

Immune-metabolic interactions that control immune function

3:45 PM - 4:10 PM

Speaker: Emily Goldberg

Development of the age-associated GZMK⁺ CD8 T cells in old mice

4:10 PM - 4:35 PM

Speaker: Maxim Artyomov

CD169⁺ nerve-associated macrophages (NAMs) regulate adipose tissue function and restrain age-induced inflammation

4:35 PM - 5:00 PM

Speaker: Elsie Gonzalez-Hurtado

Regulatory T cells shield muscle mitochondria from interferon-gamma-mediated damage to promote the beneficial effects of exercise

5:00 PM - 5:15 PM

Speaker: Kent Langston

5:15 PM - 7:15 PM

Virtual Poster Session

V1. Are we looking at the right place and time when we call “Senescent”?

5:15 PM - 7:15 PM

Speaker: Burcin Duan Sahbaz

V2. Age-associated impairment in motor, sensory and memory functions in UM-HET3 mice

5:15 PM - 7:15 PM

Speaker: Harpreet Kaur

V3. Lysophosphatidyl choline enriched Omega-3 fatty acids improved age related metabolic disorder in the Senescence Accelerated mouse(SAMP8)-a novel finding

5:15 PM - 7:15 PM

Speaker: Sugasini Dhavamani

V4. The intersection of race, ethnicity, and nativity on sleep disorder with longitudinal multilevel modeling.

5:15 PM - 7:15 PM

Speaker: Maki Karakida

V5. Maternal overweight during pregnancy programs liver metabolism in young baboon offspring

5:15 PM - 7:15 PM

Speaker: Sobha Puppala

V7. Impact of Atherosclerosis-Induced Cellular Senescence on Vascular Cognitive Impairment and Dementia

5:15 PM - 7:15 PM

Speaker: Charmae' Henry-Smith

V8. The title of my abstract is "Effects of MLKL overexpression on mitochondrial structure and function in neurons"

5:15 PM - 7:15 PM

Speaker: Zuzanna Siek

V9. The role of alternative splicing in age-related reproductive decline

5:15 PM - 7:15 PM

Speaker: Margaret Champion

V10. Genomic instability and sterile inflammation: a vicious cycle driving aging

5:15 PM - 7:15 PM

Speaker: Susana Gonzalo

V13. Feasibility and Acceptability of Conducting Walking Interviews with Black Older Adults Aging in Community

5:15 PM - 7:15 PM

Speaker: Clara Scher

V14. Molecular Mechanism of Aging: Resilience – Remodeling – Retire.

5:15 PM - 7:15 PM

Speaker: Dorota Skowronska-Krawczyk

V15. Glucagon receptor signaling is Indispensable for the metabolic and lifespan effects of caloric restriction

5:15 PM - 7:15 PM

Speaker: Jennifer Stern

5:15 PM - 7:15 PM

Poster Session 1

Location: Capitol / University Rooms

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Speaker: Elizabeth Harper

15. Molecular architecture of the Nuclear Pore Complex and Nuclear basket across different organisms

5:15 PM - 7:15 PM

Speaker: Digvijay Singh

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

5:15 PM - 7:15 PM

Speaker: Jennifer Alexander

17. Time-restricted eating to improve endothelial and cerebrovascular function in older adults

5:15 PM - 7:15 PM

Speaker: Ana Clara da C. P. Langley

18. Age facilitates leukemia progression and infiltration in non-canonical hematopoietic tissues

5:15 PM - 7:15 PM

Speaker: Marcos Garcia Teneche

19. Intracellular Osteopontin (OPN) promotes vascular senescence by suppressing the production of pro-apoptotic genes

5:15 PM - 7:15 PM

Speaker: Tatiana Rodriguez

20. The role of short chain fatty acids in skeletal muscle atrophy across inflammatory disease

5:15 PM - 7:15 PM

Speaker: Sophie Allen

21. Evaluating the role of age in the relationship between postconcussion symptoms and cognitive function.

5:15 PM - 7:15 PM

Speaker: Robrielle Pierce

23. Application of machine learning algorithms to model brain aging in Bipolar Disorder

5:15 PM - 7:15 PM

Speaker: Hui Xin Ng

24. Smart Cell-based Delivery system (SmaCD) for treatment of Alzheimer's Disease.

5:15 PM - 7:15 PM

Speaker: Cynthia Siebrand

25. A single-cell transcriptomic analysis of cell cycle exit and secondary senescence induction

5:15 PM - 7:15 PM

Speaker: Azucena Rocha

26. Exploring redox status in exercised skeletal muscle to discover potential new therapeutic targets in aging

5:15 PM - 7:15 PM

Speaker: Jonathan Petrocelli

27. Linking stresses: molecular transducers between the heat shock response and resilience to pathogens

5:15 PM - 7:15 PM

Speaker: Alejandro Rodriguez Gama

28. Increased bone formation from isolated eccentric muscle contraction in old mice

5:15 PM - 7:15 PM

Speaker: Jean Kok

29. Age and sex differences in the immune response to synthetic materials in a murine injury model

5:15 PM - 7:15 PM

Speaker: Joscelyn Mejias

30. Peroxisomal Dysfunction Drives Loss of Dynamic Nutrient Responses to Initiate Metabolic Inflexibility

5:15 PM - 7:15 PM

Speaker: Arpit Sharma

31. Single cell analysis reveals immunogenomic changes underlying intravenous BCG protection from Mtb infection

5:15 PM - 7:15 PM

Speaker: Paul Maurizio

32. Inducible skeletal muscle SOD2 Knockdown mimics age related mitochondrial dysfunction in mouse skeletal muscle

5:15 PM - 7:15 PM

Speaker: Ethan Ostrom

33. Uncovering age-related oncogenic drivers of head and neck cancer

5:15 PM - 7:15 PM

Speaker: Heidi Kletzien

35. Ghrelin receptor suppression in neurons protects against aging-associated metabolic and behavioral impairments

5:15 PM - 7:15 PM

Speaker: Hongying Wang

38. Disrupted Lipid Homeostasis and Loss of IRF4 impairs Lymphoid Progenitor Maintenance in a Murine Model of Accelerated Aging

5:15 PM - 7:15 PM

Speaker: Silvia Vicenzi

39. Exploring the interplay between neuropeptide signaling and age-onset multiple myeloma in the bone marrow microenvironment.

