



## 公衛學院 109 年 10 月份院務摘要

- 一、公衛學院全球衛生學位學程(Global Health Program,GHP)林先和主任與台灣、紐西蘭公衛專家共同研究報告刊登於《刺絡針》旗下西太平洋區域衛生期刊

**Joint research by College of Public Health Global Health Program (GHP) Director Hsien-Ho Lin, Taiwan CDC and New Zealand public health experts has been published in The Lancet Regional Health – Western Pacific**

國際權威醫學期刊《刺絡針》旗下西太平洋區域衛生期刊 109 年 10 月 21 日刊登台灣及紐西蘭公衛專家的研究報告。由台灣大學全球衛生學位學程主任林先和、台灣疾管署防疫醫師鄭皓元與紐西蘭公衛及傳染病學者共同研究兩國防疫措施，該研究由奧塔哥大學（University of Otago）公衛專家桑莫斯（Jennifer Summers）領導，曾任紐西蘭政府防疫顧問的貝克爾（Michael Baker）及威爾森（Nick Wilson）也參與其中。

內容提及全球可參考 2 國防疫措施，同時也提到紐西蘭可借鏡台灣在邊境管控、追蹤路徑、戴口罩、指揮應對等部分的做法。

The Lancet Regional Health – Western Pacific published a research report by Taiwan and New Zealand public health experts on October 21st, 2020. Hsien-Ho Lin, Director of the Global Health Program of National Taiwan University College of Public Health, Hao-Yuan Cheng, a medical officer

from Taiwan Centers of Disease Control, and New Zealand public health and infectious disease experts jointly studied the epidemic control measures of COVID-19 in Taiwan and New Zealand. The study was led by Dr. Jennifer Summers from the University of Otago, together with Prof. Michael Baker and Prof. Nick Wilson who were former national consultants for COVID-19 control in the New Zealand government.

The article highlighted the lessons that may be helpful to other high income countries for future epidemic control. It pointed to the areas that New Zealand can learn from Taiwan including border control, contact tracing, face mask wearing and supply, and central emergency response.

報導出處：

[https://www.storm.mg/article/3135544?fbclid=IwAR3G9WG5fT5\\_B6xf3G0VrBh32cwFIJai8ex40rmKhOu1EjJb6I3Q\\_DJn9T0](https://www.storm.mg/article/3135544?fbclid=IwAR3G9WG5fT5_B6xf3G0VrBh32cwFIJai8ex40rmKhOu1EjJb6I3Q_DJn9T0)

原文出處：

[https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(20\)30044-4/fulltext](https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(20)30044-4/fulltext)

Media report in Taiwan:

[https://www.storm.mg/article/3135544?fbclid=IwAR3G9WG5fT5\\_B6xf3G0VrBh32cwFIJai8ex40rmKhOu1EjJb6I3Q\\_DJn9T0](https://www.storm.mg/article/3135544?fbclid=IwAR3G9WG5fT5_B6xf3G0VrBh32cwFIJai8ex40rmKhOu1EjJb6I3Q_DJn9T0)

Media report in New Zealand:

<https://www.stuff.co.nz/national/health/coronavirus/123144103/what-nz-can-learn-from-taiwan-about-pandemic-preparedness>

<https://www.stuff.co.nz/national/health/coronavirus/123158703/covid19-public-health-experts-call-for-inquiry-into-new-zealands-coronavirus-response>

Citation:

[https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(20\)30044-4/fulltext](https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(20)30044-4/fulltext)

## 二、公衛人的新挑戰 -- 用資訊科技計算抗疫

### **A new challenge for public health people - utilizing computation resources to fight COVID-19**

2020 年受到新冠狀病毒(COVID-19)影響，全世界的生活均在防疫為先的目標下產生劇烈的變化。臺灣衛福部因應疫情變化，提出了防疫新生活概念，並委由臺灣公衛學會陳保中理事長及林先和秘書長主持進行全國性的大型調查。此外，計畫亦希望透過群集數據了解民眾在疫情影響下之生活習慣及行為變化。本委託案在 2020 年 8 月已經過臺灣大學行為與社會科學研究倫理委員會審查通過(202007HM008)，由於數據量龐大，分析上十分耗時且需要大規模運算資源。

值此同時，美國微軟公司(Microsoft Corporation)公開向世界學者徵求計畫書協助對抗疫情，因此為加速分析，本計畫由流預所盧子彬副教授負責向美國微軟公司申請使用雲端資源協助分析。計畫審核結果顯示臺灣共有兩件計畫案獲得美國微軟公司贊助，而本計畫獲得美金十二萬額度，並於九月初已在雲端上展開初步測試，最終我們希望藉由此計畫的高速運算資源申請，未來能結合產業界及學術界力量一起面對新冠狀病毒的挑戰。

In 2020, the COVID-19 pandemic changed everything world-wide as fighting COVID-19 has become the top priority. In Taiwan, the Ministry of Health and Welfare (MOHW) has announced a new venture called the “Epidemic New Life Movement” . To achieve the goal of Epidemic New Life Movement, the MOHW has appointed the Taiwan Public Health Association (TPHA) to initiate a large-scale national survey in Taiwan, which is led by the chairman of TPHA, Prof. Pau-Chung Chen, and the

secretary-general of TPHA, Prof. Hsien-Ho Lin. In addition to the survey, this project aims to understand the life and behavioral changes of Taiwanese people through the accumulation of aggregated data. This project has been reviewed by the Research Ethics Committee, National Taiwan University, with the application ID (202007HM008) in August, 2020. Considering the massive data accumulated in this project, analyzing it is highly time-consuming and requires large computational power. Meanwhile, the Microsoft Corporation in the United States, called for proposals from the whole world as an endeavor to fight COVID-19. Therefore, Tzu-Pin Lu, associate professor at the institute of epidemiology and preventive medicine at the National Taiwan University, served as the principal applicant for the computation grant and is one of the Co-PIs of this project. Eventually, the Microsoft Corporation announced two projects awarded with Azure credits, and this project has obtained a total funding of USD 120,000 to facilitate the analyses. The preliminary tests, of the analyses in this project, have already been accomplished in September 2020. In conclusion, our aim is to setup a working model such as this application to combine strengths from both industry and academia in order to face the challenges from COVID-19.