



# City of Hope School of Radiation Therapy

*The City of Hope School of Radiation Therapy has been awarded the maximum accreditation of eight years by the Joint Review Committee on Education in Radiologic Technology. (JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3128 [www.jrcert.org](http://www.jrcert.org))*

## ABOUT THE PROFESSION

Radiation therapy is the medical specialty that utilizes ionizing radiation in the treatment and cure of malignant diseases. In radiation therapy, carefully targeted doses of ionizing radiation are administered to destroy cancerous tumors without permanently damaging the surrounding normal tissues. Along with surgery and chemotherapy, aims of treatment may include cure, relief of symptoms and improvement of patients' quality of life. An interdisciplinary team of radiation oncologists, radiation physicists, medical dosimetrists, radiation therapists, nurses and support staff are involved in the planning and delivery of the course of treatment. While each team member plays a critical role in the treatment process, it is the radiation therapist who administers the radiation to the patient throughout the treatment process.

## THE RADIATION THERAPIST

Radiation therapists are health care professionals qualified by their education to provide radiation therapy related patient services under the supervision of a radiation oncologist. Responsibilities of radiation therapists include localization of the tumor volume (*simulation*), treatment planning (*dosimetry*) and the daily delivery of radiation prescribed by the radiation oncologists, as well as providing comfort and support to patients and their families. Radiation therapists are the primary liaison between patients and other members of the treatment team.

Radiation therapists must be emotionally mature and motivated individuals who have a sincere desire to be members of the health care team. A high degree of accuracy, attention to detail and personal integrity is essential. Radiation therapists must demonstrate an understanding of cancer, radiation biology, radiation therapy techniques, equipment technology, radiation safety and psychosocial aspects of cancer. Radiation therapists must also be empathetic and effective communicators and be willing to provide understanding and compassion to the patients. Radiation therapy is "technology with a human touch."

To become a registered radiation therapist in the United States it is necessary to pass the national certification examination in radiation therapy offered by the American Registry of Radiologic Technologists (ARRT) [www.rrt.org](http://www.rrt.org). Eligibility for this exam is achieved through successful completion from an accredited radiation therapy program.

Registered radiation therapists are eligible for active membership in the American Society of Radiologic Technologists (ASRT) [www.asrt.org](http://www.asrt.org) and the California Society of Radiologic Technologists (CART) [www.cart.org](http://www.cart.org). Participation in national and state professional societies affords radiation therapists opportunities for travel and continued professional growth and development through the exchange of ideas with colleagues and other members of the radiation therapy health care team. It also serves as a unified base for effecting legislation and regulations regarding radiation therapy technology.

Individuals wishing to enter City of Hope's School of Radiation Therapy must apply to the program and meet the established admission requirements.

## **CAREER OUTLOOK**

The field of radiation oncology has undergone dramatic growth in the past decade due to its effectiveness in treating cancer. Radiation is now used to treat over one-half of all cancer patients at some point in the management of the patient's disease. This growth has created a strong demand for qualified radiation therapists. With advanced training and/or education, radiation therapists also have opportunities to pursue careers in other areas of radiation oncology such as dosimetry, medical physics, equipment sales, education and management.

## **PROGRAM DESCRIPTION**

The City of Hope School of Radiation Therapy, established in 1975, is a full-time, 12-month certificate program accredited by JRCERT (*JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3128*) and the state of California, Department of Public Health, Radiologic Health Branch. ([www.dhs.ca.gov](http://www.dhs.ca.gov)). The program offers its students an exceptional educational experience through a challenging curriculum, state-of-the-art therapeutic and research facilities, a large, diverse patient population, a favorable faculty-to-student ratio, and an environment that is based on teamwork and mutual support.

During the program, students learn the technical skills necessary to plan, deliver and record a prescribed course of radiation. The students also learn the theoretical knowledge necessary to monitor patients undergoing treatment, as well as an understanding of the compassionate and skilled care required to treat cancer patients and their families.

The program begins in early October of each year, with completion the following October. Attendance is required Monday through Friday from 8 a.m. to 5 p.m., including a minimum of two evening labs during the second semester of the program year.

Combined didactic and clinical hours will not exceed a total of 40 daytime hours per week. Students are granted a total of six program-designated holidays plus an additional 10 days of personal time off.

## **PROGRAM MISSION**

The mission of the City Hope Radiation Therapy School is to educate and train radiation therapy professionals who are knowledgeable, technically competent and dedicated to the needs of their patients, the community and profession.

