

# **AGING BIOLOGY UPDATE**

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

## **Featured**

[Sex differences in optimal nutrition for longevity in fruit flies](#)

[Sex differences in human immune system aging](#)

## **Headline vs study**

[Headline: This fish may be the secret to preventing human aging](#)

[Study: Vertebrate diapause preserves organisms long term through Polycomb complex members](#)

[Headline: Researchers discover new cellular mechanism related to aging and chronic illnesses](#)

[Study: Control of protein function through oxidation and reduction of persulfidated states](#)

[Headline: Consuming this condiment after exercise slows aging](#)

[Study: Lipid droplet-derived monounsaturated fatty acids traffic via PLIN5 to allosterically activate SIRT1](#)

[Headline: Unhealthy aging could be thwarted in the future by new molecular discovery](#)

[Study: Two conserved epigenetic regulators prevent healthy ageing](#)

## **Contrary or Null Findings**

[Few changes in the gut microbiome of rhesus macaques with age](#)

## **Energetics/Nutrition**

[One-year Mediterranean diet intervention improves older people's gut microbiome](#)

[High intensity interval training reduces inflammation more than moderate intensity continuous training in aged female rats](#)

[Review: Metabolic adaptation to calorie restriction in humans](#)

[Review: Obesity and aging: Two sides of the same coin](#)

## **Basic Biology**

[Reducing hypothalamic stem cell senescence protects against aging-associated physiological decline in male mice](#)

[Transcriptomic differences between healthy and normal aging in humans](#)

[Overexpression of a small nucleolar RNA extends life in flies](#)

[Using atomic force microscopy to measure healthspan in worms](#)

[NAD<sup>+</sup> repletion rescues fertility in older female mice](#)

[Statin supplementation increase health and lifespan in worms](#)

[Mitochondrial metabolism is differently regulated and sex matters in wild-type vs growth hormone releasing hormone knockout mice](#)

[Review: Pedomorphy and prolonged lifespan in naked mole-rats and dwarf mice](#)

[Review: The aryl hydrocarbon receptor and aging](#)

[Review: The biology of skin aging](#)

## **Ecology & Evolution**

[Combining maximum longevity, annual survival, and age at first breeding to estimate extinction risks in birds](#)

[Older mother yellow bellied marmots produce daughters with greater reproductive success](#)

[Sons accelerate maternal aging in bighorn sheep](#)

[Evolutionary constraint of molecular pathways correlates with longevity across species](#)

[Modeling variance as a life history outcome](#)

## **Novel Organisms/ Comparative**

[Telomere length and antioxidant defense levels are associated with longevity in lizards](#)

[Review: The turquoise killifish as a model of aging](#)

## **Epidemiology/Demography**

[Increased height in young men is associated with decreased risk of dementia in later life](#)

[Premature mortality related to United States cross-state air pollution](#)

[Religious people only live longer in cultures that value religion](#)

## **Clinical**

[Metformin use is associated with decreased risk of osteoporosis in older women](#)

[Prevention of falls in community-dwelling older adults](#)

[Later or more severe hot flashes linked to accelerated epigenetic aging](#)

[Older HIV-infected women experience lower quality of life than age-matched HIV-infected men](#)

[Review: Does vascular aging contribute to Alzheimer's disease?](#)

### **Care-giving**

[Almost 20% of US informal caregivers report being fair or poor health](#)

[Special issue: Cognitive impairment and family caregiving](#)

### **Policy/Ethics**

[New book: Aging and human nature](#)

### **Commentary**

[Another Alzheimer's trial fails](#)

### **Odd and Ends**

[The ultra-rich are investing in companies trying to reverse aging. Is it going to work?](#)

[How does age affect the severity of traffic accidents?](#)

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Aging Biology Update is brought to you by the UAB Nathan Shock Center and compiled by Jessica Hoffman, Steven Austad, Ashley Turner, Heather Patterson, Katelynn Corder, and Ana Sogorovic. [Subscribe to this newsletter.](#)



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