

STUDENT RESEARCHERS WANTED

... to help support an **Aquaponics-based research question**
for the **spring 2020 semester**

Presidential Research Grant #04

A Comparison of Media to Determine Optimal Growth in Aquaponics

There are three primary types of grow environments within an aquaponics system: NFT (nutrient film technique), float beds, and media beds. These grow environments have considerable differences in how plant roots obtain necessary water, nutrients, and oxygen. Furthermore, the growing medium provides the plant roots with an anchor point. A variety of grow media options are available that may provide better nutritional profiles, aeration, and/or water retention to facilitate seedling growth and improve nutritional yield.

We are **looking for 3 (three) HU Undergraduate Students** to:

- compare growing conditions to determine preferred combinations for specific crops (Biology & Environmental)
 - variety of grow media candidates
 - diverse growing environments
- quantitatively analyze nutritional content from the crops grown using different grow media (Chemistry)
 - variety of parameters
 - variety of chemical analysis techniques

Join our team to gain first-hand understanding as to how the combination of optimal grow environment and grow media are important in an aquaponics research laboratory!

If interested, please email Aquaponics@HarrisburgU.edu by **December 6th** for additional details related to the research question of interest to you, and to schedule a time for an interview.