



**Department of Animal and Food Sciences
Strategic Plan**

2009-2014



MISSION AND VISION ANIMAL AND FOOD SCIENCES

WHO WE ARE

The Department of Animal and Food Sciences addresses the major issues faced by animal agriculture today – production efficiency, sustainability, animal welfare, environmental stewardship, food safety and food quality – through our programs in research, instruction and extension. These issues represent challenges and areas for science-based discussions with clientele and consumers. We are involved in multidisciplinary research programs that advance our knowledge of animal biology and production systems and their relationship to the environment, as well as processing, preservation, and improvement of human foods. Our instructional programs focus on the application of science and technology to animal and food production. Our extension programs advance sustainable agricultural and food systems and assist our youth to develop character traits needed to be successful citizens.

OUR VISION

As a part of the Land Grant system, our teaching, research and extension programs strive to make a positive difference in people's lives.

LAND-GRANT VALUES

We are guided by the values underlying the land-grant philosophy:

- learning – enhancing access to educational opportunities for all;
- discovery – expanding knowledge through research; and
- engagement – collaborating with diverse institutions, communities, and people to improve lives.

A hallmark of our work is the integration of these three values – learning, discovery, and engagement – into programs that make a difference.

OUR MISSION

The mission of the Department of Animal and Food Sciences is to:

- develop, improve, and promote sustainable animal production systems;
- improve the health and well-being of animals in food and non-food production systems;
- enhance the quality, utilization and safety of food products;
- facilitate life-long learning through:
 - creative research and discovery,
 - challenging and encompassing education,
 - effective engagement and technology transfer.

GOAL 1

Prepare Students for Leadership in an Innovation-Driven Economy and Global Society

The Department of Animal and Food Sciences takes pride in offering an educational program that provides students with current, research-based information and a solid base of concepts related to animal products, production, performance, and well-being. The Department strives to attract, retain, and graduate outstanding students who will become leaders in their professions and communities. This includes providing appropriate advising to assist students in achieving their academic goals in a timely manner, extracurricular activities to complement coursework and facilitation of internship opportunities and other interactions with the animal industry.

Most Significant Challenges

1. Classroom space is increasingly limited and some current classrooms are inadequately equipped.
2. Potential increases in funding opportunities are limited.
3. The current system of tracking graduates needs to be strengthened and improved.
4. Freshman retention and six-year graduation rates are less than desired.

Strategies

1. Provide the best possible learning environment for students with dedicated faculty, instructors, advisors and staff.
2. Implement current and new technology in the classroom, including the development of virtual classrooms.
3. Foster student participation and growth through personal and professional development opportunities beyond the classroom.
4. Use the experience of incoming students, career paths of recent graduates, and feedback from graduates' employers to help drive curriculum changes.
5. Expand faculty involvement in and financial support of Departmental scholarship and recruitment programs.
6. Increase expertise and recognition of faculty for academic and extracurricular advising.
7. Encourage students to add business related coursework in their degree programs.

Key Indicators, by 2014 the Department will have:

1. Increased the first-to-second year retention rate of full-time, degree-seeking students in the program to over 65%.
2. Increased scholarship funding awarded to students within the department by 10%.
3. Increased the percentage of full-time students graduating within a 6 year period from time of first enrollment.
4. Established a working database of graduates; actively monitored career paths.

GOAL 2

Promote Research and Creative Work to Increase the Intellectual, Social and Economic Capital of Kentucky and the World Beyond its Borders

The Department of Animal and Food Sciences' land-grant mission encourages truly creative research endeavors that result in the discovery of new knowledge. The Department's research activities will be focused on acquiring fundamental knowledge related to animal biology and management, animal and human nutrition, processing of food products and ensuring of their safety/security, and the interface of animal agriculture with the environment. The Department aspires to capitalize on the individual and collective achievement of our faculty by applying discoveries to the improvement of agriculture, industry, families, and communities at the state and national levels.