5:15 PM - 7:15 PM

Speaker: Silvia Vicenzi

40. Intracellular Iron Accumulation Facilitates Mycobacterial Infection in Old Mouse Macrophages

5:15 PM - 7:15 PM

Speaker: Stephen Kotey

41. The Role of Necroptosis-Associated Chronic Inflammation in Aging and Age-related Diseases Particularly in The Development of Liver Cancer

5:15 PM - 7:15 PM

Speaker: Ramasamy Selvarani

43. TFEB gene therapy in the dorsal hippocampus of female and male obese 5xFAD mice.

5:15 PM - 7:15 PM

Speaker: Danielle Osborne

44. Integrated epigenomics reveal dysregulated chromatin landscapes in aged hematopoietic stem cells underlying aberrant transcription

5:15 PM - 7:15 PM

Speaker: Isabel Beerman

45. Exploring the genetic regulation and influence of transposable elements in vertebrate health and disease

5:15 PM - 7:15 PM

Speaker: Aaron Lemus

46. Exploration of maturation state sex-dimorphism in murine bone marrow neutrophil aging at the single cell level

5:15 PM - 7:15 PM

Speaker: Clayton Baker

47. Prosaposin: a potential exerkin ameliorating age and age-related disease in the CNS

5:15 PM - 7:15 PM

Speaker: Ian Matthews

48. Multiple longevity pathways converge on downregulated p65 in murine livers

5:15 PM - 7:15 PM

Speaker: Ahmed Elmansi

50. Sympathetic motor neuron dysfunction is a missing link in the age-associated loss of organ control.

5:15 PM - 7:15 PM

Speaker: Oscar Vivas

51. MetaAnalysisOnline.com: a tool for the quick and easy meta-analysis of clinical trials

5:15 PM - 7:15 PM

Speaker: Balázs Györfy

53. Adult progenitor dysfunction in age-associated decline of liver regenerative capacity

5:15 PM - 7:15 PM

Speaker: Rahagir Salekeen

54. Skeletal muscle-specific p21 overexpression induces metabolic dysfunction

5:15 PM - 7:15 PM

Speaker: Davis Englund

55. Late- life shift in caloric intake affects fly metabolism and longevity

5:15 PM - 7:15 PM

Speaker: Blanka Rogina

56. The effect of estrogen signaling modulation on female-specific microglial

heterogeneity in the mouse hippocampus

5:15 PM - 7:15 PM
Speaker: Sunghwan Ko

57. Resources for aging research supported by the NIA Division of Aging Biology

5:15 PM - 7:15 PM
Speaker: Jennifer Fox

59. High fat diet induced obesity uncouples mitochondrial respiration in young and aged sarcopenic skeletal muscle.

5:15 PM - 7:15 PM
Speaker: Hector Paez

61. Sex-specific effects on environmental circadian disruption on behavior, metabolism, and frailty in a novel mouse model of Alzheimer's disease-related dementia

5:15 PM - 7:15 PM
Speaker: Laila Scroggins

62. Reversal of neuronal tau pathology, metabolic dysfunction, and electrophysiological defects via adiponectin pathway activation

5:15 PM - 7:15 PM
Speaker: Eric McGregor

63. Characterization of age associated inflammasome activation reveals tissue specific differences in transcriptional and post-translational inflammatory responses

5:15 PM - 7:15 PM
Speaker: Sarah Talley

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

5:15 PM - 7:15 PM
Speaker: Wei Tsai

65. Neural targeting of aging and neurodegenerative diseases

5:15 PM - 7:15 PM
Speaker: Shijiao Huang

67. Lifelong restriction of dietary valine has sex-specific benefits for health span and lifespan in mice

5:15 PM - 7:15 PM
Speaker: Mariah Calubag

68. Peroxisomal Dysfunction and Aging: Exploring the Role in Cellular Senescence and Mitochondrial Homeostasis

5:15 PM - 7:15 PM
Speaker: Jinh Kim

69. Sleeve gastrectomy improves cognition and frailty in AD prone mice

5:15 PM - 7:15 PM
Speaker: Julia Illiano

70. Thalidomide Attenuates Age-Related Prostatic Fibrosis: A Novel Therapy for Benign Prostatic Hyperplasia

5:15 PM - 7:15 PM
Speaker: Ajinkya Limkar

71. The role of Timeless in telomere maintenance of ALT cancer cells

5:15 PM - 7:15 PM
Speaker: Kalisse Horne

72. Genetic dosage screen identifies conserved regulators of mTOR complexes

5:15 PM - 7:15 PM
Speaker: Lesly Turcios-Hernandez

73. Increased markers of senescence and neuroinflammation predict cognitive impairment in aged mice.

5:15 PM - 7:15 PM
Speaker: Matthew Baier

74. Transcriptional profile of centrally located nuclei versus peripherally located nuclei after exercise

5:15 PM - 7:15 PM
Speaker: Agnieszka Borowik

75. Are the beneficial effects of Metformin on lifespan context specific?

5:15 PM - 7:15 PM
Speaker: Colleen O'Reilly

76. Dissecting the Role of Ribosome-Associated Protein Quality Control in Muscle Aging

5:15 PM - 7:15 PM
Speaker: Adaeze Gbufor

77. DNA Methylation Signatures of Cellular Senescence are Not Reversed by Senolytic Treatment

5:15 PM - 7:15 PM
Speaker: Jessica Kasamoto

78. Overexpression of essential gene 'Ism-5' acts as a conserved pro-longevity factor

5:15 PM - 7:15 PM
Speaker: Rohil Hameed

79. Skeletal muscle maintenance of long-lived dwarf mice

5:15 PM - 7:15 PM
Speaker: Matthew Johnston

80. Effects of tryptophan modulation on longevity and health in Drosophila

melanogaster

5:15 PM - 7:15 PM

Speaker: Jessica Alvarez

81. Ames Dwarf mice are protected from high-fat diet-induced hepatotoxicity

5:15 PM - 7:15 PM

Speaker: Jaspreet Osan

82. Aged plasma drives sex-specific cognitive changes and inflammatory transcriptional profiles in young mice

5:15 PM - 7:15 PM

Speaker: Ethan Leitschuh

83. The Study of Longitudinal Aging in Mice: Histopathological characterization of liver disease prevalence and composite lesion score

5:15 PM - 7:15 PM

Speaker: Hazal Ozturk Gurgun

84. Leveraging progeroid iPSC models to interrogate the metabolic and epigenetic mechanisms governing cellular senescence

5:15 PM - 7:15 PM

Speaker: Spencer Haws

85. Genetic background, not dietary restriction, influences Drosophila melanogaster lifespan across laboratories.

5:15 PM - 7:15 PM

Speaker: Olivia Mosley

86. PD1 blockade improves survival and CD8+ cytotoxic capacity, without increasing inflammation, during normal microbial experience in old mice

5:15 PM - 7:15 PM

Speaker: Korbyn Dahlquist

87. Integrated Metabolomics and Proteomics Profiling of Human Serum Reveals an Age-Associated Molecular Signature

5:15 PM - 7:15 PM

Speaker: Edward Weinstein

88. Effects of N-acetyl-carnosine treatment on aging and the carbonyl proteome

5:15 PM - 7:15 PM

Speaker: Edwin Miranda

89. Novel lipid senolytics targeting senescent cell vulnerability via ferroptosis

5:15 PM - 7:15 PM

Speaker: Lei Zhang

90. Characterization of peroxisomal import function in aged human peripheral blood mononuclear cells (PBMCs).

5:15 PM - 7:15 PM

Speaker: Jacinta Correia

93. Long-Term Impact of Antenatal Steroid Exposure on Ventricular Remodeling and Myocardial Mitochondrial Function in Baboons