## PROGRAM GOALS

To uphold our mission, the following goals for the program have been established:

- **Students/Graduates will be clinical and didactically competent**  
Student Learning Outcomes: Students will demonstrate technical skills in treatment set-ups  
Students will practice radiation protection
- **Students/Graduates will communicate effectively**  
Student Learning Outcomes: Students will demonstrate oral communication skills  
Students will demonstrate written communication skills  
Students will act in response to age specific and cultural needs
- **Students/Graduates will utilize critical thinking and problem solving skills**  
Student Learning Outcomes: Students will recognize set-up discrepancies  
Students will summarize the compromises between tumor control and normal tissue tolerance
- **Students/Graduates will demonstrate professional and ethical behavior**  
Student Learning Outcomes: Students will demonstrate professional work behavior  
Students will recognize the benefits of professional membership

## TRADITION OF EXCELLENCE

Upon successful completion of all program requirements, a certificate is conferred and the student is eligible to sit for the national certification exam administered by ARRT. Success of the program's curriculum is validated by the percentage of graduates who have passed the exam. Since 1995, 100 percent of program graduates have passed the certification exam and the program's overall mean score has consistently been above the national average.

## CURRICULUM

The program offers a full curriculum that includes both academic and clinical elements that are reflective of contemporary practice in radiation therapy today. The curriculum is designed in accordance with the guidelines established by the American Society of Radiologic Technologists (ASRT) [www.asrt.org](http://www.asrt.org), as well as all clinical and didactic competencies required for examination eligibility by ARRT [www.arrt.org](http://www.arrt.org). The basic curriculum will total approximately 350 didactic classroom hours and 1,500 hours of clinical instruction. The hospital-based curriculum does not earn college credits; however, equivalent semester credit hours will be established to facilitate colleges and universities, which offer credit for such coursework.

### Academics

Radiation Physics

Radiation Biology

Clinical Radiation Oncology

Radiation Protection

Medical/Legal Ethics Review

Computers in Radiation Oncology

Imaging in Radiation Oncology

Patient Care Management

Introduction to Radiation Oncology

Radiation Pathology

Quality Management

Dosimetry/Treatment Planning

Cross Sectional Anatomy

Didactic performance is evaluated and graded on a four-point scale.

## **CLINICAL INTERNSHIP**

The program offers an extensive competency-based clinical curriculum. Clinical training includes 32 hours per week of directly supervised clinical instruction, observation and participation. Throughout the clinical portion of the program, students rotate through various areas of the Radiation Therapy Department, receiving instruction and clinical experience in the delivery of radiation treatments, simulations, treatment planning, quality assurance and patient care management. Clinical performance is evaluated using a competency-based evaluation system and criteria-based performance appraisal forms.

## **CLINICAL TRAINING CENTERS**

Clinical experience is provided at City of Hope and several other leading affiliated cancer centers. Students are assigned to one of the clinical centers for the entire length of the program with the exception of a four-week, off-site rotation near the completion of their clinical training. During this time, the student will have the opportunity to observe and participate in treatment procedures and techniques other than those experienced at their assigned clinical site.

All of the program's clinical educational centers are recognized by JRCERT (*JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3128*) and offer a wide spectrum of radiation therapy experiences. Each is fully equipped with state-of-the-art therapeutic equipment and staffed by qualified radiation therapy support personnel.

## **APPLICATION**

Program applications will be accepted until June 1 for each program year beginning in October. Prospective students must submit both a City of Hope Institutional application and a Radiation Therapy School application. To apply online, please access the program Web site at [www.cityofhope.org/radther](http://www.cityofhope.org/radther).

Other documents required in the application packet include:

- Official college transcripts and final transcripts from radiography training program
- Copy of ARRT "Radiography" certification; or proof of registry eligibility
- State of California "Radiography" certification
- Copy of college degree (*minimum of an associate required*)
- Copy of Cardiopulmonary Resuscitation (CPR) certification
- Two letters recommendation
- Résumé and introductory letter
- Documentation of radiation therapy observation (*minimum of 40 hours required*)
- Nonrefundable \$50 application fee

## **INTERVIEWS AND ACCEPTANCE**

Following the application deadline of June 1, all applications are evaluated and applicants selected for further consideration are offered an interview. Interviews are scheduled during the second and third weeks of July and will include interviews at one or more of the affiliated clinical sites.

The final selection of students is done on a comparative basis, with the top applicants being offered a position. The number of students accepted into the program is dependent on the number of clinical sites and their student capacity.

The Admissions Committee, which includes the program director, clinical coordinator and clinical student supervisors; reserves the right, in every case, to accept or reject any applicant based on previous academic performance as determined by the application process, interviews, review of academic data and references.

Accepted applicants must be able to meet the physical and technical requirements necessary for the course of study. These standards are discussed with the applicant during the interview process. For applicants of equal qualifications and interview results, priority will be given to first to in-state applicants.

