



# STATISTICS SEMINAR



## A POWER COMPARISON OF MATCHED-PAIRED METHODS WITH RANDOM CENSORED DATA

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**Masters Report**

DATE: May 8, 2006

TIME: 3:30 pm

PLACE: Bluemont 113

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Generalizations of signed-rank and paired-rank methods have been used to analyze paired censored survival data. Relative power comparisons have been made between the two methods assuming type I and random censoring with a common censoring value. In this study, random censoring with individual censoring values are considered. A new scoring system is proposed as a generalization of the signed-rank method for this situation. The effects of sample size, intraclass correlation, and amount of censoring on the relative power of the signed-rank and paired-rank methods are studied. Simulations show the signed-rank method is more powerful compared to the paired-rank method for increased levels of intraclass correlation and censoring.

\*\* Upcoming seminars may also be found on the web at <http://www.ksu.edu/stats/current.seminars/nav.currentseminars.html>.