



## *Texas Center for Proton Therapy*

Texas Center for Proton Therapy brings a major life-saving cancer treatment to North Texas that offers more hope to cancer patients. This latest-generation proton therapy center opened in November 2015.

- Currently, there are only 31 proton therapy centers operating in the United States.
- Until 2015, Dallas-Fort Worth was the largest metropolitan area in the United States without a proton therapy center.
- The 63,000-square-foot center has the capacity to treat up to 100 patients per day between three treatment rooms.
- It is the first stand-alone LEED-Certified (Leadership in Energy and Environmental Design) proton therapy center in the U.S.
- The center's central location is convenient for those in the Dallas-Fort Worth area and provides easy access to airports for patients traveling longer distances.

### **Technologically Advanced Treatment**

- Proton therapy is one of the most promising developments in cancer treatment.
- Used in all three treatment rooms, pencil-beam scanning uses proton beams to rapidly scan across the cancer target to precisely match the shape of the tumor, allowing for adaption to complex shaped or moving tumors to reduce radiation to normal tissues.
- Cone beam CT gives clinicians the ability to use 3-D volumetric imaging, which provides improved anatomic visualization, better patient positioning, and more precise treatment of tumors.
- Proton therapy is a highly targeted, precise radiation therapy that is especially effective for tumors in sensitive areas.
- Proton therapy is also especially beneficial for treating children, whose bodies are still developing. Pediatric cancer is the most common disease-related cause of death among Texas children.
- The therapy uses a cyclotron weighing more than 220-tons, the equivalent of 31 elephants.
- A cyclotron, a magnet-packed particle accelerator, creates a proton beam that travels at two-thirds the speed of light through a 143-foot beamline – nearly half the length of a football field.
- The beam delivers radiation with pinpoint accuracy, minimizing damage to surrounding healthy tissue.
- Two isocentric gantry treatment rooms each contain a 30-foot tall, 110-ton machine, capable of rotating in any direction to enable pinpoint accuracy in treating tumors.
- The center also has one fixed beam treatment room.
- Proton therapy is non-invasive and may reduce side effects, allowing patients to maintain their quality of life during and after treatment.

### **Patient-Centered Approach**

Texas Center for Proton Therapy's patient-centered approach to care is evident in the center, which was designed to create a positive and supportive patient experience. The center offers:

- Latest-generation proton therapy with pencil-beam scanning and on-board cone beam CT and fluoroscopy
- The latest PET/CT and 3-Tesla MRI scanning technology
- On-site laboratory services
- Access to clinical trials
- Focused therapeutic activities for patients, families, and caregivers
- A full range of patient support services to assist with the logistics of care and travel
- A children's activities room/learning center
- Access from major highways with abundant, outdoor free parking
- Integrated with Texas Oncology locations throughout the state
- Telemedicine consultations available
- A 1,100-square-foot community room featuring a seven-foot "HOPE Wall" filled with hand-written messages of encouragement and support
- Healing garden