

## Kevin Hasegawa Eng

---

Department of Statistics  
University of Wisconsin-Madison  
Medical Sciences Center  
1300 University Ave  
Madison, WI 53706

Phone: 608.265.6217  
[eng@stat.wisc.edu](mailto:eng@stat.wisc.edu)  
[www.stat.wisc.edu/~eng/](http://www.stat.wisc.edu/~eng/)

### Education

Graduate Student, PhD Track. Dept of Statistics. University of Wisconsin-Madison.  
In Progress. Fall 2006 - Present.

Sc.B Statistics. Brown University. 2005, Honors.

### Work Experience

Research Assistant. Dept. of Statistics, UW Madison. Spring 2007-Present. Statistical genetics and machine learning. Supervisors: Prof. Grace Wahba, Prof. Sunduz Keleş.

Teaching Assistant. Dept. of Statistics, UW Madison. Fall 2006. Stat 371 Introduction to Statistics for Life Sciences.

Data Analyst. Dept. of Epidemiology and Biostatistics, Memorial Sloan Kettering Cancer Center 2005-2006. SAS data analysis and cleaning for Genes Environment Melanoma (GEM) study.

### Awards

ENAR Distinguished Student Paper Award 2008. "A Linear mixed effects clustering model for multi-species time course gene expression data."

Graduate Student Mentor Award 2008, UW Graduate School.

### Publications

Eng KH, Corrada Bravo H, Keleş S, Wahba G. (2008) "A Phylogenetic Mixture Model for Gene Expression Data." (Manuscript)

Eng KH, Keleş S, Wahba G. (2008) "A Linear Mixed Effects Clustering Model for Multi-species Time Course Gene Expression data." University of Wisconsin-Madison, Dept. of Statistics Technical Report No. 1143.

Corrada Bravo H, Eng KH, Keleş S, Wahba G. (2008) "Estimating tree-structured covariance matrices with mixed integer programming." University of Wisconsin-Madison, Dept. of Statistics Technical Report No. 1142.

Ratkovic MT, Eng KH. (2008) "Finding Jumps in Otherwise Smooth Curves: Identifying Critical Events in Political Processes." (Submitted)

Eng KH, Kvitek D, Wahba G, Gasch A, Keleş S. (2007) "Exploratory statistical analysis of multi-species time course gene expression data." Proceedings of the 56th International Statistical Institute.

Begg CB, Eng KH, Hummer AJ. (2007) "Statistical tests for clonality." *Biometrics*. 63(2): 522-530.

Eng KH, Kosorok MR. (2005) "Sample size formula for the supremum log rank statistic." *Biometrics*. 61(1):86-91.

## Poster Presentations

Eng KH, Kvitek D, Wahba G, Gasch A, Keleş S. (2007) “Mixed effects clustering model for multi-species time course gene expression data.” 1st Midwestern Symposium on Computational Biology. October 2007.

## Research Experience

Inference and estimation with tree based covariance matrices. Joint work with Hector Corrada Bravo, Grace Wahba, Sündüz Keleş. Fall 2007 - Present.

Statistical models for multi-species time course gene expression microarray data. Formulation and implementation of multi-level mixed effects mixture of regression models in R. Prof. Sündüz Keleş, UW Madison. Fall 2007 - Present.

Statistical methods for clonality. Formulation and derivation of statistics for testing for clonal differences in tumor gene data: loss of heterozygosity analysis and array comparative genome hybridization. R simulation studies in support of methods. Dr. Colin Begg, Memorial Sloan Kettering Cancer Center. Fall 2005 - Spring 2006.

Efficient designs for randomized trials evaluating diagnostic tests. Derivations and R simulation and power studies comparing study designs. Honors thesis work. Prof. Bo Lu, Brown University. Spring 2005.

Hierarchical empirical bayes methods for matched microarray experiments. Prof. Christina Kendziorski, UW-Madison. NSF-REU Program, Summer 2004.

Sample size formula for the supremum log rank statistic. Prof. Michael Kosorok, UW-Madison. NSF-REU Program, Summer 2003.

## Other Experience

Statistics Department Graduate Student Leader 2008-present.

Student Reading Group, Methods for Array-based Data, Organizer Summer 2008.

Statistics Department Student Seminar, co-organizer. 2006-2007.