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+ 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?

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.