

AGING BIOLOGY UPDATE

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

Featured

[Into the wild: lab mice exposed to natural environments make better models](#)

[Taurine deficiency, a driver of aging?](#)

[Regulation of Insulin/IGF-1 signaling by miR-142-3p associated with human longevity](#)

[Signaling by senescent melanocytes hyperactivates hair growth](#)

Headline vs Study

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Study: [Multi-omic rejuvenation of human cells by maturation phase transient reprogramming](#)

Headline: [Researchers make breakthrough in quest for longer life](#)

Study: [Engineering longevity—design of a synthetic gene oscillator to slow cellular aging](#)

Contrary or Null Findings

[Being active may reflect a healthy phenotype instead of causally reducing mortality](#)

[LAMP2A, and other chaperone-mediated autophagy related proteins, *do not* decline with age in genetically heterogeneous UM-HET3 mice](#)

[Omega-3 PUFA and cocoa flavanols did not improve cognition of brain structure in older adults with memory complaints](#)

[Low-volume alcohol drinking is not associated with protection against death](#)

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[Randomized clinical trial daily multivitamin maintains memory in older adults](#)

[Mendelian randomization supports causality between overweight status and accelerated aging](#)

[Effects of graded levels of calorie restriction on survival and body mass dynamics in](#)

[male C57BL/6J mice](#)

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Basic Biology

[Sex-specific effects of Cre expression in Syn1Cre mice](#)

[Co-housing with conspecific corpses reduces fly longevity](#)

[Senescent immune cells promote brown adipose tissue dysfunction](#)

[Combination of two life-extending drugs shortens worm lifespan](#)

[Discovery of three new senolytics using machine learning](#)

[Metabolic rewiring of mitochondria in senescent human fibroblasts](#)

[Strain and social rank affect lifespan of stressed mice](#)

[Aging disrupts mouse gene expression timing during muscle regeneration](#)

[Coordinated transcriptional upregulation of oxidative metabolism proteins in long-lived mice with disrupted growth hormone signaling](#)

[Genetically heterogenous rat reveals importance of mitochondrial genotype in aging interventions](#)

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[Hypoxia extends life in a DNA repair deficient mouse](#)

[Rapamycin supplementation of *Drosophila* larvae has complex effects on adult longevity](#)

[Myelin dysfunction drives amyloid- \$\beta\$ deposition in mouse models of Alzheimer's disease](#)

[Nutritional supplements appear to inhibit premature ovarian senescence](#)

[Genetic perturbation of AMP biosynthesis extends lifespan and restores health in male turquoise killifish](#)

[Cellular senescence in aging white matter microglia exacerbates neuroinflammation in mice](#)

[A p21-GFP zebrafish model of senescence for rapid testing of senolytics in vivo](#)

[Bone modeling and remodeling in aging mammals: data from aged rats](#)

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[Detecting Selection Bias in Observational Studies—When Interventions Work Too Fast](#)

[Computer use: a protective factor for cognition in aging and HIV disease?](#)

[Accelerometer activity profile as digital biomarker of inflammation and mortality](#)

[Immunocompetence-inflammation balance linked to favorable immunity-dependent health outcomes across lifespan](#)

[Low skeletal muscle mass index and all-cause mortality risk in adults](#)

[Study suggest mild parkinsonian signs may be prevalent in adults over 80](#)

[Discrepancies in dementia mortality reported in vital statistics worldwide](#)

[Secular trends in premature and early menopause in low-income and middle-income countries](#)

[Daytime, not nocturnal, insomnia symptoms appear to drive mortality risk in an older population](#)

[Sex differences in vision and hearing impairments across age and European regions](#)

Clinical

[An international preoperative risk assessment model for postoperative delirium](#)

[Can THC and cannabidiol be used to treat behavioral and neuropsychiatric symptoms of dementia?](#)

[Effects of exercise and behavior change enhancement on fatigue in older adults](#)

[Gait speed reference values for adults aged 90 and older](#)

[Training the aging bodies: new paradigms and practices in elder care](#)

[Frailty as a predictor of major trauma outcomes in older people](#)

[Differential utility of various frailty diagnostic tools in non-geriatric hospital settings](#)

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Ecology & Evolution

[Sex differences in longevity are not linked to the Y chromosome in *Drosophila*](#)

[Gene expression associated with long lifespan and aging conserved across mammals](#)

[Social and early life determinants of survival in a population of wild baboons](#)

[Kin-directed help and the evolution of menopause: data from Bigg's killer whales](#)

[Orshina Rhythm in a colonial tunicate: recurrent aging/rejuvenation cycles](#)

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[Comparison of DNA methylation clocks for clawed frogs and humans](#)

[Comparative analysis of bats and rodents' genomes suggests a relation between non-LTR retrotransposons and aging](#)

[Maternal effect senescence via reduced DNA repair ability in the three-spined stickleback](#)

[Unique heat shock factor extends lifespan in ant, *Harpegnathos saltator*, and flies](#)

[Vocal learning appears stable in aged male budgerigars](#)

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

Preprint: [Daily activity profiles as biomarkers of aging in female Medflies](#)

[Social determinants of health and disease in companion dogs](#)

[Formerly bile-farmed bears as a model of accelerated aging](#)

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[Online training for healthcare professionals caring for older adults](#)

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Aging Biology Update is brought to you by the UAB Nathan Shock Center and compiled by Kathleen Fischer, Jessica Hoffman, Heather Patterson, Caroline Hardman, and Steven Austad. [Subscribe to this newsletter.](#)



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