

# Department Seminars

## Causal inference for quality of life data in the presence of progression and death

**Mike Daniels, PhD**  
Professor and Chair  
Department of Statistics  
University of Florida



### Abstract:

In longitudinal clinical trials, when outcome variables at later time points are only defined for patients who survive to those times, the evaluation of the causal effect of treatment is complicated. In this paper, we describe an approach that can be used to obtain the causal effect of three treatment arms with ordinal outcomes in the presence of death using a principal stratification approach. We introduce a set of flexible assumptions to identify the causal effect and implement a sensitivity analysis for non-identifiable assumptions which we parameterize parsimoniously. Methods are illustrated on quality of life data from a recent colorectal cancer clinical trial.

Joint work with Keunbaik Lee (LSU) and Dan Sargent (Mayo Clinic)


**Friday,**

**November 20, 2009**

**G5/113 CSC**

**12:00-1:00 p.m.**

**Biography:** Dr. Daniels is professor and the chair of the Department of Statistics in the College of Liberal Arts and Sciences at the University of Florida. Before coming to the University of Florida, he spent five years as an assistant professor at Iowa State University and two years as a visiting assistant professor/postdoc in the Department of Statistics at Carnegie Mellon University. He received his doctorate in biostatistics at Harvard under Constantine Gatsonis.

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