MS3 Students require the course director’s signature on course preference form.

Note: Contact Ms. Letericia Smith (713) 563-2315; lsmith@mdanderson.org to seek approval for participation in this rotation. To be considered, a pre-application is required (including transcripts and other documentation). The pre-application and supporting documents must be received by Ms. Smith before March 15. Specific application instructions can be found on the MD Anderson website: [https://www.mdanderson.org/education-training/clinical-research-training/graduate-medical-education/rotations-to-md-anderson/radiation-oncology-elective-rotation.html](https://www.mdanderson.org/education-training/clinical-research-training/graduate-medical-education/rotations-to-md-anderson/radiation-oncology-elective-rotation.html)

If accepted, students will be notified by email and will be required to formally apply through UT (VSAS) and MD Anderson (DISCOVER).

<table>
<thead>
<tr>
<th>Faculty In Charge Of Course:</th>
<th>Jillian R. Gunther, MD, PhD (Assoc. Director for Medical Student Elective Program) and David Grosshans, MD, PhD (Director)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Faculty:</td>
<td>Attending Staff</td>
</tr>
<tr>
<td>Location:</td>
<td>MD Anderson Cancer Center, Pickens Academic Tower, 1400 Pressler St. Room FCT6.5000 or the MD Anderson Regional Care Center in Katy</td>
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<tr>
<td>Offered:</td>
<td>Blocks 2-7, 11, 13, 14</td>
</tr>
<tr>
<td>Max. # Students/Period:</td>
<td>4 - 6</td>
</tr>
</tbody>
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**Course Objective:**

**Material Covered:**

The goal of the medical student elective is to provide a broad overview of clinical radiation oncology. The emphasis of the elective will be on the clinical practice of radiation oncology in regard to physical examination of the cancer patient, cross sectional anatomy as it pertains to radiation treatment planning, and the general physician patient interaction. Radiation treatment planning and delivery techniques will also be covered. The entire rotation will be spent working with radiation oncology faculty and residents who will evaluate students on their general performance of clinical medicine. There will also be opportunities to interact with MD Anderson faculty from other oncologic disciplines as well, including through participation in multidisciplinary tumor boards.

**Skills Acquired:**

Skills in oral and written presentations, assessing data and arriving at a diagnosis, problem solving, and fund of knowledge in the specialty of radiation oncology.

- The basic principles of radiation physics, radiobiology, and radiation safety;
- The clinical evaluation and staging of the patient with cancer;
- The role of radiotherapy in the overall management of the patient with cancer as well as knowledge of the natural history for common cancers;
- The importance of a multidisciplinary approach to cancer management;
- The process by which treatment plans are generated including an understanding of tumor volume(s) and normal tissue considerations;
- The implementation and verification of treatment plans

**Activities Of Elective:**

**Number Of New Patients/Student/Week:** Two to three

**Responsibilities Of Student For Assigned Patients:**

<table>
<thead>
<tr>
<th>Does history/physical:</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Who critiques:</td>
<td>Attending</td>
</tr>
<tr>
<td>Follows patients, with appropriate notes as needed:</td>
<td>Yes</td>
</tr>
<tr>
<td>Who supervises:</td>
<td>Attending</td>
</tr>
<tr>
<td>Does student see ambulatory patients:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Scheduled Duties of Student:**

<table>
<thead>
<tr>
<th>Frequency of rounds on patients:</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presents patients to preceptor or attending physician:</td>
<td>Yes, daily</td>
</tr>
<tr>
<td>Weekly schedule of required teaching sessions:</td>
<td>Yes, attends weekly morning resident educational conferences and other schooled didactics for the assigned service</td>
</tr>
</tbody>
</table>
Describe Optional Rounds And Activities, If Any:

Medical student responsibilities

1) Attend patient consults, follow-ups, simulations, and weekly management visits.
2) Attend MD Anderson Interdisciplinary Tumor Boards.
3) Perform selected assigned tasks independently (i.e. general contouring of structures in the treatment planning system).
4) Spend time working with Radiation Therapists and Dosimetrists in their respective disciplines.
5) Follow at least one new patient from consultation, simulation, treatment planning, and treatment start per week.
6) Oral presentation of radiation oncology literature during resident didactic conference.

Other Required Activities:

| Reading/review of current literature: | Yes |
| Writing or Presenting a paper: | Yes, students will be expected to give a 15-20 minute presentation during morning conference. |

How Is Student Evaluated:

A student’s performance will be evaluated according to the following criteria:

- Gathering data by history and physical examination
- Skills in oral and written presentations
- Assessing data and arriving at a diagnosis – problem solving
- Evidence of preparation and outside reading
- Work habits and personal qualities
- Interpersonal relationships with other members of the health care team
- Knowledge and fund of information

Who Evaluates Students:

Attending physicians, residents and the Medical Student Director

Unique Features Of This Elective:

- Basic principles of radiation oncology
- Clinical evaluation and staging of the patient with cancer
- Role of radiotherapy in the overall management of the patient with cancer
- Importance of multidisciplinary approach to cancer management
- Participation in a validated medical student curriculum for the radiation oncology clerkship with lectures and hands-on contouring/treatment planning sessions led by residents and faculty.