**Nutritive Value and Forage Accumulation of Alfalfa and Alfalfa-Mixtures as Influenced by Forage Management** – Renata La Guardia Nave, University of Tennessee ($156,287)

**Objectives:**
The hypothesis of our project is that adjusting harvesting intervals can improve the relationship between yield and nutritive value of alfalfa and alfalfa-mixtures depending on forage management. A better understanding of these changes in nutritive value of alfalfa and alfalfa-mixtures will serve as a basis for managing harvest schedules and grazing management recommendations to optimize forage yield and quality based on livestock requirements. The specific objectives of this research are:

1. To characterize nutritive value and herbage accumulation of alfalfa grown as a monoculture compared to alfalfa-grass mixtures in three locations (Tennessee, Alabama and Ohio). This will help to explain changes in nutritive value over time and how herbage accumulation affects the relationship between nutritive value and morphological characterization.
2. To determine the influence of harvest frequency on alfalfa and alfalfa-mixtures on yield, nutritive value and botanical composition in three different locations. This will serve as a basis for grazing management recommendations that can optimize forage availability and forage nutritive value, according to region and livestock requirements.
3. To develop an extension program to help educate agents and producers about alfalfa production and management alternatives.