

Basic Information

- ▶ Title: Multiple Source Cone Beam Computed Tomography
- ▶ Student name: Joy Harrison
- ▶ Major: B.S in astrophysics
- ▶ Faculty advisor: Otto Zhou, medical physics department

Photo 1:
Current ms-
CBCT device

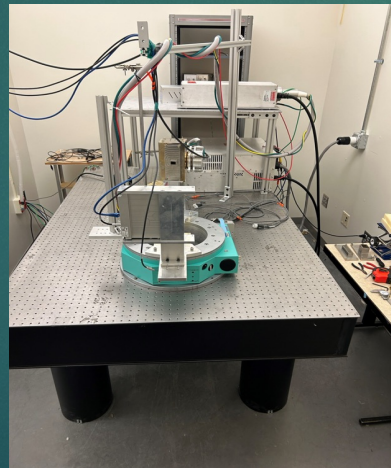


Photo 2: Joy
Harrison



Research question and significance

- ▶ Research question: Can ms-CBCT be used to improve image-guided radiation therapy (IGRT)?
- ▶ Why does this question matter: If ms-CBCT could improve IGRT then it could result in more efficient cancer treatment that limits the damage to the normal tissues while still eradicating the tumor

Results

- ▶ The project has not been fully completed yet, so the results are inconclusive so far, however previous work that the lab has conducted indicates that the results will prove to be successful. The goal of the project for this summer (to model the device) has been successful.
- ▶ These results are important to the research community as they could indicate a promising new way of conducting IGRT.
- ▶ These results are important to a general audience as they could provide a more efficient cancer treatment that protects the patient's healthy tissue while still destroying the cancerous cells.