

【專題講座】由雲端仰望「癌症登月計畫」 A Moonshot through the Cloud

一、演講摘要：

Technological advancements have given us the ability to sequence genomes in great depths, and, consequently, generated an exponential growth in data. National Cancer Institute (NCI) Cloud Resources, formerly the NCI Cancer Genomics Cloud pilots, were developed with a goal of enhancing the utility of cancer genomic data and facilitating analysis. As a Software-as-a-Service built on commercial cloud architectures, the Cloud Resources offer the flexibility for users to utilize tools in the form of Docker containers, and tools can be joined to form complex workflows described by Common Workflow Language (CWL) or Workflow Description Language (WDL). The utility of the Cloud Resources has been expanded from cancer genomics to include proteomics, imaging and other “omics” in the future. Here I present an overview of how technology is used in biomedical research with a focus on cloud computing and medical applications of artificial intelligence. The cloud environment has proven to be a cost-effective, reproducible, reusable, interoperable, and user-friendly alternative to high-performance computing, with minimal overhead and setup requirements. These production-ready workflows represent a necessary step in a publicly available, scalable toolset meant to support open and Findable, Accessible, Interoperable, Reusable (FAIR) scientific research.

二、演講者：Hsinyi Tsang (National Cancer Institute, USA)

三、時間：106年11月20日(星期一) 15:30-17:00

四、地點：中國醫藥大學立夫教學大樓13樓階梯教室

五、參加對象：本校教師、附醫醫療人員

六、報名時間：即日起至11月17日(星期五)止。

七、名額：線上報名40名，額滿為止，15:40後恕不受理簽到與現場報名。

八、報名網址：<http://webap.cmu.edu.tw/cfd/Apply.asp>

九、講者簡歷：(近五年，詳如附件)

01/16-pres.	Senior Biomedical Informaticist / Specialist Attain, McLean, VA National Cancer Institute (NCI), NIH, Rockville, MD
01/14-12/15	Freelance Consultant Chief Technology Officer Union Honest Investments, Hong Kong
05/11-10/13	Senior Computational Biologist Medical Science & Computing, Inc., Rockville, MD National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD

十、備註：

1.時數(研習)認證：

(學校)教師：登錄教師研習積分1分。

全程參與者，確實完成簽到退及課後問卷，將於會後核給研習積分或時數，活動開始30分鐘後，恕不受理簽到，未全程參與者，恕不給予積分/時數認證。

2.因名額有限，如報名後不克前往參加，請透過線上報名系統或電話取消報名，避免造成他人權益受損。

十一、聯絡人：

中國醫藥大學 教師發展中心 黃坤堆，聯絡電話：04-22053366 轉 1622