

AGING BIOLOGY UPDATE

BROUGHT TO YOU BY THE
UAB NATHAN SHOCK CENTER OF EXCELLENCE
IN THE BASIC BIOLOGY OF AGING

Featured

[Greater gender equality is associated with longer life expectancy for both sexes](#)

[Is aging a software design flaw?](#)

Headline vs Study

Headline: [Women show signs of cellular aging at 19 that hit men at age 40](#)

Study: [The human pathome shows sex-specific aging patterns post-development](#)

Headline: [Researchers discover a new way to fight the aging process and cancer development](#)

Study: [The DREAM complex functions as conserved master regulator of somatic DNA-repair capacities](#)

Headline: [Getting around muscle aging by modulating the function of immune cells](#)

Study: [Aging disrupts MANF-mediated immune modulation during skeletal muscle regeneration](#)

Contrary or Null Findings

[Dutch study finds plant-based diet is not associated with reduced cognitive aging](#)

Energetics/Nutrition

[Reduced force, not speed, explains declining muscle performance in active 70-year-olds](#)

[Maternal rat protein restriction influences circulating steroids in a sex and age-specific manner](#)

[Aging, energetics, brain volume and cardiovascular health in the Tsimane and Mosenen](#)

[Effects of parental dietary restriction on offspring fitness and lifespan in *D. melanogaster*](#)

[Aging and obesity modify the epigenome and transcriptome of adipose stem cells in male mice](#)

Review: [Adipose thermogenesis, aging and age-related diseases](#)

Review: [Diet and the cellular hallmarks of aging in humans](#)

Basic Biology

[Muscle-specific PARP1 inhibition extends life in *Drosophila*](#)

[Hypothalamic Menin regulates systemic aging and cognitive decline in male mice](#)

[Aging-related transcriptional activation of Jun and Fos family conserved across short- and long-lived mouse strains](#)

[Olfactory dysfunction occurs early in aging C57BL/6J mice](#)

The FEBS Journal Special Issue: [Cellular senescence in aging and disease](#)

[Small heat shock proteins: molecular chaperones in the mitochondrial intermembrane space](#)

[Sex differences in markers of oxidation and inflammation in mice, rats and humans](#)

[Senolytic treatment reduces SARS-CoV-2-related mortality in mice](#)

[Rescue of mitochondrial membrane potential extends *C. elegans* life](#)

[Preserved mitochondrial membrane potential required for lifespan extension from dietary restriction in *C. elegans*](#)

[Proteomic basis of human longevity mediated by FOXO3 longevity genotype](#)

[Regulation of the AMPK/mTOR axis delays tendon aging in male rats](#)

[A molecular complex that regulates DNA repair in *C. elegans*](#)

Model: [Dynamic modeling of the cellular senescence gene regulatory network](#)

Review: [Non-canonical autophagy in aging and age-related diseases](#)

Review: [Sex differences in inflammation and muscle wasting in aging and disease](#)

Review: [Hsp90 function in plants and animals](#)

Review: [Epigenetic rejuvenation by partial reprogramming](#)

Ecology & Evolution

[Maternal age effects on offspring lifespan vary within species: data from a rotifer](#)

[Aging, lifespan and male mitochondrial mutation accumulation](#)

Emerging Aging Models

[Life expectancy tables for dogs and cats derived from clinical data](#)

[Impaired fin regeneration and angiogenesis in aged zebrafish and turquoise killifish](#)

[Going to the dogs: translational opportunities from veterinary biobanks](#)

Novel Organisms/Comparative

[Longitudinal telomere dynamics within natural lifespans of free-living house sparrows \(*Passer domesticus*\)](#)

[Sex-specific innate immunity and ageing in long-lived freshwater turtle \(*Kinosternon flavescens*\)](#)

[Immune genotypes, immune responses, and longevity in a wild bird population](#)

[Zebra finch mitochondrial function declines with age but is not associated with mortality risk.](#)

[Fish species lifespan prediction from promoter CpG density](#)

[Mortality and life expectancy in European hedgehogs \(*Erinaceus europaeus*\)](#)

[Maximum tree lifespans: small samples suggest exceptionally long-lives](#)

[Spermidine dietary supplementation, survival and lifespan in honeybees](#)

[Age estimation based on blood DNA methylation levels in brown bears](#)

Review: [Stem cells and plant longevity variation](#)

Review: [Mitochondrial ROS, oxidative stress and aging within and between species](#)

Epidemiology/Demography

[Modifiable risk factors are associated with longevity](#)

[Distribution of APOE alleles in Europe from 12,000 BCE to the present](#)

[Network topologies for maximal organismal health span and lifespan](#)

[Menstrual lifespan, depression and healthy longevity in Chinese women 80 years and older](#)

[Successful Finnish agers still successful at 20-year follow-up](#)

[Proteomic basis of mortality resilience in men of Japanese ancestry living in Hawai'i mediated by FOXO3 longevity genotype](#)

[Intergenerational educational trajectories and longevity inequalities](#)

[SNAP! Food insufficiency associated with accelerated cognitive decline in older adults](#)

[What makes women "tough" beyond age 60?](#)

Clinical

[Multisite chronic pain linked with increased dementia risk](#)

Caregiving

[Caregivers' experiences affect care recipients' cognitive performance](#)

[Hospice profit status affects caregivers' experiences](#)

Policy/Ethics

[The fate of surplus laboratory animals](#)

[Evolutionary game analysis suggests regulatory strategies for Chinese pension systems](#)

Commentary

[Spell-checker for statistics reduces errors](#)

[The rapid growth of mega-journals: threats and opportunities](#)

Odd and Ends

[Creativity not as affected by age as you might think](#)

Aging Biology Update is brought to you by the UAB Nathan Shock Center and compiled by Kathleen Fischer, Jessica Hoffman, Heather Patterson, and Steven Austad.

[Subscribe to this newsletter.](#)



NATHAN SHOCK CENTERS
OF EXCELLENCE IN THE
BASIC BIOLOGY OF AGING



Copyright © 2023 The University of Alabama at Birmingham, All rights reserved.
1701 2nd Ave S, Birmingham, AL, 35294 US

[Privacy Policy](#) | [Terms of Use](#) | uab.edu