



Application for QIBA Project Funding

Title of Proposal: Assessing Measurement Variability of Lung Lesions in Patient Data Sets		
QIBA Committee/Subgroup: Volumetric CT Technical Committee		
NIBIB Task Number(s) which this project addresses: Task 7 – Determine the minimum change that can be measured for the proposed method		
<b>Project Coordinator or Lead Investigator Information:</b>		
Last Name: McNitt-Gray	First Name: Michael	Degree(s): PhD
Institution/Company: David Geffen School of Medicine at UCLA, Department of Radiology		

**Project Description**

The purpose of this project is to perform the statistical analysis of data collected under QIBA Volumetric CT committee's 1B experiment, which is investigating the minimum detectable change in lesion size from patient datasets imaged on CT. This project used: (a) "Coffee Break" CT image datasets from 32 NSCLC patients who were imaged twice over a short (15 minute) interval on the same scanner using thin (1.25 mm) slices; (b) one lesion was identified for each patient, (c) Image data has been marked up by five radiologists at RadPharm (now CoreLabs); (d) each reader marked the lesions on each of the repeat scans to obtain measures of volume, single longest diameter and bi-dimensional diameters. This data has all been collected and now remains to be analyzed.