

Luncheon Seminar on

## Genetic Architecture of Complex Traits through Trans-Ethnic Analysis

## 跨民族复杂性状的遗传结构分析

Chair Deng Minghua School of Mathematical Science, Peking University

Speaker **Hua Tang** Associate Professor of Genetics

**Courtesy Associate Professor of Statistics** 

**Stanford University** 

Date September, 9<sup>th</sup> 2015 (Wednesday)

Time 12:00 – 13:30

Language Lecture in English

Venue Stanford Center at Peking University

Genome-wide association studies (GWAS) have become a standard approach for identifying loci influencing complex traits. However, GWAS in non-European populations are hampered by limited sample sizes and are thus underpowered. Can GWAS results in one population be exploited to boost the power of mapping loci relevant in another population? In this talk, I will describe a set of analyses, which address the question, "to what extent does the genetic architecture of a complex trait overlap between human populations?" I will next introduce an empirical Bayes approach, which improves the power of mapping trait loci relevant in a specific minority population through adaptively leveraging multi-ethnic evidence. A case study on plasma lipid concentration will be presented.

Bio: Hua Tang received her BS in Biology from Harvard, and PhD in Statistics, with a minor in Genetics, from Stanford University in 2002. From 2002 to 2006, she was on faculty in the PHS division at the Fred Hutchinson Cancer Research Center. Hua joined the Stanford Genetics Department in 2007. The goals of her research are to better understand the evolutionary forces that have shaped the pattern of genetic variation in humans, as well as to elucidate the genetic architecture of complex traits and diseases in the context of human evolution.

## **REGISTRATION**

Sandwiches will be provided upon request through online registration ONLINE: http://scpku.fsi.stanford.edu/events/registration/219678 EMAIL: lapli@stanford.edu

## **ADDRESS & MAP**

Stanford Center at Peking University, The Lee Jung Sen Building, Langrun Yuan, Peking University Please bring a photo ID and enter PKU through the Northeast Gate.

Directional signage will be available starting from this gate. Pre-registration (Tel: 10-62758357) for vehicle entrance inside the campus is required.