

## Executive Summary – Costa Layman “CHARM STUDY” Summer 2013

*GRU Mission, “To provide leadership and excellence in teaching, discovery, clinical care, and service as a student-centered comprehensive research university and academic health center with a wide range of programs from learning assistance through postdoctoral studies”.*

### **Why community health?**

Health care availability does not equal access. Community health is measured by the health of each individual within that community. Poor individual health can negatively affect school, work performance and societal participation, which together form the backbone of a healthy community.

### **Brief History:**

The Costa Layman Annual Health Fair began eight years ago in a partnership with farm owner, Debbie Layman and Georgia Regents University’s College of Nursing and has evolved to provide primary preventive services that include comprehensive multi-professional health screenings, health education, and individual counseling for participating employees. GRU is proud of the work of our faculty and service-learning students who provide access to care for the identified health needs of this underserved populations. . An additional Costa Layman Women’s Clinic is held in October each year. These efforts have laid a foundation for care delivery and a myriad of studies concerning the health disparities of the Hispanic farm-worker

### **New Horizons: for 2014:**

Entering the second year of a 3 year grant funded study through the GRU Institute of Public and Preventive Health, “Cardiometabolic Risks of Hispanic Farmworker in Southeastern USA” (CHARM), faculty and students will collect more specific laboratory data to correlate with standardized measures of physical assessments/screenings.

### **Health Concerns:**

- Dental disease contributes to multiple systemic disease processes & has a direct effect on quality of life of the individual
- Elevations in BMI, Glucose, and Lipids are known significant cardiometabolic risk factors.
- Key Respiratory Indicators have acute & chronic cardiopulmonary implications with direct effects on overall health status and quality of life of individuals
- Tobacco use should be highlighted as a concern because tobacco, and smoking is a leading risk factor for multiple disease processes.
- Visual Acuity/Glaucoma & Hand Grip – impairments impede work performance and quality of life

### **Highlights of 2013 Worksite Screenings:**

There were 213 employee participants in the 2013 fair. The average age of the workers was 37 with 153 males and 59 female participants. There were many screening options available to participating employees, which included:

- Height, weight, body mass index (BMI), blood pressure (BP)
- Comprehensive Metabolic Panel, Cholesterol, Vitamin D, HIV blood testing
- Vision & Glaucoma
- Dermatology
- Respiratory – Pulmonary Function Testing, Exhaled Nitrous Oxide, & Sleep Apnea
- Physical Therapy – Hand Grip & Carpal Tunnel Screenings
- Dental & Oral Examinations
- Heel Bone Density Screenings
- Occupational Safety Demonstration Classes
- Laboratory Counseling
- **Frozen Blood Samples & FUTURE ANALYSIS \*cardiometabolic cytokines, Vitamin D, etc. (GPI)**
- Patient Education
- Referral Based Follow-ups

**Referrals Made: N= 279 \*(Employee Choice for Screenings)**

Dental: (caries, broken teeth, pain) **84%**

Abnormal BMIs: (BMI >30) **60%**

Respiratory Therapy Issues: (Obstructive Sleep Apnea (#2); ENO (#2); PFT (# 37); TOTAL: **32.3%**

Tobacco Use: **37%**

Elevated Lipid Panels: (LDL) **20.2%**.

Visual Acuity/Glaucoma – 9,8%/6.8%

Serum Glucose Elevations: (greater than 150- fasting) **6.5%**

Hand Grip/Strength: **4.7%**

**Planned Process Interventions:**

- The healthcare providers at each screening booth provides education and recommended referrals for follow-up to employees who rank outside of the normal parameters.
- A detailed list of local providers is given to each employee who needs follow-up.
- Employees are given a t-shirt and care bag filled with an assortment of personal hygiene and work safety items
- Additional service/interventions for 2014 include: Periodontal Assessments, Activity Rating Scales, and Depression Screenings

**Contact:**

PI: Bin Don, MD; PhD

Co-PI's: Pam Cromer, DNP, FNP-BC

Andrew Mazzoli, PhD, RRT

Debbie Layman, RN; Costa Layman Executive

Study Coordinator: Jigar Bhagatwala, MBBS, MPH