

# CANCER CENTER



# A CENTER OF EXCELLENCE

## A MILESTONE FOR THE COMMUNITY

The Cancer Center at Riverside Community Hospital is a milestone for the community. In the past residents have traveled to hospitals in outlying areas to seek high caliber cancer services. This new service offers residents superior cancer care close to home. This \$8.2 million, 8,200 square foot facility opened in 2003 and gives local patients the benefit of Riverside Community's uncompromised dedication to the health of the community it serves.

## COMPASSIONATE AND EXPERIENCED STAFF

The care of a cancer patient is not just about medicine; it's about relationships. The Center is comprised of a team of professionals who understand the physical and emotional needs of cancer patients. Everyone at the Cancer Center, the Medical and Administrative directors, registered nurses, physicist, patient care coordinator and radiation therapists are part of a team dedicated to your well being and quality of life during your treatment.

## SUPPORT SERVICES

Patients have direct access to nutritional, social and spiritual services. In addition, patients benefit from a rehabilitation program that includes lymphedema therapy. Other amenities include a dedicated patient education room with the latest information in cancer treatment. Patients also benefit from many American Cancer Society programs such as Look Good, Feel Better and Reach to Recovery.



CANCER CENTER  
4500 BROCKTON AVENUE, SUITE 101  
RIVERSIDE, CA 92501  
(951) 788-4318  
FAX (951) 788-4796

[WWW.RIVERSIDECOMMUNITYHOSPITAL.ORG](http://WWW.RIVERSIDECOMMUNITYHOSPITAL.ORG)

THE  
CANCER  
CENTER



## THE CANCER CENTER AT RIVERSIDE COMMUNITY HOSPITAL

THE  
CANCER  
CENTER



RIVERSIDE  
Community Hospital

### HOW DOES RADIATION THERAPY WORK?

Radiation therapy is a packet of energy known as photons or gamma rays. This packet of energy breaks apart water molecules inside of tumor cells. As a result, unstable and highly charged ions are formed. These ions in turn interact with the tumor cells' DNA. By attaching to the tumor cell DNA, the ions cause damage that will eventually result in breaks in the tumor cell DNA. All cells, even cancer cells, require intact DNA to reproduce. Consequently, the damaged radiated cancer cells are unable to reproduce, resulting in tumor cell death.

### HOW DOES RADIATION AFFECT A TUMOR WITHOUT INJURING OTHER PARTS OF THE BODY?

The different types of cells in our body divide at varying rates. Rapidly dividing cells include the cells comprising hair, skin and intestinal lining. Other cells divide very slowly or not at all, including the cells in muscle, bone or nervous tissue. The more rapidly a cell divides, the more sensitive it is to the effects of radiation therapy. Cancer cells are typically very rapidly dividing cells. As a result, relatively low doses of radiation therapy are required to kill a tumor cell. These doses of radiation are typically too weak to cause significant damage to the surrounding, slower dividing normal tissues. In addition, doses of radiation therapy are usually given in small amounts (fractions), once per day for several weeks. By delivering

radiation therapy in this fashion, the normal cells in the body can rest and repair much more effectively.

Ideally, radiation therapy should be delivered primarily to the tumor. The normal tissues and organs in the body should be spared as much as possible. Recent, highly technical advances in radiation therapy are allowing radiation oncologists to deliver higher doses to the tumor with less and less exposure to the normal organs. The Radiation Oncology Department at Riverside Community Hospital is the most technologically advanced center in the immediate service area, and is equipped with every modern device for sparing normal tissues and organs.

Every patient receiving radiation therapy at Riverside Community Hospital will be treated with CAT-scan planning. CAT-scan planning uses a CAT-scan image to create a 3-dimensional, highly conformal beam of radiation. As this beam enters the patient's body, the radiation is deposited in a conformal fashion in the tumor. Intensity Modulated Radiation Therapy (IMRT) is the latest, highly technical advance in radiation therapy. IMRT further shapes and modifies the conformal radiation beam as it enters the patient's body. By so doing, even higher doses of radiation therapy can be delivered to the tumor with even greater sparing of the surrounding tissues and organs. As a result of these higher radiation therapy doses, greater control of tumor and higher cancer cure rates are possible.

