

## Anti-Aging Therapeutics (MCB 3841W) – Spring 2024 Calendar

<b>Wk</b>	<b>Dates</b>	<b>Topic</b>	<b>Tuesday</b>	<b>Thursday</b>
1	Jan 16, Jan 18	Biological Aging & Geroscience Principles	Introduction to the course	Sierra, 2016 Lopez-Otin, 2023
2	Jan 23, Jan 25	Navigating PubMed & Journals	PubMed & Journal Websites	How to read/write a Scientific Abstract
3	Jan 30, Feb 1	Headlines vs Studies (Samples below)	Discussion of Examples	Paragraph Due
4	Feb 6, Feb 8	Activity	Paper Discussion	Paragraph Due
5	Feb 13, Feb 15	Diet	Paper Discussion	Paragraph Due
6	Feb 20, Feb 22	Drug	Paper Discussion <i>Submit paper choice #1</i>	Paragraph Due
7	Feb 27, Feb 29		Q & A	5pg Paper Due (lay audience)
8	Mar 5, Mar 7	Guest Speakers	Q & A, Preview of Guests	Ji-Young Lee JL Paragraph Due
-	<b>Spring Break</b>			
9	Mar 19, Mar 21	Guest Speakers	Jenna Bartley Iman Al-Naggar	JB Paragraph Due IA Paragraph Due
10	Mar 26, Mar 28 KC traveling	Guest Speakers	Ming Xu <i>Submit paper choice #2</i>	MX Paragraph Due
11	Apr 2, Apr 4	Publication Processes	Manuscript Discussion	Revisions Due for 5pg lay article
12	Apr 9, Apr 11 KC traveling		Q & A <i>Schedule Presentations</i>	5 pg Paper Due (scientific audience)
13	Apr 16, Apr 18		Presentations	Presentations
14	Apr 23, Apr 25		Presentations	Presentations
	Apr 26			Revisions Due for 5pg scientific article

## **Aging Biology Update**

### **Headline vs Study** (samples)

Headline: [Rejuvenation of woman's skin could tackle diseases of ageing](#)

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](#)

Headline: [To live longer, pick up the pace for just three minutes a day](#)

Study: [Association of wearable device-measured vigorous intermittent lifestyle physical activity with mortality](#)

Headline: [Aging is driven by unbalanced genes](#)

Study: [Aging is associated with a systemic length-associated transcriptome imbalance](#)

Headline: [Increasing longevity: Vigorous exercise 2 minutes a day may be enough](#)

Study: [Vigorous physical activity, incident heart disease, and cancer: how little is enough?](#)

Headline: ['Zombie cells' in the body tied to aging may actually help heal tissue damage](#)

Study: [Sentinel p16INK4a+ cells in the basement membrane form a reparative niche in the lung](#)

Headline: [New study reveals how the reproductive system can accelerate aging and worsen health](#)

Study: [Meiotic dysfunction accelerates somatic aging in \*Caenorhabditis elegans\*](#)

Headline: ["Unexpected" – scientists discover an anti-aging mechanism](#)

Study: [An intercellular transfer of telomeres rescues T cells from senescence and promotes long-term immunological memory](#)

Headline: [Drinking coffee linked to a longer lifespan](#)

Study: [The impact of coffee subtypes on incident cardiovascular disease, arrhythmias, and mortality: long-term outcomes from the UK Biobank](#)

Headline: [Eating cheese and drinking red wine can reduce your risk of Alzheimer's, study claims](#)

Study: [Genetic Factors of Alzheimer's Disease Modulate How Diet is Associated with Long-Term Cognitive Trajectories: A UK Biobank Study](#)

Headline: [Urgent warning to anyone who's had common virus over increased risk of stroke](#)

Study: [Zoster-Associated Prothrombotic Plasma Exosomes and Increased Stroke Risk](#)

Headline: [Scary evidence: how a common habit could increase your risk of Alzheimer's and dementia](#)

Study: [Chlamydia pneumoniae can infect the central nervous system via the olfactory and trigeminal nerves and contributes to Alzheimer's disease risk](#)

Headline: [Men age faster than women, study claims](#)  
Study: [Do Epigenetic Clocks Provide Explanations for Sex Differences in Life Span? A Cross-Sectional Twin Study](#)

Headline: [Physical activity may have a stronger role than genes in longevity](#)  
Study: [Associations of accelerometer-measured physical activity and sedentary time with all-cause mortality by genetic predisposition for longevity](#)

Headline: [Live longer: The food that may boost longevity by 18% - great 'potential against aging'](#)  
Study: [Antioxidant and anti-aging potential of Juniper berry \(\*Juniperus communis\* L.\) essential oil in \*Caenorhabditis elegans\* model system](#)

Headline: [Could this little-known part of your cells help reverse aging?](#)  
Study: [Plasmalogens eliminate aging-associated synaptic defects and microglia-mediated neuroinflammation in mice](#)

Headline [Immortal jellyfish may prevent human aging, research says](#)  
Study: [Comparative genomics of mortal and immortal cnidarians unveils novel keys behind rejuvenation](#)

Headline: [Here's something unexpected: Sunbathers live longer](#)  
Study: [Avoidance of sun exposure as a risk factor for major causes of death: a competing risk analysis of the Melanoma in Southern Sweden cohort](#)

Headline: [Risk factor for developing Alzheimer's disease increases by 50-80% in older adults who caught COVID-19](#)  
Study: [Association of COVID-19 with new-onset Alzheimer's disease](#)

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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, and Steven Austad. [Subscribe to this newsletter.](#)