

| 日期        | 主題  | 備註                              |         |
|-----------|---|---------------------------------|---------|
| 2/14-3/28 | 實驗介紹與分組   | 葉世榮老師                           |         |
|           | 電生理儀器設備概念與使用  |                                 |         |
|           | 心電圖測量   |                                 |         |
|           | 魔鬼魚電生理訊號測量  |                                 |         |
|           | 螯蝦逃跑行為與神經衝動   |                                 |         |
|           | 螯蝦神經構造與解剖   |                                 |         |
|           | 胞外興奮性神經電位與動作電位測量  |                                 |         |
| 4/11      | <b>Lecture:</b> 介紹助教, 看錄影帶, 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<br><b>Lab:</b> Clean culture room, 練習使用 pipet aid, pipetman, 練習 sterile techniques  | 練習時分兩半, 一半在R330一半在R326 (R326場佈) |         |
| 4/18-4/21 | <b>Lecture:</b> Methods for counting, freezing and thawing cells、介紹光學顯微鏡(助教)<br><b>Lab:</b> 配製培養基, 觀察細胞, feed cells, 看影片(空檔時間)<br>※週間需和助教約時間feed cells  | 借影片(2hr)                        |         |
| 4/25-4/28 | <b>Lab:</b> 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)<br>※週間需和助教約時間, 於不同時間點作細胞計數   | 借影片(1hr)                        |         |
| 5/2, 3    | <b>Lecture:</b> Introducing membrane protein and actin cytoskeleton structure of cells and immunofluorescence staining technique<br>Introducing immunofluorescence microscope (助教)<br><b>Lab:</b> 解凍細胞, 觀察細胞 recovery rate計算練習(空檔時間)<br>※隔天作細胞計數估計存活率 | 陳令儀老師                           |         |
| 5/9, 10   | <b>Lecture:</b> 操作考(2hr)<br><b>Lab:</b> Perform wound-healing assays to measure cancer cell migration<br>※隔天觀察cell migration結果  |                                 |         |
| 5/16, 17  | <b>Lab:</b> 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)<br>※隔天觀察染色結果                   |                                 | 匯集各週ppt |
| 5/23      | <b>Presentation</b>   |                                 |         |
| 6/6       | <b>Final exam (1.5hr)</b>   |                                 |         |