

# MEDICAL PHYSICS SEMINAR SERIES



## Will Ferris

Student of Wes Culberson

### *Evaluation of motion synchronized treatments for helical Tomotherapy*

The Synchrony system on the Radixactlinear accelerator tracks and corrects for intrafraction motion in real time during helical Tomotherapy treatments. LEDs are placed on the patient's chest and the target position is periodically determined using planar kV radiographs. Our research is focused on investigating the tracking capabilities, the dosimetric delivery, and the additional patient dose associated with this tracking system.



## Dalton Griner

Student of Guang-Hong Chen

### *CXR COVID classification using deep learning*

Medical Physicists play unique roles in the trend of increasing AI utilization in the field of radiology. High-quality clinical datasets are of critical importance to the performance of AI models in clinical contexts. Neural network models are prone to spurious correlations in training data, or dataset bias, which leads to poor generalization performance. Using COVID-19 detection from chest radiographs as an example, this talk will discuss the preparation and use of using well-curated datasets for both model training and testing.

**Monday, January 31**  
**4:00PM (CST) via Webex**

**Seminar Link:**  
**<https://bit.ly/3hCxdQF>**  
**Email Questions:**  
**[ladewerd@wisc.edu](mailto:ladewerd@wisc.edu)**



School of Medicine  
and Public Health  
UNIVERSITY OF WISCONSIN-MADISON