

## **Longer Life Foundation (LLF) Final Report**

Funding obtained from the LLF was used to provide seed money to develop and implement several initiatives to help establish a comprehensive obesity center at Washington University and increase our national visibility in the obesity field. The use of these funds has been extraordinarily successful in achieving the aims of the proposal.

The specific goals and accomplishments of this funding are as follows:

### **1. Develop a teaching slide set on pathogenesis of obesity, effect of obesity on mortality and morbidity, and obesity therapy.**

A teaching slide set on obesity has been completed (See attached File). Each slide has accompanying text which discusses the major point of the slide with appropriate references. In addition, we presented a lecture on obesity at a Life Insurance Meeting in Australia (by satellite), which used many of the slides in this set. (*Note: for a copy of the teaching slide set, please contact Phillip Smalley MD: psmalley@rgare.com*)

### **2. Develop and publish a scholarly review article on Obesity in the Elderly**

This manuscript was completed in August, 2005. Because of the high quality of the document, the manuscript is being published in the American Journal of Clinical Nutrition and Obesity Research as a Position Paper of the American Society for Nutrition and NAASO, The Obesity Society . (Villareal DT, Banks M, Sinacore DR, Siener C, Klein S. (2006) *Effect of weight loss and exercise on frailty in obese older adults*. Archives of Internal Medicine 166(8):860-6)

### **3. Conduct pilot research project to evaluate prevalence and causes of frailty and obesity in elderly populations in St. Louis.**

We developed the Washington University Community Wellness Program in April 2005. The overall mission of the CWP is to establish an innovative and effective community-based intervention strategies to ameliorate obesity, undernutrition and frailty in the older population (>65 years old), within the greater St. Louis community, particularly in underserved areas.

The education and assessment component of the program is structured as a health fair at older adult housing sites. In these health fairs, older adults participate in a comprehensive assessment through several stations, which evaluate: 1) BMI, pulse, blood pressure, 2) dietary intake, 3) cognitive function, 4) physical function, 5) bone mineral density (by using a peripheral dual energy x-ray absorptiometer), and 6) medication use. Stations are staffed by Center for Human Nutrition staff, Division of Geriatrics and Nutritional Science physicians, nurses, and community volunteers. A

summary and discussion of results are provided to the participant after the evaluation is completed, and plans are made for appropriate follow-up and management, at the exit station.

Since the Program's inception in March 2005, the program has conducted 6 wellness seminars and health fairs for older adults living at HUD-subsidized senior independent living developments in St. Louis. Approximately 150 older adults have participated, and plans are being made to conduct a health fair at older adult living facilities, churches, and senior centers every month. The average age of participants was 76 years; the oldest participant was 104 years old. Eighty-three percent of participants had evidence of lower limb proximal muscle weakness and impaired mobility, and were at increased risk for falls. In fact, almost half of the participants had fallen in the last 6 months, and more than 20% limited their activities because of their fear of falling. Fifty percent of participants were obese. Twenty percent of participants were depressed. These data demonstrate the need to evaluate health and functional status in older adults and develop effective intervention strategies in conjunction with participant's families and health care providers.

The Program has been well received by the older adults it serves, and 93% of participants indicated that they received important information about their health and are now better able to discuss their concerns with their primary physician. For many participants the Program was the first time they have had a comprehensive nutritional and health evaluation.

#### **4. Develop a program to prevent and treat obesity in families within the YMCA structure.**

The Family Lifestyle Intervention Pilot (FLIP) Program was started in February 2005. The purpose of this program is to develop, implement, and test a behavioral family weight management program, which takes advantage of the existing infrastructure of the Young Men's Christian Association (YMCA). The YMCA provides an ideal venue to evaluate the effectiveness of a family-based weight management lifestyle program in a community setting. This unique partnership involves a multidisciplinary team of psychologists, physicians, physical therapists, dietitians, and public health experts from Washington University, and fitness trainers, social workers, dietitians, cooking experts, and support staff from the YMCA.

Several months were spent developing a relationship with the YMCA, developing the curriculum, and finalizing the organizational structure of the program. The intervention involves a novel application of Golan's familial model for treating overweight children and their primary caregivers. Participants complete three different 12-wk treatment stages over the course of one year. Children and their parents or caregiver meet weekly as a group during each Stage of three 12-wk stages that build on each other. The dates

for each 12-week stage of therapy are organized to allow for school holidays and summer vacation. The program is being piloted at the West County YMCA, a suburban branch that provides services to middle and high-income families. Currently, 8 families are enrolled in the program. As of week 9 of the first stage, the children have lost an average of 5% of their body weight, while their parents have lost an average of 4% of their body weight. The early success of this program suggests that a community-based approach to obesity can be effective and requires further study. We hope to develop an additional program at an urban YMCA, which serves low-income families.

**5. Organize obesity summit at Washington University with faculty from different disciplines.**

This summit is still in the planning phase. However, discussions about organizing this summit with faculty from different disciplines led to the submission of multidisciplinary NIH SCCOR application in obesity, metabolic syndrome and vascular disease. This application has been reviewed and we are awaiting information about funding.