

First Place- Abby Bailey

Title: Obesity and Radiology: Peering Through the Fat

Abstract

Obesity is known for its health risks and obese populations are more common than ever. Based on these facts have put added strain on medical imaging facilities because of equipment limitations and challenges in obtaining quality, diagnostic images. Some obese patients are unable to fit within parameters of machines or exceed table weight limits, but experiments have shown all are exposed to increased amounts of radiation compared to the average size patient. Radiology facilities need to understand these risks and make the proper adjustments for accommodation of these patients.

Second Place- Kristin Hereford

Title: PET/CT Aiding in Early Detection of Non-Small Cell Lung Cancer

Abstract

Lung cancer is the number one cancer killer of men and women in the United States. Research has shown that integrated PET/CT scanners can help with early detection of non-small cell lung cancer. Studies have shown that PET/CT scanners are beneficial in early detection, planning of treatment, and post treatment surveillance. Over 450 people die in the United States every day from lung cancer. Early detection is an essential part towards the treatment of non-small cell lung cancer and integrated PET/CT scanners are being studied to validate if they are a valuable part in that detection.

Second Place – Chelsea Juarez

Title: Nephrogenic Systemic Fibrosis

Abstract

Although MRI is considered to a 'safe' imaging modality because it does not use ionizing radiation, there are potential risks linked to the gadolinium-based contrast agents used in conjunction with MRI. Research has shown that patients with decreased renal function have an increased risk of developing nephrogenic systemic fibrosis after being administered a gadolinium-based contrast agent. Proper screening for decreased kidney function is imperative before administering a GBCA in reducing the chances of a patient developing NSF.