Statistical Graphics & Visual Data Mining in the Medical Field

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Abstract
In this talk, we will demonstrate how statistical graphics and visual data mining can be applied to a variety of biostatistical research projects. First, we will see how various graphical methods can be used for the simultaneous exploration of CGH and gene expression arrays. Next, we will demonstrate how graphics can be used to further assess numerical results in the context of expert raters' agreement for diagnosing carpal tunnel syndrome. Finally, we will present exploratory graphical displays for various components of functional actigraphy data. Actigraphy is an emerging technology for measuring a patient's overall activity level nearly continuously over time.