

Thomas Rosenquist: Stimulus will raise UNMC to new heights

By Thomas Rosenquist

The writer, of Omaha, is vice chancellor for research and the University of Nebraska Medical Center.

The University of Nebraska Medical Center has been the recipient of significant funding from the National Institutes of Health (NIH) through the American Recovery and Reinvestment Act of 2009. We are truly grateful for the wise and thoughtful acts of President Obama, as well as Sen. Ben Nelson and his colleagues in Congress who have made this possible.

The NIH, which is part of the United States Public Health Service, has developed the largest, most successful system the world has seen for the encouragement and funding of biomedical research. Projects chosen for support through the rigorous NIH peer review process are required to be excellent science, and most of the major advances in modern medicine are derived from NIH-supported basic discoveries.

The decision by the president and Congress to specify significant funding for the NIH in the Economic Recovery Act appears to be quite strategic and very likely in the long run to result in improved health care and longevity for Americans.

This probability is increased by the careful way that the NIH has chosen to distribute the dollars: Most of the funding has been directed to the support of scientists who already have been shown to be successful. The UNMC scientists, who have received a total of nearly \$10 million, prove this point very nicely.

All of the recipients are well-known, well-funded scientists, working in key areas of health care research.

Dr. James Turpen, professor and director of the UNMC program in regenerative medicine, has been awarded more than \$1 million for further development of the Nebraska Research Network in Functional Genomics. This large-scale program of research, education and training will not only advance research in gene-based therapy but also will educate Nebraska college students in 21st-century research processes, giving Nebraska a new high-tech work force to promote our economic development.

These kinds of opportunities are a key component in stanching the brain drain and keeping our best and brightest young scientists and technicians at home.

Another good example is the \$1 million supplement won by Dr. Irving Zucker, professor and chairman of the UNMC Department of Cellular and Integrative Physiology. Because of the aging population in Nebraska, heart failure is a major and growing issue. Dr. Zucker and his group will use these new funds to investigate the role of the statin drugs to improve heart performance during heart failure, potentially improving both quality of life and survival.

Other recipients of Recovery Act funds are several scientists whose work already is being analyzed, or has been selected, by the pharmaceutical industry for further development in such areas as Alzheimer's disease, antibiotic-resistant bacteria and cancer treatment. New companies to develop some of these discoveries are being planned or already exist. The long-term prospects for economic development in Omaha and Nebraska are excellent.

In addition to the excellent long-term prospects for economic development, it is obvious that these funds will have an immediate, positive effect upon the economy of our community and our state. The major cost in research is personnel, and a large proportion of stimulus funding will be spent to increase the number of laboratory workers at UNMC. These are excellent, challenging jobs with a future.

In some cases, the stimulus dollars will leverage new, longer-term funding and the jobs will endure. In other cases, the stimulus dollars will support training jobs for post-doctoral research fellows or graduate research assistants who otherwise might not have the opportunity for high-level training and education. In addition to these laboratory positions, the NIH estimates that each \$1 million of NIH funds spent in a community in a given year supports between 25 and 30 jobs overall.

The NIH Economic Recovery Act dollars that have come to UNMC and other Nebraska medical sciences research centers are having an immediate positive impact upon the economy while providing support for the health and well-being of future generations: clearly a win-win situation.

UNMC is proud of our corps of world-class scientists who have competed so successfully for these dollars, and to be part of this great national economic and scientific project. President Obama, Sen. Nelson and his colleagues in Congress, and the people of Nebraska can be sure that the UNMC scientists are investing these funds wisely in the future of our community, state and nation.