5:15 PM - 7:15 PM

Speaker: Bowen Yang

95. Skeletal muscle mitochondrial respiration correlates to insulin sensitivity in middle-aged to older adults

5:15 PM - 7:15 PM

Speaker: Rebecca Marrah

96. Novel sendotypes differentiate renal function trajectories in chronic kidney disease

5:15 PM - 7:15 PM

Speaker: Thomas McLarnon

97. Interactions between frailty and social vulnerability on the survival and health transitions of older men and women: a study of 15613 participants in the Chinese Longitudinal Health Longevity Survey (CLHLS) with 14-year follow-up

5:15 PM - 7:15 PM

Speaker: Heng Wu

98. Mapping Plasmalogen Interactome: Insights into Mitochondrial-Peroxisome Crosstalk

5:15 PM - 7:15 PM

Speaker: Anh Pham

99. Exercise capacity in male and female C57BL/6 mice: a longitudinal study of age-related decline

5:15 PM - 7:15 PM

Speaker: Ted Graber

100. The broccoli derivative sulforaphane increases lifespan across diverse genetic backgrounds and resets the transcriptional aging clock toward a "youthful" state.

5:15 PM - 7:15 PM

Speaker: Christine Sedore

101. Skeletal muscle mitochondrial protein interactome and function in mice correlates with frailty and sarcopenia.

5:15 PM - 7:15 PM

Speaker: Gavin Pharaoh

102. Predicting Age and Identifying Aging-Related Genes from Muscle Gene Expression Data

5:15 PM - 7:15 PM

Speaker: Karen Guerrero Vazquez

103. Aging Biomarkers Modulated by Senotherapeutics In Vivo

5:15 PM - 7:15 PM

Speaker: Jair Machado Espindola-Netto

104. Prevalence of sole and combined vision/hearing impairments in companion dogs, and relationship to cognitive impairment

5:15 PM - 7:15 PM

Speaker: Freya Mowat

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

5:15 PM - 7:15 PM

Speaker: Rouven Arnold

106. Microglial-extracellular matrix remodeling associated with goal-directed behavior and neuronal function in cortical and hippocampal regions of aging mice

5:15 PM - 7:15 PM

Speaker: Abigail Gutierrez

108. The impact of continuous and intermittent ketogenic diets on cognitive behavior, motor function, blood lipids and biomarkers for Alzheimer's Disease in middle-aged TgF344-AD rats

5:15 PM - 7:15 PM

Speaker: Jennifer Rutkowsky

110. The glycation-lowering compound Gly-low improves APOE4-associated Alzheimer's disease phenotypes

5:15 PM - 7:15 PM

Speaker: Cassandra McGill

112. Lithium prophylaxis of dementia: Lessons from bipolar disorder

5:15 PM - 7:15 PM

Speaker: Jon Berner

113. The role of hepatocyte necroptosis in liver-brain crosstalk

5:15 PM - 7:15 PM

Speaker: Sabira Jazir

114. Long read sequencing identifies lncRNAs implicated in vascular smooth muscle cell senescence

5:15 PM - 7:15 PM

Speaker: Ada Okereke

115. Sex-dependent responses to calories and fasting uncouple cognition from neuropathology in a mouse model of Alzheimer's Disease.

5:15 PM - 7:15 PM

Speaker: Reji Babygirija

116. Inhibition of Glutaminolysis Restores Age-Associated Loss of Mitochondrial Function

5:15 PM - 7:15 PM

Speaker: Stelios Andreadis

117. Proline Restores Mitochondrial Function and Reverses Aging Hallmarks in Aged Stem Cells

5:15 PM - 7:15 PM

Speaker: Stelios Andreadis

118. Loss of GPR81 is associated with impaired fatty acid metabolism and skeletal muscle aging

5:15 PM - 7:15 PM

Speaker: Stelios Andreadis

119. Deep Longitudinal Proteomic Profiling of Circulating Aging and Health Biomarkers Across in Mice

5:15 PM - 7:15 PM

Speaker: Nathan Basisty

120. Alternative splicing alterations associated with aging in the non-human primate liver.

5:15 PM - 7:15 PM

Speaker: Kip Zimmerman

121. Increased mTOR activation on ovarian stroma/theca accelerates ovarian aging

5:15 PM - 7:15 PM

Speaker: Jose Isola

123. Extension of health span is not equivalent to compression of morbidity: Key conceptual, statistical, and design issues and their implications for geroscience research

5:15 PM - 7:15 PM

Speaker: Wasiuddin Najam

124. Investigating the Role of Mitochondrial Dysfunction and Senescence in Aortic Aging

5:15 PM - 7:15 PM

Speaker: Arjune Dhanekula

125. Acute Signaling Responses and Chronic Adaptations in Skeletal Muscle after Progressive Weighted Wheel Running in Female Mice

5:15 PM - 7:15 PM

Speaker: Szczepan Olszewski

126. Identifying the Ultrastructural Adaptations that Mediate Disuse- and Aging-Induced Atrophy of Skeletal Muscle Fibers

5:15 PM - 7:15 PM

Speaker: Anthony Lange

128. Impact of aging on multifractal functional connectivity and its association with cognitive performance: an EEG study

5:15 PM - 7:15 PM

Speaker: Peter Mukli

129. Development of a deficit accumulation index for non-human primates.

5:15 PM - 7:15 PM

Speaker: Ellen Quillen

131. Longitudinal sex differences in frailty and aging in UM-HET3 mice

5:15 PM - 7:15 PM

Speaker: Judy Wu

136. Age associations and retinal structure-function relationships in companion dogs.

5:15 PM - 7:15 PM

Speaker: Michele Salzman

137. Metabolic response to contraction in a 3D engineered muscle tissue model of aging

5:15 PM - 7:15 PM

Speaker: Matthew Campbell

138. Hyperbaric oxygen treatment for chemotherapy-related cognitive impairment: A focus on cellular senescence

5:15 PM - 7:15 PM

Speaker: Oanh (Kay) Trinh

139. Predicting muscle performance from anatomical MRI scans with Artificial Intelligence

5:15 PM - 7:15 PM

Speaker: Bragi Sveinsson

140. A machine vision based frailty and mortality index using genetically diverse mice

5:15 PM - 7:15 PM

Speaker: Vivek Kumar

141. Does maternal obesity accelerate offspring aging? Role of senescence.

5:15 PM - 7:15 PM

Speaker: Eric Moore

142. The influence of aging on plasma cell survival, dynamics, and competition.

5:15 PM - 7:15 PM

Speaker: Luis Ovando

143. Changes in diaphragm collagen proteostasis with aging and exercise

5:15 PM - 7:15 PM

Speaker: Paulo Mesquita

144. Metabolomics biomarkers for frailty: a longitudinal analysis of aging mice

5:15 PM - 7:15 PM

Speaker: Dantong Zhu

145. Skeletal muscle single-cell RNA sequencing reveals cell-cell communication mediated by senescent cells and the senescence-associated secretory phenotype

