**Project (6): A Multi-Part, Multi-Level Regression Model for the Demand of U.S. Inpatient Mental Healthcare**

*Project description*: To construct a theoretical two-part, three-level regression model of the demand for US mental health care services. One part is to model the frequency, as a three-level probit model. The second part is to model the severity (conditional on frequency), as a three-level regression model. The levels themselves consist of provider visits within individuals within households.

*Faculty leader*: Paul Johnson  
*Student participants (2)*: Xiongfei Ding, Siliang Ni

*Progress report*:

- After considering various data sets for suitability of analysis, we have settled on the Medical Expenditure Panel Survey (MEPS). We are using 2010-2011 to fit the model, and 2012 to validate the model.
- We are in the midst of our initial analyses, having determined summary statistics and methods for dealing with missing observations.

*Future plans and intended deliverables*:

- We intend to fit the model and test its predictive power.
- Deliverables should include a brief summary paper of the analysis, with a description of the model and some preliminary empirical results.