FEATURE ARTICLE

THE POWER OF PROTONS
A New Era in Cancer Treatment in Texas
**More survivors. More hope.**

That’s the mission of the recently opened Texas Center for Proton Therapy—a major step forward in cancer treatment in Texas. Dallas/Fort Worth had been the nation’s largest metropolitan area without a proton therapy center. Now physicians and patients have access to the most advanced proton beam radiation technology available.

Proton therapy treats tumors with extraordinary precision. Advancements in radiation physics, computer technology, and imaging over the last 25 years have made it possible to create smaller beams, better control radiation dose, and aim treatments with better accuracy. The result is less damage to healthy tissue, fewer side effects, and improved quality of life for patients during and after treatment.

“We are delivering on the power and promise that proton therapy offers for better outcomes and improved quality of life—providing new hope for cancer patients.”

Andrew Lee, M.D., M.P.H.
Medical Director
Texas Center for Proton Therapy
Texas Center for Proton Therapy is one of only a few centers in the country that offers one of the latest innovations in proton therapy: Image-guided pencil-beam scanning. Using 3-D imaging known as on-board cone beam computed tomography (cone beam CT), physicians can aim and deliver an ultra-fine proton beam across each layer of the tumor. The center’s clinical staff has more than 70 years of combined proton therapy experience – led by medical director Dr. Andrew Lee, the first physician to perform pencil-beam scanning treatment in North America.

At groundbreaking ceremonies in 2013, the center was dedicated to creating more cancer survivors. In operation three months ahead of schedule, patients already are benefiting from the power of protons, a cancer fighting one-two punch of breakthrough technology and leading oncology expertise.

### Patients First

Since Texas Center for Proton Therapy is the only proton center in North Texas, patients likely will come from near and far. They’ll share a common experience at the center that reflects Texas Oncology’s commitment to treating the whole patient, not just tumors. That means helping with logistical needs like lodging and transportation, where to get an oil change or catch a round of golf. Patient support also addresses personal and emotional needs for patients and their loved ones.

“We support patients throughout their treatment in a variety of ways. But we’ve learned that some of most impactful support that patients and their families receive is from each other,” said Christina Mershell, patient support services administrator. “Part of our role is to enable that special, helpful bonding through group meetings, and other engaging activities like our speakers series.”

Christina Mershell
Patient Support Services Administrator
Texas Center for Proton Therapy

Designed to accommodate patient support needs, the center includes a large community room, children’s activity room/learning center, and a beautiful healing garden.

### Who Benefits from Proton Therapy?

Proton therapy can treat many different cancers. With beams of radiation as small as three millimeters wide, the precision of proton therapy makes it a preferred treatment option for tumors in sensitive areas. It is particularly important for children whose bodies are still growing and developing.

**CANCERS WE TREAT**

- Brain
- Breast
- Lymphomas
- Pediatric
- Sarcoma
- Recurrence
- Head & Neck
- Lung
- Gastrointestinal
- Prostate

Healing garden at Texas Center for Proton Therapy.
About Texas Oncology
As an independent oncology practice, Texas Oncology is comprised of more than 400 physicians and more than 165 sites of service throughout Texas and southeastern Oklahoma and is a pioneer in community-based cancer care. Patients are treated with today’s most advanced, effective cancer technologies and treatments, and have the opportunity to take part in some of the most promising clinical trials in the nation for new drugs and treatments for a broad range of cancers, near the critical support of family and friends.

Texas Breast Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, and Texas Center for Proton Therapy are a part of Texas Oncology.

Leaders + Innovators = Physician Dream Team
Texas Center for Proton Therapy’s physicians have decades of experience and share a commitment to high quality and personalized patient care.

Andrew Lee, M.D., M.P.H., Medical Director
First physician to treat patients with pencil-beam scanning proton therapy in North America. Launched proton therapy treatment at MD Anderson Cancer Center.

Daniel Hamstra, M.D., Ph.D.
An international expert in radiation oncology with expertise in treating brain tumors and prostate cancers, and a focus on molecular imaging.

Victor Mangona, M.D.
Specialized experience in pediatric cancer; a former high school physics teacher passionate about working with children.

Jared Sturgeon, M.D., Ph.D.
Special interest in treating breast, head, neck, pediatric, and lung cancers; research focus includes studying advanced imaging and causes of cancer.

Texas Center for Proton Therapy By the Numbers

| 13 | school buses | weight of cyclotron (220 tons) |
| 4.5 | Olympic-sized swimming pools | equivalent amount of concrete needed to build the center |
| 12 ft | thickness of walls surrounding cyclotron |
| 3 stories | height of gantry |
| 3 millimeters | width of proton radiation beam |
| 1 | number of proton therapy centers in Texas offering newest, advanced technology |