5:15 PM - 7:15 PM

Speaker: Xu Zhang

146. Neurovascular Coupling in the Aging Brain: Insights into Traumatic Brain Injury

5:15 PM - 7:15 PM

Speaker: Zalan Kaposzta

147. Chaperone-mediated autophagy (CMA) determines fitness in age-related clonal hematopoiesis (ARCH)

5:15 PM - 7:15 PM

Speaker: Juliane Grimm

149. Caloric restriction and RNA processing: RNA helicases, mito-nuclear crosstalk, and metabolic flexibility

5:15 PM - 7:15 PM

Speaker: Anshit Singh

150. Short-term estradiol treatment on spatial memory in a rat model of menopause.

5:15 PM - 7:15 PM

Speaker: Lisa Lemajeur

153. Dysfunction of protein homeostasis with age: Alteration of proteasomes in rat and mouse liver

5:15 PM - 7:15 PM

Speaker: Ryoya Takahashi

155. Elucidating the molecular mechanisms of tooth aging: development of the first epigenetic clock for tooth tissues.

5:15 PM - 7:15 PM

Speaker: Sara C. Zapico

173. A natural nutritional compound to improve health in aging by reducing inflammation and improving autophagy.

5:15 PM - 7:15 PM

Speaker: Knut Wittkowski

174. Increased monocyte contribution to aging macrophages

5:15 PM - 7:15 PM

Speaker: Deborah Winter

239. Estimating health-span and lifespan in 5 nonhuman primate species common to translational aging research.

5:15 PM - 7:15 PM
Speaker: Hillary Huber

310. LRP1 mediates tau uptake into endothelial cells

5:15 PM - 7:15 PM
Speaker: Aishwarya Muppala

311. Distinct mechanisms regulate expansion of mesenchymal stromal cells and endothelial cells in aged bone marrow microenvironment in mice

5:15 PM - 7:15 PM
Speaker: Jing Zhang

7:15 PM - 8:30 PM

Trainee Mixer/Dinner

Location: Grand Ballroom

Tue, Jun 04, 2024

8:00 AM - 9:00 AM

Breakfast

Location: Madison / Wisconsin Rooms

8:00 AM - 9:00 AM

NIH Lounge at the AGE Breakfast

9:00 AM - 10:00 AM

Keynote Address: Identification of genetic and environmental factors that modify longevity and late-life cognitive performance

Location: Madison / Wisconsin Rooms
Keynote Speaker: Catherine Kaczorowski

10:00 AM - 12:15 PM

Session 5. Protein and Lipid Metabolism in Aging

Location: Madison / Wisconsin Rooms
Chair: George Sutphin

The impact of dietary protein intake on metabolic adaptation in adipose tissue

10:00 AM - 10:15 AM
Speaker: Cristal Hill

Evolve to adapt: A microbiome-based approach to enhance host stress resistance and lifespan.

10:15 AM - 10:30 AM
Speaker: Scott Leiser

Selective elimination of senescent cells by ferroptosis

10:30 AM - 10:45 AM
Speaker: Chisaka Kuehnemann

Regulators of health and lifespan extension in genetically diverse mice on dietary restriction

10:45 AM - 11:00 AM
Speaker: Gary Churchill

Session Intermission

11:00 AM - 11:30 AM

The impact of nutritionally, non-essential amino acids on skeletal muscle aging

11:30 AM - 11:45 AM
Speaker: Anna Thalacker-Mercer

Dietary context determines the interaction between a low isoleucine diet and rapamycin

11:45 AM - 12:00 PM
Speaker: Yang Yeh

Lipid markers of cardiovascular health in people with type 1 diabetes

12:00 PM - 12:15 PM
Speaker: Judith Simcox

12:15 PM - 12:45 PM

Poster Pitches 2 (15 total)

Location: Madison / Wisconsin Rooms

156. Reward-based foraging behavior alters microglia-extracellular matrix interactions in the mesolimbic dopamine system during healthy brain aging

12:15 PM - 12:16 PM

Speaker: Daniel Gray

157. Investigating the role of LncRNA H19 in DNA damage response

12:17 PM - 12:18 PM

Speaker: Britney Black

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

12:19 PM - 12:20 PM

Speaker: Haneen Makhoulouf

159. Programming-aging outcomes in circulating steroids of baboon offspring of over-nourished mothers.

12:21 PM - 12:22 PM

Speaker: Hillary Huber

160. Sirt3 is required to extend lifespan via mTOR inhibition in a mouse model of mitochondrial dysfunction.

12:23 PM - 12:24 PM

Speaker: Alessandro Bitto

161. Determining how calcium regulates mPTP-dependent aging.

12:25 PM - 12:26 PM

Speaker: Suzanne Angeli

162. Age-related proteostatic imbalance exacerbates heart failure with preserved ejection fraction pathogenesis in old mice

12:27 PM - 12:28 PM

Speaker: Kamil Kobak

163. The role of macrophage senescence in inflammaging and metabolic disease: Aging at the crossroads of inflammation and metabolism

12:29 PM - 12:30 PM

Speaker: Anthony Covarrubias

164. Long Term Calorie Restriction Reduces Oxidative Damage in the Aging Monkey Brain in a Cell Type Specific Manner

12:31 PM - 12:32 PM

Speaker: Ana Vitantonio

165. Neural circuit defects underlying dehydration risk in aged mice

12:33 PM - 12:34 PM

Speaker: Heeun Jang

166. Methylglyoxal-induced Glycation Stress as a Driver of Age-Associated Disorders

12:35 PM - 12:36 PM

Speaker: Parminder Singh

167. Ghrelin Receptor as a Therapeutic Target for Sarcopenia: Lessons from Mouse Models

12:37 PM - 12:38 PM

Speaker: Haiming Liu Kerr

168. Targeting Protein Degradation to Restore Lysosomal Homeostasis in Metabolism and Neurodegeneration

12:39 PM - 12:40 PM

Speaker: Travis Lear

169. Examining the mechanisms of improved prostatic mitochondrial function with oleic acid treatment

12:41 PM - 12:42 PM

Speaker: Alexis Adrian

170. Unraveling the miRs of Engagement in Aging Tissues

12:43 PM - 12:44 PM

Speaker: Bailey Peck

1:00 PM - 2:30 PM

Harman Award Lunch & Lecture - Food for Thought: 30 Years of Research on Nutrition and Cognition

Location: Madison / Wisconsin Rooms

Speaker: Barbara Shukitt-Hale

2:45 PM - 3:45 PM

Session 6. Longevity Biotech - Panel Presentation

Location: Madison / Wisconsin Rooms

Panel: Jennifer Garrison, Sarah Ocanas, Martin Borch-Jensen ; Speaker: Matt Kaerberlein

