

## **Project Summary**

The objectives of this collaborative project are to improve post-calculus students' learning of probability and statistics and to provide students with better preparation for their future careers in mathematics and statistics, mathematics education, and computer science. These objectives will be achieved by focusing on active and cooperative learning, visualization of concepts, and use of simulations in post-calculus introductory probability and statistics courses at Athens State University and Middle Tennessee State University via the adaptation and implementation of two recently developed National Science Foundation funded materials. The materials are "A Data-Oriented, Active Learning, Post-Calculus Introduction to Statistical Concepts, Methods, and Theory" (#DUE-9950476) and the "Virtual Laboratories in Probability and Statistics" (#DUE-9652870). The project will cover a twenty-seven month period which will include the professional development of the principle investigators and other faculty at the institutions, the respective institutional adaptation and implementation (A&I) of the materials, the evaluation of the A&I of the materials, and the assessment of students using the materials. Dissemination will occur via presentations at professional conferences, in-service workshops for teachers, a summer workshop for college faculty, and a project website.