

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Dr. Li ZHANG

Department of Bioinformatics and Computational Biology
The University of Texas MD Anderson Cancer Center
USA

will give a talk

entitled

**IDENTIFICATION OF CANCER PROGNOSTIC
MARKERS FROM HIGH THROUGHPUT
GENOMIC DATA**

Abstract

There are multiple challenges in the search of cancer prognostic markers using high throughput genomic data, which is generally regarded as a small-n-and-large-p problem in statistics. Besides over-fitting, batch effects, normalization and co-linearity between covariates also pose problems. Despite of extensive efforts in the field, few markers have been clinically proven so far. To overcome the challenges, we believed that the solution must involve multivariate, non-linear models that can combine information from multiple genes in multiple pathways. Following this approach, we have made some progress recently in our quest of prognostic markers in oral cancers, glioblastoma and breast cancers using a boosting approach (CoxBoost). We employed computer simulated data to evaluate the power as well as the limitation of the boosting approach. We also used multiple practical biological data sets to show that prognostic models can be developed and the models can be validated in multiple publically available datasets in corresponding diseases.

on

Tuesday, November 17, 2009

10:00 a.m. – 11:00 a.m.

at

**Room 524, Meng Wah Complex
(behind the Chong Yuet Ming Amenities Centre)**

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 2859 2466 for parking arrangement.

All interested are welcome