



## **CAES Seminar Series**

### **“Fungi, fescue, and a tripartite microbial mutualism”**

**Dr. Elizabeth Roberts**  
Biology Department  
Southern Connecticut State University

Wednesday, December 9, 2015  
12:00 noon to 1:00 p.m.

Food and coffee will be available at 11:45 a.m.

Jones Auditorium  
The Connecticut Agricultural Experiment Station  
123 Huntington Street, New Haven, CT

*Epichloë* fungal endophytes of tall fescue grass produce loline alkaloid compounds that ward off insect herbivores, but can also serve as a significant carbon source for epiphytic bacteria. Through community composition analysis and Illumina sequencing, it was discovered that the presence of this fungus plays a significant role in determining the microbiome of the plant, allowing loline-catabolizing bacterial strains to dominate the tall fescue phyllosphere and rhizosphere.