3:45 PM - 4:15 PM

Break

Location: Foyer

4:15 PM - 5:45 PM

Session 7. Trainee Session: Reproductive Aging

Location: Madison / Wisconsin Rooms

Chair: Sarah Ocanas, Jose Isola

Garrison Talk

4:15 PM - 4:35 PM

Speaker: Jennifer Garrison

Identifying cell-type-specific hallmarks of aging in the murine ovary

4:35 PM - 4:55 PM

Speaker: Michael Stout

Modulating the Aging Ovarian Microenvironment to Improve Reproductive Longevity

4:55 PM - 5:15 PM

Speaker: Francesca Duncan

Mitochondrial genetics uncover dimorphic aging patterns of the mammary gland

5:15 PM - 5:30 PM

Speaker: Thelma Mashaka

Molecular and cellular insights of reproductive longevity in ants

5:30 PM - 5:45 PM

Speaker: Ingrid Fetter Pruneda

5:45 PM - 7:45 PM

Poster Session 2

Location: Capitol / University Rooms

156. Reward-based foraging behavior alters microglia-extracellular matrix interactions in the mesolimbic dopamine system during healthy brain aging

5:45 PM - 7:45 PM

Speaker: Daniel Gray

157. Investigating the role of LncRNA H19 in DNA damage response

5:45 PM - 7:45 PM

Speaker: Britney Black

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

5:45 PM - 7:45 PM

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Speaker: Hillary Huber

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5:45 PM - 7:45 PM

Speaker: Alessandro Bitto

161. Determining how calcium regulates mPTP-dependent aging.

5:45 PM - 7:45 PM

Speaker: Suzanne Angeli

162. Age-related proteostatic imbalance exacerbates heart failure with preserved ejection fraction pathogenesis in old mice

5:45 PM - 7:45 PM

Speaker: Kamil Kobak

163. Exploring the Mechanistic Effects of Hyperbaric Oxygen Therapy on Alzheimer's Disease Pathology in 5xFAD Mice

5:45 PM - 7:45 PM

164. Long Term Calorie Restriction Reduces Oxidative Damage in the Aging Monkey Brain in a Cell Type Specific Manner

5:45 PM - 7:45 PM

Speaker: Ana Vitantonio

165. Neural circuit defects underlying dehydration risk in aged mice

5:45 PM - 7:45 PM

Speaker: Heeun Jang

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5:45 PM - 7:45 PM

Speaker: Travis Lear

169. Examining the mechanisms of improved prostatic mitochondrial function with oleic acid treatment

5:45 PM - 7:45 PM

Speaker: Alexis Adrian

170. Unraveling the miRs of Engagement in Aging Tissues

5:45 PM - 7:45 PM

Speaker: Bailey Peck

171. P21-CyclinD1-CDK6 Complex Inhibits DNA Damage Repair and Drives Inflammation in Senescence and Aging.

5:45 PM - 7:45 PM
Speaker: Adarsh Rajesh

172. The role of habitual feeding schedule in mediating the metabolic response of a calorie restriction diet

5:45 PM - 7:45 PM
Speaker: Heidi Pak

175. Multi-model and Multi-omics Approaches Identify Conserved Role of Tryptophan Catabolic Pathway in the Regulation of Life- and Healthspan

5:45 PM - 7:45 PM
Speaker: Alaattin Kaya

176. 17 α -Estradiol Attenuates NASH-driven HCC in Male Mice: Implications for Therapeutic Intervention.

5:45 PM - 7:45 PM
Speaker: Michal Fornalik

177. Activity Recording Capillary Feeder (ARC): A High-Throughput Behavioral Phenomic Assessment in *Drosophila melanogaster* Using Machine Vision

5:45 PM - 7:45 PM
Speaker: Serena Wu

180. An experimental microbiota that protects against multiple measures of age-related ill-health in the model organism *C. elegans*

5:45 PM - 7:45 PM
Speaker: Laura Freeman

182. The NIA Nonhuman Primate Core Program: Advancing Translational Aging Research

5:45 PM - 7:45 PM
Speaker: Rafael de Cabo

183. Acarbose ameliorates western diet-induced metabolic and cognitive impairments in the 3xTg mouse model of Alzheimer's disease

5:45 PM - 7:45 PM
Speaker: Michelle Sonsalla

184. Senescence suppresses the integrated stress response and activates a stress-enhanced secretory phenotype

5:45 PM - 7:45 PM
Speaker: Matthew Payea

185. Rapalog Pharmacology (RAP PAC) Study: A Geroscience guided dose finding trial for rapamycin and a rapamycin analog

5:45 PM - 7:45 PM
Speaker: Jessica Gooding

186. Post-stroke cognitive impairment in the "extended stroke belt" region

5:45 PM - 7:45 PM
Speaker: Camila Bonin Pinto

187. Sex-specific Neuroprotective Mechanisms of Canagliflozin in Aging and Alzheimer's Disease

5:45 PM - 7:45 PM
Speaker: Hashan Jayarathne

188. Investigation of Hepatic Senescent Cell Heterogeneity in Mice with Fatty Liver Disease

5:45 PM - 7:45 PM
Speaker: Kathryn Tao

190. Kynurenine metabolites below KMO target human preosteoclast differentiation and human MSC dysfunction supporting a key role in ageing dysregulation of bone homeostasis.

5:45 PM - 7:45 PM
Speaker: William Hill

191. Role of cellular senescence in brain aging and Alzheimer's disease

5:45 PM - 7:45 PM
Speaker: Gavin Wang

192. Somatic mutations in cells from human progeroid syndromes

5:45 PM - 7:45 PM
Speaker: Elizabeth Pan

193. Advanced aging syndrome causes diastolic dysfunction in the absence of work overload and decreases resilience to ischemia in hiPSC-derived ventricular cardiomyocytes

