**Part-time undergraduate research job using Matlab**

Available immediately:  Research assistant job, working with Prof. Gal Hochman, Department of Agriculture, Food, and Resource Economics, in collaboration with Prof. Alan Robock, Department of Environmental Sciences.  As an extension of our work on the impacts of geoengineering on agriculture, we seek to study the impacts of production changes on the world food market, and hence on food supply.

We assume a multi-market framework, where demand for each crop is composed of food/feed, prices of competing crops, income, and where applicable, demand for biofuels. The supply for each crop is composed of production, prices of the crop, and land. We focus on a number of crops, including, corn, rice, wheat, soybeans, and sugarcane.

The student will use Matlab to program the multi-market framework. The data we have already collected will be used to calibrate the crop supply and crop demand functions for each crop, assuming an empirical demand for inventory. The calibrated demand and supply parameters are used to calculate the effect of each of the counterfactual scenarios on the observed price in a given year.

Requirements:  Ability to program in Matlab, availability to work 10 hours per week, beginning immediately for the Spring Semester.  There will be the possibility for extending the work into the summer.  Courses in economics would be a benefit, but not a requirement.

If interested, please contact Prof. Hochman at [gal.hochman@rutgers.edu](mailto:gal.hochman@rutgers.edu)