

NEWS RELEASE

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NC State Will Lead Research At New 'Biopolis' Institute

FOR IMMEDIATE RELEASE

North Carolina State University and Dole Foods will form a cutting-edge research institute to lead the state's efforts in enhancing the nutritional content of fruits and vegetables to improve human health; increasing agricultural production to create a sustainable food supply; and providing scientific ideas and technologies that will contribute to North Carolina's economic growth. The Dole-NC State Institute for Advanced Fruit and Vegetable Science is part of a "biopolis" being constructed at the site of the former Pillowtex facility in Kannapolis.

The Institute for Advanced Fruit and Vegetable Science is a research and education institute with a global vision for improving the human condition. In addition to more plentiful harvests of fruits and vegetables already grown in North Carolina, NC State researchers and extension personnel will work with farmers to bring new crops to North Carolina in order to meet the demands of a Dole processing plant nearby.

"NC State has built a tradition of listening to the needs of the people and businesses of North Carolina and responding with real-world solutions," said Chancellor James L. Oblinger. "Our strengths in agriculture, research and technology make NC State uniquely qualified to operate the Institute for Advanced Fruit and Vegetable Science. The world-class basic and applied research conducted at the institute will yield innovative results and our extension service -- with offices in all 100 NC counties and the Cherokee reservation -- will share the new developments across the state.

"This project could mean a significant boost in economic development for North Carolina. Working with the state's producers and processors, we have an opportunity to not only make a strong contribution to the Kannapolis area, but to the entire state. "

The work of NC State researchers at the institute will be devoted to:

- improving quality traits of crops, including nutritional value, flavor, size and color
- discovering better and faster ways to grow fruits and vegetables to size while enhancing flavor

- more -

- extending the harvest to near year-round capabilities
- improving resistance to disease managing irrigation to provide maximum productivity and quality of fruits at a low cost
- extending preservation and shelf life

“As a first-class research facility, the institute will quickly establish an international reputation for excellence and leadership in translating research into practical benefits,” said Steve Leath, associate dean and director of the North Carolina Agriculture Research Service. Leath said a team approach to research will fuel this rise to international prominence. NC State will employ teams that combine researchers from genetics, genomics, horticultural science and plant breeding for research on a single crop.

Each team will examine methods of increasing nutritional value of the given crop, novel storage and preservation methods, extending the harvest season, protecting the crop against diseases, and other methods of crop improvement. The team also will consider ways to meet the growing demand for organic crops. This model will not only create a novel team approach, but also allow researchers from each team to interact – for example, allowing the geneticist from each team to share research.

This work will include berry crops and other fruits, as well as vegetables and flowers.

“NC State will work with Dole in an unprecedented, ongoing and ambitious effort to recruit and assist farmers in the growing of fruits and vegetables needed to meet the high demands of the Dole plant,” Leath said.

“Research and extension personnel will coordinate grower transition to new crops, or to greater acreage of particular crops. The effort could support and complement changes in the tobacco industry by providing diverse and alternative crop choices to growers, and the expertise to produce them.”

Coordination of the harvest cycle also is an important part of the process. NC State will assist in the recruitment, education and coordination of farmers across the state so that crops could be harvested virtually year-round. For example, with a given crop, early-season harvests might take place first in eastern North Carolina, followed by harvests in the piedmont, and later harvests in the western mountains completing the cycle.

NC State envisions the creation of about 60 new jobs, including 12 new faculty research positions, as well as several grad students and postdocs at Kannapolis.

Ongoing educational support would be provided through distance learning, producer training, consumer outreach (including outreach to high schools), grower awareness, and internship opportunities for NC State, UNC-Charlotte and North Carolina A&T State University students.

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The facility will include 100,000 square feet of research space and 65,000 square feet of greenhouse space.

The Dole project at Kannapolis also will include UNC-Chapel Hill and UNC-Charlotte.