

# **Jefferson Lung Institute**

Affecting nearly 40 million Americans, lung disease—a group of acute and chronic conditions including lung cancer, asthma, pulmonary sarcoidosis, pneumonia, cystic fibrosis and emphysema—is the third-leading cause of death in the United States. The Lung Institute aims to position Jefferson as a leading healthcare institution addressing lung disease—from innovative research to early diagnosis and effective treatment.

# Why Jefferson?

Jefferson's multidimensional programs in lung disease build on our knowledge of basic science. We are positioned to be a leader in individualized medicine, and our demonstrated excellence in the quality and safety of patient care has been recognized nationally, including:



Jefferson Health System is the only nationally ranked top 15 health system in the Delaware Valley by Thomson Reuters.



Thomas Jefferson University Hospital is consistently rated as among the best in the nation in 11 specialties in U.S. News & World Report's Best Hospitals rankings, including pulmonology.



We are a National Cancer Institute-designated Cancer Center. NCI-designated cancer centers are national leaders in cancer treatment, research and education.



Jefferson has been granted MAGNET ® recognition for nursing excellence from the American Nurses Credentialing Center.

# **Ongoing Commitment**

Jefferson's commitment to developing a leading lung institute is demonstrated by recent investments and recruitment of nationally known clinical and research leaders. For example, two key clinical recruits joined us in 2010 and 2011, respectively: Rohit Kumar, MD, an expert in endobronchial ultrasound and interventional pulmonology; and Boyd Hehn, MD, a specialist in diagnostic and interventional bronchoscopy.

Jefferson's Division of Pulmonary and Critical Care Medicine boasts four clinical groups that also maintain active research programs:

- · The Pulmonary Hypertension Program
- The Interventional Pulmonology Program
- The Lung Nodule Program
- The Lung Cancer Screening Program

# **Realizing Our Vision**

Our five-year plan for the Jefferson Lung Institute is the blueprint for gaining national prominence to better serve our patients as one of the nation's leading institutions addressing lung disease. These priorities, to be pursued concurrently, will help us realize our goal of better understanding lung disease through innovative research and exceptional patient care through expanded clinical programs.

Priority Funding Areas	Year 1	Year 2	Year 3	Year 4	Year 5	Total Request
Lung Cancer	\$300,000	\$150,000	\$150,000	\$150,000	\$0	\$750,000
Lung Biology	300,000	150,000	150,000	150,000	0	750,000
Non-cancerous Pulmonary Disease	100,000	100,000	100,000	100,000	100,000	500,000
Korman-Endowed Professorship	0	0	200,000	650,000	650,000	1,500,000
Capital expansion/Renovation	*	400,000	400,000	100,000	100,000	1,000,000
Clinical/Research Nurse Coordinator	100,000	100,000	100,000	100,000	100,000	500,000
Yearly Totals Jefferson Investment**	\$800,000 \$1,171,532	\$900,000 \$971,532	\$1,100,000 \$971,532		\$950,000 \$504,000	\$5,000,000 \$4,951,596

<sup>\*</sup>Planning stage

# Screening and Nodule Program • Evaluation • Diagnosis Lung Cancer Care • Surgery • Radiation Oncology • Medical Oncology • Interventional Bronchoscopy • Molecular Therapeutics • Clinical Trials Cung Biology • Basic Research • Translational Research • Translational Research • Prevention • Sarcoidosis Program • Pulmonary Hypertension Program • Pulmonary Diagnostics

<sup>\*\*\$829,000</sup> already invested

# **Jefferson Lung Institute Priorities**

Fulfilling the following priorities over the next five years will ensure the brightest possible future for lung disease patients.

#### **Priority 1**

Recruit a **lung biologist** to provide new insights into lung disease. This scientist's discoveries will translate into new methods of detecting and treating a variety of lung diseases.

Timing: Academic year 2012-13 Resources: \$750,000

#### **Priority 2**

Recruit a **medical oncologist** to focus primarily on clinical trials. This clinician will lead advances in molecular therapeutics and individualized medicine so Jefferson can offer patients the latest targeted therapies.

