Narrative

This project will improve pulmonary scientists' ability to explore clinical hypotheses concerning the structure and function of the human lung using multi-modal imaging data. Scientific research has been significantly enhanced by recent emphases on open-data and open-source tools. This success has been quite apparent within the neuroimaging community but no such publicly available computational resources exist for pulmonary imaging. By providing publicly available, user-friendly, widely interoperable, and extensively validated tools for pulmonary imaging analysis, the project will enable scientists to leverage modern imaging analysis technologies more effectively in answering basic science questions about the lung, which has the potential for clinical insights and advancements.