

# Beadle Center must fill big Nebraska's reputation for

By Tom Mainelli

In 1958 Nebraskan George W. Beadle received worldwide attention when he won a Nobel Prize for his groundbreaking work in genetics.

Nearly 36 years later University of Nebraska-Lincoln officials are hoping to once again bring national attention to the Beadle name, through the work of researchers at the George W. Beadle Center for Genetics and Biomaterials Research.

The \$31.5 million center is under construction east of 17th Street and south of Vine Street. The main building will house UNL's centers for biotechnology and biological chemistry and the departments of chemical engineering and biochemistry. The center will also contain new biological greenhouses, new utility tunnels and a new "chiller" that will increase air-conditioning capacity on City Campus.

Marion O'Leary, head of UNL's biochemistry depart-

ment, said the Beadle building would be a high-tech facility that would provide scientists with the tools to break new ground in many areas of research.

"The center will move us ahead in scientific and technological research," O'Leary said. "We'll be able to do cutting-edge research that has significant economic benefits for the state and the region."

Those economic benefits would come, in part, from the research projects that result in the creation of new products.

Irv Omtvedt, vice chancellor of the Institute of Agriculture and Natural Resources, said product research would include the creation of biodegradable plastics, alternative cloth fibers and fuels, and new lubricants for machines.

O'Leary said other projects would include the development of new plants that are genetically engi-

neered to be more resistant to insects, viruses and herbicides.

Bioremediation research is also planned, O'Leary said.

Bioremediation is the use of special bacteria that devour toxins. The development of this type of bacteria could bring

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national attention to UNL as communities look for ways to detoxify harmful substances that are otherwise difficult to remove.

Omtvedt said the key to the success of many of these product development projects would be the different departments working together.

"Most of the problems we encounter are broader

than one discipline," he said. "You cannot look at them in segments, you need to look at the whole problem."

"This interdisciplinary approach is very different," Omtvedt said. "Nobody else has chemical engineering working as closely with biochemistry."

Along with the various departments working together, Omtvedt said the private sector would be involved in the process.

Private businesses

would play a role in everything from research to production of these various products, Omtvedt said.

These private companies would also be allowed time for research in the Beadle Center facility. Some will work independently, and others alongside university researchers, he said.

Besides the money generated through new

product development, O'Leary said the Beadle Center would help university researchers in their search for grants.

"The Beadle Center will make us more attractive; it should help us bring in more grants," O'Leary said.

Money from organizations such as the National Science Foundation and the National Institute of Health is usually granted to individual researchers.

These grants cover everything from research materials to salaries, he said.

O'Leary said 13 biochemistry researchers brought in about \$1.8 million in grants last year.

With the use of improved facilities that number should go up.

While increased research, product development and visibility were important factors in the creation of the Beadle Center, O'Leary said it was important to point out that those would not be the center's only functions.

The facility will also house UNL's biochemistry