Thesis Defense
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Development of a Patient Set-up Verification Device (PSVD) for Radiation Therapy Treatment

Abstract

In external-beam radiation therapy, the probability of controlling local disease depends on the ability to deliver an adequate dose to the entire volume of target cells. Research has shown a strong correlation between local recurrence of the disease and inadequate coverage of the defined target volume.

The work presented here involves the development of a tool (PSVD) that will improve the quality of care in Radiation Therapy Treatment by verifying patient setup before radiation treatment is initiated. This will help reduce chances of normal tissue radiation by quantifying the setup error, hence giving the physician a figure to work with in correcting the setup. The tool is user-friendly and inexpensive, most ideal for small, low budget Radiation Therapy Departments, which cannot afford to go “filmless and DICOM”, but still see the need to deliver the best care to their patients.

Time & Venue: Thursday, May 10, 2002
12-1:00 pm
University of Connecticut, Storrs Campus
Department of Biomedical Engineering
260 Glenbrook Road, Unit 2157
Conference room ABB 224