Agriculture Experiment Station

In 2018, the Iowa Agriculture and Home Economics Experiment Station observes 130 years of encouraging and enabling scientific discovery. The dean of the college serves as director of the Experiment Station.

The program is a line item in the state budget producing about $30 million a year to fund agricultural research at Iowa State University. Additional funds come from federal capacity grants, competitive grants and royalties. The funds support faculty, staff and a scientific infrastructure that are fully integrated into and managed by the College of Agriculture and Life Sciences.

Advancing Iowa’s Agricultural Economy

The Experiment Station’s work represents the efforts of 177 scientists in 15 departments and 25 centers, institutes and initiatives. Although the work primarily focuses on areas in the College of Agriculture and Life Sciences, the Experiment Station also supports research in other colleges and cooperates with other states’ experiment stations to ensure that attention is paid to critical problems, research results are shared and duplication is avoided.

The Experiment Station conducts land grant mission-oriented research in the biological, physical and social sciences; contributes to the advancement of Iowa’s agricultural industry; and improves the economic and social condition of Iowa’s families and communities. Because of the integration of the college and Experiment Station, there is a direct relationship between the Experiment Station and college’s academic departments as well as the college’s centers, institutes, special initiatives, research and demonstration farms and other administrative units.

The college’s research strengths include work in: Plant Sciences and Plant Systems; Animal Sciences and Animal Systems; Natural Resources and Environmental Sciences; Food Safety and Security; Human Health and Nutrition; Economics, Markets and Policy; Bioeconomy/Biorenewable Products; Bioinformatics; Climate Science; Big Data-Digital Agriculture; Global Agriculture and Food.

Leading Statewide Initiatives

CALS-led plans for statewide research-and-extension initiatives were announced in 2017: the Iowa Pest Resistance Management Plan and the Iowa Monarch Conservation Strategy. Both are public-private partnerships involving farmers, businesses and communities to apply science to important issues impacting Iowa.

CALS scientists also are partnering with the College of Veterinary Medicine to develop the Antimicrobial Resistance Consortium. CALS leads statewide research that is informing new practices and advances in water quality and nutrient management, through the Iowa Nutrient Research Center in support of the Iowa Nutrient Reduction Strategy.
Farms Provide Connections

The college and experiment station operate 15 research and demonstration farms located around the state to assess the influence of soil and climate differences on agricultural practices. Associations of farmers and agribusinesses own eight of the farms and lease them to the Experiment Station. Income from farm product sales is used to offset research costs. The Experiment Station assumes the remaining costs of operating the farms. The remaining farms are owned by the university. The Experiment Station publishes research results in annual reports and farmers and the public view research in progress at field days scheduled throughout the year.

By the Numbers

- Each year college-supported scientists successfully compete for top research grants and contracts. Over the past eight years, they have brought in $400 million in sponsored funding, approximately $50 million per year.
- In FY2016, the college/Experiment Station had $120 million in research expenditures, or $803,148 per faculty FTE (those with Experiment Station appointments).
- CALS received the largest share of royalty income from licensed discoveries at Iowa State for the last three fiscal years ending in 2016.
- Nine of the top 20 income-producing technologies at Iowa State came from research in CALS and the Experiment Station.
- More than 130 Iowa State faculty members use the College of Agriculture and Life Sciences’ farms for teaching, research and extension. A similar number of staff members are involved as project leaders and workers.
- Each year about 2,000 students receive hands-on education experiences at teaching farms, including a farm management course in which undergraduates manage a crop and livestock farm.
- About 15,000 people visit Iowa State’s Research and Demonstration Farms every year.
- CALS ranks high in the following categories, from December 2017 data in Academic Analytics comparing CALS with 59 other agricultural colleges:
  - Number of faculty with a published article: #1
  - Total published faculty articles: #4
  - Number of faculty with a citation: #1
  - Total number of citations: #5
  - Number of faculty with federal grants: #1
  - Total number of federal grants: #2
  - Total federal grant dollars: #4
  - Number of faculty with honors or awards: #1
  - Total honors and awards: #1
  - Percentage of faculty with honors or awards: #7

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May 2018