The College of Agriculture and Life Sciences
Great People, Great Programs

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College of Agriculture and Life Sciences
NC State University
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ALS-103
Administrative Team

Dr. Ken Esbenshade
Director, Academic Programs

Dr. Jon Ort
Director, NC Cooperative Extension Service

Dr. Steve Leath
Director, NC Agricultural Research Service

Dr. Sylvia Blankenship
Associate Dean for Administration
Great College - Nationally

- **Academics**
  - Third largest number of students
  - Largest associate degree program at a Land-grant University
  - Innovative programs

- **Extension**
  - Second largest Extension Service
  - National Leadership – diversity, e-extension, disaster programs and fundraising
  - 30% funding from counties ($29.8M)
Great College - Nationally

- **Research**
  - Expenditures > $100M – ranked 5\textsuperscript{th} by NSF
  - Plant breeding, genetics, genomics – national leader
  - Several highly ranked departments
  - $55-$65M new grants and contracts annually

- **Advancement**
  - $40M/year for last five years
  - Outstanding events – Galas, Tailgates, Donor recognitions
  - Leader in NAADA
Great College

- People
- Partnerships
- Programs
Mission

The College of Agriculture and Life Sciences discovers, develops, teaches, and applies knowledge and technology that enables students, clientele, and citizens of North Carolina and others to improve the quality of their lives and to enhance the agricultural, economic, environmental, and social well-being of the state and world and to create and extend new knowledge through scientific research and extension in agriculture and the life sciences.
Academic Programs

Access

Success
## Degree Programs and Enrollment

<table>
<thead>
<tr>
<th></th>
<th>Number of Degree Programs</th>
<th>Enrollment (Spring 2006)</th>
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</thead>
<tbody>
<tr>
<td>Agricultural Institute</td>
<td>9</td>
<td>376</td>
</tr>
<tr>
<td>4-Year Undergraduate</td>
<td>40</td>
<td>3,920</td>
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<tr>
<td>Graduate (MS &amp; PhD)</td>
<td>31</td>
<td>828</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>5,124</strong></td>
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Evolving Academic Programs

- Health Care Professionals
- Nutrition and Health
- Genetics
- Feed Milling
- Bioprocessing Science

Relevant * Responsive
Distance Education

- ~100 courses offered; 4,000+ credit hours

- Degree and Certificate Programs
  - Master’s Level
    - Soil Science
    - Biological and Agricultural Engineering
    - Human Development and Family Studies – Family Life and Parent Education (with UNC-G)
    - Agricultural and Extension Education (four options)
    - Horticultural Science certificate
    - Design and Analysis of Environmental Systems – Watershed Assessment and Restoration certificate
  - Bachelor’s Level
    - Minor in agricultural business management
    - Certificate in food safety
Agricultural Programs

North Carolina Agricultural Research Service
North Carolina Cooperative Extension
Program Emphasis

- Economic Development
  - Traditional enterprises
  - New enterprises

- Environment
  - Soil and Water
  - Waste Management
  - Biodiversity
  - Air Quality
  - Integrated Pest Management
  - Sustainable Agriculture

- Quality of Life Issues
  - Health and Nutrition
  - Community Development
  - Youth Leadership Development
Traditional Enterprises
(Animal Agriculture)

- Beef - $258M
- Dairy - $171M
- Swine - $2.1B
- Aquaculture - $58.5M
- Poultry - $2.7B
Traditional Enterprises
(Plant Agriculture)

- Fruits & Vegetables: $252M
- Soybeans: $288M
- Cotton: $304M
- Tobacco: $620M
- Greenhouse/nursery: $832M
- Turf: $182M
- Corn: $182M
New Enterprises
Economic Development Initiatives

- Value-added and new alternatives
- Kannapolis – health and nutrition
- Bioprocessing
North Carolina Research Park
Kannapolis, NC

- Dole/NCSU Institute for Advanced Science (Fruits and Vegetables)
  - 12 faculty
  - 50 staff
  - Laboratories
  - Greenhouses
Biomanufacturing Training & Education Center

Bioprocessing
Biofuels

Sweet Potatoes
Switchgrass
Cotton Stalks
Animal Waste
Environmental Initiatives

- Waste Management
- Sustainable Agriculture
Quality of Life Initiatives
Identifying candidate genes for vaccines and drug targets for malaria

Philip Awadalla
Partnering with private company to reduce fatal complications of flu strains, including bird flu

Scott Laster
Discovered way to alter protein structure of viruses causing Mosquito-borne diseases like Dengue fever

Dennis Brown and Raquel Hernandez
Studies of fruit fly genetics have implications for human aging and other health issues

Trudy Mackay
Extension Family and Youth Programs

- Nutrition and health
- Youth leadership
- Scientific literacy
- Family financial management
Careers in Science and Math
College of Agriculture and Life Sciences

- Land-grant mission
  - Support traditional agriculture
  - Develop new economic opportunities
  - Protecting the environment and conserving natural resources
  - Quality of life issues
    Health and Nutrition
    Youth Development & Leadership
    Community Development