

# Fermilab to reopen for cancer treatment

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Don Young saw his brother suffer through side effects and surgery for prostate cancer, so when the Downers Grove man found out he also had the disease, he vowed to do something different.

He chose to attack his cancer with the neutron energy produced by the world's most powerful particle accelerator at Fermilab in Batavia.

As a physicist at Fermilab two decades earlier, Young had helped persuade the medical world to harness the energy by-product of the lab's experiments.

Little did he know then his often-criticized outreach would save his life.

Young's cancer had spread beyond the prostate, making it nearly impossible for conventional radiation therapy to eradicate with its concentrated beams. The neutron therapy emitted a "shotgun blast" of energy at his pelvis, attacking the tumor and the small cancer cells that had migrated to find breeding grounds for new tumors.

The 12 treatments were painless and relatively side-effect free.

"I could receive the treatment and go about my daily business all the time," Young said. "I think I made the right decision."

Nearly four years later, Young, 82, still is cancer-free.

Yet, he almost became a footnote in a failed bid to tackle cancer along with the other 3,100 people treated at the high-energy lab when it closed in May 2003.

After nearly 17 years of seeking financial and academic support to revive the treatment clinic, Fermilab and Northern Illinois University announced Monday a new partnership. Using \$2.7 million in federal money during the next three years, officials will reopen the cancer treatment center in mid-January and build it into a research lab.

That will give between 100 and 120 cancer patients like Young each year a chance to have neutron therapy close to home. The only other neutron therapy clinics in the United States are in Seattle and Detroit, and both have less powerful rays than Fermilab, potentially limiting the effectiveness in treating certain advanced cancers, said Aidag Diaz, medical director for the new NIU Institute for Neutron Therapy at Fermilab.

The partnership also will open the doors to the first new research from the clinic in nearly 20 years.

House Speaker Dennis Hastert, a Plano Republican, called the research key to furthering the entire field of cancer research. Hastert has been a proponent of neutron therapy since the 1980s, when a friend who coached wrestling with him had his life saved by the Fermilab program.

Officials hope to save more lives through research on expanding neutron therapy's applications and eventually isolating cancer genes to tailor all cancer treatments to individual patients, said Rathindra Bose, NIU vice president of research and dean of the graduate school.

Officials also expect the cancer treatment center to spawn research in the areas of counseling, speech therapy and hearing aids as NIU medical and research staff at the center help patients deal with the damage caused by cancer.

The clinic ceased research in 1985 and was taking only for-fee treatments until it closed in 2003. A lack of research to provide to patients was one of the reasons Provena St. Joseph Hospital in Elgin cited for not renewing its contract as the center's sponsoring hospital.

Rather than worry about finding different hospital sponsors every few years, NIU plans to have an on-site physician running the clinic, a first in the clinic's nearly three-decade existence.

The physician will track patients for research purposes as well as help advocate the treatment to Midwestern hospitals.

Although neutron therapy has been used off and on since 1938, the limited number of accelerators to produce the neutron beams, a lack of current research and the failure of Medicare to fully cover the treatment until 2002 has stifled knowledge of the program.

Officials think they can change that by educating doctors about the proper insurance codes to get reimbursements for the treatment and explaining the types of cancer where neutron therapy has a higher success rate than traditional radiation therapy or surgery. Currently, neutron therapy is used to target cancers of the salivary glands, neck, head and prostate, as well as inoperable sarcomas and adenoidcystic carcinoma.

Already, Central DuPage Hospital in Winfield has signed on and agreed to take in cancer patients that need medical oversight while they undergo the outpatient therapy.

Bose said that is only the beginning of the economic boon the clinic could bring. He expects to draw patients from throughout the Midwest to stay in the area during the four weeks of treatment. The research component should attract spin-off medical businesses, he said.

"This will lead us to the next generation of radiation research," Bose said.

Fermilab: Treatment said to work best in worst cases