

Dr. Said Audi Receives NIH R15 Award

Dr. Said Audi, Professor of Biomedical Engineering, has received a two-year \$378,335 R15 grant from NIH for a project titled “SPECT Imaging and Computational Modeling for Assessment of Acute Lung Injury.”

Project Summary: Acute respiratory distress syndrome (ARDS), a devastating disorder, is one of the most frequent causes of admission to intensive care units. Severe ARDS accounts for 75,000 deaths, 3.6 million hospital days and \$5 billion in healthcare costs in the U.S. alone per year. The objective of this proposal is to use clinical imaging and computational algorithms to detect and quantify changes in specific lung cellular targets during the progression and regression of ARDS in unique rat models of human ARDS. Outcomes of this project are expected to provide i) new prognostic information that would have clinical importance, and ii) a quantitative and mechanistic understanding of the role of a key cellular target in ARDS progression and regression. This is expected to improve patient outcomes and reduce healthcare costs.