## **ADMISSION REQUIREMENTS**

### **Minimum academic requirements**

- Graduation from a JRCERT-accredited or equivalent Radiography Program
- A minimum GPA of 2.5 for all post-secondary work
- A minimum of an associate degree (*does not have to be in radiologic sciences*)
- Required General Education prerequisites to include:
  - Human Anatomy and Physiology
  - College Algebra
  - Precalculus (*or equivalent*)
  - Written/Verbal Communication
  - Computer Science
- Certification in Radiography from ARRT
- Certification in Radiography from the state of California
- Certification in CPR

### **Physical demands**

*(Reasonable accommodations will be provided to students who, after accommodations, can perform the essential job functions.)*

- Able to lift, position, push and/or transfer patients
- Able to lift supplies and equipment

### **Communication requirements**

- Fluency in written and spoken English (*essential for success in the program and to ensure patient safety*)

### **Health and safety conditions**

*(Health clearance and background check must be received prior to clinical assignments)*

- Likely exposure to radiation hazards

## **TUITION AND FEES**

- Tuition: \$7,000 per program year  
Payment schedule: First semester: \$3,500 due October 30<sup>th</sup> of the program year  
Second semester: \$3,500 due April 30<sup>th</sup> of the program year
- Application and processing fee: \$50
- Textbooks/Instructional supplies: \$200 - 300
- Housing: No on-site housing available
- Financial aid: None available

- Refund: Students must submit a letter of withdrawal to the program director by Nov. 1 for a 100 percent refund or Dec. 1 for a 50 percent refund. After Dec. 1, no refunds granted.

## STUDENT TRANSFERS

Students wishing to transfer from another radiation therapy program *will not earn transferable credit* for their experience and must go through the established application and interview processes.

## STUDENT RESPONSIBILITIES

Students are required to attend all classes and assigned clinical rotations unless excused by the program director. Students must maintain a course grade of “C” (70 percent) or above in each element of their clinical and didactic performance. Students who fail to maintain a passing standing will be counseled and placed on probation.

Students are expected to adhere to a high standard of ethics and display appropriate professional behavior during all phases of their educational experience. Students are required to abide by all program policies and procedures as published in the Student Handbook.

## BENEFITS

A benefits package including medical coverage, worker’s compensation, life insurance and professional liability insurance will be available for students accepted into the program.

## STUDENT SERVICES

- No formal tutoring services are available; however, if at any time a student is having difficulty or falls below the minimum required grade, the program will provide every opportunity for the student to be successful in academic performance.
- Academic assistance provided by faculty is on an “as needed” basis and is scheduled in coordination with each student’s schedule.
- For matters that require professional advice and assistance beyond the realm of the program, students are provided the services offered to City of Hope employees through the Human Resources Department.
- Students also have access to the Lee Graff Medical Library, located on the City of Hope campus.

## OTHER PROGRAM INFORMATION FOR PROSPECTIVE STUDENTS

The following program policies have been developed to protect the rights and educational opportunities of all students. *(A complete list and description of all program policies and procedures is available upon request.)*

- Policy and procedure relating to pregnancy
  - Should a student become pregnant during the program, it is strongly recommended that the student inform the program director; however, this is *a voluntary disclosure*.
  - Upon disclosure of pregnancy, students are given the option to:
    - *Continue with the program educational program without modification or interruption.*
    - *Request a leave of absence from the clinical component of the program with provision to allow for completion of all clinical hours following the return of medical leave.*
    - *Withdraw from both the didactic and clinical components of the program and reapply for readmission the following year.*

- All possible measures will be taken to ensure exposure to ionizing radiation is kept below the National Council on Radiation Protection limit of 0.5REM (5mSv) for the duration of the pregnancy.
- Policy and procedure to promote fairness and consistency between students and faculty
  - Any grievance that cannot be settled between a student and the student clinical supervisor may be resolved through a formal grievance process.
  - Either party may call upon the City of Hope Human Resources Department to act in an advisory capacity at any time during the grievance process.
- Policy and procedure for alleged unfair educational practices or noncompliance with JRCERT Standards. (*JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3128* [www.jrcert.org](http://www.jrcert.org))
  - All complaints submitted by an individual or group, including students, graduates, faculty, clinical staff or the public, must be submitted to the program director. The program director will investigate the complaint and, if warranted, take corrective action.
  - Allegations of noncompliance with JRCERT Standards may also be submitted in writing to the JRCERT executive director, 20 N. Wacker Drive, Suite 2850, Chicago, IL, 60606-3182. JRCERT will investigate and determine if the allegation has merit and, if so, whether the program has documented appropriate action. The identity of the complainant is never revealed by JRCERT.
- Policy and procedure to ensure that students have the right to object to an assignment on the grounds of perceived moral, cultural, ethical or religious conflict.
  - Reassignment based on moral, cultural, ethical or religious conflicts will be assessed by the program director and immediate accommodations will be made, if possible. If reassignment is not an immediate possibility, the student will be expected to continue the assignment until the program director can investigate other resources and present the available options.
  - Disputes regarding reassignment requests will be referred to the sponsoring institution's Bioethics Committee and the Human Resources Department.

**For additional information about the *City of Hope School of Radiation Therapy* beyond that provided in this brochure, please visit us online at [www.cityofhope.org/radther](http://www.cityofhope.org/radther) or contact:**

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*The City of Hope School of Radiation Therapy does not discriminate in admissions or employment on the basis of race, sex, national origin or ethnic group, religion or disability*

## **City of Hope Mission Statement**

*City of Hope, an innovative biomedical research, treatment and educational institution, is dedicated to the prevention and cure of cancer and other life-threatening diseases, guided by a compassionate patient-centered philosophy, and supported by a national foundation of humanitarian philanthropy.*