Stimulus jolts Triangle science

Triangle area researchers won a massive infusion of $145 million in federal stimulus money Wednesday for scientific projects large and small -- including an ambitious effort to seek cancer treatments by unraveling the complex genetics of tumors.

Of the 521 grants awarded to the state, 415 are in the 4th Congressional District, which includes the Triangle. The big winners were UNC-Chapel Hill, with 186 grants worth more than $60 million, and Duke University, with 181 grants totaling more than $75 million.

The stimulus bill enacted this year included $10 billion for the National Institutes of Health, which opened the financial spigot to projects that might have otherwise taken years to fund.

In addition to creating high-paying jobs in scientific fields, the money will spur the pace of discovery into conditions that affect millions, including heart disease, autism, Alzheimer's and breast cancer.

"What it should do is help to extend existing research programs but also help to create new research programs into the future that will be very competitive with respect to obtaining other funding," said Wayne Holden, an executive vice president with RTI International, a think tank in Research Triangle Park that received 10 grants.

One of the largest awards is headed to UNC-CH, which was tapped as one of 12 research institutions in the nation to receive a Cancer Genome Atlas Grant for research into the mechanisms of how cancer grows and spreads. That knowledge is crucial for developing new therapies and even cures.

The five-year award could total from $13 million to $20 million, university officials said, and will result in the hiring of at least six people for lab and computer work.

"It's really the next phase of the Human Genome Project," said Dr. Charles Perou, referring to the huge national effort to create a blueprint of the human DNA sequence. Perou, associate professor of genetics, and pathology and laboratory medicine, is one of the leaders of the university's cancer atlas project.

"Now what we need is a blueprint of what it is to be a cancer tumor," he said.
Perou said this area of science has already borne fruit. Genetic research has found that breast cancer is actually four or five different diseases -- each responding differently to treatments based on the molecular origins.

"We hope to get a more comprehensive picture of the genetic causes and then use that information to improve treatments and outcomes for cancer patients," Perou said.

The UNC-CH portion of the money for the project will fund research to characterize the different genetic signatures that cancers express. The other national institutions receiving Cancer Genome Atlas will conduct similar work or provide data support. All will share findings.

Perou said the university was positioned to compete for the grant because it had been allocated state money to buy the sophisticated tools necessary for the genetic inquiry. The project is led by the Lineberger Comprehensive Cancer Center but involves scientists throughout the university.

Price sees a boost

U.S. Rep. David Price, a Chapel Hill Democrat who represents the Triangle, said he encouraged his local institutions to look at opportunities in the economic stimulus package. But he said he had not influenced NIH's decisions on who won the grants.

"Some people in Washington have asked, 'How does medical research provide a financial stimulus?' " Price said in an interview. "I don't think you have to ask people in our area that question. That's a big part of our economy."

Staff writer Barbara Barrett contributed to this report.