

## Software to determine lung function based on $^{19}\text{F}$ MRI lung images

Duke inventors have developed a software to determine lung function based on  $^{19}\text{F}$  MRI lung images. This technology, called Washout, calculates quantitative functional values for anatomic regions of the lung by fitting a model to the MRI images repeatedly captured as a patient breathes in  $^{19}\text{F}$  gas. The quantitative values of some or all of the spatial regions can be further analyzed statistically to group levels of change within the subject, or by comparison to a stored group of values from a comparison group of subjects. A report on these changes can be either manually or automatically generated. This technology can be run in either a Graphical User Interface (GUI) mode or in a Command Line Interface (CLI) mode for interactive or automatic batch usage, respectively. Data can be input in a variety of formats. Results can be output at various stages of processing, and for a variety of functional comparisons. This technology has been demonstrated with patients.

# Duke

## LICENSING & VENTURES

### Duke File (IDF) #

T-006528

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### Links

- [From the lab of Dr. Brian Soher](#)

### College

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