Application & Program Info

Information about the application process:

- To apply, students must be SBU seniors in the Health Science major enrolled in HAN 395
- Applications take place fall of the senior year
- The average of the first three exam scores in HAN395 will be factored into admissions decisions

Preference is given to students who document:

- An overall GPA of 2.5 or higher in college level coursework
- A strong science (physics, anatomy & physiology) and math (calculus) background (minimum "C" grade in each course and an overall natural science GPA of 2.5)
- Healthcare experience (paid or volunteer) and/or community service
- 2+ days shadowing a medical dosimetrist
- A thorough understanding of the role of the medical dosimetrist

Facts about the 12 month non-credit certificate program:

- Clinical sites are offered through a unique partnership between Stony Brook University and the Mount Sinai Health System
- Campus housing is not available
- Tuition costs and program expenses can be found on the SBU website listed on this brochure
- Available seats: 5-6



Contact Us

Website

https://healthprofessions.stonybrookmedicine.edu/ programs/hs/curriculum/clinical/medical-dosimetry

https://icahn.mssm.edu/about/departments/rad-onc/ radiation-sciences-education

Program Leadership

Maria Dimopoulos, MBA, RT(T) Center for Radiation Sciences Education, Associate Director <u>maria.dimopoulos@mountsinai.org</u>

Vishruta Dumane, PhD, DABR Medical Dosimetry Program Director vishruta.dumane@mountsinai.org



Medical Dosimetry Program Applicant Brochure







Stony Brook University/ SUNY is an affirmative action, equal opportunity educator and employer.

About Medical Dosimetry

What is medical dosimetry?

The field of medical dosimetry involves the calculation of dose and design of radiation field arrangements for the treatment of cancer patients. Dosimetrists use their knowledge of physics, anatomy, and radiobiology to develop an optimal arrangement of radiation portals to spare normal and radiosensitive tissues while applying a prescribed dose to the targeted disease volume.

Job Summary

Dosimetrists are knowledgeable about radiation oncology treatment machines and equipment. In collaboration with medical physicists, radiation oncologists and radiation therapists, they have the expertise to calculate radiation dosages and generate radiation dose distribution.

Dosimetrists are not patient facing. They work with advanced treatment planning software using interactive 3-D graphics to develop an optimal plan of radiation treatment for each individual cancer patient. The dosimetrist is an integral part of the radiation oncology team and, through regular treatment chart review and patient dose measurement, helps to ensure that each patient receives the properly prescribed treatment.





Career Advancement

Medical dosimetrists may continue their education after completion of their MDCB certification. There are career opportunities in administration, education, industry vendor technologies and graduate degrees including medical physics, MD, MS, MBA and beyond!

From Our Recent Graduates

"Being a medical dosimetrist is exciting because there's a very rewarding feeling after finishing a plan that seemed a bit hard at first. You're also part of a team that is supporting the patient's fight against cancer."

"The clinical year molds you to be efficient with deadlines, build critical thinking, and learn to communicate effectively."

"Our team at Mount Sinai encourages students to ask questions until they fully understand a topic. This way, we know that our knowledge gets passed along, shared, and used to help others."



Occupational Outlook

Salary & Market

- Employment of medical dosimetrists is projected to grow 14% from 2016 to 2026, faster than the average for all occupations. Within the greater New York market, the demand is even higher.
- Nationally, the median annual earnings for medical dosimetrists in 2021 was \$124,750.
 Salaries are dependent upon location and length of experience.
- Starting salaries for medical dosimetrists in New York City is roughly \$105,000 120,000

Clinical Rotations

Location

Every three months during the clinical year, medical dosimetry students rotate to new clinical treatment settings across the Mount Sinai Health System.

- Mount Sinai Hospital
- Mount Sinai Downtown: Union Square
- Mount Sinai Downtown: The Blavatnik Family Chelsea Medical Center at Mount Sinai
- Mount Sinai West
- The New York Proton Center

Throughout the clinical year, students are exposed to a wide range of planning and treatment techniques including but not limited to: SRS, SBRT, IMRT, DIBH, gating, CSI, TBI, TSEB, brachytherapy and proton therapy.