5:45 PM - 7:45 PM
Speaker: André Monteiro da Rocha

194. Cardiac SLC25A51 deficiency causes severe cardiac hypertrophy and shortens lifespan

5:45 PM - 7:45 PM
Speaker: Weronika Zarzycka

195. Exploring the proteomic signatures of aggregates and endoplasmic reticulum of aged skeletal muscle

5:45 PM - 7:45 PM
Speaker: Ivo Neto

196. Aging increases mitochondrial poly(ADP)-ribosylation in the heart

5:45 PM - 7:45 PM

Speaker: Andrea Ramirez Sagredo

197. Telomere Length Changes in Baboon Metabolic Tissues with Healthy Aging and Developmental Programming

5:45 PM - 7:45 PM

Speaker: Laura Cox

198. Development of a Multispecies Nonhuman Primate Aging Resource

5:45 PM - 7:45 PM

Speaker: Laura Cox

199. Tissue-Specific Trajectories and Signaling in Normal Primate Aging

5:45 PM - 7:45 PM

Speaker: Laura Cox

200. Multiplexed in vivo screening of therapeutics in small and large animal models of age-related diseases.

5:45 PM - 7:45 PM

Speaker: Martin Borch-Jensen

201. Improving mitochondrial function via drug treatments can reduce cellular senescence.

5:45 PM - 7:45 PM

Speaker: Chathurika Henpita

202. Ora Biomedical: Accelerating Drug Discovery for Geroscience

5:45 PM - 7:45 PM

Speaker: Benjamin Blue

203. Osteoarthritic human tissue samples show features of a senescence phenotype

5:45 PM - 7:45 PM

Speaker: Maddie Loops

206. Does mitochondrial haplotype drive gut microbiome changes with age?

5:45 PM - 7:45 PM

Speaker: Hoang Van Nguyen

207. Mapping the transition from senescence induction to a stable, SASP-producing phenotype

5:45 PM - 7:45 PM

Speaker: Garrett Sessions

208. Deletion of absent in melanoma (AIM) 2 gene alters bone morphology

5:45 PM - 7:45 PM

Speaker: Shoshana Yakar

209. Development of primary osteoarthritis during aging in genetically diverse UM-HET3 mice

5:45 PM - 7:45 PM

Speaker: Shoshana Yakar

210. The Impact of Reduced Growth Hormone Activity on Skeletal Health and Metabolism in Aging: Insights from an Inducible GH Receptor Knockout Mouse Model

5:45 PM - 7:45 PM

Speaker: Shoshana Yakar

211. The effects of concurrent end-stage heart failure and sarcopenia on the contractile function of human single skeletal muscle fibers

5:45 PM - 7:45 PM

Speaker: Jared Hartung

212. Senolytic Treatment Alleviates the Incidence and Effects of Hypertension Induced Cerebral Microhemorrhages in Aged Mouse Brain

5:45 PM - 7:45 PM

Speaker: Adam Nyul-Toth

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

5:45 PM - 7:45 PM

Speaker: Sharon Negri

214. Evaluating Neurovascular Dynamics and Vascular Architecture in Aging Through Advanced Functional Ultrasound Imaging Techniques

5:45 PM - 7:45 PM

Speaker: Sharon Negri

240. Time-restricted feeding mitigates age-related cognitive decline: impacts on neurovascular coupling and blood-brain barrier integrity

5:45 PM - 7:45 PM

Speaker: Sharon Negri

215. TNFR1 signaling connects inflammation to impaired fatty acid oxidation to drive intestinal stem cell aging

5:45 PM - 7:45 PM

Speaker: Ruixuan Wang

217. Dominant nonsense mutations in an adult efemp1 zebrafish model alter vertebral and craniofacial characteristics

5:45 PM - 7:45 PM

Speaker: Arianna Gomez (she/her/ella)

218. A new role for kynurenine metabolism in the age-associated decline of the bacterial immune response

5:45 PM - 7:45 PM

Speaker: George Sutphin

219. Measuring Aging Interventions: A Meta-Analysis of Epigenetic Clocks and the Launch of an Interactive Longitudinal Biomarker Platform

5:45 PM - 7:45 PM

Speaker: Daniel Borrus

220. Can rapamycin and exercise have a harmonious effect on cardiometabolic health in older female mice?

5:45 PM - 7:45 PM

Speaker: Christian Elliehausen

221. Dihomo-gamma-linoleic acid promotes ferroptosis of senescent cells and improves age-related pathology in male mice

5:45 PM - 7:45 PM

Speaker: Samantha Jezak

222. Phosphorylation of Uik1 at S555 is required for metabolic adaptation to short-term caloric restriction

5:45 PM - 7:45 PM

Speaker: Orion Willoughby

223. Heme biosynthesis regulates BCAA catabolism and thermogenesis in brown adipose tissue.

5:45 PM - 7:45 PM

Speaker: Dylan Duerre

224. Metabolic regulation of cell fate and function is derailed with aging in mammalian regeneration.

5:45 PM - 7:45 PM

Speaker: Maria Forni

225. Impact of environmental volatile organic compound (VOC) mixture exposure on aging processes and immune cell function: insights from genetically heterogeneous mice.

5:45 PM - 7:45 PM

Speaker: Sydney Scofield

226. Neuronal specific over expression of necroptosis causes Neuroinflammation and cognitive decline in a novel mouse model.

5:45 PM - 7:45 PM

Speaker: Nidheesh Thadathil

227. An mTOR Inhibitor Discovery Platform Using Drug-Sensitized Yeast

5:45 PM - 7:45 PM

Speaker: Brian Wasko

228. Age-related differences in translocation of anabolic signalling intermediates in human skeletal muscle fibres following exercise and protein feeding

5:45 PM - 7:45 PM

Speaker: Marie Korzepa

229. Machine learning predicts and characterizes cellular senescence in single-cell transcriptomics data

5:45 PM - 7:45 PM

Speaker: Samuel Hinthorn

230. Contrasting Effects of Mediterranean vs. Western Diets on Arterial Transcriptional Profiles in Socially Dominant and Subordinate Female Cynomolgus Macaques

5:45 PM - 7:45 PM

Speaker: Aya Abusheikha

232. Efficient Restoration of Blood-Brain Barrier Integrity through the Delivery of Resveratrol via Novel Fusogenic Liposomes

5:45 PM - 7:45 PM

Speaker: Boglarka Csik

235. Exercise alleviates the onset of abnormal voiding behavior in steroid hormone BPH mouse model

5:45 PM - 7:45 PM

Speaker: Teresa Liu

236. Vascular smooth muscle cell Igf1r deficiency impairs cerebrovascular aging.

5:45 PM - 7:45 PM

Speaker: Marisa Bickel

237. Dissecting the Heterogeneity of White Adipocyte Progenitors in vitro

5:45 PM - 7:45 PM

Speaker: Hoang Bui

238. Assessment of mTOR Complex 2 sensitivity of chondrogenic cells to rapamycin

5:45 PM - 7:45 PM

Speaker: Aditya Ailiani

241. Senostatic Approaches to Prevent Cognitive Decline

5:45 PM - 7:45 PM

Speaker: Luisa Abadia

242. Bridging aging and Alzheimer's disease: FABP7 as a critical modulator of neuroinflammation.

5:45 PM - 7:45 PM

Speaker: Haylee Hamilton

243. Neuronal mTORC1 signaling drives acute A β -induced cognitive dysfunction

5:45 PM - 7:45 PM

Speaker: Kylie Williams

244. Characterization the Uptake of Novel Protein Corona Augmented Fusogenic

Liposomes by Brain Endothelial Cells

5:45 PM - 7:45 PM

Speaker: Santny Shanmugarama

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

5:45 PM - 7:45 PM

Speaker: Kayla Miller

246. A mitochondria-regulated p53-CCF circuit integrates genome stability with inflammation

5:45 PM - 7:45 PM

Speaker: Karl Miller

247. Mechanisms of cholesterol-dependent lifespan extension in *Caenorhabditis elegans*.

5:45 PM - 7:45 PM

Speaker: Skye Rounseville

248. 17 α -estradiol elicits metabolic benefits in male mice independent of reduction in calorie intake

