



**WISCONSIN**  
UNIVERSITY OF WISCONSIN-MADISON

# Medical Physics Seminar

Monday, November 20th, 2017

1335 HSLC ~ 4:00 P.M.

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## **Contributions from the Outside: Three Examples Helping Radiation Therapy**

Many of the tools and techniques utilized in Radiation Therapy have their origins in other areas. For example, the ubiquitous planning CT was originally invented for diagnostic purposes. Farther afield, particle accelerator technologies created in physics laboratories have made their way into treatment delivery systems.

Along the theme of contributions from the outside, one experiment, one class of technology, and one technological request will be presented. First, experimental studies of the survival of a model radiobiological system, bacillus Megaterium, will show how attempts to tune the x-ray radiation energy may or may not offer opportunity for selective radiation therapy. Second, we will consider some of the technologies developed for video gaming which are currently being utilized in radiation therapy. Third, we will finish with a future request, describing what we need from the field of imaging in order to improve patient care.

**1335 Health Sciences Learning Center (HSLC) 4:00 - 5:00 P.M.**