

國立清華大學 112 學年第 1 學期新開課程課程大綱

科號 Course Number		學分 Credit	2	人數限制 Class Size	0
中文名稱 Course Title	細胞核膜特論 II				
英文名稱 Course English Title	Special Topics in Nuclear Envelope II				
任課教師 Instructor	李以如				
上課時間 Time	F7F8	上課教室 Room			

課程簡述(必填)(最多 500 個中文字) 本欄位資料會上傳教育部課程網  
Brief Course Description (required) (50-200 words if possible, up to 1000 letters)

細胞核膜是將細胞核中的遺傳物質與細胞質分開的重要構造。失去了此分隔作用會造成基因體的不穩定，也與許多疾病(例如癌症及早衰症)息息相關。在這個課程中，將會由同學上台報告近期有關於細胞核膜的科學論文及分享實驗進度，並帶領討論，學習到細胞在不同狀態下是如何維持細胞核膜的完整性。

The nuclear envelope separates the genome from the rest of the cell, which is critical to the function and stability of the genome. The loss of nuclear envelope integrity is associated with various diseases including cancers and progeria, etc. In this course, students will learn about how cells establish and maintain the integrity of the nuclear envelope under different conditions via reading, presenting, and discussing journal articles as well as discussing the latest research progress.

請輸入課程內容「中文暨英文關鍵字」至少 5 個，每個關鍵字至多 20 個中文，以半形逗點分隔 (必填)

Please fill in at least 5 course keywords (up to 40 letters for each keyword) and use commas to separate them.(required)

細胞核膜,基因體穩定性,核膜組合,核膜破裂,膜重組

nuclear envelope, genome stability, nuclear envelope assembly, nuclear envelope rupture, membrane remodeling

一、課程說明	<p>本課程的目標為全面性的了解細胞核膜的組合和重組。學生需要閱讀相關文獻並上台報告，並且參與討論。 需與授課教師討論後加簽選課。</p> <p>The objective of this course will be to comprehensively</p>
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	<p>understand the assembly and remodeling of nuclear envelope in the cell. This will be achieved by reading and presenting classic and current literatures on nuclear envelope integrity, and discussion in an interactive environment.</p> <p>Permission from the instructor is required.</p>
二、指定用書	<p>無</p> <p>N/A</p>
三、參考書籍	<p>分子細胞生物學教科書相關章節及期刊文章</p> <p>Molecular Cell Biology textbook chapters and current literature</p>
四、教學方式	<p>學生們將閱讀期刊文章並輪流上台報告，並參與由指導老師帶領的討論。</p> <p>The students will read assigned literatures and take turns presenting the paper. The students are also expected to participate in discussions.</p>
五、教學進度	<p>本課程將會包含以下的主題：</p> <ul style="list-style-type: none"> <li>• 細胞核膜的研究方法</li> <li>• 當下對核模組合的了解</li> <li>• 細胞核膜不正常表徵與基因體穩定性</li> </ul> <p>Major topics that will be included in this class:</p> <ul style="list-style-type: none"> <li>• Methodologies for studying nuclear envelope remodeling.</li> <li>• Current understanding of nuclear envelope assembly and knowledge gaps.</li> <li>• Nuclear atypia and genome stability.</li> </ul>
六、成績考核	<p>10% 出席，50% 上台報告，40% 討論。</p> <p>10% attendance, 50% presentation, 40% discussion.</p>
七、可連結之網頁位址(相關網頁)	