

NC STATE'S GLOBAL FOOD ANIMAL INITIATIVE

Establishing North Carolina as the world leader in food animal biosciences.

NC STATE
UNIVERSITY

Agriculture and Life Sciences
Veterinary Medicine

Percentage of animal food production must increase by 2050 to feed a population of over nine billion.

73%

A grand challenge

The world's population will grow to more than nine billion by 2050.

Changes in global diets have increased demand for food animal products. We do not have the water or land to simply scale up current cultivation methods. We need true innovation in the underlying biosciences.

An agricultural leader

North Carolina is a recognized leader in food animal production. Agriculture contributes \$76 billion to the state's economy and generates 663,200 jobs.

Over 60% stems directly from food-animal systems. Even more if you factor in offshore marine fisheries and plant-based agribusiness that supplies feedstocks.

An incentive for initiative

NC State can help North Carolina become the world leader in food animal sciences by coordinating new research with existing proven infrastructure.

An ever-growing partnership

NC State's College of Agriculture and Life Sciences and College of Veterinary Medicine are leading this transformative initiative. Moving forward, we will actively enlist support from our other colleges, the N.C. Cooperative Extension service, N.C. A&T University, other land grant universities and the N.C. Department of Agriculture and Consumer Services.

Something new: An academy to think and do

We are proposing a new way to leverage and coordinate the resources we have. Bring interdisciplinary sciences together to solve grand challenges. Partner with industry leaders to bring new ideas to market faster.

The Academy for Global Food Animal Biosciences will span multiple colleges at NC State. It will foster dynamic integrative research on a wide range of species. Designed to be a transformative organization, it will propel NC State to global leadership status in food animal sciences.

For more information, contact Jack Odle
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North Carolina ranks second in the nation in poultry, turkey, pork and trout production.

We have the resources, partners and skilled personnel to shape the growth of the state's food animal economy.



5 Poultry Facilities

Chicken, turkey, feed mill and waste management units. Free-range and layer program.



4 Pork Facilities

Specialized units for genetics, sustainability and biosecurity.



14 Dairy and Beef Facilities

Providing uniform genetics, health and record-keeping in diverse locations and climates.



3 Aquaculture Facilities

Fresh and saltwater research focused on our evolving resources.



3 Ruminant Facilities

Goats, sheep and alpaca research to meet growing global needs.



Collaboration is in NC State's DNA

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The College of Agriculture and Life Sciences and the College of Veterinary Medicine are working together to solve the grand challenges in animal science.

A strategic approach to real innovation

To encourage collaborative research in animal science, the College of Veterinary Medicine (CVM) and the College of Agriculture and Life Sciences (CALS) will fund three competitive "strategic enrichment" grants.

Strategic Enrichment Research Grants are separate investigations into the production health of swine, cattle and poultry involving nine CVM faculty members and four from CALS. The areas include:

- Developing a system for reducing Porcine Reproductive Syndrome virus in reproductive sows.
- Developing antibiotic use guidelines to mitigate antibiotic resistance in microbes and ensure food safety.
- Developing a project to aid Ethiopian poultry producers to enhance livestock production.

No horsing around here

Both colleges are working side-by-side to ensure the best training in equine science for both undergraduate Animal Science and Doctor of Veterinary Medicine students.

The Reedy Creek Equine Farm is a new \$5 million facility to serve students, clinicians and horse owners. This project is part of a multi-faceted capital improvement campaign. Phase 1, estimated at \$2.1 million, is scheduled for completion in 2018.

NC State is THE partner of choice

At NC State, we know that world-changing research and scholarship are built on innovative partnerships. We've shown time and again that those partnerships create jobs and improve lives by driving cutting-edge solutions to market.

Your support for these and other extraordinary initiatives can be a vital part of making North Carolina a leader in the global food security challenge, while improving the state's own agricultural economy.

**Help make North Carolina the world leader in food animal biosciences.
Contact us today.**

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