

中央研究院統計科學研究所

學術演講

講題：Progress report of Precision Medicine group

演講人：Dr. Grace S. Shieh, Dr. Chen-Hsiang Yeang, and Dr. Shin-Sheng Yuan (謝叔蓉研究員、楊振翔研究員及袁新盛副研究員)

Institute of Statistical Science, Academia Sinica

時間：2024-11-11(Mon.) 11:00-11:30

地點：Auditorium, B1F, Institute of Statistical Science; The tea reception will be held at 10:10.

備註：Online live streaming through Cisco Webex will be available.

Abstract

In the era of precision medicine and AI, leveraging on the great resource of UKBB and TWBB, we aim to predict disease occurrence of chronic kidney disease and cancer patients' response to immunotherapy, and reveal the statistical relations of genotype/imaging data with diseases, e.g., Alzheimer's Disease. UKBB and TWBB comprise multimodal data (e.g., genomic data and medical images) and diverse phenotypes (e.g., cancers, genetic disease) from a cohort of 500K/~20K subjects, respectively. We first report the progress of subscription to UKBB, which may take 15 working weeks. Next, we report our ongoing efforts on applying the mediation analysis to tackle our aims. We have also built a platform to read inputs of our prototype algorithms and output the predictions (outcomes). Finally, we present the research plan outlining key components for the next year.

These works are the joint works with Dr. Chen-Hsiang Yeang (co-PI), Dr. Shin-Sheng Yuan (co-PI), Dr. En-Tni Lin, Dr. Spandana Vadloori, Vahid Golderzahi, and Jae-Yu Yang.



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