# Announcement of Scholarly Presentation

<table>
<thead>
<tr>
<th>Candidate:</th>
<th>Brenda Windemuth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date, Time, Place:</td>
<td>Implementation of an education program to improve Smith Island, Maryland residents' knowledge and attributes of healthier eating practices and benefits of physical activity</td>
</tr>
</tbody>
</table>

**Scholarly Project Abstract:**

**Introduction:** Obesity rates in the United States have drastically increased over the past twenty years. According to the Center for Disease Control and Prevention, the obesity rate for adults has nearly doubled since 1990, reaching as high as 32.2 percent among adult men and 35.5 percent among adult women (Flegal, 2010). Obesity is associated with increased health risks for many health related conditions which include diabetes, cardiovascular disease, stroke, cancer, sleep apnea, and a modestly elevated risk for all cause mortality. Educating the community on healthy eating and exercise practices is one strategy to develop skills which can then be used to facilitate behavioral changes. One rural community with increased obesity rates is Smith Island, Maryland. This community has special challenges to obtain a healthy lifestyle including a unique aspect of cultural sensitivity and need to be given the opportunity for obesity prevention in an isolated environment. Although there have been small measures to reduce obesity. These have isolated events, but a program has been established for this community.

**Purpose:** The objective of this capstone project was to determine if a cultural sensitive educational program increases the knowledge of health eating practices and benefits of physical activity among residents of Smith Island.

**Design:** A one-group, pre-test post-test, pre-experimental design was used to compare knowledge scores of Smith Island residents before and after an educational program on healthier eating and benefits of physical activity.

**Sample:** A convenience sample of 25 residents living on Smith Island was recruited to participate in the program.

**Data Sources:** The subjects completed a pretest prior to participating in a culturally modified educational program based on Dietary Guidelines for Adult Americans. Participants completed a post-test after the program had been given.

**Results:** A dependent t-test was used to determine if there is a difference between pre-test and post-test attitudes and scores following the educational intervention. Overall, participants scored higher on the post-test as compared to the pre-test ($t=-2.28$, $p<0.001$). Additionally, the participants felt more confident in making changes in their food choices ($t=-4.64$, $p<0.001$) and making a nutritious meal for their families ($t=-4.54$, $p<0.001$).

**Conclusions/Implications:** There was an increase in knowledge of healthy eating practices and benefits of physical activity in a rural community through the use of culturally sensitive educational tools. Thus, the implications of the study demonstrate the need of culturally appropriate educational tools that focus on improving healthier eating habits and benefits of physical activity as a plausible strategy to reduce risk for obesity.

**Capstone Chair:** Dr. Lyn Murphy

**Capstone Advisory Committee Members:**

- Dr. Carol O’Neil
- Dr. Bridgitte Gourley