NutraMaize NSF Funded Research Internship for Veteran Students

Company Description:

Located in West Lafayette, IN, NutraMaize commercializes a more nutritious, better tasting, orange colored variety of non-GMO corn. Torbert Rocheford, Professor of Plant Genetics at Purdue University, originally developed this Orange Corn as part of broad efforts to help alleviate micro-nutrient deficiencies in developing countries. Today, varieties of Orange Corn are grown and consumed in over 10 countries in Sub-Saharan Africa and is available to consumers in the United States. Professor Torbert's Orange Corn is our consumer-facing brand; our product line currently includes grits, corn meal and corn flour. For more information visit www.professortorberts.com.

Project Description:

The Veteran Research Supplement (VRS) intern will participate in a research opportunity for veteran students funded through a National Science Foundation (NSF) Small Business Technology Transfer Research (STTR) Grant. The aim of this project is to develop NutraMaize's Orange Corn for large scale commercial application in the US. While this position will work on a variety of research tasks as part of the research team, one of their primary focuses will be on helping lead the development and implementation of a FileMaker database that will help capture and organize number of currently disparate data sets. Most of the work will be performed in Lilly Hall, the attached greenhouses, Nelson Hall (food science pilot plant) the Agronomy Center for Research and Education (ACRE) farm, and the Indiana Corn and Soybean Innovation Center (ICSIC).

Qualifications:

- **Applicant must be a veteran student.**
- Proficiency in Excel, knowledge of computer programming a plus.
- Experience, familiarity with or willingness to learn lab work.
- Detail-oriented and strong organizational skills.
- Excellent, team-oriented communication skills.
- Interest in working on an interdisciplinary project.

Core Responsibilities:

- Veteran student intern will work with a FileMaker consultant, NutraMaize employees/interns, and Purdue collaborators to implement a comprehensive FileMaker database. This database will help unify a wide variety of data sets including both genotypic and phenotypic information that is being generated through NutraMaize's

Phase II funded research, as well as other research activities. Below are examples of the type of information that will be included in the database:

Genotypic Data	Phenotypic Data	Food Science Data
Pedigree	Yield Trial Results	Carotenoid Retention in Food Products
Whole Genome Sequence	Carotenoid Content	Physical Attributes of Food Products
Genetic Marker Results	Proximate Analysis	Sensory Results for Food Products
Seed Inventory	Kernel Composition Metrics	
Field Plot Numbers		

- Veteran student intern will assist in the performance of a variety of analyses and associated data collection. This will help inform the construction and implementation of a custom low-code FileMaker data collection application and sample bar coding system that can be used by student workers and interns to reduce data collection errors and improve data collection efficiency.
- Veteran student intern will perform various research tasks related to the project, including but not limited to performing analyses on various types of equipment, inventorying seed and/or preparing seed for planting, and performing field and greenhouse work including planting, pollinating and harvesting.

Work Hours and Payment:

The internship will begin in May 2022 and end in April of 2023. During the academic year the internship is part time, during the summer of 2022 the internship will be full-time (40 hours/week). The selected candidate will receive $10,000 as an educational stipend disbursed throughout the project period.

Application:

Please submit a C.V. to NutraMaize Veteran Liaison, Rohan Crawley (CrawleyR@Purdue.edu) Applications will be considered on a rolling basis until a suitable candidate is identified.