Most Significant Challenges

1. Infrastructure and facilities limit the potential for continued growth of research:
 - Increasing operating costs and lack of adequate equipment funds hinder research capability and productivity. Our most successful research programs have insufficient equipment support for further expansion and development.
 - Off-campus research facilities (farms) are not well maintained due to repeated state, university, and college budget cuts.
2. Repeated budget cuts have created key vacancies in both faculty and staff lines which pose real challenges to attain the top 20 status.

Strategies

1. Aggressively pursue funding opportunities and sources that support fundamental/applied research, particularly federal competitive and targeted initiative funds.
2. Identify opportunities for both intra- and extramural equipment funds and encourage faculty to apply to those programs.
3. Encourage faculty to include salary savings in federal grant submissions as an incentive to generate more extramural support.
4. Strengthen existing and develop new multi-disciplinary research programs that target funding opportunities available only to multi-university (institution) collaborations.
5. Continue to actively compile, document and communicate impacts of our research.

Key Indicators, by 2014 the Department will have:

1. Maintained the annual total external grant awards above \$100,000 per research FTE.
2. Maintained at least 2 graduate students per research FTE.
3. Maintained at least four extramurally funded postdoctoral scholars/research associates.
4. Obtained at least two pieces of major equipment.
5. Increased patent submissions by 20%.
6. Maintained the number of refereed journal publications per research FTE above 3 per year.

GOAL 3

Develop the Human and Physical Resources of the Department to Achieve Top 20 Stature

The Department of Animal and Food Sciences offers access to knowledge and learning for citizens and students throughout the Commonwealth. Our mission is to discover and disseminate knowledge through innovative programs in teaching, research and extension. We will continue to recruit and retain faculty and students of the highest caliber in order to maintain our status as one of the top departments of its kind in the nation.

Most Significant Challenges

1. Infrastructure and capacity appear likely to constrain further growth and advancement in all mission areas, and across most units in the Department. Limits have been reached in:
 - quantity and quality of office, laboratory, meeting and teaching space,
 - ability to sustain and update existing farm, laboratory and teaching facilities,
 - IT and communications support and hardware,
 - business and document management of grants/contracts, animal units and other functions.
2. Budget circumstances portend limited growth in faculty numbers, and may result in decreased faculty numbers. Expansion of enrollment or grant funding is difficult without addition of faculty.
3. Attracting, retaining and compensating highly skilled staff remains a challenge.
4. Recruitment or development of faculty at the most distinguished level (e.g., academy-level) remains severely limited by budget cuts and by the limitations in infrastructure for the development of state of the art laboratory and research facilities.

Strategies

1. We will strive to recruit, develop and retain nationally distinguished faculty and students.
 - We will opportunistically reallocate resources to retain exceptional mid-career faculty who bring elevated recognition and leadership to the department.
 - We will improve strategies for recruiting and developing new faculty who have the potential to become national leaders in their area of expertise.
 - We will continue to recruit and support excellent graduate students and postdoctoral scholars who can contribute to the research, teaching and extension missions of the Department.
2. We will further develop plans for expanding and enhancing the physical infrastructure needed to sustain the growth and advancement of the last decade.
3. We must seek increased funding for high-quality lab, teaching, and field facilities, as well as for extension programs and projects.
4. We will seek to improve recruitment, retention, and remuneration of staff.
5. We will continue to improve access to resources and infrastructure through enhanced business management, information technology, and support systems.

Key Indicators, by 2014 the Department will have:

1. Sustained its funding and publication record.
2. Increased the principal value of its endowment by 10%.
3. Continued its high level of nationally and internationally-recognized programs, faculty and graduate students.
4. Continued to renovate and maintain the functionality of existing facilities, laboratories and classrooms to support teaching, research and extension programs.

GOAL 4

Promote Diversity and Inclusion

The Department of Animal and Food Sciences is committed to creating an environment where diversity is valued and all individuals can fulfill their highest potential. Respect for diversity of thought, culture and all human differences is the cornerstone of all our actions. To implement this mission, diversity, fairness, and equity in policies and practices must be an essential part of learning, discovery and engagement.

Most Significant Challenges

1. Funding is limited for support of minority positions.
2. There is a paucity of qualified minority candidates for either faculty, staff or graduate student positions.

