



Scripps Proton Therapy Center







Welcome to Scripps Proton Therapy Center

Scripps is dedicated to providing the most advanced cancer care in a collaborative and supportive healing environment.

If you are considering radiation, Scripps Proton Therapy Center offers one of the safest, most innovative options available for treating tumors — proton therapy. This therapy has been used to effectively treat cancer throughout the world and is the most precise form of radiation treatment available.

The first proton therapy treatment center in San Diego, and only the third on the West Coast, our center combines leading-edge technology with personalized care from our experienced, compassionate health care team.

Proton therapy further compliments the comprehensive cancer care available at Scripps. One of only two accredited network cancer programs in California, Scripps combines the most advanced, comprehensive cancer treatments with expert, personalized care. We offer a variety of therapies and healing disciplines to address the whole person,

including surgery, chemotherapy, traditional radiation therapy, hormone therapy, integrative medicine and access to clinical trials.

Your Scripps team will work closely with you to create an individualized plan that addresses all aspects of your experience with cancer — physical, emotional and spiritual.

Proton Therapy: Advantages for You

At Scripps Proton Therapy Center, we feature the state-of-the-art, Varian ProBeam proton system and the most advanced pencil-beam scanning technology.

The scanning technology enables advanced intensity modulated proton therapy (IMPT) treatment — which improves control of radiation doses. Through IMPT, we can shape and manipulate high-dose radiation specifically to well-defined cancerous areas throughout the treatment region, while sculpting around normal organs and healthy tissues. Traditional X-ray radiation also destroys tumors, but proton therapy may have some important benefits. The most important of these benefits is that proton therapy spares healthy areas surrounding a tumor.

Since protons can be precisely controlled to match a tumor's shape, radiation can be delivered directly to your tumor — and stop there. The radiation does not travel through and around the tumor to surrounding tissues, organs or structures, such as the heart, liver or brain.

This precision also allows for a more potent and effective dose of radiation to be used, which may result in minimal or no side effects.

Proton therapy is effective in treating many different types of cancer, as well as some non-cancerous tumors. Some of the many cancers that may benefit from proton therapy include:

- Prostate cancer
- Chest and lung cancer
- Breast cancer
- Pediatric cancers
- Central nervous system (brain and spine) tumors
- Head and neck tumors
- Lymphoma
- Gastrointestinal cancers
- Sarcomas

Proton therapy is particularly effective for pediatric and young adult patients, who face greater risks from radiation exposure because they are still growing and face higher risks from long-term side effects than adults. Proton therapy also is extremely effective for those with tumors near critical organs or structures, such as the brain and spinal cord, and for those who cannot tolerate more X-ray radiation.





Explore Your Options

Every person's needs, lifestyle, expectations and goals are different; no two conditions are the same. That's why the team at Scripps Proton Therapy Center collaborates with medical oncologists to come up with an individualized care plan for each patient.

Proton therapy may be used alone or in combination with chemotherapy. It may be a treatment prescribed prior to or following cancer surgery. The types of treatment used will depend on the type, stage and location of the disease or condition.

If proton therapy is deemed a treatment option for your cancerous or non-cancerous condition, the medical team will take scans of the treatment area and use computer modeling to formulate a treatment plan. This plan is designed to deliver maximal radiation doses to the tumor, while minimizing the radiation exposure to healthy surrounding tissues.

Shorter Treatment Courses, More Targeted Treatment

Proton therapy is non-invasive, so treatment itself is painless. It may also be quick. Most types of cancer —

and even non-cancerous conditions — can be treated in six to nine weeks with proton therapy.

While actual treatment time ranges from one to three minutes, patients can expect to be in the treatment room for a total of 30 minutes or less per treatment, depending on the tumor type, size, location and the patient's health.

The proton beam can be delivered with accuracy of up to 1 millimeter, so it is important for technicians to carefully position the person receiving treatment. Full two-way video and audio are always on during treatments, allowing the medical team members and patients to communicate throughout the process.



From left to right: Carl Rossi, MD; Huan Giap, MD; Andrew Chang, MD; Ryan Grover, MD

Your Individualized Treatment

Our medical director, Carl Rossi, MD, has 20 plus years of experience with proton therapy and has treated approximately 9,000 prostate patients — more than any other physician in the world.

Dr. Rossi leads a team of similarly experienced radiation oncologists, oncology nurses, proton therapists, medical physicists and others. With 85 years of combined experience delivering cancer care, our physician leadership team has helped more than 13,000 patients with proton therapy. Your proton therapy team will be with you every step of the way.

Support for You and Your Family

Scripps Proton Therapy Center offers more than the most leading-edge technology and clinical expertise. We provide a supportive, compassionate environment from the moment you walk through our doors into a light-filled space that creates a comfortable and inspiring environment for healing. With our integrated approach, we are committed to helping you address the many challenges of a cancer diagnosis.

