

AGING BIOLOGY UPDATE

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

Featured

[Unique mechanism of enhanced DNA repair discovered in long-lived naked mole-rats](#)

[Loss of glucagon receptor signaling abolishes the health benefits of calorie restriction in aging male mice](#)

Basic Biology

[Herbal terpenoids activate autophagy and mitophagy through bioenergetic modulation in diverse animal models](#)

[CtBP2 secreted via exosomes improves mouse longevity and health with suggestive associations in humans](#)

[Ubiquitin precursor with C-terminal extension promotes stress resistance, mitophagy, and longevity in yeast and worms](#)

[Lysosomal signaling via the epigenome contributes to transgenerational longevity in worms](#)

[Intraocular polyunsaturated fatty acid supplementation reverses aging-related vision decline in male mice](#)

[Changes in gene expression and alternative splicing events are age- and sex-specific](#)

[Individual biological aging linked to loss of coordination in transcriptional networks](#)

[Gene expression profiles and biological responses of skin fibroblasts to nicotinamide mononucleotide \(NMN\)](#)

Energetics/Nutrition

[Study suggests low BMR associated with increased dementia risk over 5 years](#)

[Mom was right: meal skipping in mid-life is associated with physical frailty in late life](#)

[Fit mouse fathers improve adult offspring endurance and metabolic health via sperm microRNAs](#)

[Accelerated performance gains of older women swimmers](#)

[Upper body strength declines more rapidly in older men than in older women](#)

[Energy, but not protein, requirements were met in geriatric rehabilitation inpatients receiving nutrition care](#)

Methodology: [A consensus guide to preclinical indirect calorimetry experiments](#)

Epidemiology/Demography

[Comprehensive analysis of coding single nucleotide polymorphisms in 18 supercentenarians and 3 centenarians](#)

[Women found to be less frail than men at ages younger than 80 years, more frail at ages greater than 100 years with no significant difference at in-between ages](#)

[Lower levels of free testosterone linked to cognitive impairment in older women but not older men](#)

[More steps per day required for survival benefit in low socioeconomic status individuals](#)

[A proteomic-based aging clock suggests sex-specific aging and mortality trajectories](#)

[9/11 World Trade Center-exposed women show accelerated epigenetic aging in some, but not all, epigenetic clocks](#)

Preprint: [Biased data in, biased models out: brain age algorithm performance by ethnicity](#)

Clinical

[Resistance exercise improves physical performance measures even in centenarians](#)

[Grip strength normalized to arm muscle mass better reflects physical performance decline than grip strength alone](#)

[30-item deficit accumulation frailty index \(FI\) from shared variables across 25 countries is a useful tool for understanding aging in a global context](#)

[80% of community dwelling older adults prioritized social activities over their own health](#)

[Calcium-channel blockers improve some markers of heart failure in women, but not men](#)

[Prescribing exercise and medication together in geriatric care](#)

[Doctors and hucksters: seeking the fountain of youth](#)

Review: [Treatment for Alzheimer's disease](#)

Review: [Contributions of chronic infection to cellular senescence](#)

Review: [Poor timing: bias in epigenetic clocks](#)

Review: [Targeting NAD+ in the clinic](#)

Women's Health and Aging

[Both earliest and latest menopause are associated with more rapid progression to frailty](#)

[A U-shaped relation between number of live births and premature mortality](#)

[Serum FSH levels are inversely correlated with metabolic disorders in post-menopausal women](#)

[Hormone replacement therapy reduces age-associated inflammatory monocytes in post-menopausal women](#)

Review: [Ovarian aging: beyond fertility to female reproductive health](#)

Review: [Reproductive aging in biological females](#)

Perspective: [Trying to Unravel Why Alzheimer Disease Is More Common in Women](#)

Negative or Null Results

[Ten-year observational study also finds no long-term benefit of low-dose aspirin versus placebo on mortality, dementia, or physical disability](#)

[β-amyloid accumulation not associated with poor cognitive performance](#)

Evolution/Comparative

[Does sexual selection drive sex differences in adult life expectancy among birds and mammals?](#)

[Comparative analysis of cystathionine gamma-lyase in long-lived mammals](#)

Novel Organisms

[Wild House Sparrows reared with greater in-nest competition show increased early- and decreased late-life annual survival](#)

[Adult lifespan and reproductive success are influenced by maternal age in sons, but not daughters, in Soay sheep](#)

[Let them eat cake? Mosquitoes live longer eating high sugar diets](#)

[Long-term study of small \(6 cm\) threatened mountain yellow-legged frog finds maximum longevity of at least 23 years in the wild](#)

Resources

[An open-access database of AI-generated faces that represents the same individuals at three life stages](#)

[BIRDBASE: "a global avian trait dataset"](#)

Care-giving

[What makes older people a burden: privileging young adults' lives](#)

RCT: [Community based care does not affect clinical measures but does increase caregiver satisfaction](#)

Policy/Ethics

[Ending publication bias: the value of null and negative results](#)

[Federal housing assistance is associated with earlier cancer diagnosis in older adults](#)

[Combating climate change in an era of longevity](#)

Commentary

Perspective: [Aging as a never-healing wound](#)

[Reductio ad absurdum: what if NIH had been 40% smaller?](#)

[Women scientists are underrepresented in science reporting](#)

Odd and Ends

[One off: tales from the study of one 117-year-old woman](#)

[Ah, to be 26 again: how aging affects performance in elite football \(soccer\)](#)

[Remembering Jane Goodall: The Simple Habits That Kept Her Mind Sharp for 91 Years](#)

[Move over metazoans! A unicellular cryptophyte alga \(*Guillardia theta*\) produces apoptotic bodies too](#)

Aging Biology Update is brought to you by the **UAB Nathan Shock Center** and compiled ***without AI***, by Kathleen Fischer and Steven Austad. [Subscribe to this newsletter](#).



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