Strategies

1. Progress toward implementation of recommendations or objectives set forth by the department will be reviewed annually.
2. A network of partners with the 1890 land-grant universities, especially Kentucky State University, will be utilized to recruit faculty, staff and students and fulfill the different land grant missions.
3. The Department will utilize the Office of Diversity in support of recruitment of students, staff and faculty.
4. The Department will take advantage of financial resources available for the recruitment and retention of a diverse student body, faculty and staff.
5. Each Departmental Search Committee must actively pursue qualified minority and women candidates when positions are available.
6. The Department should promote and encourage interaction with established diverse disciplines (e.g. African American, Asian, Hispanic and Women's Studies programs).
7. Encourage the recognition of scholarly activity that may not fit traditional agriculture models.
8. The Department will seek to recruit undergraduate and graduate students from minority, under-represented and non-traditional agricultural areas (e.g. urban populations).
9. The Department will seek to recruit undergraduate students from minority, non-traditional agriculture areas and from under-represented groups for internships and work-study or student worker positions.
10. The Department will enhance the recruitment of doctoral students for the Lyman T. Johnson Graduate Fellowship.

Key Indicators, by 2014 the Department will have:

1. Sought qualified minority candidates for faculty and staff vacancies, graduate assistants and post-doctoral scholars.
2. Continued the inclusion of a diversity-related seminar that is held at least once yearly as part of the regular departmental seminar series.
3. Partnered with one or more 1890's land-grant institutions for recruitment of graduate students.

GOAL 5

Improve the Quality of Life for Kentuckians through Extension, Outreach and Service

Issues in the animal and food industries have created an unprecedented demand for knowledge- and research-based educational programs applicable to the needs of all Kentuckians. Economic development, leadership development, nutrition and health issues, opportunities for youth, and a rapidly changing agricultural landscape in Kentucky require a vital, progressive and responsive Animal and Food Sciences Cooperative Extension Service.

Most Significant Challenges

1. Ag Development Board funds have been critical to the success of Animal and Food Sciences Extension programs for over 5 years. These funds have become increasingly more limited and may expire in the near future. Alternative funding, alternative delivery methods or selective downsizing of programs will likely become necessary.
2. Adapting to new technologies available in the college for delivery of programs. This challenge is two-fold: difficult for Extension personnel to adapt to new technology; acceptance by some clientele audiences is not evident.
3. The college has implemented a requirement that newly hired Extension agents must complete their Master's degree. There are currently few opportunities for agents to take graduate level courses in Animal and Food Sciences and there are no graduate level distance learning courses in Animal and Food Sciences.
4. Operating funds for Extension and applied research becomes increasingly limited. Reliance on extramural sources necessarily increases. Opportunities for these alternative funding mechanisms are limited and extremely competitive.
5. In some species, increased concentration has led to sparse producer populations within individual counties. As a result, county level programming efforts are not effective use of resources in many cases. Regional programming increases travel distances for clientele and requires more coordination.

Strategies

1. Continue the pursuit of extramural funding from a variety of sources. In particular, the USDA-AFRI integrated extension and research grants provide new opportunities.
2. Sustain traditional Extension strengths while offering innovative new programs to serve increasingly diverse stakeholders.
3. Maintain and establish new Extension and outreach partnerships within and outside UK.
4. Increase the deployment of new information technologies such as eXtension, YouTube, electronic distribution lists, and enhanced web effectiveness.
5. Enhance training and support for outreach personnel statewide.
6. Work to develop courses/opportunities in Animal and Food Sciences for county educators to pursue graduate degrees.
7. Establish clearly understood measures to assess and communicate the impact of Extension programs.
8. Engage key constituencies – including commodity groups – to help the department achieve its objectives.

Key Indicators, by 2014 the Department will have:

1. Enhanced and refined Extension section of the Animal and Food Sciences website; tracked users through online tracking device.
2. Sustained current level of Extension educator training sessions and number trained.

3. Increased grantsmanship from sources other than the Ag Development Board. This will be evidenced by numbers of proposals submitted and funded and total funding amount.
4. Sustained departmental contacts at or above the current level.