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 and mapping, the project will enable a broad field of scientists to leverage modern imaging technologies more effectively in answering basic science questions about the lung, which will lead to clinical insights and advancements.