Colloquium:
Medical Physics in Radiotherapy—Clinic, Research and Education

Radiotherapy has been used in cancer medicine for more than a century and more than 60% cancer patients in the world received radiation therapy treatment. Radiotherapy uses radiation (either X-ray or particle beams) to deposit high energy in tumor to kill cancer. However, to reach the target, radiation has to travel through healthy tissues, which may cause radiation toxicity. Thanks to decades of research and clinical practice to refine, improve and innovate the treatment, it has become an incredibly sophisticated and precise technique to treat and cure cancer with less toxicity than cancer drug.

In this talk, a general radiotherapy clinical workflow will be presented. Through each step of clinical workflow, we will detail the medical physics involvement in both clinic and research development. Particularly, state-of-art medical physics research in the University of Southwestern Medical center (UTSW) will be presented. We will also go through UTSW medical physics education program to introduce the career path on how to become a board certified medical physicist.

Xuejun Gu
UT Southwestern Medical Center

WEDNESDAY, NOVEMBER 6
4PM ROOM 100 SCIENCE HALL
REFRESHMENTS AT 3:30PM IN 108 SCIENCE HALL