

Real Life 101

Medical Specialist

Oncology is the study and treatment of cancer, it has several subspecialties or modalities of therapy:

- Surgical oncologist surgically removes cancerous tumors.
- Radio oncologist uses radiation treatment.
- Pediatric oncologist works with children.
- Medical oncologist administers medication and uses chemotherapy to make cancer go into remission or prevent its spread.

A **medical oncologist's** day consists of attending to the hospitalized patients with complications and treating patients in the office. The most commonly seen cancers are lung, breast and colon cancer. Most patients are frightened upon receiving a cancerous diagnosis. Taking away patient's fears and informing them of the options in treatment that weren't available even ten years ago is one of the most rewarding parts of the profession. Cancer research is advancing, and even while giving the worst news, oncologists can often offer their patients hope for remission. To pursue oncology one should have some sense of calling for work with cancer patients, cancer treatment research or promoting cancer care, as well as be prepared for a lot of paperwork.

School and training:

- 4 years of college
- 4 years of medical school
- 3 years of internal medicine training
- up to 4 years in oncology training sometimes paired with hematology (study of blood, the blood-forming organs, and blood diseases)

Gastroenterologist is a specialist in diagnosis and treatment of digestive disorders, including problems with the esophagus (difficulty swallowing, heartburn), stomach ulcers, polyps, and indigestion, as well as liver, gallbladder and pancreas diseases. Regular colonoscopies performed by gastroenterologists are an important part of early cancer detection.

A typical day consists of diagnostic endoscopy and colonoscopy procedures in the morning, seeing patients in the office in the afternoons, and doing rounds in the hospital in the evenings. A private practice usually has a number of employees, such as assistants and receptionists, and has to deal with the issues any small business has to deal with, like liability insurance, payroll and accounting. One of the challenges for the practitioner is staying on schedule.

School and training:

- 4 years of college
- 4 years of medical school
- 6 years of training (internship, residency and fellowship programs)

Diagnostic radiology

Consultants to other physicians

- Radiography (x-rays)
- Fluoroscopy (real time x-ray imaging)
- Mammography (early breast cancer screening using x-ray imaging)
- Biopsy (examination of removed tissue under a microscope)
- Ultrasound
- CT Scan: CAT, or Computed Axial Tomography, uses low doses of radiation to produce images of thin sections of the body in the axial plane. In combination with orthogonal scanning, it can be used in volumetric (3D) representation of body structures.
- MRI (Magnetic Resonance Imaging)
- Nuclear medicine

School and training:

- 4 years of college
- 4 years of medical school
- 1 year internship in primary care specialty
- 1 year of radiology training
- 1-2 years of subspecialty training

Before deciding to pursue a medical specialty, get in touch with a practicing specialist to observe him or her at work, as the job is usually quite different from what is seen from a patient's or medical student's perspective. To get into medical school, focus on courses in biology, physics, mathematics and English. Med school entrance tests are extremely competitive. To be successful in any medical specialty you need to have an inquiring mind, a capacity for ongoing learning, and an ability to relate to individuals who are seeking your help. It's important to be dedicated and persistent, as it takes a long time of studying before you can enter the practice.