

Center on Diabetes, Obesity and Metabolism Seminar Series Presents:

Heterogeneous Stock Rats for Genetic Mapping of Diabetes and Obesity Traits

Leah Solberg Woods, PhD **Associate Professor, Molecular Medicine**

Dr. Woods joined the Wake Forest community this summer from the Medical College of Wisconsin. Her laboratory is interested in identifying genes involved in type 2 diabetes (T2D) and obesity using rat models. T2D is a growing health problem with 347 million people affected worldwide. Prevalence in the United States is expected to more than double by 2050. Dr. Woods' lab uses a genetic rat model, outbred heterogeneous stock (HS) rats, to identify relatively small chromosomal regions that play a role in diabetes and obesity related phenotypes. HS rats are outbred from eight inbred rat strains such that the chromosomal make-up of the progeny is a mosaic of the founding inbred strains. This enables the mapping of chromosomal loci to only 2-4 Megabases, significantly decreasing the number of possible candidate genes within each region. Once genetic regions are identified, the lab uses expression and sequence analysis to identify underlying causal genes.



Monday, November 7, 2016

4:00 – 5:00 p.m.

Comprehensive Cancer Center, 10th floor, Room 10B