

The Southeast Poultry Research Laboratory (SEPRL) provides an integrated research approach to Bacteriology, Agricultural Engineering, Molecular Biology, Pathology, Virology, and Immunology research that is key to developing prevention, management, and eradication strategies to protect the \$25 billion per year U.S. poultry industry. This is a major international resource for research to control the highly pathogenic Avian influenza and Newcastle diseases that are a threat to U.S. poultry industries and pose severe risks to public health.

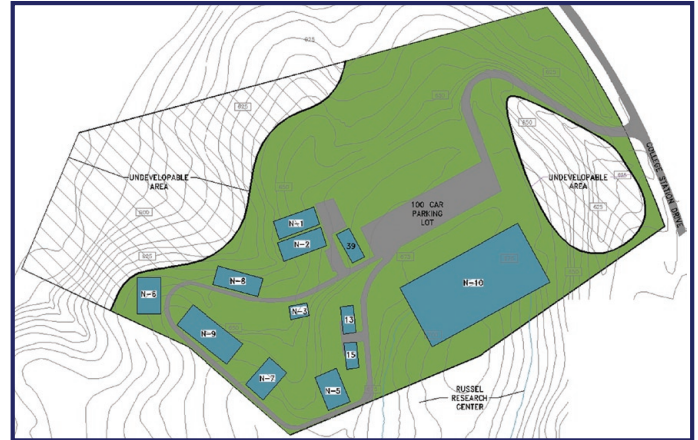
U.S. Department of Agriculture's (USDA) intent is to merge all poultry viral disease research into a single location by transferring work from the Avian Disease Oncology Laboratory (ADOL) in Lansing, Michigan to the Athens, Georgia campus of SEPRL. This union will promote the sharing of information and ideas about on-going research, as well as create a single center for Avian disease expertise to enhance the services already being offered.

USDA-ARS retained the team of RMF Engineering and Merrick & Company to prepare a Program of Requirements to upgrade facilities necessary for SEPRL to remain competitive and continue providing rapid response to emerging and exotic disease issues.

The new state-of-the-art laboratory and animal housing facility will include adequate research and animal components that support safe, efficient, and accurate research.

Facility specifications include:

- Filtered-Air Positive-Pressure (FAPP) Housing for Specific-Pathogen Free (SPF) Poultry
- Egg Storage, Incubation, and Brooding Facility
- Hatching & Grow-out Facility
- Laboratories to support DNA Sequencing, Immunology, Histopathology, Immunohistochemistry, and In-situ hybridization including:
 - BSL-2 Laboratory Space
 - ABSL-2 Laboratory Space
 - BSL-3E Laboratory Space
 - ABSL-3E Laboratory Space
 - BSL-3Ag Laboratory Space
- Main Laboratory Bldg: 193,572 gsf
- Production Facilities: 36,250 gsf
- Ancillary Facilities: 15,540 gsf
- Total Cost: \$190 million



Main Laboratory Building

The main laboratory building will contain the majority of the scientific program space including the security, administrative, logistics, and building support functions including BSL-2, BSL-3E, ABSL-2, ABSL-3E, and BSL-3Ag components.

The new building will consist of three distinct zones which will be tied to one another by a system of clean corridors that allow movement from one zone to another through a series of airlock and change rooms to inhibit cross-contamination of animals and samples.

Production Buildings

Buildings used for the breeding of chicken, duck, and turkey flocks, as well as egg incubation and growout, will be constructed with a Filtered-Air-Positive-Pressure (FAPP) environment for the breeding and rearing of poultry and eggs that meet the standards for specific pathogen-free research use.

Breeding Building (SPF)

The general layouts for the breeding spaces will remain the same as the facilities currently in use. Two FAPP rooms flanking a central mechanical/electrical support space will be the basis of design. Separate shower/change areas will be provided for each FAPP room.

Incubation and Grow-Out Building

Current plans provide two identical buildings for incubation and grow-out functions that follow the egg production process; each building will consist of seven 600 sf modules linked by a common corridor. As with the breeding rooms, this facility will be constructed to FAPP standards for SPF production.