Animal Health Research Building  
College of Agriculture & Life Science  
Department of Animal Science  
North Carolina State University

Construction of this 2000 square foot facility was completed in November of 2005. It is located on Mid Pines Road and is physically isolated from the NCSU poultry and swine farms by approximately two miles. The unit is designed for research with infectious agents that must be isolated from the base animal production units operated by the University Field Laboratories. The faculty liaison is Dr. Jack Odle (jack_odle@ncsu.edu) and the manager of the unit is Mr. Christopher Lassiter (christopher_lassiter@ncsu.edu). The facility (unofficially) meets BCL 2 standards for animal disease research and falls under the auspices of the College of Agriculture University Field Laboratories (mac_mcneil@ncsu.edu).

The building consists of two mirror images units, each with isolated entries on opposing ends (see photo). Each may be operated as shower-in-shower-out depending on the biosecurity needs of the experiment. Each half has an office and a laboratory/prep room (see floor plan schematic below). The animal room is equipped with a simple HVAC system comprised of a centralized controller that operates a propane gas heater as well as four wall-mounted air conditioners. Two variable speed fans control air exchanges in the animal room. The floor of the animal room has a steep crown than slopes to open drench drains that run the length of the room on each side. They drain into a 5000 gallon underground storage tank. At the back of each animal room is an additional feed-storage/prep room that opens to the outside via double doors. This rear entry is designed for moving animals and feed into and out of the facility.

The animal rooms measure 17 X 23 feet, and each is equipped to accommodate 30 autosow cages for suckling piglet studies (see photo below). Other penning structures, isolators or metabolism cages can be installed to accommodate different sized animals.

**Current research** underway in this facility is aimed at improving milk formulas for piglets and for human infants. Other studies are examining the pathology and treatment of infectious intestinal diseases affecting swine and poultry.
ANIMAL HEALTH RESEARCH LABORATORY
NCSU, Raleigh, NC

------------- Side A ---------------

1 - OFFICE
2 - BATHROOM
3 - LABORATORY
4 - ANIMAL HOLDING ROOM

------------- Side B ---------------

5 - FEED STORAGE
- SINGLE DOORWAY
- DOUBLE DOORWAY

17 X 23 ft animal room

Piglet Milk Feeding Study in Animal Health Building