Timing: Academic year 2012-13 Resources: \$750,000

#### **Priority 3**

Lung spot evaluation at Jefferson's Lung Nodule Clinic Diagnostic and imaging services in the Departments of Radiology and Pathology

Leading-edge procedures in our Thoracic Surgery Program Personalized therapies in the Medical or Radiation Oncology Departments

Recruit a lung cancer coordinator to navigate patients throughout their treatment experience at Jefferson. This nursing staff member will also collect and inventory data for current and future clinical research, tracking results and other statistics.

Timing: Academic year 2013-14 Resources: \$500,000

# **Priority 4**

Recruit a **clinician(s)** to lead new Asthma and Sarcoidosis Programs at Jefferson. The Institute will streamline access to care to improve outcomes for patients with sarcoidosis, a regionally prevalent disease that triggers the formation of non-cancerous masses in the lungs.

**Timing:** Ongoing **Resources:** Institutional funding + \$500,000

# **Priority 5**

Renovate and expand outpatient facilities for the Division of Pulmonology and Critical Care Medicine to increase capacity for exams and procedures and maximize patient care and comfort.

**Timing:** Planning 2013/Expansion 2014 **Resources:** \$1,000,000

# **Priority 6**

Establish a fully funded professorship in pulmonary medicine to enable Jefferson to continue the academic mission and research initiatives that characterize us as a leader in medical education and health care.

Timing: Academic year 2014-15 Resources: \$1,500,000

#### **Strengths in Pulmonary Care**

Our comprehensive pulmonary clinical and research programs are bolstered by our strengths, such as:

- Access to the latest in diagnostic equipment, imaging and technologies.
- A thoracic surgery team at the forefront of surgical breakthroughs.
- Nationally recognized medical and radiation oncology departments.
- A commitment to individualized medicine, with physicians increasingly able to use patients' unique genetic markers to develop highly tailored treatments.
- Streamlined care and interdisciplinary studies among pulmonary experts and specialists in vascular disease, thoracic surgery, allergy, pathology, sleep medicine, ENT, obesity and metabolic syndrome and all types of cancer.

#### A Comprehensive Pulmonary Program

Our Interventional Pulmonology Program, initiated in 2010 under the leadership of Mani Kavuru, MD, builds on the collective expertise of our newly recruited experts as mentioned previously. They join renowned pulmonary expert Gregory C. Kane, MD, and other surgeons, physicians and scientists who are meeting the challenges of lung disease each and every day at Jefferson.

The Interventional Pulmonology Program works closely with pulmonary oncology and surgery to improve longevity and quality of life for patients with malignant and benign airway lesions and endobronchial stents. An expanded pulmonary surgery team now includes Nathaniel Evans, MD, who joined Jefferson as a thoracic surgeon in 2007, and Scott Cowan, MD, an expert in minimally invasive surgery, who joined Jefferson in 2010. Both Evans and Cowan offer a level of surgical expertise that helps Jefferson recruit new clinical-care and research leaders to campus.

Currently rated among the best in the nation for pulmonology by U.S.News & World Report, Jefferson delivers comprehensive diagnostic and therapeutic services for diseases that affect the respiratory system. Our specialists use the latest endoscopic, imaging and physiologic testing procedures as well as advanced diagnostic techniques involving thoracoscopy and transthoracic needle biopsy, in collaboration with specialists in thoracic radiology and thoracic surgery.

Our programs in asthma, emphysema and interstitial lung disease are nationally recognized for asthma research and in management of difficult asthmatic conditions. Pulmonary medicine specialists apply the newest technology and strategies in ventilator and respiratory care and in weaning patients from ventilator dependency. Jefferson's Lung Nodule Clinic and Lung Cancer Screening Program offer further evaluation of lung nodules that may appear as spots on x-rays.



Gregory C. Kane, MD, Interim Chair of Jefferson's Department of Medicine



Mani Kavuru, MD, Director, Pulmonary and Critical Care Division



Nathaniel Evans, II, MD, Assistant Professor and Thoracic Surgeon



Neal Flomenberg, MD Chair, Department of Medical Oncology



Stephen C. Peiper, MD Chair, Department of Pathology