行政院國家科學委員會專題研究計畫　期中進度報告

胃癌致病機轉：建立生物檢體、細菌、和病人資料庫的核心單位(2/3)

計畫類別：整合型計畫
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計畫主持人：林肇堂

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行政院國家科學委員會專題研究計畫成果報告

胃癌致病機轉：建立生物檢體、細菌、和病人資料庫的核心單位(2/3)

Gastric carcinogenesis: Core unit for biospecimen bank, bacterial bank and the patient's data bank (2/3)

計畫類別：□個別型計畫　■整合型計畫

計畫編號： NSC92-2314-B-002-124

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整合型計畫：總計畫主持人：林肇堂醫師
子計畫主持人：林肇堂醫師

註：整合型計畫總報告與子計畫成果報告請分開編印各成一冊，彙整一起繳送國科會

處理方式：□可立即對外提供參考
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(必要時，本會得展延發表時限)

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中 文 摘 要

胃癌為台灣常見之惡性腫瘤，每年導致 2000 人以上的死亡。雖然胃癌的診斷和治療在過去幾年已有明顯進步，但是有關胃癌的發生機轉所知仍相當有限。因此，吾人嘗試以整合性的蛋白質體和基因體方式來研究胃癌致病機轉。此整合型計劃的主要目的在於評估參與胃癌起始和進展過程中的致病因子，釐清其根本機轉，找出有用的惡性標記。整個計劃包涵 5 個子計劃，此為第 5 個子計劃，扮演提供其它子計劃檢體的核心單位。

血液、血清、胃組織、癌組織等臨床檢体為研究胃癌發生機轉不可或缺的材料。此外，在體外獲得的實驗室結果與臨床病理特徵的關連對於找尋早期診斷、鑑別診斷、治療選擇、結果評估和預後預測等生物標記非常重要。因此，一個可提供各種不同生物檢體予各個子計劃的核心單位相當要緊。吾人自 1999 年起已成功在台大醫院和台北榮民總院建立胃癌研究的核心單位，並順利提供足夠的生物檢體給不同實驗室進行包括 SNP、CGH、microarray, laser capture microscopy 和 microsatellite 等分析。故本計劃沿續過去的成功模式，繼續收集更多更完整檢體及資料以供研究使用。

在本計劃實施的前二年度，吾人已順利收集近 200 例各種不同胃癌的組織及病患血液及血清檢體；另外，吾人也承續第一年的式成功地從 38 位胃癌，106 位十二指腸潰瘍、42 位胃潰瘍和 42 位非潰瘍性消化不良患者組織，培養出不同幽門螺旋桿菌菌株。上述收案的檢體可用於各子計劃中。在接下來的第 3 年計劃中，吾人將收集更多具足夠病理特徵的胃癌檢體，合併臨床人口資料，以利進一步研究。在完整的檢體收集後，預期可促成更多臨床上有價值的新實驗成果。

關鍵詞：胃癌、生物檢體、核心單位

Abstract

Gastric cancer (GC) is one of the most common cancers in Taiwan. It causes more than 2000 cancer deaths annually in this island. Little is known about the mechanism of gastric carcinogenesis, although the diagnosis and treatment of GC have been significantly improved in the recent decades. Therefore, we try to conduct an integrated project for studying gastric carcinogenesis through genomic and ptrotomic approaches. The major goals of the integrated project are to evaluate the pathogenic factors involved in the initiation and progression, to dissect the undermining mechanisms, and to identify useful markers for this malignancy. The integrated project is composed of 5 component projects. This is the 5th component project, which will serve as the “core unit” supplying various biospecimens for the investigation of all other component projects. We have previously established a “core unit” for gastric cancer study in Veteran General Hospital (VGH) and National Taiwan University Hospital (NTUH) since 1999. The core unit has provided adequate biospecimens for various laboratory investigation including SNP, CGH, microarray, laser capture microscopy, and microsatellite analysis. In the new integrated project to be conducted, we will extend previous model to collect more cases with detailed data and biospecimens for various uses to component projects.

In the first two years of grant periods, we have enrolled nearly 200 cases with GC. Biospecimens including gastric tissues, peripheral blood mononuclear cells (PBMCs), and serum were collected. Following previous experience in the first year, different H. pylori strains from 38 cases with GC, 106 cases with duodenal ulcer, 42 cases with gastric ulcer, and 42 cases with nonulcer dyspepsia were successfully cultured. All these specimens were available for users of component projects. In the following third year grant period, we will further collect adequate biospecimens with sufficient pathologic claracteristics of each case together with clinico-demographic data.

New laboratory findings with valuable clinical impact shall be anticipated after all these collocations.

Key words:Gastric cancer, Biospecimen, Core unit

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