5:45 PM - 7:45 PM

Speaker: Roberto Santin-Marquez

249. Astrocytic regulation of neuronal lipid metabolism in Tauopathy

5:45 PM - 7:45 PM

Speaker: Mariyam Akter

250. The influence of age on the interindividual variability in *Drosophila* metabolic rate in response to the Angiotensin-converting enzyme inhibitor Lisinopril

5:45 PM - 7:45 PM

Speaker: Denise Vecchie

251. Dietary restriction of individual branched-chain amino acids improves metabolic health and cognition in a mouse model of Alzheimer's Disease

5:45 PM - 7:45 PM

Speaker: Fan Xiao

252. The role of GABA receptor Gabbr1 during hematopoietic aging

5:45 PM - 7:45 PM

Speaker: Cesi Deng

253. Application of supervised machine learning in state-of-art, high-throughput image analysis for 3D reconstruction of cerebral microhemorrhages in whole mouse brain

5:45 PM - 7:45 PM

Speaker: Roland Patai

254. Role Of Brain Vascular Senescence In Age-Related Cerebromicrovascular Dysfunction And Vascular Cognitive Impairment

5:45 PM - 7:45 PM

Speaker: Roland Patai

255. Distinct male and female hematopoietic aging phenotypes in mice.

5:45 PM - 7:45 PM

Speaker: Ferda Tekin-Turhan

256. Endothelial deficiency of insulin-like growth factor-1 receptor (IGF1R) leads to blood-brain barrier disruption and accelerated endothelial senescence in mice, mimicking aspects of the brain aging phenotype

5:45 PM - 7:45 PM

Speaker: Rafal Gulej

257. GDF3 induces inflammation through the activation of SMAD2/3 signaling in adipose tissue macrophages from aged mice.

5:45 PM - 7:45 PM

Speaker: In Hwa Jang

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

5:45 PM - 7:45 PM

Speaker: Michaela Vance

259. Consequences of somatic mutations at single-cell resolution

5:45 PM - 7:45 PM

Speaker: Ronald Cutler

260. Establishing *Daphnia pulex* as an alternative model for aging biology research

5:45 PM - 7:45 PM

Speaker: Victoria Gibbs

261. The effect of let-7 microRNAs on the stemness of bone marrow stromal cells

5:45 PM - 7:45 PM

Speaker: Nicholas Guzman

262. Noninvasive Characterization of Sarcopenia by Quantitative Magnetic Resonance Imaging

5:45 PM - 7:45 PM

Speaker: Brendan Eck

263. Advancing Neurovascular Uncoupling Diagnosis in Aging: Decoding Functional Hyperemia Mechanisms through Systems Biology

5:45 PM - 7:45 PM

Speaker: Hadi Esfandi

264. Dissecting the function of Phosphoenolpyruvate Carboxykinase 1 (PCK1) in adipose tissue.

5:45 PM - 7:45 PM

Speaker: Yutong Bao

265. Caloric restriction and the brain: RNA processing and lipid composition

5:45 PM - 7:45 PM

Speaker: Spencer Tye

266. The effect of NAD supplementation on vascular health in patients with peripheral artery disease: interim results from an on-going pilot open-label longitudinal clinical trial.

5:45 PM - 7:45 PM

Speaker: Zsofia Szarvas

267. Assessing Age-Related Gait Changes in Community-Dwelling Adults: A Dual Approach through Functional and Molecular Evaluation of Chronological and Biological Aging.

5:45 PM - 7:45 PM

Speaker: Mihaly Muranyi

268. Using cell morphology quantitative trait loci from diversity outbred mice to identify genes associated with senescence susceptibility

5:45 PM - 7:45 PM

Speaker: Gretchen Clark

269. Interactions between hyperactive activated SKN-1 and canonical longevity promoting pathways in *C. elegans*

5:45 PM - 7:45 PM

Speaker: Chris Turner

270. Systems biology of human aging - network model 2024.

5:45 PM - 7:45 PM

Speaker: John Furber

271. Development of an anti-Ang2 vaccine and characterization of its effects on AVMs in BMP9/10-deficient mice

5:45 PM - 7:45 PM

273. Distinct cell subtypes within naïve CD4 T cells compartment shape its aging and senescence

5:45 PM - 7:45 PM

Speaker: CJ Kelly

274. Non-canonical roles for autophagy protein ATG16 in neuronal exopher biogenesis and longevity

5:45 PM - 7:45 PM

Speaker: Ling-Hsuan Sun

275. Robust AD-like deficits in the P301S(PS19) mouse model

5:45 PM - 7:45 PM

Speaker: Kylee White

276. Non-human primate age-related differences in T-cell types and locations in the large intestinal mucosal immune cell landscape.

5:45 PM - 7:45 PM

Speaker: Christina Stevens

277. Heterogeneity in the impact of dietary protein on metabolic health highlights the importance of precision dietetics

5:45 PM - 7:45 PM

Speaker: Cara Green

278. Investigating caloric restriction as an intervention for age-related disease in the adult Rhesus monkey cerebellum.

5:45 PM - 7:45 PM

Speaker: Aaron Berkowitz

280. Reduction of neuronal mTORC1 preserves age-related motor nerve function

5:45 PM - 7:45 PM

Speaker: Stacy Hussong

281. Everolimus Alleviates CD4+ T Cell Inflammation by Regulating Autophagy and Cellular Redox Homeostasis

5:45 PM - 7:45 PM

Speaker: Evelyn Ocegueda

282. Dietary composition, age, and sex impact the metabolic response to mTOR inhibition

5:45 PM - 7:45 PM

283. Maternal obesogenic diet (MO) during pregnancy programs skeletal muscle signaling and metabolism in young baboon offspring.

5:45 PM - 7:45 PM

Speaker: Angelica Riojas

284. UCP1 is dispensable for calorie restriction-mediated benefits on glucose metabolism

5:45 PM - 7:45 PM

Speaker: Duraipandy Natarajan

285. Cell-type specific epigenetic modifications in the aging brain

5:45 PM - 7:45 PM

Speaker: Walker Hoolehan

286. Genetic and chemical interventions in male *C. elegans* dramatically increase reproductive health and longevity in a sex-specific manner

