

Medical University of South Carolina Respiratory Institute

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Vision

To be a preeminent Institute of excellence that improves respiratory health, generates scientific knowledge, and educates future generations of clinical experts and researchers in respiratory and related disorders.

Mission

The MUSC Respiratory Institute will:

1. Provide unsurpassed care to patients with a wide array respiratory disorders in South Carolina and the Southeast region.
2. Design and conduct research across the translational spectrum in respiratory health ensuring all patients have an opportunity to participate.
3. Educate and train investigators and clinicians including residents, fellows, and allied health professionals.

Background/Significance: In South Carolina (SC), lower respiratory disease is the fourth leading cause of death and rates of lung cancer death substantially exceed US national averages. These disproportionately poor outcomes in respiratory health in SC are exacerbated by a paucity of specially trained physicians in the state, which ranks in the bottom ten of US states with relevant specialist physicians (i.e. allergy, critical care, pulmonary, sleep, and thoracic surgery) per capita. MUSC is a quaternary healthcare system and SC's only comprehensive academic medical center, and so is uniquely poised to establish a comprehensive Respiratory Institute. MUSC offers highly specialized care in a variety of nationally-accredited programs/centers alongside more commonly encountered respiratory conditions. Complementing its excellence in patient care, MUSC has robust research programs in respiratory conditions with >\$9 million annually in extramural funding from a diverse portfolio of funding sources (e.g. NIH, foundation and corporate). Finally, the education mission is outstanding with over 30 trainees in pulmonary medicine, critical care medicine, sleep medicine, and cardiothoracic surgery. The proposed Respiratory Institute will leverage this bench of clinical, research, and education excellence to build a comprehensive, integrated, and multi-disciplinary portfolio of programs.

Goal: The MUSC Respiratory Institute will be comprised of a high concentration of expertise and resources dedicated to respiratory conditions. Patients will receive timely, first-in-class care alongside the opportunity to contribute to and/or participate in research. The Institute will advance basic and translational science in respiratory health and provide patients access to cutting-edge clinical trial opportunities. Trainees and learners at each stage of medical education will benefit from the opportunity to learn from world class experts.

Methods/Approach: A multidisciplinary group of Collaborators and Advisors has been established. The Collaborators will inform three key stages of the Respiratory Institute's development: 1) Vision and Validation; 2) Design and Development; 3) Completion and Sustainment. The Respiratory Institute will be a collaboration between the MUSC College of Medicine and MUSC Health. A shared governance paradigm will provide oversight. The Institute's primary medical foci will be in allergy, critical care, pulmonary, and sleep medicine. The Institute's primary procedural foci will be interventional pulmonary, thoracic surgery, and lung transplantation. Linkages to the Hollings Cancer Center and MUSC Department of Otolaryngology will also be established.

Evaluation Strategy: Evaluation will include both process and outcome measures in clinical, research, and finance domains. Data sources will include institutional performance reports (e.g. access, satisfaction, volume), research reports (e.g. research funding, subject trial enrollment), and financial monitoring (e.g. wRVU's, philanthropy). Growth estimates will inform expected progress and be reconciled with actuals on a routine basis.

Outcomes and Results: The MUSC Respiratory Institute is presently in the Vision and Validation stage. The concept has been informally discussed with senior leadership in 1:1 meetings and there is general support for the ideas. The next immediate outcome will be a formal strategic plan and business plan.