

日期	主題	備註
2/20	Lecture: 介紹助教、分組；看實驗室安全錄影帶；儀器、器材、實驗室介紹；學期評分說明；介紹動物細胞培養及培養基成分 Lab: Clean culture room, 練習sterile techniques	陳令儀老師
2/27	Lecture: Methods for counting, freezing and thawing cells、介紹光學顯微鏡(助教) Lab: 練習使用pipetman, 配製培養基, 觀察細胞, feed cells, 看影片(空檔時間) ※週間需和助教約時間feed cells	
3/5	Lab: 觀察細胞、細胞繼代培養、細胞計數、凍細胞、決定細胞生長曲線、growth curve and doubling time計算練習+看影片(空檔時間) ※週間需和助教約時間，於不同時間點作細胞計數	
3/12	Lecture: Introducing membrane protein and actin cytoskeleton structure of cells and immunofluorescence staining technique Introducing immunofluorescence microscope (助教) Lab: 解凍細胞, 觀察細胞 recovery rate計算練習(空檔時間) ※隔天作細胞計數估計存活率	
3/19	Lecture: 操作考(2hr) Lab: Perform wound-healing assays to measure cancer cell migration ※隔天觀察cell migration結果	
3/26	Lab: Immunofluorescence staining of mitochondria and actin cytoskeleton structure of COS-7 cells, taking images (please make reservation ahead of time and show up to use the microscope on time), 課程內容複習(空檔時間) ※隔天觀察染色結果	
4/2	Presentation	
4/9	mid-term exam (1.5hr)	
4/16	Plasmid DNA extraction	林玉俊老師
4/23	DNA transfection and live-cell imaging ※隔天照live-cell imaging	
4/30	Calcium imaging	
5/7	Promoter activity assay ※週間回來做induction及看結果	
5/14	Image J analysis	
5/21	Presentation	
5/28	Final exam	