

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

AGING BIOLOGY UPDATE

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**UAB NATHAN SHOCK CENTER OF EXCELLENCE
IN THE BASIC BIOLOGY OF AGING**

Featured

[How to target chronic, but not acute, inflammation](#)

[Lab mouse telomeres regardless of initial length do not shorten with age](#)

Basic Biology

[Multomic clocks to predict phenotypic age in mice](#)

[Chaperone-proteasome mediated fragmentation is necessary for a specific form of autophagy](#)

[Characterizing primary and secondary senescence in mice reveals tissue- and inducer-specific responses](#)

[TGF- \$\beta\$ inhibitor plus oxytocin treatment extend life and health in 25-month-old male, but not female, mice](#)

[Identifying extracellular matrix signatures of mouse cardiac aging](#)

[Blocking cGAS-STING in telomerase-deficient zebrafish prevents premature aging](#)

[No impact of long- versus short-term hematopoietic stem cell transplant on mouse myeloid-based hematopoiesis](#)

Review: [Dysfunctional mitochondria in aging T cells](#)

Clinical

RCT: [Physiology-guided complete revascularization in people >75 with myocardial infarction shows benefits maintained after 3 years](#)

[Bivalent RSV vaccine prevents cardiovascular hospitalization in older \(>60\) adults](#)

[Hospital frailty risk score predicts hospital stay duration and costs in all adults](#)

RCT: [Germicidal UV light fails to reduce the incidence, but does reduce prevalence, of acute respiratory infections in older adults in long-term care facilities](#)

[One dose of RSV vaccine reduces RSV-associated hospitalization for two seasons in adults >60](#)

Women's Health and Aging

[Growing promise of nonhormonal relief of menopause symptoms](#)

[Menopause misinformation is harming care](#)

Perspective: [Does the ovary hold the secret to the fountain of youth?](#)

Epidemiology/Demography

[Healthspan-lifespan gap smallest but most variable in Africa, expected to increase everywhere by 2100](#)

[Cohort mortality in high income countries forecasts indicate deceleration in life expectancy gains](#)

[Agreeable people live longer](#)

[Childhood hookworm de-worming improves health and longevity, many years later](#)

[Ether lipids and sphingolipids associate with sex-specific human aging dynamics](#)

[mtDNA explains at least 5% of longevity outcomes in huge extended pedigrees](#)

[Even modest regular alcohol drinking associated with lower serum \$\alpha\$ -Klotho levels](#)

[California data show that U.S. life expectancy in 2024 has not returned to pre-pandemic levels with pandemic mortality itself playing only a minor role](#)

[Epigenetic age variably linked to age acceleration in Turner and Klinefelter syndrome](#)

[Changes in US heart disease mortality patterns 1970 to 2022](#)

[Sex-specific body fat phenotype predicts cardiovascular aging](#)

Review: [Adverse drug events remain a significant cause of hospitalization in older adults](#)

Energetics/Nutrition

[Old marmosets eat more, eat faster, and eat more efficiently than young adult marmosets](#)

[An energy metabolism-based nanomedicine reverses osteoporotic bone loss in 18-month-old male mice](#)

[Late breakfasts associated with poorer health in older adults](#)

[Plant-based diet reduces risk of multimorbidity risk in middle-aged and older adults](#)

[Too much of a good thing: supplement-driven iron overload accelerates phenotypic aging](#)

[Demographic data suggests large brain size promotes survival in immature primates](#)

[BMI 25-39 \(overweight\) associated lower 30-day and 1 year mortality rates post-surgery.](#)

Evolution/Comparative

[Captive green turtles show Gompertzian mortality increase with age but negligible reproductive aging](#)

[Using metabolic theory to estimate lifespans of early animals of the Ediacaran \(ca. 580-539 Ma\)](#)

Review: [Unlocking longevity mechanisms through the comparative biology of aging](#)

Review: [Inflammaging as a diverse and context-dependent process](#)

Review: [Pleiotropies, cancer resistance and aging](#)

Novel Organisms

[Life history tradeoffs with migration in flamingos](#)

[Little penguins who grow quickly survive longer and produce more offspring](#)

[Calorie restriction, hah! *Ad lib* access to pollen increases honeybee lifespan and reverses the longevity difference between summer and winter bees](#)

Review: [Genetic and genomic insights into regeneration, aging and age-reversal from Planaria](#)

Review: [Going to the dogs—dogs as a model for human social and cognitive abilities](#)

Resources

[Genomic data in multiple British birth cohorts \(1946–2001\).](#)

Preprint: [A simple antibody-based strategy for recovering all major mouse brain cell types from multiplexed single-cell RNAseq samples](#)

Preprint: [DNA Methylation Ageing Atlas Across 17 Human Tissues](#)

Contrary or Null Findings

[Aerobic capacity and cardiopulmonary variables do not differ between pre and postmenopausal women](#)

[None of 5 models tested outperformed age and education only in predicting dementia](#)

[risk](#)

CT: [Exercise alone, but not exercise and time-restricted eating, improves some, but not all indicators of cognitive function](#)

RCT: [Patient and caregiver outcomes of different models of dementia care: if clinical measures don't differ but caregivers are more satisfied, is there a difference?](#)

Headline vs Study

Headline: [People carrying two copies of 'Alzheimer's gene' lowered risk by 35% via diet changes](#)

Study: [Interplay of genetic predisposition, plasma metabolome and Mediterranean diet in dementia risk and cognitive function](#)

Caregiving

[Nurse-led end of life community care model supports individuals' and caregivers' care preferences](#)

[Despite increased use of managed long-term services unpaid family caregivers provide the majority of care](#)

[Measuring the health status, wellbeing and burdens of informal caregivers](#)

Policy/Ethics

[How many countries does it take to make a prescription drug?](#)

[Medicaid cuts, rural hospitals and clinics—there is a tide in congressional affairs that sinks all rural boats](#)

[Nearly two-thirds of drug manufacturers are in areas at risk from climate-related disasters](#)

Commentary

[Should hospitals be public utilities?](#)

[Sarcopenia lacks clear diagnostic criteria](#)

Workshop Report: [How to build an interdisciplinary workforce in geroscience](#)

Odd and Ends

[Fauja Singh: a case for centenarian athletes?](#)

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