

Adi Robinson

Senior medical physicist with AdventHealth Orlando

TOPIC: Introduction to Medical Physics

Wilhelm Röntgen took the first medical image of his wife's hand. It was the first-time humans could see inside the body without cutting it open. The use of radiation to image and treat the human body quickly spread and evolved. Radiation was used to image injured soldiers in WWI and WWII and also treat common illness and cancer and physicists played a pivoting role in the advancement of diagnostic and therapeutic fields of medicine.

Medical physicists are health care professionals with specialized training in the medical application of physics. Medical physicists are concerned with three areas of activity:

- Clinical service and consultation
 - Treatment planning and machine QA
- Research and development
 - Design and construction of radiotherapy and imaging equipment
- Teaching
 - Teaching undergraduate and graduate programs
 - Teaching residents

This lecture will cover the history of medical physics, how radiation interacts with the human body and the different branches of medical physics.

Bio:

Adi Robinson is a senior medical physicist with AdventHealth Orlando. He earned his Bachelor of science in physics and Bachelor of Arts in chemistry at the University of Rochester, a master's degree in medical physics from Columbia University and a Ph.D. from Rochester Institute of Technology. His research interests focuses in surface guided radiation therapy and stereotactic radiotherapy.