STATISTICS COLLOQUIUM

MONDAY, SEPTEMBER 24, 2007
TALK: 4:00 PM — SCIENCE CENTER RM. 309
RECEPTION: 5:15 PM — SCIENCE CENTER, 300h

"Development, Evaluation and Comparison of Prediction Rules Based on A Panel of Markers"

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ABSTRACT

Continuing technological advancements allow researchers and clinicians to measure an increasingly vast diversity of clinical and biological markers, rapidly increasing our understanding of disease processes. The wide range of newly available markers holds great potential for the personalization of medical care through accurate prediction of outcomes in individual patients. Traditional statistical methods for using patient's marker values to make personalized predictions are derived under a strong assumption that the true model relating markers to the response can be identified, at least with a large enough sample. In practice, however, it is difficult if not impossible even to locate a class of models containing the truth. In this talk, I will discuss various methods for construction, evaluation and comparison of prediction rules without having to assume that the fitted regression models are correct.

LINKS:
http://www.hsph.harvard.edu/faculty/tianxi-cai/