

**University of Dayton
Department of Mathematics
Colloquium**

**QTL(Quantitative Trait Locus) Detection Using
Accelerated Failure Time Cure Model For
Survival Data**

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Abstract:

Many important problems in evolutionary biology begin with observations of phenotypic variation. For example, variation in survival time is partly due to genetic differences among individuals and partly due to environmental factors. Developing statistical methodologies relating the unknown genotype of QTL to the survival time of an individual is important in identifying the disease genes. In some genetic studies with survival end points, the population under study consists of susceptible and nonsusceptible individuals. All susceptible subjects would eventually experience the event in the absence of censoring, while nonsusceptible subjects are not at risk of developing such events and can be regarded as “cured.” I will discuss a procedure to detect the QTL locations for survival data using accelerated failure time cure model for survival data.

Date: Friday March 14, 2008

Place: University of Dayton, Science Center 323

Time: Refreshments at 3:00 PM in Science Center 313, Talk at 3:30 PM in Science Center 323