Projects

Project ideas can be taken directly from your research or classwork. A typical project will often present a method just barely mentioned in class, or an elaboration of a model studied in class, or an exploration of a method appearing in SAS output (all those additional measures of association in PROC FREQ, for instance), or an alternative analysis mentioned by Agresti in one of his exercises. An interesting data analysis is certainly a possibility as well. Some of these ideas, as you can tell, are based on past student projects.

1. A measure of association for I x J tables
2. An exact test for I x J tables
3. A test of ordinal association for I x J tables
4. A Bayesian analysis for categorical data
5. A further discussion of the Zero-inflated Poisson analysis of the horseshoe crab data
6. Negative binomial, Zero-inflated negative binomial, and zero-truncated data analysis
7. Specificity and sensitivity for pool data with dilution
8. A simulation of asymptotic normality for quadratic dose response models
9. A presentation on ROC curves for sensitivity and specificity
10. Logistic regression with random effects
11. Hierarchical cluster analysis for binary data
12. Propensity score matching–many cases with a control
13. Bayesian binomial credible intervals