

### 109 學年度 老化研究特論(Special Topics on Aging Research )

這門課程的目標，是期望將老化研究領域中的重要文獻背景做回顧，並探討最近的突破與發現。並希望藉由介紹老化研究領域的研究模式，讓學生能從單一細胞老化、到生物體的衰老及與老化相關疾病如癌症、神經退化疾病的產生的已知機制與模式能有廣泛的認知。

時 間：Friday AM 10:10-12:00

地 點：醫學院 303D 教室

協調人：蔣輯武老師 (分醫所) Tel: 3637 陳昌熙老師 (生化所) Tel: 5548

助教：陳宜馨 簡姣樺 (分醫所) Tel:3591

週次 Week	進度說明 Progress Description	日期	教師
1	Introduction to aging	2/26	蔣輯武
2	The molecular genetics of aging	3/5	蔣輯武
3	Aging in model organisms I	3/12	陳昌熙
4	Aging in model organisms II	3/19	蔣輯武
5	From cell dividing to cell senescence	3/26	蔣輯武
6	Cell senescence, oncogene, and cancer	4/9	蔣輯武
7	Mitochondria, Oxidative stress, and aging I	4/16	莊季瑛
8	Mitochondria, Oxidative stress, and aging II	4/23	莊季瑛
9	Calorie restriction and aging	4/30	蔣輯武
10	Discussions on aging research (PBL)	5/7	蔣輯武
11	Molecular basis of neurodegeneration	5/14	張南山
12	Drosophila as a model for human neurodegenerative disease	5/21	姜學誠
13	Reproductive aging	5/28	郭保麟
14	Discussions on aging research (PBL)	6/4	陳昌熙
15	The keys to longevity	6/11	蔣輯武
16	Final reports	6/18	蔣輯武

#### Class format

The class will include lectures and journal club in some of the topics. Each student is required to present a paper assigned by the instructor.

~The grade for this class will be given by evaluating participations (including attendance) in the class (20%) and performances in the oral presentation (40%) and a final written report (40%). Turn in the final written report no later than 5 pm on June 18, 2021

**Guidelines for the final report**

The written report should be typed in A4 paper with 6-page limit, including cover page

Please find a topic related to the topics lectured in the course and prepare a report following the guidelines as follows.

1. Abstract, a half page
2. Background and significance, 2 pages
3. Unsolved issues to be addressed, a half page
4. Goals (aims) to be pursued, less than a half page
5. Experimental rationale, strategy, and methods, 3 pages
6. Expected results, 2 pages
7. References