



*Sinclair Miniature Swine*

### Background

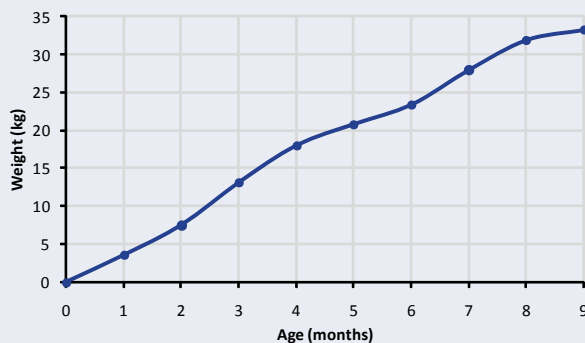
- Domesticated miniature swine
- Bred by Sinclair Research Center

### Origin

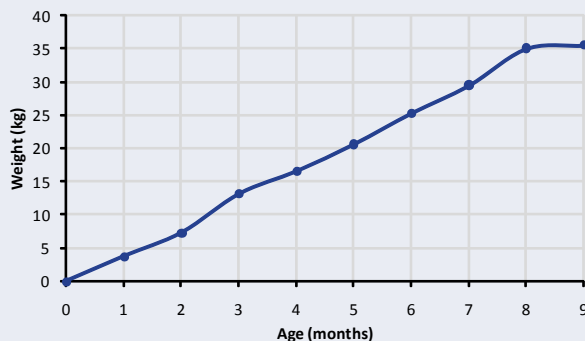
- Developed by Hormel Institute at the University of Minnesota in 1949. First miniature swine stock developed specifically for research purposes.
- Sinclair (Hormel) miniature swine were developed by crossing four feral breeds. Later, a Yorkshire boar provided white hair color to the dark pigment animals.
- Portion of original Sinclair herd acquired with breeding rights by the University of Missouri, Columbia in 1965. A few additions of Sinclair miniature swine were made from satellite herds in the early 1970s.
- The colony has been closed, thereafter maintained by random breeding, and named Sinclair S-1 miniature Swine.
- Colony maintained since 1991 by least-related breeding program.
- Sinclair acquired complete production and research facilities from the University of Missouri, Columbia in 1994.

### Growth Curves

#### Male



#### Female



### Characteristics

- Purpose-bred, socialized, and vaccinated.
- Slow growth rate.
- Different hair coat colors that facilitate identification.
- Free from common domestic swine diseases; e.g. leptospirosis, brucellosis, pseudorabies, transmissible gastroenteritis, porcine reproductive respiratory syndrome, toxoplasmosis, etc.
- Used as animal models in multiple research areas: cardiovascular, musculoskeletal, urogenital, oncology (melanoma), immunology, reproduction toxicology, teratology, dermatology, gastroenterology, respiration, nutrition, pediatrics, etc.
- Unique Model: One lineage of the Sinclair miniature swine develops a malignant spontaneously regressing melanoma.
- Well adapted to the laboratory environment and very useful when only limited space is available.