Our concierge staff will help you and your family manage day-to-day concerns during your treatment. We can assist in arranging accommodations, provide guidance on spiritual resources in the area and help direct you to support groups, educational classes and counseling. Workshops cover important topics, such as nutrition, exercise and emotional journaling. We encourage you to visit scripps.org/support-services to find out more.

Getting Started

Scripps Proton Therapy Center is committed to making your experience as positive and healing as possible. Call us at **858-549-7400** to request a consultation.

For more information, visit us at scripps.org/proton.



Answering Your Questions

We understand that when you receive a diagnosis of cancer, you have to make many important decisions and may have a lot of questions. We are here to help.

What is a proton?

A proton is a subatomic particle with a positive charge. Protons can be manipulated to stop and deliver radiation directly at a tumor — and travel no further.

What is proton therapy?

Proton therapy is a form of external beam radiation treatment using powerful technology to generate a beam that penetrates the body from the outside. This is different from conventional radiation, which uses X-rays.

How accurate is the delivery of proton beams, compared to conventional X-ray radiation therapy?

Proton therapy is by far the most accurate form of external beam radiation treatment available today. Conventional X-ray treatment beams penetrate well

beyond the tumor, but protons can be controlled to conform precisely to the shape of the tumor and to release most of their energy within the tumor. Protons can be made to stop where the tumor stops, whereas X-rays penetrate entirely through the body. Protons have a lower entrance dose than X-rays, and have no exit dose beyond the tumor.

Are there side effects?

In many cases, side effects associated with external beam radiation therapy such as diarrhea, headache and loss of appetite are fewer with protons than with X-rays. This is because proton therapy spares significantly more healthy tissue than X-ray therapy.





Three of the five treatment rooms are equipped with gantries shown here in this photo with Huan Giap, MD, (left) and Ryan Grover, MD. The gantry rotates around the patient to aim and deliver the proton beam at a precise angle.

Is proton therapy experimental?

No, proton therapy is not experimental. Proton therapy has been approved by the U.S. Food and Drug Administration since 1990 and has been used in the United States for more than 50 years.

What scientific evidence shows the effectiveness of proton therapy?

There are hundreds of peer-reviewed journal articles that have been published in medical literature showing that proton beam therapy is highly effective in treating many tumor sites compared to alternative therapies. In the United States, there are currently more than 100 active proton therapy studies — research in which Scripps will take part.

What is the duration of a treatment?

Delivery of the proton beam lasts about one minute. Plan to be in the treatment room an additional 10 to 25 minutes to make sure you are positioned accurately. In most cases, you can expect to spend several weeks receiving treatment. Many people can be completely treated in four to six weeks.

Is treatment painful?

Treatment itself is painless. Most people feel no physical sensation from the proton beam, hear very little noise and experience minimal discomfort.

Do I have to stay overnight?

Proton therapy is an outpatient treatment performed in the Scripps Proton Therapy Center. You do not stay overnight in the hospital.

Is proton therapy covered by insurance?

Proton therapy is approved by the FDA and has an established history of reimbursement by Medicare and many private health care payers. Specific coverage guidelines vary among commercial insurers.

Can I still work while getting treatment?

After your treatment, you may resume your daily routine.

What if I don't live nearby?

If you are not a San Diego County resident and decide to receive treatment at our facility, we will help you find hotel accommodations or other living arrangements.

How can I find out if proton therapy is for me?

You or your physician can contact Scripps Proton Therapy Center at **858-549-7400** or visit **scripps.org/proton** for more information.



Scripps Proton Therapy Center

Scripps Health: A Leader in Cancer Care

Founded in 1924 by philanthropist Ellen Browning Scripps, Scripps Health is a \$2.5 billion nonprofit, integrated health system based in San Diego, California. Scripps treats a half-million patients annually through its five acute-care hospital campuses, home health care services and an ambulatory care network of physician offices and 23 outpatient centers and clinics. Our 2,600 affiliated physicians and 13,500 employees are dedicated to providing high-quality care.

With more than 300 affiliated physicians who provide care to people with cancer, Scripps offers the best possible treatment and leading-edge research trials for individuals by coordinating medical expertise in the areas of clinical cancer care, community outreach and clinical, translational and basic research.

Scripps has long been a leader in providing cancer care in San Diego. It opened the county's first blood and marrow transplantation program in 1980, and during the past 30 years, the program's patient survival rate has doubled. Scripps offers the most comprehensive robotic surgery program in San Diego. And Scripps is the only cancer care provider in San Diego to earn network accreditation from the American College of Surgeons' Commission on Cancer. Scripps is the third health care system west of the Rockies to offer advanced proton therapy to cancer patients. Located in Mira Mesa, the center will be the twelfth proton therapy facility in the United States.

Our nationally renowned physicians are here for you. For more information about our cancer care services, go to scripps.org/cancer.

Business card holder do not print

Contact Us

It's easy to take the next step. Call Scripps Proton Therapy Center at **858-549-7400** to request a consultation.

Scripps Proton Therapy Center

9730 Summers Ridge Road
San Diego, CA 92121

858-549-7400

scripps.org/proton



1-800-SCRIPPS (727-4777)
scripps.org