## 106 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: 朱沛容 (分醫所) Tel:3591

週次 Week	進度說明 Progress Description	日期	教師
1	Introduction to aging	3/2	蔣輯武
2	The molecular genetics of aging	3/9	蔣輯武
3	Aging in model organisms I	3/16	陳昌熙
4	Aging in model organisms II	3/23	蔣輯武
5	From cell dividing to cell senescence	3/30	蔣輯武
6	Mitochondria, Oxidative stress, and aging I	4/13	莊季瑛
7	Mitochondria, Oxidative stress, and aging II	4/20	莊季瑛
8	Cell senescence, oncogene, and cancer	4/27	吳梨華
9	Calorie restriction and aging	5/4	蔣輯武
10	Discussions on aging research (PBL)	5/11	蔣輯武
11	The molecular pathogenesis of Alzheimer's disease in aging	5/18	郭余民
12	Molecular basis of neurodegeneration	5/25	張南山
13	Reproductive aging	6/1	郭保麟
14	Discussions on aging research (PBL)	6/8	陳昌熙
15	The keys to longevity	6/15	蔣輯武
16	Final report(Oral presentation)	6/22	陳昌熙/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%).
- ~The final report will include a written report and an 7-min oral presentation on June 22 for introducing the highlights of the report.
- ~ Turn in the final written report no later than 5 pm on June 22, 2018

## **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

**The oral presentation** is limited to 7 minutes and should be organized for the following points:1. The most important background information facilitates the study. 2. The most important finding/concept of the study. 3. The significance of this study contributes to the related research field.