



Experience

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研究方向

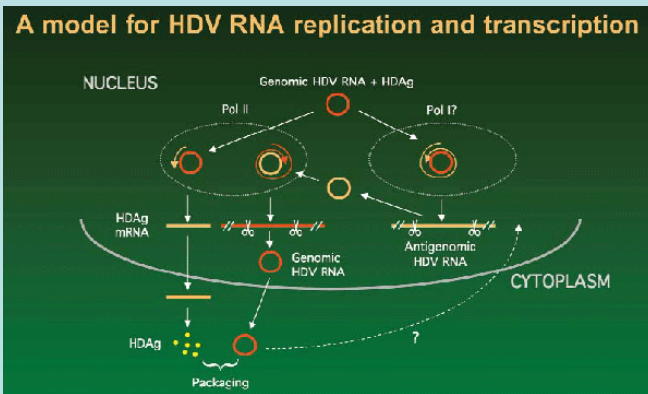
我們的研究重點是各種RNA 病毒的分子生物學及致病機制。

本實驗室現在所研究的病毒包括三種病毒：

第一種是冠狀病毒。此病毒包括引起嚴重急性呼吸道症候群 (severe acute respiratory syndrome, SARS) 的病毒。我們過去發現許多這類病毒的基因構造及繁殖的方法。近年來特別專注於研究這些病毒RNA 複製過程中所需要的細胞因素。未來的研究將注重於SARS 病毒的基因與蛋白質的性質，以及它引起嚴重症狀的原因。

第二種病毒是C型肝炎病毒。此病毒引起慢性肝炎而會引發肝硬化及肝癌，為近年所發現最嚴重及最常見的肝炎病毒之一。本實驗室要了解這個病毒如何複製RNA，我們將從分析RNA 複製所需的蛋白質 (包括病毒蛋白及細胞因素) 著手，進而瞭解哪些步驟可以用以發展抗病毒的藥品。我們已經發展出一種培養C型肝炎病毒的細胞，能用以研究這個病毒在感染細胞後所引起的變化。經由此方法，我們已經能夠了解C型肝炎病毒引起癌症的機轉。目前已發現這個病毒會引起細胞基因的破壞並抑制基因修補的功能，因而引起染色體的斷裂及細胞基因的變化。

第三種病毒是D型肝炎病毒。這個病毒帶有圓形的RNA，是在自然界很奇特的RNA，特別是它的複製需要把細胞的RNA 聚合酶改變性質來從事RNA 複製。由此現象我們得知人類細胞能夠直接複製RNA，我們正在進行用分子生物學及細胞學的方法來瞭解這個奇特的機制。



研究著作

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