5:45 PM - 7:45 PM

Speaker: Rose Al-Saadi

- 287. The effect of chemotherapy on neurovascular coupling responses and cognitive performance in breast cancer survivors: a pilot cross-sectional study**
5:45 PM - 7:45 PM
Speaker: Anna Peterfi
- 288. Leveraging a systems geroscience approach to identify drug synergy for Alzheimer's Disease**
5:45 PM - 7:45 PM
Speaker: Sushma Narayan
- 289. Deciphering the Potential for Hyperbaric Oxygen Therapy as a Geroprotective Strategy**
5:45 PM - 7:45 PM
Speaker: Kyle Jewell
- 290. Delivering Biological Therapies to the CNS Using Microglia**
5:45 PM - 7:45 PM
Speaker: Rohan Hofland
- 292. The potential role of sex chromosomes in Alzheimer's Disease: Insights from the mouse hippocampus**
5:45 PM - 7:45 PM
Speaker: Jillian Cox
- 294. Proteomics analysis of alzheimer's disease, physical activity, and inflammation**
5:45 PM - 7:45 PM
Speaker: Jennifer Kraszewski
- 295. The Gehan test identifies life-extending compounds overlooked by the log-rank test in the NIA Interventions Testing Program**
5:45 PM - 7:45 PM
Speaker: Nisi Jiang
- 296. An optimized surgical stress challenge reveals resilience as a cause and consequence of aging.**
5:45 PM - 7:45 PM
Speaker: Todd Richmann
- 297. Identification and combination of hormetic stressors in Caenorhabditis elegans**
5:45 PM - 7:45 PM
Speaker: Emily Gardea
- 298. mTOR inhibition increases amyloid-beta internalization by LRP1 and PICALM.**
5:45 PM - 7:45 PM
Speaker: Beatriz Ferran Perez
- 299. Defining a rejuvenation signature in transcription factor mediated cellular reprogramming.**
5:45 PM - 7:45 PM
Speaker: Andrew Tak
- 300. Knowledge, attitudes and beliefs toward polypharmacy among older people attending Family Medicine Clinic, Nairobi, Kenya**
5:45 PM - 7:45 PM
- 301. Unexplored Chromatin Modifications and Proteome Heterogeneity in Aging Research: Insights from Next-Generation Mass Spectrometry**
5:45 PM - 7:45 PM
Speaker: Simone Sidoli
- 302. Exploring Isogenic Cellular Lifespan Heterogeneity with Single-Cell Transcriptomic Aging Landscape Analysis in Yeast**
5:45 PM - 7:45 PM
Speaker: Nicolas Nikoloutsos
- 303. Single cell RNA sequencing to identify aging hematopoiesis in unconventional species**
5:45 PM - 7:45 PM
Speaker: Hagai Yanai
- 304. Establishing A Novel, Non-human Primate Model for Studying Age-Related Changes in Salivary Gland and Therapeutic Effects of Rapamycin**
5:45 PM - 7:45 PM
Speaker: Milos Marinkovic
- 305. mTOR-inhibition decreases post-traumatic osteoarthritis pain behavior in female mice.**
5:45 PM - 7:45 PM
Speaker: Dennis Minton
- 306. ImAge enables spatial analysis of ageing in situ.**
5:45 PM - 7:45 PM
Speaker: Alexey Terskikh
- 308. Age-related changes in DNA methylation in three primates by nanopore long-read sequencing.**
5:45 PM - 7:45 PM
Speaker: Chris Faulk
- 309. Effects of overactive PDGFR¹ and PDGFR² on skeletal muscle function and metabolism**
5:45 PM - 7:45 PM
Speaker: Mariola Gimla

8:00 PM - 9:00 PM

Trainee Data Blitz

Location: Madison / Wisconsin Rooms

8:00 PM - 10:00 PM

AGE Board of Directors Meeting (closed)

Location: Private Dining - 1st Floor

Wed, Jun 05, 2024

7:00 AM - 8:00 AM

Breakfast

Location: Madison / Wisconsin Rooms

7:00 AM - 8:00 AM

NIH Lounge at the AGE Breakfast

8:00 AM - 9:15 AM

Session 8. Comparative Biology of Aging (New models)

Location: Madison / Wisconsin Rooms

Chair: Kristin Gribble

The Dog Aging Project: A Systems Biology Perspective

8:00 AM - 8:15 AM

Speaker: Daniel Promislow

Defining a novel homeostat that senses the temporal barriers of parental reproductive-span and sets progeny stress resistance capacity.

8:15 AM - 8:30 AM

Speaker: Bennett Van Camp

Insights from the edge: Genetic analysis of exceptionally long- and short-lived species to reveal the regulation of human aging

8:30 AM - 8:45 AM

Speaker: Stephen Treaster

Understanding aging related metabolic dysregulation using the blind cavefish (*Astyanax mexicanus*)

8:45 AM - 9:00 AM

Speaker: Ansa Cobham

Viewing sex-specific aging through a comparative lens

9:00 AM - 9:15 AM

Speaker: Anne Bronikowski

9:15 AM - 9:30 AM

GeroScience Publication Awards

9:15 AM - 9:45 AM

Break

Location: Foyer

9:45 AM - 11:00 AM

Session 9. Aging with Cells, Stem cells

Location: Madison / Wisconsin Rooms

Chair: Matt Yousefzadeh

Exploring the role of amino acid toxicity in age-related organelle decline

9:45 AM - 10:00 AM

Speaker: Adam Hughes

HSF-1 promotes longevity through ubiquilin-1 dependent mitochondrial network remodelling

10:00 AM - 10:15 AM

Speaker: Annmary Erinjeri

Understanding senescence in clonal hematopoiesis

10:15 AM - 10:30 AM

Speaker: Ines Fernandez Maestre

Senescent microenvironment impacts on tumorigenesis

10:30 AM - 10:45 AM

Speaker: Darren Baker

Long lifetime and tissue-specific accumulation of lamin A/C in Hutchinson-Gilford progeria syndrome

10:45 AM - 11:00 AM

Speaker: Abby Buchwalter

11:00 AM - 11:30 AM

Honoring Judith Campisi

Location: Madison / Wisconsin Rooms

Speaker: Christopher Wiley

11:30 AM - 1:00 PM

Women in AGE Lunch

Location: Madison / Wisconsin Rooms

1:00 PM - 2:30 PM

Session 10. Role of Systemic Environment in Aging

Location: Madison / Wisconsin Rooms

Chair: Benjamin Miller, Matthew Bubak

Circulating Factors Drive Mitochondrial Alterations Associated with Human Aging and Dementia

1:00 PM - 1:15 PM

Speaker: Anthony Molina

Restoring the ability of aged muscle to adapt to aerobic exercise with heterochronic plasma transfer

1:15 PM - 1:30 PM

Speaker: Matthew Bubak

Aging as a systemic excess of signaling proteins and epigenetic noise.

1:30 PM - 1:45 PM

Speaker: Irina Conboy

Cellular resilience varies by cell type and niche in aging baboons

1:45 PM - 2:00 PM

Speaker: Daniel Adekunbi

Mechanisms of brain aging and rejuvenation

2:00 PM - 2:15 PM

Speaker: Saul Villeda

2:30 PM - 3:00 PM

James Joseph Award Presentation and Lecture

Location: Madison / Wisconsin Rooms

Speakers: Barbara Shukitt-Hale, Claire Williams

3:00 PM - 3:30 PM

Membership Meeting and Awards

Location: Madison / Wisconsin Rooms