The Cleveland FES Center congratulates Anant Madabhushi on receiving a VA RR&D Merit Review for his project entitled, “Lung Imaging based Risk Score (LunIRiS): Decision support tool for screening CT.”

Each year, more than 20 million patients in the United States undergo a chest computer tomography (CT) exam. In nearly half of these exams, a pulmonary nodule will be identified. While most of these nodules are benign, it is difficult to distinguish them from nodules that require treatment. As a result, many patients unnecessarily undergo more invasive diagnostic procedures.

The novel technology, LunIRiS, is a computerized decision-support technology for use in conjunction with routine chest CT scans to reduce the high false-positive diagnostic rate associated with lung nodules. The technology could greatly reduce the number of unnecessary invasive diagnostic procedures. With advanced computational image-analytic and machine-learning tools, LunIRiS provides a risk score for improved quantitative assessment of lung nodules and has been shown to improve the diagnostic accuracy of human readers.