

**UAB** The University of Alabama at Birmingham.

# Aging Biology Update

Brought to you by the **UAB NATHAN SHOCK CENTER OF EXCELLENCE IN THE BASIC BIOLOGY OF AGING**

## Featured

[A framework for assessing the trustworthiness of scientific research findings](#)

## Basic Biology

[Plasma-derived extracellular vesicles from older individuals have miRNA signatures](#)

[Semaglutide ameliorates osteoarthritis progression through a weight loss-independent mechanism](#)

[NMU-induced breast tumors in aged female rats show distinct luminal progenitors, reduced immune response and unique mutations, also found in human breast tumors](#)

[Plasma measure of % phosphorylated tau at position 217 used to predict onset of Alzheimer's disease symptoms](#)

Review: [Contribution of DNA in non-double helical conformation to genetic diversity, aging and disease](#)

## Clinical

[Prescribing patterns of potentially inappropriate CNS-active medications in older adults](#)

Angiotensin II–stimulating antihypertensive medications are associated with lower risk of some dementia-related neuropathology

Statin use does not impair muscle health in older (>75) adults

High-risk prescriptions among older adults discharged from the ER

RCT: Collaborative medication reviews during acute primary care admissions did not improve health-related quality of life in home dwelling older adults

How do people with autism age?

Whooping cough is spreading: recognizing pertussis infection in older adults

Review: The role of vaccination in promoting healthy aging

Review: The aging immune system effects on lymphoid and non-lymphoid organs

Review: Mechanisms in thymic involution and therapeutic possibilities



A Pyrrhic victory: suicide replaces COVID-19 in the top ten rankings for leading cause of death in the US, as life expectancy rises to pre-pandemic levels

Causes and extent of avoidable mortality across the European Union

BRCA1/BRCA2 pathogenic germline variant carriers have increased incidence of clinically significant prostate cancer

Cognitive decline is associated with sex-specific mortality predictors

Are we there yet? The limits of predicting individual-level longevity

Modeling the legacy of slavery for current county-level impact on mortality

Healthy longevity in Russian individuals >90 years is positively associated with MYO18B, TBC1D28, and LOC105376454 genes



Women, to live long, stay strong!

Very high levels of lipoprotein(a) are associated with increased risk of cardiovascular disease among healthy women

[Low-dose tamoxifen ameliorates ovariectomy-induced metabolic and immune dysfunction in mice](#)

[Microbial dysbiosis is associated with overactive bladder syndrome in women](#)

[Higher bioavailable serum estradiol and testosterone concentrations are associated with reduced odds of sarcopenia in post-menopausal women](#)

[Maternal obesity decreases offspring lifespan in mice](#)

[Caloric restriction is associated with life-long improved body weight homeostasis in female diversity outbred mice](#)

[Primary skeletal myoblasts from older people show mitochondrial hyperfusion and increased mitochondria–endoplasmic reticulum contact sites](#)

[Sex and genes influence longevity effects of intermittent fasting in mouse strains](#)

Review: [Visceral adiposity's effect on metabolic health and aging is context dependent](#)

Preprint: [The aging mouse lipidome](#)

[Phylogenetic analysis of host defenses and transposable elements offers insights into termite aging](#)

[Comparison of DNA methylation across tissues and ages in two species of annual killifish](#)

[Comparative analysis of neurofilament light chain suggests it might be a useful blood biomarker to assess aging](#)

[Fish in warmer water tend to have faster life histories and shorter lifespans: data from 7 species and 2704 lakes](#)

[The evolvable soma theory of aging](#)

[Age-related accumulation of mtDNA insertions and deletions occur in energetically demanding tissue in humans, macaques and mice](#)

Review: [Comparison of the turquoise killifish, zebrafish, medaka and fugu as aging models](#)

## Novel Organisms

[Reproductive aging in the long-lived Scopoli's shearwater is trait- and sex-specific](#)

## Resources

[ASCENT: a resource to support palliative care research across the lifespan](#)

[Cohort Profile Update: HUNT4 70+](#)

## Contrary or Null Findings

[Human genetic IL-6 receptor blockade is not associated with lower chronic disease risk or longevity](#)

## Caregiving

[Following widowhood European men, but not women, reduce caregiving for grandchildren](#)

## Policy/Ethics

[Forced disenrollments among Medicare Advantage beneficiaries](#)

[The changing dynamics of quality measurement in Medicare Programs and why it matters](#)

## Commentary

Review: [Brave new world: Digital ADLs?](#)

## Odds and Ends

[Effective population size does not predict mutation rate or genome size](#)

[Did microchromosomes save birds and other dinosaurs from extinction?](#)

[Drug safety during pregnancy—the unknown unknowns](#)

[Emergency department pregnancy tests without consent](#)

[Giant DNA viruses use viral translation-initiation complex on host ribosomes to hijack eukaryotic protein synthesis](#)

[Escape from X inactivation varies across genes and tissues and shapes sex-biased sex chromosome gene expression](#)

[DNA methylation markers to identify vaginal secretions and/or menstrual blood in the context of sexual assaults irrespective of age or hormone status](#)

---

*Aging Biology Update is brought to you by the UAB Nathan Shock Center and compiled by Kathleen Fischer and Steven Austad.*

Subscribe to this newsletter



NATHAN SHOCK CENTERS  
OF EXCELLENCE IN THE  
BASIC BIOLOGY OF AGING



---

Copyright © 2026 The University of Alabama at Birmingham, All rights reserved.  
1701 2nd Ave S, Birmingham, AL, 35294 US

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